Low influenza activity in Europe at the start of the 2011/2012 influenza season

Week 40 marks the beginning of the 2011/2012 influenza season, during which the EuroFlu bulletin will be published weekly.

- This issue is based on data reported for week 40 by 37 Member States in the WHO European Region.
- Levels of influenza activity in Europe are low.
- Sporadic detections of influenza A (H3N2), pandemic influenza A(H1N1) 2009, and influenza B were reported in previous weeks.

Current situation: week 40/2011

Of the 30 countries reporting clinical data on influenza-like illness (ILI) and acute respiratory infection (ARI), 10 reported increases in consultation rates: Albania, Armenia, Azerbaijan, Bulgaria, Poland, the Republic of Moldova, Serbia, Slovakia, Ukraine and the United Kingdom (Northern Ireland). Overall, influenza activity remains low throughout the Region, however, with only the Russian Federation reporting medium activity.

Virological situation: week 40/2011

Sentinel physicians collected 89 respiratory specimens, none of which tested positive for influenza virus. Among specimens tested from non-sentinel sources, only 2 were positive for influenza: 1 pandemic influenza A(H1) and 1 influenza B (both from the Russian Federation).

No antigenic or genetic characterizations were reported to WHO this week.

Comment

Influenza activity is at low levels throughout the WHO European Region. The virus strains recommended for vaccine composition for the northern hemisphere in 2011/2012 are unchanged from those in the previous season and include: A/California/7/2009 (H1N1)-like, A/Perth/16/2009 (H3N2)-like and B/Brisbane/60/2008-like viruses. While it is too early to predict which influenza viruses will predominate during the upcoming influenza season, data from the inter-season period in Europe and the recent southern hemisphere influenza season suggest that pandemic influenza A (H1N1) 2009 virus will continue to co-circulate with influenza B and influenza A(H3N2) viruses in the northern hemisphere.

Please note that, owing to an error in data transmission between EuroFlu and TESSy, information on virology from European Union (EU)/European Economic Area (EEA) Member States is not included in this week's bulletin.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe and WHO headquarters web sites.

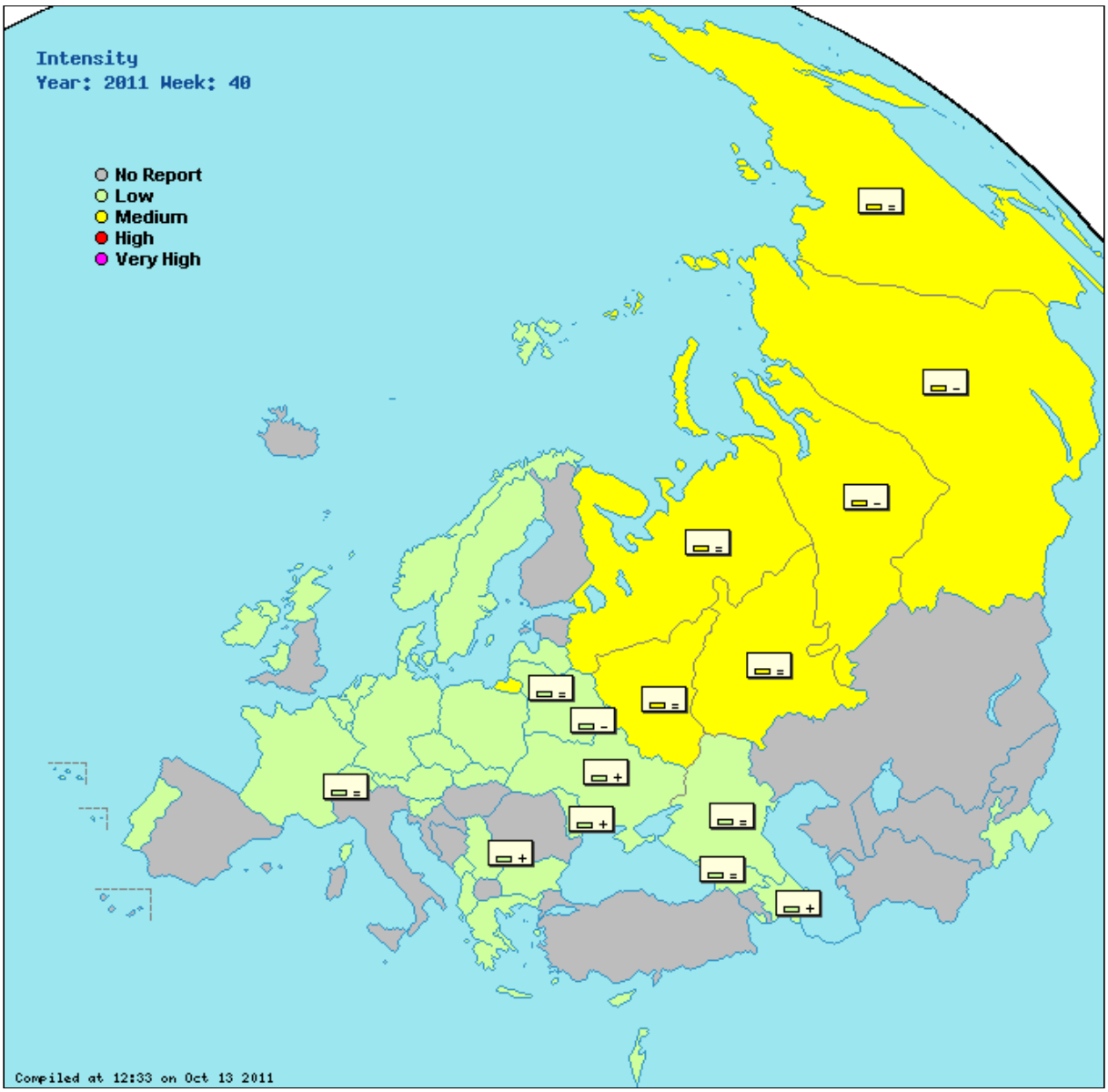
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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 laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

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	Sentinel SARI	Virology graph and pie chart
Albania	Low	Sporadic	Low	Increasing					342.8 (graphs)	sari	Click here
Armenia					0	0%	None		(graphs)	sari	Click here
Austria	Low	None	Low					0.0 (graphs)	7.7 (graphs)		Click here
Azerbaijan	Low	Sporadic	Low	Increasing	3	0%	None	255.3 (graphs)			Click here
Belarus	Low	None	Low	Decreasing	22	0%	None	2.0 (graphs)	1045.7 (graphs)	sari	Click here
Belgium	Low	None		Stable				43.3 (graphs)	1330.4 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Low	None		Increasing				(graphs)	500.7 (graphs)		Click here
Cyprus	Low	Sporadic	Low	Stable				0.2 * (graphs)	3.5 * (graphs)		Click here
Czech Republic	Low	None		Stable				17.0 (graphs)	726.9 (graphs)		Click here
Denmark	Low	None		Stable				29.8 (graphs)	(graphs)		Click here

France	Low	Sporadic	Low	Stable				(graphs)	1639.4	(graphs)		Click here
Georgia	Low	None	Low	Stable	14	0%	None	294.2	(graphs)		sari	Click here
Germany	Low	None	Low	Stable				(graphs)	952.4	(graphs)		Click here
Greece	Low	None		Stable				51.5	(graphs)	(graphs)		Click here
Ireland	Low	None	Low	Stable				3.9	(graphs)	(graphs)		Click here
Israel	Low	None	Low	Stable				3.8	(graphs)			Click here
Latvia	Low	None		Stable				0 *	(graphs)			Click here
Lithuania	Low	None	Low	Stable	0	0%	None	0.3	(graphs)	408.5	(graphs)	Click here
Luxembourg	Low	None	Low					0.2 *	(graphs)	26.7 *	(graphs)	Click here
The former Yugoslav Republic of Macedonia							None		(graphs)			Click here
Montenegro	Low	None	Low	Stable				1.3	(graphs)			Click here
Netherlands	Low	None		Stable				19.9	(graphs)	(graphs)		Click here
Northern Ireland	Low	None		Increasing				14.6	(graphs)	292.8	(graphs)	Click here
Norway	Low	None	Low	Stable				21.4	(graphs)	(graphs)		Click here
Poland	Low	None	Low	Increasing				52.8	(graphs)	(graphs)		Click here
Portugal	Low	None		Stable				0.0	(graphs)	(graphs)		Click here
Republic of Moldova	Low	None	Low	Increasing	0	0%	None		(graphs)	237.8	(graphs)	sari Click here
Russian Federation	Medium	None		Stable	38	0%	None	0.1	(graphs)	596.3	(graphs)	sari Click here
Scotland	Low	None	Low	Stable				7.6	(graphs)	421.0	(graphs)	Click here
Serbia	Low	None	Low	Increasing	0	0%	None	23.8	(graphs)			sari Click here
Slovakia	Low	None	Low	Increasing				147.3	(graphs)	1425.9	(graphs)	sari Click here
Slovenia	Low	None		Stable				0.0	(graphs)	1029.2	(graphs)	Click here
Sweden	Low	None	Low	Stable				0.7	(graphs)	(graphs)		Click here
Switzerland	Low	None		Stable	7	0%	None	9.7	(graphs)			Click here
Tajikistan	Low	None	Low	Stable					(graphs)			Click here
Turkey					1	0%	None		(graphs)			Click here
Ukraine	Low	None	Low	Increasing	4	0%	None	2.9 *	(graphs)	429.0	(graphs)	sari Click here
Wales	Low	None		Stable				4.6	(graphs)	(graphs)		Click here
Europe					89	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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Low influenza activity in the WHO European Region

- This issue is based on data reported for week 41 by 44 Member States in the WHO European Region.
- Levels of influenza activity in Europe remain low.

Sporadic detections of influenza A(H3N2), pandemic influenza A(H1N1) 2009 and influenza B have been reported.

Current situation: week 41/2011

Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) continue to be low throughout the WHO European Region. Of the 34 countries reporting clinical data for week 41, 10 reported some increases in consultation rates: Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Hungary, Ireland, Poland, Serbia and Ukraine. Of the 36 countries reporting on geographical distribution of influenza activity, 30 reported no spread.

Data from sentinel hospital-based surveillance for severe acute respiratory infection (SARI) were reported by 7 countries: Armenia, Georgia, Kazakhstan, the Republic of Moldova, the Russian Federation, Serbia and Ukraine. Sentinel SARI hospitalizations in all countries are currently at pre-season levels.

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in "Overview of sentinel SARI systems in EuroFlu".

Virological situation: week 41/2011

Sentinel outpatient clinics collected 378 respiratory specimens, none of which tested positive for influenza virus. Among specimens tested from non-sentinel sources, 7 were positive for influenza: 4 were pandemic influenza A(H1); 1 was A(H3) and 2 influenza B. Sentinel hospitals collected 53 respiratory specimens from SARI patients, none of which tested positive for influenza virus.

No antigenic or genetic characterizations were reported to WHO this week.

Cumulative virological data: weeks 40"41/2011

During this period, 21 influenza virus detections were reported: 14 (67%) were influenza A and 7 (33%) were influenza B. Of the influenza A viruses, 3 were subtyped as A(H3).

Comment

Consultation rates for ILI and ARI in outpatient clinics and hospitalizations due to SARI are at low levels throughout the WHO European Region. There have been sporadic detections of influenza A(H3N2), pandemic influenza A(H1N1) and influenza B during the last 2 weeks.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

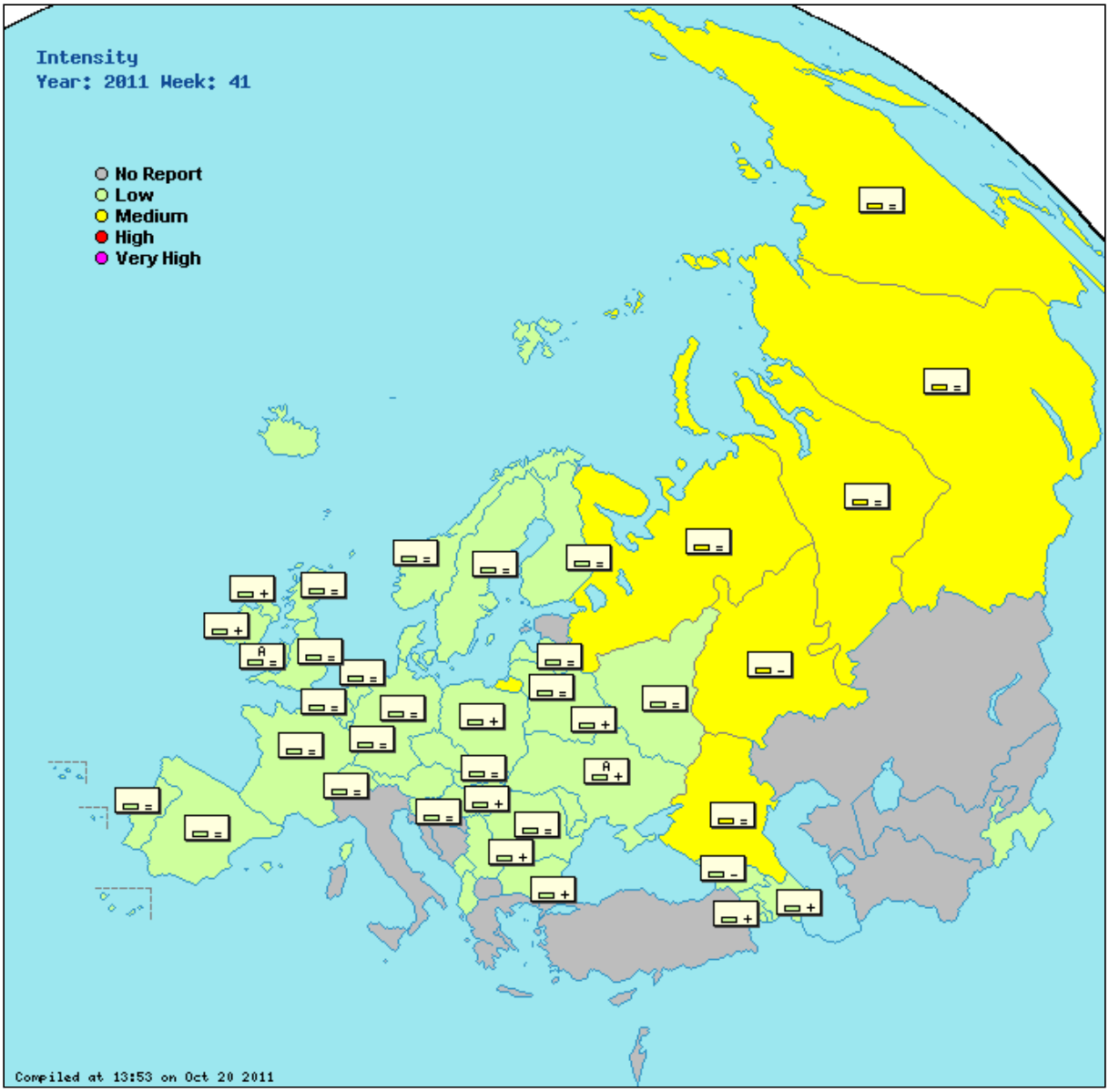
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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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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+ : increasing clinical activity
- : decreasing clinical activity

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Very high = particularly severe levels of influenza activity

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Widespread = appearing in ≥50% of the administrative units of the country (or reporting sites).

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	Sentinel SARI	Virology graph and pie chart
Albania	Low	Sporadic	Low	Increasing					380.6 (graphs)	sari	Click here
Armenia	Low	None	Low	Increasing	0	0%	None	(graphs)	81.6 (graphs)	sari	Click here
Austria	Low	None	Low		0	0%	None	0.0 (graphs)	10.1 (graphs)		Click here
Azerbaijan	Low	Sporadic	Low	Increasing	5	0%	None	263.6 (graphs)			Click here
Belarus	Low	None	Low	Increasing	11	0%	None	3.0 (graphs)	1057.8 (graphs)	sari	Click here
Belgium	Low	None		Stable	25	0%	None	42.2 (graphs)	1411.8 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Low	None		Increasing	0	0%	None	(graphs)	688.9 (graphs)		Click here
Croatia							None	(graphs)			Click here
Czech Republic	Low	None		Stable				17.8 (graphs)	772.7 (graphs)		Click here
Denmark	Low	None		Stable				34.7 (graphs)	(graphs)		Click here

England	Low	None		Stable	49	0%	None	6.5 (graphs)	311.5 (graphs)			Click here
Estonia					1	0%	None	(graphs)				Click here
Finland	Low	None	Low	Stable	0	0%		0.0 (graphs)	(graphs)			Click here
France	Low	Sporadic	Low	Stable	53	0%	None	(graphs)	1692.7 (graphs)			Click here
Georgia	Low	None	Low	Decreasing	9	0%	None	218.7 (graphs)			sari	Click here
Germany	Low	None		Stable	13	0%		(graphs)	1120.8 (graphs)			Click here
Hungary	Low	None		Increasing	1	0%	None	56.2 (graphs)	(graphs)			Click here
Iceland	Low	None	Low	Stable				1.6 (graphs)	(graphs)			Click here
Ireland	Low	None	Low	Increasing	5	0%	None	7.3 (graphs)	(graphs)			Click here
Kazakhstan					5	0%	None	0.7 (graphs)	129.8 (graphs)		sari	Click here
Kyrgyzstan					1	0%	None		(graphs)		sari	Click here
Latvia	Low	None		Stable	0	0%	None	0 * (graphs)				Click here
Lithuania	Low	None	Low	Stable	0	0%	None	0.3 (graphs)	450.7 (graphs)			Click here
Luxembourg	Low	None	Low		1	0%	None	0.2 * (graphs)	27.9 * (graphs)			Click here
The former Yugoslav Republic of Macedonia							None	(graphs)				Click here
Malta					0	0%	None	(graphs)				Click here
Montenegro	Low	None	Low	Stable				1.6 (graphs)				Click here
Netherlands	Low	None		Stable	3	0%	None	28.9 (graphs)	(graphs)			Click here
Northern Ireland	Low	None		Increasing	1	0%		18.1 (graphs)	275.6 (graphs)			Click here
Norway	Low	Sporadic	Low	Stable	2	0%	None	25.2 (graphs)	(graphs)			Click here
Poland	Low	Sporadic	Low	Increasing	2	0%	None	95.8 (graphs)	(graphs)			Click here
Portugal	Low	None		Stable	0	0%	None	11.6 (graphs)	(graphs)			Click here
Republic of Moldova	Low	None	Low	Stable				(graphs)	173.4 (graphs)		sari	Click here
Romania	Low	None	Low	Stable	9	0%	None	2.9 (graphs)	806.1 (graphs)		sari	Click here
Russian Federation	Medium	Sporadic		Stable	42	0%	None	0.1 (graphs)	582.1 (graphs)		sari	Click here
Scotland	Low	None	Low	Stable	28	0%		6.4 (graphs)	386.1 (graphs)			Click here
Serbia	Low	None	Low	Increasing	0	0%	None	27.0 (graphs)			sari	Click here
Slovakia	Low	None	Low	Stable	0	0%	None	152.0 (graphs)	1459.6 (graphs)		sari	Click here
Slovenia	Low	None		Stable	13	0%	None	1.3 (graphs)	913.5 (graphs)			Click here
Spain	Low	None		Stable	34	0%	None	9.8 (graphs)	(graphs)			Click here
Sweden	Low	None	Low	Stable	14	0%	None	2.1 (graphs)	(graphs)			Click here
Switzerland	Low	None		Stable	6	0%	None	17.3 (graphs)				Click here
Tajikistan	Low	None	Low	Stable				(graphs)				Click here
Turkey					41	0%	None	(graphs)				Click here
Ukraine	Low	None	Low	Increasing			None	2.6 * (graphs)	444.7 (graphs)		sari	Click here
Wales	Low	None		Stable	4	0%		7.6 (graphs)	(graphs)			Click here
Europe					378	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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Only a few sporadic cases of influenza detected in the WHO European Region

- This issue is based on data reported for week 42 by 47 Member States in the WHO European Region.
- Levels of influenza activity in Europe remain low.
- Sporadic detections of influenza A(H3N2), influenza A(H1N1)pdm09 and influenza B have been reported.

Current situation: week 42/2011

Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) continue to be low throughout the WHO European Region. Of the 38 countries reporting clinical data for week 42, 10 reported some increases in consultation rates: Albania, Armenia, Georgia, Hungary, Kazakhstan, Poland, the Republic of Moldova, Serbia, Slovakia and Ukraine. Consultation rates were generally highest in young children. Of the 39 countries reporting on geographical distribution of influenza activity, 34 reported no spread. All of these countries reported low intensity of influenza activity.

Data from sentinel hospital-based surveillance for severe acute respiratory infection (SARI) were reported by 8 countries: Albania, Armenia, Georgia, Kazakhstan, the Republic of Moldova, the Russian Federation, Serbia and Ukraine. Sentinel SARI hospitalizations in all countries are currently at pre-season levels.

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological situation: week 42/2011

Sentinel outpatient clinics collected 458 respiratory specimens, of which 2 (0.4%) tested positive for influenza virus. Of these, 1 was influenza A(H1)pdm09 (Spain) and 1 was influenza A(H3) (England). Among specimens tested from non-sentinel sources, 7 were influenza A and 3 were influenza B. Of the influenza A viruses 5 were subtyped, 2 as A(H1)pdm09 and 3 as influenza A(H3). Sentinel hospitals collected 65 respiratory specimens from SARI patients, none of which tested positive for influenza virus.

No antigenic or genetic characterizations were reported to WHO/Europe this week.

Cumulative virological data: weeks 40-42/2011

During this period, 36 influenza virus detections were reported: 23 (64%) were influenza A and 13 (36%) were influenza B. Of the influenza A viruses, 15 were subtyped: 11 A(H3) and 4 A(H1)pdm09.

Comment

Consultation rates for ILI and ARI in outpatient clinics and hospitalizations due to SARI are at low levels throughout the WHO European Region. There have been sporadic detections of influenza A(H3N2), influenza A(H1N1)pdm09 and influenza B during recent weeks.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries of the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

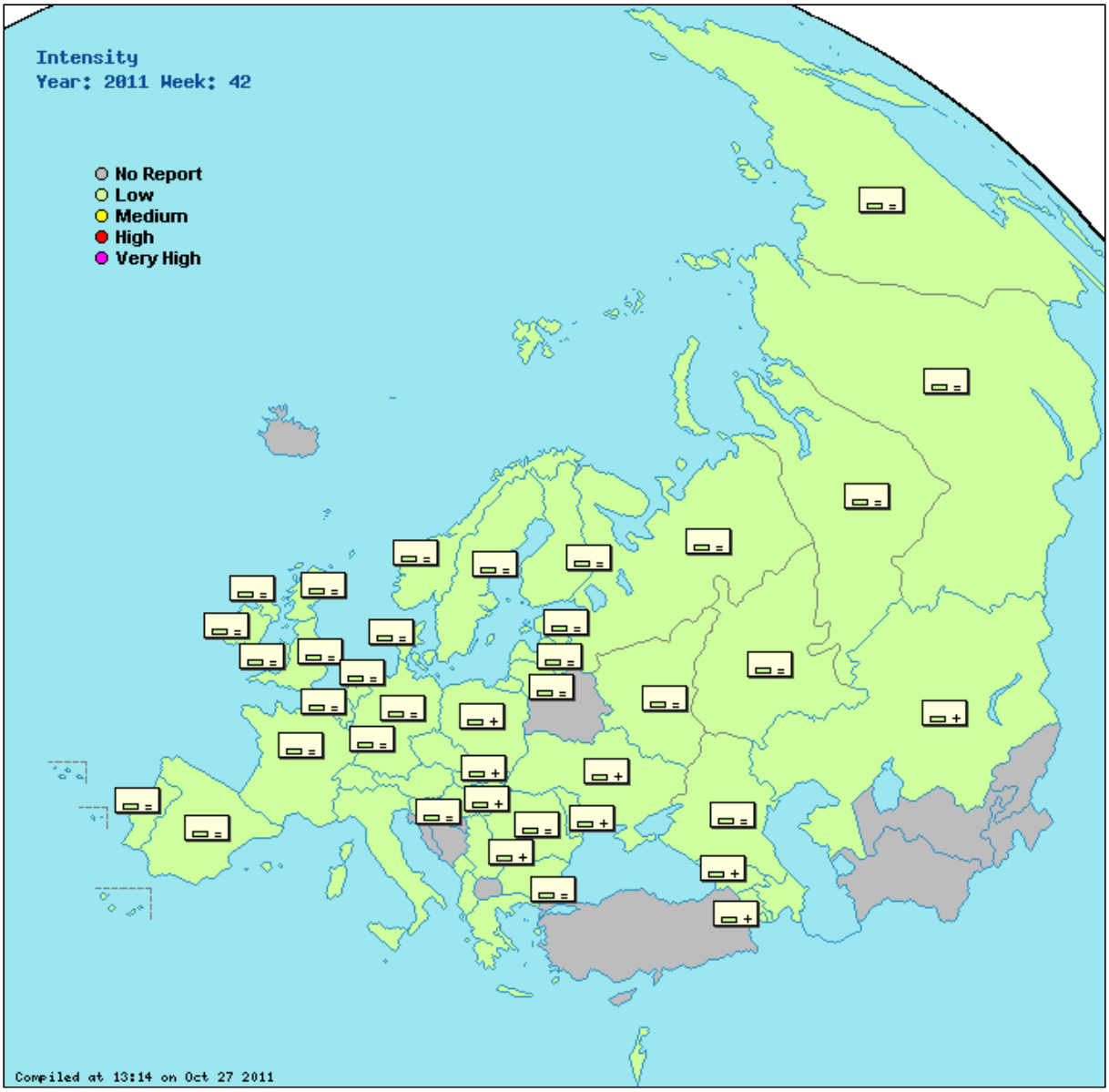
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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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
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High = higher than usual levels of influenza activity
Very high = particularly severe levels of influenza activity

No activity = no laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

Country comments (where available)

Scotland
The one case being reported is a dual infection of Influenza A H1N1 (2009) & Influenza B.
Spain
In week 42/2011 the first influenza virus A(H1N1)2009 has been detected in Spain from a sentinel source in the North of Spain (Baske Country). Influenza activity remains stable and at a low level in all 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	Sentinel SARI	Virology graph and pie chart
Albania	Low	Sporadic	Low	Increasing					389.9 (graphs)	sari	Click here
Armenia	Low	None	Low	Increasing	0	0%	None	(graphs)	109.6 (graphs)	sari	Click here
Austria	Low	None	Low		0	0%	None	0.0 (graphs)	19.8 (graphs)		Click here
Azerbaijan	Low	Sporadic	Low					268.2 (graphs)			Click here
Belarus					18	0%	None		(graphs)	sari	Click here
Belgium	Low	None		Stable	24	0%	None	58.8 (graphs)	1384.8 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Low	None		Stable	0	0%	None	(graphs)	710.5 (graphs)		Click here

Croatia							None	(graphs)				Click here
Czech Republic	Low	None		Stable				20.0 (graphs)	858.3 (graphs)			Click here
Denmark	Low	None		Stable	0	0%	None	36.3 (graphs)	(graphs)			Click here
England	Low	None		Stable	56	1.8%	None	6.2 (graphs)	327.7 (graphs)			Click here
Estonia	Low	None		Stable	1	0%	None	6.1 (graphs)	253.9 (graphs)			Click here
Finland	Low	None	Low	Stable	27	0%	None	0.0 (graphs)	(graphs)			Click here
France	Low	Sporadic	Low	Stable	75	0%	None	(graphs)	1738.4 (graphs)			Click here
Georgia	Low	None	Low	Increasing	19	0%	None	399.4 (graphs)			sari	Click here
Germany	Low	None		Stable	8	0%	None	(graphs)	1168.1 (graphs)			Click here
Greece	Low	None		Stable				46.4 (graphs)	(graphs)			Click here
Hungary	Low	None	Low	Increasing	4	0%	None	61.0 (graphs)	(graphs)			Click here
Iceland					0	0%		(graphs)				Click here
Ireland	Low	None	Low	Stable	3	0%	None	7.5 (graphs)	(graphs)			Click here
Israel	Low	None	Low	Stable				2.4 (graphs)				Click here
Italy	Low	None	Low	Stable				54.3 (graphs)	(graphs)			Click here
Kazakhstan	Low	None		Increasing	8	0%	None	4.1 (graphs)	145.0 (graphs)		sari	Click here
Kyrgyzstan					5	0%	None		(graphs)		sari	Click here
Latvia	Low	None		Stable	0	0%	None	(graphs)				Click here
Lithuania	Low	None	Low	Stable	6	0%	None	0.6 (graphs)	479.1 (graphs)			Click here
Luxembourg	Low	None			0	0%	None	0.2 * (graphs)	21.7 * (graphs)			Click here
The former Yugoslav Republic of Macedonia							None	(graphs)				Click here
Malta					0	0%	None	(graphs)				Click here
Montenegro	Low	None	Low	Stable				1.4 (graphs)				Click here
Netherlands	Low	None		Stable	7	0%	None	19.9 (graphs)	(graphs)			Click here
Northern Ireland	Low	None		Stable	2	0%		17.5 (graphs)	303.7 (graphs)			Click here
Norway	Low	None	Low	Stable	8	0%		32.0 (graphs)	(graphs)			Click here
Poland	Low	Sporadic	Low	Increasing	22	0%	None	117.2 (graphs)	(graphs)			Click here
Portugal	Low	None		Stable	2	0%	None	20.1 (graphs)	(graphs)			Click here
Republic of Moldova	Low	None	Low	Increasing	3	0%	None	(graphs)	194.2 (graphs)		sari	Click here
Romania	Low	None	Low	Stable	15	0%	None	5.1 (graphs)	831.2 (graphs)		sari	Click here
Russian Federation	Low	None		Stable	41	0%	None	0.1 (graphs)	587.2 (graphs)		sari	Click here
Scotland	Low	Sporadic	Low	Stable	19	0%	None	8.7 (graphs)	366.5 (graphs)			Click here
Serbia	Low	None	Low	Increasing	0	0%	None	44.2 (graphs)			sari	Click here
Slovakia	Low	None	Low	Increasing	0	0%	None	180.1 (graphs)	1557.0 (graphs)		sari	Click here
Slovenia	Low	None		Stable	3	0%	None	0.0 (graphs)	852.9 (graphs)			Click here
Spain	Low	None		Stable	49	2.0%	None	14.0 (graphs)	(graphs)			Click here
Sweden	Low	None	Low	Stable	27	0%	None	2.2 (graphs)	(graphs)			Click here
Switzerland	Low	None		Stable				16.5 (graphs)				Click here
Turkey					0	0%	None	(graphs)				Click here
Ukraine	Low	Sporadic	Low	Increasing	3	0%	None	3.4 * (graphs)	457.9 (graphs)		sari	Click here
Uzbekistan							None		(graphs)			Click here
Wales	Low	None		Stable	3	0%		5.0 (graphs)	(graphs)			Click here
Europe					458	0.4%						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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza detections in WHO European Region remain sporadic

- This issue is based on data reported for week 43/2011 by 46 Member States in the WHO European Region.
- Levels of influenza activity in the Region remain low.
- All sentinel samples collected in the Region were negative for influenza.

Current situation: week 43/2011

Consultation rates were low and generally stable in the 39 countries reporting clinical data on influenza-like illness (ILI) and/or acute respiratory infection (ARI). Out of 41 countries reporting on trends, 30 said they were stable, while 4 countries reported increasing trends and 7, decreasing trends. Consultation rates were generally highest in young children. Of the 41 countries reporting on geographical distribution of influenza activity, 34 reported no spread. All countries reported low intensity of influenza activity and low impact on their health care services.

Data from sentinel hospital-based surveillance for severe acute respiratory infection (SARI) were reported by 7 countries: Armenia, Georgia, Kazakhstan, the Republic of Moldova, the Russian Federation, Serbia and Ukraine. Sentinel SARI hospitalizations in these countries are currently at pre-season levels.

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in ﷺOverview of sentinel SARI systems in EuroFluﷺ.

Virological situation: week 43/2011

Sentinel outpatient clinics collected 508 respiratory specimens, none of which tested positive for influenza virus. Among specimens tested from non-sentinel sources, 17 were influenza A and 4 were influenza B. Of the influenza A viruses, 12 were subtyped: 4 as A(H1)pdm09 and 8 as influenza A(H3). Sentinel hospitals collected 80 respiratory specimens from SARI patients, none of which tested positive for influenza virus.

No antigenic or genetic characterizations were reported to WHO/Europe this week.

Cumulative virological data: weeks 40ﷺ43/2011

During this period, 59 influenza virus detections were reported: 42 (71%) were influenza A and 17 (29%) were influenza B. Of the influenza A viruses, 29 were subtyped: 20 as A(H3) and 9 as A(H1)pdm09.

Comment

Consultation rates for ILI and ARI in outpatient clinics and hospitalizations due to SARI are at low levels throughout the WHO European Region. There have been sporadic detections of influenza A(H3N2), influenza A(H1N1)pdm09 and influenza B during recent weeks.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

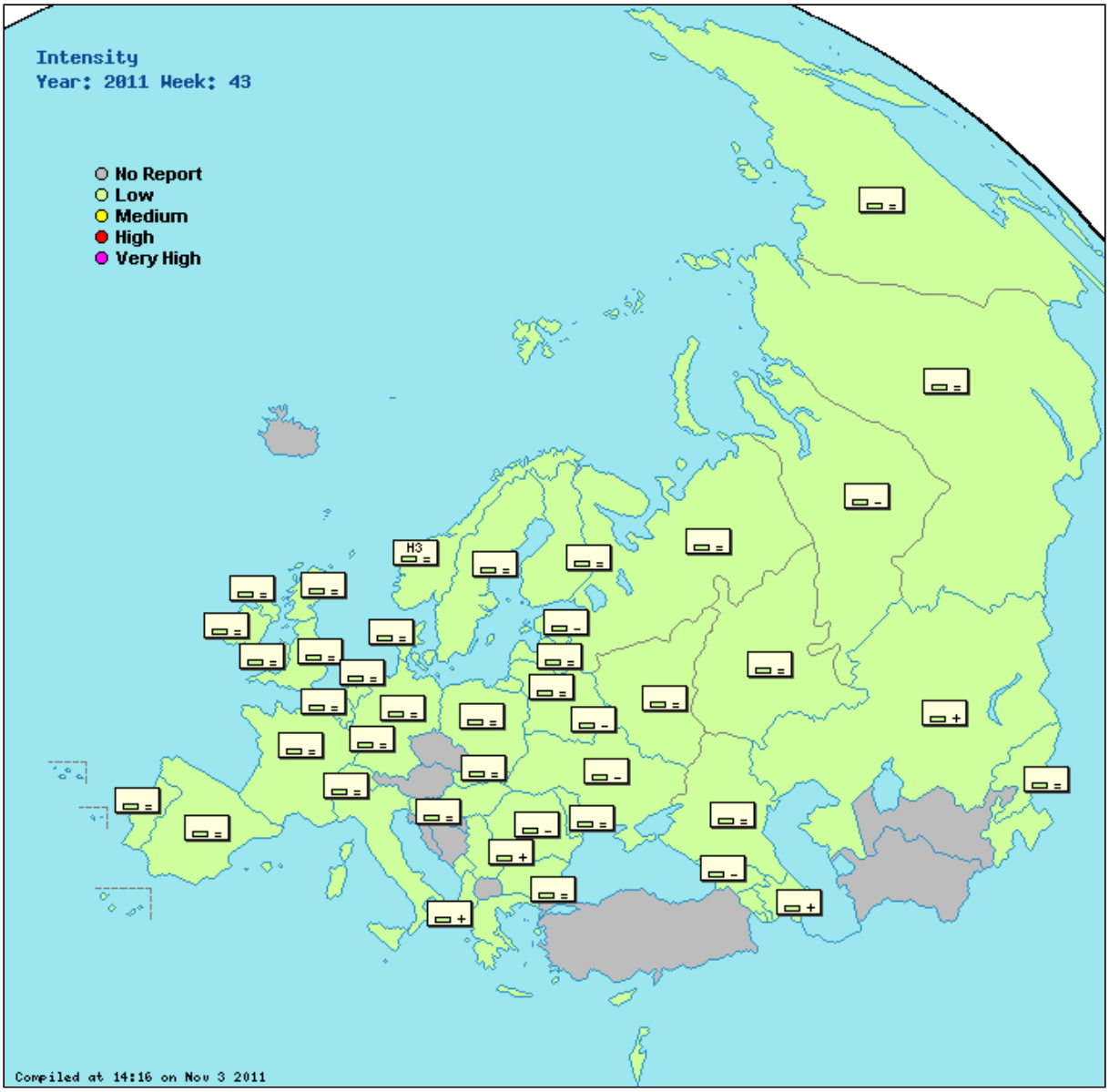
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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 laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

Country comments (where available)

Armenia
A new sentinel site (in patient hospital), the Medical Center 'Erebuni' has been added to the SARI sentinel surveillance system of Yerevan city in the Republic of Armenia. Medical center ' Erebuni' is a multi-functional hospital. The intensive care unit and cardiopulmonary departments participate in SARI sentinel surveillance. The training was organized for personnel and technical support is provided.

Kazakhstan
In the week 43/2011 189 respiratory specimens were collected, of which 0 tested positive for influenza virus. Of the 189 respiratory specimens tested for other respiratory viruses, 16 (8.5%) were positive: 8 (50%) Adenoviruses, 6 (38%) Respiratory syncytial viruses (RSV) and 2 (12%) Parainfluenza-1.

Scotland
No Death due to confirmed Flu or SARI have been reported to HPS 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	Sentinel SARI	Virology graph and pie chart
Albania	Low	None	Low	Increasing	0	0%	None		395.4 (graphs)	sari	Click here
Armenia	Low	None	Low	Decreasing				(graphs)	103.9 (graphs)	sari	Click here

Austria					0	0%	None		(graphs)				Click here
Azerbaijan	Low	Sporadic	Low	Increasing	7	0%	None	291.4	(graphs)				Click here
Belarus	Low	None	Low	Decreasing	21	0%	None	6.0	(graphs)	1068.8	(graphs)	sari	Click here
Belgium	Low	None		Stable	7	0%	None	73.4	(graphs)	1838.2	(graphs)	sari	Click here
Bosnia and Herzegovina							None		(graphs)				Click here
Bulgaria	Low	None		Stable	1	0%	None		(graphs)	698.6	(graphs)		Click here
Cyprus	Low	Sporadic	Low	Stable				0.5 *	(graphs)	5.6 *	(graphs)		Click here
Czech Republic					10	0%	None				(graphs)		Click here
Denmark	Low	None		Stable	1	0%	None	50.1	(graphs)		(graphs)		Click here
England	Low	None		Stable	48	0%	None	8.2	(graphs)	346.8	(graphs)		Click here
Estonia	Low	None		Decreasing	3	0%	None	5.3	(graphs)	238.9	(graphs)		Click here
Finland	Low	Sporadic	Low	Stable	21	0%	None	0.0	(graphs)		(graphs)		Click here
France	Low	Sporadic	Low	Stable	46	0%	None		(graphs)	1674.4	(graphs)		Click here
Georgia	Low	None	Low	Decreasing	17	0%	None	306.9	(graphs)			sari	Click here
Germany	Low	None		Stable	18	0%	None		(graphs)	1166.5	(graphs)		Click here
Greece	Low	None		Stable				52.4	(graphs)		(graphs)		Click here
Hungary	Low	Sporadic	Low	Stable				58.7	(graphs)		(graphs)		Click here
Iceland					0	0%	None		(graphs)				Click here
Ireland	Low	None	Low	Stable	1	0%	None	5.1	(graphs)		(graphs)		Click here
Israel	Low	None	Low	Decreasing				4.5	(graphs)				Click here
Italy	Low	None	Low	Stable				67.5	(graphs)		(graphs)		Click here
Kazakhstan	Low	None	Low	Increasing	7	0%	None	3.0	(graphs)	150.6	(graphs)	sari	Click here
Kyrgyzstan	Low	None	Low	Stable	3	0%	None		(graphs)	32.7	(graphs)	sari	Click here
Latvia	Low	None		Stable	0	0%	None	0 *	(graphs)				Click here
Lithuania	Low	None	Low	Stable	5	0%	None	0.5	(graphs)	455.9	(graphs)		Click here
Luxembourg	Low	None	Low		4	0%	None	0.6 *	(graphs)	26.7 *	(graphs)		Click here
Montenegro	Low	None	Low	Stable				2.1	(graphs)				Click here
Netherlands	Low	None		Stable	6	0%	None	20.9	(graphs)		(graphs)		Click here
Northern Ireland	Low	None		Stable	3	0%		14.2	(graphs)	322.0	(graphs)		Click here
Norway	Low	Sporadic	Low	Stable	0	0%	Type A, Subtype H3	26.7	(graphs)		(graphs)		Click here
Poland	Low	None	Low	Stable	13	0%	None	117.2	(graphs)		(graphs)		Click here
Portugal	Low	None		Stable	1	0%	None	4.9	(graphs)		(graphs)		Click here
Republic of Moldova	Low	None	Low	Stable	3	0%	None		(graphs)	205.0	(graphs)	sari	Click here
Romania	Low	None	Low	Decreasing	21	0%	None	5.2	(graphs)	720.1	(graphs)	sari	Click here
Russian Federation	Low	Sporadic		Stable	33	0%	None	0.1	(graphs)	585.1	(graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	32	0%	None	10.3	(graphs)	409.3	(graphs)		Click here
Serbia	Low	None	Low	Increasing	0	0%	None	45.6	(graphs)			sari	Click here
Slovakia	Low	None	Low	Stable	3	0%	None	149.8	(graphs)	1453.5	(graphs)	sari	Click here
Slovenia	Low	None		Stable	4	0%	None	0.0	(graphs)	835.0	(graphs)		Click here
Spain	Low	None		Stable	61	0%	None	16.4	(graphs)		(graphs)		Click here
Sweden	Low	None	Low	Stable	31	0%	None	5.4	(graphs)		(graphs)		Click here
Switzerland	Low	None		Stable	12	0%	None	26.9	(graphs)				Click here
Tajikistan	Low	None	Low	Stable					(graphs)				Click here
Turkey					61	0%	None		(graphs)				Click here
Ukraine	Low	None	Low	Decreasing	2	0%	None	3.4 *	(graphs)	417.1	(graphs)	sari	Click here
Uzbekistan							None			19.1	(graphs)		Click here
Wales	Low	None		Stable	2	0%		2.0	(graphs)		(graphs)		Click here
Europe					508	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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Sporadic Influenza detections in WHO European Region

- This issue is based on data for week 44/2011 reported by 44 Member States in the WHO European Region.
- Levels of influenza activity in the Region remain low.
- Sporadic detections of influenza A(H1N1)pdm09, influenza A(H3N2) and influenza B have been reported.

Current situation: week 44/2011

Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) continue to be low throughout the WHO European Region. Out of 39 countries reporting on trends, 27 countries reported stable trends, while 5 countries reported increasing and 7, decreasing trends. Consultation rates were in general highest in young children. Of the 40 countries reporting on geographical distribution of influenza activity, 5 countries reported sporadic spread: the Czech Republic, Finland, France, Norway and Sweden. All countries reported low intensity of influenza activity and low impact on their health care services.

Data from sentinel hospital-based surveillance for severe acute respiratory infection (SARI) were reported by 7 countries: Armenia, Georgia, Kazakhstan, the Republic of Moldova, the Russian Federation, Serbia and Ukraine. Sentinel SARI hospitalizations in these countries are currently at pre-season levels.

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in ﷺOverview of sentinel SARI systems in EuroFluﷺ.

Virological situation: week 44/2011

Sentinel outpatient clinics collected 544 respiratory specimens, of which 9 (1.7%) tested positive for influenza virus: 8 were influenza A and 1 was influenza B. Of the influenza A viruses, 2 were subtyped as influenza A(H3). In addition, 20 non-sentinel specimens were reported positive for influenza: 12 influenza A and 8 influenza B. Of the influenza A viruses, 7 were subtyped: 1 as A(H1)pdm09 and 6 as A(H3). Sentinel hospitals collected 59 respiratory specimens from SARI patients, none of which tested positive for influenza virus.

No antigenic or genetic characterizations were reported to WHO/Europe this week.

Cumulative virological data: weeks 40ﷺ44/2011

During this period, 88 influenza virus detections were reported: 63 (72%) were influenza A and 25 (28%) were influenza B. Of the influenza A viruses, 38 were subtyped: 10 as A(H1)pdm09 and 28 as A(H3).

Comment

Consultation rates for ILI and ARI in outpatient clinics and hospitalizations due to SARI are at low levels throughout the WHO European Region. There have been sporadic detections of influenza A(H1N1)pdm09, influenza A(H3N2) and influenza B during recent weeks.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

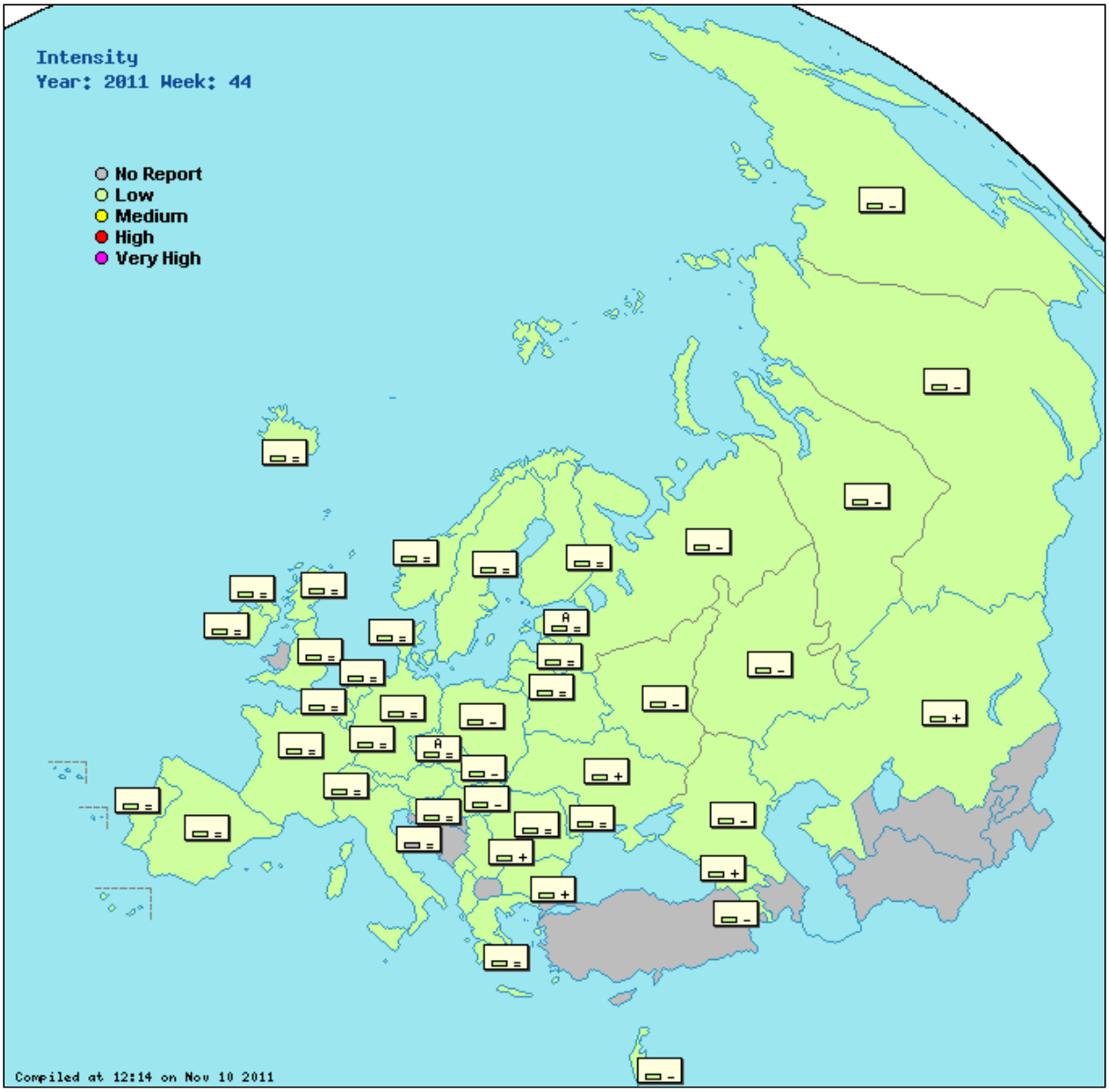
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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 laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

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	Sentinel SARI	Virology graph and pie chart
Albania	Low	None	Low	Stable					387.8 (graphs)	sari	Click here
Armenia	Low	None	Low	Decreasing	0	0%	None	(graphs)	99.5 (graphs)	sari	Click here
Austria	Low	None	Low		1	0%	None	0.0 (graphs)	16.6 (graphs)		Click here
Belarus	Low	None	Low	Decreasing				2.9 (graphs)	946.6 (graphs)	sari	Click here
Belgium	Low	None		Stable	7	0%	None	58.1 (graphs)	1368.6 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Low	None		Increasing	0	0%	None	(graphs)	999.7 (graphs)		Click here
Croatia		None		Stable			None	0.0 (graphs)			Click here
Czech Republic	Low	Sporadic		Stable	22	27.3%	Type A	22.6 (graphs)	838.4 (graphs)		Click here
Denmark	Low	None		Stable	0	0%	None	41.4 (graphs)	(graphs)		Click here
England	Low	None		Stable	68	0%	None	6.6 (graphs)	334.8 (graphs)		Click here

Estonia	Low	None		Stable	3	0%		5.5 (graphs)	255.0 (graphs)		Click here
Finland	Low	Sporadic	Low	Stable	27	0%	None	0.0 (graphs)	(graphs)		Click here
France	Low	Sporadic	Low	Stable	38	0%	None	(graphs)	1321.1 (graphs)		Click here
Georgia	Low	None	Low	Increasing	16	0%	None	370.7 (graphs)		sari	Click here
Germany	Low	None		Stable	17	0%	None	(graphs)	952.2 (graphs)		Click here
Greece	Low	None		Stable	0	0%	None	61.3 (graphs)	(graphs)		Click here
Hungary	Low	None	Low	Decreasing	15	0%	None	39.2 (graphs)	(graphs)		Click here
Iceland	Low	None	Low	Stable	0	0%	None	0.9 (graphs)	(graphs)		Click here
Ireland	Low	None	Low	Stable	7	0%	None	4.9 (graphs)	(graphs)		Click here
Israel	Low	None	Low	Decreasing	25	8.0%	None	4.9 (graphs)			Click here
Italy	Low	None	Low	Stable				54.7 (graphs)	(graphs)		Click here
Kazakhstan	Low	None	Low	Increasing	4	0%	None	6.5 (graphs)	149.3 (graphs)	sari	Click here
Kyrgyzstan					2	0%	None		(graphs)	sari	Click here
Latvia	Low	None		Stable	0	0%	None	0 * (graphs)			Click here
Lithuania	Low	None	Low	Stable	0	0%	None	0.3 (graphs)	297.4 (graphs)		Click here
Luxembourg	Low	None	Low		1	0%	None	0.4 * (graphs)	19.4 * (graphs)		Click here
Montenegro	Low	None	Low	Stable				2.1 (graphs)			Click here
Netherlands	Low	None		Stable	7	0%	None	21.4 (graphs)	(graphs)		Click here
Northern Ireland	Low	None		Stable	2	0%		14.0 (graphs)	355.2 (graphs)		Click here
Norway	Low	Sporadic	Low	Stable	5	20.0%	None	28.5 (graphs)	(graphs)		Click here
Poland	Low	None	Low	Decreasing	6	0%	None	31.4 (graphs)	(graphs)		Click here
Portugal	Low	None		Stable	1	0%	None	11.6 (graphs)	(graphs)		Click here
Republic of Moldova	Low	None	Low	Stable	0	0%	None	(graphs)	197.5 (graphs)	sari	Click here
Romania	Low	None	Low	Stable	21	0%	None	4.6 (graphs)	717.4 (graphs)	sari	Click here
Russian Federation	Low	None	Low	Decreasing	38	0%	None	0.1 (graphs)	482.3 (graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	20	0%	None	8.9 (graphs)	407.0 (graphs)		Click here
Serbia	Low	None	Low	Increasing	0	0%	None	54.0 (graphs)		sari	Click here
Slovakia	Low	None	Low	Decreasing	1	0%	None	133.9 (graphs)	1340.2 (graphs)	sari	Click here
Slovenia	Low	None		Stable	3	0%	None	1.4 (graphs)	566.3 (graphs)		Click here
Spain	Low	None		Stable	58	0%		15.9 (graphs)	(graphs)		Click here
Sweden	Low	Sporadic	Low	Stable	50	0%	None	1.5 (graphs)	(graphs)		Click here
Switzerland	Low	None		Stable	12	0%	None	15.7 (graphs)			Click here
Turkey					65	0%	None	(graphs)			Click here
Ukraine	Low	None	Low	Increasing	2	0%	None	2.8 * (graphs)	429.4 (graphs)	sari	Click here
Uzbekistan							None	(graphs)	22.5 (graphs)		Click here
Europe					544	1.7%					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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Sporadic influenza detections in the WHO European Region

- This issue is based on data for week 45/2011 reported by 48 Member States in the WHO European Region.
- Levels of influenza activity in the Region remain low.
- Sporadic detections of influenza A(H1N1)pdm09, influenza A(H3N2) and influenza B have been reported.

Current situation: week 45/2011

Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) continue to be low throughout the WHO European Region. Out of 41 countries reporting on trends, 29 reported stable trends, while 7 reported increasing and 5 reported decreasing trends. Consultation rates were in general highest in young children. Of the 41 countries reporting on geographical distribution of influenza activity, 6 reported sporadic activity: the Czech Republic, France, Norway, the Russian Federation, Spain and Sweden. All countries reported a low intensity of influenza activity and low impact on their health care services.

Data from sentinel hospital-based surveillance for severe acute respiratory infection (SARI) were reported by 8 countries: Armenia, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, the Russian Federation, Serbia and Ukraine. Sentinel SARI hospitalizations in these countries are currently at pre-season levels.

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological situation: week 45/2011

Sentinel outpatient clinics collected 596 respiratory specimens, of which 6 (1.0%) tested positive for influenza virus: 2 were type A and 4 were type B. Of the influenza A viruses, 1 was subtyped as influenza A(H3). In addition, 30 non-sentinel specimens were reported positive for influenza: 23 type A and 7 type B. Of the influenza A viruses, 15 were subtyped: 11 as A(H1)pdm09 and 4 as A(H3). Sentinel hospitals collected 48 respiratory specimens from SARI patients, none of which tested positive for influenza virus.

Cumulative virological data: weeks 40-45/2011

During this period, 125 influenza virus detections were reported: 89 (71%) were influenza A and 36 (29%) were influenza B. Of the influenza A viruses, 55 were subtyped: 21 as A(H1)pdm09 and 34 as A(H3).

Since week 40/2011, 5 influenza viruses have been characterized antigenically: 2 were A(H1)pdm09 A/California/7/2009 (H1N1)-like; 1 was A(H3) A/Perth/16/2009 (H3N2)-like; 1 was B/Florida/4/2006-like (B/Yamagata/16/88 lineage), and 1 was B/Brisbane/60/2008-like (B/Victoria/2/87 lineage).

Comment

Consultation rates for ILI and ARI in outpatient clinics and hospitalizations due to SARI are at low levels throughout the WHO European Region. There have been sporadic detections of influenza A(H1N1)pdm09, influenza A(H3N2) and influenza B during recent weeks.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

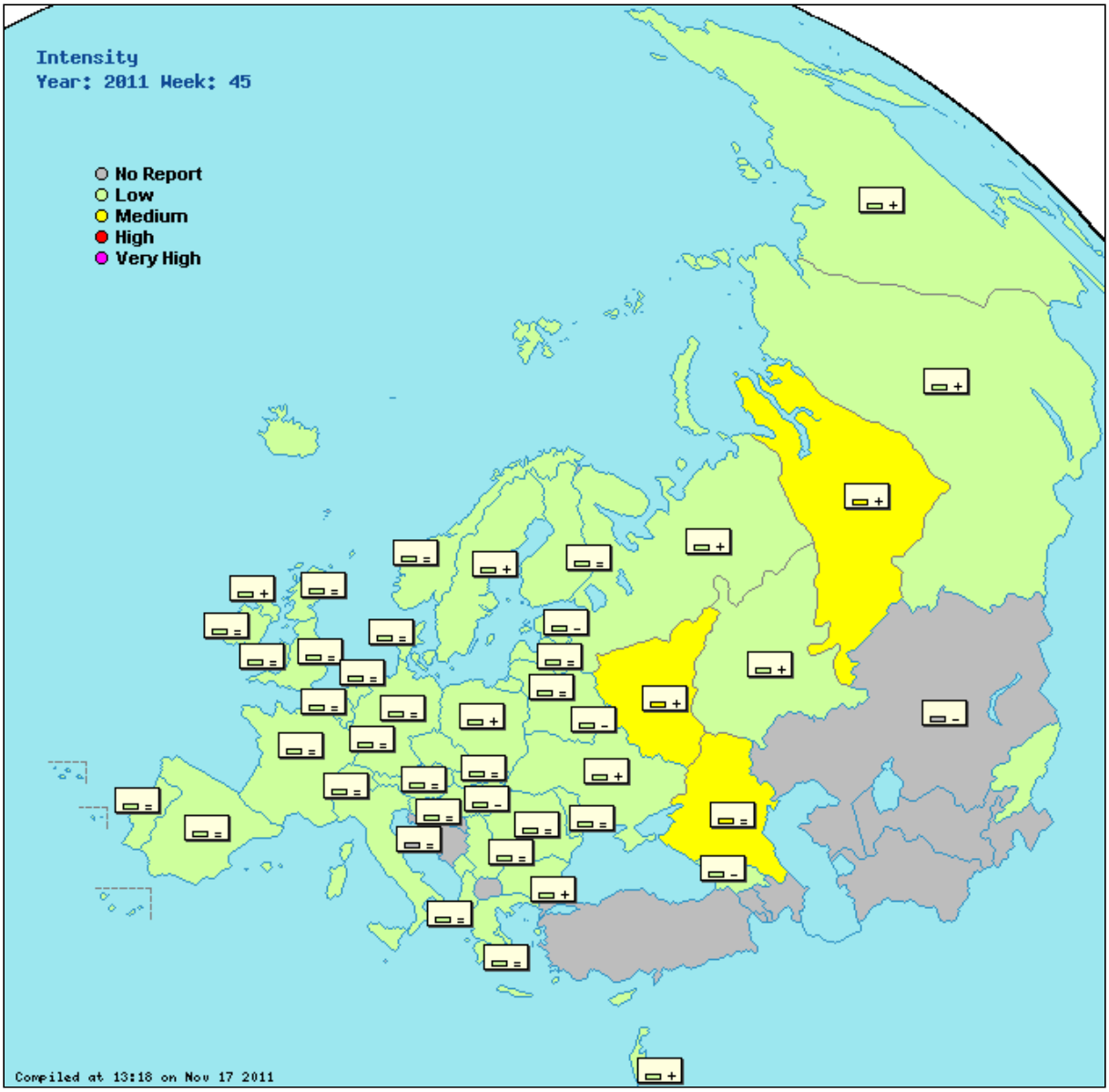
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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 laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

Country comments (where available)

Scotland
These figures are based on incomplete data and are therefore provisional.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania	Low	None	Low	Stable	0	0%	None		380.7 (graphs)	sari	Click here
Armenia					3	0%	None		(graphs)	sari	Click here
Austria	Low	None	Low	Stable	4	0%	None	0.0 (graphs)	21.2 (graphs)		Click here
Azerbaijan					1	0%	None	(graphs)			Click here
Belarus	Low	None	Low	Decreasing	39	0%	None	0.7 (graphs)	836.5 (graphs)	sari	Click here
Belgium	Low	None		Stable	11	0%	None	59.6 (graphs)	1146.6 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Low	None		Increasing	0	0%	None	(graphs)	1086.6 (graphs)		Click here
Croatia		None		Stable			None	0.0 (graphs)			Click here
Cyprus	Low	None	Low	Stable				1.9 * (graphs)	8.1 * (graphs)		Click here
Czech Republic	Low	Sporadic		Stable				23.5 (graphs)	863.3 (graphs)		Click here

Denmark	Low	None		Stable	1	0%	None	53.9 (graphs)		(graphs)		Click here
England	Low	None		Stable	71	0%	None	8.6 (graphs)	364.5 (graphs)			Click here
Estonia	Low	None		Decreasing	0	0%	None	4.3 (graphs)	217.7 (graphs)			Click here
Finland	Low	None	Low	Stable	33	0%	None	0.0 (graphs)		(graphs)		Click here
France	Low	Sporadic	Low	Stable	42	0%		(graphs)	1326.7 (graphs)			Click here
Georgia	Low	None	Low	Decreasing	20	0%	None	359.3 (graphs)			sari	Click here
Germany	Low	None		Stable	15	0%	None	(graphs)	1157.1 (graphs)			Click here
Greece	Low	None		Stable	0	0%	None	79.6 (graphs)		(graphs)		Click here
Hungary	Low	None	Low	Decreasing	0	0%	None	56.2 (graphs)		(graphs)		Click here
Iceland	Low	None	Low	Stable				0.3 (graphs)		(graphs)		Click here
Ireland	Low	None	Low	Stable	6	0%	None	8.2 (graphs)		(graphs)		Click here
Israel	Low	None	Low	Increasing	44	0%	None	6.6 (graphs)				Click here
Italy	Low	None	Low	Stable				77.2 (graphs)		(graphs)		Click here
Kazakhstan		None	Low	Decreasing	9	0%	None	5.3 (graphs)	145.0 (graphs)		sari	Click here
Kyrgyzstan	Low	None	Low	Stable				(graphs)	26.1 (graphs)		sari	Click here
Latvia	Low	None		Stable	0	0%	None	0 * (graphs)				Click here
Lithuania	Low	None	Low	Stable	0	0%	None	0.4 (graphs)	380.0 (graphs)			Click here
Luxembourg	Low	None	Low		6	0%	None	0.7 * (graphs)	21.9 * (graphs)			Click here
The former Yugoslav Republic of Macedonia							None	(graphs)				Click here
Malta					0	0%	None	(graphs)				Click here
Montenegro	Low	None	Low	Increasing				4.3 (graphs)				Click here
Netherlands	Low	None		Stable	10	30.0%	None	30.7 (graphs)		(graphs)		Click here
Northern Ireland	Low	None		Increasing	6	0%		21.2 (graphs)	340.9 (graphs)			Click here
Norway	Low	Sporadic	Low	Stable	4	25.0%	None	26.1 (graphs)		(graphs)		Click here
Poland	Low	None	Low	Increasing	6	0%	None	72.1 (graphs)		(graphs)		Click here
Portugal	Low	None		Stable	0	0%	None	6.2 (graphs)		(graphs)		Click here
Republic of Moldova	Low	None	Low	Stable	7	0%	None	(graphs)	77.0 (graphs)		sari	Click here
Romania	Low	None	Low	Stable	22	0%	None	3.7 (graphs)	700.9 (graphs)		sari	Click here
Russian Federation	Low	Sporadic	Low	Increasing	40	0%	None	0.1 (graphs)	565.8 (graphs)		sari	Click here
Scotland	Low	None	Low	Stable	5	0%	None	10.1 (graphs)	455.0 (graphs)			Click here
Serbia	Low	None	Low	Stable	0	0%	None	54.2 (graphs)			sari	Click here
Slovakia	Low	None	Low	Stable	3	0%	None	145.3 (graphs)	1410.9 (graphs)		sari	Click here
Slovenia	Low	None		Stable	3	0%	None	0.0 (graphs)	886.5 (graphs)			Click here
Spain	Low	Sporadic		Stable	90	2.2%	None	18.2 (graphs)		(graphs)		Click here
Sweden	Low	Sporadic	Low	Increasing	48	0%	None	6.4 (graphs)		(graphs)		Click here
Switzerland	Low	None		Stable	8	0%	None	28.0 (graphs)				Click here
Turkey					33	0%	None	(graphs)				Click here
Ukraine	Low	None	Low	Increasing	2	0%	None	3.2 * (graphs)	448.5 (graphs)		sari	Click here
Uzbekistan							None			(graphs)		Click here
Wales	Low	None		Stable	4	0%		6.7 (graphs)		(graphs)		Click here
Europe					596	1.0%						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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Low levels of influenza activity in the WHO European Region

- This issue is based on data for week 46/2011 reported by 46 Member States in the WHO European Region.
- Levels of influenza activity in the Region remain low.
- Sporadic detections of influenza A(H1N1)pdm09, influenza A(H3N2) and influenza B have been reported.

Current situation: week 46/2011

Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) continue to be low throughout the WHO European Region. Out of 38 countries reporting on trends, 26 reported stable trends, while 10 reported increasing and 2 reported decreasing trends. In general, consultation rates were highest in young children. Of the 39 countries reporting on geographical distribution of influenza activity, 7 reported sporadic activity (the Czech Republic, France, Ireland, Norway, the Russian Federation, Spain and Sweden) and 1 reported local activity (the Netherlands). All countries reported a low intensity of influenza activity and low impact on their health care services.

Data from sentinel hospital-based surveillance for severe acute respiratory infection (SARI) were reported by 8 countries: Armenia, Georgia, Kazakhstan, Kyrgyzstan, Romania, the Russian Federation, Serbia and Ukraine. Sentinel SARI hospitalizations in these countries are currently at pre-season levels.

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological situation: week 46/2011

Sentinel outpatient clinics collected 734 respiratory specimens, of which 12 (1.6%) tested positive for influenza viruses: 8 were type A and 4 were type B. Of the influenza A viruses, 7 were subtyped as influenza A(H3) and 1 was subtype as influenza A(H1)pdm09. In addition, 29 non-sentinel specimens were reported positive for influenza: 22 type A and 7 type B. Of the influenza A viruses, 11 were subtyped: 2 as A(H1)pdm09 and 9 as A(H3). Sentinel hospitals collected 177 respiratory specimens from SARI patients, none of which tested positive for influenza virus.

Cumulative virological data: weeks 40–46/2011

During this period, 172 influenza virus detections were reported: 122 (71%) were influenza A and 50 (29%) were influenza B. Of the influenza A viruses, 76 were subtyped: 24 (32%) as A(H1)pdm09 and 52 (68%) as A(H3).

Since week 40/2011, 5 influenza viruses have been characterized antigenically: 2 were A(H1)pdm09 A/California/7/2009 (H1N1)-like; 1 was A(H3) A/Perth/16/2009 (H3N2)-like; 1 was B/Florida/4/2006-like (B/Yamagata/16/88 lineage), and 1 was B/Brisbane/60/2008-like (B/Victoria/2/87 lineage).

Comment

Consultation rates for ILI and ARI in outpatient clinics and hospitalizations due to SARI are at low levels throughout the WHO European Region. There have been sporadic detections of influenza A(H1N1)pdm09, influenza A(H3N2) and influenza B during recent weeks. The percentage of sentinel samples that tested positive was low (1.6%). As is common at this time of year, the number of influenza detections remains low, with respiratory syncytial virus detections slowly increasing (see graphs for Europe, season 2011/2012).

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

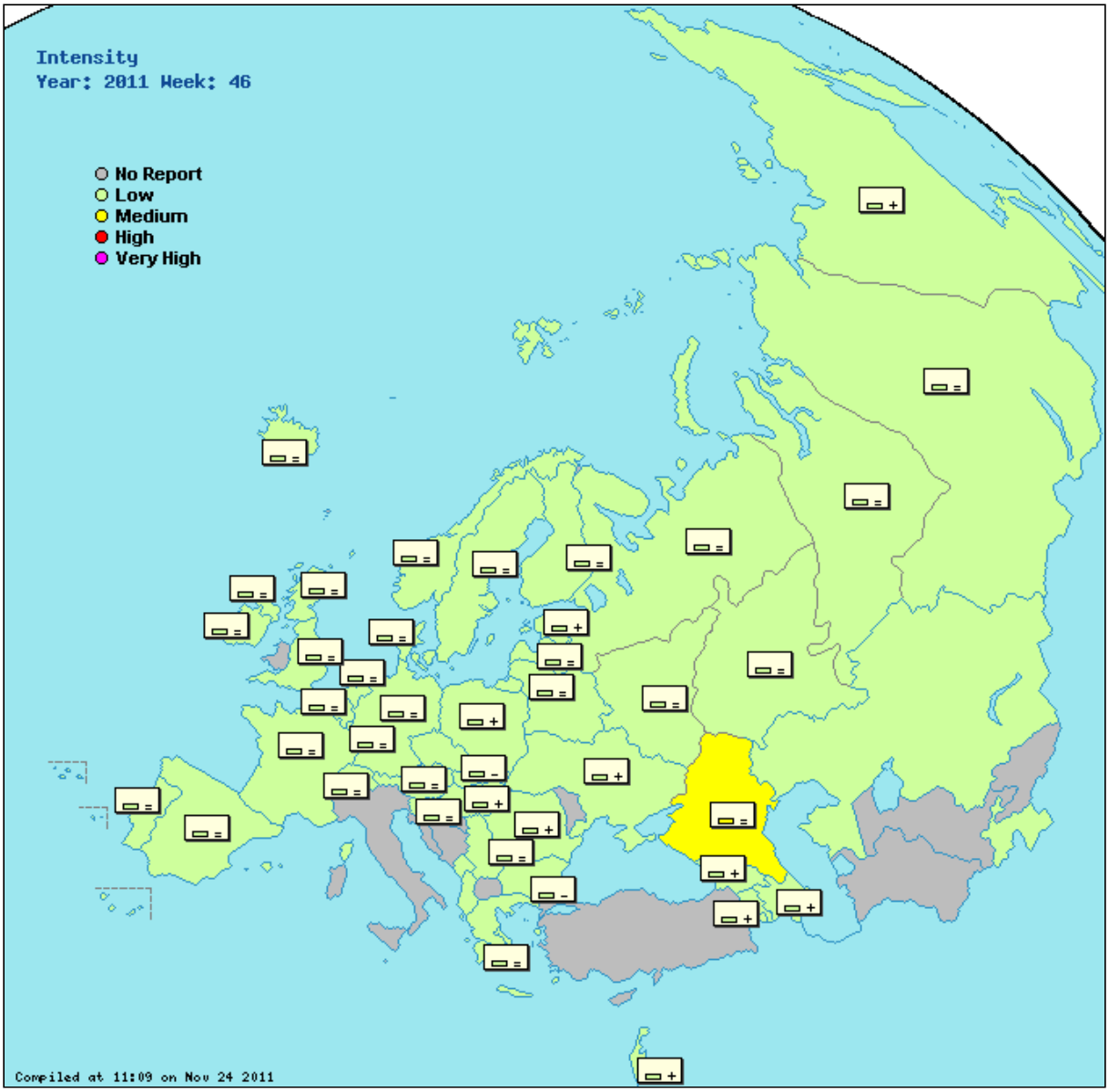
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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 laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

Country comments (where available)

Czech Republic

We are reporting first confirmed influenza death in this season _ female born 1973 _ hospitalized from 25 October at intensive care unit _ first symptoms 19 October _ influenza isolate A H1N1 pdm confirmed at national influenza reference laboratory _ antiviral treatment during hospitalization_ death on 9 November

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania	Low	None	Low	Stable					396.7 (graphs)	sari	Click here
Armenia	Low	None	Low	Increasing	0	0%	None	(graphs)	117.8 (graphs)	sari	Click here
Austria	Low	None	Low	Stable	2	0%	None	0.0 (graphs)	21.0 (graphs)		Click here
Azerbaijan	Low	None	Low	Increasing	3	0%	None	278.5 (graphs)			Click here
Belarus	Low	None	Low	Increasing				1.2 (graphs)	967.2 (graphs)	sari	Click here
Belgium	Low	None		Stable	11	9.1%	None	70.8 (graphs)	1644.4 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Low	None		Decreasing	6	0%	None	(graphs)	1019.0 (graphs)		Click here
Croatia							None	(graphs)			Click here

Czech Republic	Low	Sporadic		Stable				23.0 (graphs)	802.9 (graphs)			Click here
Denmark	Low	None		Stable	0	0%	None	58.5 (graphs)	(graphs)			Click here
England	Low	None		Stable	84	0%	None	8.7 (graphs)	384.2 (graphs)			Click here
Estonia	Low	None		Increasing	2	0%		4.6 (graphs)	235.2 (graphs)			Click here
Finland	Low	None	Low	Stable	26	0%	None	0.0 (graphs)	(graphs)			Click here
France	Low	Sporadic	Low	Stable	84	0%	None	(graphs)	1706.4 (graphs)			Click here
Georgia	Low	None	Low	Increasing	17	0%	None	369.5 (graphs)			sari	Click here
Germany	Low	None		Stable	17	0%	None	(graphs)	1249.0 (graphs)			Click here
Greece	Low	None		Stable	0	0%	None	63.4 (graphs)	(graphs)			Click here
Hungary	Low	None	Low	Increasing	27	0%	None	59.6 (graphs)	(graphs)			Click here
Iceland	Low	None	Low	Stable	0	0%	None	1.3 (graphs)	(graphs)			Click here
Ireland	Low	Sporadic	Low	Stable	12	16.7%	None	7.7 (graphs)	(graphs)			Click here
Israel	Low	None	Low	Increasing	61	0%	None	7.5 (graphs)				Click here
Italy					7	0%		(graphs)				Click here
Kazakhstan	Low	None			10	0%	None	3.2 (graphs)	149.9 (graphs)		sari	Click here
Kyrgyzstan					0	0%	None		(graphs)		sari	Click here
Latvia	Low	None		Stable	0	0%	None	0.0 (graphs)	935.5 (graphs)			Click here
Lithuania	Low	None	Low	Stable	4	0%	None	0.7 (graphs)	444.2 (graphs)			Click here
Luxembourg	Low	None	Low		4	0%	None	0.2 * (graphs)	19.6 * (graphs)			Click here
The former Yugoslav Republic of Macedonia							None	(graphs)				Click here
Montenegro	Low	None	Low	Stable				2.2 (graphs)				Click here
Netherlands	Low	Local		Stable	13	0%	None	29.1 (graphs)	(graphs)			Click here
Northern Ireland	Low	Sporadic		Stable	8	12.5%		19.9 (graphs)	324.8 (graphs)			Click here
Norway	Low	Sporadic		Stable	7	0%	None	26.9 (graphs)	(graphs)			Click here
Poland	Low	None	Low	Increasing	18	0%	None	99.8 (graphs)	(graphs)			Click here
Portugal	Low	None		Stable	3	0%	None	14.8 (graphs)	(graphs)			Click here
Romania	Low	None	Low	Increasing	22	0%	None	4.4 (graphs)	768.1 (graphs)		sari	Click here
Russian Federation	Low	Sporadic	Low	Stable	42	0%	None	0.1 (graphs)	587.7 (graphs)		sari	Click here
Scotland	Low	None	Low	Stable	37	0%	None	14.4 (graphs)	446.0 (graphs)			Click here
Serbia	Low	None	Low	Stable	0	0%	None	56.2 (graphs)			sari	Click here
Slovakia	Low	None	Low	Decreasing	1	0%	None	128.9 (graphs)	1272.5 (graphs)		sari	Click here
Slovenia	Low	None		Stable	4	0%	None	0.0 (graphs)	802.9 (graphs)			Click here
Spain	Low	Sporadic		Stable	94	5.3%	None	21.8 (graphs)	(graphs)			Click here
Sweden	Low	Sporadic	Low	Stable	42	4.8%	None	5.1 (graphs)	(graphs)			Click here
Switzerland	Low	None		Stable	9	0%	None	22.4 (graphs)				Click here
Tajikistan	Low	None	Low	Stable				(graphs)				Click here
Turkey					55	1.8%	None	(graphs)				Click here
Ukraine	Low	None	Low	Increasing	2	0%	None	3.1 * (graphs)	490.8 (graphs)		sari	Click here
Uzbekistan							None		27.4 (graphs)			Click here
Europe					734	1.6%						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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Continued low level of influenza activity in the WHO European Region

- This issue is based on data for week 47/2011 reported by 46 Member States in the WHO European Region.
- Levels of influenza activity in the Region remain low.
- Sporadic detections of influenza A(H3N2), influenza B, and influenza A(H1N1)pdm09 have been reported.

Current situation: week 47/2011

Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) continue to be low throughout the WHO European Region. Out of 42 countries reporting on trends, 31 reported stable trends, while 9 reported increasing and 2 reported decreasing trends. In general, consultation rates were highest in young children. Of the 42 countries reporting on geographical distribution of influenza activity, 9 reported sporadic activity (Azerbaijan, the Czech Republic, France, Ireland, Norway, the Russian Federation, Spain, Sweden and Switzerland) and 1 reported local activity (the Netherlands). All countries reported a low intensity of influenza activity and low impact on their health care services.

In week 47, data from sentinel hospital-based surveillance for severe acute respiratory infection (SARI) were reported by 9 countries: Albania, Armenia, Georgia, Kazakhstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. Sentinel SARI hospitalizations in these countries are currently at pre-season levels.

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in ﷺOverview of sentinel SARI systems in EuroFluﷺ.

Virological situation: week 47/2011

Sentinel outpatient clinics collected 834 respiratory specimens, of which 7 (0.8%) tested positive for influenza viruses: 5 were type A and 2 were type B. All 5 influenza A viruses were subtyped as influenza A(H3). In addition, 37 non-sentinel specimens were reported positive for influenza: 30 type A and 7 type B. Of the influenza A viruses, 21 were subtyped: 1 as A(H1)pdm09 and 20 as A(H3). Sentinel hospitals collected 117 respiratory specimens from SARI patients, none of which tested positive for influenza virus.

Cumulative virological data: weeks 40ﷺ47/2011

During this period, 219 influenza virus detections were reported: 160 (73%) were influenza A and 59 (27%) were influenza B. Of the influenza A viruses, 110 were subtyped: 25 (23%) as A(H1)pdm09 and 85 (77%) as A(H3).

Since week 40/2011, 5 influenza viruses have been characterized antigenically: 2 were A(H1)pdm09 A/California/7/2009 (H1N1)-like; 1 was A(H3) A/Perth/16/2009 (H3N2)-like; 1 was B/Florida/4/2006-like (B/Yamagata/16/88 lineage), and 1 was B/Brisbane/60/2008-like (B/Victoria/2/87 lineage). Out of 2 influenza viruses characterized genetically, 1 belonged to the group represented by A/Stockholm/18/2011 and 1 to the group represented by A/Iowa/19/2010, both in the A/Victoria/208/2009 A(H3) clade.

Comment

Consultation rates for ILI and ARI in outpatient clinics and hospitalizations due to SARI are at low levels throughout the WHO European Region. There have been sporadic detections of influenza A(H3N2), influenza B and influenza A(H1N1)pdm09 during recent weeks. The percentage of sentinel samples that tested positive for influenza in week 47/2011 (0.8%) remained low, as is common for this time of year, while respiratory syncytial virus detections have slowly increased (see graphs for Europe, season 2011/2012).

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

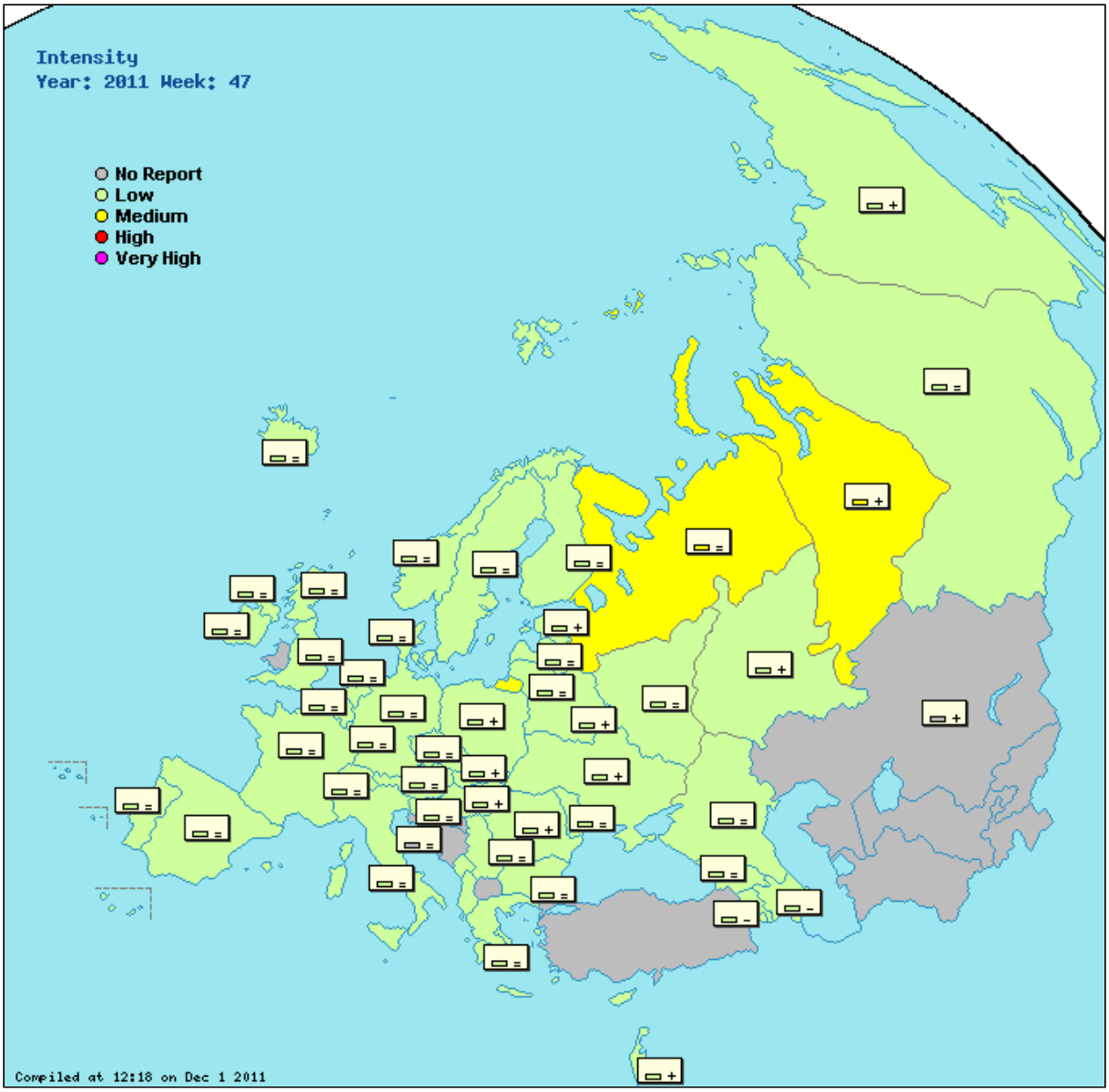
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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 laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

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	Sentinel SARI	Virology graph and pie chart
Albania	Low	None	Low	Stable					399.0 (graphs)	sari	Click here
Armenia	Low	None	Low	Decreasing	0	0%	None	(graphs)	112.5 (graphs)	sari	Click here
Austria	Low	None	Low	Stable	4	0%	None	0.0 (graphs)	19.4 (graphs)		Click here
Azerbaijan	Low	Sporadic	Low	Decreasing	1	0%	None	259.5 (graphs)	(graphs)		Click here
Belarus	Low	None	Low	Increasing	39	0%	None	1.5 (graphs)	1005.6 (graphs)	sari	Click here
Belgium	Low	None		Stable	15	6.7%	None	51.8 (graphs)	1748.9 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Low	None		Stable	13	0%	None	(graphs)	1052.7 (graphs)		Click here
Croatia		None		Stable			None	0.0 (graphs)	(graphs)		Click here
Cyprus	Low	None	Low	Stable				1.0 * (graphs)	5.0 * (graphs)		Click here
Czech Republic	Low	Sporadic		Stable	19	0%	None	30.4 (graphs)	951.9 (graphs)		Click here

Denmark	Low	None		Stable	10	0%	None	82.5	(graphs)		(graphs)		Click here
England	Low	None		Stable	68	0%	None	8.6	(graphs)	405.2	(graphs)		Click here
Estonia	Low	None		Increasing	3	0%	None	6.0	(graphs)	255.4	(graphs)		Click here
Finland	Low	None	Low	Stable	30	0%	None	0.0	(graphs)		(graphs)		Click here
France	Low	Sporadic	Low	Stable	70	1.4%	None		(graphs)	1925.6	(graphs)		Click here
Georgia	Low	None	Low	Stable	6	0%	None	312.6	(graphs)		(graphs)	sari	Click here
Germany	Low	None		Stable	35	0%	None		(graphs)	1290.2	(graphs)		Click here
Greece	Low	None		Stable	0	0%	None	69.6	(graphs)		(graphs)		Click here
Hungary	Low	None	Low	Increasing	23	0%	None	67.1	(graphs)		(graphs)		Click here
Iceland	Low	None	Low	Stable	0	0%	None	2.8	(graphs)		(graphs)		Click here
Ireland	Low	Sporadic	Low	Stable	7	0%	None	5.8	(graphs)		(graphs)		Click here
Israel	Low	None	Low	Increasing	56	1.8%	None	10.4	(graphs)				Click here
Italy	Low	None	Low	Stable	18	11.1%	None	106.7	(graphs)		(graphs)		Click here
Kazakhstan		None		Increasing	7	0%	None	12.5	(graphs)	158.0	(graphs)	sari	Click here
Kyrgyzstan					3	0%	None				(graphs)	sari	Click here
Latvia	Low	None		Stable	0	0%	None	0.0	(graphs)	1256.8	(graphs)		Click here
Lithuania	Low	None	Low	Stable	3	0%	None	0.8	(graphs)	483.6	(graphs)		Click here
Luxembourg	Low	None	Low		6	0%	None	1.0 *	(graphs)	25.8 *	(graphs)		Click here
Montenegro	Low	None	Low	Stable				2.7	(graphs)		(graphs)		Click here
Netherlands	Low	Local		Stable	11	9.1%	None	41.6	(graphs)		(graphs)		Click here
Northern Ireland	Low	None		Stable	5	0%		21.2	(graphs)	340.9	(graphs)		Click here
Norway	Low	Sporadic		Stable	9	0%	None	36.0	(graphs)		(graphs)		Click here
Poland	Low	None	Low	Increasing	15	0%	None	103.5	(graphs)		(graphs)		Click here
Portugal	Low	None		Stable	4	0%	None	26.3	(graphs)		(graphs)		Click here
Republic of Moldova	Low	None	Low	Stable	2	0%	None		(graphs)	92.5	(graphs)	sari	Click here
Romania	Low	None	Low	Increasing	16	0%	None	2.8	(graphs)	809.5	(graphs)	sari	Click here
Russian Federation	Low	Sporadic	Low	Stable	65	0%	Type A, Subtype H3	0.1	(graphs)	621.5	(graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	37	0%	None	17.0	(graphs)	500.6	(graphs)		Click here
Serbia	Low	None	Low	Stable	0	0%	None	56.6	(graphs)		(graphs)	sari	Click here
Slovakia	Low	None	Low	Increasing	5	0%	None	155.3	(graphs)	1497.6	(graphs)	sari	Click here
Slovenia	Low	None		Stable	4	0%	None	0.0	(graphs)	936.7	(graphs)		Click here
Spain	Low	Sporadic		Stable	99	1.0%	None	22.5	(graphs)		(graphs)		Click here
Sweden	Low	Sporadic	Low	Stable	29	0%	None	7.0	(graphs)		(graphs)		Click here
Switzerland	Low	Sporadic		Stable	13	0%	None	28.4	(graphs)		(graphs)		Click here
Turkey					82	0%	None		(graphs)				Click here
Ukraine	Low	None	Low	Increasing	2	0%	None	3.1 *	(graphs)	503.2	(graphs)	sari	Click here
Uzbekistan							None	0.2	(graphs)	27.4	(graphs)		Click here
Europe					834	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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

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Continued low influenza activity in the WHO European Region

- This issue is based on data for week 48/2011 reported by 46 Member States in the WHO European Region.
- Levels of influenza activity in the Region remain low.
- Sporadic detections of influenza A(H3N2), influenza B, and influenza A(H1N1)pdm09 have been reported.

Current situation: week 48/2011

Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) continue to be low throughout the WHO European Region. Out of 41 countries reporting on trends, 26 reported stable trends, while 9 reported increasing and 6 reported decreasing trends. In general, consultation rates were highest in young children. Of the 41 countries reporting on the geographical distribution of influenza activity, 7 reported sporadic activity (Azerbaijan, the Czech Republic, France, Norway, Spain, Sweden and Uzbekistan) and 1 reported local activity (the Netherlands). All countries reported low intensity of influenza activity and low impact on their health care services.

In week 48, data from sentinel hospital-based surveillance for severe acute respiratory infection (SARI) were reported by 8 countries: Albania, Georgia, Kazakhstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. Sentinel SARI hospitalizations in these countries are at pre-season levels.

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in ﷺOverview of sentinel SARI systems in EuroFluﷺ.

Virological situation: week 48/2011

Sentinel outpatient clinics collected 932 respiratory specimens, of which 17 (1.8%) tested positive for influenza viruses: 14 were type A and 3 were type B. Of the influenza A viruses, 10 were subtyped as influenza A(H3) and 1 as A(H1)pdm09. In addition, 48 non-sentinel specimens were reported positive for influenza: 40 type A and 8 type B. Of the influenza A viruses, 17 were subtyped: 14 as A(H3) and 3 as A(H1)pdm09. Sentinel hospitals collected 122 respiratory specimens from SARI patients, none of which tested positive for influenza virus.

Cumulative virological data: weeks 40ﷺ48/2011

During this period, 295 influenza virus detections were reported: 226 (77%) were influenza A and 69 (33%) were influenza B. Of the influenza A viruses, 148 were subtyped: 118 (80%) as A(H3) and 30 (20%) as A(H1)pdm09.

Since week 40/2011, 5 influenza viruses have been characterized antigenically: 2 were A(H1)pdm09 A/California/7/2009 (H1N1)-like; 1 was A(H3) A/Perth/16/2009 (H3N2)-like; 1 was B/Florida/4/2006-like (B/Yamagata/16/88 lineage), and 1 was B/Brisbane/60/2008-like (B/Victoria/2/87 lineage). Out of 4 influenza viruses characterized genetically, 2 belonged to the B/Bangladesh/3333/2007 clade (Yamagata lineage); 1 belonged to the group represented by A/Stockholm/18/2011 and 1 to the group represented by A/Iowa/19/2010, both in the A/Victoria/208/2009 A(H3) clade.

Comment

Consultation rates for ILI and ARI in outpatient clinics and hospitalizations due to SARI are at low levels throughout the WHO European Region. There have been sporadic detections of influenza A(H3N2), influenza B and influenza A(H1N1)pdm09 during recent weeks. The percentage of sentinel samples that tested positive for influenza in week 48/2011 (1.8%) remained low, as is common for this time of year, while respiratory syncytial virus detections have slowly increased since week 40/2011(see the graphs for Europe, season 2011/2012.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

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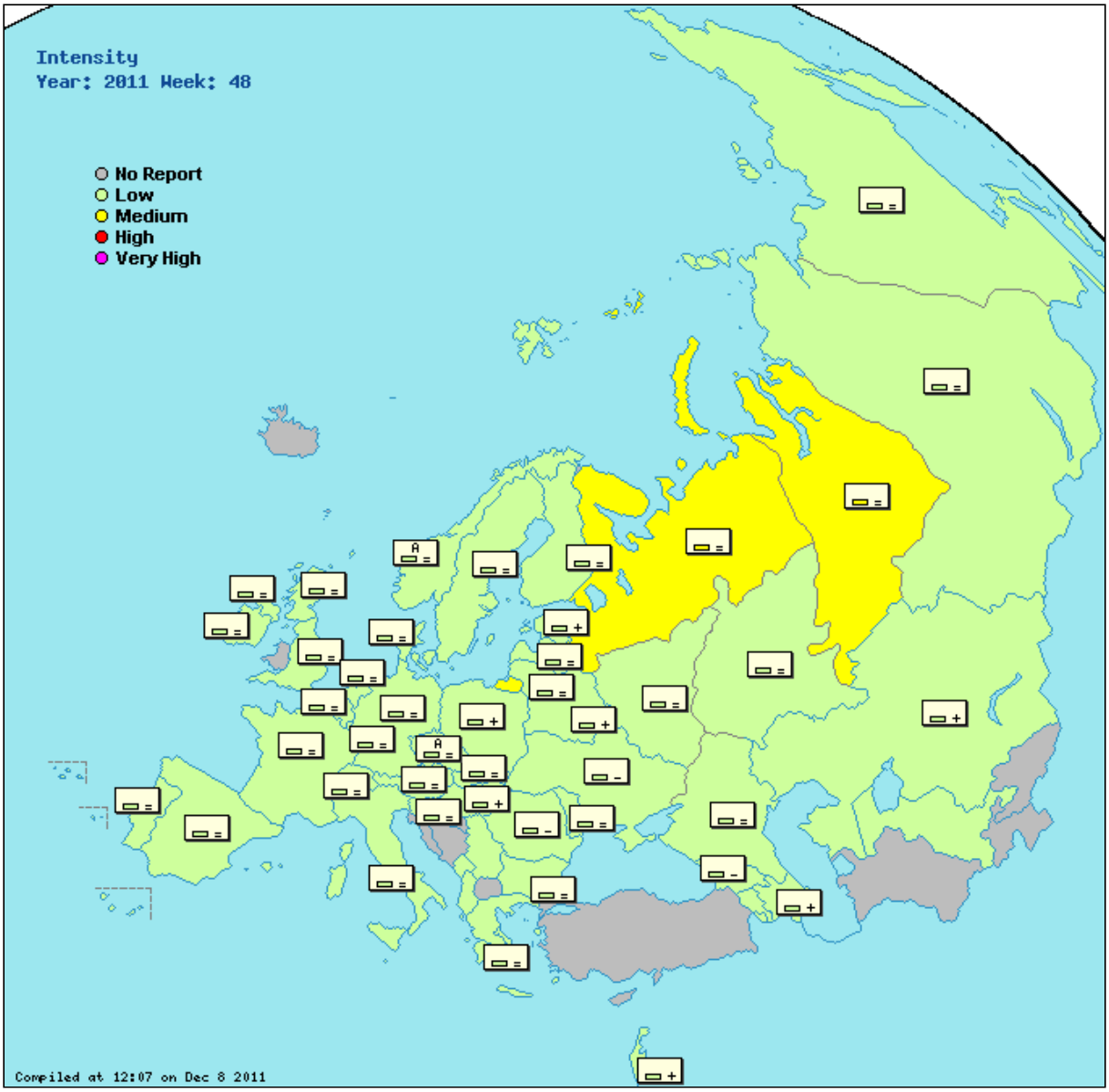
Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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

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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).

Country comments (where available)

Latvia
In week 48/2011 the first case of influenza, identificated as B/Victoria- lineage virus, has been detected from non-sentinel sourse in Latvia.

Romania
For 89.5% of SARI cases laboratory investigations have been performed. The etiologies detected by now are the following: 7 Parainfluenza virus type 1; 2 Parainfluenza virus type 4; 2 RSV type B; 2 Adenovirus; 1 Rhinovirus; 1 Bocavirus and 1 Str.pneumoniae. The total positivity rate for SARI cases is 47% and the positivity rate for influenza in SARI cases is 0% by now. In one of the two deaths registered in SARI cases an Adenovirus was detected. For the other one the laboratory investigation is ongoing.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania	Low	None	Low	Decreasing					432.7 (graphs)	sari	Click here
Armenia	Low	None	Low	Decreasing				(graphs)	0.0 (graphs)	sari	Click here
Austria	Low	None	Low	Stable	2	0%	None	0.0 (graphs)	22.0 (graphs)		Click here
Azerbaijan	Low	Sporadic	Low	Increasing	13	0%	None	214.9 (graphs)	(graphs)		Click here

Belarus	Low	None	Low	Increasing	50	0%	None	2.0 (graphs)	1025.9 (graphs)	sari	Click here
Belgium	Low	None		Stable	15	0%	None	76.9 (graphs)	1953.6 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Low	None		Stable	6	0%	None	(graphs)	1068.2 (graphs)		Click here
Croatia							None	(graphs)			Click here
Czech Republic	Low	Sporadic		Stable	18	16.7%	Type A	32.9 (graphs)	996.8 (graphs)		Click here
Denmark	Low	None		Stable	13	7.7%	None	62.1 (graphs)	(graphs)		Click here
England	Low	None		Stable	84	0%	None	8.1 (graphs)	435.2 (graphs)		Click here
Estonia	Low	None		Increasing	5	0%		6.3 (graphs)	291.6 (graphs)		Click here
Finland	Low	None	Low	Stable	21	0%	None	0.0 (graphs)	(graphs)		Click here
France	Low	Sporadic	Low	Stable	87	0%	None	(graphs)	2054.5 (graphs)		Click here
Georgia	Low	None	Low	Decreasing	15	0%	None	263.9 (graphs)	(graphs)	sari	Click here
Germany	Low	None		Stable	42	2.4%	None	(graphs)	1313.9 (graphs)		Click here
Greece	Low	None		Stable	0	0%	None	70.5 (graphs)	(graphs)		Click here
Hungary	Low	None	Low	Increasing	23	0%	None	71.7 (graphs)	(graphs)		Click here
Iceland					0	0%	None	(graphs)			Click here
Ireland	Low	None	Low	Stable	11	0%	None	8.4 (graphs)	(graphs)		Click here
Israel	Low	None	Low	Increasing	57	8.8%	None	10.6 (graphs)			Click here
Italy	Low	None	Low	Stable	26	0%	None	123.9 (graphs)	(graphs)		Click here
Kazakhstan	Low	None	Low	Increasing	2	0%	None	7.8 (graphs)	168.0 (graphs)	sari	Click here
Kyrgyzstan					12	0%	None		(graphs)	sari	Click here
Latvia	Low	None		Stable	0	0%	None	0.0 (graphs)	1277.6 (graphs)		Click here
Lithuania	Low	None	Low	Stable	5	0%	None	0.9 (graphs)	473.4 (graphs)		Click here
Luxembourg	Low	None			3	0%	None	0.2 * (graphs)	28.3 * (graphs)		Click here
Malta	Low	None	Low	Stable				3.3 * (graphs)	0 * (graphs)		Click here
Montenegro	Low	None	Low	Increasing				4.8 (graphs)	(graphs)		Click here
Netherlands	Low	Local		Stable	13	0%	None	36.4 (graphs)	(graphs)		Click here
Northern Ireland	Low	None		Stable	1	0%		11.7 (graphs)	340.5 (graphs)		Click here
Norway	Low	Sporadic		Stable	9	11.1%	Type A	36.9 (graphs)	(graphs)		Click here
Poland	Low	None	Low	Increasing	22	0%	None	115.0 (graphs)	(graphs)		Click here
Portugal	Low	None		Stable	12	0%	None	22.4 (graphs)	(graphs)		Click here
Republic of Moldova	Low	None	Low	Stable	4	0%	None	(graphs)	44.3 (graphs)	sari	Click here
Romania	Low	None	Low	Decreasing	16	0%	None	3.1 (graphs)	664.2 (graphs)	sari	Click here
Russian Federation	Low	None		Stable	40	0%	None	0.2 (graphs)	644.7 (graphs)	sari	Click here
Scotland	Low	None	Low	Stable	28	0%	None	12.6 (graphs)	518.9 (graphs)		Click here
Serbia	Low	None	Low	Increasing				67.0 (graphs)	(graphs)	sari	Click here
Slovakia	Low	None	Low	Stable	2	0%	None	159.6 (graphs)	1509.4 (graphs)	sari	Click here
Slovenia	Low	None		Stable	7	0%	None	0.0 (graphs)	1113.8 (graphs)		Click here
Spain	Low	Sporadic		Stable	90	3.3%	None	23.4 (graphs)	(graphs)		Click here
Sweden	Low	Sporadic	Low	Stable	44	0%	None	4.8 (graphs)	(graphs)		Click here
Switzerland	Low	None		Stable	18	0%	None	19.8 (graphs)	(graphs)		Click here
Turkey					111	2.7%	None	(graphs)			Click here
Ukraine	Low	None	Low	Decreasing	5	0%	None	3.5 * (graphs)	500.0 (graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Decreasing				0.1 (graphs)	27.8 (graphs)		Click here
Europe					932	1.8%					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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Overall low levels but slowly increasing influenza activity in some countries in the WHO European Region

- This issue is based on data for week 49/2011 reported by 48 Member States in the WHO European Region.
- Levels of influenza activity in the Region remain low.
- Sporadic detections of influenza A(H3N2), influenza B, and influenza A(H1N1)pdm09 have been reported.

Current situation: week 49/2011

Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) continue to be low throughout the WHO European Region. Out of 42 countries reporting on trends, 33 reported stable trends, while 5 reported increasing and 4 reported decreasing trends. In general, consultation rates were highest in young children. Of the 43 countries reporting on the geographical distribution of influenza activity, 12 reported sporadic activity (Belgium, the Czech Republic, Estonia, France, Iceland, Norway, the Russian Federation, Slovenia, Spain, Sweden, Tajikistan and Uzbekistan) and 1 reported local activity (the Netherlands). All countries reported low intensity of influenza activity and low impact on their health care services.

In week 49, data from sentinel hospital-based surveillance for severe acute respiratory infection (SARI) were reported by 10 countries: Albania, Armenia, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. Sentinel SARI hospitalizations in these countries are at pre-season levels.

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in ﷺOverview of sentinel SARI systems in EuroFluﷺ.

Virological situation: week 49/2011

Sentinel outpatient clinics collected 935 respiratory specimens, of which 22 (2.4%) tested positive for influenza viruses: 21 were type A and 1 was type B. Of the influenza A viruses, 15 were subtyped as influenza A(H3). In addition, 61 non-sentinel specimens were reported positive for influenza: 56 type A and 5 type B. Of the influenza A viruses, 27 were subtyped: 22 as A(H3) and 5 as A(H1)pdm09. Sentinel hospitals collected 123 respiratory specimens from SARI patients, none of which tested positive for influenza virus.

Cumulative virological data: weeks 40ﷺ49/2011

During this period, 384 influenza virus detections were reported: 311 (81%) were influenza A and 73 (19%) were influenza B. Of the influenza A viruses, 207 were subtyped: 172 (83%) as A(H3) and 35 (17%) as A(H1)pdm09.

Since week 40/2011, 8 influenza viruses have been characterized antigenically: 2 were A(H1)pdm09 A/California/7/2009 (H1N1)-like; 2 were A(H3) A/Perth/16/2009 (H3N2)-like; 2 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage); 1 was B/Bangladesh/3333/2007-like (B/Yamagata/16/88 lineage); and 1 was B/Brisbane/60/2008-like (B/Victoria/2/87 lineage). Out of 9 influenza viruses characterized genetically, 1 belonged to the A(H1)pdm09 group represented by A/Astrakhan/1/2011; 6 belonged to the group represented by A/Stockholm/18/2011 and 2 to the group represented by A/Iowa/19/2010, both in the A/Victoria/208/2009 A(H3) clade.

Comment

Consultation rates for ILI and ARI in outpatient clinics and hospitalizations due to SARI are at low levels throughout the WHO European Region. There have been sporadic detections of influenza A(H3N2), influenza B and influenza A(H1N1)pdm09 during recent weeks. However, the number of countries reporting sporadic and local geographical distribution of influenza activity is increasing slightly. The percentage of sentinel samples that tested positive for influenza in week 49/2011 (2.4%) remained low, as is common for this time of year, while respiratory syncytial virus detections have slowly increased since week 40/2011 (see the graphs for Europe, season 2011/2012.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

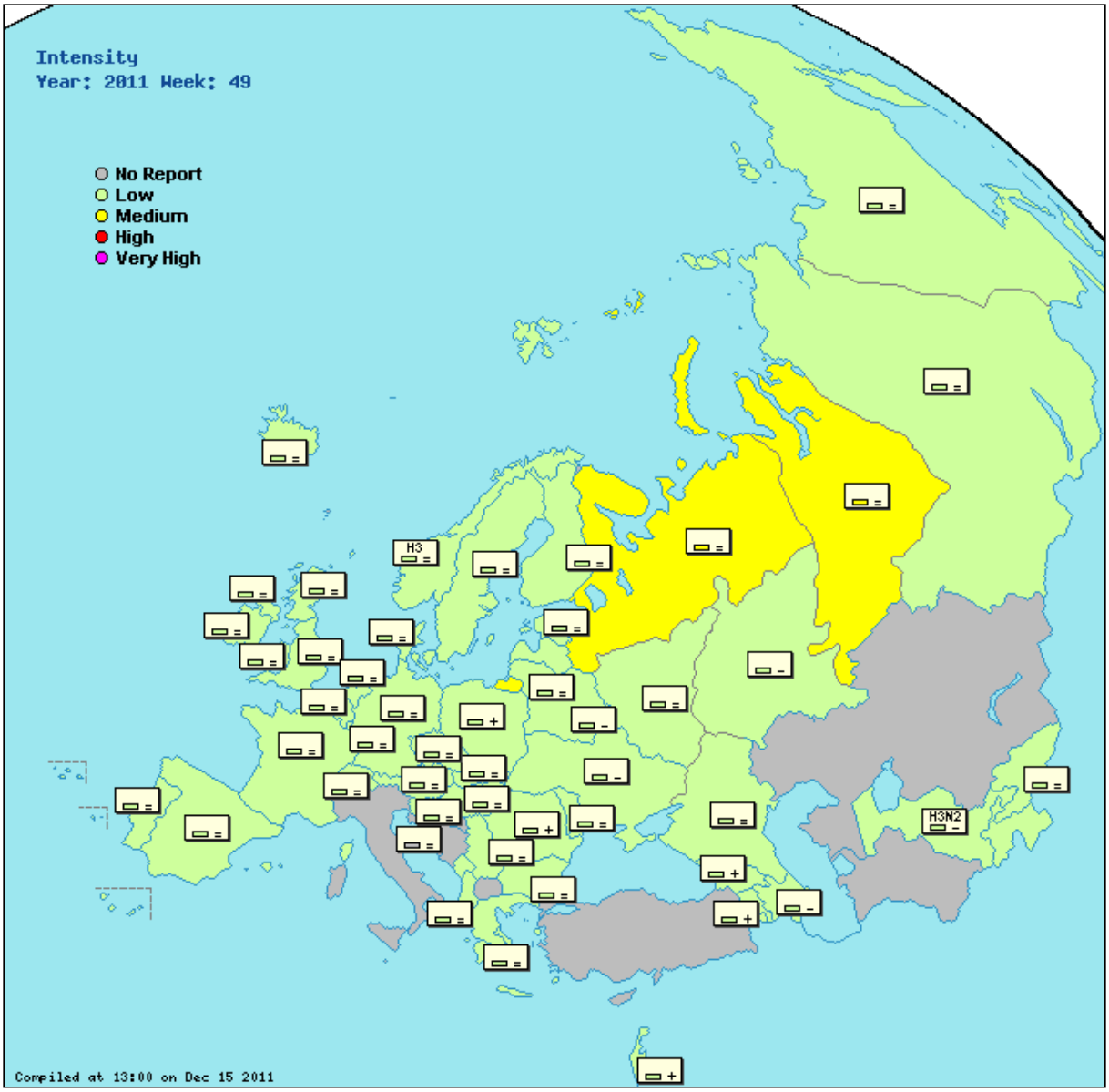
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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 laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

Country comments (where available)

Norway

Whereas the number of influenza virus detections in Norway remains low, there has an increase of influenza A detections in weeks 48 & 49. All 30 influenza A viruses analysed in Norway over the first weeks of this season have consistently been of H3 subtype. A number of the viruses from week 49 have tested negative for H1pdm09 in the primary laboratory and are expected to be confirmed as subtype H3 in the national reference laboratory.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania	Low	None	Low	Stable	4	0%	None		432.5 (graphs)	sari	Click here
Armenia	Low	None	Low	Increasing	0	0%	None	(graphs)	110.4 (graphs)	sari	Click here
Austria	Low	None	Low	Stable	5	0%	None	0.0 (graphs)	18.3 (graphs)		Click here
Azerbaijan	Low	None	Low	Decreasing	10	0%	None	168.6 (graphs)	(graphs)		Click here
Belarus	Low	None	Low	Decreasing	48	0%	None	5.6 (graphs)	980.0 (graphs)	sari	Click here
Belgium	Low	Sporadic		Stable	35	8.6%	None	101.9 (graphs)	1903.4 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Low	None		Stable	0	0%	None	(graphs)	1018.0 (graphs)		Click here

Croatia		None		Stable			None	0.0 (graphs)		(graphs)			Click here
Czech Republic	Low	Sporadic		Stable	22	9.1%	None	35.7 (graphs)	1013.2	(graphs)			Click here
Denmark	Low	None		Stable	8	0%	None	65.5 (graphs)		(graphs)			Click here
England	Low	None		Stable	80	2.5%	None	9.2 (graphs)	428.0	(graphs)			Click here
Estonia	Low	Sporadic		Stable	4	0%	None	6.2 (graphs)	251.3	(graphs)			Click here
Finland	Low	None	Low	Stable	30	0%	None	0.0 (graphs)		(graphs)			Click here
France	Low	Sporadic	Low	Stable	73	2.7%	None	(graphs)	2167.6	(graphs)			Click here
Georgia	Low	None	Low	Increasing	11	0%	None	318.0 (graphs)		(graphs)		sari	Click here
Germany	Low	None		Stable	74	0%	None	(graphs)	1307.8	(graphs)			Click here
Greece	Low	None		Stable	0	0%	None	67.1 (graphs)		(graphs)			Click here
Hungary	Low	None	Low	Stable	24	0%	None	73.5 (graphs)		(graphs)			Click here
Iceland	Low	Sporadic	Low	Stable	0	0%		4.1 (graphs)		(graphs)			Click here
Ireland	Low	None	Low	Stable	5	0%	None	9.3 (graphs)		(graphs)			Click here
Israel	Low	None	Low	Increasing	59	5.1%	None	11.9 (graphs)					Click here
Italy					20	15.0%	None	(graphs)					Click here
Kazakhstan		None			7	0%	None	39.1 (graphs)	185.5	(graphs)		sari	Click here
Kyrgyzstan	Low	None	Low	Stable	19	0%	None	2.0 (graphs)	38.3	(graphs)		sari	Click here
Latvia	Low	None		Stable				0.0 (graphs)	1253.9	(graphs)			Click here
Lithuania	Low	None	Low	Stable	2	0%	None	0.9 (graphs)	525.0	(graphs)			Click here
Luxembourg	Low	None	Low		13	0%	None	1.3 * (graphs)	36.7 *	(graphs)			Click here
The former Yugoslav Republic of Macedonia							None	(graphs)					Click here
Malta					0	0%	None	(graphs)					Click here
Montenegro	Low	None	Low	Stable				2.4 (graphs)		(graphs)			Click here
Netherlands	Low	Local		Stable	10	0%	None	21.8 (graphs)		(graphs)			Click here
Northern Ireland	Low	None		Stable	7	0%		9.3 (graphs)	379.0	(graphs)			Click here
Norway	Low	Sporadic	Low	Stable	5	0%	Type A, Subtype H3	40.1 (graphs)		(graphs)			Click here
Poland	Low	None	Low	Increasing	27	0%	None	137.4 (graphs)		(graphs)			Click here
Portugal	Low	None		Stable	0	0%	None	0.0 (graphs)		(graphs)			Click here
Republic of Moldova	Low	None	Low	Stable	1	0%	None	0.1 (graphs)	42.6	(graphs)		sari	Click here
Romania	Low	None	Low	Increasing	18	0%	None	4.3 (graphs)	742.2	(graphs)		sari	Click here
Russian Federation	Low	Sporadic		Stable	53	0%	None	0.1 (graphs)	620.8	(graphs)		sari	Click here
Scotland	Low	Sporadic	Low	Stable	36	0%	None	11.6 (graphs)	480.9	(graphs)			Click here
Serbia	Low	None	Low	Stable	0	0%	None	67.2 (graphs)		(graphs)		sari	Click here
Slovakia	Low	None	Low	Stable	6	0%	None	160.6 (graphs)	1529.4	(graphs)		sari	Click here
Slovenia	Low	Sporadic		Stable	5	0%	None	5.2 (graphs)	967.7	(graphs)			Click here
Spain	Low	Sporadic		Stable	31	0%	None	15.9 (graphs)		(graphs)			Click here
Sweden	Low	Sporadic	Low	Stable	50	0%	None	5.6 (graphs)		(graphs)			Click here
Switzerland	Low	None		Stable	15	0%	None	30.0 (graphs)		(graphs)			Click here
Tajikistan	Low	Sporadic	Low	Stable				0.0 (graphs)		(graphs)			Click here
Turkey					108	6.5%	None	(graphs)					Click here
Ukraine	Low	None	Low	Decreasing	2	0%	None	3.3 * (graphs)	484.1	(graphs)		sari	Click here
Uzbekistan	Low	Sporadic	Low	Decreasing			Type A, Subtype H3N2	0.1 (graphs)	26.9	(graphs)			Click here
Wales	Low	None		Stable	8	0%		8.3 (graphs)		(graphs)			Click here
Europe					935	2.4%							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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

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Influenza activity remains low in the WHO European Region

- This issue is based on data for week 50/2011 reported by 49 Member States in the WHO European Region.
- Levels of influenza activity in the Region are low.
- Sporadic detections of influenza A(H3N2), influenza B and influenza A(H1N1)pdm09 have been reported.

Current situation: week 50/2011

Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) remain at pre-season levels in most countries of the WHO European Region. Of 46 countries reporting on trends in respiratory disease activity, 35 reported stable trends, 6 reported increasing trends and 5 reported decreasing trends. Of the 46 countries reporting the geographical distribution of influenza activity, 25 reported no activity, 3 reported local activity and 18 reported sporadic activity.

In week 50, data from sentinel hospital-based surveillance for severe acute respiratory infection (SARI) were reported by 8 countries: Armenia, Georgia, Kazakhstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. Although some countries have been reporting slight increases in recent weeks, SARI hospitalizations remain at pre-season levels, with no laboratory confirmed cases of influenza this week.

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological situation: week 50/2011

Sentinel outpatient clinics collected 979 respiratory specimens, of which 45 (5%) tested positive for influenza viruses: 42 were type A and 3 were type B. All 34 influenza A viruses subtyped were identified as A(H3). In the 15 countries testing 20 or more sentinel specimens, influenza positivity ranged from 0% to 17% (Turkey). Among these countries, France, Germany, Israel, Spain and Turkey have observed increases in influenza activity in recent weeks. In addition, 75 non-sentinel specimens were reported positive for influenza: 65 as type A and 10 as type B. Of the influenza A viruses, 23 were subtyped: 22 as A(H3) and 1 as A(H1)pdm09. Sentinel hospitals collected 127 respiratory specimens from patients with SARI, none of which tested positive for influenza virus.

Cumulative virological data: weeks 40–50/2011

During this period, 527 influenza virus detections were reported: 440 (83%) were influenza A and 87 (17%) were influenza B. Of the influenza A viruses, 281 were subtyped: 244 (87%) as A(H3) and 37 (13%) as A(H1)pdm09.

Since week 40/2011, 12 influenza viruses have been characterized antigenically: 2 were A(H1)pdm09 A/California/7/2009 (H1N1)–like, 6 were A(H3) A/Perth/16/2009 (H3N2)–like, 2 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage), 1 was B/Bangladesh/3333/2007-like (B/Yamagata/16/88 lineage), and 1 was B/Brisbane/60/2008-like (B/Victoria/2/87 lineage). Of 23 influenza viruses characterized genetically, 3 belonged to the B/Bangladesh/3333/2007 clade (Yamagata lineage), 1 belonged to the A(H1)pdm09 group represented by A/Astrakhan/1/2011, 1 belonged to the B/Brisbane/60/2008 clade (Victoria lineage) and 18 belonged to the A/Victoria/208/2009 A(H3) clade – 14 in the group represented by A/Stockholm/18/2011 and 4 in the group represented by A/Iowa/19/2010.

Comment

Influenza activity remains low throughout the WHO European Region, although some countries are observing increasing activity. Consultation rates for ILI and ARI in outpatient clinics and SARI admissions in hospitals are also at pre-season levels in most countries. Influenza A(H3N2), influenza B and influenza A(H1N1)pdm09 have been sporadically detected during recent weeks, with 5% of sentinel samples testing positive for influenza this week – an increase from 2% in the previous week. Respiratory syncytial virus detections continue to increase in some countries.

Please note that there are errors in the reported number of ILI consultations (week 49) and the number of SARI admissions (week 50) for Kazakhstan. The data are currently being corrected.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries of the WHO European Region. Further information can be obtained from the web sites of WHO/Europe, WHO headquarters and the European Centre for Disease Prevention and Control.

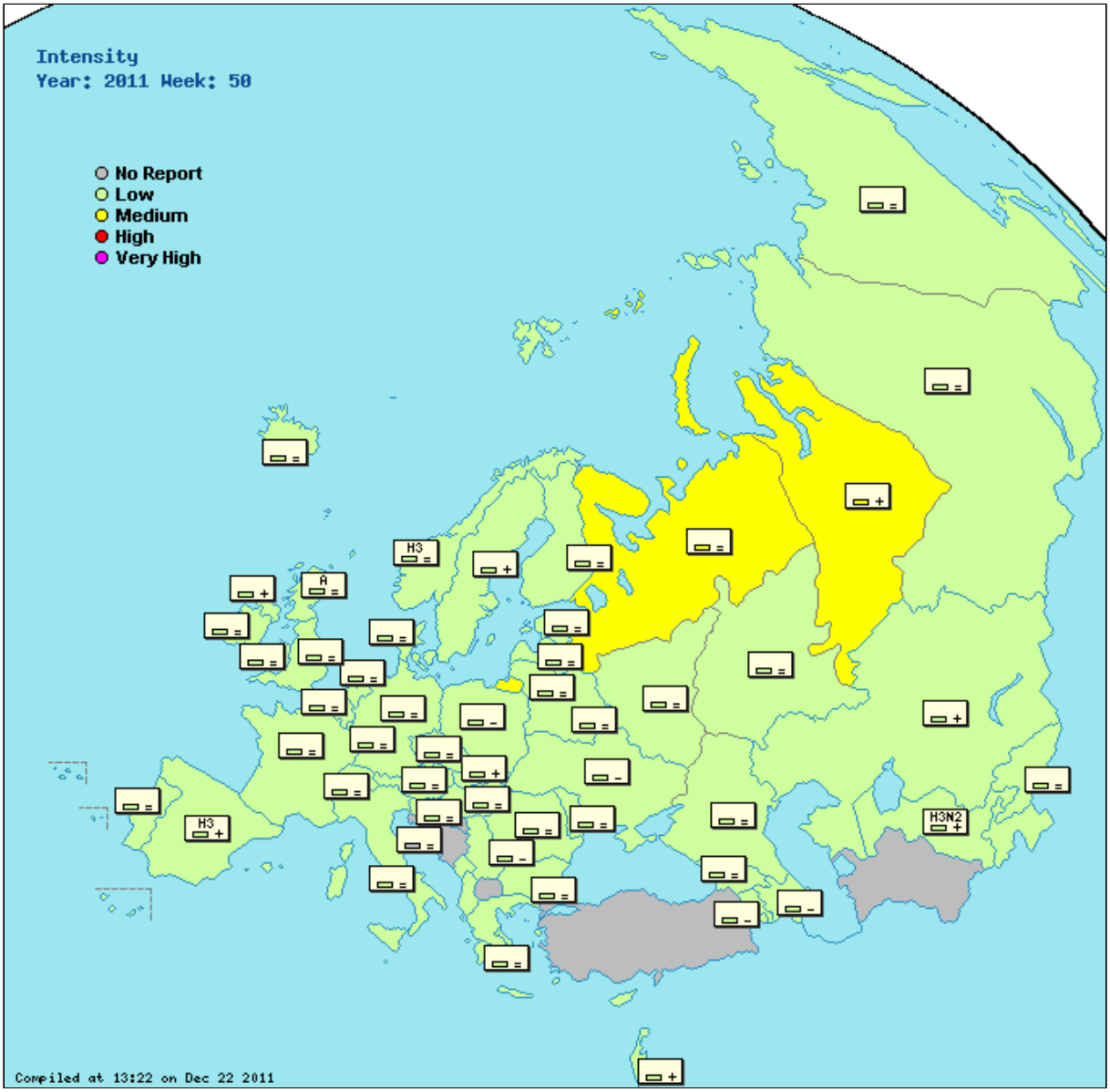
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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 laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

Country comments (where available)

Kazakhstan
In week 50/2011, 181 respiratory specimens were collected of which: 0 tested positive for influenza virus, 4 were adenoviruses, 5 respiratory syncytial viruses (RSV) and 8 parainfluenza-1.

Norway
Whereas the number of influenza virus detections in Norway remains low, there has an increase number of influenza A detections in weeks 48 through 50. All except one out of 35 influenza A viruses subtyped in Norway so far this season have been of H3 subtype.

Romania
Laboratory investigations have been performed for 86% of SARI cases. Detected pathogens were: ten parainfluenza virus type 1; one parainfluenza virus type 2; four parainfluenza virus type 4; three RSV type B; two adenovirus; two rhinovirus; two bocavirus; one Coronavirus 229E/NL63; one H.influenzae; seven Str.pneumoniae; one Ps.aeruginosa + Klebsiella spp. To date, the total positivity rate for SARI cases has been 59% and the positivity rate for influenza in SARI cases 0%.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania	Low	None	Low	Stable					431.8 (graphs)	sari	Click here
Armenia	Low	None	Low	Decreasing	3	0%	None		102.2 (graphs)	sari	Click here
Austria	Low	None	Low	Stable	9	0%	None	22.0 (graphs)	(graphs)		Click here
Azerbaijan	Low	Sporadic	Low	Decreasing	2	0%	None	165.6 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Stable	40	0%	None	4.4 (graphs)	974.7 (graphs)	sari	Click here
Belgium	Low	Sporadic		Stable	21	0%	None	99.7 (graphs)	2076.9 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Low	None		Stable	7	0%	None	(graphs)	1071.7 (graphs)		Click here
Croatia		None		Stable			None	0.0 (graphs)	(graphs)		Click here
Cyprus	Low	None	Low	Stable				1.7 * (graphs)	5.9 * (graphs)		Click here
Czech Republic	Low	Sporadic		Stable	25	0%	None	39.3 (graphs)	1079.0 (graphs)		Click here
Denmark	Low	None		Stable	7	0%	None	59.5 (graphs)	(graphs)		Click here
England	Low	None		Stable	105	0%	None	5.8 (graphs)	465.5 (graphs)		Click here
Estonia	Low	Sporadic		Stable	4	0%		5.7 (graphs)	241.0 (graphs)		Click here
Finland	Low	None	Low	Stable	23	0%	None	0.0 (graphs)	(graphs)		Click here
France	Low	Sporadic	Low	Stable	81	3.7%	None	(graphs)	2260.7 (graphs)		Click here
Georgia	Low	None	Low	Stable	17	0%	None	306.2 (graphs)	(graphs)	sari	Click here
Germany	Low	Sporadic		Stable	76	2.6%	None	(graphs)	1333.8 (graphs)		Click here
Greece	Low	None		Stable	0	0%	None	72.6 (graphs)	(graphs)		Click here
Hungary	Low	Sporadic	Low	Stable	26	3.9%	None	69.9 (graphs)	(graphs)		Click here
Iceland	Low	Sporadic	Low	Stable	0	0%		5.3 (graphs)	(graphs)		Click here
Ireland	Low	None	Low	Stable	9	11.1%	None	11.9 (graphs)	(graphs)		Click here
Israel	Low	None	Low	Increasing	56	8.9%	None	13.2 (graphs)			Click here
Italy	Low	Local	Low	Stable	5	0%	None	162.9 (graphs)	(graphs)		Click here
Kazakhstan	Low	None	Low	Increasing	14	0%	None	13.3 (graphs)	175.6 (graphs)	sari	Click here
Kyrgyzstan	Low	None	Low	Stable	15	0%	None	(graphs)	42.0 (graphs)	sari	Click here
Latvia	Low	None		Stable	0	0%	None	0.0 (graphs)	1197.6 (graphs)		Click here
Lithuania	Low	None	Low	Stable	4	0%	None	1.4 (graphs)	543.8 (graphs)		Click here
Luxembourg	Low	Sporadic	Low		6	16.7%		0.8 * (graphs)	36.8 * (graphs)		Click here
The former Yugoslav Republic of Macedonia							None	(graphs)			Click here
Malta	Low	Local	Low	Stable				2.5 * (graphs)	0 * (graphs)		Click here
Montenegro	Low	None	Low	Stable				2.9 (graphs)	(graphs)		Click here
Netherlands	Low	Local		Stable	5	0%	None	21.0 (graphs)	(graphs)		Click here
Northern Ireland	Low	None		Increasing	8	0%		18.2 (graphs)	395.2 (graphs)		Click here
Norway	Low	Sporadic	Low	Stable	9	11.1%	Type A, Subtype H3	46.4 (graphs)	(graphs)		Click here
Poland	Low	None	Low	Decreasing	19	0%	None	73.4 (graphs)	(graphs)		Click here
Portugal	Low	None		Stable	5	0%	None	4.8 (graphs)	(graphs)		Click here
Republic of Moldova	Low	None	Low	Stable	6	0%	None	(graphs)	38.1 (graphs)	sari	Click here
Romania	Low	Sporadic	Low	Stable	22	4.6%	None	3.0 (graphs)	740.6 (graphs)	sari	Click here
Russian Federation	Low	Sporadic	Low	Stable	47	0%	None	0.1 (graphs)	629.5 (graphs)	sari	Click here
Scotland	Low	None	Low	Stable	24	0%	Type A	13.3 (graphs)	536.1 (graphs)		Click here
Serbia	Low	None	Low	Decreasing	0	0%	None	47.0 (graphs)	(graphs)	sari	Click here
Slovakia	Low	None	Low	Increasing	7	0%	None	174.3 (graphs)	1614.6 (graphs)	sari	Click here
Slovenia	Low	Sporadic		Stable	10	0%	None	2.9 (graphs)	990.6 (graphs)		Click here
Spain	Low	Sporadic		Increasing	98	12.2%	Type A, Subtype H3	26.5 (graphs)	(graphs)		Click here
Sweden	Low	Sporadic	Low	Increasing	52	3.9%	None	11.6 (graphs)	(graphs)		Click here
Switzerland	Low	None		Stable	14	0%	None	29.3 (graphs)	(graphs)		Click here
Tajikistan	Low	Sporadic	Low	Stable				0.0 (graphs)	(graphs)		Click here
Turkey					92	17.4%	None	(graphs)			Click here
Ukraine	Low	None	Low	Decreasing	2	0%	None	3.7 * (graphs)	467.5 (graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Increasing			Type A, Subtype H3N2	0.2 (graphs)	30.7 (graphs)		Click here
Wales	Low	None		Stable	4	0%		9.1 (graphs)	(graphs)		Click here
Europe					979	4.6%					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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey)

and ECDC, on behalf of the data contributors.

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Sporadic influenza detections in the WHO European Region

- This issue is based on data for week 51/2011 reported by 44 Member States in the WHO European Region.
- The levels of influenza activity in the Region were low.
- Sixty-six sentinel specimens (8%) from patients with influenza-like illness (ILI) or acute respiratory infection (ARI) tested positive for influenza.
- The percentage of sentinel samples that were positive has increased during the past two weeks and indicates the possible start of the influenza season.
- Sporadic detections of influenza A(H3N2), influenza B and influenza A(H1N1)pdm09 have been reported since week 40/2011.
- All 101 influenza A viruses subtyped in week 51/2011 were A(H3).

Current situation: week 51/2011

Consultation rates for ILI and ARI are at pre-season levels in most countries in the WHO European Region. Of 35 countries reporting on trends in respiratory disease activity, 20 reported stable trends, 6 reported increasing trends and 9 reported decreasing trends. Of the 35 countries reporting on the geographical distribution of influenza activity, 21 reported no activity, 1 reported local activity and 13 reported sporadic activity.

In week 51, data from sentinel hospital-based surveillance for severe acute respiratory infection (SARI) were reported by 10 countries: Albania, Armenia, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. Although some countries have been reporting slight increases in SARI cases in recent weeks, none of the cases reported this week were associated with laboratory-confirmed influenza.

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in the overview of sentinel SARI systems in EuroFlu.

Virological situation: week 51/2011

Sentinel outpatient clinics collected 801 respiratory specimens, of which 66 (8%) tested positive for influenza viruses: 62 were type A and 4 were type B. All 61 type A viruses subtyped were identified as influenza A(H3). In the 11 countries testing 20 or more sentinel specimens, influenza positivity ranged from 0% to 24% (Turkey). Among these countries, France, Germany, Italy, Spain and Turkey have observed slight increases in influenza activity in recent weeks. Only in France has the rate for ARI exceeded the baseline level. In addition, 97 non-sentinel specimens were reported positive for influenza: 86 as type A and 11 as type B. Of the influenza A viruses, 40 were subtyped: all were A(H3). Sentinel hospitals collected 81 respiratory specimens from patients with SARI, none of which tested positive for influenza virus.

Cumulative virological data: weeks 40-51/2011

During this period, 733 influenza virus detections were reported: 631 (86%) were influenza A and 102 (14%) were influenza B. Of the influenza A viruses, 428 were subtyped: 389 (91%) as A(H3) and 39 (9%) as A(H1)pdm09.

Since week 40/2011, 19 influenza viruses have been characterized antigenically: 2 were A(H1)pdm09 A/California/7/2009 (H1N1)-like, 13 were A(H3) A/Perth/16/2009 (H3N2)-like, 2 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage), 1 was B/Bangladesh/3333/2007-like (B/Yamagata/16/88 lineage) and 1 was B/Brisbane/60/2008-like (B/Victoria/2/87 lineage). Of 27 influenza viruses characterized genetically, 3 belonged to the B/Bangladesh/3333/2007 clade (Yamagata lineage), 1 belonged to the A(H1)pdm09 group represented by A/Astrakhan/1/2011, 1 belonged to the B/Brisbane/60/2008 clade (Victoria lineage) and 22 belonged to the A/Victoria/208/2009 A(H3) clade - 18 in the group represented by A/Stockholm/18/2011 and 4 in the group represented by A/Iowa/19/2010.

Comment

Influenza activity remains low throughout the WHO European Region. For most countries, consultation rates for ILI and ARI in outpatient clinics and SARI admissions to hospitals are at pre-season levels. Two countries (Spain and Turkey) reported increases in confirmed influenza cases among sentinel samples, with percentages of positive samples of 17% and 23% respectively, which could indicate that influenza activity is about to start in these countries. Influenza has been detected sporadically during recent weeks, with 8% of sentinel samples collected across the WHO European Region testing positive for influenza in week 51/2011 - an increase from 5% in the previous week. Sporadic detections of influenza A(H3N2), influenza B and influenza A(H1N1)pdm09 have been reported since week 40/2011. Type A influenza has been dominant over type B, and in week 51/2011 all 101 type A viruses subtyped were A(H3).

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries of the WHO European Region. Further information can be obtained from the web sites of WHO/Europe, WHO headquarters and the European Centre for Disease Prevention and Control.

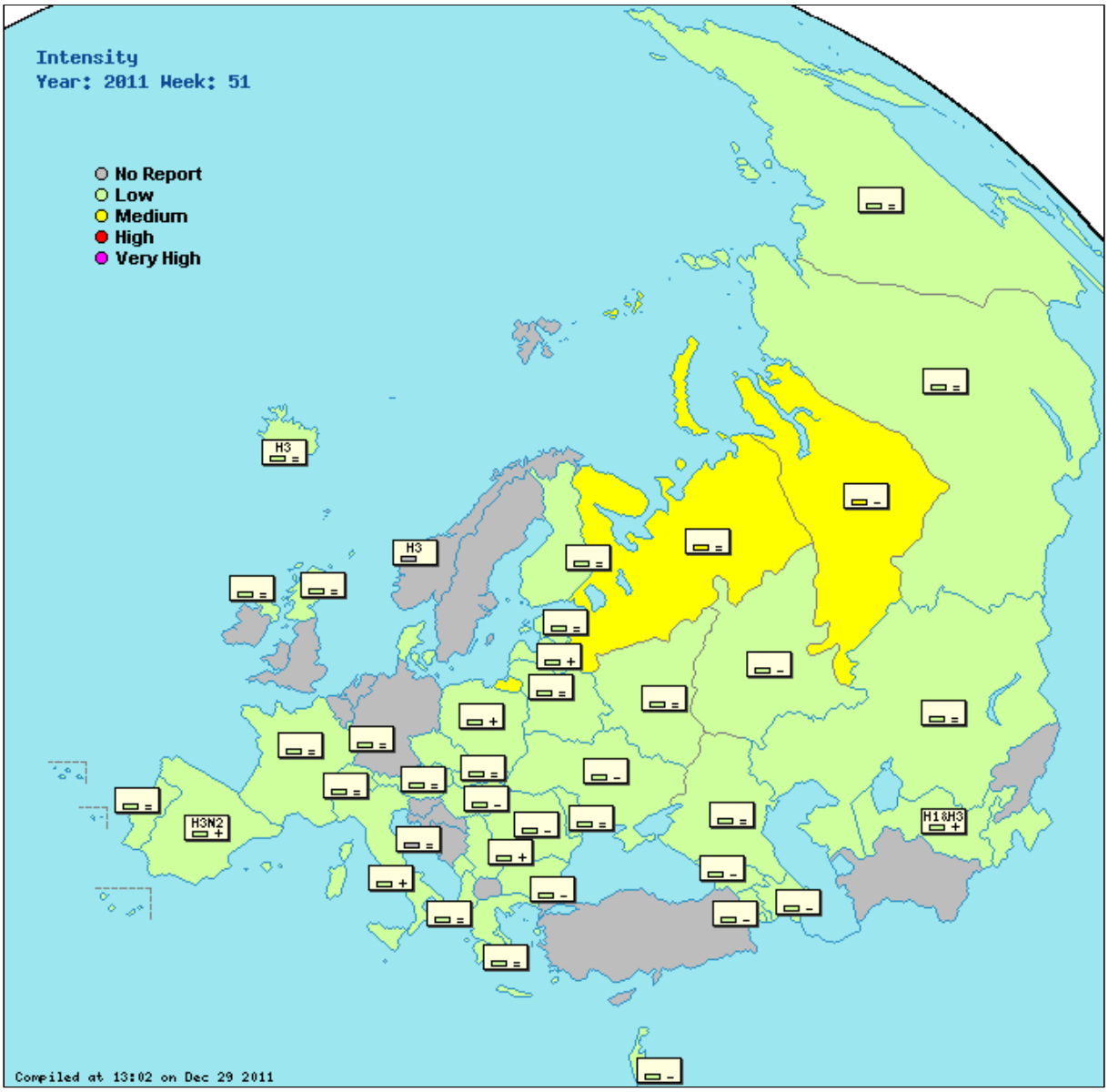
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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 laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

Country comments (where available)

Kazakhstan
In week 51/2011, 155 respiratory specimens were collected of which: 0 tested positive for influenza virus, 2 were adenoviruses, 3 respiratory syncytial viruses (RSV) and 3 parainfluenza-1.

Norway
Whereas the number of influenza virus detections in Norway remains comparably low, there has an increased number of influenza A detections in weeks 48 through 51. All except one out of 49 influenza A viruses subtyped in Norway so far this season have been of H3 subtype.

Romania
Laboratory investigations have been performed for 87% of SARI cases. Detected pathogens were: eleven parainfluenza virus type 1; two parainfluenza virus type 2; four parainfluenza virus type 4; three RSV type B; one untyped RSV; two adenovirus; two rhinovirus; two bocavirus; one Coronavirus 229E/NL63; one H.influenzae; seven Str.pneumoniae; one

Ps.aeruginosa + Klebsiella spp. To date, the total positivity rate for SARI cases has been 52.2% and the positivity rate for influenza in SARI cases 0%. In one of the two deaths registered in SARI cases, an adenovirus was detected. For the second one, no samples have been prelevated (refusal of parents). In the third death Pseudomonas aeruginosa and Klebsiella spp. have been isolated from tracheo-bronchial aspirate.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania	Low	None	Low	Stable	7	0%	None		425.6 (graphs)	sari	Click here
Armenia	Low	None	Low	Decreasing	0	0%	None		88.5 (graphs)	sari	Click here
Austria	Low	Sporadic	Low	Stable	9	0%	None	13.3 (graphs)	(graphs)		Click here
Azerbaijan	Low	Sporadic	Low	Decreasing	2	0%	None	141.7 (graphs)	(graphs)		Click here
Belarus	Low	None	Low	Decreasing				4.7 (graphs)	895.9 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Low	None		Decreasing	7	0%	None	(graphs)	970.4 (graphs)		Click here
Croatia		None		Stable			None	0.0 (graphs)	(graphs)		Click here
Czech Republic	Low	Sporadic		Stable				34.3 (graphs)	983.3 (graphs)		Click here
Denmark	Low	None		Stable				63.2 (graphs)	(graphs)		Click here
England					120	1.7%	None	(graphs)			Click here
Estonia	Low	None		Stable	7	0%	None	6.3 (graphs)	219.0 (graphs)		Click here
Finland	Low	None	Low	Stable	10	0%	None	0.0 (graphs)	(graphs)		Click here
France	Low	Sporadic	Low	Stable	47	4.3%	None	(graphs)	2313.0 (graphs)		Click here
Georgia	Low	None	Low	Decreasing	13	0%	None	255.8 (graphs)	(graphs)	sari	Click here
Germany					59	1.7%	None		(graphs)		Click here
Greece	Low	None		Stable	0	0%	None	62.9 (graphs)	(graphs)		Click here
Hungary	Low	None	Low	Decreasing	0	0%	None	51.9 (graphs)	(graphs)		Click here
Iceland	Low	Sporadic	Low	Stable	0	0%		6.3 (graphs)	(graphs)		Click here
Israel	Low	None	Low	Decreasing	49	8.2%	None	12.5 (graphs)			Click here
Italy	Low	Local	Low	Increasing	36	8.3%	None	174.9 (graphs)	(graphs)		Click here
Kazakhstan	Low	None	Low	Stable	11	0%	None	49.1 (graphs)	151.2 (graphs)	sari	Click here
Kyrgyzstan					11	18.2%	None		(graphs)	sari	Click here
Latvia	Low	Sporadic		Increasing	0	0%	None	1.0 (graphs)	1074.0 (graphs)		Click here
Lithuania	Low	None	Low	Stable	3	0%	None	1.4 (graphs)	453.1 (graphs)		Click here
Luxembourg	Low	None	Low		12	0%	None	0.9 * (graphs)	27.5 * (graphs)		Click here
The former Yugoslav Republic of Macedonia							None	(graphs)			Click here
Montenegro	Low	None	Low	Stable				4.1 (graphs)	(graphs)		Click here
Netherlands					8	0%	None	(graphs)			Click here
Northern Ireland	Low	None		Stable	5	0%		16.6 (graphs)	553.8 (graphs)		Click here
Norway					5	40.0%	Type A, Subtype H3	(graphs)			Click here
Poland	Low	None	Low	Increasing	9	0%	None	150.2 (graphs)	(graphs)		Click here
Portugal	Low	Sporadic		Stable	3	33.3%		4.5 (graphs)	(graphs)		Click here
Republic of Moldova	Low	None	Low	Stable	4	0%	None	(graphs)	34.6 (graphs)	sari	Click here
Romania	Low	Sporadic	Low	Decreasing	23	4.4%	None	3.1 (graphs)	632.5 (graphs)	sari	Click here
Russian Federation	Low	Sporadic		Stable	45	0%	None	0.1 (graphs)	607.4 (graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	33	0%	None	9.7 (graphs)	612.5 (graphs)		Click here
Serbia	Low	Sporadic	Low	Increasing	4	100.0%	None	56.0 (graphs)	(graphs)	sari	Click here
Slovakia	Low	None	Low	Stable	2	0%	None	162.3 (graphs)	1518.0 (graphs)	sari	Click here
Slovenia					9	0%		(graphs)			Click here
Spain	Low	Sporadic		Increasing	132	17.4%	Type A, Subtype H3N2	39.8 (graphs)	(graphs)		Click here
Switzerland	Low	None		Stable	24	0%	None	29.0 (graphs)	(graphs)		Click here
Tajikistan	Low	Sporadic	Low	Stable				0.0 (graphs)	(graphs)		Click here
Turkey					89	23.6%	None	(graphs)			Click here
Ukraine	Low	None	Low	Decreasing	3	0%	None	3.8 * (graphs)	427.2 (graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Increasing			Type A, Subtype H1 and H3	0.1 (graphs)	31.3 (graphs)		Click here
Europe					801	8.2%					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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

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Increasing influenza activity in the WHO European Region mainly due to influenza A(H3N2)

- This issue is based on data for week 52/2011 reported by 43 Member States in the WHO European Region.
- Clinical consultation rates in the Region were low.
- 24% of sentinel specimens from patients with influenza-like illness (ILI) or acute respiratory infection (ARI) tested positive for influenza.
- The percentage of sentinel samples that were influenza positive increased during the previous two weeks, which may indicate the start of the influenza season.
- Sporadic detections of influenza A(H3N2), influenza B, and influenza A(H1N1)pdm09 have been reported, with A(H3N2) predominating.

Current situation: week 52/2011

Consultation rates for ILI and ARI remain at low levels throughout the WHO European Region, as normally seen outside the peak period for seasonal influenza. Only Spain reported ILI consultation rates above the national baseline level. Out of 36 countries reporting on trends, 22 reported stable trends, while 4 reported increasing and 10 reported decreasing trends. In general, consultation rates were highest in young children. Of the 36 countries reporting on the geographical distribution of influenza activity, 19 reported no activity, 3 reported local activity and 14 reported sporadic activity. All countries reported low intensity of influenza activity and low impact on their health care services.

Severe acute respiratory infection (SARI): week 52/2011

In week 52, 6 countries reported data from sentinel hospital-based surveillance for SARI: Georgia, Kazakhstan, the Republic of Moldova, Romania, Serbia and Ukraine. A total of 30 respiratory specimens was collected from SARI patients. Sentinel SARI hospitalizations in these countries are at out-of-season levels. 2 of the 10 cases reported by Romania were associated with laboratory-confirmed influenza A(H3N2).

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in ﷺOverview of sentinel SARI systems in EuroFluﷺ.

Virological situation: week 52/2011

Sentinel outpatient clinics collected 554 respiratory specimens, 133 (24%) of which tested positive for influenza viruses: 131 were type A and 2 were type B. Of the influenza A viruses, all 124 that were subtyped were influenza A(H3). In the 6 countries (France, Israel, Italy, Spain, Turkey and the United Kingdom) testing 20 or more sentinel specimens, influenza positivity ranged from 7.8% to 43.2%, with a median of 25.7% (mean: 25.1%). In addition, 162 non-sentinel specimens were reported positive for influenza: 155 type A and 7 type B. Of the influenza A viruses, 36 were subtyped: 35 as A(H3) and 1 as A(H1)pdm09.

Cumulative virological data: weeks 40ﷺ52/2011

During this period, 1104 influenza virus detections were reported: 990 (90%) were influenza A and 114 (10%) were influenza B. Of the influenza A viruses, 633 were subtyped: 594 (94%) as A(H3) and 39 (6%) as A(H1)pdm09.

Since week 40/2011, 24 influenza viruses have been characterized antigenically: 2 were A(H1)pdm09 A/California/7/2009 (H1N1)-like; 16 were A(H3) A/Perth/16/2009 (H3N2)-like; 2 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage), 1 was B/Bangladesh/3333/2007-like (B/Yamagata/16/88 lineage) and 3 were B/Brisbane/60/2008-like (B/Victoria/2/87 lineage). Out of 17 influenza viruses characterized genetically, 1 belonged to the B/Bangladesh/3333/2007 clade (Yamagata lineage), 2 belonged to the B/Brisbane/60/2008 clade (Victoria lineage) and 14 belonged to the A/Victoria/208/2009 A(H3) clade ﷺ 10 in the group represented by A/Stockholm/18/2011 (group 3) and 4 in the group represented by A/Iowa/19/2010 (group 6).

Comment

Consultation rates for ILI and ARI in outpatient clinics and hospitalizations due to SARI are at low levels throughout the WHO European Region. Consultation rates for week 52/2011 should be interpreted with caution, however, since it spans a holiday period when use of primary care and collection of respiratory samples are usually low. This is reflected in the overall number of sentinel specimens collected for virological testing, which decreased from 801 in week 51 to 554 in week 52/2011. The proportion of specimens testing positive for influenza virus increased from 8% in week 51 to 24% in week 52/2011. With this increasing trend, the number of countries with consultations rates above their baseline thresholds is expected to increase over the coming weeks. Influenza types A and B have continued to co-circulate, with type A viruses being in the great majority and A(H3N2) viruses representing 94% of the H-subtyped viruses.

Detections of respiratory syncytial virus (RSV), a respiratory virus with clinical symptoms similar to influenza, peaked in week 49/2011 and are now stable (see the graphs for Europe, season 2011/2012).

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

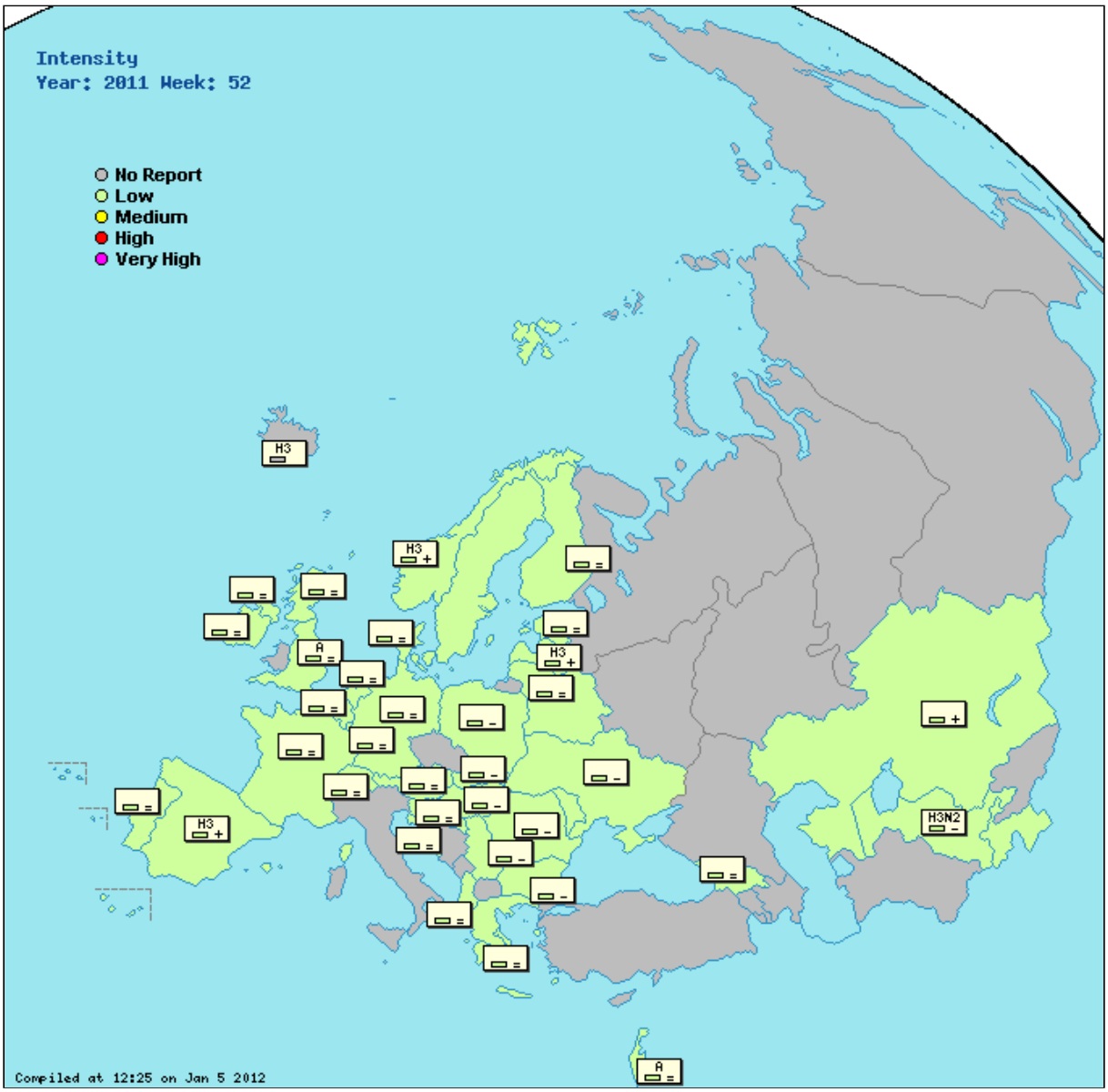
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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 laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

Country comments (where available)

Kazakhstan
In week 52/2011, 80 respiratory specimens were collected of which: 0 tested positive for influenza virus, 2 were adenoviruses, 1 respiratory syncytial viruses (RSV) and 3 parainfluenza-1, 1 parainfluenza-3.
Norway

The number of influenza A virus detections in Norway has increased during weeks 48 through 52. All except two out of 57 influenza A viruses subtyped in Norway so far this season have been of the H3 subtype.

Romania

Laboratory investigations have been performed for 89% of SARI cases. The first two influenza viruses (AH3) have been detected in SARI cases notified in Week 52. One of the patients is a 6 month old girl, with onset in 23/12/2011 and the other one is a 6 years old boy having the onset three days later. Both were reported by the same sentinel hospital and have the residence and the incubation in the same region of Romania. None of them has underlying risk conditions. To date, the total positivity rate for SARI cases has been 55.8% and the positivity rate for influenza in SARI cases 2.6%. The 4th death registered in SARI cases was negative for influenza, too and also for other etiologies (parainfluenza virus, hMPV, RSV, enterovirus, rhinovirus, coronaviruses).

Spain

In week 52/2011 ILI incidence rate has exceeded in Spain baseline level by first time in the season. Since week 48/2011 there has been an increase of influenza detections and the percentage of positive samples (from 4% to 40%). In week 52/2011 there has been identified 60 influenza A virus and two B virus, out of 53 influenza virus A subtyped 100% were AH3 resulting the predominant virus along 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	Sentinel SARI	Virology graph and pie chart
Albania	Low	None	Low	Stable	1	0%	None		378.7 (graphs)	sari	Click here
Austria	Low	Sporadic	Low	Stable	5	20.0%	None	6.7 (graphs)	(graphs)		Click here
Azerbaijan					3	0%	None	(graphs)			Click here
Belarus	Low	None	Low	Decreasing				3.7 (graphs)	748.3 (graphs)	sari	Click here
Belgium	Low	Sporadic		Stable	3	33.3%	None	69.0 (graphs)	1403.7 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Low	None		Decreasing	2	0%	None	(graphs)	724.0 (graphs)		Click here
Croatia	Low	None	Low	Stable			None	0.0 (graphs)	(graphs)		Click here
Czech Republic					6	0%	None		(graphs)		Click here
Denmark	Low	None		Stable	1	0%	None	48.7 (graphs)	(graphs)		Click here
England	Low	Sporadic		Stable	48	8.3%	Type A	6.9 (graphs)	319.7 (graphs)		Click here
Estonia	Low	Sporadic		Stable	6	0%	None	6.0 (graphs)	236.7 (graphs)		Click here
Finland	Low	None	Low	Stable	2	0%	None	0.0 (graphs)	(graphs)		Click here
France	Low	Sporadic	Low	Stable	37	8.1%	None	(graphs)	1789.1 (graphs)		Click here
Georgia	Low	None	Low	Stable	12	0%	None	246.2 (graphs)	(graphs)	sari	Click here
Germany	Low	Sporadic		Stable	9	11.1%	None	(graphs)	844.9 (graphs)		Click here
Greece	Low	None		Stable	0	0%	None	36.8 (graphs)	(graphs)		Click here
Hungary	Low	None	Low	Decreasing	6	0%	None	33.4 (graphs)	(graphs)		Click here
Iceland					0	0%	Type A, Subtype H3	(graphs)			Click here
Ireland	Low	None	Low	Stable	0	0%	None	8.9 (graphs)	(graphs)		Click here
Israel	Low	Sporadic	Low	Stable	45	11.1%	Type A	12.4 (graphs)			Click here
Italy					44	43.2%		(graphs)			Click here
Kazakhstan	Low	None	Low	Increasing	8	0%	None	51.0 (graphs)	171.7 (graphs)	sari	Click here
Latvia	Low	Sporadic		Increasing	0	0%	Type A, Subtype H3	1.9 (graphs)	883.1 (graphs)		Click here
Lithuania	Low	None	Low	Stable	0	0%	None	1.0 (graphs)	333.5 (graphs)		Click here
Luxembourg	Low	None	Low		2	0%	None	0 * (graphs)	15.9 * (graphs)		Click here
The former Yugoslav Republic of Macedonia							None	(graphs)			Click here
Netherlands	Low	Local		Stable	9	0%	None	19.6 (graphs)	(graphs)		Click here
Northern Ireland	Low	None		Stable	3	0%		20.8 (graphs)	339.2 (graphs)		Click here
Norway	Low	Local	Low	Increasing	6	0%	Type A, Subtype H3	31.4 (graphs)	(graphs)		Click here
Poland	Low	None	Low	Decreasing	3	0%	None	71.8 (graphs)	(graphs)		Click here
Portugal	Low	None		Stable	2	0%	None	9.0 (graphs)	(graphs)		Click here
Republic of Moldova	Low	None	Low	Decreasing				(graphs)	23.5 (graphs)	sari	Click here
Romania	Low	Sporadic	Low	Decreasing	16	12.5%	None	2.7 (graphs)	527.4 (graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	26	7.7%	None	8.9 (graphs)	691.4 (graphs)		Click here
Serbia	Low	Sporadic	Low	Decreasing	6	83.3%	None	33.2 (graphs)	(graphs)	sari	Click here
Slovakia	Low	None	Low	Decreasing	3	0%	None	94.9 (graphs)	1043.9 (graphs)	sari	Click here
Slovenia	Low	Sporadic		Stable	2	0%	None	0.0 (graphs)	719.0 (graphs)		Click here
Spain	Low	Local		Increasing	139	40.3%	Type A, Subtype H3	62.3 (graphs)	(graphs)		Click here
Sweden	Low	Sporadic	Low	Stable				5.4 (graphs)	(graphs)		Click here
Switzerland	Low	Sporadic		Stable	11	9.1%	None	23.1 (graphs)	(graphs)		Click here
Tajikistan	Low	None	Low	Stable				0.0 (graphs)	(graphs)		Click here
Turkey					82	40.2%	None	(graphs)			Click here
Ukraine	Low	None	Low	Decreasing	6	0%	None	3.8 * (graphs)	366.1 (graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Decreasing			Type A, Subtype H3N2	0.2 (graphs)	25.6 (graphs)		Click here
Europe					554	24.0%					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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity remains low in the WHO European Region

- This issue is based on data for week 1/2012 reported by 48 Member States in the WHO European Region.
- Clinical consultation rates in the Region were low.
- 16.3% of sentinel specimens from patients with influenza-like illness (ILI) or acute respiratory infection (ARI) tested positive for influenza.
- Sporadic detections of influenza A(H3N2), influenza B, and influenza A(H1N1)pdm09 were reported, with A(H3N2) predominating.
- All 130 influenza A viruses from sentinel sources that were subtyped in week 1/2012 were A(H3N2).

Current situation: week 1/2012

Consultation rates for ILI and ARI remained at low levels throughout the WHO European Region, as normally seen outside the peak period for seasonal influenza. Out of 44 countries reporting on trends, 29 reported stable trends, while 11 reported increasing and 4 reported decreasing trends. In general, consultation rates were highest in young children. Of the 44 countries reporting on the geographical distribution of influenza activity, 16 reported no activity; 4 reported local activity; 21 reported sporadic activity and 3 reported regional activity. 2 countries (Malta and Turkey) reported medium intensity of influenza activity and moderate impact on their health care services.

Severe acute respiratory infection (SARI): week 1/2012

9 countries reported data from sentinel hospital-based surveillance for SARI: Albania, Armenia, Georgia, Kazakhstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. A total of 36 respiratory specimens was collected from SARI patients. Sentinel SARI hospitalizations in these countries were at out-of-season levels. Of the 12 cases reported by Romania, 2 were associated with laboratory-confirmed influenza A(H3N2).

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in ﷺOverview of sentinel SARI systems in EuroFluﷺ.

Virological situation: week 01/2012

Sentinel outpatient clinics collected 910 respiratory specimens, 148 (16%) of which tested positive for influenza viruses: 142 were type A and 6 were type B. Of the influenza A viruses, all 130 that were subtyped were influenza A(H3). In the 13 countries testing 20 or more sentinel specimens (Albania, Belarus, the Czech Republic, Finland, France, Germany, Israel, Italy, Romania, Spain, Sweden, Turkey and the United Kingdom), influenza positivity ranged from 0% to 53.3%, with a median of 9.1% (mean: 13.4%). In addition, 317 non-sentinel specimens were reported positive for influenza: 306 type A and 11 type B. Of the influenza A viruses, 106 were subtyped: 93 as A(H3) and 13 as A(H1)pdm09.

Cumulative virological data: weeks 40/2011ﷺ1/2012

During this period, 1722 influenza virus detections were reported: 1584 (92%) were influenza A and 138 (8%) were influenza B. Of the influenza A viruses, 981 were subtyped: 915 (93%) as A(H3) and 66 (7%) as A(H1)pdm09.

In addition, 29 influenza viruses were characterized antigenically: 2 were A(H1)pdm09 A/California/7/2009 (H1N1)-like; 21 were A(H3) A/Perth/16/2009 (H3N2)-like; 2 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage); 1 was B/Bangladesh/3333/2007-like (B/Yamagata/16/88 lineage) and 3 were B/Brisbane/60/2008-like (B/Victoria/2/87 lineage). Out of 48 influenza viruses characterized genetically, 1 belonged to the A(H1)pdm09 group represented by A/Astrakhan/1/2011; 1 belonged to the A(H1)pdm09 group represented by A/St Petersburg/100/2011; 1 belonged to the B/Bangladesh/3333/2007 clade (Yamagata lineage); 2 belonged to the B/Brisbane/60/2008 clade (Victoria lineage), and 43 belonged to the A/Victoria/208/2009 A(H3) clade ﷺ 34 in the group represented by A/Stockholm/18/2011 (group 3), 4 in the group represented by A/Iowa/19/2010 (group 6) and 1 in the group represented by A/Johannesburg/114/2011 (group 7).

Comment

Consultation rates for ILI and ARI in outpatient clinics and hospitalizations due to SARI are at low levels throughout the WHO European Region. Two countries (Malta and Turkey) now report influenza activity of medium intensity and moderate impact on their health care services. Consultation rates for week 1/2011 should be interpreted with caution, however, as it spans a holiday period when use of primary care and collection of respiratory samples are usually low. The proportion of sentinel specimens testing positive for influenza virus decreased from 24% in week 52/2011 to 16% in week 1/2012. The highest percentages of sentinel specimens positive for influenza were seen in 3 countries in the southern part of the Region (Italy, Spain and Turkey). Influenza types A and B have continued to co-circulate, with type A viruses in the great majority and A(H3N2) viruses representing 92% of the H-subtyped viruses.

Detections of respiratory syncytial virus (RSV), a respiratory virus with clinical symptoms similar to influenza, peaked in week 52/2011 and are now decreasing (see the graphs for Europe, season 2011/2012).

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

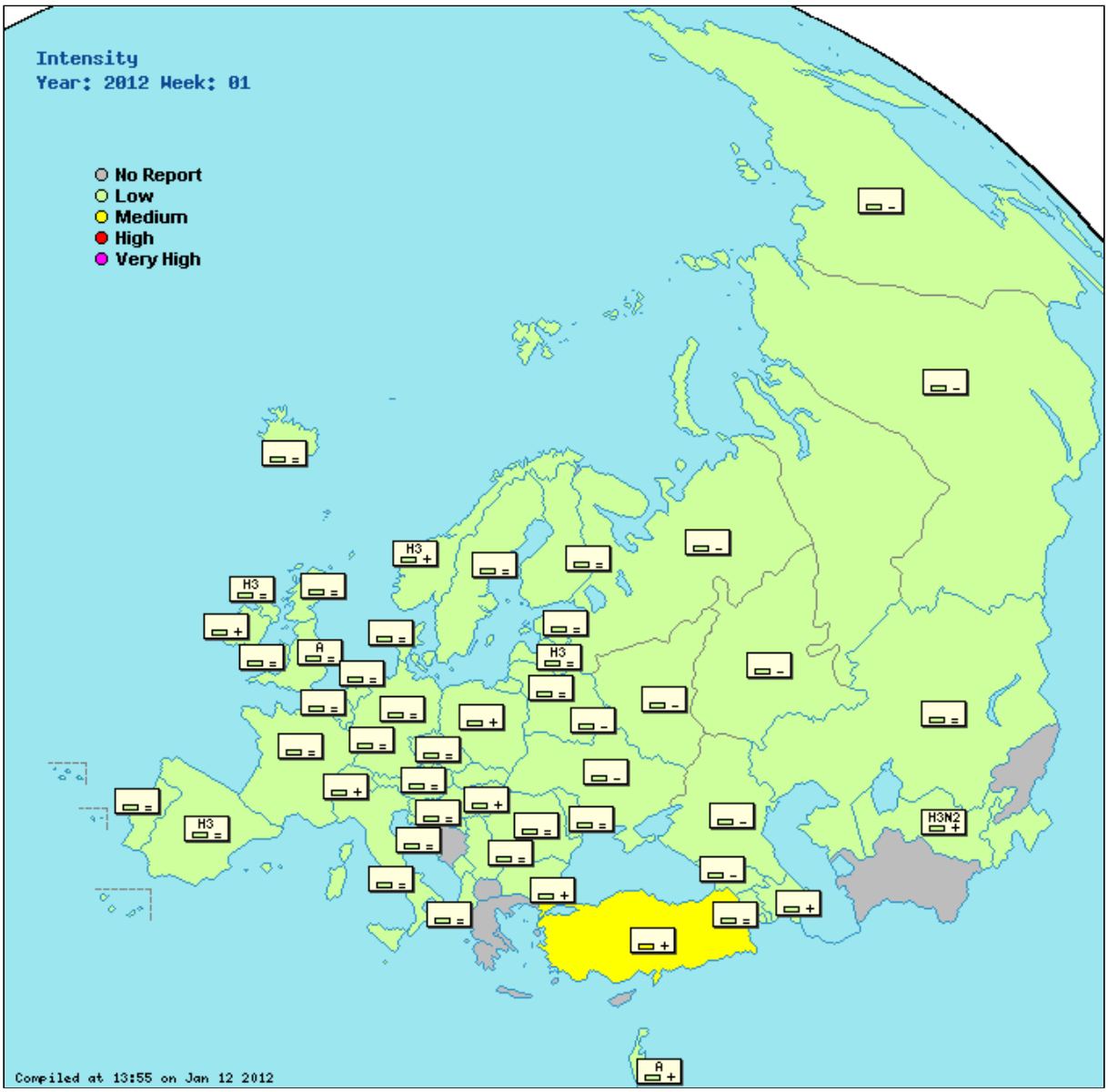
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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)**

Kazakhstan
In week 01/2012, 50 respiratory specimens were collected of which: 0 tested positive for influenza virus, 2 were adenoviruses, 1 parainfluenza-1.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania	Low	None	Low	Stable	31	9.7%	None		399.2 (graphs)	sari	Click here
Armenia	Low	None	Low	Stable	0	0%	None	(graphs)	66.6 (graphs)	sari	Click here
Austria	Low	Sporadic	Low	Stable	9	22.2%	None	7.3 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Increasing	0	0%	None	156.6 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Decreasing	38	0%	None	3.9 (graphs)	720.1 (graphs)	sari	Click here
Belgium	Low	Sporadic		Stable	8	0%	None	76.4 (graphs)	1662.8 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Low	None		Increasing	0	0%	None	(graphs)	866.6 (graphs)		Click here
Croatia	Low	Sporadic	Low	Stable			None	0.0 (graphs)	(graphs)		Click here
Czech Republic	Low	Sporadic		Stable	20	10.0%	None	35.4 (graphs)	950.7 (graphs)		Click here
Denmark	Low	None		Stable	6	0%	None	49.8 (graphs)	(graphs)		Click here
England	Low	Sporadic		Stable	88	9.1%	Type A	9.8 (graphs)	397.3 (graphs)		Click here
Estonia	Low	None		Stable	6	0%	None	6.3 (graphs)	204.8 (graphs)		Click here
Finland	Low	None	Low	Stable	21	0%	None	0.0 (graphs)	(graphs)		Click here
France	Low	Sporadic	Low	Stable	88	9.1%	None	(graphs)	1759.4 (graphs)		Click here
Georgia	Low	None	Low	Decreasing	12	0%	None	176.7 (graphs)	(graphs)	sari	Click here
Germany	Low	Sporadic		Stable	44	0%	None	(graphs)	1185.1 (graphs)		Click here
Greece					1	100.0%	None	(graphs)			Click here
Hungary	Low	Sporadic	Low	Increasing	17	0%	None	68.1 (graphs)	(graphs)		Click here
Iceland	Low	Sporadic	Low	Stable	0	0%		11.0 (graphs)	(graphs)		Click here
Ireland	Low	Sporadic	Low	Increasing	16	18.8%	None	15.1 (graphs)	(graphs)		Click here
Israel	Low	Sporadic	Low	Increasing	56	7.1%	Type A	(graphs)			Click here
Italy	Low	Regional	Low	Stable	54	35.2%		278.7 (graphs)	(graphs)		Click here
Kazakhstan	Low	Sporadic	Low	Stable	7	14.3%	None	31.7 (graphs)	93.6 (graphs)	sari	Click here
Kyrgyzstan					4	25.0%	None		(graphs)	sari	Click here
Latvia	Low	Sporadic		Stable	1	0%	Type A, Subtype H3	0.0 (graphs)	1033.4 (graphs)		Click here
Lithuania	Low	None	Low	Stable	4	0%	None	1.2 (graphs)	403.7 (graphs)		Click here
Luxembourg	Low	Sporadic	Low		10	10.0%	None	0 * (graphs)	23.0 * (graphs)		Click here
The former Yugoslav Republic of Macedonia							None	(graphs)			Click here
Malta	Medium	Local	Moderate	Increasing				10.8 * (graphs)	0 * (graphs)		Click here
Montenegro	Low	None	Low	Stable				2.9 (graphs)	(graphs)		Click here
Netherlands	Low	Local		Stable	11	9.1%	None	30.9 (graphs)	(graphs)		Click here
Northern Ireland	Low	Sporadic		Stable	0	0%		19.6 (graphs)	359.0 (graphs)		Click here
Norway	Low	Local		Increasing	12	8.3%	Type A, Subtype H3	55.4 (graphs)	(graphs)		Click here
Poland	Low	None	Low	Increasing	7	14.3%	None	100.3 (graphs)	(graphs)		Click here
Portugal	Low	Sporadic		Stable	5	20.0%	None	13.2 (graphs)	(graphs)		Click here
Republic of Moldova	Low	None	Low	Stable	1	0%	None	(graphs)	28.7 (graphs)	sari	Click here
Romania	Low	Sporadic	Low	Stable	29	10.3%	None	3.3 (graphs)	518.5 (graphs)	sari	Click here
Russian Federation	Low	Sporadic	Low	Decreasing	18	0%	None	0.1 (graphs)	230.8 (graphs)	sari	Click here
Scotland	Low	None	Low	Stable	1	0%	None	13.7 (graphs)	783.7 (graphs)		Click here
Serbia	Low	None	Low	Stable	0	0%	None	35.7 (graphs)	(graphs)	sari	Click here
Slovakia	Low	None	Low	Stable				95.0 (graphs)	974.7 (graphs)	sari	Click here
Slovenia	Low	Sporadic		Stable	11	9.1%	None	0.0 (graphs)	919.3 (graphs)		Click here
Spain	Low	Local		Stable	98	28.6%	Type A, Subtype H3	52.1 (graphs)	(graphs)		Click here
Sweden	Low	Regional	Low	Stable	54	1.9%		4.7 (graphs)	(graphs)		Click here
Switzerland	Low	Sporadic		Increasing	9	11.1%	None	39.7 (graphs)	(graphs)		Click here
Tajikistan	Low	None	Low	Stable				0.0 (graphs)	(graphs)		Click here
Turkey	Medium	Regional	Moderate	Increasing	107	53.3%	None	67.6 (graphs)	(graphs)		Click here
Ukraine	Low	None	Low	Decreasing	2	0%	None	3.0 * (graphs)	274.2 (graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Increasing			Type A, Subtype H3N2	0.1 (graphs)	26.2 (graphs)		Click here
Wales	Low	None		Stable	4	0%		10.5 (graphs)	(graphs)		Click here
Europe					910	16.3%					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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity increasing slowly in the WHO European Region due to A(H3N2)

- This issue is based on data for week 2/2012 reported by 47 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) continue to be low in most countries in the Region.
- 21% of sentinel specimens tested positive for influenza: 95% of these were influenza A.
- Of the 191 influenza A viruses from sentinel sources that were subtyped, 99% were A(H3N2).

Current situation: week 2/2012

Despite an overall increasing trend, ILI and ARI consultation rates remained at low levels in most countries in the WHO European Region. In general, consultation rates were highest in young children. Of the 42 countries reporting on the geographical spread of influenza: 13 reported no activity; 6, local activity; 22, sporadic activity; and 1 country (Italy), regional activity. Intensity was reported to be low in most countries reporting on this indicator, except for Italy and Spain , where influenza activity was at medium levels.

Severe acute respiratory infection (SARI): week 2/2012

10 countries reported data from sentinel hospital-based surveillance for SARI: Albania, Armenia, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. The number of SARI hospitalizations has decreased overall in the Region in the past weeks, in general owing to declining hospitalizations in children aged 0–4 years. A total of 88 respiratory specimens was collected from SARI patients, of which 7 (8%) tested positive for influenza; all were subtyped as A(H3N2). Only 3 countries (Kyrgyzstan, Romania and Ukraine) have reported influenza detections in SARI patients during the course of this influenza season.

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological situation: week 2/2012

Sentinel outpatient clinics collected 1138 respiratory specimens, 242 (21%) of which tested positive for influenza viruses: 231 (95%) were type A and 11 (5%) were type B. Of the 191 influenza A viruses subtyped, 189 (99%) were influenza A(H3N2) and 2 (1%) were A(H1N1)pdm09. In the 16 countries testing 20 or more sentinel specimens, influenza positivity ranged from 0% to 60%, with a median of 16% (mean: 18%). In addition, 365 non-sentinel specimens were reported positive for influenza: 353 (97%) type A and 12 (3%) type B. Of the influenza A viruses, 158 were subtyped: 146 (92%) as A(H3N2) and 12 (8%) as A(H1N1)pdm09.

Cumulative virological data: weeks 40/2011 – 2/2012

During this period, 2388 influenza virus detections were reported: 2223 (93%) were influenza A and 165 (3%) were influenza B. Of the influenza A viruses, 1402 were subtyped: 1320 (94%) as A(H3N2) and 82 (6%) as A(H1N1)pdm09.

In addition, 48 influenza viruses were characterized antigenically: 39 were A(H3) A/Perth/16/2009 (H3N2)-like; 2 were A(H1N1)pdm09 A/California/7/2009 (H1N1)-like; 2 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage); 1 was B/Bangladesh/3333/2007-like (B/Yamagata/16/88 lineage) and 4 were B/Brisbane/60/2008-like (B/Victoria/2/87 lineage). Of 65 influenza viruses characterized genetically, 1 belonged to the A(H1N1)pdm09 group represented by A/Astrakhan/1/2011; 1 belonged to the A(H1N1)pdm09 group represented by A/St Petersburg/100/2011; 3 belonged to the B/Bangladesh/3333/2007 clade (Yamagata lineage); 3 belonged to the B/Brisbane/60/2008 clade (Victoria lineage), and 57 belonged to the A/Victoria/208/2009 A(H3) clade – 44 in the group represented by A/Stockholm/18/2011 (group 3), 12 in the group represented by A/Iowa/19/2010 (group 6) and 1 in the group represented by A/Johannesburg/114/2011 (group 7).

Comment

Influenza activity has increased slowly but steadily over the past weeks, although remaining low compared to the same period of the 2010/2011 season, when detections were approximately 9 times higher and represented 50% of sentinel samples testing positive for influenza in the WHO European Region. Influenza A and B viruses are co-circulating in the Region, with the vast majority of detections in outpatient clinics and hospitals being A(H3N2) – in contrast to the 2010/2011 season, when A(H1N1)pdm09 was the dominant virus at the beginning.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

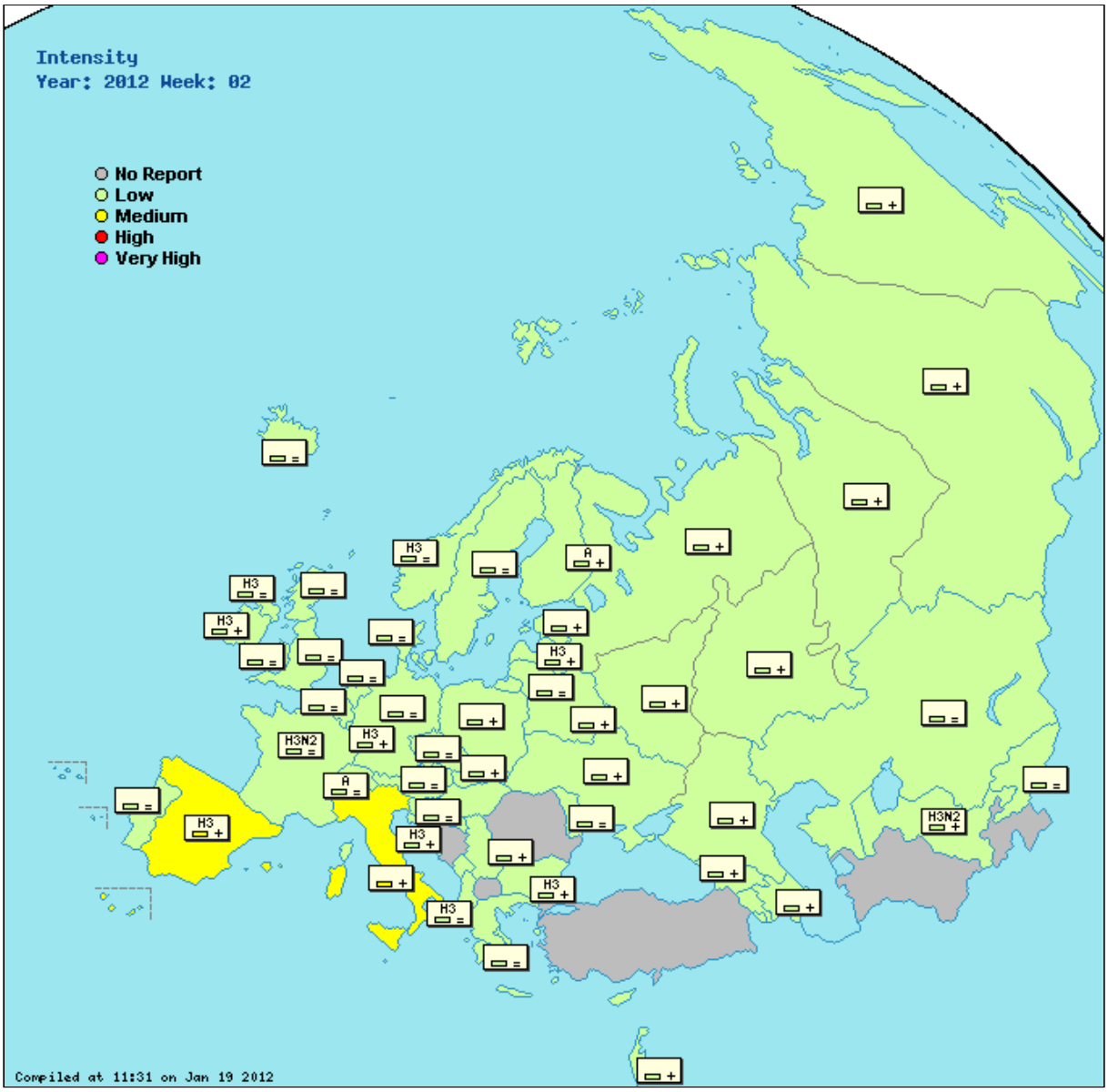
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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)

Kazakhstan
In week 02/2012, 140 respiratory specimens were collected of which: 0 tested positive for influenza virus, 6 were adenoviruses, 2 parainfluenza-1, 1 parainfluenza-3, 3 respiratory syncytial viruses (RSV).

Table and graphs (where available)

Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart

Albania	Low	None	Low	Stable	27	33.3%	Type A, Subtype H3		416.3 (graphs)	sari	Click here
Armenia	Low	None	Low	Increasing				(graphs)	101.2 (graphs)	sari	Click here
Austria	Low	Sporadic	Low	Stable	10	20.0%	None	21.0 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Increasing	1	0%	None	170.3 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Increasing	38	5.3%	None	4.1 (graphs)	804.7 (graphs)	sari	Click here
Belgium	Low	Sporadic		Stable	17	17.7%	None	93.8 (graphs)	1687.0 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Low	Sporadic		Increasing	18	5.6%	Type A, Subtype H3	(graphs)	1079.9 (graphs)		Click here
Croatia	Low	Sporadic	Low	Increasing			Type A, Subtype H3	0.2 (graphs)	(graphs)		Click here
Cyprus	Low	None	Low	Stable				1.4 * (graphs)	6.9 * (graphs)		Click here
Czech Republic	Low	Sporadic		Stable	22	0%	None	31.8 (graphs)	923.3 (graphs)		Click here
Denmark	Low	None		Stable	6	0%	None	130.7 (graphs)	(graphs)		Click here
England	Low	Sporadic		Stable	124	4.0%	None	7.8 (graphs)	409.5 (graphs)		Click here
Estonia	Low	Sporadic		Increasing	9	0%	None	6.7 (graphs)	216.7 (graphs)		Click here
Finland	Low	Local	Low	Increasing	33	12.1%	Type A	0.0 (graphs)	(graphs)		Click here
France	Low	Sporadic	Low	Stable	81	22.2%	Type A, Subtype H3N2	(graphs)	1638.4 (graphs)		Click here
Georgia	Low	Sporadic	Low	Increasing	15	13.3%	None	315.2 (graphs)	(graphs)	sari	Click here
Germany	Low	Sporadic		Stable	42	14.3%	None	(graphs)	1137.6 (graphs)		Click here
Greece	Low	Sporadic		Stable	1	100.0%	None	54.7 (graphs)	(graphs)		Click here
Hungary	Low	Sporadic	Low	Stable				73.7 (graphs)	(graphs)		Click here
Iceland	Low	Sporadic	Low	Stable	0	0%		12.3 (graphs)	(graphs)		Click here
Ireland	Low	Sporadic	Low	Increasing	11	18.2%	Type A, Subtype H3	15.1 (graphs)	(graphs)		Click here
Israel	Low	Local	Low	Increasing	53	20.8%	None	21.1 (graphs)			Click here
Italy	Medium	Regional	Low	Increasing	47	38.3%		383.1 (graphs)	(graphs)		Click here
Kazakhstan	Low	Sporadic	Low	Stable	20	5.0%	None	116.4 (graphs)	180.3 (graphs)	sari	Click here
Kyrgyzstan	Low	None	Low	Stable	9	88.9%	None	8.0 (graphs)	62.1 (graphs)	sari	Click here
Latvia	Low	Sporadic		Increasing	3	33.3%	Type A, Subtype H3	2.8 (graphs)	1114.8 (graphs)		Click here
Lithuania	Low	None	Low	Stable	1	0%		0.9 (graphs)	411.4 (graphs)		Click here
Luxembourg	Low	Sporadic	Low		15	20.0%	Type A, Subtype H3	1.0 * (graphs)	23.7 * (graphs)		Click here
The former Yugoslav Republic of Macedonia							None	(graphs)			Click here
Montenegro	Low	None	Low	Stable				5.1 (graphs)	(graphs)		Click here
Netherlands	Low	Local		Stable	10	10.0%	None	32.3 (graphs)	(graphs)		Click here
Northern Ireland	Low	Sporadic		Stable	1	0%		25.4 (graphs)	395.3 (graphs)		Click here
Norway	Low	Local	Low	Stable	4	0%	Type A, Subtype H3	61.0 (graphs)	(graphs)		Click here
Poland	Low	None	Low	Increasing	15	0%	None	127.9 (graphs)	(graphs)		Click here
Portugal	Low	Sporadic		Stable	5	0%	None	16.2 (graphs)	(graphs)		Click here
Republic of Moldova	Low	None	Low	Stable	3	0%	None	(graphs)	27.2 (graphs)	sari	Click here
Romania					23	4.4%	None	0.0 (graphs)	(graphs)	sari	Click here
Russian Federation	Low	Sporadic		Increasing	35	0%	None	0.2 (graphs)	444.2 (graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	22	0%	None	14.1 (graphs)	558.3 (graphs)		Click here
Serbia	Low	None	Low	Increasing	1	0%	None	47.7 (graphs)	(graphs)	sari	Click here
Slovakia	Low	None	Low	Increasing	0	0%	None	141.6 (graphs)	1316.7 (graphs)	sari	Click here
Slovenia	Low	Sporadic		Stable	14	21.4%	None	5.1 (graphs)	1036.6 (graphs)		Click here
Spain	Medium	Local		Increasing	226	27.0%	Type A, Subtype H3	97.4 (graphs)	(graphs)		Click here
Sweden	Low	Sporadic	Low	Stable	40	17.5%		4.3 (graphs)	(graphs)		Click here
Switzerland	Low	Local		Stable	21	28.6%	Type A	42.9 (graphs)	(graphs)		Click here
Turkey					110	60.0%	None	(graphs)			Click here
Ukraine	Low	None	Low	Increasing	2	0%	None	3.3 * (graphs)	308.5 (graphs)	sari	Click here
Uzbekistan	Low		Low	Increasing			Type A, Subtype H3N2	0.2 (graphs)	29.9 (graphs)		Click here
Wales	Low	None		Stable	3	0%		7.2 (graphs)	(graphs)		Click here
Europe					1138	21.3%					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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity continues to rise slowly in the WHO European Region due to A(H3N2)

- This issue is based on data for week 3/2012 reported by 46 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) continue to be relatively low in most countries of the Region, but with many countries reporting increasing activity.
- 29 % of sentinel specimens tested positive for influenza, which is an increase over last week: 95% of these were influenza A.
- Of the 352 influenza A viruses from sentinel sources that were subtyped, 99 % were A(H3N2).

Current situation: week 3/2012

Trends in clinical activity were reported by 42 countries: 20 stable, 19 increasing and 3 decreasing. At the same time, ILI and ARI consultation rates remained at low levels in most countries of the WHO European Region. Similar to the previous week, consultation rates were highest in young children. Of the 41 countries reporting on the geographical spread of influenza: 12 reported no activity; 7 local activity; 18 sporadic activity; and 4 countries (Finland, Iceland, Italy and Spain) regional activity. Intensity was reported to be low in most countries reporting on this indicator, except for Bulgaria, Iceland, Italy and Spain, where influenza activity was at medium levels.

Severe acute respiratory infection (SARI): week 3/2012

11 countries reported data from sentinel hospital-based surveillance for SARI: Albania, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. The number of SARI hospitalizations remained largely unchanged compared to the previous week, except in Kazakhstan, which reported increases in SARI hospitalization ﷺ mainly in children aged 0ﷺ4 years. A total of 122 respiratory specimens was collected from SARI patients, of which 10 (8%) tested positive for influenza with 6 being subtyped, all as A(H3N2). 6 countries so far (Albania, Belarus, Kazakhstan, Kyrgyzstan, Romania and Ukraine) have reported influenza detections in SARI patients during the course of this influenza season.

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in ﷺOverview of sentinel SARI systems in EuroFluﷺ.

Virological situation: week 3/2012

Sentinel outpatient clinics collected 1469 respiratory specimens, 422 (29 %) of which tested positive for influenza viruses: 401 (95%) were type A and 21 (5%) were type B. Of the 352 influenza A viruses subtyped, 349 (99%) were influenza A(H3N2) and 3 (1%) were A(H1N1)pdm09. In the 18 countries testing 20 or more sentinel specimens, influenza positivity ranged from 0% to 85%, with a median of 22% (mean: 25%). In addition, 525 non-sentinel specimens were reported positive for influenza: 504 (96%) type A and 21 (4%) type B. Of the influenza A viruses, 189 were subtyped: 173 (92%) as A(H3N2) and 16 (8%) as A(H1N1)pdm09.

Cumulative virological data: weeks 40/2011 ﷺ 3/2012

During this period, 3436 influenza virus detections were reported: 3226 (94%) were influenza A and 210 (6%) were influenza B. Of the influenza A viruses, 2099 were subtyped: 1985 (95%) as A(H3N2) and 114 (5%) as A(H1N1)pdm09.

In addition, 56 influenza viruses were characterized antigenically: 46 were A(H3) A/Perth/16/2009 (H3N2)-like; 2 were A(H1N1)pdm09 A/California/7/2009 (H1N1)-like; 2 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage); 2 were B/Bangladesh/3333/2007-like (B/Yamagata/16/88 lineage); and 4 were B/Brisbane/60/2008-like (B/Victoria/2/87 lineage). Of 95 influenza viruses characterized genetically, 1 belonged to the A(H1N1)pdm09 group represented by A/Astrakhan/1/2011; 1 belonged to the A(H1N1)pdm09 group represented by A/St Petersburg/100/2011; 5 belonged to the B/Bangladesh/3333/2007 clade (Yamagata lineage); 2 belonged to the B/Brisbane/60/2008 clade (Victoria lineage); and 86 belonged to the A/Victoria/208/2009 A(H3) clade ﷺ 63 in the group represented by A/Stockholm/18/2011 (group 3), 19 in the group represented by A/Iowa/19/2010 (group 6) and 1 in the group represented by A/Johannesburg/114/2011(group 7).

Comment

Influenza activity has increased consistently over the past several weeks, but influenza detections remain low compared to the same period of the 2010/2011 season. Influenza A and B viruses are co-circulating in the Region, with the vast majority of detections in both outpatient clinics and hospitals being A(H3N2).

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

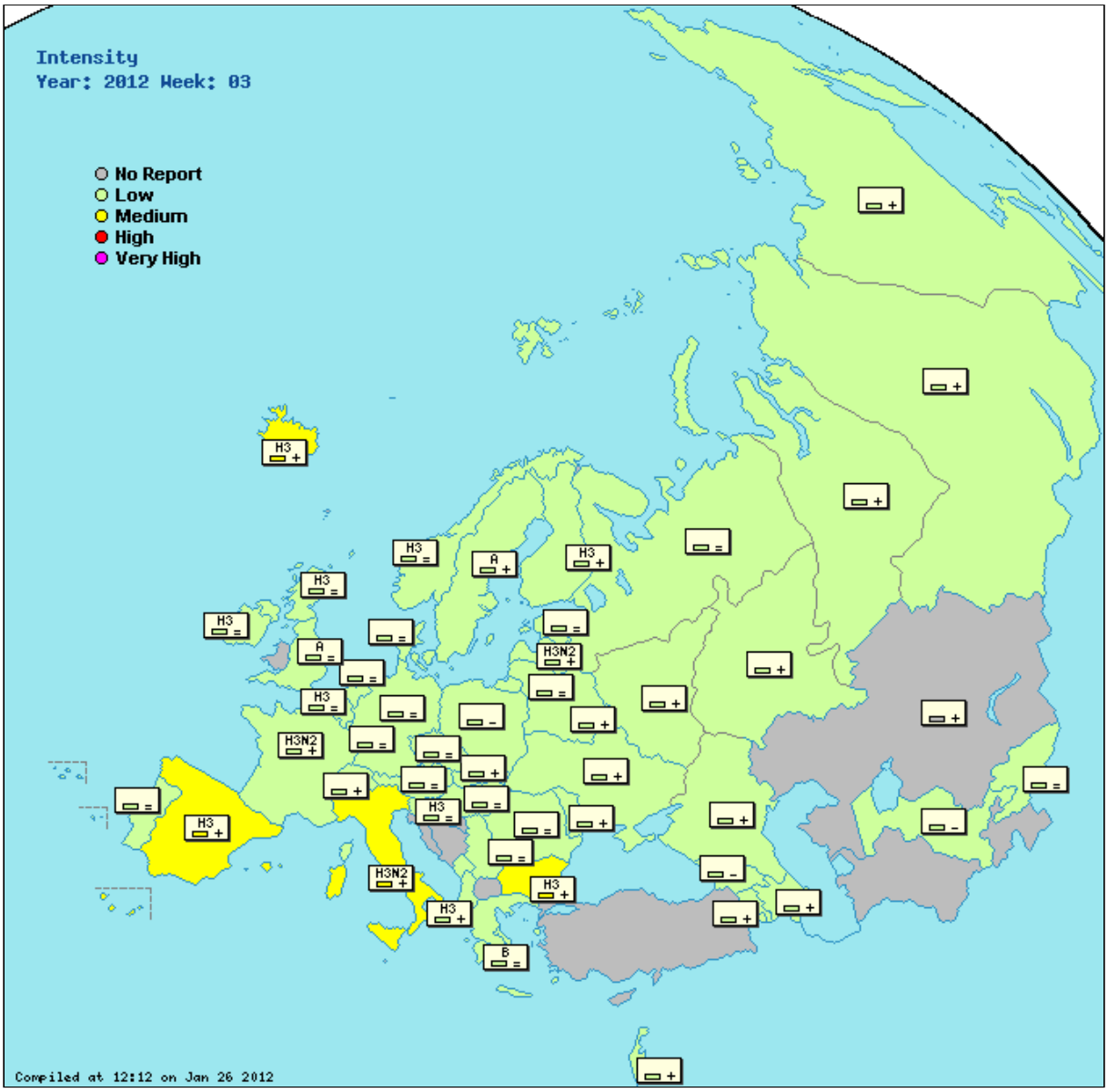
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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)

Denmark
one H3N2 were detected in surveillance samples, recieved from other labs in Denmark
Kazakhstan
In week 03/2012, 185 respiratory specimens were collected of which: 0 tested positive for influenza virus, 5 were adenoviruses, 5 parainfluenza-1, 13 parainfluenza-3, 4 respiratory syncytial viruses (RSV)

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania	Low	Sporadic	Low	Increasing	40	50.0%	Type A, Subtype H3		463.8 (graphs)	sari	Click here
Armenia	Low	None	Low	Increasing	0	0%	None	(graphs)	113.6 (graphs)	sari	Click here
Austria	Low	Sporadic	Low	Stable	12	8.3%	None	19.9 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Increasing	1	0%	None	192.2 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Increasing	33	3.0%	None	4.4 (graphs)	918.8 (graphs)	sari	Click here
Belgium	Low	Sporadic		Stable	23	26.1%	Type A, Subtype H3	112.0 (graphs)	1726.3 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Medium	Local		Increasing	12	50.0%	Type A, Subtype H3	(graphs)	1282.4 (graphs)		Click here
Croatia							None	(graphs)			Click here
Czech Republic	Low	Sporadic		Stable	16	0%	None	30.9 (graphs)	920.5 (graphs)		Click here
Denmark	Low	None		Stable	5	0%	None	49.8 (graphs)	(graphs)		Click here
England	Low	Sporadic		Stable	74	6.8%	Type A	6.2 (graphs)	364.7 (graphs)		Click here
Estonia	Low	Sporadic		Stable	10	0%		6.6 (graphs)	228.2 (graphs)		Click here
Finland	Low	Regional	Low	Increasing	44	38.6%	Type A, Subtype H3	0.0 (graphs)	(graphs)		Click here
France	Low	Local	Low	Increasing	146	26.0%	Type A, Subtype H3N2	(graphs)	1892.2 (graphs)		Click here
Georgia	Low	None	Low	Decreasing	16	0%	None	230.8 (graphs)	(graphs)	sari	Click here
Germany	Low	Sporadic		Stable	55	7.3%	None	(graphs)	1088.6 (graphs)		Click here
Greece	Low	Sporadic		Stable	0	0%	Type B	72.3 (graphs)	(graphs)		Click here
Hungary	Low	Sporadic	Low	Stable	32	3.1%	None	80.0 (graphs)	(graphs)		Click here
Iceland	Medium	Regional	Low	Increasing	0	0%		22.0 (graphs)	(graphs)		Click here
Ireland	Low	Sporadic	Low	Stable	16	37.5%	Type A, Subtype H3	11.9 (graphs)	(graphs)		Click here
Israel	Low	Local	Low	Increasing	62	21.0%	None	26.6 (graphs)			Click here
Italy	Medium	Regional	Moderate	Increasing	128	36.7%	Type A, Subtype H3N2	626.9 (graphs)	(graphs)		Click here
Kazakhstan		Local	Low	Increasing	20	5.0%	None	121.2 (graphs)	197.1 (graphs)	sari	Click here
Kyrgyzstan	Low	None	Low	Stable	20	85.0%	None	8.6 (graphs)	122.3 (graphs)	sari	Click here
Latvia	Low	Sporadic		Increasing	2	50.0%	Type A, Subtype H3N2	3.8 (graphs)	1239.6 (graphs)		Click here
Lithuania	Low	None	Low	Stable	3	0%	None	0.9 (graphs)	460.0 (graphs)		Click here
Luxembourg	Low	None	Low		9	0%	None	1.4 * (graphs)	27.8 * (graphs)		Click here
The former Yugoslav Republic of Macedonia							None	(graphs)			Click here
Montenegro	Low	None	Low	Stable				4.3 (graphs)	(graphs)		Click here
Netherlands	Low	Local		Stable	9	0%	None	29.5 (graphs)	(graphs)		Click here
Northern Ireland	Low	Sporadic		Decreasing				16.5 (graphs)	426.2 (graphs)		Click here
Norway	Low	Local	Low	Stable	10	60.0%	Type A, Subtype H3	60.4 (graphs)	(graphs)		Click here
Poland	Low	None	Low	Decreasing	5	0%	None	112.0 (graphs)	(graphs)		Click here
Portugal	Low	Sporadic		Stable	6	50.0%	None	8.5 (graphs)	(graphs)		Click here
Republic of Moldova	Low	None	Low	Increasing	1	0%	None	(graphs)	38.4 (graphs)	sari	Click here
Romania	Low	Sporadic	Low	Stable	25	16.0%	None	3.8 (graphs)	532.1 (graphs)	sari	Click here
Russian Federation	Low	Sporadic		Increasing	66	0%	Type A, Subtype H3	0.2 (graphs)	519.5 (graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	28	0%	Type A, Subtype H3	12.3 (graphs)	523.7 (graphs)		Click here
Serbia	Low	Sporadic	Low	Stable	6	16.7%	None	46.4 (graphs)	(graphs)	sari	Click here
Slovakia	Low	None	Low	Increasing	0	0%	None	143.6 (graphs)	1369.8 (graphs)	sari	Click here
Slovenia	Low	Sporadic		Stable	17	47.1%	Type A, Subtype H3	2.7 (graphs)	1019.8 (graphs)		Click here
Spain	Medium	Regional		Increasing	371	42.9%	Type A, Subtype H3	139.8 (graphs)	(graphs)		Click here
Sweden	Low	Sporadic	Low	Increasing	34	23.5%	Type A	4.3 (graphs)	(graphs)		Click here
Switzerland	Low	Local		Increasing	21	9.5%	None	64.0 (graphs)	(graphs)		Click here
Turkey					89	52.8%	None	(graphs)			Click here
Ukraine	Low	None	Low	Increasing	2	0%	None	3.0 * (graphs)	388.0 (graphs)	sari	Click here
Uzbekistan	Low		Low	Decreasing			None	0.2 (graphs)	29.6 (graphs)		Click here
Europe					1469	28.7%					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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

commentary used in this bulletin do not imply any opinions whatsoever on the part of WHO or its partners about the legal status of the countries and territories shown or about their borders.

Influenza activity remains at low levels in most countries in the WHO European Region

- This issue is based on data for week 4/2012 reported by 49 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) remain low in most countries in the Region.
- 29% of sentinel specimens tested positive for influenza: 95% of these were influenza A.
- Influenza A(H3N2) continues to be the dominant virus in circulation throughout the Region, with relatively few A(H1N1)pdm09 and influenza B detections being reported.

Current situation: week 4/2012

ILI and ARI consultation rates continue to increase slowly but are at low levels in most countries in the WHO European Region, particularly in the north and west. A few countries are reporting high and increasing ILI or ARI consultation rates, e.g. Bulgaria, Italy, Kyrgyzstan and Spain. Of the 43 countries reporting on intensity of influenza activity, 38 reported low intensity and 5 reported medium intensity (Bulgaria, Iceland, Italy, Malta and Spain). Geographic spread of influenza was reported by 43 countries: 8 reported no activity; 29 local or sporadic activity; 4 regional activity, and 2 widespread activity (Italy and Spain).

Severe acute respiratory infection (SARI): week 4/2012

11 countries reported data from sentinel hospital-based surveillance for SARI: Albania, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. In most countries, hospitalizations due to SARI have either decreased or remained stable in the past weeks, except in Kazakhstan and Romania, where they have increased steadily. A total of 120 respiratory specimens was collected from SARI patients, of which 11 (9%) tested positive for influenza A. All 8 of the influenza A viruses subtyped were A(H3N2). This week, 4 countries (Kazakhstan, Kyrgyzstan, Romania and the Russian Federation) reported influenza detections in SARI patients.

Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological situation: week 4/2012

Sentinel outpatient clinics collected 1506 respiratory specimens, 437 (29%) of which tested positive for influenza viruses: 414 (95%) were type A and 23 (5%) were type B. Of the 352 influenza A viruses subtyped, 347 (99%) were influenza A(H3N2) and 5 (1%) were A(H1N1)pdm09. In the 17 countries testing 20 or more sentinel specimens, influenza positivity ranged from 0% to 54%, with a median of 24% (mean: 23%). In addition, 575 non-sentinel specimens were reported positive for influenza: 534 (93%) type A and 41 (7%) type B. Of the influenza A viruses, 251 were subtyped: 222 (88%) as A(H3N2) and 29 (12%) as A(H1N1)pdm09.

Cumulative virological data: weeks 40/2011 – 4/2012

During this period, 4585 influenza virus detections were reported: 4305 (94%) were influenza A and 280 (4%) were influenza B. Of the influenza A viruses, 2900 were subtyped: 2744 (95%) as A(H3N2) and 156 (5%) as A(H1N1)pdm09.

In addition, 76 influenza viruses were characterized antigenically: 66 were A(H3) A/Perth/16/2009 (H3N2)-like; 2 were A(H1N1)pdm09 A/California/7/2009 (H1N1)-like; 2 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage); 2 were B/Bangladesh/3333/2007-like (B/Yamagata/16/88 lineage) and 4 were B/Brisbane/60/2008-like (B/Victoria/2/87 lineage). Of 151 influenza viruses characterized genetically, 1 belonged to the A(H1N1)pdm09 group represented by A/Astrakhan/1/2011 (group 5); 1 belonged to the A(H1N1)pdm09 group represented by A/St Petersburg/100/2011 (group 7); 2 belonged to the A(H1N1)pdm09 group represented by A/St Petersburg/27/2011 (group 6); 6 belonged to the B/Bangladesh/3333/2007 clade (Yamagata lineage); 2 belonged to the B/Brisbane/60/2008 clade (Victoria lineage); and 139 belonged to the A/Victoria/208/2009 A(H3) clade – 100 in the group represented by A/Stockholm/18/2011 (group 3), 33 in the group represented by A/Iowa/19/2010 (group 6) and 2 in the group represented by A/Johannesburg/114/2011(group 7).

Comment

Overall, influenza activity remains low in most countries in the WHO European Region. In week 4/2012, 29% of sentinel samples tested positive for influenza, similar to the previous week. At present, ILI and ARI consultations rates are stable in many countries and increasing slowly in others. Influenza A(H3N2) accounts for the vast majority of influenza detections in outpatient clinics and hospitals, although sporadic detections of influenza A(H1N1)pdm09 and B viruses are also reported in the Region. Respiratory syncytial virus continues to circulate in some parts of the Region.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

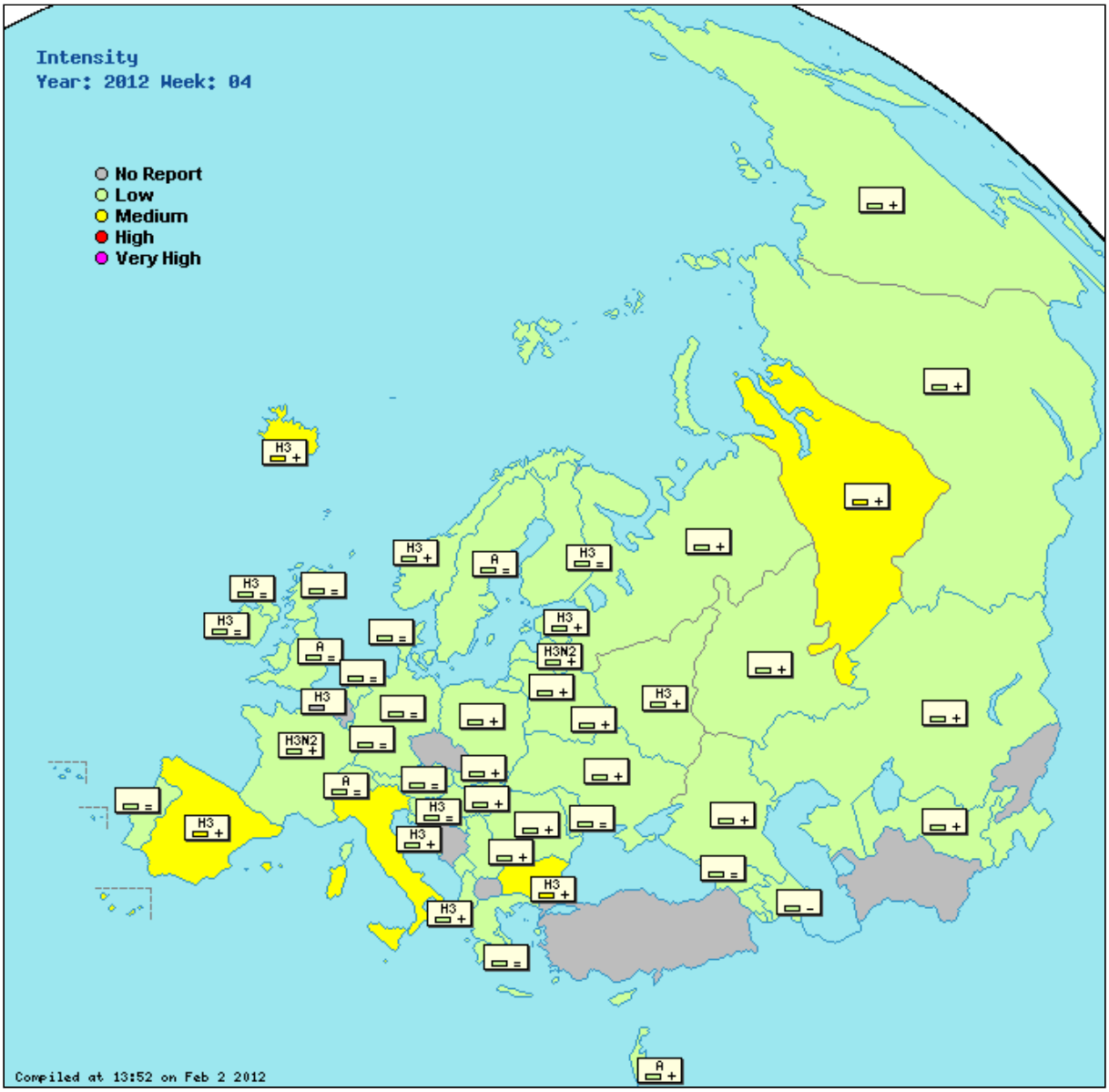
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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	Sentinel SARI	Virology graph and pie chart
Albania	Low	Sporadic	Moderate	Increasing	33	36.4%	Type A, Subtype H3		530.6 (graphs)	sari	Click here
Armenia	Low	None	Low	Increasing				(graphs)	123.4 (graphs)	sari	Click here
Austria	Low	Sporadic	Low	Stable	14	35.7%	None	18.3 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Decreasing	5	0%	None	158.7 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Increasing	45	0%	None	5.9 (graphs)	990.7 (graphs)	sari	Click here
Belgium					13	38.5%	Type A, Subtype H3	(graphs)		sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Medium	Regional		Increasing	43	37.2%	Type A, Subtype H3	(graphs)	1756.5 (graphs)		Click here
Croatia	Low	Sporadic	Low	Increasing			Type A, Subtype H3	1.3 (graphs)	(graphs)		Click here
Cyprus	Low	None	Low	Stable				1.4 * (graphs)	10.2 * (graphs)		Click here
Czech Republic					12	0%	None		(graphs)		Click here
Denmark	Low	None		Stable	2	0%	None	47.9 (graphs)	(graphs)		Click here
England	Low	Sporadic		Stable	76	15.8%	Type A	7.8 (graphs)	389.2 (graphs)		Click here
Estonia	Low	Local		Increasing	19	10.5%	Type A, Subtype H3	9.6 (graphs)	267.4 (graphs)		Click here
Finland	Low	Regional	Low	Stable	62	24.2%	Type A, Subtype H3	0.0 (graphs)	(graphs)		Click here
France	Low	Local	Low	Increasing	151	26.5%	Type A, Subtype H3N2	(graphs)	1968.6 (graphs)		Click here
Georgia	Low	Sporadic	Low	Stable	16	6.3%	None	238.6 (graphs)	(graphs)	sari	Click here
Germany	Low	Sporadic		Stable	65	9.2%	None	(graphs)	1113.4 (graphs)		Click here
Greece	Low	Sporadic		Stable	0	0%	None	103.4 (graphs)	(graphs)		Click here
Hungary	Low	Sporadic	Low	Increasing	43	11.6%	None	101.4 (graphs)	(graphs)		Click here
Iceland	Medium	Regional	Low	Increasing	0	0%	Type A, Subtype H3	33.0 (graphs)	(graphs)		Click here
Ireland	Low	Sporadic	Low	Stable	14	7.1%	Type A, Subtype H3	12.2 (graphs)	(graphs)		Click here
Israel	Low	Local	Low	Increasing	64	25.0%	Type A	(graphs)			Click here
Italy	Medium	Widespread	Moderate	Increasing				866.4 (graphs)	(graphs)		Click here
Kazakhstan	Low	Local	Low	Increasing	20	15.0%	None	107.2 (graphs)	224.7 (graphs)	sari	Click here
Kyrgyzstan					9	55.6%	None		(graphs)	sari	Click here
Latvia	Low	Sporadic		Increasing	0	0%	Type A, Subtype H3N2	12.3 (graphs)	1246.8 (graphs)		Click here
Lithuania	Low	Local	Low	Increasing	1	0%	None	2.3 (graphs)	519.2 (graphs)		Click here
Luxembourg	Low	Sporadic	Low		12	8.3%	None	0.6 * (graphs)	31.2 * (graphs)		Click here
The former Yugoslav Republic of Macedonia							None	(graphs)			Click here
Malta	Medium	Local	Low	Decreasing				8.6 * (graphs)	0 * (graphs)		Click here
Montenegro	Low	Sporadic	Low	Stable				4.6 (graphs)	(graphs)		Click here
Netherlands	Low	Local		Stable	12	8.3%	None	38.2 (graphs)	(graphs)		Click here
Northern Ireland	Low	Sporadic		Stable	3	0%		16.9 (graphs)	396.9 (graphs)		Click here
Norway	Low	Regional		Increasing	8	62.5%	Type A, Subtype H3	70.5 (graphs)	(graphs)		Click here
Poland	Low	None	Low	Increasing	10	0%	None	126.8 (graphs)	(graphs)		Click here
Portugal	Low	Sporadic		Stable	3	0%	None	23.1 (graphs)	(graphs)		Click here
Republic of Moldova	Low	None	Low	Stable	5	0%	None	(graphs)	38.1 (graphs)	sari	Click here
Romania	Low	Local	Low	Increasing	31	25.8%	None	6.2 (graphs)	655.8 (graphs)	sari	Click here
Russian Federation	Low	Sporadic		Increasing	45	0%	Type A, Subtype H3	0.3 (graphs)	598.4 (graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	35	0%	None	10.0 (graphs)	472.8 (graphs)		Click here
Serbia	Low	Sporadic	Low	Increasing	4	50.0%	None	54.5 (graphs)	(graphs)	sari	Click here
Slovakia	Low	None	Low	Increasing	3	0%	None	152.2 (graphs)	1477.1 (graphs)	sari	Click here
Slovenia	Low	Sporadic		Stable	31	41.9%	Type A, Subtype H3	9.3 (graphs)	1305.0 (graphs)		Click here
Spain	Medium	Widespread		Increasing	443	47.6%	Type A, Subtype H3	196.1 (graphs)	(graphs)		Click here
Sweden	Low	Sporadic	Low	Stable	29	0%	Type A	8.0 (graphs)	(graphs)		Click here
Switzerland	Low	Local		Stable	34	20.6%	Type A	56.5 (graphs)	(graphs)		Click here
Tajikistan	Low	Sporadic	Low	Stable				0.0 (graphs)	(graphs)		Click here
Turkey					83	54.2%	None	(graphs)			Click here
Ukraine	Low	None	Low	Increasing	8	0%	None	3.4 * (graphs)	433.0 (graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Increasing			None	0.2 (graphs)	30.3 (graphs)		Click here
Wales	Low	None	Low	Stable				5.4 (graphs)	(graphs)		Click here
Europe					1506	29.0%					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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Gradual increase of influenza activity in the WHO European Region

Current situation: week 5/2012

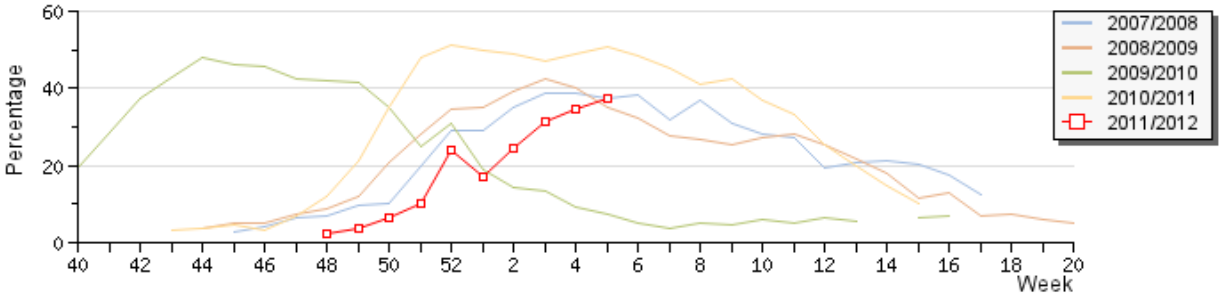
- This issue is based on data for week 5/2012 reported by 46 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are increasing in most countries in the Region. 37% of sentinel outpatient specimens tested positive for influenza, which is an increase over the previous week: 96% of these were influenza A.
- Hospitalizations due to severe acute respiratory infection (SARI) continue to be relatively stable with most cases being in the group aged 0-4 years. 19% of sentinel SARI specimens tested positive for influenza, which is an increase over the previous week: all of these were influenza A.
- By a large margin, influenza A(H3N2) continues to be the dominant virus in circulation in the Region, with relatively few A(H1N1)pdm09 and influenza B detections being reported.
- Overall, influenza activity is heterogeneous, but with most countries reporting sporadic activity. In some countries (Italy, Kyrgyzstan and Spain), influenza activity may have peaked and be levelling off.

Outpatient surveillance for ILI and ARI

Trends in clinical activity were reported by 41 countries: 10 stable, 30 increasing and 1 decreasing. At the same time, ILI and ARI consultation rates remained at low levels in most countries in the WHO European Region. As in the previous week, consultation rates were highest in young children. Of the 18 countries that report a threshold for the 2011/2012 season, the consultation rates exceeded the threshold in 8 (Albania, Belgium, France, Kyrgyzstan, the Russian Federation, Spain, Sweden and Switzerland) and were below but near the threshold in 3 (Estonia, Israel and Romania) in week 5/2012. Of the 42 countries reporting on the geographical spread of influenza: 4 reported no activity; 19 sporadic activity; 11 local activity; 5 regional activity, and 3 (Belgium, Italy and Spain) widespread activity. Intensity was reported to be low in 28 countries reporting on this indicator, and medium in 14 others.

Sentinel outpatient clinics collected 1815 respiratory specimens, 676 (37%) of which tested positive for influenza viruses. Of these, 647 (96%) were influenza type A and 29 (4%) were influenza B (Table 1). The percentage that was positive increased from 29% in week 4/2012 to 37% in week 5 (Fig. 1). In the 22 countries testing 20 or more sentinel specimens, influenza positivity ranged from 0% to 84%, with a median of 28% (mean: 30%).

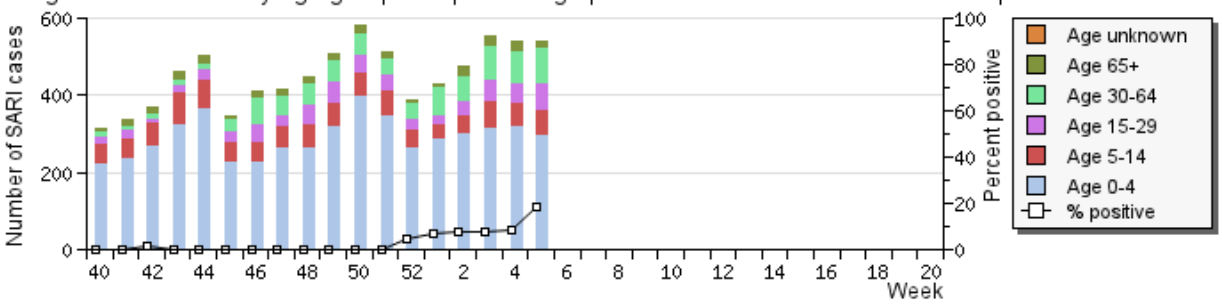
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

11 countries reported data from sentinel hospital-based surveillance for SARI: Albania, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. The number of SARI hospitalizations remained largely unchanged from the previous week, except in Kazakhstan, which reported a slight increase with 38% of specimens testing positive for influenza. A total of 150 respiratory specimens was collected from SARI patients, of which 28 (19%) tested positive for influenza with 25 being subtyped: 20 as A(H3N2) and 5 as A(H1N1)pdm09 (Fig. 2). So far 7 countries (Albania, Belarus, Kazakhstan, Kyrgyzstan, the Russian Federation, Romania and Ukraine) have reported influenza detections in SARI patients during the course of this influenza season.

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological overview

Sentinel detections

Table 1 provides an overview of the influenza virus detections by type and subtype in sentinel ILI/ARI and SARI surveillance, both for the current week and cumulative since week 40/2011. The dominant influenza type was A(H3) or A(H3N2) in 16 countries, influenza A in 4 countries, and type B and type A(H3N2) in 1 country.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	1815	150	17319	2096
Influenza A + B	676 (37.3%)	28 (18.7%)	2681 (15.5%)	69 (3.3%)
Influenza A	647 (95.7%)	28 (100.0%)	2535 (94.6%)	69 (100.0%)
Influenza B	29 (4.3%)	0 (0.0%)	146 (5.5%)	0 (0.0%)
Influenza A subtyped	553	25	2305	59
A (H1N1)pdm09	10 (1.8%)	5 (20.0%)	34 (1.5%)	6 (10.2%)
A (H3N2)	543 (98.2%)	20 (80.0%)	2271 (98.5%)	53 (89.8%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

Non-sentinel detections

During week 5/2012, 1064 specimens from non-sentinel sources were reported positive for influenza: 1016 (95%) type A and 48 (5%) type B. Of the influenza A viruses, 368 were subtyped: 357 (97%) as A(H3N2) and 11 (3%) as A(H1N1)pdm09. Since week 40/2011, a total of 6488 influenza virus detections from non-sentinel sources was reported: 6135 (95%) were influenza A and 353 (5%) were influenza B. Of the influenza A viruses, 4056 were subtyped: 3884 (96%) as A(H3N2) and 172 (4%) as A(H1N1)pdm09.

Cumulative virological data: weeks 40/201-5/2012

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine (Fig. 3). To date these viruses match those in the vaccine.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 12 countries (Austria, the Czech Republic, the United Kingdom (England), France, Germany, Latvia, Portugal, Romania, the Russian Federation, Slovenia, Sweden, Switzerland) have characterized 103 influenza viruses antigenically (Fig. 3). 12 countries (Austria, Denmark, Finland, France, Germany, Ireland, Italy, Norway, Portugal, Russian Federation, Spain, Sweden) have characterized 339 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 05/2012
[Total N = 103]

(1) Sentinel and non-sentinel specimens combined

Compiled at 13:06 on Feb 9 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

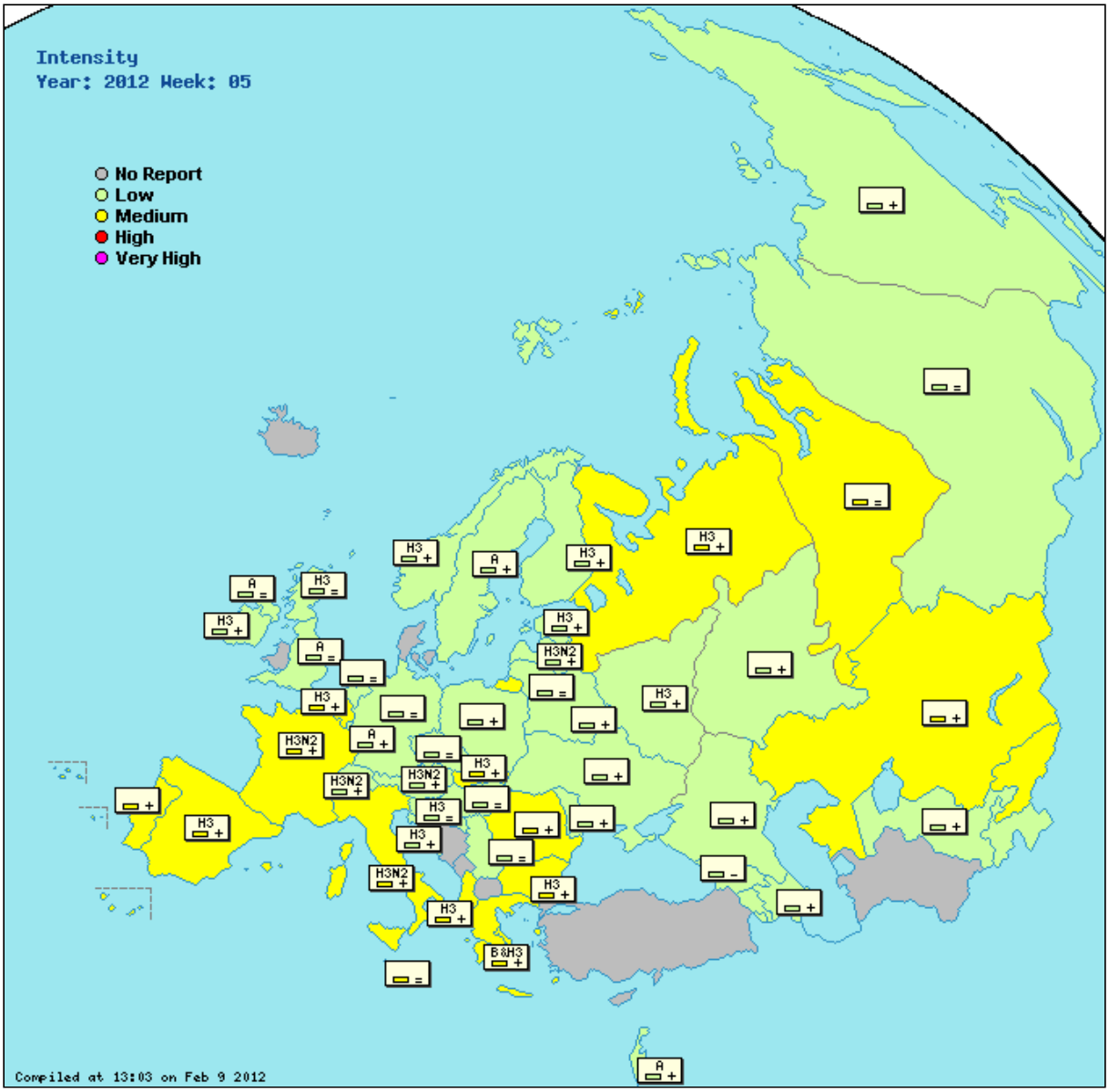
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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)

Finland

Influenza A(H1)pdm09 viruses have so far been detected only in one garrison.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania	Medium	Sporadic	Moderate	Increasing	50	54.0%	Type A, Subtype H3		676.9 (graphs)	sari	Click here
Armenia	Low	None	Low	Increasing				(graphs)	129.9 (graphs)	sari	Click here
Austria	Low	Local	Low	Increasing	23	47.8%	Type A, Subtype H3N2	23.0 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Increasing	0	0%	None	181.5 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Increasing	42	0%	None	6.9 (graphs)	1046.8 (graphs)	sari	Click here
Belgium	Medium	Widespread		Increasing	15	66.7%	Type A, Subtype H3	163.0 (graphs)	2293.8 (graphs)	sari	Click here
Bosnia and Herzegovina					2	100.0%	None	(graphs)			Click here
Bulgaria	Medium	Regional		Increasing	16	43.8%	Type A, Subtype H3	(graphs)	1785.5 (graphs)		Click here

Croatia	Low	Sporadic	Low	Increasing			Type A, Subtype H3	3.3	(graphs)		(graphs)		Click here
Czech Republic	Low	Sporadic		Stable	16	18.8%	None	35.4	(graphs)	923.1	(graphs)		Click here
Denmark					1	0%	None		(graphs)				Click here
England	Low	Sporadic		Stable	94	19.2%	Type A	10.1	(graphs)	415.4	(graphs)		Click here
Estonia	Low	Local		Increasing	20	0%	Type A, Subtype H3	10.7	(graphs)	281.6	(graphs)		Click here
Finland	Low	Regional	Low	Increasing	83	38.6%	Type A, Subtype H3	0.0	(graphs)		(graphs)		Click here
France	Medium	Regional	Low	Increasing	159	45.9%	Type A, Subtype H3N2		(graphs)	2168.1	(graphs)		Click here
Georgia	Low	Sporadic	Low	Decreasing	9	0%	None	198.9	(graphs)		(graphs)	sari	Click here
Germany	Low	Local		Stable	64	15.6%	None		(graphs)	1157.9	(graphs)		Click here
Greece	Medium	Sporadic		Increasing	2	100.0%	Type B and Type A, Subtype H3N2	162.3	(graphs)		(graphs)		Click here
Hungary	Low	Sporadic	Low	Stable	47	6.4%		115.1	(graphs)		(graphs)		Click here
Ireland	Low	Sporadic	Low	Increasing	17	47.1%	Type A, Subtype H3	17.3	(graphs)		(graphs)		Click here
Israel	Low	Local	Low	Increasing	80	33.8%	Type A	34.7	(graphs)				Click here
Italy	Medium	Widespread	Moderate	Increasing	131	84.0%	Type A, Subtype H3N2	947.0	(graphs)		(graphs)		Click here
Kazakhstan	Medium	Local	Moderate	Increasing	35	22.9%	None	107.1	(graphs)	235.9	(graphs)	sari	Click here
Kyrgyzstan	Medium	Sporadic			23	8.7%	None	4.7	(graphs)	168.4	(graphs)	sari	Click here
Latvia	Low	Sporadic		Increasing	1	0%	Type A, Subtype H3N2	14.1	(graphs)	1238.3	(graphs)		Click here
Lithuania	Low	Local	Low	Stable	5	0%	None	1.8	(graphs)	479.4	(graphs)		Click here
Luxembourg	Low	Sporadic	Low		10	20.0%	Type A	1.1 *	(graphs)	29.6 *	(graphs)		Click here
The former Yugoslav Republic of Macedonia							None		(graphs)				Click here
Malta	Medium	Local	Moderate	Stable	8	25.0%	None	9.4 *	(graphs)	0 *	(graphs)		Click here
Netherlands	Low	Local		Stable	15	0%	None	27.0	(graphs)		(graphs)		Click here
Northern Ireland	Low	Sporadic		Stable	5	20.0%		21.9	(graphs)	469.5	(graphs)		Click here
Norway	Low	Regional	Low	Increasing	22	68.2%	Type A, Subtype H3	84.7	(graphs)		(graphs)		Click here
Poland	Low	None	Low	Increasing	22	0%	None	141.7	(graphs)		(graphs)		Click here
Portugal	Medium	Regional		Increasing	9	33.3%	None	51.6	(graphs)		(graphs)		Click here
Republic of Moldova	Low	None	Low	Increasing	0	0%	None		(graphs)	58.9	(graphs)	sari	Click here
Romania	Medium	Local	Low	Increasing	30	53.3%	None	5.3	(graphs)	766.3	(graphs)	sari	Click here
Russian Federation	Medium	Sporadic	Low	Increasing	43	2.3%	Type A, Subtype H3	0.6	(graphs)	687.0	(graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	29	3.5%	Type A, Subtype H3	12.0	(graphs)	524.7	(graphs)		Click here
Serbia	Low	Sporadic	Low	Stable	5	20.0%	None	53.8	(graphs)		(graphs)	sari	Click here
Slovakia	Medium	Sporadic	Low	Increasing	6	16.7%		186.8	(graphs)	1618.2	(graphs)	sari	Click here
Slovenia	Low	Local		Stable	23	39.1%	Type A, Subtype H3	13.8	(graphs)	1234.8	(graphs)		Click here
Spain	Medium	Widespread		Increasing	497	46.1%	Type A, Subtype H3	212.3	(graphs)		(graphs)		Click here
Sweden	Low	Sporadic	Low	Increasing	49	26.5%	Type A	7.3	(graphs)		(graphs)		Click here
Switzerland	Low	Local		Increasing	29	24.1%	Type A, Subtype H3N2	85.9	(graphs)		(graphs)		Click here
Tajikistan	Low	Sporadic	Low	Stable				0.0	(graphs)		(graphs)		Click here
Turkey					73	30.1%	None		(graphs)				Click here
Ukraine	Low	Sporadic	Low	Increasing	5	0%	None	3.6 *	(graphs)	482.5	(graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Increasing			None	0.4	(graphs)	35.2	(graphs)		Click here
Europe					1815	37.3%							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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity increasing slowly across the WHO European Region

Current situation: week 6/2012

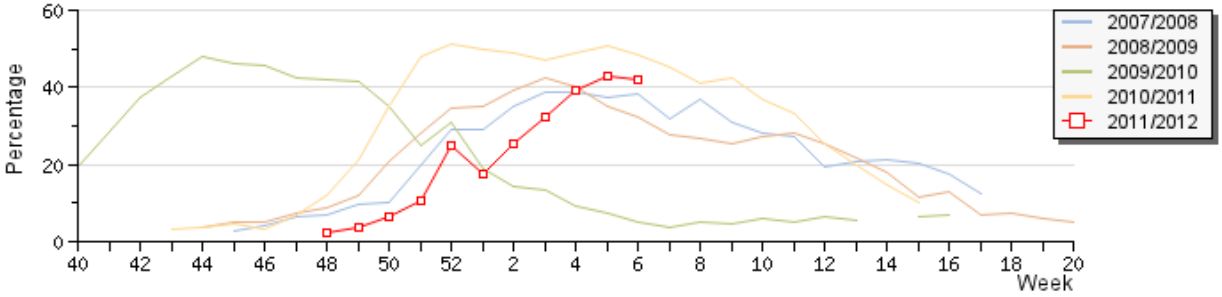
- This issue is based on data for week 6/2012 reported by 47 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are increasing in 27 out of 42 countries in the Region. 42% of sentinel outpatient specimens tested positive for influenza, which is an increase over the previous week; 92% of these were influenza A.
- Overall, influenza activity is higher in some countries in the western part of the Region than in the east. For most countries, influenza activity is low and in general has not reached the peak levels of ILI and/or ARI consultation rates seen in 2011.
- Hospitalizations due to severe acute respiratory infection (SARI) continue to be relatively stable, with most cases being in the group aged 0–4 years. 14% of sentinel SARI specimens tested positive for influenza, which is a decrease over the previous week; all were influenza A.
- Influenza A(H3N2) continues to be the dominant virus circulating in the Region, with relatively few A(H1N1)pdm09 and influenza B detections being reported.
- To date, antigenic and genetic characterization of viruses have shown them to be similar to those recommended for inclusion in the 2011/2012 northern hemisphere vaccine.

Outpatient surveillance for ILI and ARI

Trends in clinical activity were reported by 42 countries: 11 stable, 27 increasing and 4 decreasing. As in the previous week, consultation rates were highest in young children. Although many countries reported an increase in ILI and ARI consultation rates, in general influenza activity is increasing slowly. Azerbaijan, Belarus, the Czech Republic, Denmark, Montenegro, Poland, the Republic of Moldova, Serbia and Ukraine have reported no influenza activity or only sporadic detections to date. Of the 18 countries that reported a threshold for the 2011/2012 season, the consultation rates exceeded the threshold in 9 (Albania, Belgium, France, Kyrgyzstan, the Russian Federation, Romania, Spain, Sweden and Switzerland) and were below but near the threshold in 4 (Estonia, Ireland, Israel and the Netherlands). Of the 42 countries reporting on the geographical spread of influenza, 6 reported no activity; 12 sporadic activity; 8 local activity; 8 regional activity, and 8 widespread activity. Intensity was reported to be low in 27 countries reporting on this indicator, and medium in 15 others.

Sentinel outpatient clinics collected 2081 respiratory specimens during week 6/2012, of which 872 (42%) tested positive for influenza viruses, a slight decrease compared to week 5/2012. Of these, 805 (92%) were influenza type A and 67 (8%) were influenza B (Table 1, Fig. 1). Percentage positivity in previous seasons peaked between weeks 44 and 6, indicating that influenza activity in the 2011/2012 season is relatively late. In the 24 countries testing 20 or more sentinel specimens, influenza positivity ranged from 0% to 84%, with a median of 43% (mean: 39%).

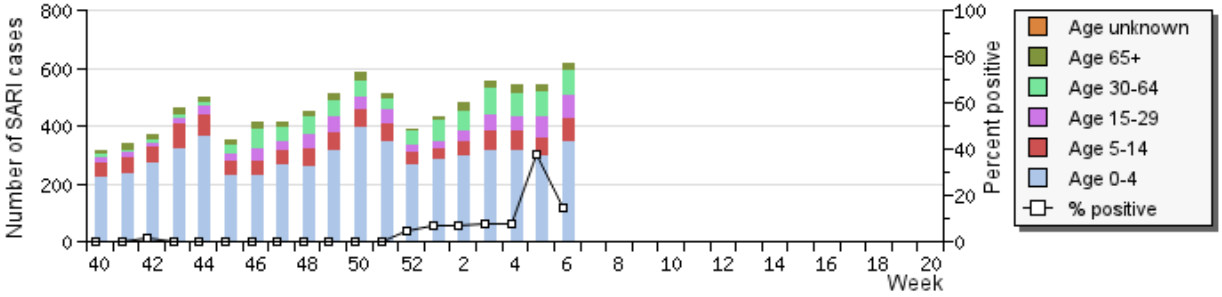
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

11 countries reported data from hospital-based sentinel surveillance for SARI: Albania, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. The number of SARI hospitalizations remained largely unchanged from the previous week. A total of 167 respiratory specimens was collected from SARI patients, of which 24 (14%) tested positive for influenza A, all of which were subtyped: 21 as A(H3N2) and 3 as A(H1N1)pdm09 (Fig. 2). So far, 8 countries (Albania, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Russian Federation, Romania and Ukraine) have reported influenza detections in SARI patients during the course of the current influenza season.

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological overview

During week 6/2012, 41 countries reported a dominant virus type and/or subtype; 21 reported influenza A as the dominant virus. Of these, 18 reported A(H3N2) and 3 reported influenza A not subtyped. In addition, 1 country reported influenza B and 1 reported co-dominance of influenza B and A(H3N2).

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel ILI/ARI and SARI surveillance** for both the current week and the period since week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	2081	167	19965	2294
Influenza A + B	872 (41.9%)	24 (14.4%)	3973 (19.9%)	139 (6.1%)
Influenza A	805 (92.3%)	24 (100.0%)	3755 (94.5%)	139 (100.0%)
Influenza B	67 (7.7%)	0 (0.0%)	218 (5.5%)	0 (0.0%)
Influenza A subtyped	688	24	3434	131
A (H1N1)pdm09	4 (0.6%)	3 (12.5%)	42 (1.2%)	37 (28.2%)
A (H3N2)	684 (99.4%)	21 (87.5%)	3392 (98.8%)	94 (71.8%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

During week 6/2012, 1417 specimens from **non-sentinel sources** were reported positive for influenza: 1345 (95%) type A and 72 (5%) type B. Of the influenza A viruses, 499 were subtyped: 487 (98%) as A(H3N2) and 12 (2%) as A(H1N1)pdm09. Since week 40/2011, a total of 9440 influenza virus detections from non-sentinel sources was reported: 8951 (95%) were influenza A and 489 (5%) were influenza B. Of the influenza A viruses, 5905 were subtyped: 5698 (96%) as A(H3N2) and 207 (4%) as A(H1N1)pdm09.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 13 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Latvia, Portugal, Romania, the Russian Federation, Slovenia, Sweden, Switzerland) have characterized 146 influenza viruses antigenically (Fig. 3). 13 countries (Austria, Denmark, Finland, France, Germany, Ireland, Italy, Latvia, Norway, Portugal, the Russian Federation, Spain, Sweden) have characterized 421 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 06/2012
[Total N = 146]

(1) Sentinel and non-sentinel specimens combined

Compiled at 13:06 on Feb 16 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

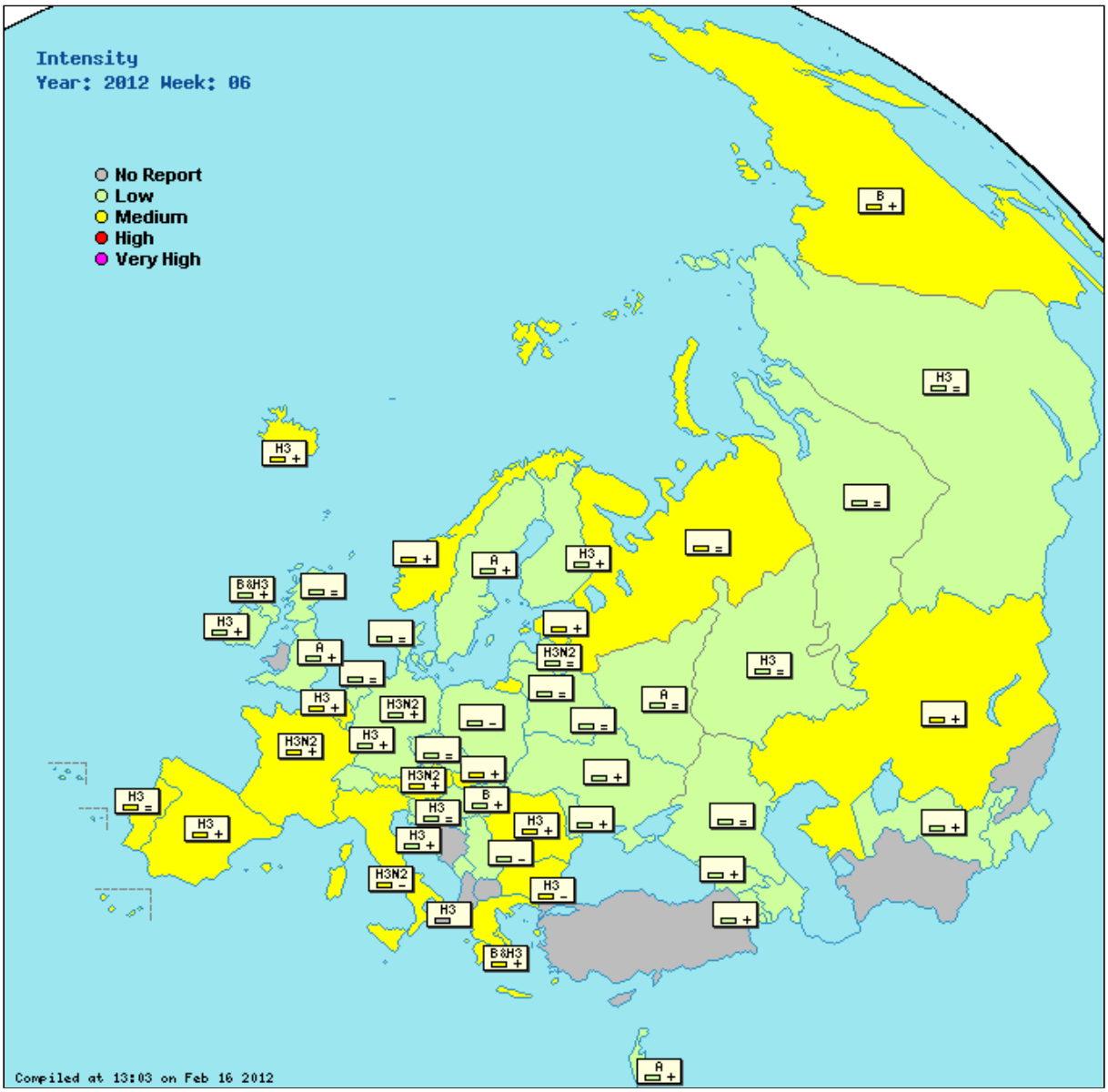
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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)**

Republic of Moldova
This week were tested 20 samples from sentinel surveillance system and only in one of them was detected DNA of Adenovirus by classic PCR.
Romania
By now, 38.7% from all SARI cases had underlying risk conditions, and 44.4% from confirmed SARI cases (AH3). The number of deaths in SARI cases (4) has been unchanged since Week 52, none of them being caused by influenza. Laboratory investigations have been performed for 87.7% of SARI cases. The first two influenza viruses (AH3) have been detected in SARI cases notified in Week 52. To date, the total positivity rate for SARI cases has been 66% and the positivity rate for influenza in SARI cases 19.4%. The most frequently detected etiologies were influenza AH3 (36 cases), RSV (26), PIV (22) and Str. pneumoniae (14). In 8 out of 36 confirmed (AH3) SARI cases, AH3N2 has been isolated. One of them was also tested for antiviral resistance, with negative result, both for Oseltamivir and Zanamivir.Following the declaration, on 08/02/2012, of Week 5 as week of onset of influenza season in Romania ('week with 10% positive samples for the same subtype/variant from the total number of tested samples in that week'), we passed to the sampling protocol specific to this new period of ILI and SARI Surveillance. Therefore, SARI samples received in the National Reference Laboratory starting from 10/02/2012 will be tested only for influenza.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania					22	59.1%	Type A, Subtype H3		(graphs)	sari	Click here
Armenia	Low	None	Low	Increasing	3	0%	None		135.3 (graphs)	sari	Click here
Austria	Medium	Regional	Low	Increasing	55	54.6%	Type A, Subtype H3N2	28.9 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Increasing				192.5 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Stable	42	0%	None	4.5 (graphs)	1031.3 (graphs)	sari	Click here
Belgium	Medium	Widespread		Increasing	72	55.6%	Type A, Subtype H3	246.5 (graphs)	2550.1 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Medium	Regional		Decreasing	1	100.0%	Type A, Subtype H3	(graphs)	1476.7 (graphs)		Click here
Croatia	Low	Widespread	Low	Increasing			Type A, Subtype H3	4.9 (graphs)	(graphs)		Click here
Czech Republic	Low	Sporadic		Stable	16	31.3%	None	39.0 (graphs)	955.9 (graphs)		Click here
Denmark	Low	Sporadic		Stable	5	20.0%	None	43.4 (graphs)	(graphs)		Click here
England	Low	Sporadic		Increasing	89	18.0%	Type A	15.6 (graphs)	476.3 (graphs)		Click here
Estonia	Medium	Regional		Increasing	16	12.5%		11.4 (graphs)	314.1 (graphs)		Click here
Finland	Low	Regional	Moderate	Increasing	77	39.0%	Type A, Subtype H3	0.0 (graphs)	(graphs)		Click here
France	Medium	Widespread	Moderate	Increasing	218	43.6%	Type A, Subtype H3N2	(graphs)	2203.2 (graphs)		Click here
Georgia	Low	Sporadic	Low	Increasing	16	25.0%	None	370.8 (graphs)	(graphs)	sari	Click here
Germany	Low	Regional		Increasing	71	23.9%	Type A, Subtype H3N2	(graphs)	1340.9 (graphs)		Click here
Greece	Medium	Local		Increasing	37	83.8%	Type B and Type A, Subtype H3N2	219.1 (graphs)	(graphs)		Click here
Hungary	Low	Regional	Low	Increasing	50	16.0%	Type B	156.9 (graphs)	(graphs)		Click here
Iceland	Medium	Regional	Low	Increasing	0	0%	Type A, Subtype H3	59.7 (graphs)	(graphs)		Click here
Ireland	Low	Local	Low	Increasing	23	69.6%	Type A, Subtype H3	26.2 (graphs)	(graphs)		Click here
Israel	Low	Regional	Moderate	Increasing	81	42.0%	Type A	36.5 (graphs)			Click here
Italy	Medium	Widespread	Moderate	Decreasing	158	60.1%	Type A, Subtype H3N2	883.2 (graphs)	(graphs)		Click here
Kazakhstan	Medium	Local	Moderate	Increasing	33	21.2%	None	131.0 (graphs)	237.5 (graphs)	sari	Click here
Kyrgyzstan					4	25.0%	None	3.5 (graphs)	174.7 (graphs)	sari	Click here
Latvia	Low	Sporadic		Stable	0	0%	Type A, Subtype H3N2	9.3 (graphs)	1250.5 (graphs)		Click here
Lithuania	Low	Local	Low	Stable	2	0%	None	1.8 (graphs)	459.5 (graphs)		Click here
Luxembourg	Low	Local	Low		25	32.0%	Type A, Subtype H3	2.5 * (graphs)	29.2 * (graphs)		Click here
The former Yugoslav Republic of Macedonia							None	(graphs)			Click here
Montenegro	Low	None	Low	Stable				4.0 (graphs)	(graphs)		Click here
Netherlands	Low	Local		Stable	18	0%	None	47.8 (graphs)	(graphs)		Click here
Northern Ireland	Low	Sporadic		Increasing	2	0%	Type B and Type A, Subtype H3	25.9 (graphs)	537.1 (graphs)		Click here
Norway	Medium	Widespread	Low	Increasing	24	62.5%		113.5 (graphs)	(graphs)		Click here
Poland	Low	None	Low	Decreasing	23	8.7%	None	126.5 (graphs)	(graphs)		Click here
Portugal	Medium	Widespread		Stable	18	44.4%	Type A, Subtype H3	51.7 (graphs)	(graphs)		Click here
Republic of Moldova	Low	None	Low	Increasing	20	0%	None	(graphs)	63.1 (graphs)	sari	Click here
Romania	Medium	Local	Low	Increasing	37	62.2%	Type A, Subtype H3	7.0 (graphs)	824.5 (graphs)	sari	Click here
Russian Federation	Medium	Sporadic		Stable	64	1.6%	Type A, Subtype H3	0.7 (graphs)	703.7 (graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	28	7.1%	None	13.6 (graphs)	541.8 (graphs)		Click here
Serbia	Low	None	Low	Decreasing			None	42.2 (graphs)	(graphs)	sari	Click here
Slovakia	Medium	Sporadic	Low	Increasing	1	0%	None	225.8 (graphs)	1809.5 (graphs)	sari	Click here
Slovenia	Low	Widespread		Stable	20	45.0%	Type A, Subtype H3	6.2 (graphs)	1129.9 (graphs)		Click here
Spain	Medium	Widespread		Increasing	573	54.1%	Type A, Subtype H3	249.7 (graphs)	(graphs)		Click here
Sweden	Low	Sporadic	Low	Increasing	59	44.1%	Type A	9.1 (graphs)	(graphs)		Click here
Switzerland	Low	Local		Increasing				98.6 (graphs)	(graphs)		Click here
Tajikistan	Low	Sporadic	Low	Stable				0.0 (graphs)	(graphs)		Click here
Turkey					75	29.3%	None	(graphs)			Click here
Ukraine	Low	Sporadic	Low	Increasing	3	0%	None	3.5 * (graphs)	445.3 (graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Increasing			None	0.5 (graphs)	42.9 (graphs)		Click here
Europe					2081	41.9%					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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity continues to increase in most of the countries in the WHO European Region

Current situation: week 7/2012

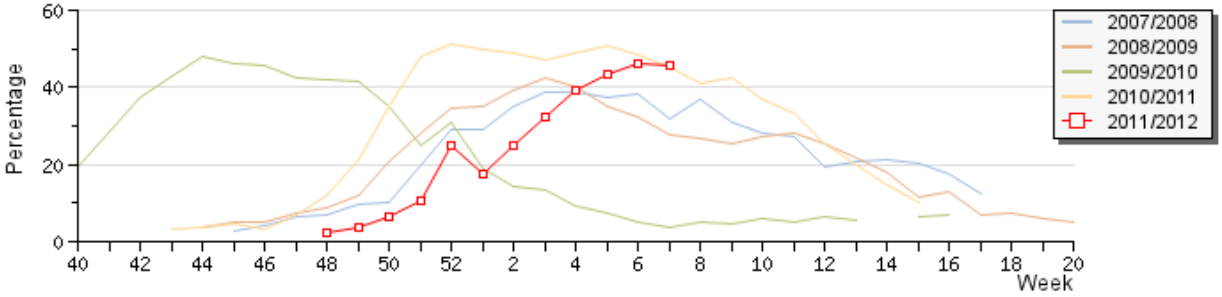
- This issue is based on data for week 7/2012 reported by 47 Member States in the WHO European Region.
- Influenza activity is increasing in 27 countries. In general, the situation in the Region is rather diverse, with about half the countries experiencing low influenza activity and half, medium activity. 13 countries did not detect any influenza viruses in specimens from sentinel outpatient surveillance this week.
- This season is starting somewhat later than previous seasons.
- The number of hospitalizations due to severe acute respiratory infection (SARI) continues to be relatively stable, with 12% of sentinel SARI specimens testing positive for influenza.
- Circulation of influenza A(H3N2)virus is still prevalent, with some A(H1N1)pdm09 and influenza B detections reported.
- To date, circulating virus strains are similar to those that were recommended for inclusion in the current northern hemisphere vaccine for 2011/2012.

Outpatient surveillance for influenza-like illness (ILI) and acute respiratory infection (ARI)

42 countries reported on trends in clinical activity: 11 stable, 27 increasing and 4 decreasing trends. Similarly to several previous weeks, consultation rates were highest in young children. Of the 18 countries that reported a threshold for the 2011/2012 season, the consultation rates were below the threshold in 7: the Czech Republic, the United Kingdom (England), Estonia, Latvia, the Netherlands, the Republic of Moldova, and Ukraine. Israel and Ireland just reached their threshold in week 7/2012. Of the 42 countries reporting on the geographical spread of influenza, 4 reported no activity; 13, sporadic activity; 4, local activity; 7, regional activity; and 14, widespread activity. Low intensity was reported by 22 countries, medium by 18 and high by 2.

Sentinel outpatient clinics collected 2240 respiratory specimens during week 7/2012, of which 1024 (46%) tested positive for influenza viruses, slightly more than in week 6/2012. Of these, 930 (91%) were influenza type A and 94 (9%) were influenza B (Table 1, Fig. 1). In the 26 countries testing 20 or more sentinel specimens, influenza positivity ranged from 0% to 77%, with a median of 47% (mean: 41%).

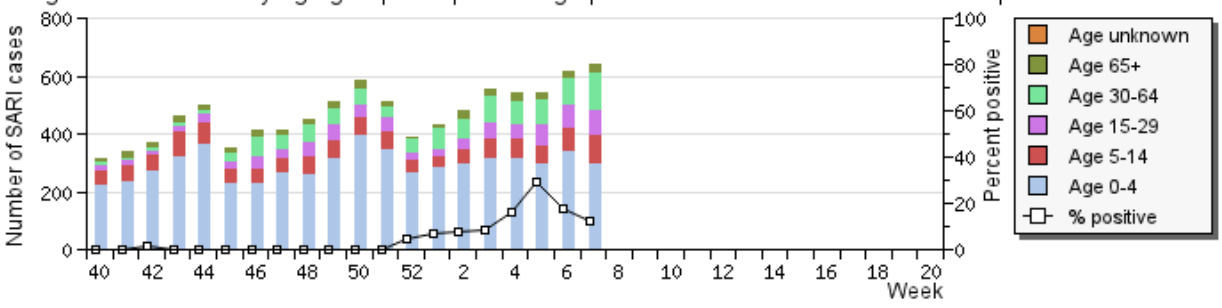
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

11 countries reported data from hospital-based sentinel surveillance for SARI: Albania, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. The number of SARI hospitalizations remained similar to the previous week, but with a slight decrease in the percentage of influenza-positive cases. A total of 169 respiratory specimens was collected from SARI patients, of which 21 (12%) were influenza positive, all of which were typed/subtyped: 17 as A(H3N2), 1 as A(H1N1)pdm09 and 3 as influenza B. (Fig. 2). So far, 8 countries (Albania, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Russian Federation, Romania and Ukraine) have reported influenza detections in SARI patients during the current influenza season.

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological overview

During week 7/2012, 45 countries reported a dominant virus type and/or subtype; 25 reported influenza A as the dominant virus, and 2 reported co-dominance of influenza B with A(H3)/A(H3N2. The remaining 18 reported no dominant virus.

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel** ILI/ARI and SARI surveillance for both the current week and the period from week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	2240	169	22545	2559
Influenza A + B	1024 (45.7%)	21 (12.4%)	5241 (23.3%)	172 (6.7%)
Influenza A	930 (90.8%)	18 (85.7%)	4906 (93.6%)	168 (97.7%)
Influenza B	94 (9.2%)	3 (14.3%)	335 (6.4%)	4 (2.3%)
Influenza A subtyped	671	18	4395	160
A (H1N1)pdm09	8 (1.2%)	1 (5.6%)	53 (1.2%)	45 (28.1%)
A (H3N2)	663 (98.8%)	17 (94.4%)	4342 (98.8%)	115 (71.9%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

During week 7/2012, 2232 specimens from **non-sentinel** sources were reported positive for influenza: 2135 (96%) type A and 97 (4%) type B. Of the influenza A viruses, 671 were subtyped: 663 (99%) as A(H3N2) and 8 (1%) as A(H1N1)pdm09.
Since week 40/2011, 13 117 specimens of influenza viruses from sentinel and non-sentinel sources have been typed and subtyped: 12 421(95%) were influenza A and 696 (5%) were influenza B. Of the influenza A viruses 7616 were subtyped: 7347 (96%) as A (H3N2) and 269(4%) as A(H1N1)pdm09.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 14 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Greece, Latvia, Portugal, Romania, the Russian Federation, Slovenia, Sweden, Switzerland) have characterized 219 influenza viruses antigenically (Fig. 3). 15 countries (Austria, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Norway, Portugal, the Russian Federation, Spain, Sweden, Switzerland) have characterized 475 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 07/2012
[Total N = 218]

(1) Sentinel and non-sentinel specimens combined

Compiled at 11:25 on Feb 23 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

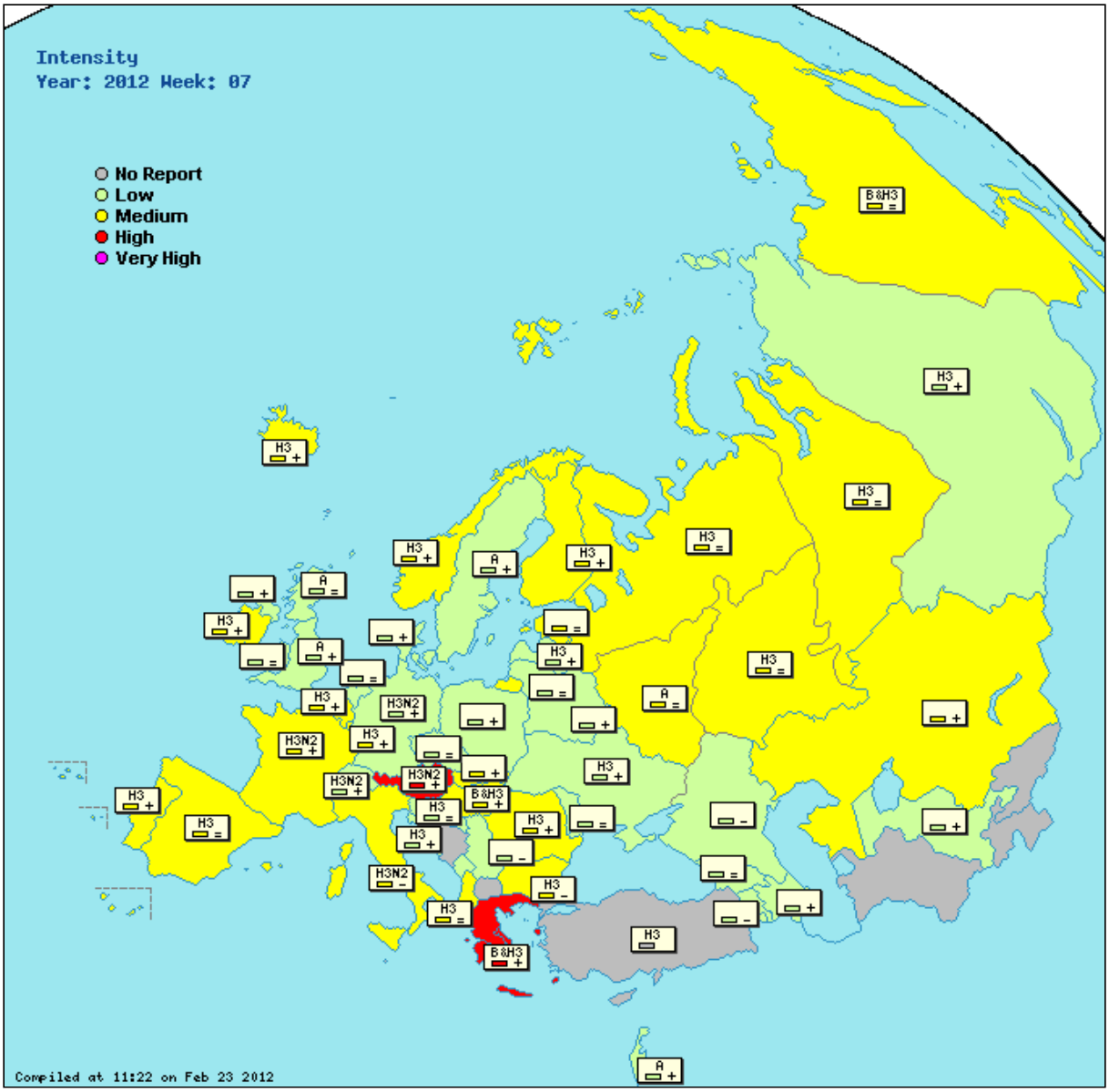
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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)

Republic of Moldova

This week were tested 9 samples, from which 3 were positive for A/H3N2, and 3 were positive for DNA Adenovirus.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania	Medium	Sporadic	Moderate	Stable	23	52.2%	Type A, Subtype H3		554.1 (graphs)	sari	Click here
Armenia	Low	None	Low	Decreasing	5	0%	None		132.6 (graphs)	sari	Click here
Austria	High	Widespread	Low	Increasing	51	62.8%	Type A, Subtype H3N2	27.3 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Increasing	0	0%	None	202.5 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Increasing	36	0%	None	6.8 (graphs)	1052.2 (graphs)	sari	Click here
Belgium	Medium	Widespread		Increasing	114	71.1%	Type A, Subtype H3	586.9 (graphs)	2725.5 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Medium	Regional		Decreasing	0	0%	Type A, Subtype H3	(graphs)	1304.2 (graphs)		Click here

Croatia	Low	Widespread	Low	Increasing			Type A, Subtype H3	12.8	(graphs)		(graphs)		Click here
Czech Republic	Low	Sporadic		Stable	20	10.0%	None	43.6	(graphs)	953.8	(graphs)		Click here
Denmark	Low	Sporadic		Increasing	6	50.0%	None	67.5	(graphs)		(graphs)		Click here
England	Low	Sporadic		Increasing	86	32.6%	Type A	20.2	(graphs)	477.0	(graphs)		Click here
Estonia	Medium	Widespread		Stable	17	35.3%		10.7	(graphs)	179.8	(graphs)		Click here
Finland	Medium	Regional	Low	Increasing	91	51.7%	Type A, Subtype H3	0.0	(graphs)		(graphs)		Click here
France	Medium	Widespread	Low	Increasing	244	56.6%	Type A, Subtype H3N2		(graphs)	2610.4	(graphs)		Click here
Georgia	Low	Regional	Low	Stable	15	13.3%	None	364.7	(graphs)		(graphs)	sari	Click here
Germany	Low	Regional		Increasing	98	29.6%	Type A, Subtype H3N2		(graphs)	1407.1	(graphs)		Click here
Greece	High	Widespread		Increasing	49	71.4%	Type B and Type A, Subtype H3N2	368.4	(graphs)		(graphs)		Click here
Hungary	Medium	Widespread	Low	Increasing	57	42.1%	Type B and Type A, Subtype H3	209.1	(graphs)		(graphs)		Click here
Iceland	Medium	Regional	Moderate	Increasing	0	0%	Type A, Subtype H3	97.0	(graphs)		(graphs)		Click here
Ireland	Medium	Local	Low	Increasing	23	56.5%	Type A, Subtype H3	32.9	(graphs)		(graphs)		Click here
Israel	Low	Widespread	Moderate	Increasing	71	45.1%	Type A	43.5	(graphs)				Click here
Italy	Medium	Widespread	Moderate	Decreasing	146	52.1%	Type A, Subtype H3N2	706.5	(graphs)		(graphs)		Click here
Kazakhstan	Medium	Local	Moderate	Increasing	30	13.3%	None	166.8	(graphs)	287.4	(graphs)	sari	Click here
Kyrgyzstan					6	16.7%	None				(graphs)	sari	Click here
Latvia	Low	Sporadic		Increasing	1	0%	Type A, Subtype H3	10.2	(graphs)	1370.2	(graphs)		Click here
Lithuania	Low	Local	Low	Stable	0	0%	None	2.3	(graphs)	357.8	(graphs)		Click here
Luxembourg	Medium	Regional	Low		31	41.9%	Type A, Subtype H3	2.0 *	(graphs)	34.2 *	(graphs)		Click here
The former Yugoslav Republic of Macedonia							None		(graphs)				Click here
Malta					7	0%	None		(graphs)				Click here
Montenegro	Low	Sporadic	Low	Stable				4.0	(graphs)		(graphs)		Click here
Netherlands	Low	Local		Stable	23	21.7%	None	47.3	(graphs)		(graphs)		Click here
Northern Ireland	Low	Sporadic		Increasing	1	100.0%		30.6	(graphs)	510.0	(graphs)		Click here
Norway	Medium	Widespread		Increasing	25	64.0%	Type A, Subtype H3	152.2	(graphs)		(graphs)		Click here
Poland	Low	None	Low	Increasing	25	0%	None	148.7	(graphs)		(graphs)		Click here
Portugal	Medium	Widespread		Increasing	11	63.6%	Type A, Subtype H3	78.6	(graphs)		(graphs)		Click here
Republic of Moldova	Low	Sporadic	Low	Stable	8	37.5%	None		(graphs)	57.8	(graphs)	sari	Click here
Romania	Medium	Regional	Low	Increasing	30	76.7%	Type A, Subtype H3	4.3	(graphs)	885.0	(graphs)	sari	Click here
Russian Federation	Medium	Sporadic	Low	Stable	45	4.4%	Type A, Subtype H3	0.9	(graphs)	740.1	(graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	27	7.4%	Type A	11.0	(graphs)	546.8	(graphs)		Click here
Serbia	Low	None	Low	Decreasing	0	0%	None	29.2	(graphs)		(graphs)	sari	Click here
Slovakia	Medium	Sporadic	Low	Increasing	3	0%	None	257.8	(graphs)	1982.6	(graphs)	sari	Click here
Slovenia	Low	Widespread		Stable	25	56.0%	Type A, Subtype H3	32.1	(graphs)	1265.3	(graphs)		Click here
Spain	Medium	Widespread		Stable	557	52.4%	Type A, Subtype H3	251.7	(graphs)		(graphs)		Click here
Sweden	Low	Sporadic	Low	Increasing	104	38.5%	Type A	18.6	(graphs)		(graphs)		Click here
Switzerland	Low	Widespread		Increasing	52	48.1%	Type A, Subtype H3N2	157.9	(graphs)		(graphs)		Click here
Turkey					71	22.5%	Type A, Subtype H3	0.0	(graphs)		(graphs)		Click here
Ukraine	Low	Sporadic	Low	Increasing	5	0%	Type A, Subtype H3	3.4 *	(graphs)	467.6	(graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Increasing			None	0.5	(graphs)	39.5	(graphs)		Click here
Wales	Low	None		Stable	1	0%		5.1	(graphs)		(graphs)		Click here
Europe					2240	45.7%							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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Large variation in influenza activity between countries in the WHO European Region

Current situation: week 8/2012

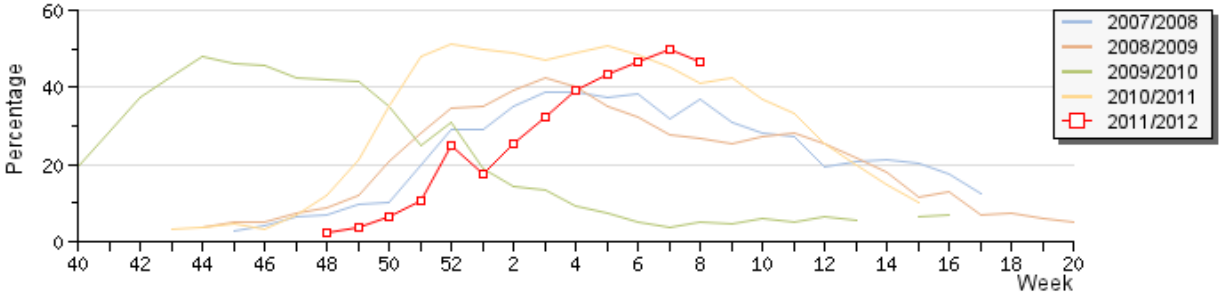
- This issue is based on data for week 8/2012 reported by 47 Member States in the WHO European Region.
- Although influenza activity is still increasing in some countries, it has peaked and is decreasing in others. Most countries continue to report low intensity. Outpatient consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are in general low compared to the same period last year.
- The number of hospitalizations due to severe acute respiratory infection (SARI) continues to be relatively stable, with 8% of sentinel SARI specimens testing positive for influenza, a slight decrease from 12% in the previous week.
- Influenza A(H3N2) continues to be the dominant virus in circulation, with relatively few A(H1N1)pdm09 and influenza B detections reported.
- Since week 40/2011, 204 influenza A(H1N1)pdm09, A(H3N2) and B viruses have been screened for susceptibility to the neuraminidase inhibitors oseltamivir and zanamivir. None was resistant. All of the 91 A(H3N2) viruses and 7 influenza A(H1N1)pdm09 viruses that were screened for susceptibility to adamantanes were found to be resistant.

Outpatient surveillance for ILI and ARI

42 countries reported on trends in clinical activity: 11 stable, 18 increasing and 13 decreasing trends. ILI and ARI consultation rates have peaked and are decreasing in some countries (e.g. Albania, Bulgaria, Italy and Spain). Nevertheless, consultation rates in most countries continue to be well below the levels observed in the 2010/2011 season, although some are reporting increasing trends. Similarly, among the 41 countries reporting on influenza intensity in week 8/2012, most (21) reported low intensity while 17 reported medium. Only 3 countries reported high intensity . Of the 42 countries reporting on the geographical spread of influenza, 3 reported no activity; 18, local or sporadic activity; 6, regional activity; and 15, widespread activity.

During week 8/2012 sentinel outpatient clinics collected 1985 respiratory specimens, of which 922 (46%) tested positive for influenza viruses, similarly to the previous week. Of the 922 positive specimens, 828 (90%) were influenza type A and 94 (10%) were influenza B (Fig. 1, Table 1). In the 23 countries testing 20 or more sentinel specimens, influenza positivity ranged from 3% to 81%, with a median of 44% (mean: 41%).

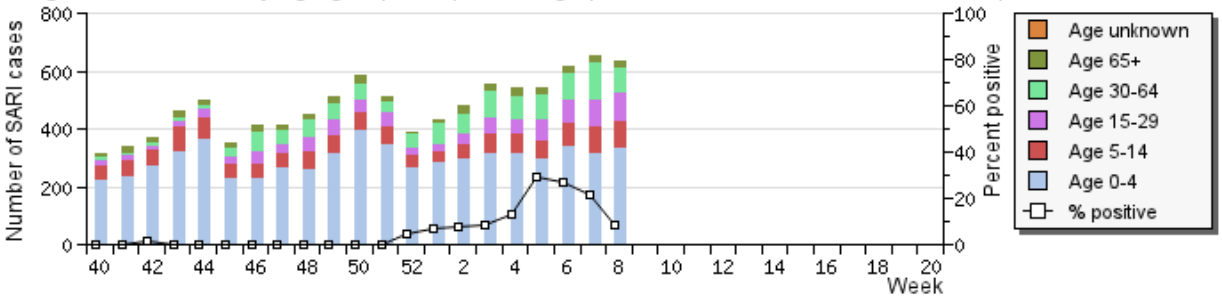
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

Similarly to the previous week, 11 countries reported data for hospital-based sentinel surveillance of SARI: Albania, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. The number of SARI hospitalizations remains stable, but the percentage of cases testing positive for influenza is decreasing. A total of 167 respiratory specimens was collected from SARI patients, of which 14 (8%) were positive for influenza A; all were subtyped as A(H3N2). (Fig. 2). So far, most countries have reported influenza detections in SARI patients during the course of the current influenza season, but with considerably lower influenza-positivity rates than in the previous season.

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel

SARI systems in EuroFlu.

Virological overview

During week 8/2012, 43 countries reported a dominant virus type and/or subtype; 28 reported influenza A as the dominant virus and 3 reported co-dominance of influenza B with A(H3N2). 12 countries reported no dominant virus.

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel** ILI/ARI and SARI surveillance for both the current week and the period since week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	1985	167	24708	2766
Influenza A + B	922 (46.5%)	14 (8.4%)	6353 (25.7%)	225 (8.1%)
Influenza A	828 (89.8%)	14 (100.0%)	5918 (93.2%)	221 (98.2%)
Influenza B	94 (10.2%)	0 (0.0%)	435 (6.9%)	4 (1.8%)
Influenza A subtyped	628	14	5279	210
A (H1N1)pdm09	10 (1.6%)	0 (0.0%)	68 (1.3%)	51 (24.3%)
A (H3N2)	618 (98.4%)	14 (100.0%)	5211 (98.7%)	159 (75.7%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

During week 8/2012, 3084 specimens from **non-sentinel** sources were reported positive for influenza: 2940 (95%) type A and 144 (5%) type B. Of the influenza A viruses, 885 were subtyped: 854 (96%) as A(H3N2) and 31 (4%) as A(H1N1)pdm09.
Since week 40/2011, 17 636 specimens of influenza viruses from sentinel and non-sentinel sources have been typed and subtyped: 16 714 (95%) were influenza A and 922 (5%) were influenza B. Of the influenza A viruses 9542 were subtyped: 9223 (97%) as A (H3N2) and 319 (3%) as A(H1N1)pdm09.
Since week 40/2010, 8 countries (Germany, Italy, the Netherlands, Norway, Portugal, Romania, Sweden and the United Kingdom) have screened 204 influenza A(H1N1)pdm09, A(H3N2) and B viruses for susceptibility to the neuraminidase inhibitors oseltamivir and zanamivir. None was resistant. All 91 A(H3N2) viruses and 7 influenza A(H1N1)pdm09 viruses that were screened for susceptibility to adamantanes were found to be resistant.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 14 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Greece, Latvia, Portugal, Romania, the Russian Federation, Slovenia, Sweden, Switzerland) have characterized 276 influenza viruses antigenically (Fig. 3). 15 countries (Austria, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Norway, Portugal, the Russian Federation, Spain, Sweden, Switzerland) have characterized 515 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 08/2012
[Total N = 275]

(1) Sentinel and non-sentinel specimens combined

Compiled at 10:11 on Mar 1 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

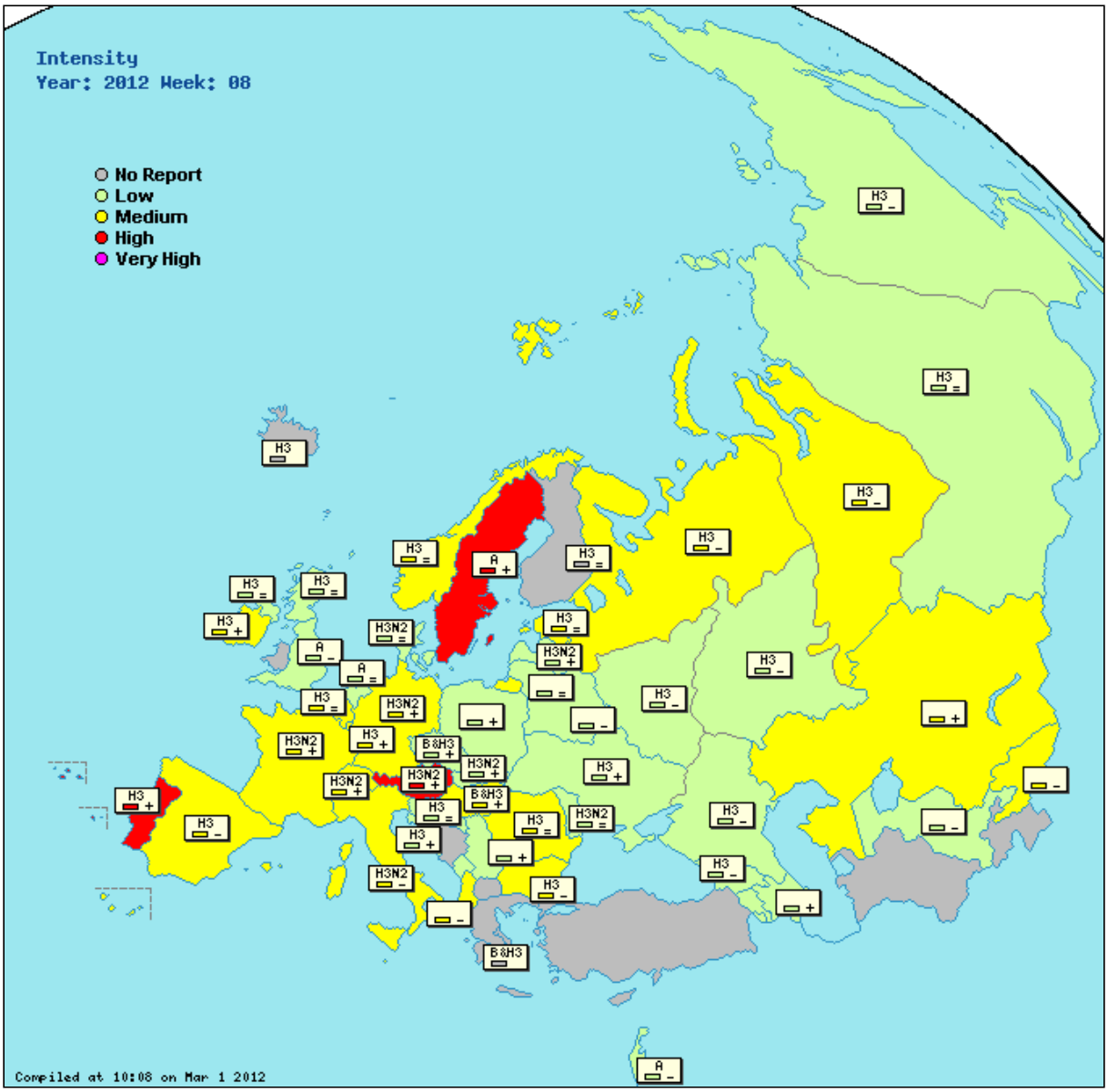
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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

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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)

Republic of Moldova
Were tested 11 samples, from which 3 were positive for A/H3N2, and 2 were positive for DNA Adenovirus.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania	Medium	Sporadic	Moderate	Decreasing	17	11.8%	None		449.2 (graphs)	sari	Click here
Armenia	Low	None	Low	Decreasing					120.3 (graphs)	sari	Click here

Austria	High	Widespread	Moderate	Increasing	67	62.7%	Type A, Subtype H3N2	33.0	(graphs)		(graphs)		Click here
Azerbaijan	Low	None	Low	Increasing	2	0%	None	208.0	(graphs)		(graphs)		Click here
Belarus	Low	Sporadic	Low	Decreasing	31	3.2%	None	5.9	(graphs)	1035.9	(graphs)	sari	Click here
Belgium	Medium	Widespread		Stable	88	58.0%	Type A, Subtype H3	527.7	(graphs)	2241.4	(graphs)	sari	Click here
Bosnia and Herzegovina							None		(graphs)				Click here
Bulgaria	Medium	Regional		Decreasing	30	63.3%	Type A, Subtype H3		(graphs)	1146.7	(graphs)		Click here
Croatia	Low	Widespread	Low	Increasing			Type A, Subtype H3	37.0	(graphs)		(graphs)		Click here
Czech Republic	Low	Local		Increasing	29	48.3%	Type B and Type A, Subtype H3N2	42.3	(graphs)	939.3	(graphs)		Click here
Denmark	Low	Sporadic		Stable	7	57.1%	Type A, Subtype H3N2	62.3	(graphs)		(graphs)		Click here
England	Low	Sporadic		Decreasing	90	37.8%	Type A	16.1	(graphs)	448.9	(graphs)		Click here
Estonia	Medium	Regional		Stable	16	37.5%	Type A, Subtype H3	10.5	(graphs)	298.0	(graphs)		Click here
Finland		Widespread	Moderate	Stable	65	36.9%	Type A, Subtype H3	0.0	(graphs)		(graphs)		Click here
France	Medium	Widespread	Low	Increasing	189	65.1%	Type A, Subtype H3N2		(graphs)	2662.4	(graphs)		Click here
Georgia	Low	Regional	Low	Decreasing	24	12.5%	Type A, Subtype H3	340.5	(graphs)		(graphs)	sari	Click here
Germany	Medium	Regional		Increasing	114	40.4%	Type A, Subtype H3N2		(graphs)	1443.7	(graphs)		Click here
Greece					16	81.3%	Type B and Type A, Subtype H3N2		(graphs)				Click here
Hungary	Medium	Widespread	Low	Increasing	82	43.9%	Type B and Type A, Subtype H3	338.3	(graphs)		(graphs)		Click here
Iceland					0	0%	Type A, Subtype H3		(graphs)				Click here
Ireland	Medium	Regional	Low	Increasing	33	48.5%	Type A, Subtype H3	43.1	(graphs)		(graphs)		Click here
Israel	Low	Widespread	Moderate	Decreasing	54	37.0%	Type A	42.2	(graphs)				Click here
Italy	Medium	Widespread	Low	Decreasing	90	57.8%	Type A, Subtype H3N2	584.8	(graphs)		(graphs)		Click here
Kazakhstan	Medium	Local		Increasing	27	7.4%	None	168.8	(graphs)	289.5	(graphs)	sari	Click here
Kyrgyzstan	Medium	Sporadic	Low	Decreasing	1	0%	None	2.4	(graphs)	82.8	(graphs)	sari	Click here
Latvia	Low	Local		Increasing	4	25.0%	Type A, Subtype H3N2	15.8	(graphs)	1276.5	(graphs)		Click here
Lithuania	Low	Sporadic	Low	Stable	2	0%	None	2.3	(graphs)	457.3	(graphs)		Click here
Luxembourg	Medium	Widespread	Low		40	30.0%	Type A, Subtype H3	4.9 *	(graphs)	24.1 *	(graphs)		Click here
The former Yugoslav Republic of Macedonia							None		(graphs)				Click here
Malta	Medium	Local	Low	Decreasing				11.8 *	(graphs)	0 *	(graphs)		Click here
Montenegro	Low	Sporadic	Low	Stable				3.5	(graphs)		(graphs)		Click here
Netherlands	Low	Local		Stable	13	46.2%	Type A	44.1	(graphs)		(graphs)		Click here
Northern Ireland	Low	Sporadic		Stable	3	33.3%	Type A, Subtype H3	24.7	(graphs)	457.8	(graphs)		Click here
Norway	Medium	Widespread		Stable	17	64.7%	Type A, Subtype H3	156.5	(graphs)		(graphs)		Click here
Poland	Low	None	Low	Increasing	32	12.5%	None	161.9	(graphs)		(graphs)		Click here
Portugal	High	Widespread		Increasing	11	36.4%	Type A, Subtype H3	138.3	(graphs)		(graphs)		Click here
Republic of Moldova	Low	Sporadic	Low	Stable	11	27.3%	Type A, Subtype H3N2	0.2	(graphs)	53.7	(graphs)	sari	Click here
Romania	Medium	Regional	Low	Stable	0	0%		6.7	(graphs)	862.7	(graphs)	sari	Click here
Russian Federation	Low	Sporadic		Decreasing	47	12.8%	Type A, Subtype H3	1.4	(graphs)	665.9	(graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	22	13.6%	Type A, Subtype H3	13.7	(graphs)	531.5	(graphs)		Click here
Serbia	Low	Sporadic	Low	Increasing	0	0%	None	38.5	(graphs)		(graphs)	sari	Click here
Slovakia	Low	Sporadic	Low	Increasing	3	100.0%	Type A, Subtype H3N2	226.4	(graphs)	1826.4	(graphs)	sari	Click here
Slovenia	Low	Widespread		Stable	36	80.6%	Type A, Subtype H3	19.0	(graphs)	1204.8	(graphs)		Click here
Spain	Medium	Widespread		Decreasing	435	50.1%	Type A, Subtype H3	201.7	(graphs)		(graphs)		Click here
Sweden	High	Widespread	Severe	Increasing	126	58.7%	Type A	37.9	(graphs)		(graphs)		Click here
Switzerland	Medium	Widespread		Increasing	34	61.8%	Type A, Subtype H3N2	210.3	(graphs)		(graphs)		Click here
Turkey					74	24.3%	None		(graphs)				Click here
Ukraine	Low	Sporadic	Low	Increasing	3	0%	Type A, Subtype H3	3.7 *	(graphs)	532.6	(graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Decreasing			None	0.5	(graphs)	34.9	(graphs)		Click here
Europe					1985	46.5%							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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

commentary used in this bulletin do not imply any opinions whatsoever on the part of WHO or its partners about the legal status of the countries and territories shown or about their borders.

Continued increase but large variation in influenza activity in the WHO European Region

Current situation: week 9/2012

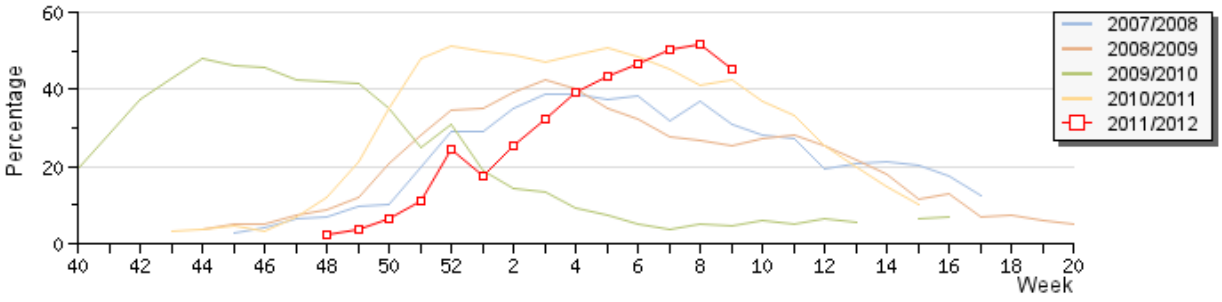
- This issue is based on data for week 9/2012 reported by 47 Member States in the WHO European Region.
- Most countries reported medium-intensity, widespread activity and increasing or stable trends. Outpatient consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are low compared to the same period last year.
- Overall, the number of hospitalizations due to severe acute respiratory infection (SARI) has not increased during the past 6 weeks, and the percentage of sentinel SARI specimens testing positive for influenza (about 20%) has not varied much.
- Influenza A(H3N2) continues to be the dominant virus in circulation, with relatively few A(H1N1)pdm09 and influenza B detections reported.
- None of the influenza A(H1N1)pdm09, A(H3N2) or B viruses screened for susceptibility to neuraminidase inhibitors was found to be resistant, although the numbers analysed were relatively low.

Outpatient surveillance for ILI and ARI

43 countries reported on trends in clinical activity: 13 stable, 19 increasing and 11 decreasing trends. ILI and ARI consultation rates are still increasing in some countries (e.g. Croatia, Germany, Hungary and Ukraine) and have peaked and are decreasing in others (e.g. Albania, Bulgaria, Italy and Spain). Nevertheless, consultation rates in most countries continue to be below the levels observed in the 2010/2011 season, although some are reporting increasing trends and some have exceeded the levels observed last season. Among the 42 countries reporting on influenza intensity in week 9/2012, most (22) reported medium intensity, with 2 countries reporting high, 1 reporting very high and 17 reporting low intensity. Of the 43 countries reporting on the geographical spread of influenza, 5 reported no activity; 13, local or sporadic activity; 7, regional activity; and 18, widespread activity.

During week 9/2012 sentinel outpatient clinics collected 1878 respiratory specimens, of which 851 (45%) tested positive for influenza viruses, similarly to the previous week. Of the 851 positive specimens, 774 (91%) were influenza type A and 77 (9%) were influenza B (Fig. 1, Table 1). In the 22 countries testing 20 or more sentinel specimens, influenza positivity ranged from 3% to 92%, with a median of 47% (mean: 45%).

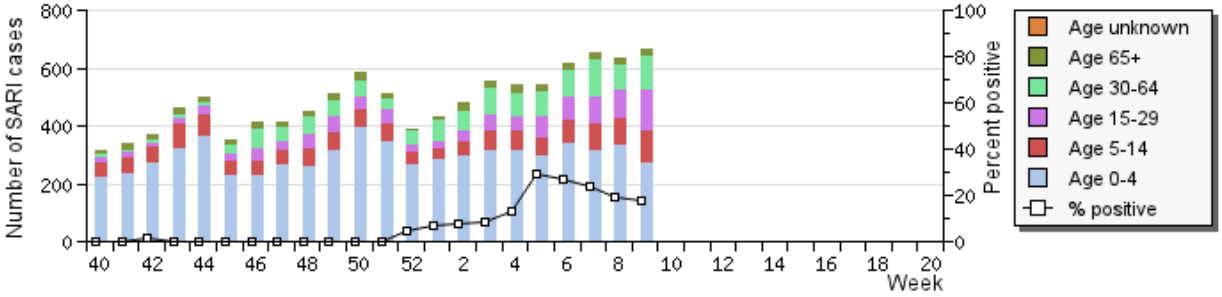
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

Similarly to the previous week, 11 countries reported data for hospital-based sentinel surveillance of SARI: Albania, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. The number of SARI hospitalizations remained stable, but the percentage of cases testing positive for influenza was decreasing. A total of 141 respiratory specimens was collected from SARI patients, of which 25 (18%) were positive for influenza: 23 were type A and 2 were type B. Of the influenza A viruses, 22 were subtyped: 20 as A(H3) and 2 as A(H1)pdm09. (Fig. 2). So far, most countries have reported influenza detections in SARI patients during the course of the current influenza season, but with considerably lower influenza-positivity rates than last season.

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological overview

During week 9/2012, 43 countries reported a dominant virus type and/or subtype; 26 reported influenza A as the dominant virus and 3 reported co-dominance of influenza B with A(H3N2). 14 countries reported no dominant virus.

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel** ILI/ARI and SARI surveillance for both the current week and the period since week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	1878	141	26791	2961
Influenza A + B	851 (45.3%)	25 (17.7%)	7431 (27.7%)	284 (9.6%)
Influenza A	774 (91.0%)	23 (92.0%)	6905 (92.9%)	278 (97.9%)
Influenza B	77 (9.1%)	2 (8.0%)	526 (7.1%)	6 (2.1%)
Influenza A subtyped	632	22	6189	266
A (H1N1)pdm09	10 (1.6%)	2 (9.1%)	89 (1.4%)	59 (22.2%)
A (H3N2)	622 (98.4%)	20 (90.9%)	6100 (98.6%)	207 (77.8%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

During week 9/2012, 2511 specimens from **non-sentinel** sources were reported positive for influenza: 2375 (95%) type A and 136 (5%) type B. Of the influenza A viruses, 816 were subtyped: 794 (97%) as A(H3N2) and 22 (3%) as A(H1N1)pdm09.

Since week 40/2011, 21 448 specimens of influenza viruses from sentinel and non-sentinel sources have been typed: 20 321 (95%) were influenza A and 1127 (5%) were influenza B. Of the influenza A viruses, 11 469 were subtyped: 11036 (96%) as A (H3N2) and 433 (4%) as A(H1N1)pdm09.

Since week 40/2010, 8 countries (Germany, Italy, the Netherlands, Norway, Portugal, Romania, Sweden and the United Kingdom) have screened 245 influenza A(H1N1)pdm09, A(H3N2) and B viruses for susceptibility to the neuraminidase inhibitors oseltamivir and zanamivir. None was resistant, although relatively few viruses have been analysed compared with the 1217 analysed by week 9 of last season. All of the 91 A(H3N2) viruses and 7 influenza A(H1N1)pdm09 viruses that were screened for susceptibility to adamantanes were found to be resistant.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 15 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Greece, Latvia, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, Sweden, Switzerland) have characterized 382 influenza viruses antigenically (Fig. 3). 17 countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Norway, Portugal, Romania, the Russian Federation, Spain, Sweden, Switzerland) have characterized 592 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 09/2012
[Total N = 382]

(1) Sentinel and non-sentinel specimens combined

Compiled at 12:34 on Mar 8 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

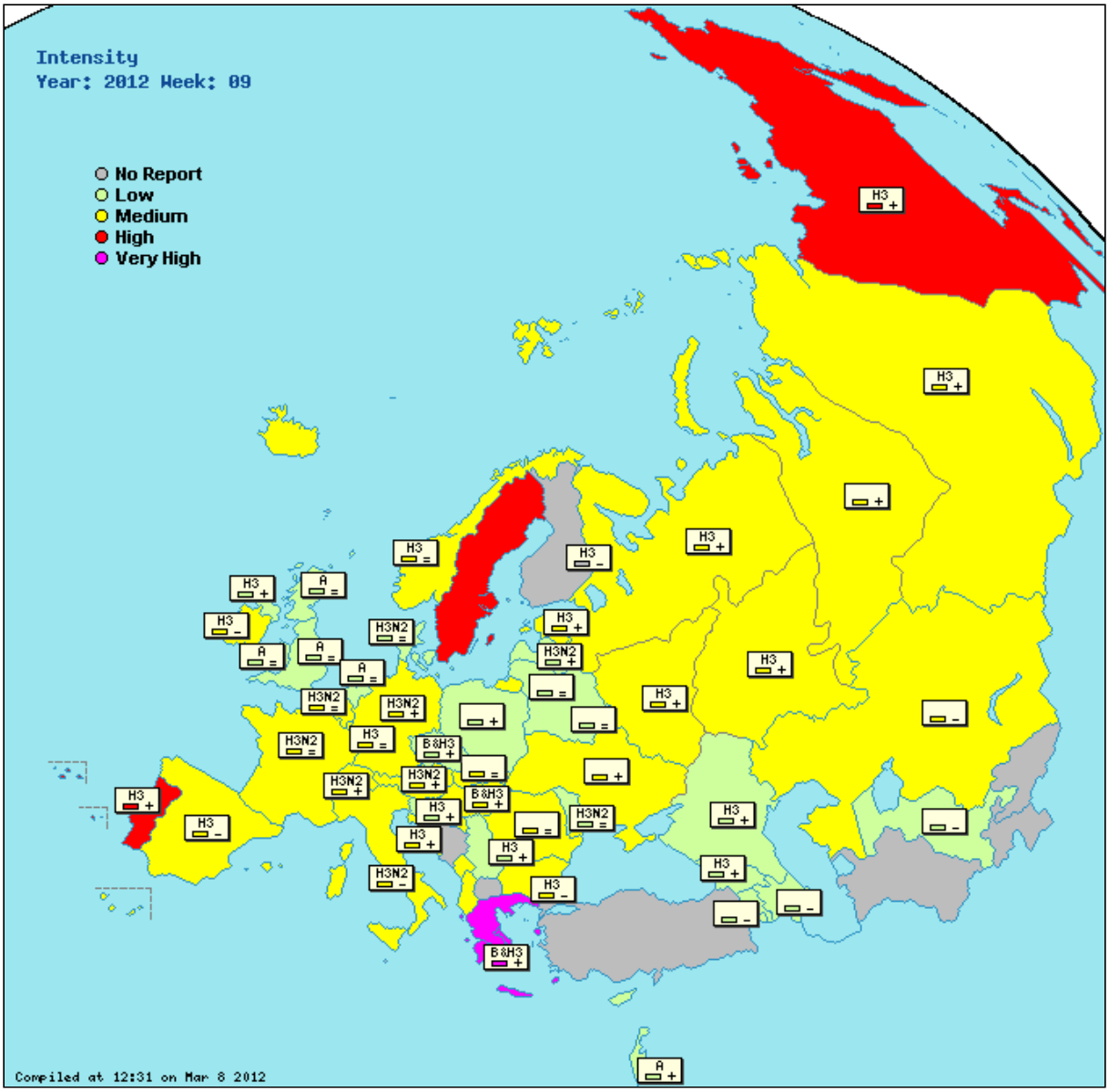
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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	Sentinel SARI	Virology graph and pie chart
Albania	Medium	None	Moderate	Decreasing					483.0 (graphs)	sari	Click here
Armenia	Low	None	Low	Decreasing	0	0%	None	(graphs)	106.1 (graphs)	sari	Click here
Austria	Medium	Widespread	Moderate	Increasing	57	68.4%	Type A, Subtype H3N2	39.3 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Decreasing	1	0%	None	195.1 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Stable	32	3.1%	None	5.2 (graphs)	1034.6 (graphs)	sari	Click here
Belgium	Medium	Widespread		Stable	113	62.0%	Type A, Subtype H3N2	469.7 (graphs)	2149.0 (graphs)	sari	Click here
Bosnia and Herzegovina							None	(graphs)			Click here
Bulgaria	Medium	Regional		Decreasing	10	70.0%	Type A, Subtype H3	(graphs)	1029.1 (graphs)		Click here
Croatia	Medium	Widespread	Low	Increasing			Type A, Subtype H3	72.0 (graphs)	(graphs)		Click here

Cyprus	Low	None	Low	Stable				2.0 * (graphs)	12.3 * (graphs)			Click here
Czech Republic	Low	Local		Increasing	28	35.7%	Type B and Type A, Subtype H3N2	54.6 (graphs)	985.5 (graphs)			Click here
Denmark	Low	Sporadic		Stable	5	20.0%	Type A, Subtype H3N2	54.0 (graphs)	(graphs)			Click here
England	Low	Sporadic		Stable	106	34.9%	Type A	15.1 (graphs)	435.3 (graphs)			Click here
Estonia	Medium	Widespread		Increasing	30	50.0%	Type A, Subtype H3	14.9 (graphs)	425.4 (graphs)			Click here
Finland		Widespread	Moderate	Decreasing	74	35.1%	Type A, Subtype H3	0.0 (graphs)	(graphs)			Click here
France	Medium	Widespread	Low	Stable	228	52.2%	Type A, Subtype H3N2	(graphs)	2167.7 (graphs)			Click here
Georgia	Low	Widespread	Low	Increasing	14	42.9%	Type A, Subtype H3	383.8 (graphs)	(graphs)		sari	Click here
Germany	Medium	Regional		Increasing	147	36.1%	Type A, Subtype H3N2	(graphs)	1542.9 (graphs)			Click here
Greece	Very High	Widespread		Increasing	12	50.0%	Type B and Type A, Subtype H3N2	410.1 (graphs)	(graphs)			Click here
Hungary	Medium	Widespread	Low	Increasing	125	40.0%	Type B and Type A, Subtype H3	395.6 (graphs)	(graphs)			Click here
Iceland	Medium	Regional	Moderate	Decreasing				95.5 (graphs)	(graphs)			Click here
Ireland	Medium	Regional	Low	Decreasing	29	65.5%	Type A, Subtype H3	34.6 (graphs)	(graphs)			Click here
Israel	Low	Widespread	Moderate	Increasing	37	54.1%	Type A	44.1 (graphs)				Click here
Italy	Medium	Regional	Low	Decreasing	80	43.8%	Type A, Subtype H3N2	418.7 (graphs)	(graphs)			Click here
Kazakhstan	Medium	Local	Low	Decreasing	18	0%	None	154.0 (graphs)	262.7 (graphs)		sari	Click here
Kyrgyzstan					6	0%	None		(graphs)		sari	Click here
Latvia	Low	Regional		Increasing	3	33.3%	Type A, Subtype H3N2	38.0 (graphs)	1243.1 (graphs)			Click here
Lithuania	Low	Sporadic	Low	Stable	6	50.0%	None	2.4 (graphs)	440.2 (graphs)			Click here
Luxembourg	Medium	Widespread			24	91.7%	Type A, Subtype H3	2.3 * (graphs)	35.7 * (graphs)			Click here
The former Yugoslav Republic of Macedonia							None	(graphs)				Click here
Montenegro	Medium	Sporadic	Low	Increasing				16.8 (graphs)	(graphs)			Click here
Netherlands	Low	Widespread		Stable	24	37.5%	Type A	49.5 (graphs)	(graphs)			Click here
Northern Ireland	Low	Sporadic		Increasing	2	0%	Type A, Subtype H3	31.2 (graphs)	422.5 (graphs)			Click here
Norway	Medium	Widespread		Stable	8	75.0%	Type A, Subtype H3	157.2 (graphs)	(graphs)			Click here
Poland	Low	None	Low	Increasing	31	6.5%	None	256.2 (graphs)	(graphs)			Click here
Portugal	High	Widespread		Increasing	17	52.9%	Type A, Subtype H3	141.3 (graphs)	(graphs)			Click here
Republic of Moldova	Low	Sporadic	Low	Stable	7	71.4%	Type A, Subtype H3N2	0.3 (graphs)	49.0 (graphs)		sari	Click here
Romania	Medium	Regional	Low	Stable	21	52.4%	None	4.5 (graphs)	843.4 (graphs)		sari	Click here
Russian Federation	Medium	Local	Low	Increasing	52	21.2%	Type A, Subtype H3	2.5 (graphs)	778.0 (graphs)		sari	Click here
Scotland	Low	Sporadic	Low	Stable	36	25.0%	Type A	11.4 (graphs)	533.5 (graphs)			Click here
Serbia	Low	Sporadic	Low	Increasing	11	100.0%	Type A, Subtype H3	47.4 (graphs)	(graphs)		sari	Click here
Slovakia	Medium	Sporadic	Low	Stable	11	36.4%	None	220.9 (graphs)	1786.1 (graphs)		sari	Click here
Slovenia	Low	Widespread		Increasing	43	62.8%	Type A, Subtype H3	63.2 (graphs)	1305.9 (graphs)			Click here
Spain	Medium	Widespread		Decreasing	309	51.8%	Type A, Subtype H3	140.0 (graphs)	(graphs)			Click here
Sweden	High	Widespread	Severe	Increasing				30.3 (graphs)	(graphs)			Click here
Switzerland	Medium	Widespread		Increasing	45	64.4%	Type A, Subtype H3N2	230.5 (graphs)	(graphs)			Click here
Turkey					71	23.9%	None	(graphs)				Click here
Ukraine	Medium	Local	Low	Increasing	5	20.0%	None	3.8 * (graphs)	650.4 (graphs)		sari	Click here
Uzbekistan	Low	Sporadic	Low	Decreasing			None	0.4 (graphs)	30.0 (graphs)			Click here
Wales	Low	None		Stable	0	0%	Type A	4.4 (graphs)	(graphs)			Click here
Europe					1878	45.3%						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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Stable or decreasing Influenza activity in most countries in the WHO European Region

Current situation: week 10/2012

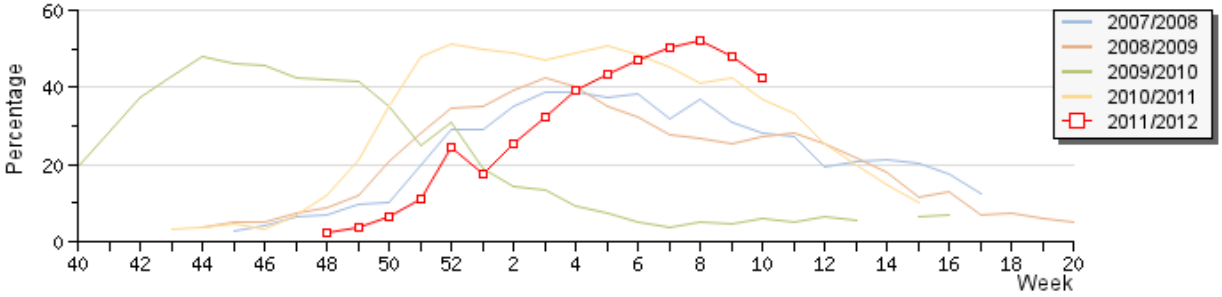
- This issue is based on data for week 10/2012 reported by 46 Member States in the WHO European Region.
- In contrast to previous seasons, the 2011/2012 season has shown no particular pattern of spread of influenza across the Region. Instead, influenza activity has peaked simultaneously in countries in different parts of the Region.
- Outpatient consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are low compared to the same period last year.
- Overall, the number of hospitalizations due to severe acute respiratory infection (SARI) has not increased in the past 5 weeks, and the percentage of sentinel SARI specimens testing positive for influenza (about 20%) has been stable.
- Influenza A(H3N2) continues to be the dominant virus in circulation, with an increasing number of influenza B detections, and relatively few A(H1N1)pdm09, reported.
- None of the influenza A(H1N1)pdm09, A(H3N2) or B viruses screened for susceptibility to neuraminidase inhibitors was found to be resistant, although the numbers analysed were relatively low.

Outpatient surveillance for ILI and ARI

41 countries reported on trends in clinical activity: 14 stable, 7 increasing and 20 decreasing trends. ILI and ARI consultation rates are increasing in some Baltic and south-eastern European countries and have peaked in 5 countries. Consultation rates in most countries continue to be below the levels observed in the 2010/2011 season. Among the 40 countries reporting on influenza intensity in week 10/2012, most (21) reported medium intensity, with 2 countries reporting high, 1 reporting very high and 16 reporting low intensity. Of the 41 countries reporting on the geographical spread of influenza, 4 reported no activity; 13, local or sporadic activity; 7, regional activity; and 17, widespread activity.

During week 10/2012 sentinel outpatient clinics collected 1708 respiratory specimens, of which 723 (42%) tested positive for influenza viruses, a slight decrease from the previous week. Of the 723 positive specimens, 605 (84%) were influenza type A and 118 (16%) were influenza B (Fig. 1, Table 1). In the 23 countries testing 20 or more sentinel specimens, influenza positivity ranged from 20% to 78%, with a median of 45% (mean: 45%).

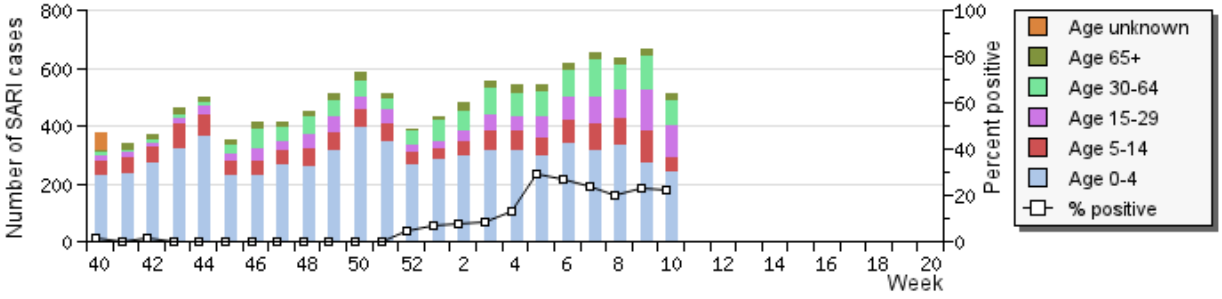
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

10 countries reported data for hospital-based sentinel surveillance of SARI: Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. The number of SARI hospitalizations remained stable, but with a higher percentage of influenza-positive cases in some countries. A total of 121 respiratory specimens was collected from SARI patients, of which 27 (22%) were positive for influenza: 25 were type A and 2 were type B. Of the influenza A viruses, 25 were subtyped: 22 as A(H3) and 3 as A(H1)pdm09. (Fig. 2). So far, most countries have reported influenza detections in SARI patients during the course of the current influenza season, but with considerably lower influenza-positivity rates than last season.

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological overview

During week 10/2012, 40 countries reported a dominant virus based on both sentinel and non-sentinel detections. 26 countries reported influenza A and/or A(H3N2) as the dominant virus and 4 reported co-dominance of influenza B with A(H3N2). 10 countries reported that no virus was dominant.

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel** ILI/ARI and SARI surveillance for both the current week and the period since week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	1708	121	28839	3115
Influenza A + B	723 (42.3%)	27 (22.3%)	8383 (29.1%)	327 (10.5%)
Influenza A	605 (83.7%)	25 (92.6%)	7719 (92.1%)	317 (96.9%)
Influenza B	118 (16.3%)	2 (7.4%)	664 (7.9%)	10 (3.1%)
Influenza A subtyped	486	25	6960	297
A (H1N1)pdm09	9 (1.9%)	3 (12.0%)	105 (1.5%)	59 (19.9%)
A (H3N2)	477 (98.2%)	22 (88.0%)	6855 (98.5%)	238 (80.1%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

During week 10/2012, 2856 specimens from **non-sentinel** sources were reported positive for influenza: 2694 (94%) type A and 162 (6%) type B. Of the influenza A viruses, 920 were subtyped: 887 (96%) as A(H3N2) and 33 (4%) as A(H1N1)pdm09.

Since week 40/2011, 25 167 specimens of influenza viruses from sentinel and non-sentinel sources have been typed: 23 613 (94%) were influenza A and 1554 (6%) were influenza B. Of the influenza A viruses, 11 943 were subtyped: 11 374 (95%) as A (H3N2) and 569 (5%) as A(H1N1)pdm09.

Since week 40/2010, 8 countries (Germany, Italy, the Netherlands, Norway, Portugal, Romania, Sweden and the United Kingdom) have screened 297 influenza A(H3N2), A(H1N1)pdm09 and B viruses for susceptibility to the neuraminidase inhibitors oseltamivir and zanamivir. None was resistant, although relatively few viruses have been analysed compared with the 1227 analysed by week 10/2011. All of the 98 A(H3N2) viruses and 7 influenza A(H1N1)pdm09 viruses that were screened for susceptibility to adamantanes were found to be resistant.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 15 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Greece, Latvia, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, Sweden, Switzerland) have characterized 567 influenza viruses antigenically (Fig. 3). 17 countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Norway, Portugal, Romania, the Russian Federation, Spain, Sweden, Switzerland) have characterized 670 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 10/2012
[Total N = 558]

(1) Sentinel and non-sentinel specimens combined

Compiled at 12:43 on Mar 15 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

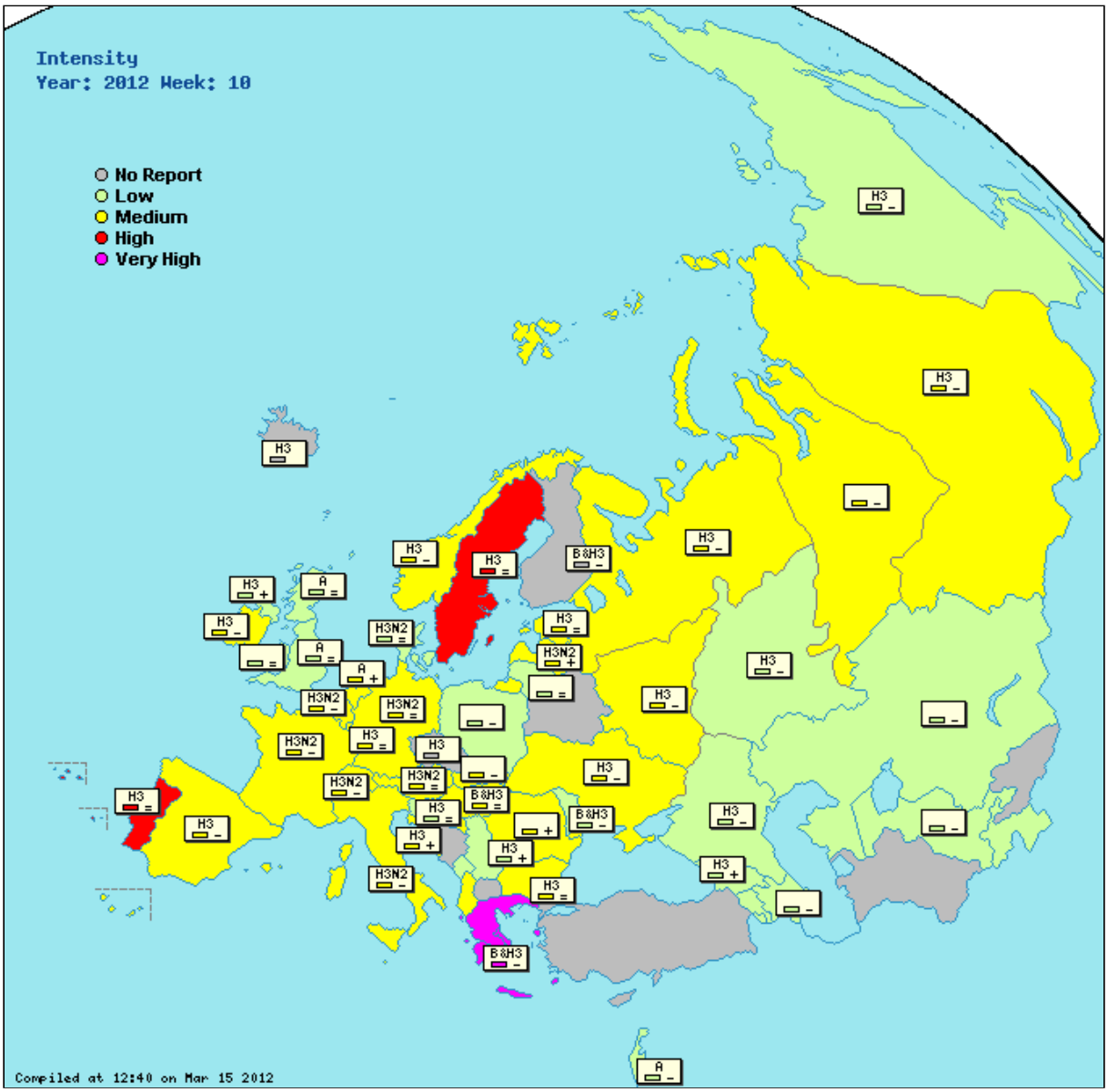
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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	Sentinel SARI	Virology graph and pie chart
Albania	Medium	None	Moderate	Decreasing					462.1 (graphs)	sari	Click here
Armenia	Low	None	Low	Decreasing				(graphs)	71.7 (graphs)	sari	Click here
Austria	Medium	Widespread	Moderate	Stable	68	55.9%	Type A, Subtype H3N2	35.1 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Decreasing	0	0%	None	187.0 (graphs)	(graphs)		Click here
Belgium	Medium	Widespread		Decreasing	62	48.4%	Type A, Subtype H3N2	336.5 (graphs)	1922.4 (graphs)	sari	Click here
Bosnia and Herzegovina					1	100.0%	None	(graphs)			Click here
Bulgaria	Medium	Regional		Stable	6	83.3%	Type A, Subtype H3	(graphs)	1011.2 (graphs)		Click here
Croatia	Medium	Widespread	Low	Increasing			Type A, Subtype H3	143.4 (graphs)	(graphs)		Click here
Czech Republic					29	48.3%	Type A, Subtype H3		(graphs)		Click here
Denmark	Low	Sporadic		Stable	3	66.7%	Type A, Subtype H3N2	72.8 (graphs)	(graphs)		Click here
England	Low	Sporadic		Stable	83	34.9%	Type A	13.0 (graphs)	404.8 (graphs)		Click here
Estonia	Medium	Widespread		Stable	31	58.1%	Type A, Subtype H3	15.5 (graphs)	361.7 (graphs)		Click here
Finland		Regional	Low	Decreasing	63	20.6%	Type B and Type A, Subtype H3	0.0 (graphs)	(graphs)		Click here
France	Medium	Widespread	Low	Decreasing	197	45.2%	Type A, Subtype H3N2	(graphs)	1890.3 (graphs)		Click here
Georgia	Low	Widespread	Low	Increasing	16	68.8%	Type A, Subtype H3	460.3 (graphs)	(graphs)	sari	Click here
Germany	Medium	Regional		Stable	132	39.4%	Type A, Subtype H3N2	(graphs)	1333.6 (graphs)		Click here
Greece	Very High	Widespread		Decreasing	18	61.1%	Type B and Type A, Subtype H3N2	456.9 (graphs)	(graphs)		Click here
Hungary	Medium	Widespread	Low	Stable	102	51.0%	Type B and Type A, Subtype H3	392.0 (graphs)	(graphs)		Click here
Iceland					0	0%	Type A, Subtype H3	(graphs)			Click here
Ireland	Medium	Local	Low	Decreasing	30	46.7%	Type A, Subtype H3	22.9 (graphs)	(graphs)		Click here
Israel	Low	Widespread	Moderate	Decreasing	78	34.6%	Type A	37.0 (graphs)			Click here
Italy	Medium	Regional	Low	Decreasing	40	37.5%	Type A, Subtype H3N2	297.7 (graphs)	(graphs)		Click here
Kazakhstan	Low	Sporadic	Low	Decreasing	17	5.9%	None	173.1 (graphs)	224.3 (graphs)	sari	Click here
Kyrgyzstan					3	0%	None		(graphs)	sari	Click here
Latvia	Medium	Widespread		Increasing	6	33.3%	Type A, Subtype H3N2	167.0 (graphs)	1408.2 (graphs)		Click here
Lithuania	Low	Sporadic	Low	Stable	25	44.0%	None	3.9 (graphs)	473.3 (graphs)		Click here
Luxembourg	Medium	Widespread	Low		36	52.8%	Type A, Subtype H3	4.6 * (graphs)	45.1 * (graphs)		Click here
Malta	Medium	Local	Moderate	Stable				14.8 * (graphs)	0 * (graphs)		Click here
Montenegro	Low	Sporadic	Low	Increasing				43.2 (graphs)	(graphs)		Click here
Netherlands	Medium	Widespread		Increasing	20	35.0%	Type A	78.0 (graphs)	(graphs)		Click here
Northern Ireland	Low	Sporadic		Increasing	4	25.0%	Type A, Subtype H3	32.7 (graphs)	475.4 (graphs)		Click here
Norway	Medium	Widespread		Decreasing	14	71.4%	Type A, Subtype H3	145.8 (graphs)	(graphs)		Click here
Poland	Low	None	Low	Decreasing	8	25.0%	None	105.1 (graphs)	(graphs)		Click here
Portugal	High	Widespread		Stable	6	50.0%	Type A, Subtype H3	120.7 (graphs)	(graphs)		Click here
Republic of Moldova	Low	Sporadic	Low	Decreasing	10	50.0%	Type B and Type A, Subtype H3N2	(graphs)	32.7 (graphs)	sari	Click here
Romania	Medium	Regional	Low	Increasing	25	64.0%	None	5.1 (graphs)	861.1 (graphs)	sari	Click here
Russian Federation	Low	Sporadic		Decreasing	48	35.4%	Type A, Subtype H3	1.6 (graphs)	646.2 (graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	38	13.2%	Type A	15.0 (graphs)	511.6 (graphs)		Click here
Serbia	Low	Local	Low	Increasing	23	78.3%	Type A, Subtype H3	76.8 (graphs)	(graphs)	sari	Click here
Slovakia	Medium	Sporadic	Low	Decreasing	9	0%	None	203.4 (graphs)	1603.0 (graphs)	sari	Click here
Slovenia	Low	Widespread		Stable	49	61.2%	Type A, Subtype H3	53.7 (graphs)	1398.7 (graphs)		Click here
Spain	Medium	Regional		Decreasing	200	44.5%	Type A, Subtype H3	83.9 (graphs)	(graphs)		Click here
Sweden	High	Widespread	Severe	Stable	99	20.2%		30.3 (graphs)	(graphs)		Click here
Switzerland	Medium	Widespread		Decreasing	31	67.7%	Type A, Subtype H3N2	145.4 (graphs)	(graphs)		Click here
Tajikistan	Low	Sporadic	Low	Stable				0.0 (graphs)	(graphs)		Click here
Turkey					66	28.8%	None	(graphs)			Click here
Ukraine	Medium	Regional	Moderate	Decreasing	10	60.0%	Type A, Subtype H3	15.2 * (graphs)	486.1 (graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Decreasing			None	0.2 (graphs)	22.4 (graphs)		Click here
Wales	Low	None		Stable	2	0%		5.6 (graphs)	(graphs)		Click here
Europe					1708	42.3%					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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity continues to decrease in many countries of the WHO European Region

Current situation: week 11/2012

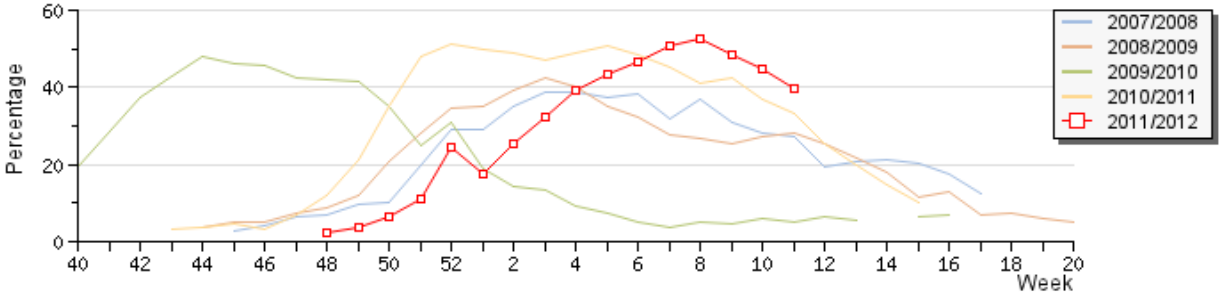
- This issue is based on data for week 11/2012 reported by 47 Member States in the WHO European Region.
- Influenza activity is generally decreasing, but consultation rates are still above the thresholds in 50% of the countries reporting.
- The number of hospitalizations due to severe acute respiratory infection (SARI) is also decreasing, but there has been an increase in the percentage of influenza-positive cases.
- Influenza A(H3N2) viruses continue to dominate, with some influenza B and a few A(H1N1)pdm09 detections being reported.

Outpatient surveillance for ILI and ARI

40 countries reported on trends in clinical activity: 7 stable, 13 increasing and 20 decreasing trends. Of the 40 countries reporting on the geographical spread of influenza, 4 reported no activity; 7, sporadic activity; 3, local activity; 9, regional activity; and 17, widespread activity. Low intensity was reported by 15 countries, medium by 23 and high by 1 country (Sweden). Of the 18 countries reporting a threshold for the 2011/2012 season, the consultation rates are still above the threshold in 9 countries (Belgium, Estonia, Kyrgyzstan, Romania, the Russian Federation, Serbia, Sweden, Switzerland and Ukraine).

During week 11/2012 sentinel outpatient clinics collected 1482 respiratory specimens, of which 588 (40%) tested positive for influenza viruses, a slight decrease in comparison with the previous week. Of these positive specimens, 483 (82%) were influenza type A and 105 (18%) were influenza B (Table 1, Fig. 1). In the 24 countries testing 20 or more sentinel specimens, influenza positivity ranged from 8% to 83%, with a median of 41% (mean: 42%).

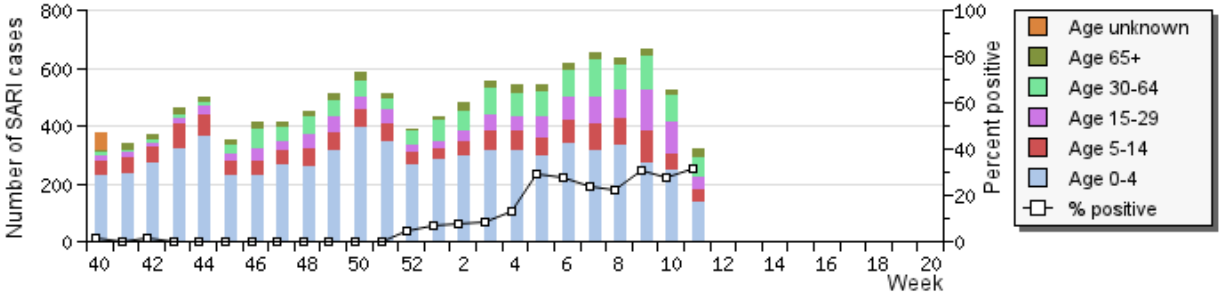
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

11 countries reported data for hospital-based sentinel surveillance of SARI: Albania, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. Of these 11countries only the Republic of Moldova has reported no detection of influenza among SARI cases so far this season. The number of SARI hospitalizations was lower compared to the previous week, but there was a slight increase in the percentage of influenza-positive cases in some countries. A total of 142 respiratory specimens was collected from SARI patients, of which 45 (32%) were positive for influenza: 42 were type A and 3 were type B. All influenza A viruses were subtyped: 40 as A(H3) and 2 as A(H1)pdm09.(Fig. 2).

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological overview

During week 11/2012, 42 countries reported a dominant virus based on both sentinel and non-sentinel detections. 29 countries reported

influenza A and/or A(H3N2) as the dominant virus and 2 reported co-dominance of influenza B with A(H3N2). 11 countries reported that no virus was dominant.

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel** ILI/ARI and SARI surveillance for both the current week and the period since week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	1482	142	30432	3350
Influenza A + B	588 (39.7%)	45 (31.7%)	9096 (29.9%)	423 (12.6%)
Influenza A	483 (82.1%)	42 (93.3%)	8310 (91.4%)	409 (96.7%)
Influenza B	105 (17.9%)	3 (6.7%)	786 (8.6%)	14 (3.3%)
Influenza A subtyped	371	42	7525	392
A (H1N1)pdm09	8 (2.2%)	1 (2.4%)	125 (1.7%)	60 (15.3%)
A (H3N2)	363 (97.8%)	40 (95.2%)	7400 (98.3%)	331 (84.4%)
A (H1N1)	0 (0.0%)	1 (2.4%)	0 (0.0%)	1 (0.3%)

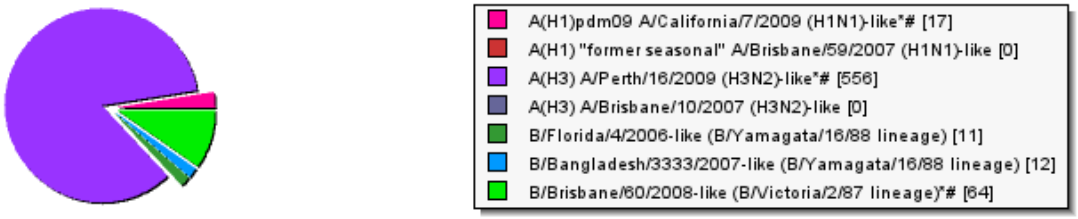
During week 11/2012, 2624 specimens from **non-sentinel** sources were reported positive for influenza: 2439 (93%) type A and 185 (7%) type B. Of the influenza A viruses, 870 were subtyped: 847 (97%) as A(H3N2) and 23 (3%) as A(H1N1)pdm09.

Since week 40/2011, 28 788 influenza viruses from sentinel and non-sentinel sources have been typed: 26 919 (94%) were influenza A and 1869 (6%) were influenza B. Of the influenza A viruses, 13 531 were subtyped: 12 903 (95%) as A(H3N2) and 628 (5%) as A(H1N1)pdm09.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 16 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Greece, Hungary, Latvia, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, Sweden, Switzerland) have characterized 668 influenza viruses antigenically (Fig. 3). 17 countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Norway, Portugal, Romania, the Russian Federation, Spain, Sweden, Switzerland) have characterized 734 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 11/2012
[Total N = 660]



(1) Sentinel and non-sentinel specimens combined

Compiled at 10:27 on Mar 22 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

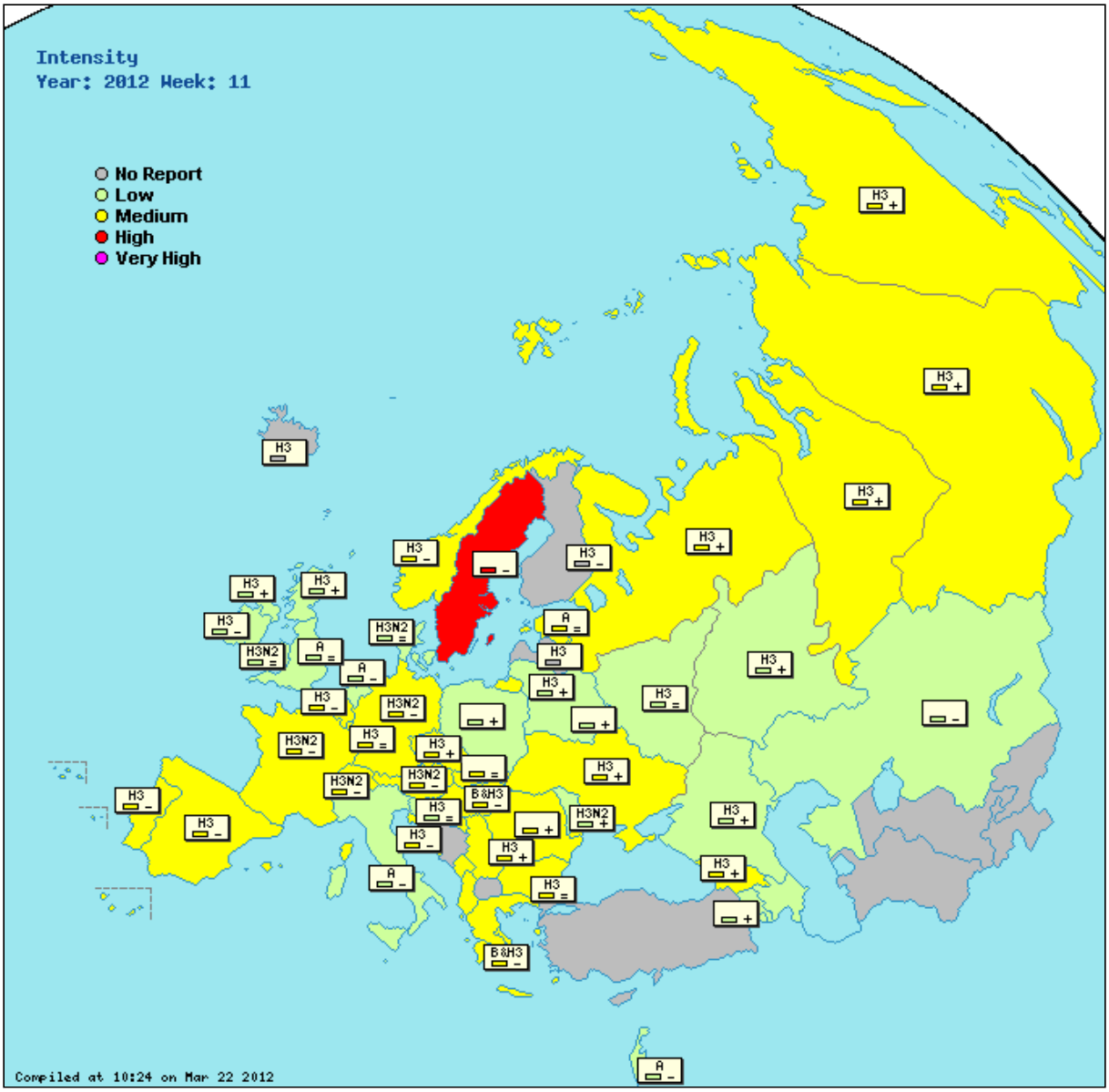
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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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Very high = particularly severe levels of influenza activity

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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)

Republic of Moldova
This week were tested 13 samples, from which 6 were positive for A/H3N2, and 1 was positive for DNA Adenovirus.
Serbia
Sentinel SARI surveillance system in SERBIA: In week 11/2012, 7 SARI from all causes were reported. Out of 6 SARI specimens collected in this week, 5 (83,3%) tested positive as A H3.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania	Medium	None	Moderate	Decreasing					410.5 (graphs)	sari	Click here
Armenia	Low	None	Low	Increasing	0	0%	None	(graphs)	101.3 (graphs)	sari	Click here
Austria	Medium	Widespread	Moderate	Decreasing	47	68.1%	Type A, Subtype H3N2	30.0 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Increasing				218.5 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Increasing	38	7.9%	None	9.9 (graphs)	952.9 (graphs)	sari	Click here
Belgium	Medium	Widespread		Decreasing	53	58.5%	Type A, Subtype H3	265.7 (graphs)	1763.6 (graphs)	sari	Click here

Bosnia and Herzegovina					1	100.0%	None		(graphs)				Click here
Bulgaria	Medium	Regional		Stable	0	0%	Type A, Subtype H3		(graphs)	1025.9	(graphs)		Click here
Croatia	Medium	Widespread	Low	Decreasing			Type A, Subtype H3	121.2	(graphs)		(graphs)		Click here
Czech Republic	Medium	Regional		Increasing	35	60.0%	Type A, Subtype H3	78.9	(graphs)	1083.5	(graphs)		Click here
Denmark	Low	Sporadic		Stable	3	0%	Type A, Subtype H3N2	55.5	(graphs)		(graphs)		Click here
England	Low	Sporadic		Stable	65	30.8%	Type A	14.7	(graphs)	404.2	(graphs)		Click here
Estonia	Medium	Widespread		Stable	34	67.7%	Type A	15.0	(graphs)	390.4	(graphs)		Click here
Finland		Regional	Low	Decreasing	67	7.5%	Type A, Subtype H3	0.0	(graphs)		(graphs)		Click here
France	Medium	Widespread	Low	Decreasing	138	47.1%	Type A, Subtype H3N2		(graphs)	1680.7	(graphs)		Click here
Georgia	Medium	Widespread	Low	Increasing	20	45.0%	Type A, Subtype H3	490.8	(graphs)		(graphs)	sari	Click here
Germany	Medium	Regional		Decreasing	118	40.7%	Type A, Subtype H3N2		(graphs)	1339.5	(graphs)		Click here
Greece	Medium	Widespread		Decreasing	14	78.6%	Type B and Type A, Subtype H3N2	329.6	(graphs)		(graphs)		Click here
Hungary	Medium	Widespread	Low	Decreasing	46	41.3%	Type B and Type A, Subtype H3	252.8	(graphs)		(graphs)		Click here
Iceland					0	0%	Type A, Subtype H3		(graphs)				Click here
Ireland	Low	Local	Low	Decreasing	20	25.0%	Type A, Subtype H3	16.2	(graphs)		(graphs)		Click here
Israel	Low	Widespread	Moderate	Decreasing	52	36.5%	Type A	32.9	(graphs)				Click here
Italy	Low	Regional	Low	Decreasing	35	31.4%	Type A	205.9	(graphs)		(graphs)		Click here
Kazakhstan	Low	Sporadic	Low	Decreasing	16	6.3%	None	146.6	(graphs)	178.9	(graphs)	sari	Click here
Kyrgyzstan					4	0%	None				(graphs)	sari	Click here
Latvia					11	63.6%	Type A, Subtype H3		(graphs)				Click here
Lithuania	Low	Local	Low	Increasing	5	60.0%	Type A, Subtype H3	10.5	(graphs)	546.7	(graphs)		Click here
Luxembourg	Medium	Widespread	Low		53	50.9%	Type A, Subtype H3	4.6 *	(graphs)	46.7 *	(graphs)		Click here
The former Yugoslav Republic of Macedonia							None		(graphs)				Click here
Malta	Low	Local	Low	Decreasing				2.4 *	(graphs)	0 *	(graphs)		Click here
Montenegro	Medium	Widespread	Moderate	Increasing				117.7	(graphs)		(graphs)		Click here
Netherlands	Low	Widespread		Decreasing	18	44.4%	Type A	43.5	(graphs)		(graphs)		Click here
Northern Ireland	Low	Sporadic		Increasing	4	0%	Type A, Subtype H3	36.3	(graphs)	468.9	(graphs)		Click here
Norway	Medium	Widespread		Decreasing	9	66.7%	Type A, Subtype H3	118.7	(graphs)		(graphs)		Click here
Poland	Low	None	Low	Increasing	27	11.1%	None	128.7	(graphs)		(graphs)		Click here
Portugal	Medium	Widespread		Decreasing	16	56.3%	Type A, Subtype H3	70.1	(graphs)		(graphs)		Click here
Republic of Moldova	Low	Sporadic	Low	Increasing	11	54.6%	Type A, Subtype H3N2	0.1	(graphs)	54.2	(graphs)	sari	Click here
Romania	Medium	Regional	Low	Increasing	30	56.7%	None	4.4	(graphs)	945.5	(graphs)	sari	Click here
Russian Federation	Medium	Sporadic		Increasing	45	24.4%	Type A, Subtype H3	2.2	(graphs)	723.7	(graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Increasing	34	23.5%	Type A, Subtype H3	18.4	(graphs)	507.2	(graphs)		Click here
Serbia	Medium	Regional	Low	Increasing	22	63.6%	Type A, Subtype H3	137.9	(graphs)		(graphs)	sari	Click here
Slovakia	Medium	Sporadic	Low	Stable	6	16.7%	None	207.6	(graphs)	1625.6	(graphs)	sari	Click here
Slovenia	Low	Widespread		Stable	29	82.8%	Type A, Subtype H3	44.5	(graphs)	1268.9	(graphs)		Click here
Spain	Medium	Regional		Decreasing	158	30.4%	Type A, Subtype H3	57.2	(graphs)		(graphs)		Click here
Sweden	High	Widespread	Moderate	Decreasing	93	30.1%		24.3	(graphs)		(graphs)		Click here
Switzerland	Medium	Widespread		Decreasing	38	57.9%	Type A, Subtype H3N2	137.5	(graphs)		(graphs)		Click here
Turkey					57	28.1%	None		(graphs)				Click here
Ukraine	Medium	Regional	Moderate	Increasing	7	71.4%	Type A, Subtype H3	0 *	(graphs)	684.5	(graphs)	sari	Click here
Uzbekistan							None				(graphs)		Click here
Wales	Low	None		Stable	3	33.3%		7.8	(graphs)		(graphs)		Click here
Europe					1482	39.7%							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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Decreasing clinical activity in most countries of the WHO European Region

Current situation: week 12/2012

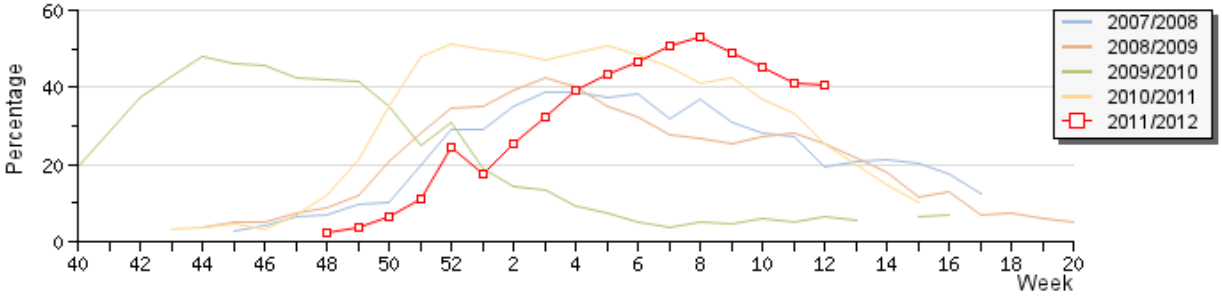
- This issue is based on data for week 12/2012 reported by 45 Member States in the WHO European Region.
- Consultation rates continue to decrease with only 7 countries reporting consultation rates above their thresholds, and percentages of influenza-positive cases remain similar to the previous week.
- The number of hospitalizations due to severe acute respiratory infection (SARI) and the SARI influenza-positivity rate is generally stable.
- Influenza A(H3N2) viruses continue to dominate, despite a slight increase in influenza B detections and a few A(H1N1)pdm09 detections

Outpatient surveillance for ILI and ARI

42 countries reported on trends in clinical activity: 7 stable, 5 increasing and 30 decreasing trends. Of the 42 countries reporting on the geographical spread of influenza: 5 reported no activity; 8, sporadic activity; 10, local activity; 7, regional activity; and 12, widespread activity. No country reported high or very high intensity while 23 reported low intensity and 19, medium intensity. Of the 19 countries that reported a threshold for the 2011/2012 season, the consultation rates are still above the threshold in 7 countries (Estonia, Latvia, the Russian Federation, Serbia, Sweden, Switzerland and Ukraine).

During week 12/2012 sentinel outpatient clinics collected 1252 respiratory specimens, of which 511 (41%) tested positive for influenza viruses, a percentage similar to the previous week. Of these positive specimens, 368 (72%) were influenza type A and 143 (28%) were influenza B Table 1, Fig. 1). In the 20 countries testing 20 or more sentinel specimens, influenza positivity ranged from 11% to 85%, with a median of 47% (mean: 44%).

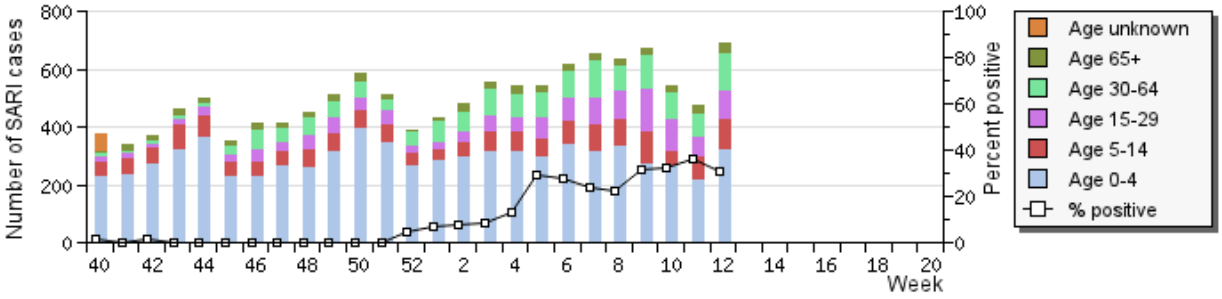
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

8 countries reported data for hospital-based sentinel surveillance of SARI: Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Russian Federation, Serbia and Ukraine. A total of 122 respiratory specimens was collected from SARI patients, of which 38 (31%) were positive for influenza: 34 were type A and 4 were type B. All influenza A viruses were subtyped: 30 as A(H3) and 4 as A(H1)pdm09. (Fig. 2).

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological overview

During week 12/2012, 39 countries reported a dominant virus based on both sentinel and non-sentinel detections. 25 countries reported influenza A and/or A(H3N2) as the dominant virus and 1 reported co-dominance of influenza B with A(H3N2). 13 countries reported that no virus was dominant.

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel** ILI/ARI and SARI surveillance for both the current week and the period since week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	1252	122	31917	3499
Influenza A + B	511 (40.8%)	38 (31.2%)	9763 (30.6%)	485 (13.9%)
Influenza A	368 (72.0%)	34 (89.5%)	8787 (90.0%)	466 (96.1%)
Influenza B	143 (28.0%)	4 (10.5%)	976 (10.0%)	19 (3.9%)
Influenza A subtyped	293	34	7951	441
A (H1N1)pdm09	11 (3.8%)	4 (11.8%)	138 (1.7%)	60 (13.6%)
A (H3N2)	282 (96.3%)	30 (88.2%)	7813 (98.3%)	380 (86.2%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.2%)

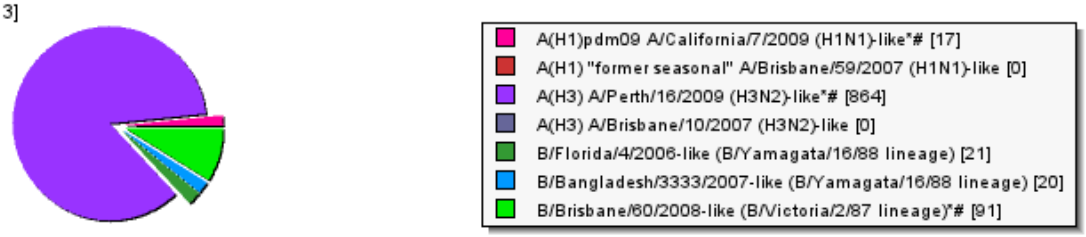
During week 12/2012, 2272 specimens from **non-sentinel** sources were reported positive for influenza: 2008 (88%) type A and 264 (12%) type B. Of the influenza A viruses, 771 were subtyped: 735 (95%) as A(H3N2) and 36 (5%) as A(H1N1)pdm09.

Since week 40/2011, 31 964 influenza viruses from sentinel and non-sentinel sources have been typed: 29 620 (93%) were influenza A and 2344 (7%) were influenza B. Of the influenza A viruses, 14 857 were subtyped: 14 160 (95%) as A(H3N2) and 697 (5%) as A(H1N1)pdm09.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 17 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Greece, Hungary, Italy, Latvia, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, Sweden, Switzerland) have characterized 1021 influenza viruses antigenically (Fig. 3). 17 countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Norway, Portugal, Romania, the Russian Federation, Spain, Sweden, Switzerland) have characterized 922 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 12/2012
[Total N = 1013]



(1) Sentinel and non-sentinel specimens combined

Compiled at 11:57 on Mar 29 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

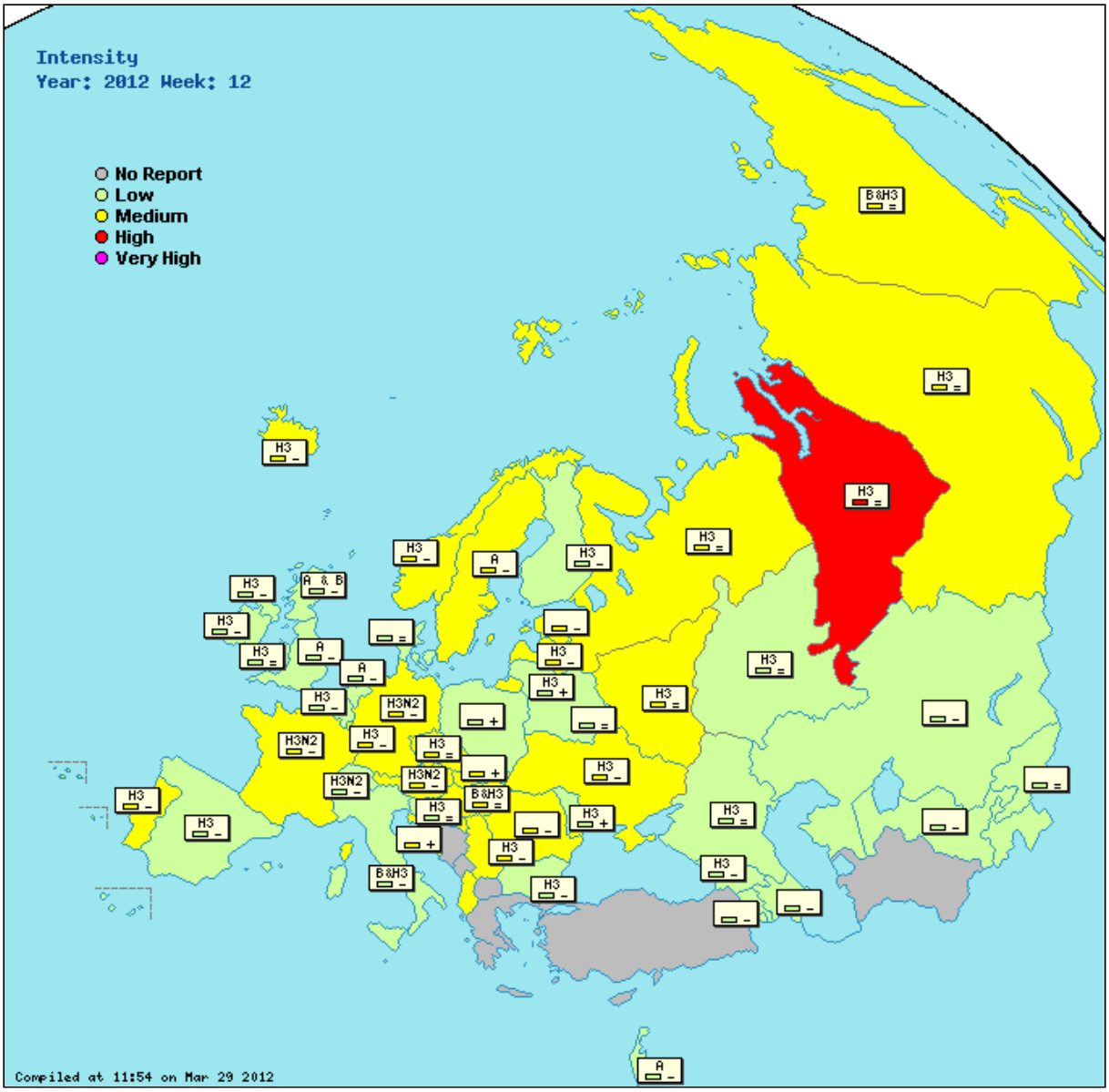
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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)

Scotland
Influenza A includes H3 subtype and Influenza A subtype unknown

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania	Medium	None	Moderate	Decreasing					(graphs)	sari	Click here
Armenia	Low	Sporadic	Low	Decreasing	1	0%	None		91.1 (graphs)	sari	Click here
Austria	Medium	Widespread	Low	Decreasing	21	57.1%	Type A, Subtype H3N2	24.5 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Decreasing	0	0%	None	(graphs)			Click here
Belarus	Low	Sporadic	Low	Stable	40	12.5%	None	9.0 (graphs)	951.4 (graphs)	sari	Click here
Belgium	Low	Widespread		Decreasing	33	60.6%	Type A, Subtype H3	130.8 (graphs)	1651.0 (graphs)	sari	Click here
Bosnia and Herzegovina					3	100.0%	None	(graphs)			Click here
Bulgaria	Low	Local		Decreasing	21	47.6%	Type A, Subtype H3	(graphs)	816.9 (graphs)		Click here

Croatia	Medium	Widespread	Low	Increasing			None	215.7	(graphs)		(graphs)		Click here
Czech Republic	Medium	Regional		Stable	30	63.3%	Type A, Subtype H3	81.9	(graphs)	1080.8	(graphs)		Click here
Denmark	Low	Sporadic		Stable	3	100.0%	None	51.5	(graphs)		(graphs)		Click here
England	Low	Sporadic		Decreasing	71	39.4%	Type A	9.4	(graphs)	426.6	(graphs)		Click here
Estonia	Medium	Widespread		Decreasing	17	47.1%		14.3	(graphs)	361.1	(graphs)		Click here
Finland	Low	Local	Low	Decreasing	38	10.5%	Type A, Subtype H3	0.0	(graphs)		(graphs)		Click here
France	Medium	Widespread	Low	Decreasing	142	38.0%	Type A, Subtype H3N2		(graphs)	1551.8	(graphs)		Click here
Georgia	Low	Widespread	Low	Decreasing	16	37.5%	Type A, Subtype H3	472.6	(graphs)		(graphs)	sari	Click here
Germany	Medium	Local		Decreasing	91	49.5%	Type A, Subtype H3N2		(graphs)	1262.9	(graphs)		Click here
Greece					23	69.6%			(graphs)				Click here
Hungary	Medium	Widespread	Low	Stable	98	58.2%	Type B and Type A, Subtype H3	237.0	(graphs)		(graphs)		Click here
Iceland	Medium	Regional	Low	Decreasing	0	0%	Type A, Subtype H3	37.1	(graphs)		(graphs)		Click here
Ireland	Low	Local	Low	Decreasing	15	33.3%	Type A, Subtype H3	12.1	(graphs)		(graphs)		Click here
Israel	Low	Regional	Moderate	Decreasing	51	47.1%	Type A	25.4	(graphs)				Click here
Italy	Low	Local	Low	Decreasing	15	26.7%		141.9	(graphs)		(graphs)		Click here
Kazakhstan	Low	Sporadic	Low	Decreasing	12	0%	None	97.2	(graphs)	149.7	(graphs)	sari	Click here
Kyrgyzstan	Low	None	Low	Stable	3	0%	None		(graphs)	44.8	(graphs)	sari	Click here
Latvia	Medium	Widespread		Decreasing	11	54.6%	Type A, Subtype H3	193.2	(graphs)	1038.5	(graphs)		Click here
Lithuania	Low	Local	Low	Increasing	8	50.0%		12.4	(graphs)	567.7	(graphs)		Click here
Luxembourg	Medium	Regional	Low		34	47.1%	Type A, Subtype H3	2.7 *	(graphs)	26.8 *	(graphs)		Click here
Netherlands	Low	Local		Decreasing	13	69.2%	Type A	33.2	(graphs)		(graphs)		Click here
Northern Ireland	Low	Sporadic		Decreasing	0	0%		24.7	(graphs)	399.9	(graphs)		Click here
Norway	Medium	Widespread		Decreasing	2	0%	Type A, Subtype H3	106.9	(graphs)		(graphs)		Click here
Poland	Low	None	Low	Increasing	24	12.5%	None	131.2	(graphs)		(graphs)		Click here
Portugal	Medium	Widespread		Decreasing	10	10.0%	Type A, Subtype H3	74.2	(graphs)		(graphs)		Click here
Republic of Moldova	Low	Sporadic	Low	Increasing	13	38.5%	Type A, Subtype H3	0.3	(graphs)	62.9	(graphs)	sari	Click here
Romania	Medium	Regional	Low	Decreasing	16	43.8%	None	4.0	(graphs)	834.6	(graphs)	sari	Click here
Russian Federation	Medium	Local		Stable	51	25.5%	Type A, Subtype H3	2.5	(graphs)	745.0	(graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Decreasing	15	20.0%	Type A and B	12.3	(graphs)	513.4	(graphs)		Click here
Serbia	Medium	Regional	Low	Decreasing	22	72.7%	Type A, Subtype H3	124.6	(graphs)		(graphs)	sari	Click here
Slovakia	Medium	Sporadic	Low	Increasing	9	66.7%	None	243.2	(graphs)	1748.6	(graphs)	sari	Click here
Slovenia	Low	Widespread		Stable	20	85.0%	Type A, Subtype H3	26.0	(graphs)	1272.4	(graphs)		Click here
Spain	Low	Local		Decreasing	104	32.7%	Type A, Subtype H3	34.1	(graphs)		(graphs)		Click here
Sweden	Medium	Widespread	Moderate	Decreasing	46	13.0%	Type A	11.9	(graphs)		(graphs)		Click here
Switzerland	Low	Local		Decreasing	18	44.4%	Type A, Subtype H3N2	100.2	(graphs)		(graphs)		Click here
Tajikistan	Low	None	Low	Decreasing				0.0	(graphs)		(graphs)		Click here
Turkey					77	35.1%	None		(graphs)				Click here
Ukraine	Medium	Regional	Moderate	Decreasing	11	36.4%	Type A, Subtype H3	4.1 *	(graphs)	601.7	(graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Decreasing			None	0.1	(graphs)	18.5	(graphs)		Click here
Wales	Low	None		Stable	4	75.0%	Type A, Subtype H3	5.2	(graphs)		(graphs)		Click here
Europe					1252	40.8%							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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity is decreasing in most countries of the WHO European Region

Current situation: week 13/2012

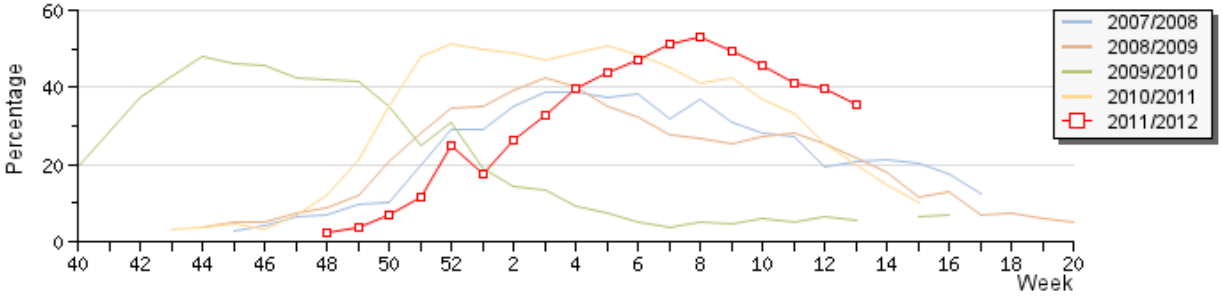
- This issue is based on data for week 13/2012 reported by 46 Member States in the WHO European Region.
- Consultation rates continue to decrease with only 5 countries reporting consultation rates above their thresholds, and percentages of influenza-positive cases decreased compared to the previous week.
- The number of hospitalizations due to severe acute respiratory infection (SARI) and the SARI influenza-positivity rate are slowly decreasing.
- Influenza A(H3N2) viruses continue to dominate, despite a slight increase in influenza B detections and a few A(H1N1)pdm09 detections.

Outpatient surveillance for ILI and ARI

39 countries reported on trends in clinical activity: 2 increasing, 8 stable, and 29 decreasing. Of the 39 countries reporting on the geographical spread of influenza: 13 reported no or sporadic activity; 10, local activity; 7, regional activity; and 8, widespread activity. No country reported high or very high intensity while low and medium intensity were reported by 25 and 14 countries respectively. Of the 19 countries that reported a threshold for the 2011/2012 season, the consultation rates were above the threshold in 5 countries (Estonia, Latvia, the Russian Federation, Sweden and Switzerland). While influenza activity in Latvia passed its influenza peak two weeks ago, the clinical rates were near the threshold in Estonia, the Russian Federation, Sweden and Switzerland.

During week 13/2012 sentinel outpatient clinics collected 900 respiratory specimens, of which 319 (35%) tested positive for influenza viruses, a percentage that is lower than the previous week (41%). Of these positive specimens, 229 (72%) were influenza type A and 90 (28%) were influenza B Table 1, Fig. 1). In the 17 countries testing 20 or more sentinel specimens, influenza positivity ranged from 7% to 65%, with a median of 38% (mean: 36%).

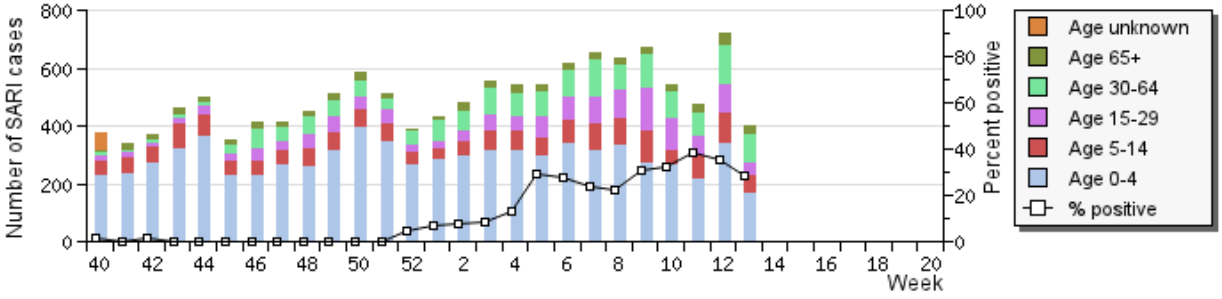
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

10 countries reported data for hospital-based sentinel surveillance of SARI: Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. 125 respiratory specimens were collected from SARI patients, of which 36 (29%) were positive for influenza: 34 were type A and 2 were type B. 33 influenza A viruses were subtyped: 28 as A(H3) and 5 as A(H1)pdm09. (Fig. 2).

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological overview

During week 13/2012, 42 countries reported a dominant virus based on both sentinel and non-sentinel detections. 23 countries reported influenza A and/or A(H3N2) as the dominant virus and 4 reported co-dominance of influenza B with influenza A(H3N2). 15 countries

reported that no virus was dominant.

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel** ILI/ARI and SARI surveillance for both the current week and the period since week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	900	125	32023	3679
Influenza A + B	319 (35.4%)	36 (28.8%)	10004 (31.2%)	549 (14.9%)
Influenza A	229 (71.8%)	34 (94.4%)	8935 (89.3%)	525 (95.6%)
Influenza B	90 (28.2%)	2 (5.6%)	1069 (10.7%)	24 (4.4%)
Influenza A subtyped	164	33	8069	494
A (H1N1)pdm09	3 (1.8%)	5 (15.2%)	143 (1.8%)	61 (12.4%)
A (H3N2)	161 (98.2%)	28 (84.9%)	7926 (98.2%)	432 (87.5%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.2%)

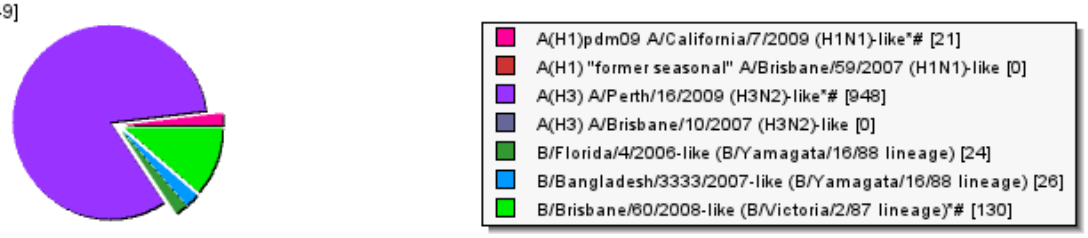
During week 13/2012, 2201 specimens from **non-sentinel** sources were reported positive for influenza: 1859 (84%) type A and 342 (16%) type B. Of the influenza A viruses, 885 were subtyped: 846 (96%) as A(H3N2) and 39 (4%) as A(H1N1)pdm09.

Since week 40/2011, 33 689 influenza viruses from sentinel and non-sentinel sources have been typed: 31 029 (92%) were influenza A and 2660 (8%) were influenza B. Of the influenza A viruses, 4279 were subtyped: 3911 (91%) as A(H3N2) and 368 (9%) as A(H1N1)pdm09.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 17 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Greece, Hungary, Italy, Latvia, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, Sweden, Switzerland) have characterized 1420 influenza viruses antigenically (Fig. 3). 16 countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Norway, Portugal, the Russian Federation, Spain, Sweden, Switzerland) have characterized 1088 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 13/2012
[Total N = 1149]



(1) Sentinel and non-sentinel specimens combined

Compiled at 10:55 on Apr 5 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

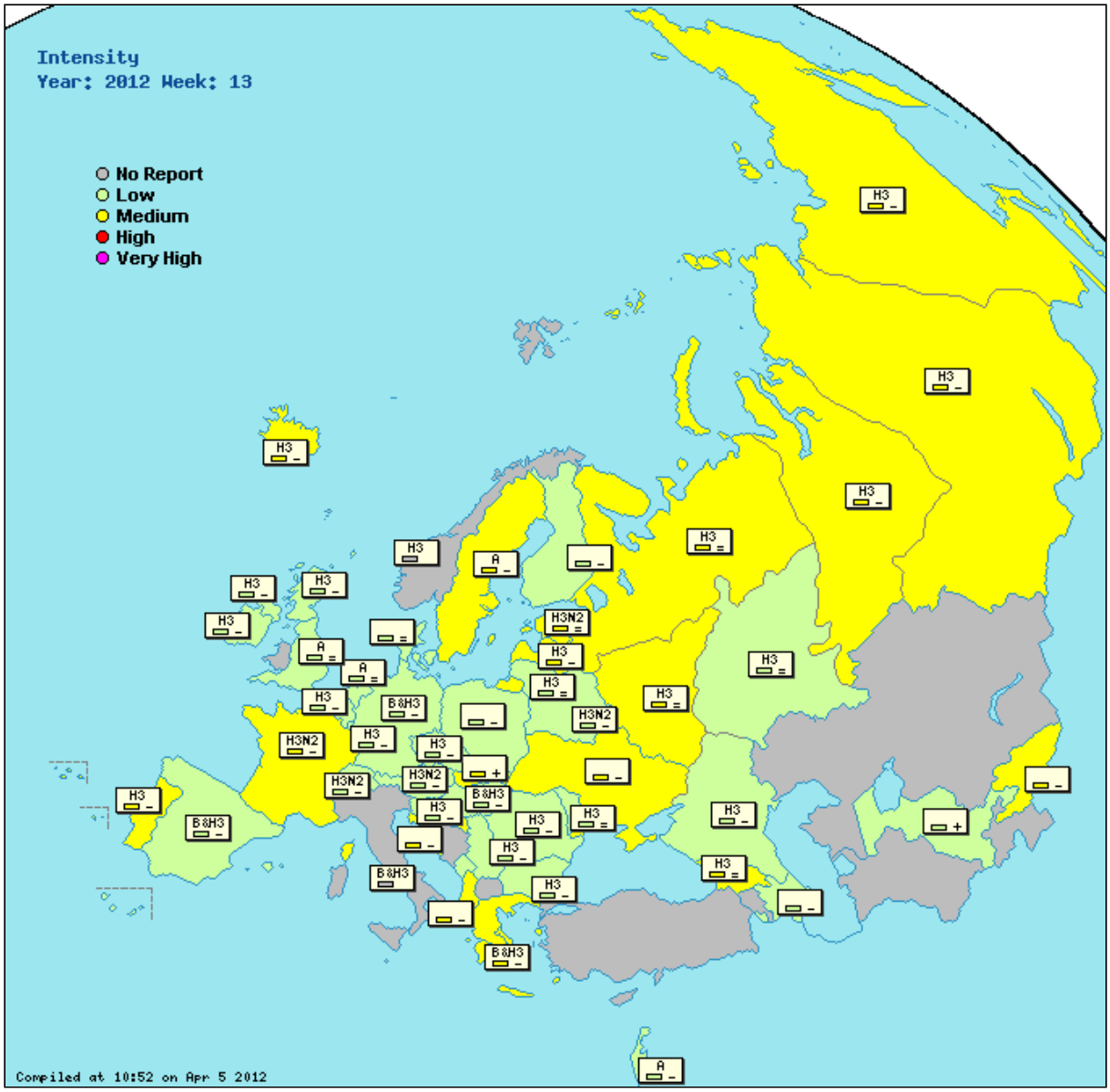
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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	Sentinel SARI	Virology graph and pie chart
Albania	Medium	None	Moderate	Decreasing	0	0%	None		380.1 (graphs)	sari	Click here
Armenia					0	0%	None		(graphs)	sari	Click here
Austria	Low	Regional	Low	Decreasing	20	40.0%	Type A, Subtype H3N2	17.8 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Decreasing	2	0%	None	215.4 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Decreasing	37	16.2%	Type A, Subtype H3N2	6.0 (graphs)	914.2 (graphs)	sari	Click here
Belgium	Low	Sporadic		Decreasing	4	75.0%	Type A, Subtype H3	83.5 (graphs)	1627.9 (graphs)	sari	Click here
Bosnia and Herzegovina					8	62.5%	None	(graphs)			Click here
Bulgaria	Low	Local		Decreasing	14	35.7%	Type A, Subtype H3	(graphs)	721.7 (graphs)		Click here
Croatia	Medium	Widespread	Low	Decreasing			None	111.3 (graphs)	(graphs)		Click here

Czech Republic	Low	Local		Decreasing				67.7	(graphs)	1042.0	(graphs)		Click here
Denmark	Low	Sporadic		Stable	0	0%	None	32.4	(graphs)		(graphs)		Click here
England	Low	Sporadic		Stable	28	21.4%	Type A	8.9	(graphs)	422.0	(graphs)		Click here
Estonia	Medium	Widespread		Stable	28	57.1%		13.7	(graphs)	374.2	(graphs)		Click here
Finland	Low	Local	Low	Decreasing	27	7.4%	None	0.0	(graphs)		(graphs)		Click here
France	Medium	Regional	Low	Decreasing	82	48.8%	Type A, Subtype H3N2		(graphs)	1379.3	(graphs)		Click here
Georgia	Medium	Widespread	Low	Stable	10	60.0%	Type A, Subtype H3	481.1	(graphs)		(graphs)	sari	Click here
Germany	Low	Local		Decreasing	81	37.0%	Type B and Type A, Subtype H3N2		(graphs)	1084.8	(graphs)		Click here
Greece	Medium	Widespread		Decreasing	4	75.0%	Type B and Type A, Subtype H3N2	173.7	(graphs)		(graphs)		Click here
Hungary	Low	Regional	Low	Decreasing	47	53.2%	Type B and Type A, Subtype H3	137.0	(graphs)		(graphs)		Click here
Iceland	Medium	Regional	Low	Decreasing	0	0%		22.3	(graphs)		(graphs)		Click here
Ireland	Low	Local	Low	Decreasing	11	0%	Type A, Subtype H3	7.6	(graphs)		(graphs)		Click here
Israel	Low	Regional	Moderate	Decreasing	36	47.2%	Type A	19.3	(graphs)				Click here
Italy					17	23.5%			(graphs)				Click here
Kazakhstan					9	0%	None				(graphs)	sari	Click here
Kyrgyzstan	Medium	Sporadic	Low	Decreasing	5	0%	None	3.5	(graphs)	44.3	(graphs)	sari	Click here
Latvia	Medium	Widespread		Decreasing	17	52.9%	Type A, Subtype H3	161.6	(graphs)	1094.1	(graphs)		Click here
Lithuania	Low	Local	Low	Stable				9.9	(graphs)	534.1	(graphs)		Click here
Luxembourg	Low	Sporadic	Low		21	38.1%	Type A, Subtype H3	1.9 *	(graphs)	24.2 *	(graphs)		Click here
The former Yugoslav Republic of Macedonia							None		(graphs)				Click here
Montenegro	Low	Sporadic	Low	Decreasing				63.3	(graphs)		(graphs)		Click here
Netherlands	Low	Local		Stable	9	0%	Type A	42.1	(graphs)		(graphs)		Click here
Northern Ireland	Low	Sporadic		Decreasing	2	0%	Type A, Subtype H3	21.2	(graphs)	418.0	(graphs)		Click here
Norway					4	50.0%	Type A, Subtype H3		(graphs)				Click here
Poland	Low	None	Low	Decreasing	18	0%	None	111.3	(graphs)		(graphs)		Click here
Portugal	Medium	Widespread		Decreasing	0	0%	Type A, Subtype H3	25.1	(graphs)		(graphs)		Click here
Republic of Moldova	Low	Sporadic	Low	Stable	8	75.0%	Type A, Subtype H3		(graphs)	69.5	(graphs)	sari	Click here
Romania	Low	Regional	Low	Decreasing	21	42.9%	Type A, Subtype H3	3.0	(graphs)	718.2	(graphs)	sari	Click here
Russian Federation	Medium	Local	Low	Stable	50	14.0%	Type A, Subtype H3	2.6	(graphs)	707.8	(graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Decreasing	27	11.1%	Type A, Subtype H3	11.6	(graphs)	496.8	(graphs)		Click here
Serbia	Low	Local	Low	Decreasing	10	90.0%	Type A, Subtype H3	101.2	(graphs)		(graphs)	sari	Click here
Slovakia	Medium	Sporadic	Low	Increasing	12	66.7%	None	267.3	(graphs)	1855.9	(graphs)	sari	Click here
Slovenia	Low	Widespread		Decreasing	11	36.4%	Type A, Subtype H3	22.6	(graphs)	1123.2	(graphs)		Click here
Spain	Low	Sporadic		Decreasing	66	30.3%	Type B and Type A, Subtype H3	22.5	(graphs)		(graphs)		Click here
Sweden	Medium	Widespread	Moderate	Decreasing	36	16.7%	Type A	8.8	(graphs)		(graphs)		Click here
Switzerland	Low	Local		Decreasing	31	64.5%	Type A, Subtype H3N2	77.3	(graphs)		(graphs)		Click here
Turkey					51	35.3%	None		(graphs)				Click here
Ukraine	Medium	Regional	Moderate	Decreasing	3	0%	None	4.0 *	(graphs)	521.6	(graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Increasing			None	0.1	(graphs)	20.6	(graphs)		Click here
Europe					867	35.2%							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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Low levels of influenza activity in most countries of the WHO European Region

Current situation: week 14/2012

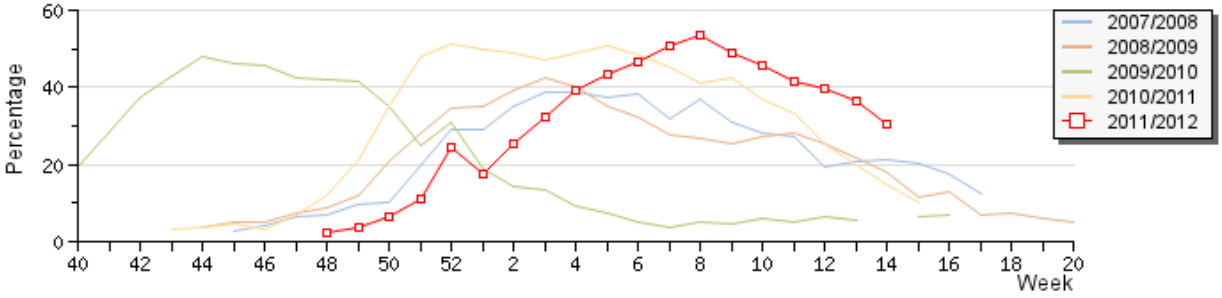
- This issue is based on data for week 14/2012 reported by 45 Member States in the WHO European Region.
- Consultation rates continue to decrease with only 2 countries reporting consultation rates above their thresholds.
- The percentage of influenza-positive cases has decreased from 35% to 30% compared to the previous week.
- The number of hospitalizations due to severe acute respiratory infection (SARI) is stable but the SARI influenza-positivity rate is decreasing.
- The proportion of influenza B in sentinel specimens increased slightly but the overall number of influenza B detections was stable. Influenza A(H3N2) viruses continue to dominate.
- No resistance to neuraminidase inhibitors has been reported so far this season.

Outpatient surveillance for ILI and ARI

37 countries reported on trends in clinical activity: 2 increasing, 7 stable and 28 decreasing. Of the 37 countries reporting on the geographical spread of influenza: 15 reported no or sporadic activity; 13, local activity; 5, regional activity; and 4, widespread activity. No country reported high or very high intensity while low and medium intensity were reported by 30 and 7 countries respectively. Of the 19 countries that reported a threshold for the 2011/2012 season, the consultation rates were above the threshold in Latvia and Sweden only. In Croatia, where no epidemic threshold is available, the clinical rates of influenza activity are elevated.

During week 14/2012 sentinel outpatient clinics collected 657 respiratory specimens, of which 199 (30%) tested positive for influenza viruses, a percentage that is lower than the previous week (35%). Of these positive specimens, 123 (62%) were influenza type A and 76 (38%) were influenza B (Table 1, Fig. 1). In the 10 countries testing 20 or more sentinel specimens, influenza positivity ranged from 5% to 41%, with a median of 26% (mean: 23%).

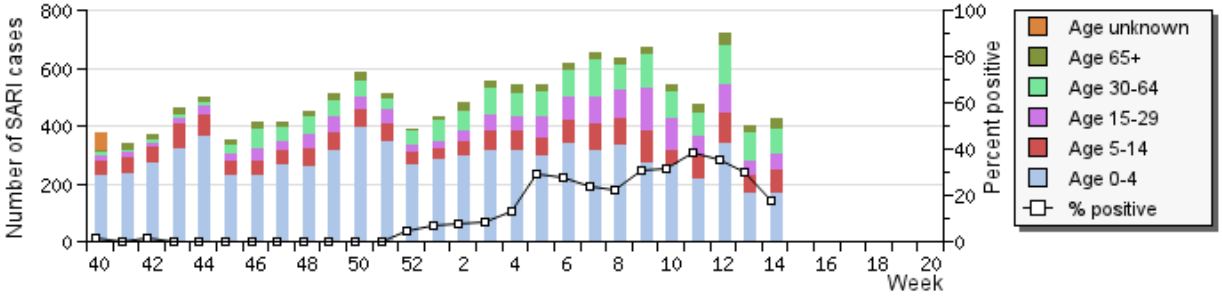
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

10 countries reported data for hospital-based sentinel surveillance of SARI: Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. 126 respiratory specimens were collected from SARI patients, of which 22 (17%) were positive for influenza: 20 were type A and 2 were type B. All influenza A viruses were subtyped: 17 as A(H3) and 3 as A(H1)pdm09 (Fig. 2).

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in ﷺOverview of sentinel SARI systems in EuroFluﷺ.

Virological overview

During week 14/2012, 37 countries reported a dominant virus based on both sentinel and non-sentinel detections. 16 countries reported influenza A or A(H3N2) as the dominant virus, 1 country reported co-dominance of influenza A(H3) and A(H1), 2 reported co-dominance

of influenza B with influenza A(H3N2), and 1 country reported influenza B as the dominant virus. 17 countries reported that no virus was dominant.

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel** ILI/ARI and SARI surveillance for both the current week and the period since week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	657	126	33651	3850
Influenza A + B	199 (30.3%)	22 (17.5%)	10366 (30.8%)	587 (15.3%)
Influenza A	123 (61.8%)	20 (90.9%)	9207 (88.8%)	560 (95.4%)
Influenza B	76 (38.2%)	2 (9.1%)	1159 (11.2%)	27 (4.6%)
Influenza A subtyped	92	20	8312	525
A (H1N1)pdm09	4 (4.4%)	3 (15.0%)	153 (1.8%)	62 (11.8%)
A (H3N2)	88 (95.7%)	17 (85.0%)	8159 (98.2%)	462 (88.0%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.2%)

During week 14/2012, 1332 specimens from **non-sentinel** sources were reported positive for influenza: 1097 (82%) type A and 235 (18%) type B. Of the influenza A viruses, 623 were subtyped: 606 (97%) as A(H3N2) and 17 (3%) as A(H1N1)pdm09.

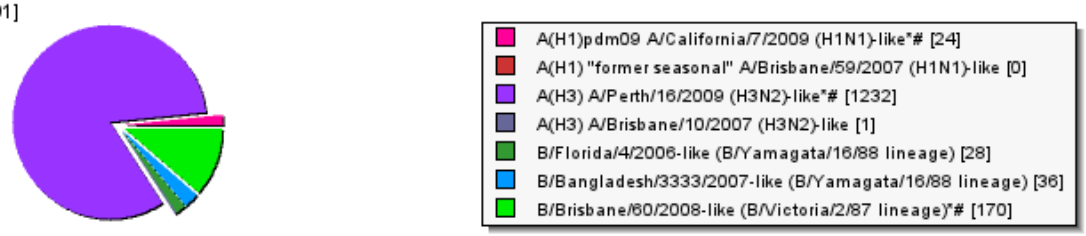
Since week 40/2011, 36 341 influenza viruses from sentinel and non-sentinel sources have been typed: 33 385 (92%) were influenza A and 2956 (8%) were influenza B. Of the influenza A viruses, 4335 were subtyped: 3956 (91%) as A(H3N2) and 379 (9%) as A(H1N1)pdm09.

Since week 40/2011, 9 countries (Germany, Italy, the Netherlands, Norway, Portugal, Romania, the Russian Federation, Sweden and the United Kingdom) have screened 566 influenza A(H3N2), A(H1N1)pdm09 and B viruses for susceptibility to the neuraminidase inhibitors oseltamivir and zanamivir. No resistance was reported. All of the 110 A(H3N2) viruses and 10 influenza A(H1N1)pdm09 viruses that were screened for susceptibility to adamantanes were found to be resistant.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 17 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Greece, Hungary, Italy, Latvia, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, Sweden, Switzerland) have characterized 1522 influenza viruses antigenically (Fig. 3). 16 countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Norway, Portugal, the Russian Federation, Spain, Sweden, Switzerland) have characterized 1093 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 14/2012
[Total N = 1491]



(1) Sentinel and non-sentinel specimens combined

Compiled at 11:04 on Apr 12 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

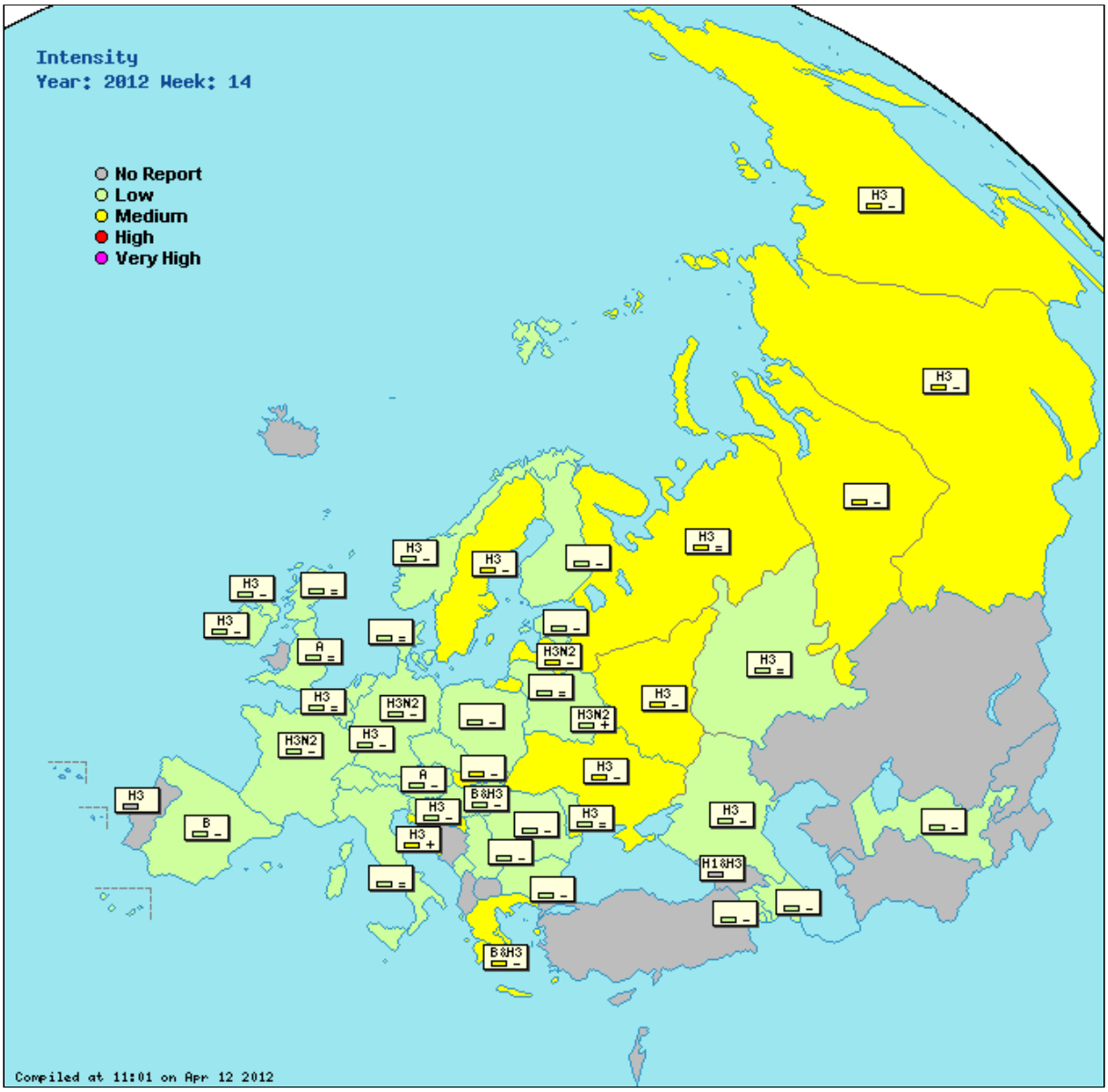
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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
The data for week 13 are incomplete and preliminary, due to the Easter holidays

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Armenia	Low	None	Low	Decreasing	0	0%	None	(graphs)	36.8 (graphs)	sari	Click here

Austria	Low	Local	Low	Decreasing	13	46.2%	Type A	6.5	(graphs)		(graphs)		Click here
Azerbaijan	Low	None	Low	Decreasing	0	0%	None	172.1	(graphs)		(graphs)		Click here
Belarus	Low	Sporadic	Low	Increasing	33	6.1%	Type A, Subtype H3N2	7.7	(graphs)	983.6	(graphs)	sari	Click here
Belgium	Low	Sporadic		Stable	15	46.7%	Type A, Subtype H3	68.2	(graphs)	1438.0	(graphs)	sari	Click here
Bosnia and Herzegovina					12	58.3%	None		(graphs)				Click here
Bulgaria	Low	Sporadic		Decreasing	0	0%	None		(graphs)	619.4	(graphs)		Click here
Croatia	Medium	Widespread	Low	Increasing			Type A, Subtype H3	145.0	(graphs)		(graphs)		Click here
Czech Republic	Low	Local		Decreasing				48.6	(graphs)	914.1	(graphs)		Click here
Denmark	Low	None		Stable	0	0%	None	14.4	(graphs)		(graphs)		Click here
England	Low	Sporadic		Stable	45	11.1%	Type A	5.5	(graphs)	319.2	(graphs)		Click here
Estonia	Low	Widespread		Decreasing	16	43.8%		10.3	(graphs)	245.3	(graphs)		Click here
Finland	Low	Local	Low	Decreasing	10	20.0%	None	0.0	(graphs)		(graphs)		Click here
France	Low	Regional	Low	Decreasing	58	34.5%	Type A, Subtype H3N2		(graphs)	1383.1	(graphs)		Click here
Georgia					17	70.6%	Type A, Subtype H1 and H3	443.9	(graphs)		(graphs)	sari	Click here
Germany	Low	Local		Decreasing	34	26.5%	Type A, Subtype H3N2		(graphs)	912.8	(graphs)		Click here
Greece	Medium	Regional		Decreasing	15	60.0%	Type B and Type A, Subtype H3N2	97.7	(graphs)		(graphs)		Click here
Hungary	Low	Local	Low	Decreasing	39	35.9%	Type B and Type A, Subtype H3	71.1	(graphs)		(graphs)		Click here
Iceland					0	0%	None		(graphs)				Click here
Ireland	Low	Local	Low	Decreasing	6	16.7%	Type A, Subtype H3	6.3	(graphs)		(graphs)		Click here
Italy	Low	Sporadic	Low	Stable	20	25.0%	None	82.5	(graphs)		(graphs)		Click here
Kazakhstan					9	0%	None				(graphs)	sari	Click here
Kyrgyzstan					7	0%	None				(graphs)	sari	Click here
Latvia	Medium	Regional		Decreasing	1	0%	Type A, Subtype H3N2	91.1	(graphs)	927.4	(graphs)		Click here
Lithuania	Low	Local	Low	Stable	5	80.0%		6.6	(graphs)	418.3	(graphs)		Click here
Luxembourg	Low	Sporadic	Low		14	50.0%	Type A, Subtype H3	2.5 *	(graphs)	20.7 *	(graphs)		Click here
The former Yugoslav Republic of Macedonia							None		(graphs)				Click here
Malta	Low	Local	Low	Decreasing				2.7 *	(graphs)	0 *	(graphs)		Click here
Montenegro	Low	Sporadic	Low	Decreasing				37.8	(graphs)		(graphs)		Click here
Netherlands	Low	Local		Stable				31.6	(graphs)		(graphs)		Click here
Northern Ireland	Low	Local		Decreasing	3	33.3%	Type A, Subtype H3	17.0	(graphs)	375.7	(graphs)		Click here
Norway	Low	Regional		Decreasing	1	0%	Type A, Subtype H3	35.2	(graphs)		(graphs)		Click here
Poland	Low	None	Low	Decreasing	19	21.1%	None	87.2	(graphs)		(graphs)		Click here
Portugal					4	0%	Type A, Subtype H3		(graphs)				Click here
Republic of Moldova	Low	Sporadic	Low	Stable	9	44.4%	Type A, Subtype H3	0.1	(graphs)	66.8	(graphs)	sari	Click here
Romania	Low	Local	Low	Decreasing	13	23.1%	None	2.1	(graphs)	584.7	(graphs)	sari	Click here
Russian Federation	Medium	Local		Decreasing	63	23.8%	Type A, Subtype H3	1.7	(graphs)	659.8	(graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	13	0%	None	11.7	(graphs)	521.8	(graphs)		Click here
Serbia	Low	Local	Low	Decreasing	5	60.0%	None	92.2	(graphs)		(graphs)	sari	Click here
Slovakia	Medium	None	Low	Decreasing	15	40.0%	None	214.0	(graphs)	1543.6	(graphs)	sari	Click here
Slovenia	Low	Widespread		Decreasing	10	70.0%	Type A, Subtype H3	14.2	(graphs)	936.1	(graphs)		Click here
Spain	Low	Sporadic		Decreasing	45	26.7%	Type B	14.9	(graphs)		(graphs)		Click here
Sweden	Medium	Widespread	Low	Decreasing	22	4.6%		14.8	(graphs)		(graphs)		Click here
Switzerland	Low	Local		Decreasing				34.1	(graphs)		(graphs)		Click here
Turkey					61	41.0%	None		(graphs)				Click here
Ukraine	Medium	Regional	Moderate	Decreasing	5	20.0%	Type A, Subtype H3	3.1 *	(graphs)	473.9	(graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Decreasing			None		(graphs)	19.0	(graphs)		Click here
Europe					657	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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Low and decreasing influenza activity in most countries of the WHO European Region

Current situation: week 15/2012

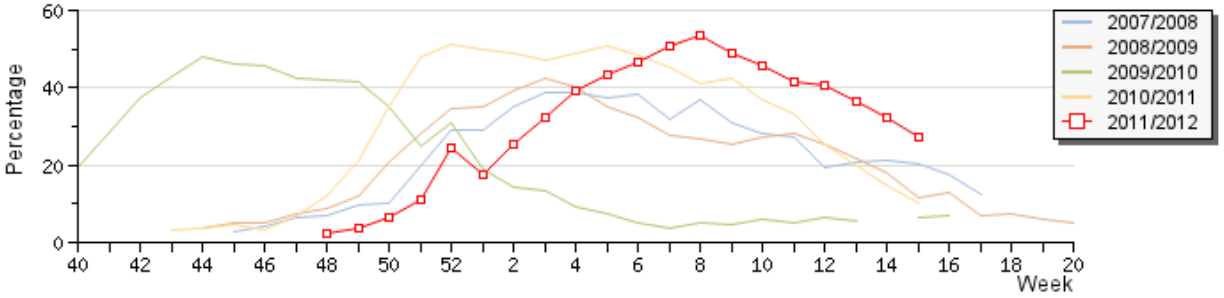
- This issue is based on data for week 15/2012 reported by 46 Member States in the WHO European Region.
- Consultation rates have decreased in most of the countries with only 2 of them reporting increasing trends.
- The number of specimens tested from both sentinel and non-sentinel sources is decreasing with a slight decrease in the percentage of influenza-positive cases.
- The number of hospitalizations due to severe acute respiratory infection (SARI) is more or less stable with a slight decrease in the influenza-positivity rate.
- Influenza A(H3N2) viruses continue to dominate, with few A(H1N1)pdm09 detections and some influenza B detections.

Outpatient surveillance for ILI and ARI

41 countries reported on trends in clinical activity: 12 stable, 2 increasing and 27 decreasing. Of the 41 countries reporting on the geographical spread of influenza: 8 reported no activity; 17, sporadic activity; 12, local activity; 1, regional activity; and 3, widespread activity. All countries reported either medium (5) or low intensity (36).

During week 15/2012 sentinel outpatient clinics collected 482 respiratory specimens, of which 132 (27%) tested positive for influenza viruses, a slight decrease in comparison to the previous week. Of these positive specimens, 84 (64%) were influenza type A and 48 (37%) were influenza B (Table 1, Fig. 1). In the 8 countries testing 20 or more sentinel specimens, influenza positivity ranged from 15% to 41%, with a median of 26% (mean: 29%).

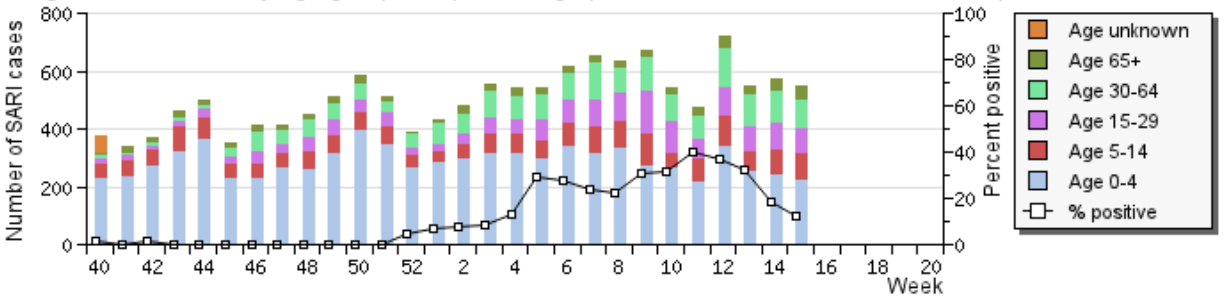
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

10 countries reported data for hospital-based sentinel surveillance of SARI: Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. 95 respiratory specimens were collected from SARI patients, of which 12 (13%) were positive for influenza: 9 were type A and 3 were type B. All influenza A viruses were subtyped: 8 as A(H3) and 1 as A(H1)pdm09. (Fig. 2).

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological overview

During week 15/2012, 38 countries reported a dominant virus based on both sentinel and non-sentinel detections. 12 countries reported influenza A and/or A(H3N2) as the dominant virus, 1 reported influenza B and 3 reported co-dominance of influenza B with A(H3N2). 22 countries reported that no virus was dominant.

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel** ILI/ARI and SARI surveillance for both the current week and the period since week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	482	95	34236	3963
Influenza A + B	132 (27.4%)	12 (12.6%)	10557 (30.8%)	614 (15.5%)
Influenza A	84 (63.6%)	9 (75.0%)	9331 (88.4%)	583 (95.0%)
Influenza B	48 (36.4%)	3 (25.0%)	1226 (11.6%)	31 (5.1%)
Influenza A subtyped	53	9	8418	550
A (H1N1)pdm09	3 (5.7%)	1 (11.1%)	158 (1.9%)	63 (11.5%)
A (H3N2)	50 (94.3%)	8 (88.9%)	8260 (98.1%)	486 (88.4%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.2%)

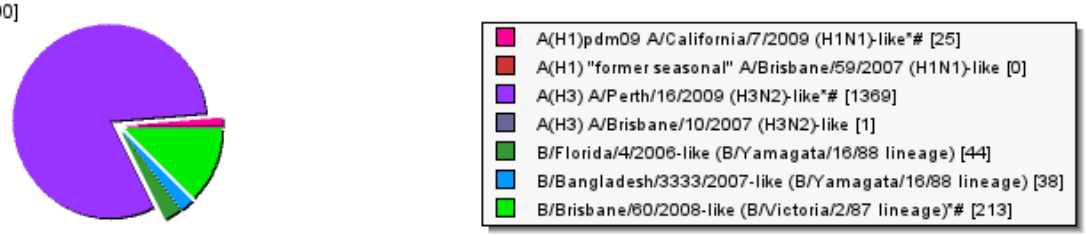
During week 15/2012, 1122 specimens from **non-sentinel** sources were reported positive for influenza: 929 (83%) type A and 193 (17%) type B. Of the influenza A viruses, 523 were subtyped: 503 (96%) as A(H3N2) and 20 (4%) as A(H1N1)pdm09.

Since week 40/2011, 39 965 influenza viruses from sentinel and non-sentinel sources have been typed: 36 736 (92%) were influenza A and 3229 (8%) were influenza B. Of the influenza A viruses, 19 817 were subtyped: 19 003 (96%) as A (H3N2) and 814 (4%) as A(H1N1)pdm09.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 17 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Greece, Hungary, Italy, Latvia, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, Sweden, Switzerland) have characterized 1699 influenza viruses antigenically (Fig. 3). 16 countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Norway, Portugal, the Russian Federation, Spain, Sweden, Switzerland) have characterized 1106 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 15/2012
[Total N = 1690]



(1) Sentinel and non-sentinel specimens combined

Compiled at 10:39 on Apr 19 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

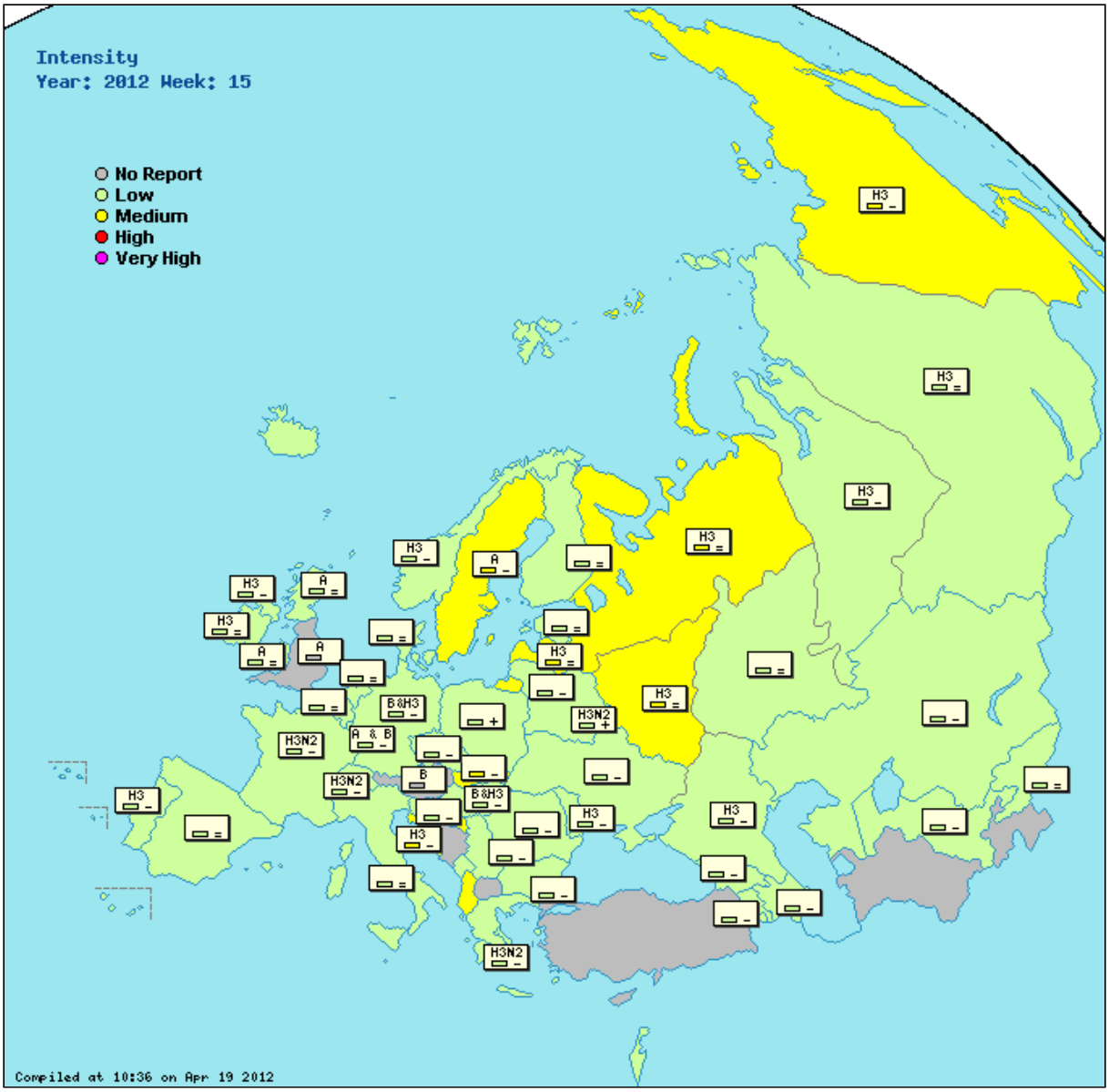
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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)

Republic of Moldova

This week were tested 8 sentinel samples, from which 2 were positive for A/H3, and 1 was positive for DNA Adenovirus.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Albania	Medium	None	Low	Decreasing					377.8 (graphs)	sari	Click here
Armenia	Low	None	Low	Decreasing	0	-	None	(graphs)	69.0 (graphs)	sari	Click here
Austria					0	-	Type B	(graphs)			Click here
Azerbaijan	Low	None	Low	Decreasing	0	-	None	169.2 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Increasing	36	22.2%	Type A, Subtype H3N2	9.8 (graphs)	1017.4 (graphs)	sari	Click here
Belgium	Low	Sporadic		Stable	4	25.0%		39.0 (graphs)	1198.0 (graphs)	sari	Click here
Bosnia and Herzegovina					4	75.0%	None	(graphs)			Click here
Bulgaria	Low	None		Decreasing	1	0%	None	(graphs)	466.5 (graphs)		Click here

Croatia	Medium	Widespread	Low	Decreasing			Type A, Subtype H3	40.0	(graphs)		(graphs)		Click here
Czech Republic	Low	Local		Decreasing	11	18.2%	None	45.0	(graphs)	882.9	(graphs)		Click here
Denmark	Low	None		Stable	1	0%	None	24.5	(graphs)		(graphs)		Click here
England					22	18.2%	Type A		(graphs)				Click here
Estonia	Low	Widespread		Stable	27	40.7%		10.7	(graphs)	287.5	(graphs)		Click here
Finland	Low	Sporadic	Low	Stable	6	16.7%	None	0.0	(graphs)		(graphs)		Click here
France	Low	Local	Low	Decreasing	46	32.6%	Type A, Subtype H3N2		(graphs)	1121.7	(graphs)		Click here
Georgia	Low	Sporadic	Low	Decreasing	10	20.0%	None	271.6	(graphs)		(graphs)	sari	Click here
Germany	Low	Local		Decreasing	46	41.3%	Type B and Type A, Subtype H3N2		(graphs)	854.2	(graphs)		Click here
Greece	Low	Sporadic		Decreasing	0	-		69.5	(graphs)		(graphs)		Click here
Hungary	Low	Sporadic	Low	Decreasing	15	46.7%	Type B and Type A, Subtype H3	50.6	(graphs)		(graphs)		Click here
Iceland	Low	Local	Low	Stable				9.1	(graphs)		(graphs)		Click here
Ireland	Low	Local	Low	Stable	8	0%	Type A, Subtype H3	11.1	(graphs)		(graphs)		Click here
Israel	Low	Sporadic	Low	Decreasing				3.9	(graphs)				Click here
Italy	Low	Local	Low	Stable	7	42.9%	None	84.7	(graphs)		(graphs)		Click here
Kazakhstan	Low	Sporadic	Low	Decreasing	6	0%	None	74.4	(graphs)	104.9	(graphs)	sari	Click here
Kyrgyzstan	Low	None	Low	Stable	11	0%	None	7.3	(graphs)	34.3	(graphs)	sari	Click here
Latvia	Medium	Regional		Stable	1	0%	Type A, Subtype H3	91.0	(graphs)	1011.0	(graphs)		Click here
Lithuania	Low	Local	Low	Decreasing	2	100.0%	None	3.9	(graphs)	371.8	(graphs)		Click here
Luxembourg	Low	Local	Low		10	50.0%	Type A and B	1.7 *	(graphs)	7.8 *	(graphs)		Click here
Montenegro	Low	Sporadic	Low	Decreasing				21.5	(graphs)		(graphs)		Click here
Netherlands	Low	Local		Stable	5	20.0%	None	21.9	(graphs)		(graphs)		Click here
Northern Ireland	Low	Local		Decreasing	4	50.0%	Type A, Subtype H3	15.4	(graphs)	212.7	(graphs)		Click here
Norway	Low	Local		Decreasing	2	50.0%	Type A, Subtype H3	27.8	(graphs)		(graphs)		Click here
Poland	Low	None	Low	Increasing	14	7.1%	None	115.7	(graphs)		(graphs)		Click here
Portugal	Low	None		Decreasing	0	-	Type A, Subtype H3	0.0	(graphs)		(graphs)		Click here
Republic of Moldova	Low	Sporadic	Low	Decreasing	8	25.0%	Type A, Subtype H3		(graphs)	65.6	(graphs)	sari	Click here
Romania	Low	Sporadic	Low	Decreasing	13	7.7%	None	2.1	(graphs)	518.4	(graphs)	sari	Click here
Russian Federation	Low	Local		Stable	48	27.1%	Type A, Subtype H3	1.3	(graphs)	638.9	(graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	12	25.0%	Type A	12.3	(graphs)	474.3	(graphs)		Click here
Serbia	Low	Sporadic	Low	Decreasing	2	100.0%	None	44.0	(graphs)		(graphs)	sari	Click here
Slovakia	Medium	Sporadic	Low	Decreasing	1	100.0%	None	177.6	(graphs)	1424.5	(graphs)	sari	Click here
Slovenia	Low	Sporadic		Decreasing	1	0%	None	1.2	(graphs)	668.6	(graphs)		Click here
Spain	Low	Sporadic		Stable	33	15.2%	None	13.1	(graphs)		(graphs)		Click here
Sweden	Medium	Widespread	Low	Decreasing	5	20.0%	Type A	5.4	(graphs)		(graphs)		Click here
Switzerland	Low	Sporadic		Decreasing	8	37.5%	Type A, Subtype H3N2	31.8	(graphs)		(graphs)		Click here
Turkey					47	25.5%	None		(graphs)				Click here
Ukraine	Low	Local	Low	Decreasing	4	0%	None	3.7 *	(graphs)	427.0	(graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Decreasing			None		(graphs)	16.3	(graphs)		Click here
Wales	Low	None		Stable	1	100.0%	Type A	5.4	(graphs)		(graphs)		Click here
Europe					482	27.4%							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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity declining in the WHO European Region

Current situation: week 16/2012

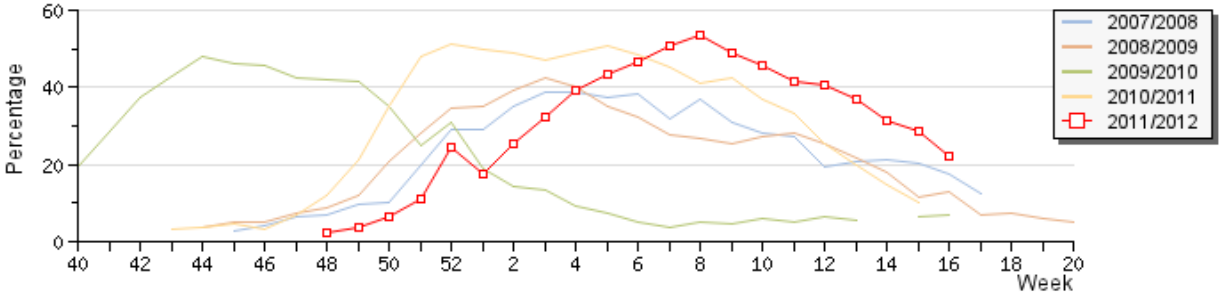
- This issue is based on data for week 16/2012 reported by 42 Member States in the WHO European Region.
- Consultation rates continue to decrease or have stabilized in most countries.
- The percentage of influenza-positive cases is decreasing but has a higher proportion of influenza B viruses than in previous weeks.
- The number of hospitalizations due to severe acute respiratory infection (SARI) and the influenza-positivity rate are relatively stable.
- Influenza A(H3N2) viruses continue to dominate, with co-circulation of influenza B and A(H1N1)pdm09 viruses.

Outpatient surveillance for influenza-like illness (ILI) and acute respiratory infection (ARI)

38 countries reported on trends in clinical activity: 16 stable; 4 increasing and 18 decreasing. Of the 38 countries reporting on the geographical spread of influenza: 7 reported no activity; 20, sporadic activity; 7, local activity; 1, regional activity; and 3, widespread activity. All countries reported either medium (2) or low intensity (36).

During week 16/2012 sentinel outpatient clinics collected 538 respiratory specimens, of which 120 (22%) tested positive for influenza viruses, a slight decrease from the previous week. Of the positive specimens, 58 (48%) were influenza type A and 62 (52%) were influenza B (Table 1, Fig. 1). In the 9 countries testing 20 or more sentinel specimens, influenza positivity ranged from 5% to 30%, with a median of 24% (mean: 20%).

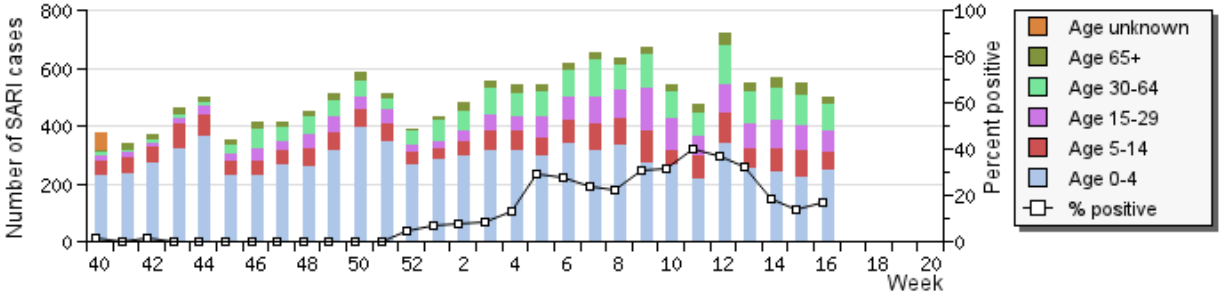
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

10 countries reported data for hospital-based sentinel surveillance of SARI: Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. 87 respiratory specimens were collected from SARI patients, of which 15 (17%) were positive for influenza: 12 were type A and 3 were type B. All influenza A viruses were subtyped as A(H3). (Fig. 2).

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological overview

During week 16/2012, 39 countries reported on whether there was a dominant virus based on both sentinel and non-sentinel detections. 11 countries reported influenza A and/or A(H3N2) as the dominant virus; 3 reported influenza B, and 2 reported co-dominance of influenza B and A(H3N2). 23 countries reported that no virus was dominant.

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel** ILI/ARI and SARI surveillance for both the current week and the period since week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	538	87	34862	4050
Influenza A + B	120 (22.3%)	15 (17.2%)	10709 (30.7%)	630 (15.6%)
Influenza A	58 (48.3%)	12 (80.0%)	9410 (87.9%)	595 (94.4%)
Influenza B	62 (51.7%)	3 (20.0%)	1299 (12.1%)	35 (5.6%)
Influenza A subtyped	42	12	8484	562
A (H1N1)pdm09	4 (9.5%)	0 (0.0%)	167 (2.0%)	64 (11.4%)
A (H3N2)	38 (90.5%)	12 (100.0%)	8317 (98.0%)	498 (88.6%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

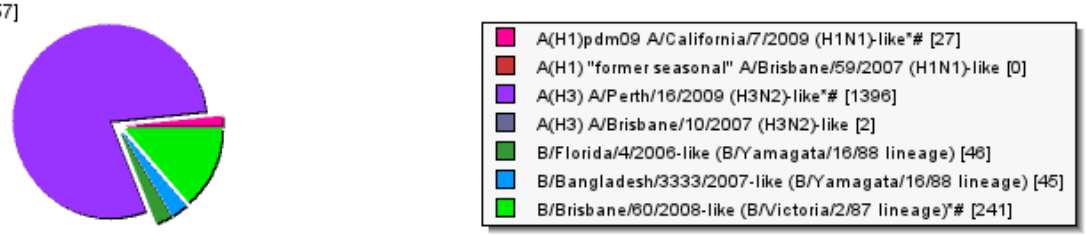
During week 16/2012, 811 specimens from **non-sentinel** sources were reported positive for influenza: 647 (80%) type A and 164 (20%) type B. Of the influenza A viruses, 325 were subtyped: 317 (98%) as A(H3N2) and 8 (2%) as A(H1N1)pdm09.

Since week 40/2011, 41 214 influenza viruses from sentinel and non-sentinel sources have been typed: 37 708 (91%) were influenza A and 3506 (9%) were influenza B. Of the influenza A viruses, 20 377 were subtyped: 19 536 (96%) as A (H3N2) and 841 (4%) as A(H1N1)pdm09.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 17 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Greece, Hungary, Italy, Latvia, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, Sweden, Switzerland) have characterized 1801 influenza viruses antigenically (Fig. 3). 16 countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Norway, Portugal, the Russian Federation, Spain, Sweden, Switzerland) have characterized 1181 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 16/2012
[Total N = 1757]



(1) Sentinel and non-sentinel specimens combined

Compiled at 12:54 on Apr 26 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○

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	Sentinel SARI	Virology graph and pie chart
Armenia	Low	None	Low	Stable	0	-	None	(graphs)	69.3 (graphs)	sari	Click here
Austria					0	-	Type A	(graphs)			Click here
Azerbaijan	Low	None	Low	Increasing	2	0%	None	192.2 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Increasing	41	12.2%	None	8.4 (graphs)	1070.0 (graphs)	sari	Click here
Belgium	Low	Sporadic		Stable	6	33.3%	Type B and Type A, Subtype H3	30.5 (graphs)	1380.7 (graphs)	sari	Click here
Bosnia and Herzegovina					7	42.9%	None	(graphs)			Click here
Bulgaria	Low	None		Stable	0	-	None	(graphs)	534.1 (graphs)		Click here
Croatia	Medium	Widespread	Low	Decreasing			None	26.3 (graphs)	(graphs)		Click here

Czech Republic	Low	Local		Stable	13	46.2%	Type A, Subtype H3	32.8 (graphs)	869.0 (graphs)		Click here
Denmark	Low	None		Stable	0	-	None	19.1 (graphs)	(graphs)		Click here
England	Low	Sporadic		Stable	33	15.2%	Type A	4.9 (graphs)	343.9 (graphs)		Click here
Estonia	Low	Local		Decreasing	20	30.0%		8.8 (graphs)	255.7 (graphs)		Click here
Finland	Low	Sporadic	Low	Stable	22	4.6%	None	0.0 (graphs)	(graphs)		Click here
France	Low	Sporadic	Low	Decreasing	39	25.6%	Type A, Subtype H3N2	(graphs)	0.0 (graphs)		Click here
Georgia	Low	Sporadic	Low	Increasing	12	25.0%	None	338.4 (graphs)	(graphs)	sari	Click here
Germany	Low	Local		Decreasing	37	24.3%	Type B	(graphs)	856.1 (graphs)		Click here
Greece	Low	Sporadic		Stable	2	50.0%	Type B	37.7 (graphs)	(graphs)		Click here
Hungary	Low	Sporadic	Low	Decreasing	15	46.7%	Type B and Type A, Subtype H3	38.9 (graphs)	(graphs)		Click here
Ireland	Low	Sporadic	Low	Decreasing	4	25.0%	None	6.6 (graphs)	(graphs)		Click here
Israel	Low	Sporadic	Low	Increasing	19	15.8%	None	4.5 (graphs)			Click here
Kazakhstan	Low	Sporadic	Low	Decreasing	8	0%	None	61.7 (graphs)	85.4 (graphs)	sari	Click here
Kyrgyzstan	Low	None	Low	Stable	4	0%	None	2.7 (graphs)	36.8 (graphs)	sari	Click here
Latvia	Low	Regional		Decreasing	0	-	Type A	35.3 (graphs)	956.4 (graphs)		Click here
Lithuania	Low	Local	Low	Stable	0	-	None	3.7 (graphs)	390.2 (graphs)		Click here
Luxembourg	Low	Local	Low		5	20.0%		0 * (graphs)	19.9 * (graphs)		Click here
The former Yugoslav Republic of Macedonia							None	(graphs)			Click here
Montenegro	Low	Sporadic	Low	Decreasing				12.8 (graphs)	(graphs)		Click here
Netherlands	Low	Widespread		Stable	10	50.0%	Type A	33.6 (graphs)	(graphs)		Click here
Northern Ireland	Low	Local		Increasing	5	20.0%	Type A, Subtype H3	20.7 (graphs)	353.0 (graphs)		Click here
Norway	Low	Local		Decreasing	2	50.0%	Type A, Subtype H3	35.5 (graphs)	(graphs)		Click here
Portugal	Low	None		Stable	0	-	None	8.7 (graphs)	(graphs)		Click here
Republic of Moldova	Low	Sporadic	Low	Decreasing	12	41.7%	Type A, Subtype H3	0.1 (graphs)	40.5 (graphs)	sari	Click here
Romania	Low	Sporadic	Low	Decreasing	9	11.1%	None	1.8 (graphs)	403.1 (graphs)	sari	Click here
Russian Federation	Low	Local		Stable	54	14.8%	Type A, Subtype H3	0.9 (graphs)	612.5 (graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	25	0%	Type A	13.7 (graphs)	472.6 (graphs)		Click here
Serbia	Low	None	Low	Decreasing	0	-	None	33.9 (graphs)	(graphs)	sari	Click here
Slovakia	Medium	Sporadic	Low	Stable	2	100.0%	None	175.0 (graphs)	1514.2 (graphs)	sari	Click here
Slovenia	Low	Sporadic		Stable	3	66.7%	None	4.7 (graphs)	841.8 (graphs)		Click here
Spain	Low	Sporadic		Stable	50	30.0%	Type B	13.1 (graphs)	(graphs)		Click here
Sweden	Low	Widespread	Low	Decreasing	12	0%	Type A	4.5 (graphs)	(graphs)		Click here
Switzerland	Low	Sporadic		Decreasing	10	40.0%	Type A, Subtype H3N2	9.6 (graphs)	(graphs)		Click here
Turkey					50	26.0%	None	(graphs)			Click here
Ukraine	Low	Sporadic	Low	Decreasing	3	0%	None	3.2 * (graphs)	349.5 (graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Decreasing			None	(graphs)	16.3 (graphs)		Click here
Wales	Low	None		Stable	2	0%		2.1 (graphs)	(graphs)		Click here
Europe					538	22.3%					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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity continues to decline in the WHO European Region

Current situation: week 17/2012

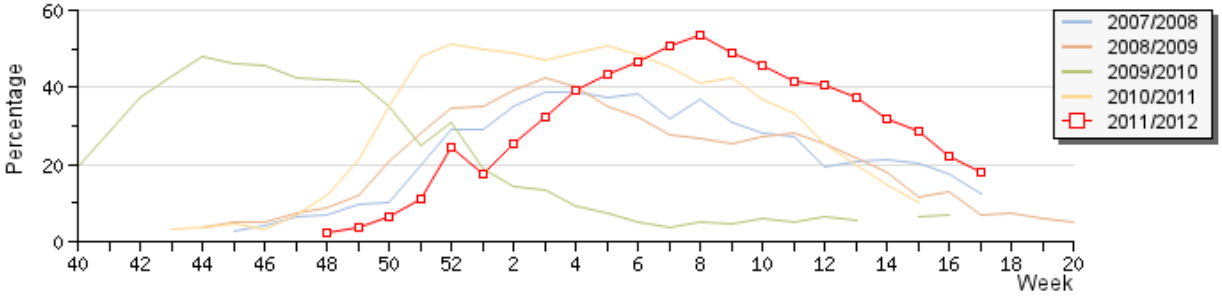
- This issue is based on data for week 17/2012 reported by 44 Member States in the WHO European Region.
- Clinical consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) continue to decrease or have stabilized in most countries.
- The number of hospitalizations due to severe acute respiratory infection (SARI) and the influenza-positivity rate are decreasing.
- Both the total number of influenza virus detections and the percentage influenza-positive detections are decreasing
- Influenza A(H3N2) continues to be the dominant virus in circulation, followed by influenza B, with relatively few A(H1N1)pdm09 viruses reported

Outpatient surveillance for ILI and ARI

35 countries reported on trends in clinical activity: 18 were stable, 2 increasing and 15 decreasing. Of the 35 countries reporting on the geographical spread of influenza, 11 reported no activity; 16, sporadic activity; 4, local activity; 2, regional activity; and 2, widespread activity. All countries reported either medium (1) or low intensity (34).

During week 17/2012 sentinel outpatient clinics collected 308 respiratory specimens, of which 56 (18%) tested positive for influenza viruses, a slight decrease from the previous week. Of the positive specimens, 32 (57%) were influenza type A and 24 (43%) were influenza B (Table 1, Fig. 1). In the 6 countries testing 20 or more sentinel specimens, influenza positivity ranged from 5% to 27%, with a median of 12% (mean: 14%).

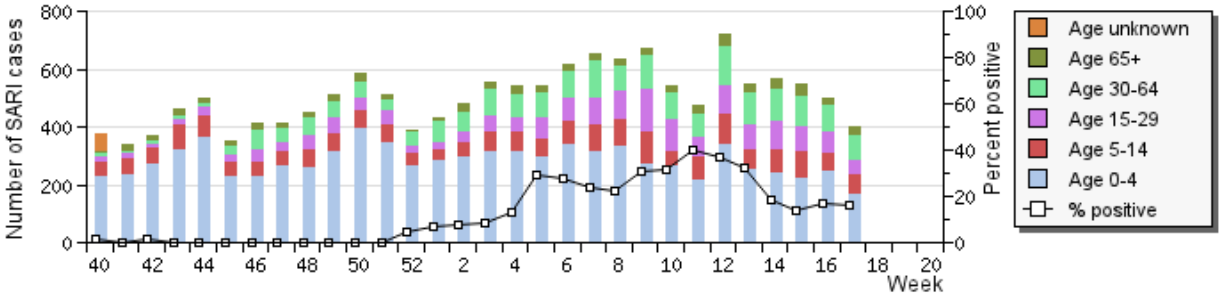
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

8 countries reported data for hospital-based sentinel surveillance of SARI: Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, and the Russian Federation. 68 respiratory specimens were collected from SARI patients, of which 11 (16%) were positive for influenza: 9 were type A and 2 were type B. All influenza A viruses were subtyped as A(H3). (Fig. 2).

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in ﷺOverview of sentinel SARI systems in EuroFluﷺ.

Virological overview

During week 17/2012, 34 countries reported on whether there was a dominant virus, based on both sentinel and non-sentinel detections. 6 countries reported influenza A and/or A(H3N2); 2 reported influenza B as the dominant virus. 26 countries reported that no virus was

dominant.

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel** ILI/ARI and SARI surveillance for both the current week and the period since week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	308	68	35225	4118
Influenza A + B	56 (18.2%)	11 (16.2%)	10783 (30.6%)	641 (15.6%)
Influenza A	32 (57.1%)	9 (81.8%)	9454 (87.7%)	604 (94.2%)
Influenza B	24 (42.9%)	2 (18.2%)	1329 (12.3%)	37 (5.8%)
Influenza A subtyped	28	9	8524	571
A (H1N1)pdm09	2 (7.1%)	0 (0.0%)	173 (2.0%)	64 (11.2%)
A (H3N2)	26 (92.9%)	9 (100.0%)	8351 (98.0%)	507 (88.8%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

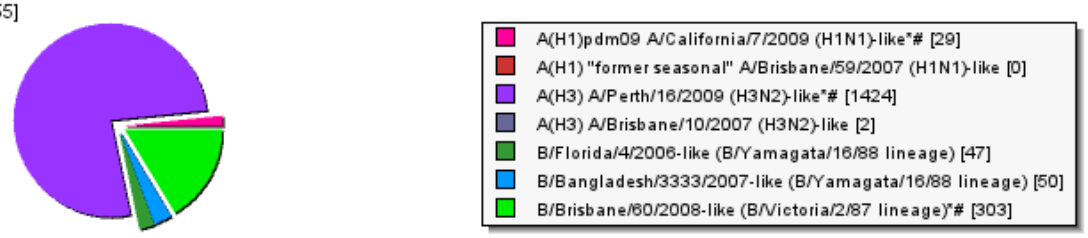
During week 17/2012, 481 specimens from **non-sentinel** sources were reported positive for influenza: 391 (81%) type A and 90 (19%) type B. Of the influenza A viruses, 206 were subtyped: all as A(H3N2).

Since week 40/2011, 41 844 influenza viruses from sentinel and non-sentinel sources have been typed: 38 195 (91%) were influenza A and 3649 (9%) were influenza B. Of the influenza A viruses, 20 691 were subtyped: 19 844 (96%) as A (H3N2) and 847 (4%) as A(H1N1)pdm09.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 17 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Greece, Hungary, Italy, Latvia, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, Sweden, Switzerland) have characterized 1906 influenza viruses antigenically (Fig. 3). 17 countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Norway, Portugal, Romania, the Russian Federation, Spain, Sweden, Switzerland) have characterized 1141 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 17/2012
[Total N = 1855]



(1) Sentinel and non-sentinel specimens combined

Compiled at 12:57 on May 3 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

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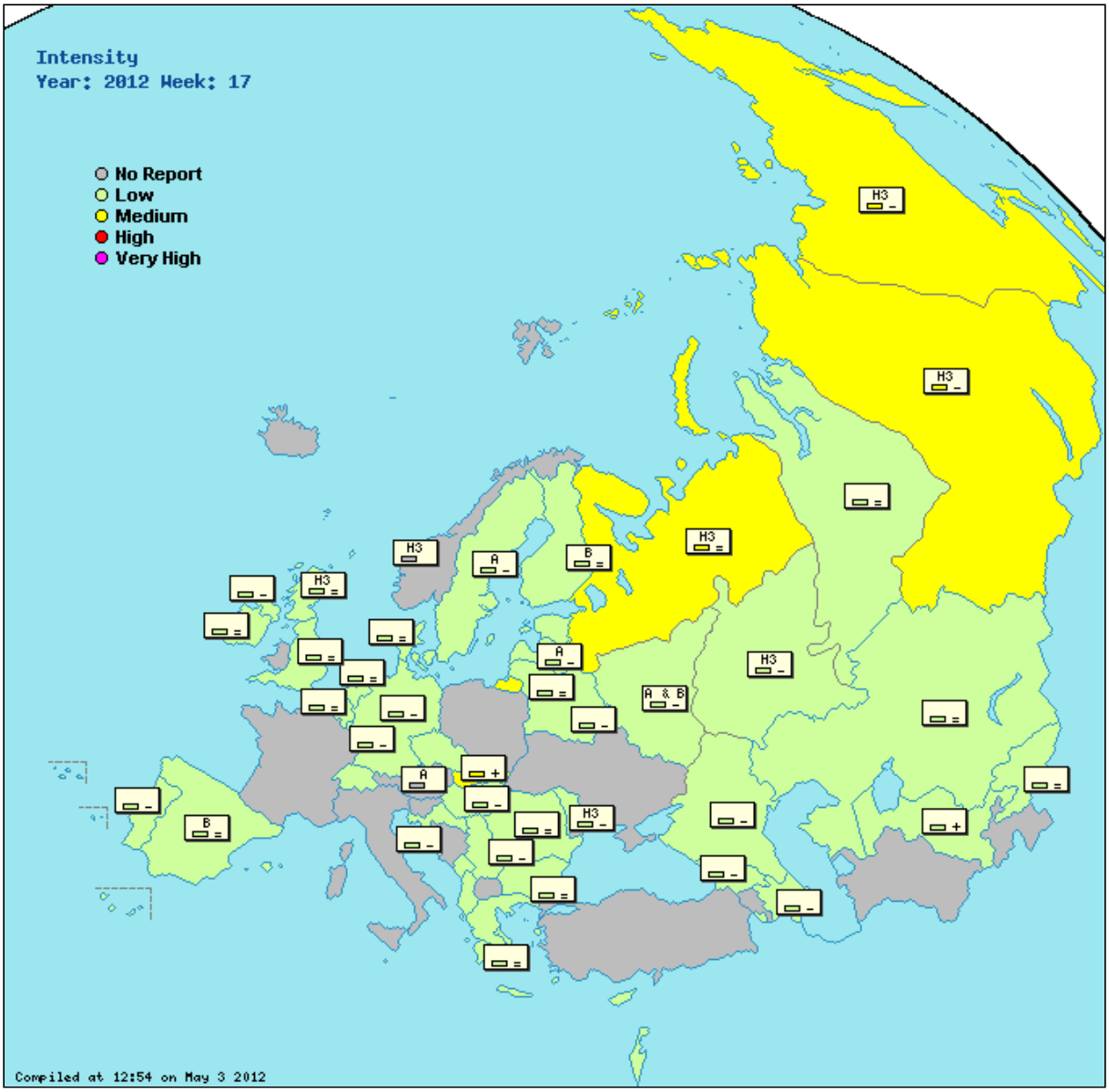
Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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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- : decreasing clinical activity

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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	Sentinel SARI	Virology graph and pie chart
Albania	Low	None	Low	Stable					379.2 (graphs)	sari	Click here
Armenia					0	-	None		(graphs)	sari	Click here
Austria					0	-	Type A	(graphs)			Click here
Azerbaijan	Low	None	Low	Decreasing	0	-	None	176.2 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Decreasing	28	7.1%	None	8.8 (graphs)	814.8 (graphs)	sari	Click here
Belgium	Low	Sporadic		Stable	0	-	None	36.1 (graphs)	1592.6 (graphs)	sari	Click here
Bosnia and Herzegovina					11	54.6%	None	(graphs)			Click here
Bulgaria	Low	None		Stable	0	-	None	(graphs)	484.7 (graphs)		Click here
Croatia	Low	Widespread	Low	Decreasing			None	10.1 (graphs)	(graphs)		Click here

Cyprus	Low	None	Low	Stable				0.3 *	(graphs)	5.6 *	(graphs)		Click here
Czech Republic	Low	Sporadic		Stable				27.7	(graphs)	807.6	(graphs)		Click here
Denmark	Low	None		Stable	0	-	None	19.4	(graphs)		(graphs)		Click here
England	Low	Sporadic		Stable	14	7.1%	None	4.3	(graphs)	340.4	(graphs)		Click here
Estonia	Low	Sporadic		Decreasing				8.7	(graphs)	263.0	(graphs)		Click here
Finland	Low	Sporadic	Low	Stable	14	42.9%	Type B	0.0	(graphs)		(graphs)		Click here
France					27	18.5%					(graphs)		Click here
Georgia	Low	Sporadic	Low	Decreasing	12	0%	None	319.7	(graphs)		(graphs)	sari	Click here
Germany	Low	Sporadic		Decreasing	24	12.5%	None		(graphs)	758.8	(graphs)		Click here
Greece	Low	Sporadic		Stable	0	-	None	26.6	(graphs)		(graphs)		Click here
Hungary	Low	Sporadic	Low	Decreasing	6	33.3%	None	20.9	(graphs)		(graphs)		Click here
Ireland	Low	Local	Low	Stable	0	-	None	3.3	(graphs)		(graphs)		Click here
Israel	Low	None	Low	Decreasing				2.3	(graphs)				Click here
Italy					0	-			(graphs)				Click here
Kazakhstan	Low	None	Low	Stable	5	0%	None	69.4	(graphs)	93.6	(graphs)	sari	Click here
Kyrgyzstan	Low	None	Low	Stable	1	0%	None	0.7	(graphs)	30.4	(graphs)	sari	Click here
Latvia	Low	Regional		Decreasing	0	-	Type A	28.4	(graphs)	895.2	(graphs)		Click here
Lithuania	Low	Local	Low	Stable	0	-	None	2.9	(graphs)	412.2	(graphs)		Click here
Luxembourg	Low	Local	Low		6	16.7%	None	0.4 *	(graphs)	16.5 *	(graphs)		Click here
The former Yugoslav Republic of Macedonia							None		(graphs)				Click here
Montenegro	Low	None	Low	Decreasing				6.3	(graphs)		(graphs)		Click here
Netherlands	Low	Widespread		Stable	4	25.0%		23.6	(graphs)		(graphs)		Click here
Northern Ireland	Low	Sporadic		Decreasing	7	14.3%		11.6	(graphs)	323.8	(graphs)		Click here
Norway					1	100.0%	Type A, Subtype H3		(graphs)				Click here
Portugal	Low	None		Decreasing	0	-	None	0.0	(graphs)		(graphs)		Click here
Republic of Moldova	Low	Sporadic	Low	Decreasing	6	16.7%	Type A, Subtype H3		(graphs)	34.9	(graphs)	sari	Click here
Romania	Low	Sporadic	Low	Stable	9	11.1%	None	1.7	(graphs)	413.3	(graphs)	sari	Click here
Russian Federation	Low	Local		Stable	42	11.9%	Type A, Subtype H3	0.6	(graphs)	585.0	(graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	23	0%	Type A, Subtype H3	10.2	(graphs)	454.4	(graphs)		Click here
Serbia	Low	None	Low	Decreasing	8	100.0%	None	32.7	(graphs)		(graphs)	sari	Click here
Slovakia	Medium	Sporadic	Low	Increasing	2	0%	None	151.3	(graphs)	1430.6	(graphs)	sari	Click here
Slovenia					1	0%	None		(graphs)				Click here
Spain	Low	Sporadic		Stable	41	26.8%	Type B	10.3	(graphs)		(graphs)		Click here
Sweden	Low	Regional	Low	Decreasing	6	0%	Type A	4.0	(graphs)		(graphs)		Click here
Switzerland	Low	Sporadic		Stable				8.0	(graphs)		(graphs)		Click here
Turkey					10	10.0%	None		(graphs)				Click here
Uzbekistan	Low	Sporadic	Low	Increasing			None		(graphs)	18.1	(graphs)		Click here
Europe					308	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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

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Influenza season ending in the WHO European Region

Current situation: week 18/2012

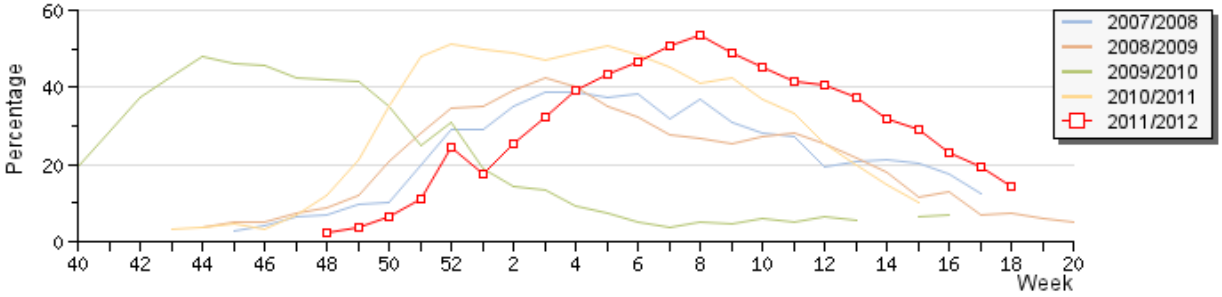
- This issue is based on data for week 18/2012 reported by 41 Member States in the WHO European Region.
- Clinical consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) have returned to low activity levels in almost all the countries in the Region.
- The number of hospitalizations due to severe acute respiratory infection (SARI) is decreasing, and none of the cases reported this week was associated with laboratory-confirmed influenza.
- Both the total number of influenza virus detections and the percentage of influenza-positive detections are decreasing
- Influenza B viruses accounted for 50% of the sentinel positive specimens collected in week 18/2012. Since the start of the season, most viruses detected have been influenza A(H3N2), followed by influenza B, with relatively few A(H1N1)pdm09 viruses reported
- None of the influenza A(H1N1)pdm09, A(H3N2) or B viruses screened by 10 countries for susceptibility to neuraminidase inhibitors was found to be resistant

Outpatient surveillance for ILI and ARI

40 countries reported on trends in clinical activity: 16 were stable, 1 increasing and 23 decreasing. Of the 40 countries reporting on the geographical spread of influenza, 15 reported no activity; 21, sporadic activity; 2, local activity and 2, widespread activity. All countries reported low influenza activity, except Slovakia, which reported medium activity.

During week 18/2012 sentinel outpatient clinics collected 218 respiratory specimens, of which 31 (14%) tested positive for influenza viruses, a decrease from the previous week. Of the positive specimens, 15 (48%) were influenza type A and 16 (52%) were influenza B (Table 1, Fig. 1). In the 4 countries testing 20 or more sentinel specimens, influenza positivity ranged from 5% to 23%, with a median of 12% (mean: 13%).

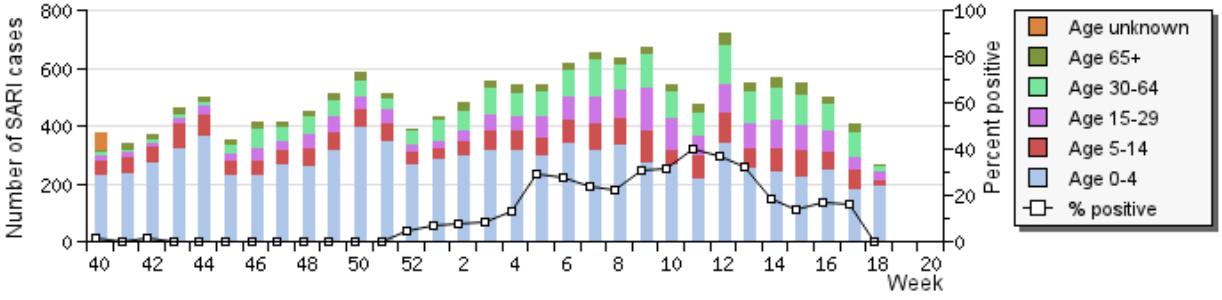
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

8 countries reported data for hospital-based sentinel surveillance of SARI: Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania and Serbia. 17 respiratory specimens were collected from SARI patients, none of which tested positive for influenza virus. (Fig. 2).

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological overview

During week 18/2012, 35 countries reported on whether there was a dominant virus, based on both sentinel and non-sentinel detections. 5 countries reported influenza A and/or A(H3N2) as the dominant virus. 30 countries reported that no virus was dominant.

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel** ILI/ARI and SARI surveillance for both the current week and the period since week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	218	17	35529	4135
Influenza A + B	31 (14.2%)	0 (0.0%)	10839 (30.5%)	641 (15.5%)
Influenza A	15 (48.4%)	0 (0.0%)	9477 (87.4%)	604 (94.2%)
Influenza B	16 (51.6%)	0 (0.0%)	1362 (12.6%)	37 (5.8%)
Influenza A subtyped	12	0	8539	571
A (H1N1)pdm09	0 (0.0%)	0 (0.0%)	173 (2.0%)	64 (11.2%)
A (H3N2)	12 (100.0%)	0 (0.0%)	8366 (98.0%)	507 (88.8%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

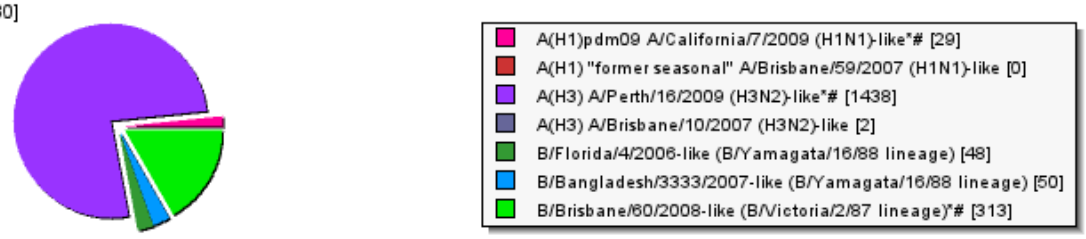
During week 18/2012, 189 specimens from **non-sentinel** sources were reported positive for influenza: 145 (77%) type A and 44 (23%) type B. Of the influenza A viruses, 27 were subtyped: 25 (93%) as A(H3N2) and 2 (7%) as A(H1N1)pdm09.

Since week 40/2011, 42 193 influenza viruses from sentinel and non-sentinel sources have been typed: 38 458 (91%) were influenza A and 3735 (9%) were influenza B. Of the influenza A viruses, 20 834 were subtyped: 19 985 (96%) as A (H3N2) and 849 (4%) as A(H1N1)pdm09.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 17 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Greece, Hungary, Italy, Latvia, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, Sweden, Switzerland) have characterized 1931 influenza viruses antigenically (Fig. 3). 17 countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Norway, Portugal, Romania, the Russian Federation, Spain, Sweden, Switzerland) have characterized 1147 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 18/2012
[Total N = 1880]



(1) Sentinel and non-sentinel specimens combined

Compiled at 12:04 on May 10 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

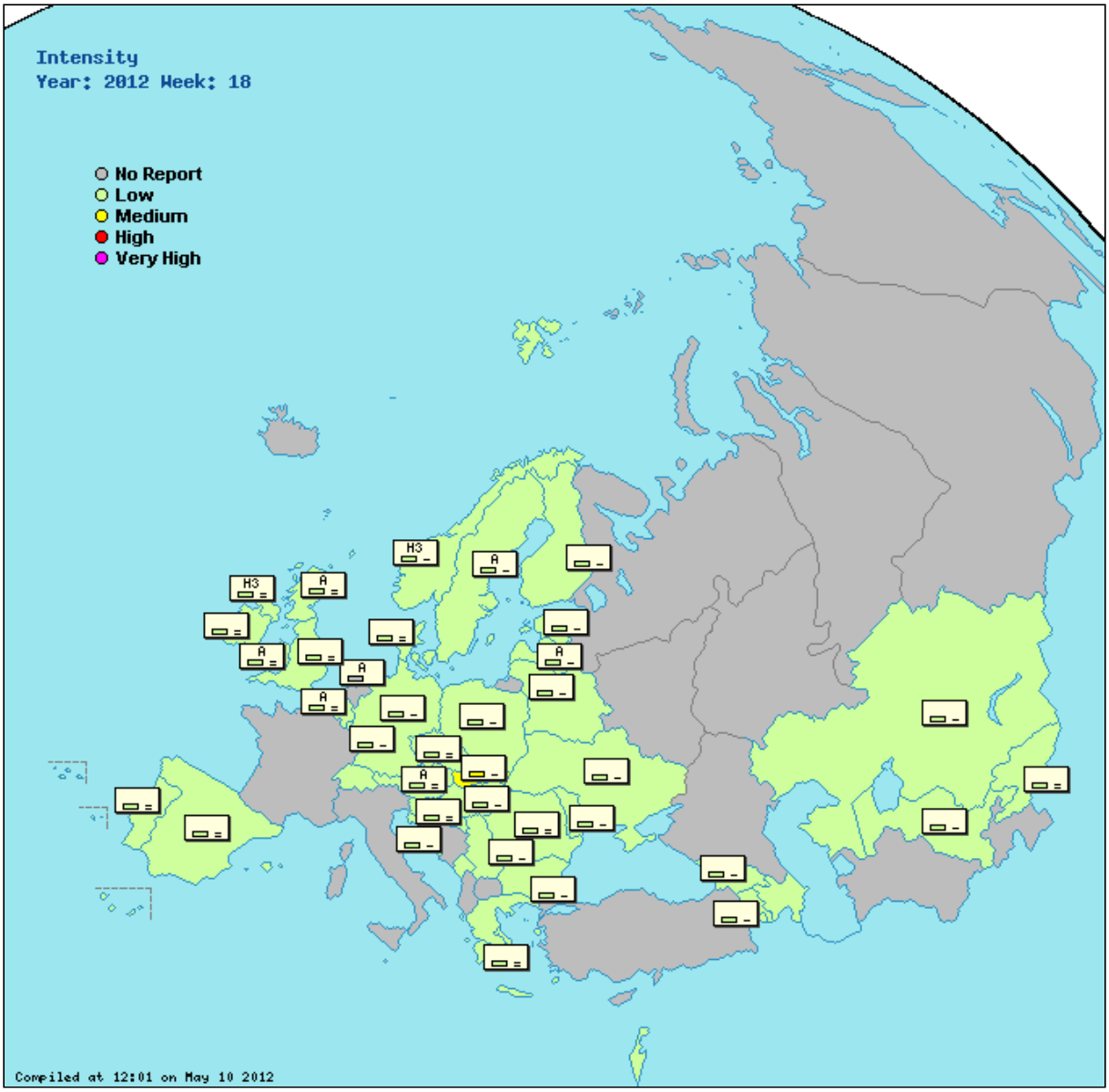
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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	Sentinel SARI	Virology graph and pie chart
Armenia	Low	None	Low	Decreasing	0	-	None	(graphs)	51.6 (graphs)	sari	Click here
Austria	Low	Local	Low	Stable	0	-	Type A	0.0 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Decreasing				140.5 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Decreasing				7.3 (graphs)	669.4 (graphs)	sari	Click here
Belgium	Low	Sporadic		Stable	1	0%		25.6 (graphs)	1401.3 (graphs)	sari	Click here
Bosnia and Herzegovina					7	28.6%	None	(graphs)			Click here
Bulgaria	Low	None		Decreasing	0	-	None	(graphs)	339.3 (graphs)		Click here
Croatia	Low	Widespread	Low	Decreasing			None	9.1 (graphs)	(graphs)		Click here
Czech Republic	Low	Sporadic		Stable	7	14.3%	None	19.5 (graphs)	663.1 (graphs)		Click here

Denmark	Low	None		Stable	0	-	None	15.3 (graphs)		(graphs)		Click here
England	Low	Sporadic		Stable	20	5.0%	None	6.3 (graphs)	344.2	(graphs)		Click here
Estonia	Low	Sporadic		Decreasing	4	25.0%	None	6.1 (graphs)	209.9	(graphs)		Click here
Finland	Low	Sporadic	Low	Decreasing	21	4.8%	None	0.0 (graphs)		(graphs)		Click here
Georgia	Low	Sporadic	Low	Decreasing	14	7.1%	None	202.4 (graphs)		(graphs)	sari	Click here
Germany	Low	Sporadic		Decreasing	17	11.8%	None	(graphs)	590.2	(graphs)		Click here
Greece	Low	Sporadic		Stable	2	0%	None	30.9 (graphs)		(graphs)		Click here
Hungary	Low	Sporadic	Low	Decreasing	3	66.7%	None	11.0 (graphs)		(graphs)		Click here
Iceland					0	-	None	(graphs)				Click here
Ireland	Low	Sporadic	Low	Stable	4	0%	None	4.8 (graphs)		(graphs)		Click here
Israel	Low	None	Low	Increasing				3.5 (graphs)				Click here
Kazakhstan	Low	None	Low	Decreasing	3	0%	None	60.9 (graphs)	67.9	(graphs)	sari	Click here
Kyrgyzstan	Low	None	Low	Stable	2	0%	None	2.0 (graphs)	26.1	(graphs)	sari	Click here
Latvia	Low	Local		Decreasing	0	-	Type A	7.2 (graphs)	466.1	(graphs)		Click here
Lithuania	Low	Sporadic	Low	Decreasing	0	-	None	1.4 (graphs)	329.9	(graphs)		Click here
Luxembourg	Low	None	Low		1	0%	None	0 * (graphs)	17.4 *	(graphs)		Click here
Montenegro	Low	Sporadic	Low	Decreasing				2.7 (graphs)		(graphs)		Click here
Netherlands					6	50.0%	Type A	(graphs)				Click here
Northern Ireland	Low	Sporadic		Stable	5	40.0%	Type A, Subtype H3	12.6 (graphs)	325.3	(graphs)		Click here
Norway	Low	Sporadic		Decreasing	1	100.0%	Type A, Subtype H3	14.6 (graphs)		(graphs)		Click here
Poland	Low	None	Low	Decreasing	0	-	None	53.5 (graphs)		(graphs)		Click here
Portugal	Low	None		Stable	1	0%	None	6.6 (graphs)		(graphs)		Click here
Republic of Moldova	Low	None	Low	Decreasing	4	0%	None	(graphs)	22.7	(graphs)	sari	Click here
Romania	Low	Sporadic	Low	Stable	8	0%	None	0.9 (graphs)	345.9	(graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	18	5.6%	Type A	10.2 (graphs)	449.7	(graphs)		Click here
Serbia	Low	Sporadic	Low	Decreasing	0	-	None	21.5 (graphs)		(graphs)	sari	Click here
Slovakia	Medium	Sporadic	Low	Decreasing	1	100.0%	None	106.9 (graphs)	1207.8	(graphs)	sari	Click here
Slovenia	Low	None		Stable	0	-	None	0.0 (graphs)	421.2	(graphs)		Click here
Spain	Low	Sporadic		Stable	30	23.3%	None	8.2 (graphs)		(graphs)		Click here
Sweden	Low	Sporadic	Low	Decreasing	3	0%	Type A	1.6 (graphs)		(graphs)		Click here
Switzerland	Low	None		Stable				10.4 (graphs)		(graphs)		Click here
Turkey					35	14.3%	None	(graphs)				Click here
Ukraine	Low	Sporadic	Low	Decreasing			None	0 * (graphs)	212.5	(graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Decreasing			None	(graphs)	17.0	(graphs)		Click here
Wales	Low	None		Stable	0	-	Type A	2.4 (graphs)		(graphs)		Click here
Europe					218	14.2%						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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity in Europe approaching out-of-season levels

Current situation: week 19/2012

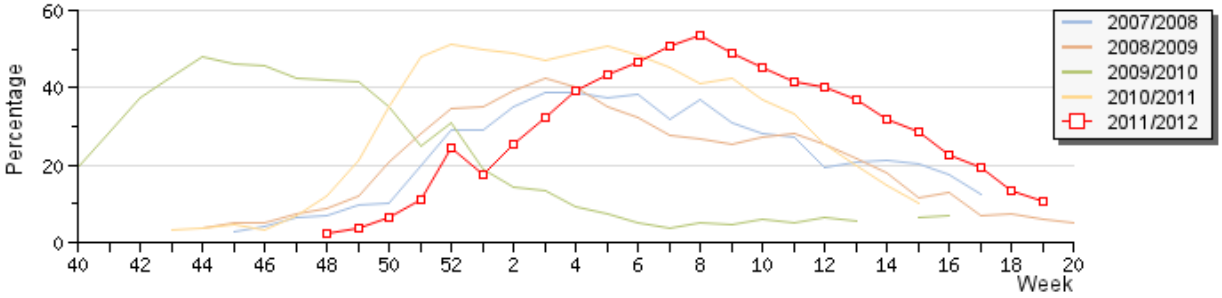
- This issue is based on data for week 19/2012 reported by 43 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are approaching out-of-season levels in most of the countries in the Region.
- The number of specimens tested, as well as the percentage of influenza-positive cases, continues to decline but the positive cases show a higher prevalence of influenza B viruses.
- The number of hospitalizations due to severe acute respiratory infection (SARI) is relatively stable with a slight increase in influenza-positivity rate .
- No resistance to neuraminidase inhibitors among influenza viruses was detected

Outpatient surveillance for ILI and ARI

37 countries reported on trends in clinical activity: 18 stable; 6 increasing and 13 decreasing. Of the 37 countries reporting on the geographical spread of influenza: 16 reported no activity; 17, sporadic activity; 2, local activity; 1, regional activity; and 1, widespread activity. Intensity was reported as medium by 1 country in the Region and low by 36.

During week 19/2012 sentinel outpatient clinics collected 194 respiratory specimens, of which 21 (11%) tested positive for influenza viruses: slightly fewer than last week. Of these positive specimens, 7 (33%) were influenza type A and 14 (67%) were influenza B (Table 1, Fig. 1). In the 4 countries testing 20 or more sentinel specimens, influenza positivity ranged from 0% to 24%, with a median of 5% (mean: 9%).

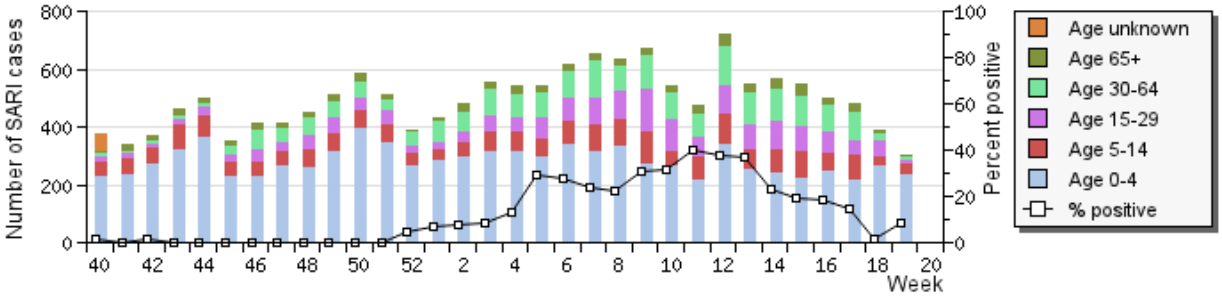
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

10 countries reported data from hospital-based sentinel surveillance of SARI: Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Romania, the Russian Federation, Serbia and Ukraine. 61 respiratory specimens were collected from SARI patients, of which 5 (8%) were positive for influenza: 3 were type A and 2 were type B. 1 influenza A virus was subtyped as A(H1N1)pdm09 and 2 - as A(H3). (Fig. 2).

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in Overview of sentinel SARI systems in EuroFlu.

Virological overview

During week 19/2012, 36 countries reported a dominant virus based on both sentinel and non-sentinel detections. 5 countries reported influenza A and/or A(H3N2) as the dominant virus: 1 reported influenza B and 30 countries reported that no virus was dominant.

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel** ILI/ARI and SARI surveillance for both the current week and the period since week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	194	61	35817	4326
Influenza A + B	21 (10.8%)	5 (8.2%)	10870 (30.4%)	686 (15.9%)
Influenza A	7 (33.3%)	3 (60.0%)	9494 (87.3%)	647 (94.3%)
Influenza B	14 (66.7%)	2 (40.0%)	1376 (12.7%)	39 (5.7%)
Influenza A subtyped	7	3	8556	613
A (H1N1)pdm09	0 (0.0%)	1 (33.3%)	173 (2.0%)	64 (10.4%)
A (H3N2)	7 (100.0%)	2 (66.7%)	8383 (98.0%)	549 (89.6%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

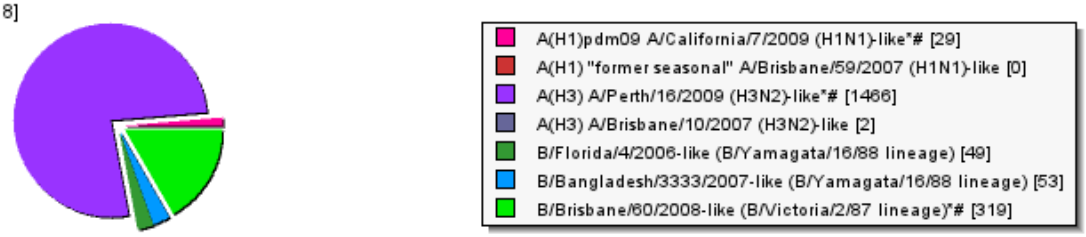
During week 19/2012, 175 specimens from **non-sentinel** sources were reported positive for influenza: 125 (72%) type A and 50 (28 %) type B. Of the influenza A viruses, 71 were subtyped: 68 (96%) as A(H3N2) and 3 (4%) as A(H1N1)pdm09.

Since week 40/2011, 42644 influenza viruses from sentinel and non-sentinel sources have been typed: 38802 (91%) were influenza A and 3842(9%) were influenza B. Of the influenza A viruses, 21110 were subtyped: 20255 (96%) as A (H3N2) and 855 (4%) as A(H1N1)pdm09.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 18 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, Sweden, Switzerland) have characterized 1966 influenza viruses antigenically (Fig. 3). 17 countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Norway, Portugal, Romania, the Russian Federation, Spain, Sweden, Switzerland) have characterized 1254 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 19/2012
[Total N = 1918]



(1) Sentinel and non-sentinel specimens combined

Compiled at 10:52 on May 17 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

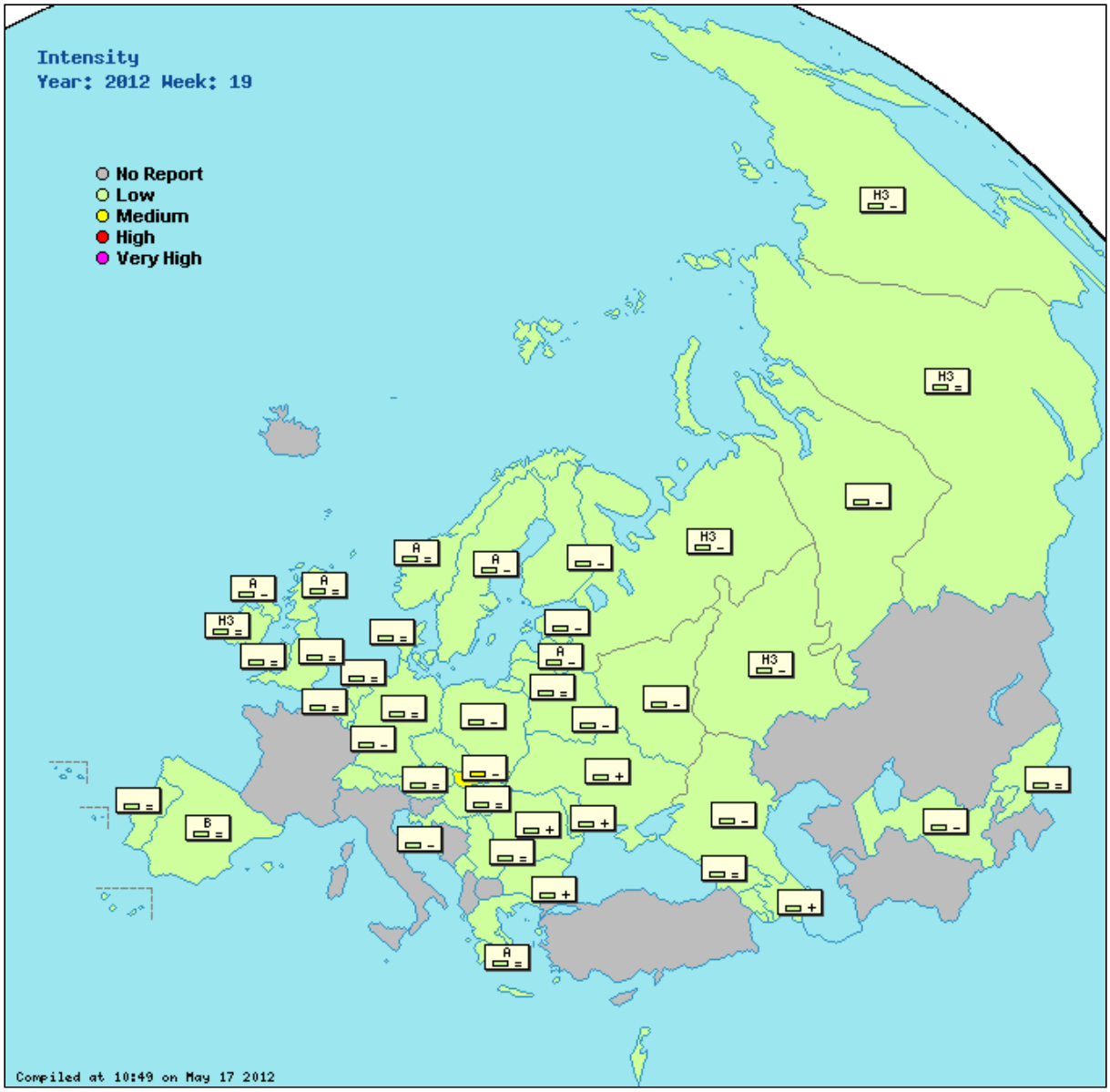
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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	Sentinel SARI	Virology graph and pie chart
Armenia	Low	None	Low	Increasing				(graphs)	58.3 (graphs)	sari	Click here
Austria	Low	None	Low	Stable	0	-	None	0.0 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Increasing	2	0%	None	170.6 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Decreasing	15	0%	None	6.6 (graphs)	625.8 (graphs)	sari	Click here
Belgium	Low	Sporadic		Stable	0	-	None	33.1 (graphs)	1587.5 (graphs)	sari	Click here
Bosnia and Herzegovina					1	0%	None	(graphs)			Click here
Bulgaria	Low	None		Increasing	0	-	None	(graphs)	480.5 (graphs)		Click here
Croatia	Low	Regional	Low	Decreasing			None	3.2 (graphs)	(graphs)		Click here
Czech Republic	Low	Sporadic		Stable				16.3 (graphs)	610.2 (graphs)		Click here

Denmark	Low	None		Stable	1	0%	None	16.4	(graphs)		(graphs)		Click here
England	Low	Sporadic		Stable	12	0%	None	5.2	(graphs)	336.3	(graphs)		Click here
Estonia	Low	Sporadic		Decreasing	6	33.3%	None	4.0	(graphs)	200.2	(graphs)		Click here
Finland	Low	Sporadic	Low	Decreasing	21	4.8%	None	0.0	(graphs)		(graphs)		Click here
Georgia	Low	Sporadic	Low	Stable	6	16.7%	None	196.9	(graphs)		(graphs)	sari	Click here
Germany	Low	Sporadic		Stable	10	10.0%	None		(graphs)	656.7	(graphs)		Click here
Greece	Low	Sporadic		Stable	0	-		16.4	(graphs)		(graphs)		Click here
Hungary	Low	None	Low	Stable	3	0%	None	12.6	(graphs)		(graphs)		Click here
Iceland					0	-	None		(graphs)				Click here
Ireland	Low	Sporadic	Low	Stable	3	0%	Type A, Subtype H3	3.0	(graphs)		(graphs)		Click here
Israel	Low	None	Low	Decreasing				2.8	(graphs)				Click here
Kazakhstan					4	0%	None				(graphs)	sari	Click here
Kyrgyzstan	Low	None	Low	Stable	0	-	None		(graphs)	30.1	(graphs)	sari	Click here
Latvia	Low	Local		Decreasing	0	-	Type A	3.0	(graphs)	708.6	(graphs)		Click here
Lithuania	Low	Sporadic	Low	Stable	0	-	None	0.6	(graphs)	360.1	(graphs)		Click here
Luxembourg	Low	Local	Low		4	25.0%		0.5 *	(graphs)	14.7 *	(graphs)		Click here
The former Yugoslav Republic of Macedonia							None		(graphs)				Click here
Montenegro	Low	None	Low	Decreasing				1.3	(graphs)		(graphs)		Click here
Netherlands	Low	Widespread		Stable	3	66.7%	None	35.8	(graphs)		(graphs)		Click here
Northern Ireland	Low	Sporadic		Decreasing	0	-		8.6	(graphs)	299.1	(graphs)		Click here
Norway	Low	Sporadic		Stable	2	50.0%	Type A	25.7	(graphs)		(graphs)		Click here
Poland	Low	None	Low	Decreasing	0	-	None	46.2	(graphs)		(graphs)		Click here
Portugal	Low	None		Stable	0	-	None	0.0	(graphs)		(graphs)		Click here
Republic of Moldova	Low	None	Low	Increasing	1	0%	None		(graphs)	27.1	(graphs)	sari	Click here
Romania	Low	None	Low	Increasing	8	0%	None	1.0	(graphs)	478.3	(graphs)	sari	Click here
Russian Federation	Low	Sporadic	Low	Decreasing	19	10.5%	Type A, Subtype H3	0.2	(graphs)	349.8	(graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	8	0%	Type A	5.9	(graphs)	523.1	(graphs)		Click here
Serbia	Low	None	Low	Stable	0	-	None	19.2	(graphs)		(graphs)	sari	Click here
Slovakia	Medium	Sporadic	Low	Decreasing	2	50.0%	None	93.7	(graphs)	1075.1	(graphs)	sari	Click here
Slovenia					0	-	None		(graphs)				Click here
Spain	Low	Sporadic		Stable	34	23.5%	Type B	7.0	(graphs)		(graphs)		Click here
Sweden	Low	Sporadic	Low	Decreasing	5	0%	Type A	5.7	(graphs)		(graphs)		Click here
Switzerland	Low	None		Stable				1.8	(graphs)		(graphs)		Click here
Turkey					20	0%	None		(graphs)				Click here
Ukraine	Low	None	Low	Increasing	4	25.0%	None	2.7 *	(graphs)	248.7	(graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Decreasing			None		(graphs)	15.0	(graphs)		Click here
Wales	Low	None		Stable	0	-		2.4	(graphs)		(graphs)		Click here
Europe					194	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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity at out-of-season levels in the WHO European Region

Current situation: week 20/2012

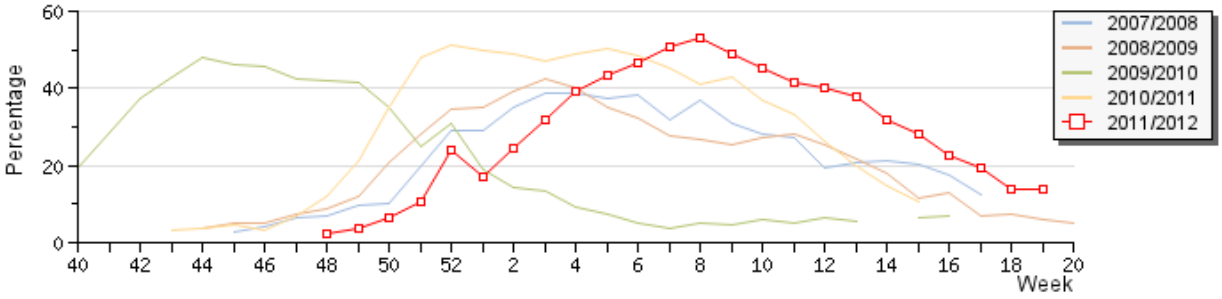
- This issue is based on data for week 20/2012 reported by 41 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are now at low levels in all countries in the Region.
- 4% of sentinel specimens from patients with ILI or ARI, and 2% of specimens from sentinel SARI patients tested positive for influenza this week.
- The number of hospitalizations due to severe acute respiratory infection (SARI) is declining overall.
- No resistance to neuraminidase inhibitors among influenza viruses was detected.
- This is the last weekly EuroFlu bulletin for the 2011/2012 season. The next bulletin will be published on 8 June and will summarize the situation for weeks 21–23/2012.

Outpatient surveillance for ILI and ARI

Among 38 countries reporting data on intensity, 37 reported low intensity with decreasing or stable trends in clinical activity. Slovakia reported medium intensity. Of the 38 countries reporting on the geographical spread of influenza: 20 reported no activity; 17, sporadic or local activity; and 1, regional activity.

During week 20/2012 sentinel outpatient clinics collected 263 respiratory specimens, of which 10 (4%) tested positive for influenza viruses, a decrease from 11% in week 19/2012. Of the positive specimens, 3 were influenza type A and 7 were influenza B (Table 1, Fig. 1). In the 5 countries testing 20 or more sentinel specimens, influenza positivity ranged from 0% to 15%.

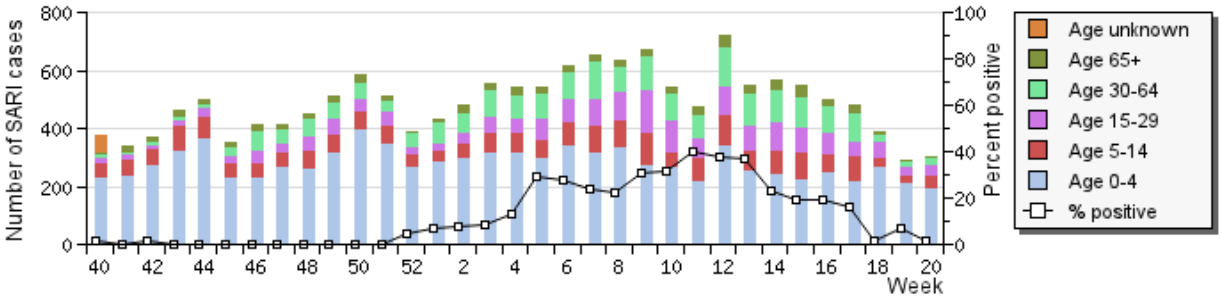
Fig. 1. Percentage of sentinel ILI/ARI specimens tested positive for influenza viruses/season



Hospital surveillance for SARI

7 countries reported data for hospital-based sentinel surveillance of SARI: Belarus, Georgia, Kazakhstan, Kyrgyzstan, Romania, the Russian Federation and Ukraine. 56 respiratory specimens were collected from SARI patients, of which only 1 tested positive for influenza type B. (Fig. 2).

Fig. 2. SARI cases by age group and percentage positive for influenza at sentinel hospitals



Further information on the sentinel SARI surveillance systems represented in the EuroFlu bulletin can be found in "Overview of sentinel SARI systems in EuroFlu".

Virological overview

Influenza virus type and subtype detections

Table 1 provides an overview of the influenza virus detections by type and subtype in **sentinel** ILI/ARI and SARI surveillance for both the current week and the period since week 40/2011.

Table 1. Influenza virus detections in sentinel specimens

Specimens tested and viruses	Current week (number and %)		Cumulative since week 40 (number and %)	
	ILI/ARI	SARI	ILI/ARI	SARI
Specimens tested	263	56	36747	4399
Influenza A + B	10 (3.8%)	1 (1.8%)	10983 (29.9%)	689 (15.7%)
Influenza A	3 (30.0%)	0 (0.0%)	9586 (87.3%)	647 (93.9%)
Influenza B	7 (70.0%)	1 (100.0%)	1397 (12.7%)	42 (6.1%)
Influenza A subtyped	3	0	8645	613
A (H1N1)pdm09	0 (0.0%)	0 (0.0%)	187 (2.2%)	64 (10.4%)
A (H3N2)	3 (100.0%)	0 (0.0%)	8458 (97.8%)	549 (89.6%)
A (H1N1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

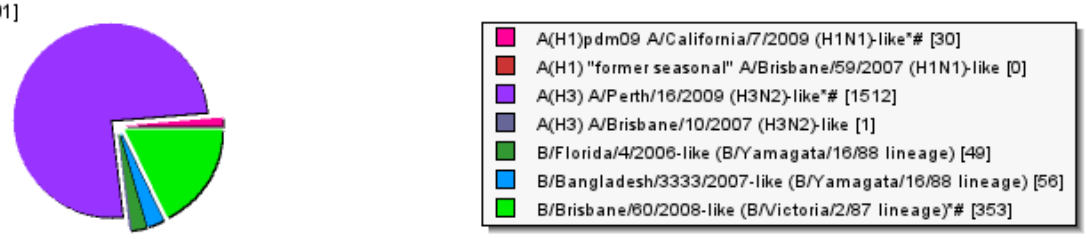
During week 20/2012, 129 specimens from **non-sentinel** sources were reported positive for influenza: 81 (63%) type A and 48 (37%) type B. Of the influenza A viruses, 45 were subtyped, 44 (98%) were A(H3N2) and 1 (2%) was A(H1N1)pdm09.

Since week 40/2011, 43 233 influenza viruses from sentinel and non-sentinel sources have been typed: 39 296 (91%) were influenza A and 3937(9%) were influenza B. Of the influenza A viruses, 21 526 were subtyped: 20 656 (96%) as A (H3N2) and 870 (4%) as A(H1N1)pdm09.

Virus strain characterizations

Influenza viruses are monitored each season for antigenic and genetic characteristics, to determine the extent to which they correspond with the viruses included in the seasonal influenza vaccine as well as the occurrence of mutations that affect pathogenicity or that are associated with susceptibility to antiviral drugs. Since week 40/2011, 19 countries (Austria, the Czech Republic, Denmark, the United Kingdom (England), France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Portugal, Romania, the Russian Federation, Scotland, Slovakia, Slovenia, Sweden, Switzerland) have characterized 2068 influenza viruses antigenically (Fig. 3). 18 countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Norway, Portugal, Romania, the Russian Federation, Scotland, Spain, Sweden, Switzerland) have characterized 1283 influenza viruses genetically (Fig. 4).

Fig. 3. Cumulative virus strain characterizations - antigenic (1)
weeks 40/2011 - 20/2012
[Total N = 2001]



(1) Sentinel and non-sentinel specimens combined

Compiled at 11:47 on May 24 2012

Included in the WHO-recommended composition of influenza virus vaccines for use in the 2011/2012 northern hemisphere influenza season.
* Included in the WHO-recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe, WHO headquarters and European Centre for Disease Prevention and Control web sites.

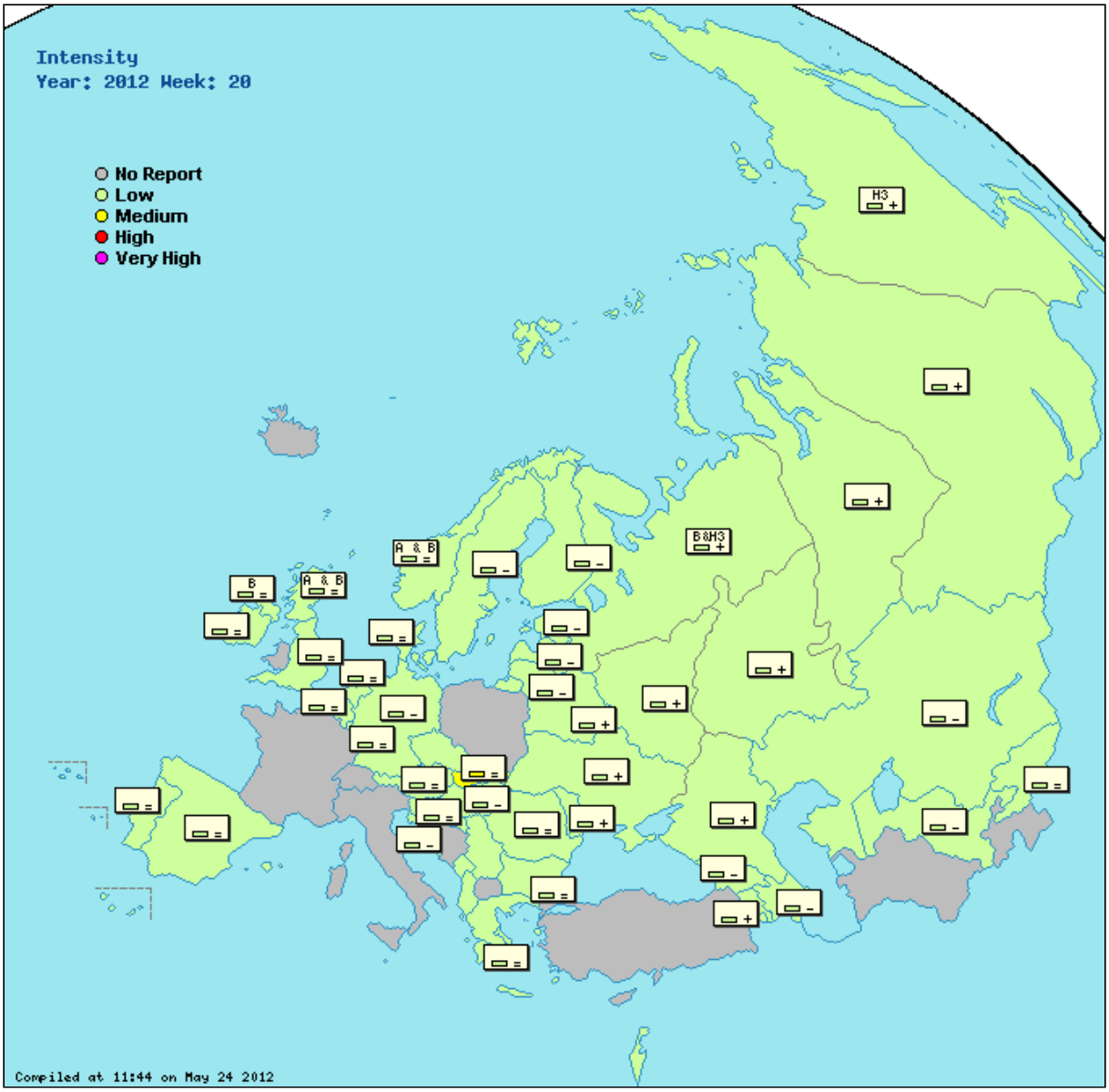
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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	Sentinel SARI	Virology graph and pie chart
Albania	Low	None	Low	Stable					341.0 (graphs)	sari	Click here
Armenia	Low	None	Low	Increasing	1	0%	None	(graphs)	62.2 (graphs)	sari	Click here
Austria	Low	None	Low	Stable	0	-	None	0.0 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Decreasing	0	-	None	167.6 (graphs)	(graphs)		Click here
Belarus	Low	Sporadic	Low	Increasing	36	0%	None	5.8 (graphs)	717.0 (graphs)	sari	Click here
Belgium	Low	Sporadic		Stable	1	0%		25.2 (graphs)	1480.2 (graphs)	sari	Click here
Bosnia and Herzegovina					1	0%	None	(graphs)			Click here
Bulgaria	Low	None		Stable	0	-	None	(graphs)	436.0 (graphs)		Click here
Croatia	Low	Local	Low	Decreasing			None	0.6 (graphs)	(graphs)		Click here

Czech Republic	Low	Sporadic		Stable				13.8 (graphs)	614.9 (graphs)		Click here
Denmark	Low	None		Stable	1	0%	None	11.9 (graphs)	(graphs)		Click here
England	Low	Sporadic		Stable	21	4.8%	None	7.3 (graphs)	380.0 (graphs)		Click here
Estonia	Low	Sporadic		Decreasing	3	0%	None	2.6 (graphs)	168.9 (graphs)		Click here
Finland	Low	Sporadic	Low	Decreasing	17	5.9%	None	0.0 (graphs)	(graphs)		Click here
Georgia	Low	None	Low	Decreasing	14	0%	None	253.2 (graphs)	(graphs)	sari	Click here
Germany	Low	Sporadic		Decreasing	12	0%	None	(graphs)	519.3 (graphs)		Click here
Greece	Low	Sporadic		Stable	2	0%		24.7 (graphs)	(graphs)		Click here
Hungary	Low	None	Low	Decreasing	5	0%	None	9.3 (graphs)	(graphs)		Click here
Ireland	Low	None	Low	Stable	1	0%	None	4.5 (graphs)	(graphs)		Click here
Israel	Low	None	Low	Decreasing				2.2 (graphs)			Click here
Kazakhstan	Low	None	Low	Decreasing	5	0%	None	77.6 (graphs)	71.8 (graphs)	sari	Click here
Kyrgyzstan	Low	None	Low	Stable	7	0%	None	6.0 (graphs)	33.5 (graphs)	sari	Click here
Latvia	Low	Sporadic		Decreasing	0	-	None	0.0 (graphs)	676.5 (graphs)		Click here
Lithuania	Low	Sporadic	Low	Decreasing	0	-	None	0.4 (graphs)	345.9 (graphs)		Click here
Luxembourg	Low	None			2	0%	None	0.4 * (graphs)	16.0 * (graphs)		Click here
Montenegro	Low	Sporadic	Low	Decreasing				1.0 (graphs)	(graphs)		Click here
Netherlands	Low	Regional		Stable	2	50.0%	None	24.6 (graphs)	(graphs)		Click here
Northern Ireland	Low	Sporadic		Stable	3	0%	Type B	9.6 (graphs)	320.3 (graphs)		Click here
Norway	Low	Sporadic		Stable	2	50.0%	Type A and B	15.5 (graphs)	(graphs)		Click here
Portugal	Low	None		Stable	0	-	None	0.0 (graphs)	(graphs)		Click here
Republic of Moldova	Low	None	Low	Increasing	3	0%	None	(graphs)	29.5 (graphs)	sari	Click here
Romania	Low	None	Low	Stable	8	0%	None	1.0 (graphs)	495.1 (graphs)	sari	Click here
Russian Federation	Low	Sporadic		Increasing	36	5.6%	Type A, Subtype H3	0.2 (graphs)	397.4 (graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	10	0%	Type A and B	6.2 (graphs)	458.7 (graphs)		Click here
Serbia	Low	None	Low	Stable				20.5 (graphs)	(graphs)	sari	Click here
Slovakia	Medium	Sporadic	Low	Stable	0	-	None	94.4 (graphs)	1097.4 (graphs)	sari	Click here
Slovenia	Low	None		Stable	1	0%	None	0.0 (graphs)	476.7 (graphs)		Click here
Spain	Low	Sporadic		Stable	26	15.4%	None	5.9 (graphs)	(graphs)		Click here
Sweden	Low	Sporadic	Low	Decreasing	2	0%	None	0.9 (graphs)	(graphs)		Click here
Tajikistan					0	-	None	0.0 (graphs)	19.9 (graphs)		Click here
Turkey					38	0%	None	(graphs)			Click here
Ukraine	Low	None	Low	Increasing	3	0%	None	2.4 * (graphs)	279.7 (graphs)	sari	Click here
Uzbekistan	Low	None	Low	Decreasing			None	(graphs)	15.0 (graphs)		Click here
Europe					263	3.8%					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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity in Europe is at out-of-season levels

Until week 40/2012, the EuroFlu bulletin will be published biweekly.

- This is the first summer report, based on data from weeks 21–22/2012, reported in week 22/2012 by 35 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are now at low levels in all countries in the Region.
- Only 2 of the 108 specimens (1.9%) collected from sentinel sources tested positive for influenza.

Outpatient surveillance for ILI and ARI

Among 27 countries reporting data on intensity, all reported low intensity, with decreasing or stable trends in clinical activity overall. Of the 27 countries reporting on the geographical spread of influenza, 21 reported no activity and 6 reported sporadic activity.

During week 22/2012, sentinel outpatient clinics collected 108 respiratory specimens, of which 2 (1.9%) tested positive for influenza viruses. Of the positive specimens, 1 was influenza type A(H3N2) and 1 was influenza B.

Hospital surveillance for SARI

8 countries reported data for hospital-based sentinel surveillance of SARI in weeks 21–22/2012: Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, the Russian Federation and Ukraine. 59 respiratory specimens were collected from SARI patients, of which 2 tested positive for influenza: 1 A(H3N2) and 1 B.

Virological overview

Specimens from non-sentinel sources yielded 56 influenza detections in week 22/2012: 31 type A (19 A/H3 and 12 A unsubtyped) and 25 influenza B.

Since week 21/2012, a total of 158 influenza virus detections was reported: 93 were influenza A (59%) and 65 (41%) were influenza B. Of the influenza A viruses, 61 (65%) were subtyped, with 1 being A(H1N1)pdm09 and 60 A(H3).

Comment

Influenza activity is at out-of-season levels throughout the European Region. 1.9% of the samples collected from sentinel sources was positive for influenza virus. From non-sentinel sources, 56 samples were influenza-positive, indicating low influenza activity in the Region.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe and WHO headquarters web sites.

Erratum: For Slovakia, the intensity and geographic spread indicator presented in the table and the map are incorrect. Correct indicators are low intensity and no activity.

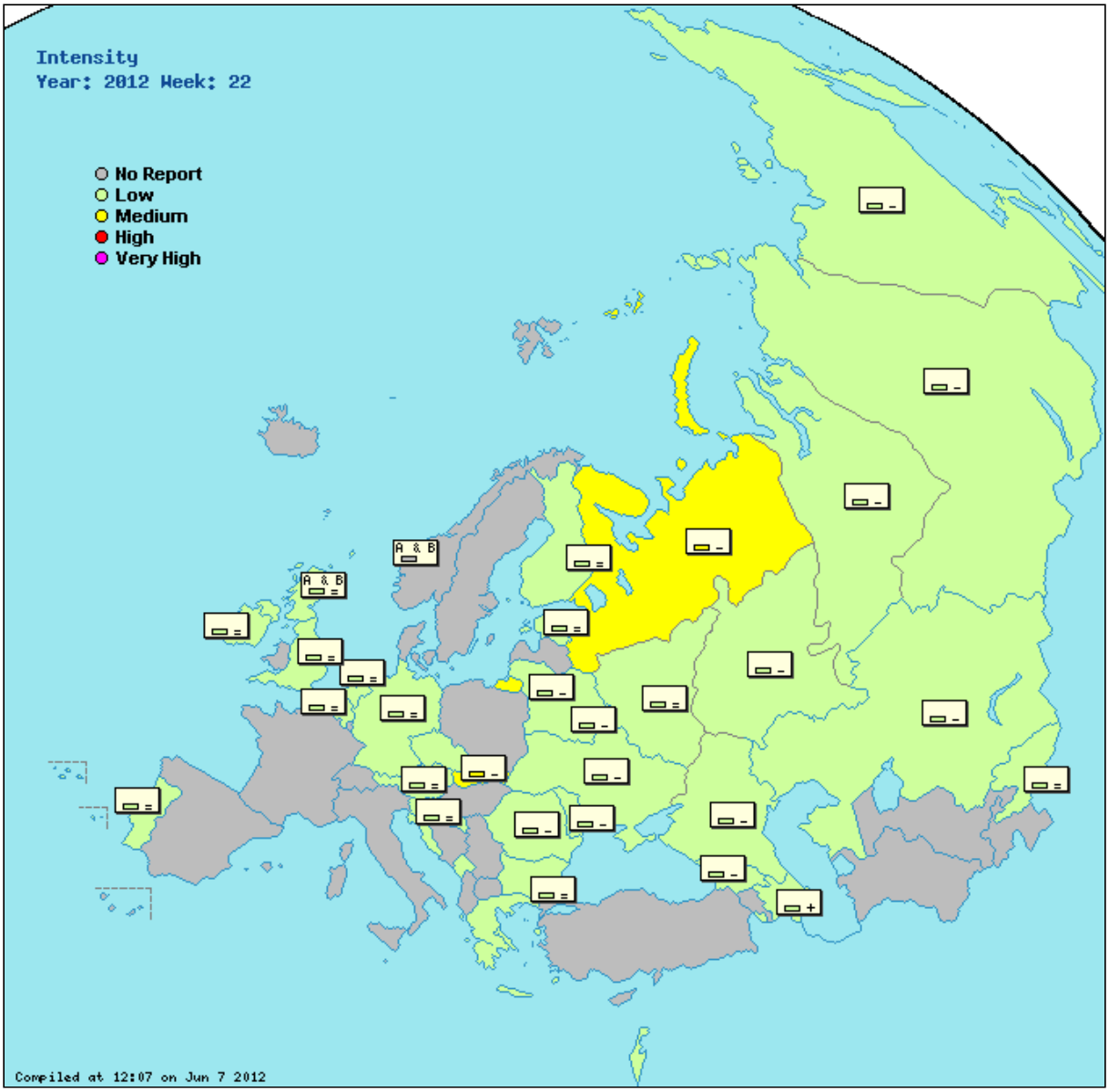
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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	Sentinel SARI	Virology graph and pie chart
Armenia					0	-	None		(graphs)	sari	Click here
Austria	Low	None	Low	Stable	0	-	None	0.0 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Increasing	0	-	None	146.5 (graphs)	(graphs)		Click here
Belarus	Low	None	Low	Decreasing	23	0%	None	0.8 (graphs)	633.6 (graphs)	sari	Click here
Belgium	Low	None		Stable	1	0%	None	22.4 (graphs)	1121.9 (graphs)	sari	Click here
Bosnia and Herzegovina					1	100.0%	None	(graphs)			Click here
Bulgaria	Low	None		Stable	0	-	None	(graphs)	387.1 (graphs)		Click here
Croatia	Low		Low	Decreasing				0.1 (graphs)	(graphs)		Click here
Czech Republic	Low	None		Stable				12.6 (graphs)	585.3 (graphs)		Click here

Denmark					0	-	None		(graphs)				Click here
England	Low	Sporadic		Stable	6	0%	None	3.5	(graphs)	380.9	(graphs)		Click here
Estonia	Low	Sporadic		Stable	1	0%	None	2.5	(graphs)	178.7	(graphs)		Click here
Finland	Low	None	Low	Stable	11	0%	None	0.0	(graphs)		(graphs)		Click here
Georgia	Low	None	Low	Decreasing	9	0%	None	207.6	(graphs)		(graphs)	sari	Click here
Germany	Low	None		Stable	4	0%	None		(graphs)	432.0	(graphs)		Click here
Greece	Low	None		Stable				40.3	(graphs)		(graphs)		Click here
Ireland	Low	None	Low	Stable	0	-	None	0.0	(graphs)		(graphs)		Click here
Israel	Low	None	Low	Decreasing				1.4	(graphs)				Click here
Kazakhstan	Low	None	Low	Decreasing	11	0%	None	65.9	(graphs)	50.6	(graphs)	sari	Click here
Kyrgyzstan	Low	None	Low	Stable			None		(graphs)	32.8	(graphs)	sari	Click here
Latvia					0	-	None		(graphs)				Click here
Lithuania	Low	Sporadic	Low	Decreasing	0	-	None	0.2	(graphs)	268.7	(graphs)		Click here
Montenegro	Low	None	Low	Decreasing				0.2	(graphs)		(graphs)		Click here
Netherlands	Low	Sporadic		Stable	0	-	None	12.2	(graphs)		(graphs)		Click here
Northern Ireland	Low	Sporadic		Decreasing				6.0	(graphs)	305.2	(graphs)		Click here
Norway		Sporadic			0	-	Type A and B	0.0	(graphs)		(graphs)		Click here
Portugal	Low	None		Stable	0	-	None	0.0	(graphs)		(graphs)		Click here
Republic of Moldova	Low	None	Low	Decreasing	0	-	None		(graphs)	22.2	(graphs)	sari	Click here
Romania	Low	None	Low	Decreasing	1	0%	None	0.2	(graphs)	494.4	(graphs)	sari	Click here
Russian Federation	Low	Sporadic		Decreasing	37	2.7%	Type A, Subtype H3	0.1	(graphs)	359.3	(graphs)	sari	Click here
Scotland	Low	Sporadic	Low	Stable	0	-	Type A and B	5.2	(graphs)	388.0	(graphs)		Click here
Slovakia	Medium	Sporadic	Low	Decreasing	0	-	None	80.2	(graphs)	1026.8	(graphs)	sari	Click here
Slovenia	Low	None		Stable	0	-	None	0.0	(graphs)	669.5	(graphs)		Click here
Spain					0	-	None		(graphs)				Click here
Turkey					1	0%	None		(graphs)				Click here
Ukraine	Low	None	Low	Decreasing	2	0%	None	2.1 *	(graphs)	266.8	(graphs)	sari	Click here
Uzbekistan							None				(graphs)		Click here
Europe					108	1.9%							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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity in Europe is at out-of-season levels

Until week 40/2012, the EuroFlu bulletin will be published fortnightly.

- This issue is based on data reported in week 24/2012 by 32 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are now at low levels in all countries in the Region.
- Only 1 of the 98 specimens (1.0%) collected from sentinel sources tested positive for influenza (type B).

Outpatient surveillance for ILI and ARI

All 22 countries reporting data on intensity reported low intensity, with decreasing or stable trends in clinical activity overall. Of the 22 countries reporting on the geographical spread of influenza, 21 reported no activity and 1 reported sporadic activity.

During week 24/2012, sentinel outpatient clinics collected 98 respiratory specimens, of which 1 (1.0%) tested positive for influenza B virus.

Hospital surveillance for SARI

4 countries reported data for hospital-based sentinel surveillance of SARI in weeks 23&#65533;24/2012: Belarus, Kazakhstan, Kyrgyzstan and the Russian Federation. 40 respiratory specimens were collected from SARI patients, all of which tested negative for influenza.

Virological overview

Specimens from non-sentinel sources yielded 39 influenza detections in week 24/2012: 9 type A unsubtyped and 30 influenza B.

Since week 21/2012, a total of 274 influenza virus detections was reported: 133 were influenza A (49%) and 141 (51%) were influenza B. Of the influenza A viruses, 80 (60%) were subtyped, with 3 being A(H1N1)pdm09 and 77 A(H3).

Comment

Influenza activity is at out-of-season levels throughout the European Region. Only 1 of 98 (1.0%) samples collected from sentinel sources was positive for influenza virus. From non-sentinel sources, 39 samples were influenza-positive, indicating low influenza activity in the Region.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe and WHO headquarters web sites.

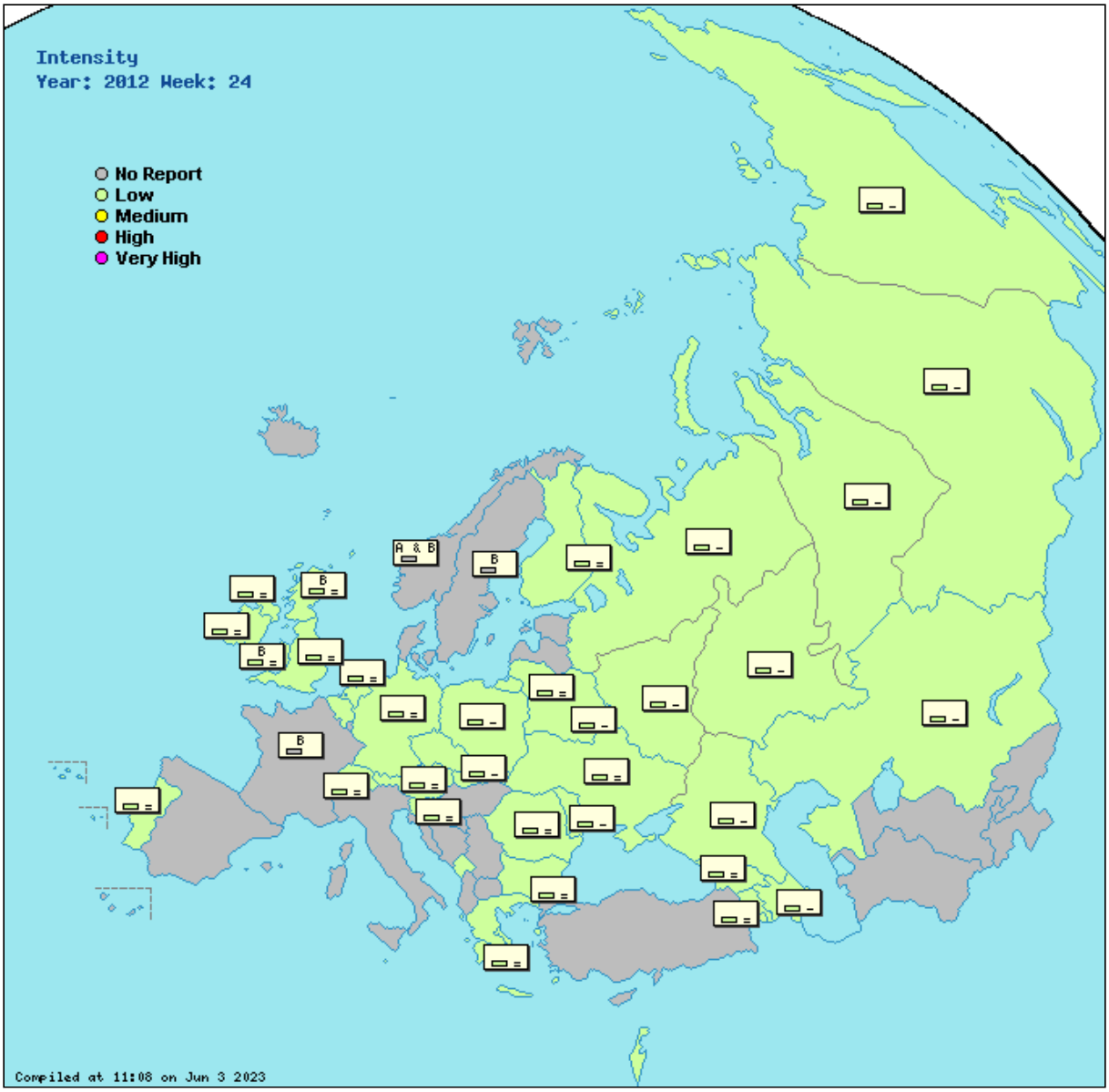
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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)

Netherlands
'In an A(H3N2) virus detected in a specimen collected in April 2012, an I222V substitution in the N2 was detected. I222V has previously been associated with slightly reduced susceptibility for neuraminidase inhibitors. However, in combination with E119V it has a synergistic effect on the resistance level against oseltamivir. Furthermore, it has a compensatory role in the replication of A(H3N2) viruses with the E119V substitution in N2. The patient presented with common cold, was vaccinated, not immunocompromised, and not exposed to antivirals, either through therapy or exposure to treated household contacts. Further characterisation of the virus is under way.'

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Armenia	Low	None	Low	Stable	0	-	None	(graphs)	60.8 (graphs)	sari	Click here
Austria	Low	None	Low	Stable	0	-	None	0.0 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Decreasing	0	-	None	135.9 (graphs)	(graphs)		Click here
Belarus					24	0%	None		(graphs)	sari	Click here

Belgium	Low	None		Stable				25.9 (graphs)	1264.2 (graphs)	sari	Click here
Bulgaria	Low	None		Stable	0	-	None	(graphs)	347.4 (graphs)		Click here
Croatia								0.0 (graphs)	(graphs)		Click here
Denmark					0	-	None	(graphs)			Click here
England					6	0%	None	(graphs)			Click here
Estonia					0	-	None	(graphs)			Click here
Finland	Low	None	Low	Stable	14	0%	None	0.0 (graphs)	(graphs)		Click here
Georgia	Low	None	Low	Stable			None	254.2 (graphs)	(graphs)	sari	Click here
Germany	Low	None		Stable	7	0%	None	(graphs)	573.6 (graphs)		Click here
Ireland	Low	None	Low	Stable	2	0%	None	2.3 (graphs)	(graphs)		Click here
Israel	Low	None	Low	Stable				1.6 (graphs)			Click here
Kazakhstan					3	0%	None		(graphs)	sari	Click here
Kyrgyzstan					8	0%	None		(graphs)	sari	Click here
Latvia					0	-	None	(graphs)			Click here
Lithuania	Low	None	Low	Stable	0	-	None	(graphs)			Click here
Montenegro	Low	None	Low	Stable				0.3 (graphs)	(graphs)		Click here
Netherlands					4	25.0%	None	(graphs)			Click here
Northern Ireland	Low	None		Stable	0	-		6.0 (graphs)	279.0 (graphs)		Click here
Portugal	Low	None		Stable	0	-	None	0.0 (graphs)	(graphs)		Click here
Republic of Moldova	Low	None	Low	Decreasing			None	(graphs)	26.0 (graphs)	sari	Click here
Romania	Low	None	Low	Stable	1	0%	None	0.2 (graphs)	435.3 (graphs)	sari	Click here
Russian Federation	Low	Sporadic		Decreasing	28	0%	None	(graphs)	234.0 (graphs)	sari	Click here
Slovakia	Low	None	Low	Decreasing	0	-	None	69.4 (graphs)	920.3 (graphs)	sari	Click here
Slovenia	Low	None		Stable	0	-	None	0.0 (graphs)	459.3 (graphs)		Click here
Spain					1	0%	None	(graphs)			Click here
Switzerland	Low	None		Stable				1.8 (graphs)	(graphs)		Click here
Turkey					1	0%	None	(graphs)			Click here
Ukraine	Low	None	Low	Stable				0 * (graphs)	215.7 (graphs)	sari	Click here
Uzbekistan							None		(graphs)		Click here
Europe					99	1.0%					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

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Influenza activity in Europe at out-of-season levels

Until week 40/2012, the EuroFlu bulletin will be published fortnightly.

- This issue is based on data reported in week 26/2012 by 27 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are now at low levels in all countries in the Region.
- Only 1 of the 73 specimens (1.4%) collected from sentinel sources tested positive for influenza (type B).

Outpatient surveillance for ILI and ARI

All 19 countries reporting data on intensity reported low intensity, with decreasing or stable trends in clinical activity overall. Of the 19 countries reporting on the geographical spread of influenza, 16 reported no activity and 3 reported sporadic activity.

During week 26/2012, sentinel outpatient clinics collected 73 respiratory specimens, of which 1 (1.4%) tested positive for influenza B virus.

Hospital surveillance for severe acute respiratory infection (SARI)

5 countries reported data for hospital-based sentinel surveillance of SARI in week 26/2012: Belarus, Kazakhstan, Kyrgyzstan, the Russian Federation and Ukraine. 37 respiratory specimens were collected from SARI patients, all of which tested negative for influenza.

Virological overview

Specimens from non-sentinel sources yielded 17 influenza detections in week 26/2012: 1 type A unsubtyped, 1 A(H1N1)pdm09 and 15 influenza B.

Since week 21/2012, a total of 360 influenza virus detections was reported: 166 were influenza A (46%) and 194 (54%) were influenza B. Of the influenza A viruses, 99 (60%) were subtyped, with 4 being A(H1N1)pdm09 and 95 A(H3N2).

Comment

Influenza activity is at out-of-season levels throughout the European Region. Only 1 of 73 (1.4%) samples collected from sentinel sources was positive for influenza virus. From non-sentinel sources, 17 samples were influenza-positive, indicating low influenza activity in the Region.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe and WHO headquarters web sites.

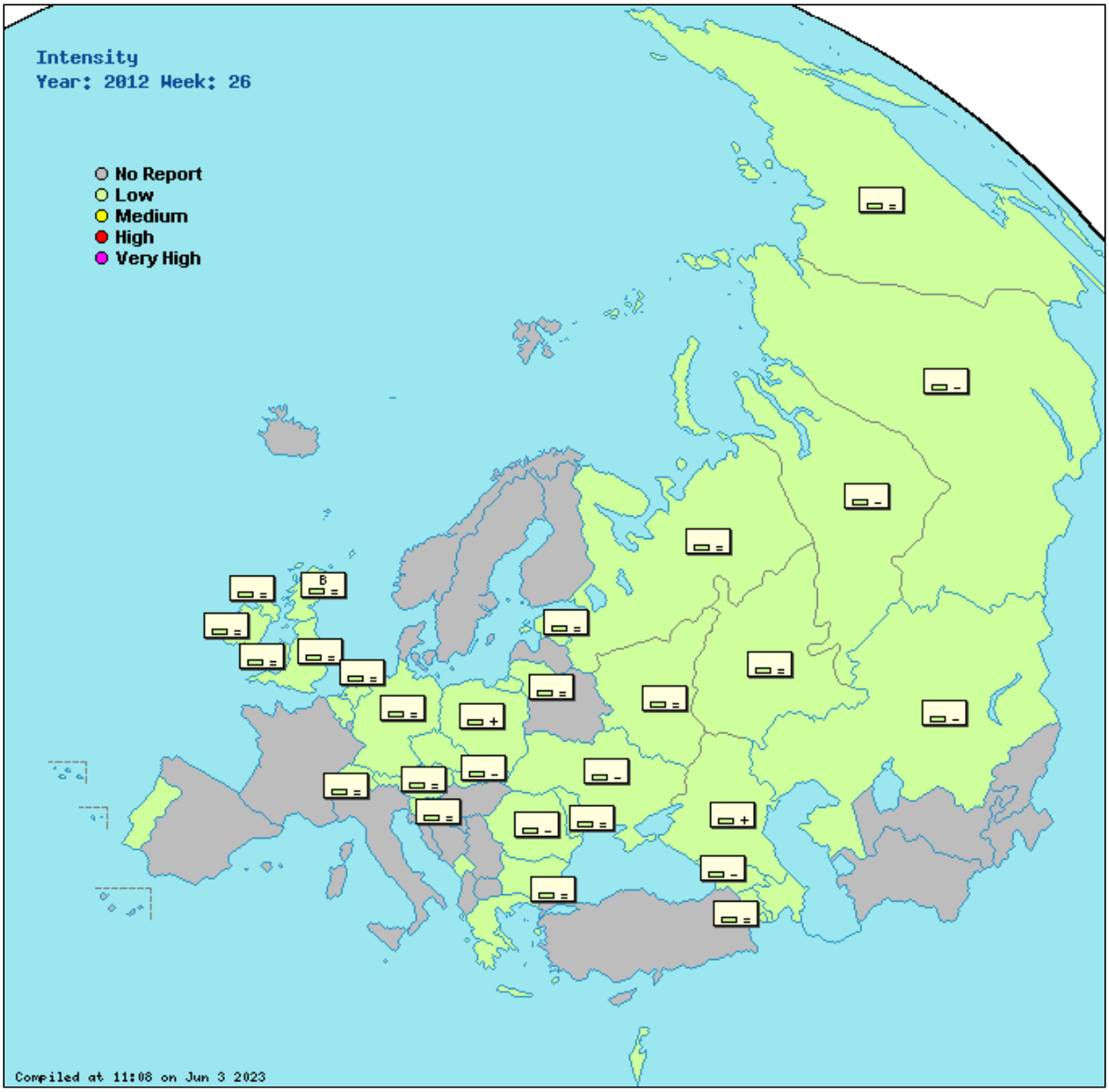
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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)

Spain

During the weeks 21-39/2012 only the virological influenza surveillance will be active in Spain. Although qualitative activity indicators (intensity level and geographic spread) are not provided by sentinel sites. Weekly virological influenza detections mainly from non sentinel sources are being notified

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Armenia					0	-	None		(graphs)	sari	Click here
Austria	Low	None	Low	Stable	0	-	None	0.0 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Increasing				175.2 (graphs)	(graphs)		Click here
Belarus					15	0%	None	4.3 (graphs)	471.4 (graphs)	sari	Click here
Bulgaria	Low	None		Stable	0	-	None	(graphs)	234.3 (graphs)		Click here
Denmark					0	-	None	(graphs)			Click here
England	Low	Sporadic		Stable	2	0%	None	2.2 (graphs)	344.8 (graphs)		Click here

Estonia	Low	None		Stable	2	0%	None	1.6 (graphs)	104.4 (graphs)			Click here
Georgia	Low	None	Low	Decreasing	8	0%	None	179.8 (graphs)	(graphs)	sari		Click here
Germany	Low	None		Stable	4	0%	None	(graphs)	538.8 (graphs)			Click here
Greece	Low	None		Stable				5.4 (graphs)	(graphs)			Click here
Ireland	Low	None	Low	Stable	1	100.0%	None	1.9 (graphs)	(graphs)			Click here
Israel	Low	None	Low	Stable				1.0 (graphs)				Click here
Kazakhstan	Low	None	Low	Stable	3	0%	None	50.9 (graphs)	21.6 (graphs)	sari		Click here
Kyrgyzstan					5	0%	None		(graphs)	sari		Click here
Lithuania	Low	None	Low	Stable	0	-	None	0.1 (graphs)	158.8 (graphs)			Click here
Montenegro	Low	None	Low	Stable				0.3 (graphs)	(graphs)			Click here
Netherlands					1	0%	None	(graphs)				Click here
Northern Ireland	Low	None		Stable				8.1 (graphs)	290.6 (graphs)			Click here
Portugal	Low	None		Stable				0.0 (graphs)	(graphs)			Click here
Republic of Moldova	Low	Sporadic	Low	Stable			None	(graphs)	22.3 (graphs)	sari		Click here
Romania	Low	None	Low	Decreasing	0	-	None	0.0 (graphs)	390.2 (graphs)	sari		Click here
Russian Federation	Low	Sporadic		Stable	29	0%	None	(graphs)	247.3 (graphs)	sari		Click here
Scotland	Low	Sporadic	Low	Stable	0	-	Type B	5.7 (graphs)	361.2 (graphs)			Click here
Slovakia	Low	None	Low	Decreasing	0	-		61.6 (graphs)	799.8 (graphs)	sari		Click here
Slovenia					0	-	None	(graphs)				Click here
Spain					0	-		(graphs)				Click here
Turkey					0	-	None	(graphs)				Click here
Ukraine	Low	None	Low	Decreasing	3	0%	None	2.1 * (graphs)	148.5 (graphs)	sari		Click here
Uzbekistan							None	(graphs)	11.7 (graphs)			Click here
Europe					73	1.4%						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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Influenza activity in Europe at out-of-season levels

Until week 40/2012, the EuroFlu bulletin will be published fortnightly.

- This issue is based on data reported in week 28/2012 by 29 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are now at low levels in all countries in the Region.
- None of the 32 specimens collected from sentinel sources tested positive for influenza virus.

Outpatient surveillance for ILI and ARI

All 23 countries reporting data on intensity reported low intensity, with decreasing or stable trends in clinical activity overall. All 23 countries reporting on the geographical spread of influenza reported no activity.

During week 28/2012, sentinel outpatient clinics collected 32 respiratory specimens, none of which tested positive for influenza virus.

Hospital surveillance for severe acute respiratory infection (SARI)

2 countries reported data for hospital-based sentinel surveillance of SARI in week 28/2012: Georgia and Kazakhstan. 7 respiratory specimens were collected from SARI patients, all of which tested negative for influenza.

Virological overview

Specimens from non-sentinel sources yielded 7 influenza detections in week 28/2012: 3 type A unsubtyped and 4 influenza B.

Since week 21/2012, a total of 405 influenza virus detections was reported: 191 influenza A (47%) and 214 (53%) influenza B. Of the influenza A viruses, 106 (55%) were subtyped: 5 were A(H1N1)pdm09 and 101 A(H3N2).

Comment

Influenza activity is at out-of-season levels throughout the European Region. None of the 32 samples collected from sentinel sources was positive for influenza virus. 7 samples from non-sentinel sources were influenza positive, indicating low influenza activity in the Region.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe and WHO headquarters web sites.

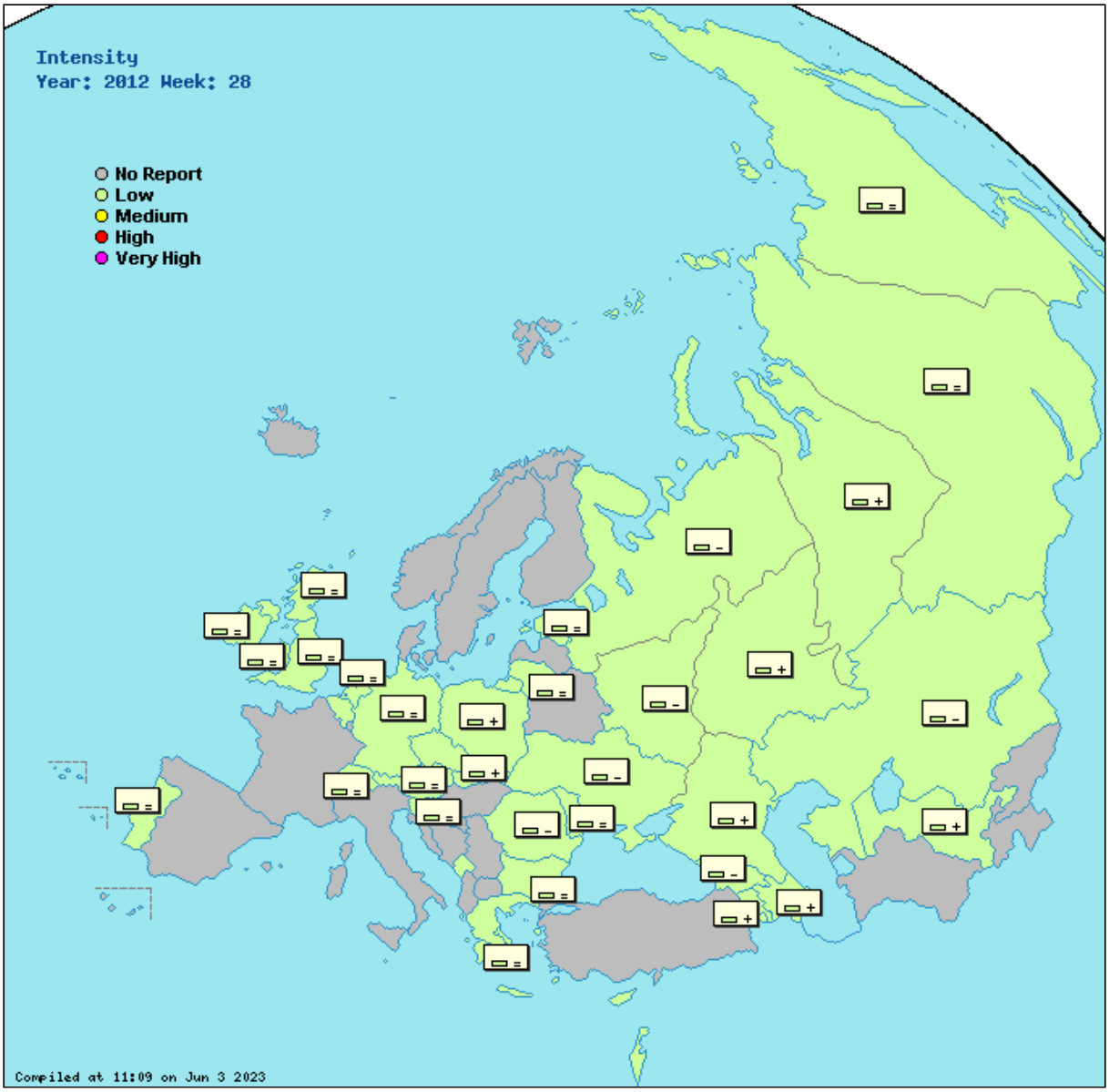
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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)

Spain

During the weeks 21-39/2012 only the virological influenza surveillance will be active in Spain. Although qualitative activity indicators (intensity level and geographic spread) are not provided by sentinel sites. Weekly virological influenza detections mainly from non sentinel sources are being notified

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Armenia					0	-	None		(graphs)	sari	Click here
Austria	Low	None	Low	Stable	0	-	None	0.0 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Increasing	3	0%	None	158.3 (graphs)	(graphs)		Click here
Belgium	Low	None		Stable				27.5 (graphs)	971.3 (graphs)	sari	Click here
Bosnia and Herzegovina					0	-	None	(graphs)			Click here
Bulgaria	Low	None		Stable	0	-	None	(graphs)	256.9 (graphs)		Click here

England	Low	None		Stable	9	0%	None	4.0 (graphs)	307.7 (graphs)		Click here
Estonia	Low	None		Stable				1.3 (graphs)	67.1 (graphs)		Click here
Georgia	Low	None	Low	Decreasing	10	0%	None	181.6 (graphs)	(graphs)	sari	Click here
Germany	Low	None		Stable				(graphs)	554.4 (graphs)		Click here
Greece	Low	None		Stable	0	-	None	11.6 (graphs)	(graphs)		Click here
Ireland	Low	None	Low	Stable	1	0%	None	1.8 (graphs)	(graphs)		Click here
Israel	Low	None	Low	Stable				1.0 (graphs)			Click here
Kazakhstan	Low	None	Low	Decreasing	0	-	None	45.9 (graphs)	11.8 (graphs)	sari	Click here
Kyrgyzstan					2	0%	None		(graphs)	sari	Click here
Latvia					0	-	None	(graphs)			Click here
Lithuania	Low	None	Low	Stable	0	-	None	0.1 (graphs)	140.2 (graphs)		Click here
Montenegro	Low	None	Low	Stable				0.0 (graphs)	(graphs)		Click here
Netherlands	Low	None		Stable	2	0%	None	15.1 (graphs)	(graphs)		Click here
Northern Ireland	Low	None		Stable				3.3 (graphs)	176.9 (graphs)		Click here
Portugal	Low	None		Stable	0	-	None	0.0 (graphs)	(graphs)		Click here
Republic of Moldova	Low	None	Low	Stable	0	-	None	(graphs)	17.6 (graphs)	sari	Click here
Romania	Low	None	Low	Decreasing	0	-	None	0.0 (graphs)	296.4 (graphs)	sari	Click here
Russian Federation	Low	None		Stable				(graphs)	210.9 (graphs)	sari	Click here
Scotland	Low	None	Low	Stable	0	-	None	4.1 (graphs)	319.0 (graphs)		Click here
Slovakia	Low	None	Low	Increasing	0	-	None	40.7 (graphs)	594.0 (graphs)	sari	Click here
Slovenia	Low	None		Stable	0	-	None	0.0 (graphs)	567.2 (graphs)		Click here
Spain					0	-	None	(graphs)			Click here
Turkey					0	-	None	(graphs)			Click here
Ukraine	Low	None	Low	Decreasing				0 * (graphs)	162.1 (graphs)	sari	Click here
Uzbekistan	Low	None	Low	Increasing			None	(graphs)	12.9 (graphs)		Click here
Europe					27	-					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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity in Europe at out-of-season levels

Until week 40/2012, the EuroFlu bulletin will be published fortnightly.

- This issue is based on data reported in week 30/2012 by 29 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are now at low levels in all countries in the Region.
- None of the 26 specimens collected from sentinel sources tested positive for influenza virus.

Outpatient surveillance for ILI and ARI

All 22 countries reporting data on intensity reported low intensity, with decreasing or stable trends in clinical activity overall. All 22 countries reporting on the geographical spread of influenza reported no activity.

During week 30/2012, sentinel outpatient clinics collected 26 respiratory specimens, none of which tested positive for influenza virus.

Hospital surveillance for severe acute respiratory infection (SARI)

3 countries reported data for hospital-based sentinel surveillance of SARI in week 30/2012: Georgia, Kazakhstan and Kyrgyzstan. 7 respiratory specimens were collected from SARI patients, all of which tested negative for influenza.

Virological overview

Specimens from non-sentinel sources yielded 6 influenza detections in week 30/2012: 3 type A unsubtyped and 3 influenza B.

Since week 21/2012, 427 influenza virus detections were reported: 199 influenza A (47%) and 228 (53%) influenza B. Of the influenza A viruses, 107 (54%) were subtyped: 5 were A(H1N1)pdm09 and 102 A(H3N2).

Comment

Influenza activity is at out-of-season levels throughout the European Region. None of the 26 samples collected from sentinel sources was positive for influenza virus. 6 samples from non-sentinel sources were influenza positive, indicating low influenza activity in the Region.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe and WHO headquarters web sites.

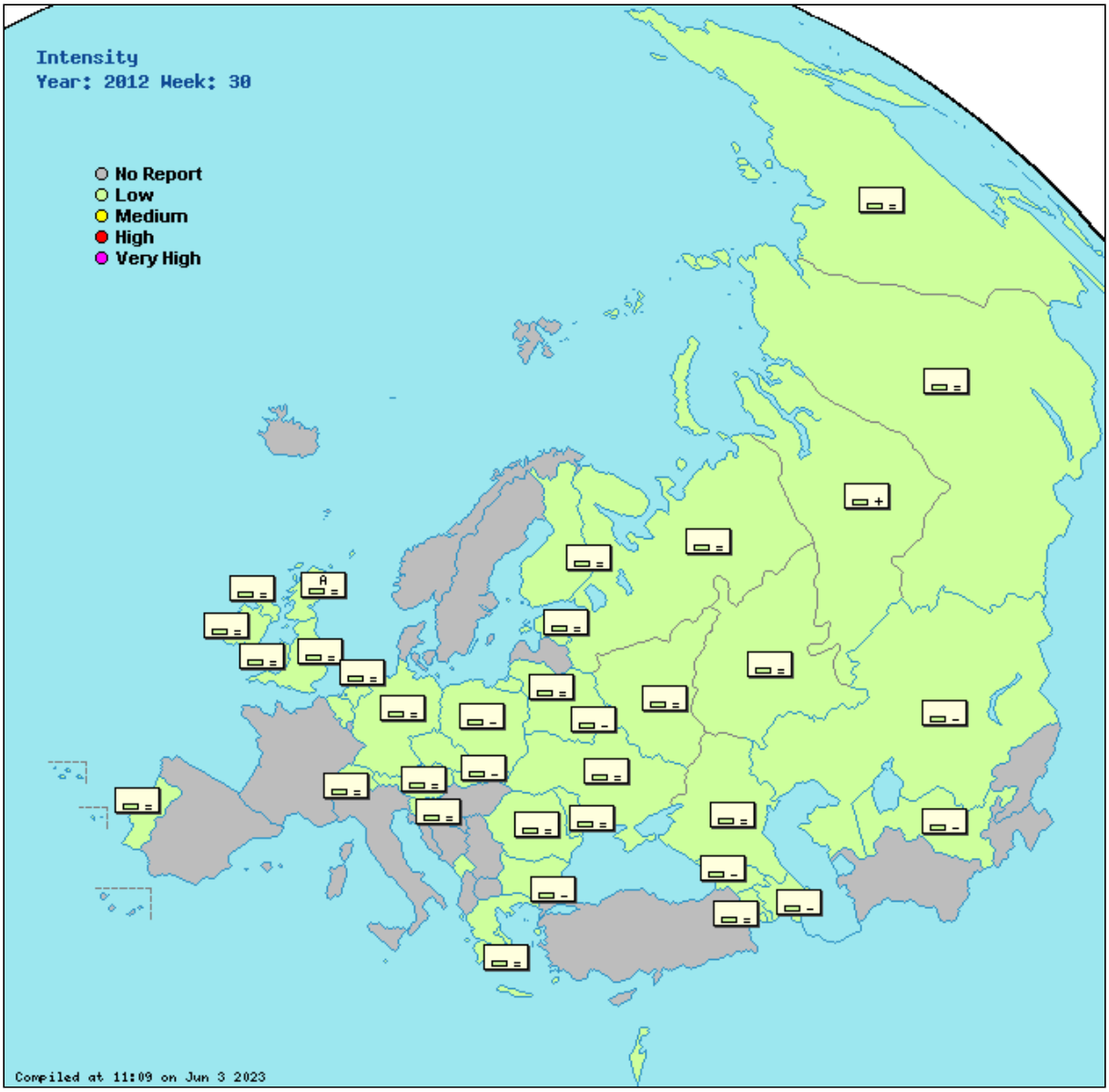
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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)

Spain

During the weeks 21-39/2012 only the virological influenza surveillance will be active in Spain. Although qualitative activity indicators (intensity level and geographic spread) are not provided by sentinel sites. Weekly virological influenza detections mainly from non sentinel sources are being notified

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Armenia	Low	None	Low	Stable	0	-	None	(graphs)	41.7 (graphs)	sari	Click here
Azerbaijan	Low	None	Low	Decreasing	3	0%	None	117.4 (graphs)	(graphs)		Click here
Belarus	Low	None	Low	Decreasing				3.0 (graphs)	346.3 (graphs)	sari	Click here
Belgium	Low	None		Stable				31.1 (graphs)	661.9 (graphs)	sari	Click here
Bosnia and Herzegovina					0	-	None	(graphs)			Click here
Bulgaria	Low	None		Decreasing	0	-	None	(graphs)	225.9 (graphs)		Click here

Denmark					0	-	None	(graphs)				Click here
England	Low	None		Stable	1	0%	None	3.4 (graphs)	276.0 (graphs)			Click here
Estonia	Low	None		Stable				0.8 (graphs)	52.1 (graphs)			Click here
Finland	Low	None	Low	Stable	8	0%	None	0.0 (graphs)	(graphs)			Click here
Georgia	Low	None	Low	Decreasing	6	0%	None	91.8 (graphs)	(graphs)		sari	Click here
Germany	Low	None		Stable	3	0%	None	(graphs)	516.8 (graphs)			Click here
Greece	Low	None		Stable				23.5 (graphs)	(graphs)			Click here
Ireland	Low	None	Low	Stable	0	-	None	1.8 (graphs)	(graphs)			Click here
Israel	Low	None	Low	Stable				0.9 (graphs)				Click here
Kazakhstan	Low	None	Low	Decreasing	0	-	None	47.4 (graphs)	13.8 (graphs)		sari	Click here
Kyrgyzstan					1	0%	None		(graphs)		sari	Click here
Lithuania	Low	None	Low	Stable	0	-	None	0.0 (graphs)	106.2 (graphs)			Click here
Montenegro	Low	None	Low	Stable				0.0 (graphs)	(graphs)			Click here
Netherlands					3	0%	None	(graphs)				Click here
Northern Ireland	Low	None		Stable	0	-		5.5 (graphs)	207.0 (graphs)			Click here
Portugal	Low	None		Stable	0	-	None	0.0 (graphs)	(graphs)			Click here
Republic of Moldova	Low	None	Low	Stable	0	-	None	(graphs)	21.1 (graphs)		sari	Click here
Romania	Low	None	Low	Stable	0	-	None	0.0 (graphs)	296.5 (graphs)		sari	Click here
Russian Federation	Low	None	Low	Stable				(graphs)	218.7 (graphs)		sari	Click here
Scotland	Low	Sporadic	Low	Stable	0	-	Type A	3.1 (graphs)	314.3 (graphs)			Click here
Slovakia	Low	None	Low	Decreasing	0	-	None	35.3 (graphs)	534.6 (graphs)		sari	Click here
Slovenia					0	-	None	(graphs)				Click here
Spain					0	-	None	(graphs)				Click here
Switzerland	Low	None		Stable				2.0 (graphs)	(graphs)			Click here
Turkey					1	0%	None	(graphs)				Click here
Uzbekistan	Low	None	Low	Decreasing			None	(graphs)	12.3 (graphs)			Click here
Europe					26	-						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 in Europe at out-of-season levels

Until week 40/2012, the EuroFlu bulletin will be published fortnightly.

- This issue is based on data reported in week 32/2012 by 29 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are now at low levels in all countries in the Region.
- None of the 19 specimens collected from sentinel sources tested positive for influenza virus.

Outpatient surveillance for ILI and ARI

All 22 countries reporting data on intensity reported low intensity, with increasing, decreasing or stable trends in clinical activity overall. All 22 countries reporting on the geographical spread of influenza reported no activity.

During week 32/2012, sentinel outpatient clinics collected 19 respiratory specimens, none of which tested positive for influenza virus.

Hospital surveillance for severe acute respiratory infection (SARI)

2 countries reported data for hospital-based sentinel surveillance of SARI in week 32/2012: Georgia and Kazakhstan. 2 respiratory specimens were collected from SARI patients, both of which tested negative for influenza.

Virological overview

Specimens from non-sentinel sources yielded 2 influenza B detections in week 32/2012.

Since week 21/2012, 389 influenza virus detections have been reported: 181 influenza A (47%) and 208 (53%) influenza B. Of the influenza A viruses, 109 (60%) were subtyped: 4 were A(H1N1)pdm09 and 105 A(H3N2).

Comment

Influenza activity is at out-of-season levels throughout the European Region. None of the 19 samples collected from sentinel sources was positive for influenza virus. 2 samples from non-sentinel sources were positive for type B influenza, indicating low influenza activity in the Region.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe and WHO headquarters web sites.

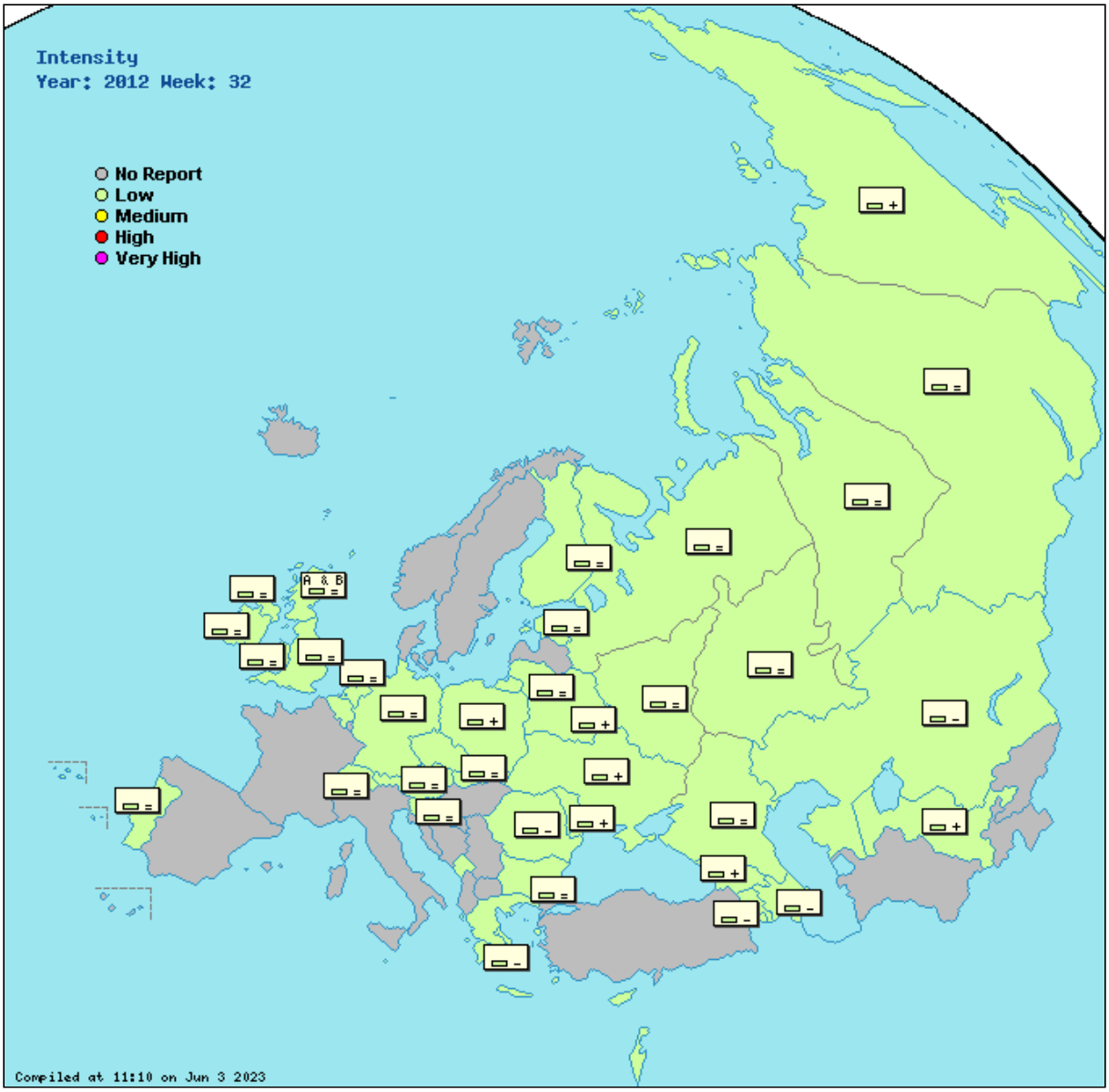
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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 laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

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	Sentinel SARI	Virology graph and pie chart
Armenia	Low	None	Low	Decreasing	0	-	None	(graphs)	40.1 (graphs)	sari	Click here
Azerbaijan	Low	None	Low	Decreasing				100.0 (graphs)	(graphs)		Click here
Belarus	Low	None	Low	Increasing				3.0 (graphs)	352.4 (graphs)	sari	Click here
Belgium	Low	None		Stable				32.7 (graphs)	697.3 (graphs)	sari	Click here
Bosnia and Herzegovina					0	-	None	(graphs)			Click here
Bulgaria	Low	None		Stable	0	-	None	(graphs)	218.2 (graphs)		Click here
Denmark					0	-	None	(graphs)			Click here
England	Low	None		Stable	0	-	None	1.5 (graphs)	220.7 (graphs)		Click here
Estonia					0	-	None	(graphs)			Click here
Finland	Low	None	Low	Stable	5	0%	None	0.0 (graphs)	(graphs)		Click here
Georgia	Low	None	Low	Increasing	7	0%	None	154.4 (graphs)	(graphs)	sari	Click here

Germany	Low	None		Stable	1	0%	None	(graphs)	413.9	(graphs)		Click here
Ireland	Low	None	Low	Stable	1	0%	None	1.9 (graphs)		(graphs)		Click here
Israel	Low	None	Low	Stable				0.9 (graphs)				Click here
Kazakhstan	Low	None	Low	Decreasing	2	0%	None	45.4 (graphs)	14.4	(graphs)	sari	Click here
Lithuania	Low	None	Low	Stable	0	-	None	0.0 (graphs)	117.3	(graphs)		Click here
Montenegro	Low	None	Low	Stable				0.0 (graphs)		(graphs)		Click here
Netherlands	Low	None		Stable	2	0%	None	13.3 (graphs)		(graphs)		Click here
Northern Ireland	Low	None		Stable	0	-		2.0 (graphs)	194.9	(graphs)		Click here
Norway		None			1	0%	None	0.0 (graphs)		(graphs)		Click here
Poland	Low	None	Low	Increasing	0	-	None	11.7 (graphs)		(graphs)		Click here
Portugal					0	-	None	(graphs)				Click here
Republic of Moldova	Low	None	Low	Increasing	0	-	None	(graphs)	23.9	(graphs)	sari	Click here
Romania	Low	None	Low	Decreasing	0	-	None	0.0 (graphs)	257.7	(graphs)	sari	Click here
Russian Federation	Low	None		Stable				(graphs)	221.2	(graphs)	sari	Click here
Scotland	Low	None	Low	Stable	0	-	None	3.4 (graphs)	268.6	(graphs)		Click here
Slovakia	Low	None	Low	Stable	0	-	None	32.6 (graphs)	496.4	(graphs)	sari	Click here
Slovenia					0	-	None	(graphs)				Click here
Switzerland	Low	None		Stable				3.4 (graphs)		(graphs)		Click here
Turkey					0	-	None	(graphs)				Click here
Ukraine	Low	None	Low	Increasing				0 * (graphs)	178.4	(graphs)	sari	Click here
Uzbekistan	Low	Sporadic	Low	Increasing			None	(graphs)	13.1	(graphs)		Click here
Europe					19	-						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 in Europe at out-of-season levels

Until week 40/2012, the EuroFlu bulletin will be published fortnightly.

- This issue is based on data reported in week 34/2012 by 32 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are now at low levels in all countries in the Region.
- Only 1 of the 54 specimens (1.8%) collected from sentinel sources tested positive for influenza virus (type A, unsubtyped).

Outpatient surveillance for ILI and ARI

All 27 countries reporting data on intensity reported low intensity, but trends in clinical activity covered the ranges of increasing, decreasing and stable. For the geographical spread of influenza indicator, 26 countries reported no activity, while 2 countries reported sporadic activity.

During week 34/2012, sentinel outpatient clinics collected 54 respiratory specimens, of which 1 (1.8%) tested positive for influenza A virus (unsubtyped).

Hospital surveillance for severe acute respiratory infection (SARI)

3 countries reported data for hospital-based sentinel surveillance of SARI in week 34/2012: Belarus, Kazakhstan and Kyrgyzstan. 18 respiratory specimens were collected from SARI patients, all of which tested negative for influenza.

Virological overview

Specimens from non-sentinel sources yielded 4 influenza type A detections in week 34/2012: 2 were not subtyped and 2 were A(H3N2).

Since week 21/2012, 498 influenza virus detections have been reported: 233 (46.8%) influenza A and 265 (53.2%) influenza B. Of the influenza A viruses, 122 (52.4%) were subtyped: 8 were A(H1N1)pdm09 and 114 A(H3N2).

Comment

Influenza activity is at out-of-season levels throughout the European Region. Only 1 of the 54 samples collected from sentinel sources was positive for influenza virus. Only 4 samples from non-sentinel sources were positive for type A influenza, indicating low influenza activity in the Region.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe and WHO headquarters web sites.

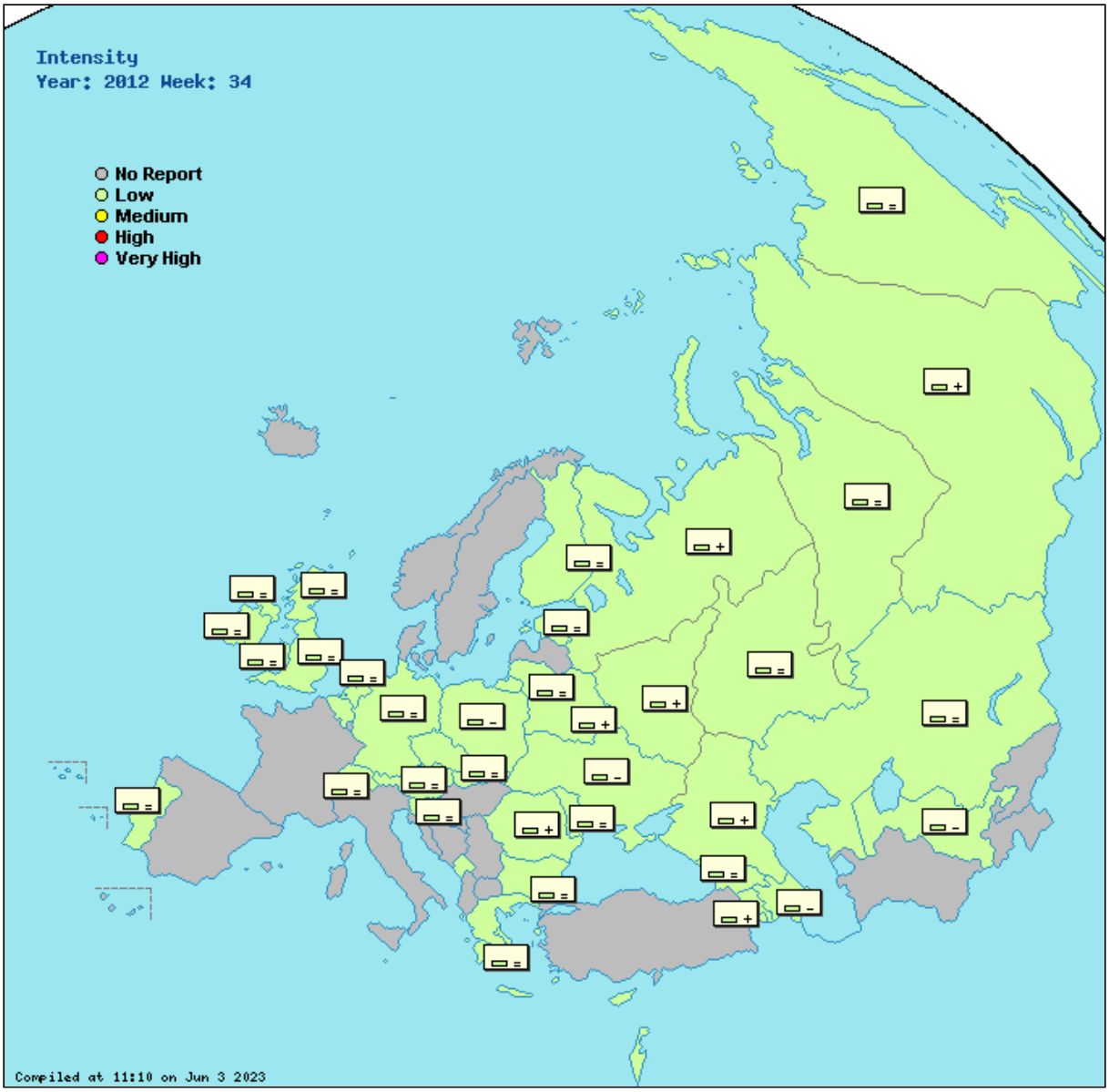
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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 laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

Country comments (where available)

Slovakia

-

Spain

During the weeks 21-39/2012 only the virological influenza surveillance will be active in Spain. Although qualitative activity indicators (intensity level and geographic spread) are not provided by sentinel sites. Weekly virological influenza detections mainly from non sentinel sources are being notified

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Armenia	Low	None	Low	Increasing	0	-	None	(graphs)	40.4 (graphs)	sari	Click here
Austria	Low	None	Low	Stable	0	-	None	0.0 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Decreasing	1	100.0%	None	91.7 (graphs)	(graphs)		Click here
Belarus	Low	None	Low	Increasing	26	0%	None	3.6 (graphs)	433.2 (graphs)	sari	Click here
Belgium	Low	None		Stable				44.2 (graphs)	685.7 (graphs)	sari	Click here
Bulgaria	Low	None		Stable	3	0%	None	(graphs)	190.1 (graphs)		Click here
Czech Republic	Low	None		Stable				4.8 (graphs)	302.3 (graphs)		Click here

England	Low	None		Stable	2	0%	None	2.0 (graphs)	191.9 (graphs)			Click here
Estonia					0	-	None	(graphs)				Click here
Finland	Low	None		Stable	18	0%	None	0.0 (graphs)	(graphs)			Click here
Georgia	Low	None	Low	Stable				282.4 (graphs)	(graphs)		sari	Click here
Germany	Low	None		Stable	2	0%	None	(graphs)	362.0 (graphs)			Click here
Greece	Low	None		Stable				21.5 (graphs)	(graphs)			Click here
Ireland	Low	None	Low	Stable	0	-	None	0.9 (graphs)	(graphs)			Click here
Israel	Low	None	Low	Stable				1.1 (graphs)				Click here
Kazakhstan	Low	None	Low	Stable	1	0%	None	48.8 (graphs)	17.6 (graphs)		sari	Click here
Kyrgyzstan							None		(graphs)		sari	Click here
Lithuania	Low	None	Low	Stable				0.0 (graphs)	128.0 (graphs)			Click here
Montenegro	Low	None	Low	Stable				0.3 (graphs)	(graphs)			Click here
Netherlands	Low	None		Stable	1	0%	None	6.6 (graphs)	(graphs)			Click here
Northern Ireland	Low	None		Stable	0	-		3.2 (graphs)	189.3 (graphs)			Click here
Norway		Sporadic			0	-	None	0.0 (graphs)	(graphs)			Click here
Poland	Low	None	Low	Decreasing	0	-	None	9.0 (graphs)	(graphs)			Click here
Portugal	Low	None		Stable	0	-	None	0.0 (graphs)	(graphs)			Click here
Republic of Moldova	Low	None	Low	Stable	0	-	None	(graphs)	22.6 (graphs)		sari	Click here
Romania	Low	None	Low	Increasing	0	-	None	0.0 (graphs)	290.7 (graphs)		sari	Click here
Russian Federation	Low	Sporadic		Increasing				(graphs)	262.4 (graphs)		sari	Click here
Scotland	Low	None	Low	Stable	0	-	None	1.0 (graphs)	277.6 (graphs)			Click here
Slovakia	Low	None	Low	Stable	0	-		30.0 (graphs)	503.8 (graphs)		sari	Click here
Slovenia	Low	None		Stable	0	-	None	0.0 (graphs)	353.9 (graphs)			Click here
Spain					0	-	None	(graphs)				Click here
Switzerland	Low	None		Stable				2.7 (graphs)	(graphs)			Click here
Turkey					0	-	None	(graphs)				Click here
Ukraine	Low	None	Low	Decreasing				0 * (graphs)	174.6 (graphs)		sari	Click here
Uzbekistan	Low	None	Low	Decreasing			None	(graphs)	9.3 (graphs)			Click here
Europe					54	1.9%						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

Data reported by Member states of the European Union and the European Economic Area are validated by The European Centre for Disease Prevention and Control (ECDC).

The bulletin text was written by an editorial team at the WHO Regional Office for Europe (Ganna Bolokhovets, Pernille Jorgensen, Dmitriy Pereyaslov and Caroline Brown), the Netherlands Institute for Health Services Research (NIVEL; Liana Martirosyan, Temporary Adviser to WHO), Radboud University Nijmegen Medical Centre, (Tamara Meerhoff, Temporary Adviser to WHO) and the WHO Collaborating Center for Influenza, Mill Hill, United Kingdom (Rod Daniels). The bulletin was reviewed by Khatuna Zakhashvili (National Centre for Disease Control and Public Health, Georgia), Siri Helene Hauge (Norwegian Institute of Public Health, Norway), Meral Ciblak (University of Istanbul, Turkey) and ECDC, on behalf of the data contributors.

Influenza activity in Europe at out-of-season levels

> Until week 40/2012, the EuroFlu bulletin will be published fortnightly.

- This issue is based on data reported in week 36/2012 by 30 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are at low levels in all countries in the Region.
- None of the 35 specimens collected from sentinel sources tested positive for influenza virus .

Outpatient surveillance for ILI and ARI

All 24 countries reporting data on intensity reported low intensity, but trends in clinical activity covered the ranges of increasing, decreasing and stable. For the geographical spread of influenza indicator, 24 countries reported no activity, while 1 country reported sporadic activity.

During week 36/2012, sentinel outpatient clinics collected 35 respiratory specimens, none of which tested positive for influenza virus.

Hospital surveillance for severe acute respiratory infection (SARI)

No data were reported for hospital-based sentinel surveillance of SARI in week 36/2012.

Virological overview

Specimens from non-sentinel sources yielded 3 influenza type B detections and 3 influenza type A detections in week 36/2012, 1 of which was subtyped as A(H1N1)pdm09.

Since week 21/2012, 542 influenza virus detections have been reported: 259 (47.8%) influenza A and 283 (52.2%) influenza B. Of the influenza A viruses, 143 (55.2%) were subtyped: 13 were A(H1N1)pdm09 and 130 A(H3N2).

Comment

Influenza activity is at out-of-season levels throughout the European Region. None of the 35 samples collected from sentinel sources was positive for influenza virus. Only 6 samples from non-sentinel sources were positive for influenza virus, indicating low influenza activity in the Region.

Further information

The Euro Flu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe and WHO headquarters web sites.

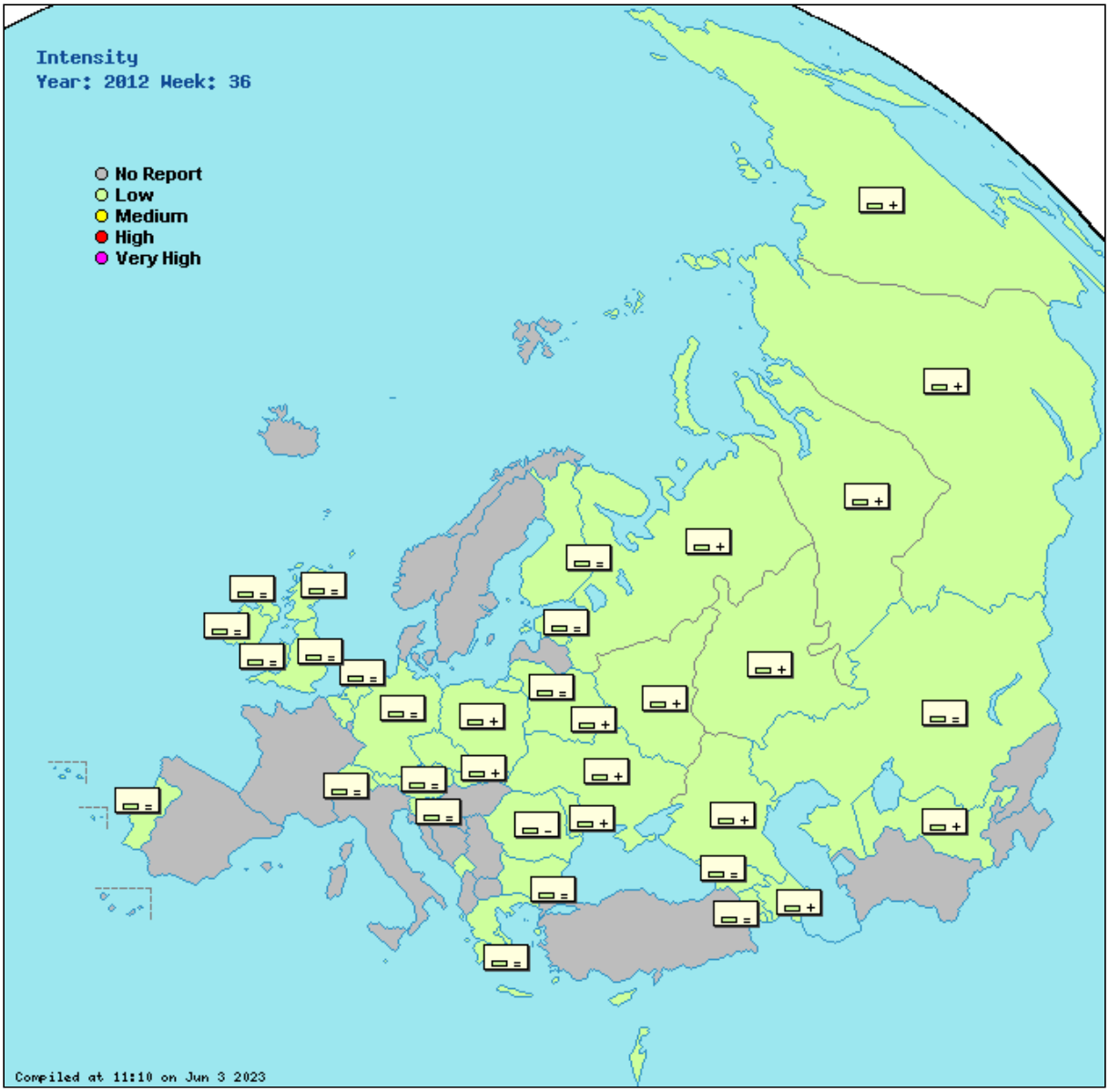
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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 laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

Country comments (where available)

Netherlands
'Two Dutch travellers were infected with oseltamivir-resistant influenza A(H1N1)pdm09 viruses with an H275Y neuraminidase substitution in early August 2012. Both cases were probably infected during separate holidays in Spain. No epidemiological connection between the two cases was found, and neither of them was treated with oseltamivir before specimen collection. Genetic analysis of the neuraminidase gene revealed the presence of previously described permissive mutations that may increase the likelihood of such strains emerging and spreading widely. For a detailed report see: http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=20266.'

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Armenia	Low	None	Low	Stable					41.6 (graphs)	sari	Click here
Austria	Low	None	Low	Stable	0	-	None	0.0 (graphs)	(graphs)		Click here
Azerbaijan	Low	None	Low	Increasing	0	-	None	130.0 (graphs)	(graphs)		Click here
Belarus	Low	None	Low	Increasing				3.4 (graphs)	613.3 (graphs)	sari	Click here
Belgium	Low	None		Stable				26.2 (graphs)	755.3 (graphs)	sari	Click here
Bosnia and					0	-	None	(graphs)			Click here

Herzegovina												
Bulgaria	Low	None		Stable	0	-	None	(graphs)	157.8 (graphs)			Click here
Czech Republic	Low	None		Stable				5.3 (graphs)	352.2 (graphs)			Click here
Estonia	Low	None		Stable	0	-	None	1.7 (graphs)	117.6 (graphs)			Click here
Finland	Low	None		Stable	19	0%	None	0.0 (graphs)	(graphs)			Click here
Georgia	Low	None	Low	Stable	5	0%	None	156.3 (graphs)	(graphs)		sari	Click here
Germany	Low	None		Stable	3	0%	None	(graphs)	494.3 (graphs)			Click here
Greece	Low	None		Stable	0	-		8.4 (graphs)	(graphs)			Click here
Ireland	Low	None	Low	Stable	2	0%	None	5.1 (graphs)	(graphs)			Click here
Israel	Low	None	Low	Stable				1.2 (graphs)				Click here
Kazakhstan	Low	None	Low	Stable				50.5 (graphs)	18.1 (graphs)		sari	Click here
Lithuania	Low	None	Low	Stable				0.0 (graphs)	184.0 (graphs)			Click here
Montenegro	Low	None	Low	Stable				0.0 (graphs)	(graphs)			Click here
Netherlands					1	0%	None	(graphs)				Click here
Northern Ireland	Low	None		Stable	0	-		5.0 (graphs)	212.5 (graphs)			Click here
Norway		None			2	0%	None	0.0 (graphs)	(graphs)			Click here
Poland	Low	None	Low	Increasing	0	-	None	22.1 (graphs)	(graphs)			Click here
Portugal	Low	None		Stable	0	-	None	0.0 (graphs)	(graphs)			Click here
Republic of Moldova	Low	None	Low	Stable	0	-	None	(graphs)	36.4 (graphs)		sari	Click here
Romania	Low	None	Low	Decreasing	0	-	None	0.0 (graphs)	310.3 (graphs)		sari	Click here
Russian Federation	Low	Sporadic		Increasing				0.1 (graphs)	367.1 (graphs)		sari	Click here
Scotland	Low	None	Low	Stable	0	-	None	2.8 (graphs)	351.5 (graphs)			Click here
Slovakia	Low	None	Low	Increasing	0	-	None	38.2 (graphs)	584.5 (graphs)		sari	Click here
Slovenia	Low	None		Stable	0	-	None	0.0 (graphs)	369.7 (graphs)			Click here
Turkey					1	0%	None	(graphs)				Click here
Ukraine								246.3 (graphs)	2.2 * (graphs)		sari	Click here
Uzbekistan							None		(graphs)			Click here
Europe					33	-						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 in Europe at low levels

Until week 40/2012, the EuroFlu bulletin will be published fortnightly.

- This issue is based on data reported in week 38/2012 by 33 Member States in the WHO European Region.
- Consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) are now at low levels in all countries in the Region.
- 2 of the 95 specimens collected from sentinel sources tested positive for influenza virus type A (unsubtyped).

Outpatient surveillance for ILI and ARI

All 23 countries reporting data on intensity reported low intensity, but trends in clinical activity covered the range of increasing, decreasing and stable. For the geographical spread of influenza, 21 countries reported no activity, while 3 reported sporadic activity.

During week 38/2012, sentinel outpatient clinics collected 95 respiratory specimens, 2 of which tested positive for influenza virus.

Hospital surveillance for severe acute respiratory infection (SARI)

5 countries reported data for hospital-based sentinel surveillance of SARI in week 38/2012: Armenia, Georgia, Kazakhstan, the Russian Federation and Ukraine. 36 respiratory specimens were collected from SARI patients, all of which tested negative for influenza virus.

Virological overview

Specimens from non-sentinel sources yielded 14 influenza type-B detections and 7influenza type-A detections in week 38/2012: of the type-A viruses, 4 were not subtyped and 3 were A(H3N2)

Since week 21/2012, 576 influenza virus detections have been reported: 273 (47.4%) influenza A and 303 (52.6%) influenza B. Of the influenza A viruses, 150 (54.9%) were subtyped: 14were A(H1N1)pdm09 and 136 A(H3N2).

Comment

Influenza activity is at low levels throughout the European Region. 2 of the 95 samples collected from sentinel sources were positive for influenza virus type A (unsubtyped). 21 samples from non-sentinel sources were positive for influenza virus, indicating low influenza activity in the Region.

Further information

The EuroFlu bulletin describes and comments on influenza activity in the 53 countries in the WHO European Region. Further information can be obtained from the WHO/Europe and WHO headquarters web sites.

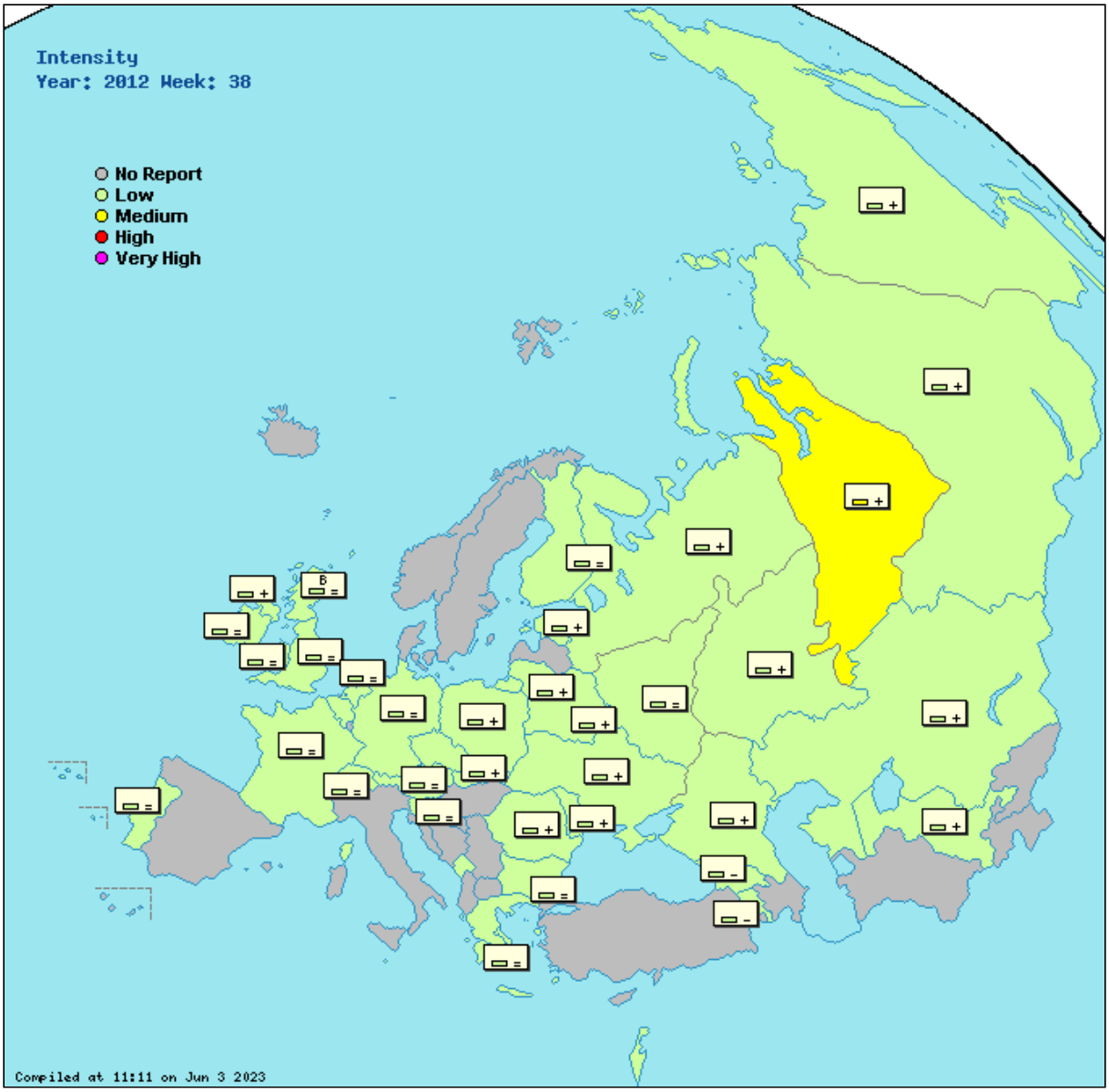
Map

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.

Type of map : **Intensity** ○ **+ virological** ◉ **Geographical spread** ○ **+ virological** ○ **Impact** ○



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 laboratory-confirmed case(s) of influenza, or evidence of increased or unusual respiratory disease activity.
Sporadic = isolated cases of laboratory confirmed influenza infection
Localized = limited to one administrative unit of 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).

Country comments (where available)

Norway
Recent cases of influenza B infection have mostly been associated with travel abroad
Spain
During weeks 21?39/2012 only virological influenza surveillance is active in Spain. Qualitative activity indicators (intensity level and geographic spread) are not provided by sentinel sites. Weekly virological influenza detections (mainly from non-sentinel sources) are being notified. During this period 40 influenza detections have been notified in Spain. Of them: 95% of influenza type B and 5% of type A. Since May 2012 there were no detections of influenza A(H1N1)pdm09 viruses in Catalonia where the Dutch people were on holidays. A severe influenza A(H1N1)pdm09 has been notified in the Autonomous Community of Madrid in week 34/2012. The patient presented a good outcome and a recent history of travel to Nepal. Other A(H1N1)pdm09 have not been reported in this area since week 20/2012. The National Influenza Centre of Madrid is conducting analysis to test antiviral resistance. Fortnightly Spanish Influenza Surveillance reports are available in: www.isciii.es/cne-gripe-infsemanal

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Sentinel SARI	Virology graph and pie chart
Armenia					0	-	None		(graphs)	sari	Click here

Austria	Low	None	Low	Stable	0	-	None	0.0 (graphs)	(graphs)			Click here
Azerbaijan					4	50.0%	None	(graphs)				Click here
Belarus	Low	None	Low	Increasing				7.9 (graphs)	1048.2 (graphs)		sari	Click here
Belgium	Low	None		Stable				53.1 (graphs)	1788.0 (graphs)		sari	Click here
Bosnia and Herzegovina					0	-	None	(graphs)				Click here
Bulgaria	Low	None		Stable	0	-	None	(graphs)	0.0 (graphs)			Click here
Denmark					0	-	None	(graphs)				Click here
England	Low	None		Stable	9	0%	None	3.2 (graphs)	249.3 (graphs)			Click here
Estonia	Low	None		Increasing	3	0%	None	2.9 (graphs)	249.8 (graphs)			Click here
Finland	Low	None		Stable	14	0%	None	0.0 (graphs)	(graphs)			Click here
Georgia	Low	None	Low	Decreasing	2	0%	None	103.6 (graphs)	(graphs)		sari	Click here
Germany	Low	None		Stable	5	0%	None	(graphs)	818.7 (graphs)			Click here
Greece	Low	None		Stable	0	-		18.4 (graphs)	(graphs)			Click here
Iceland					0	-		(graphs)				Click here
Ireland	Low	None	Low	Stable	0	-	None	3.0 (graphs)	(graphs)			Click here
Israel	Low	None	Low	Stable				1.4 (graphs)				Click here
Kazakhstan	Low	None	Low	Increasing	4	0%	None	75.1 (graphs)	15.9 (graphs)		sari	Click here
Kyrgyzstan					0	-	None		(graphs)		sari	Click here
Latvia					0	-	None	(graphs)				Click here
Lithuania	Low	Sporadic	Low	Increasing	0	-	None	0.0 (graphs)	523.9 (graphs)			Click here
Netherlands	Low	None		Stable	6	0%	None	17.3 (graphs)	(graphs)			Click here
Northern Ireland	Low	None		Increasing	0	-		7.1 (graphs)	301.2 (graphs)			Click here
Norway		None			0	-	None	0.0 (graphs)	(graphs)			Click here
Poland	Low	None	Low	Increasing	0	-	None	65.3 (graphs)	(graphs)			Click here
Portugal	Low	None		Stable	0	-	None	0.0 (graphs)	(graphs)			Click here
Republic of Moldova	Low	None	Low	Increasing	0	-	None	(graphs)	50.1 (graphs)		sari	Click here
Romania	Low	None	Low	Increasing	0	-	None	0.0 (graphs)	402.5 (graphs)		sari	Click here
Russian Federation	Low	None	Low	Increasing	42	0%	None	0.1 (graphs)	604.2 (graphs)		sari	Click here
Scotland	Low	Sporadic	Low	Stable	0	-	Type B	8.3 (graphs)	379.2 (graphs)			Click here
Slovakia	Low	None	Low	Increasing	0	-	None	89.5 (graphs)	1141.5 (graphs)		sari	Click here
Slovenia	Low	None		Stable	1	0%	None	0.0 (graphs)	880.1 (graphs)			Click here
Spain					0	-	None	(graphs)				Click here
Ukraine	Low	None	Low	Increasing	2	0%	None	421.4 (graphs)	2.5 * (graphs)		sari	Click here
Uzbekistan	Low	Sporadic	Low	Increasing			None	(graphs)	16.4 (graphs)			Click here
Europe					92	2.2%						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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