

Influenza Weekly Surveillance Bulletin

Northern Ireland, Week 5 (29 January – 4 February 2011)

Summary

- GP consultation rates for combined flu/ FLI decreased from 78.8/100,000 population (updated) in week 4 to 69.6/100,000 in week 5 (12% decrease).
 - flu/FLI rates continue to decrease and now approximate to the Northern Ireland threshold (70/100,000 population).
 - flu/FLI rates remain highest in the 5–14 year age group.
- Out-of-hours flu/FLI call rates decreased from 20.2 per 100,000 population in week 4 to 14.6 per 100,000 in week 5 (28% decrease). Out-of-hours Flu/FLI rates are highest in the 5–14 year age group.
- The number of influenza A (H1N1) 2009 detections increased from 10 (updated) in week 4 to 11 in week 5 (10% increase).
- Number of influenza B detections decreased from 25 (updated) in week 4 to 13 in week 5 (48% decrease).
- Respiratory syncytial virus (RSV) weekly detections decreased by 36% compared with week 4.
- Four swine flu related deaths were reported in week 5 (Saturday 29 January to Friday 4 February).
- The total number of swine flu related deaths reported up to noon, 9 February 2011, is 29. Of these, 26 patients had an underlying health problem, two did not, and one is not yet known.

Key messages

- Both consultation rates and numbers of new cases of flu (influenza A (H1N1) 2009 and influenza B combined) continue to decrease.
- Influenza viruses still circulating but at lower levels
- People with underlying health problems remain at much greater risk of developing serious complications of flu.
- People without underlying health problems can also be affected.

Sentinel GP Consultation Data

Figure 1. Sentinel GP consultation rate for combined flu and flu-like illness and number of virology flu detections from week 40 2009

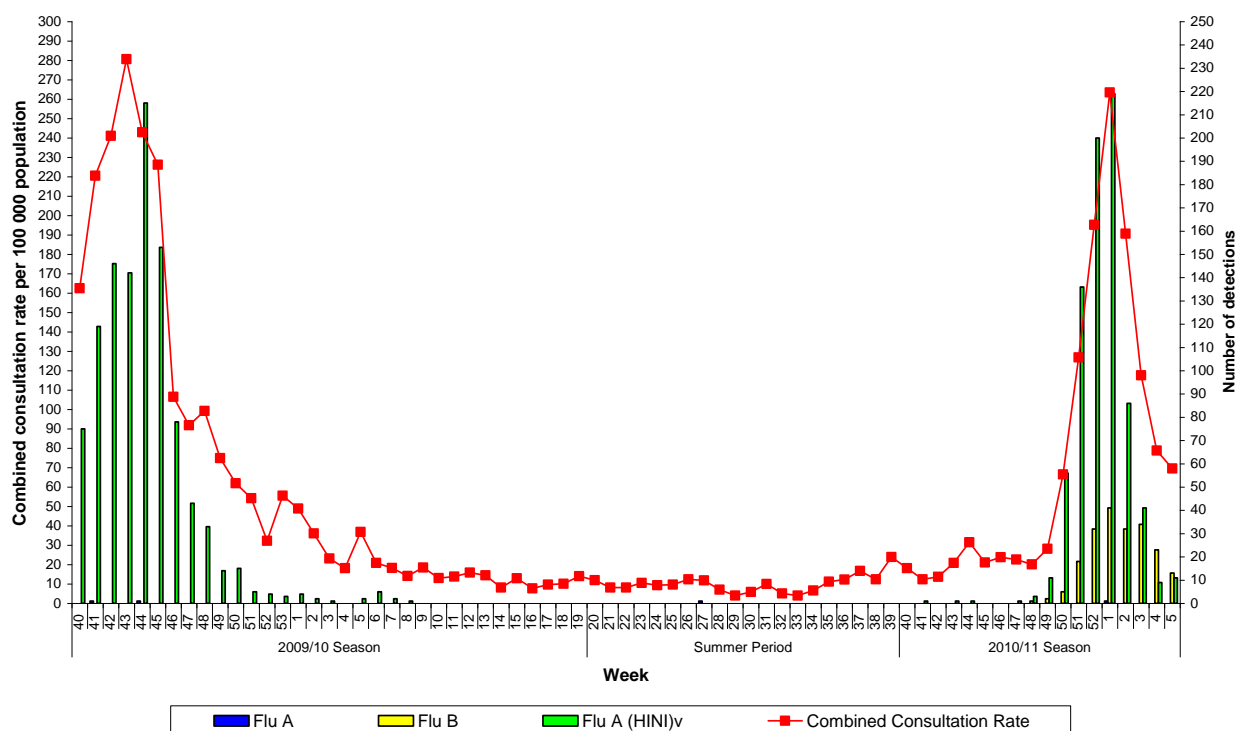
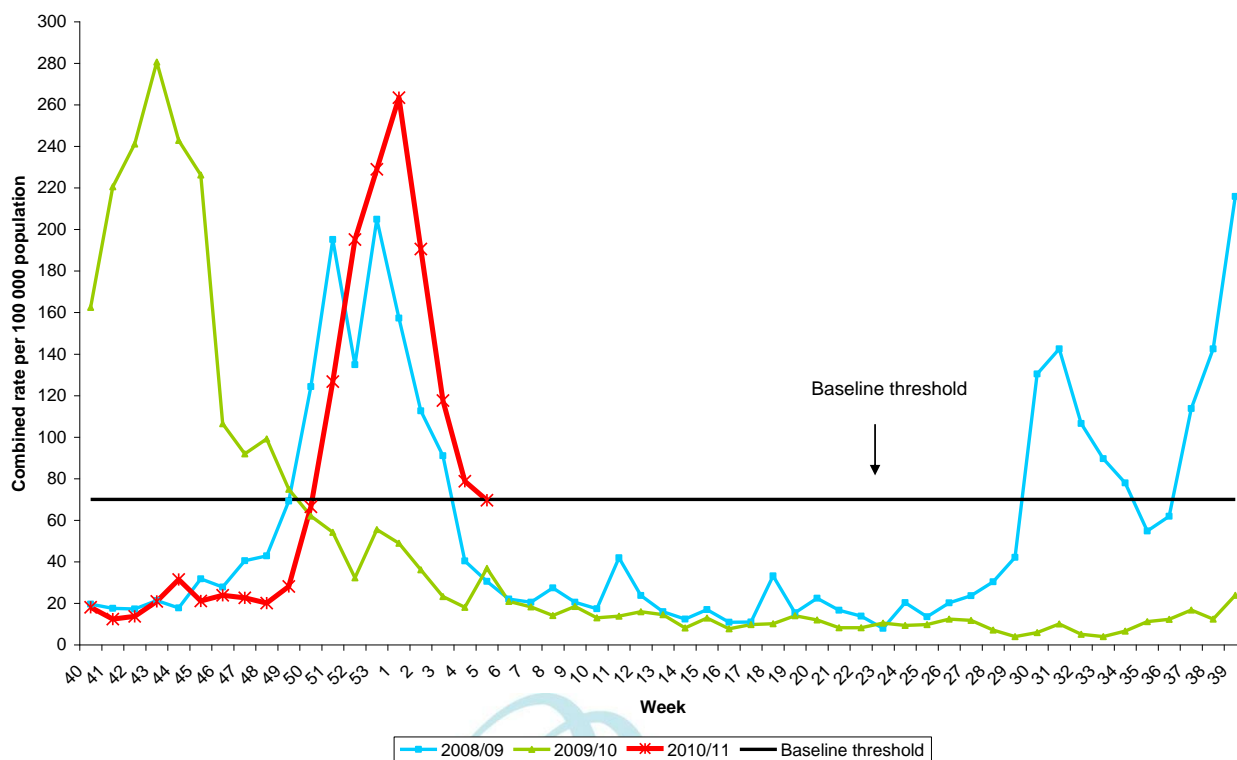


Figure 2. Sentinel GP consultation rate for combined flu and flu-like illness 2008/09–2010/11



Comment

The GP consultation rate decreased again this week from 78.8 (updated) per 100,000 population in week 4 to 69.6 per 100,000 population in week 5 (12% decrease). Rates now approximate to the Northern Ireland threshold. (Figures 2 and 4).

Figure 3. Sentinel GP age-specific consultation rates for combined flu and flu-like illness from week 40 2009

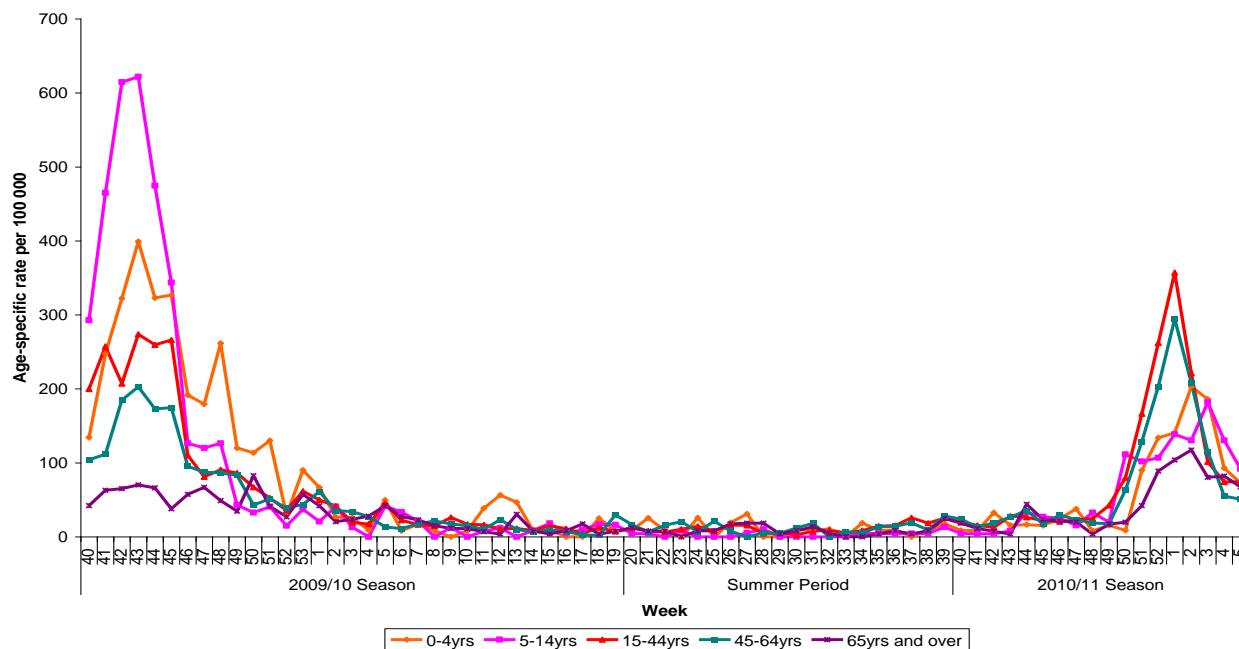
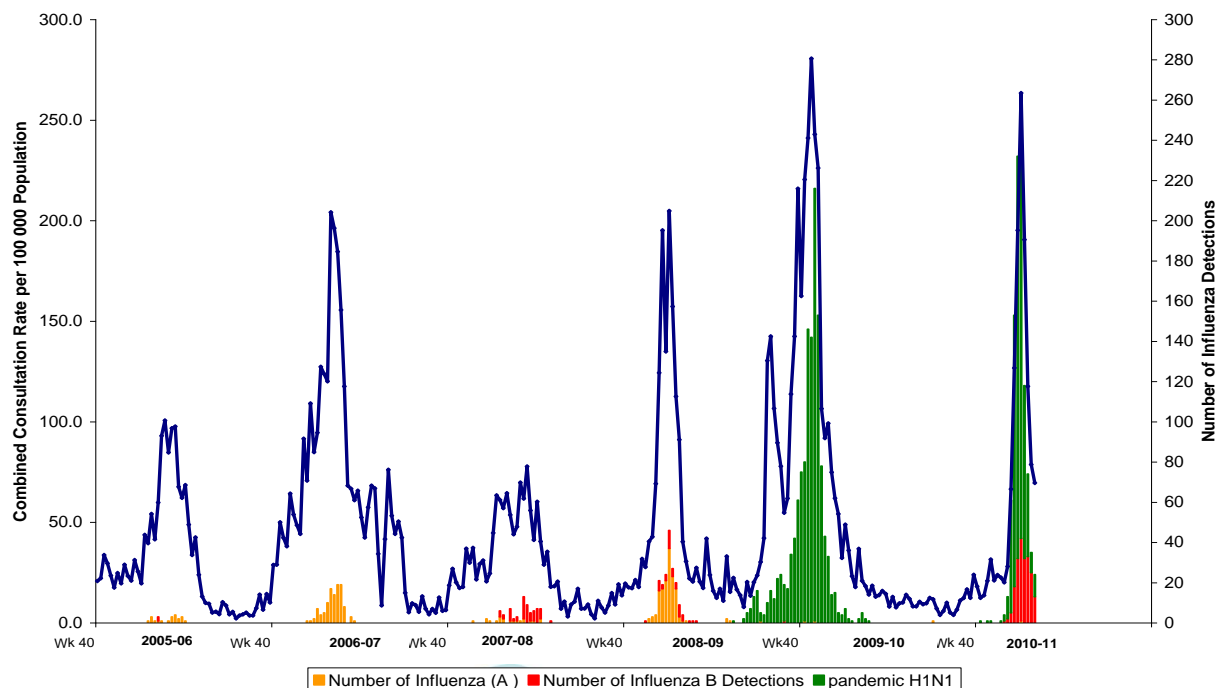


Figure 4. Sentinel GP combined consultation rate and number of influenza positive detections 2005/06 – present.



Comment

The majority of age-specific consultation rates decreased in week 5. The highest age-specific combined rates this week were in the 5–14 year age group (Figure 3).

From the start of the current flu season 21% of flu detections are influenza B in contrast to the pandemic period when all flu detections were influenza A (H1N1) 2009 (Figure 4).

Out-of-hours (OOH) centres call data

Figure 5. OOH total call rate (all diagnoses) and call rate for flu and flu-like illness from week 40 2009

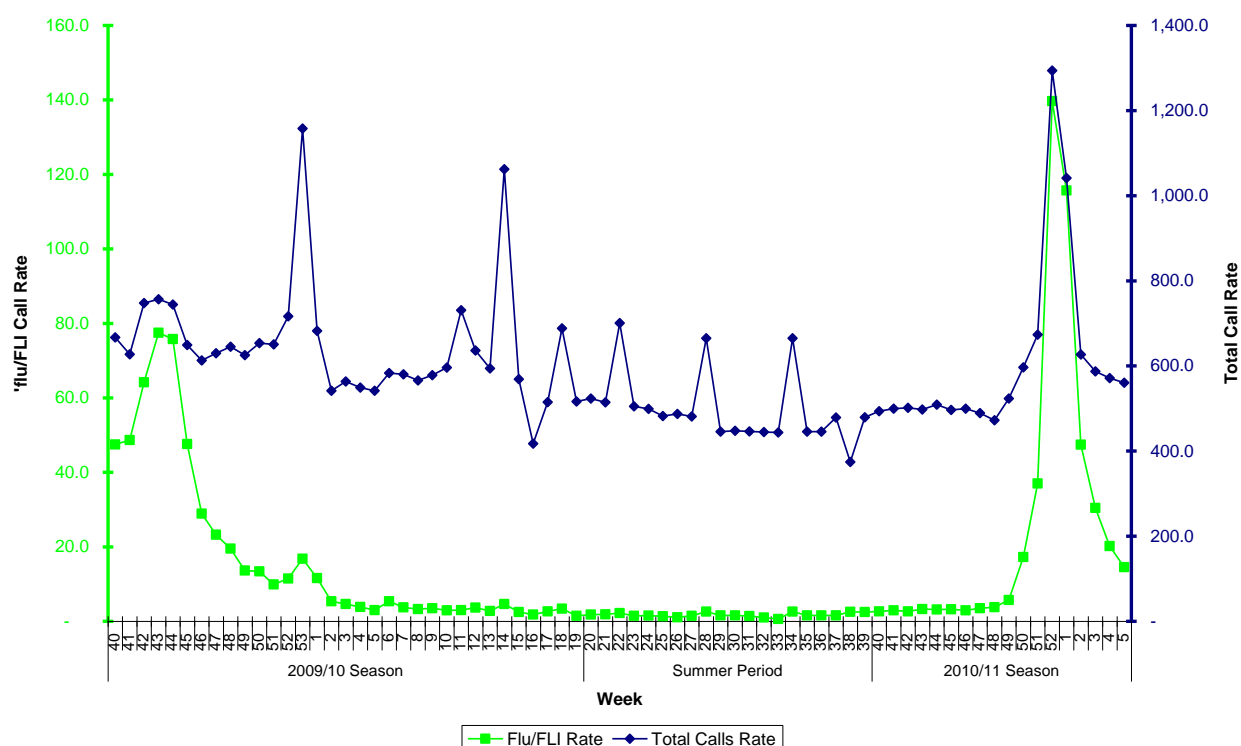
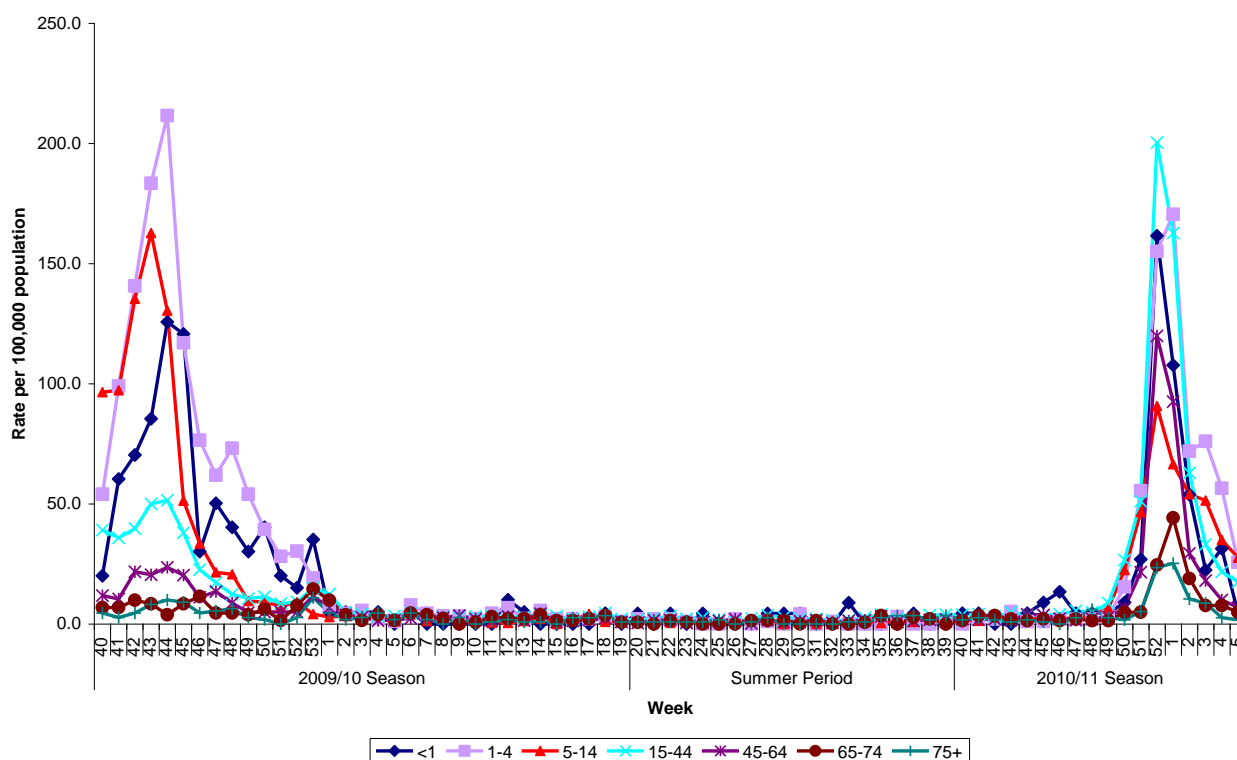


Figure 6. OOH call rates of flu and flu-like illness by age-group from week 40 2009



Comment

The number of calls to OOH centres (all diagnoses) in week 5 decreased by 2% compared with week 4. OOH call rates for flu/FLI also decreased from 20.2 per 100,000 population in week 4 to 14.6 per 100,000 population in week 5 (28% decrease). The highest age-specific rates are in the 5–14 year age group followed by the 1–4 year age group (Figure 6).

The proportion of total calls due to flu/FLI decreased from 3.5% in week 4 to 2.6% in week 5 (26% decrease).

Note:

- Data from week 15 onwards represents all 7 OOH databases.

Virology Data

Table 1. Virus activity in Northern Ireland week 5 2011

Source	Specimens tested	(H1N1) 2009	Influenza B	RSV	Total influenza positive	% Influenza positive
Sentinel	26	5	5	2	10	38%
Non-sentinel	159	6	8	56	14	9%
Total	185	11	13	58	24	13%

Table 2. Cumulative total week 40 – week 5 2011

	(H1N1) 2009	AH3	Flu B	RSV	Total
0-4	151	0	38	431	620
5-14	59	0	48	12	119
15-64	512	0	98	34	644
65+	55	1	19	21	96
Unknown	1	0	0	2	3
All ages	778	1	203	500	1482

Table 3. Cumulative total week 40 – week 5 2011

Age	Sentinel				Non-sentinel				
	(H1N1) 2009	Flu B	RSV	Total	(H1N1) 2009	AH3	Flu B	RSV	Total
0-4	3	1	3	7	148	0	37	428	613
5-14	17	9	0	26	42	0	39	12	93
15-64	79	22	4	105	433	0	76	30	539
65+	0	1	0	1	55	1	18	21	95
Unknown	0	0	0	0	1	0	0	2	3
All ages	99	33	7	139	679	1	170	493	1343

Note

All virology data is provisional. Positive specimens refer to the date of specimen, however number of specimens tested refers to the date of laboratory reports and not the date the specimen was received by the laboratory. Sentinel samples are tested for influenza including influenza A (H1N1) 2009, flu B, and RSV. Non-sentinel samples are tested for the above, plus: bocavirus, coronavirus, metapneumovirus, parainfluenza, respiratory adenovirus and rhinovirus.

Please note that cumulative virology figures can include updated figures for previous weeks due to laboratory results that may have arrived after publication of the bulletin.

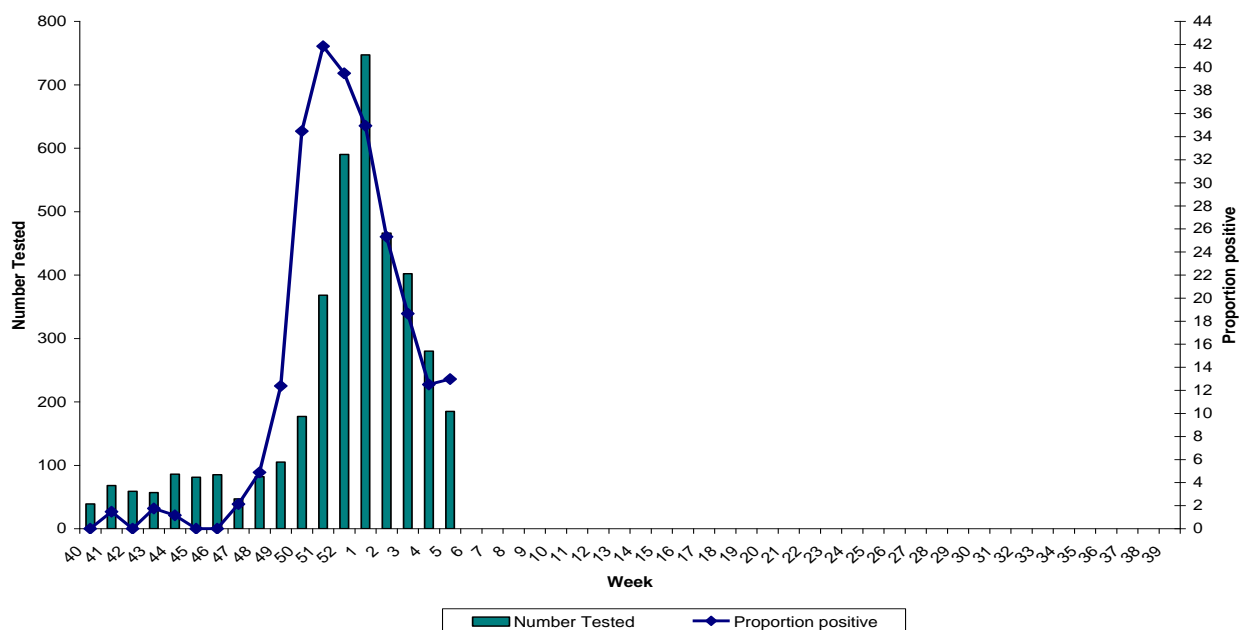
Comment

In week 5 there were 185 specimens (26 sentinel) submitted for testing to the Regional Virus Laboratory. There were 24 positive influenza specimens in this period; 11 influenza A (H1N1) 2009 and 13 influenza B. As in previous weeks the majority of influenza detections remain in the 15–64 year age group.

The median age for influenza A (H1N1) 2009 is 29 years with the median age for influenza B being 19 years.

The proportion of influenza B detections had been steadily increasing from 8% in week 50 to a peak of 71% (updated) in week 4; however the proportion has fallen to 54% in week 5.

Figure 7. The number of samples tested (sentinel and non-sentinel) for influenza in Northern Ireland from week 40 2010 with the proportion positive.

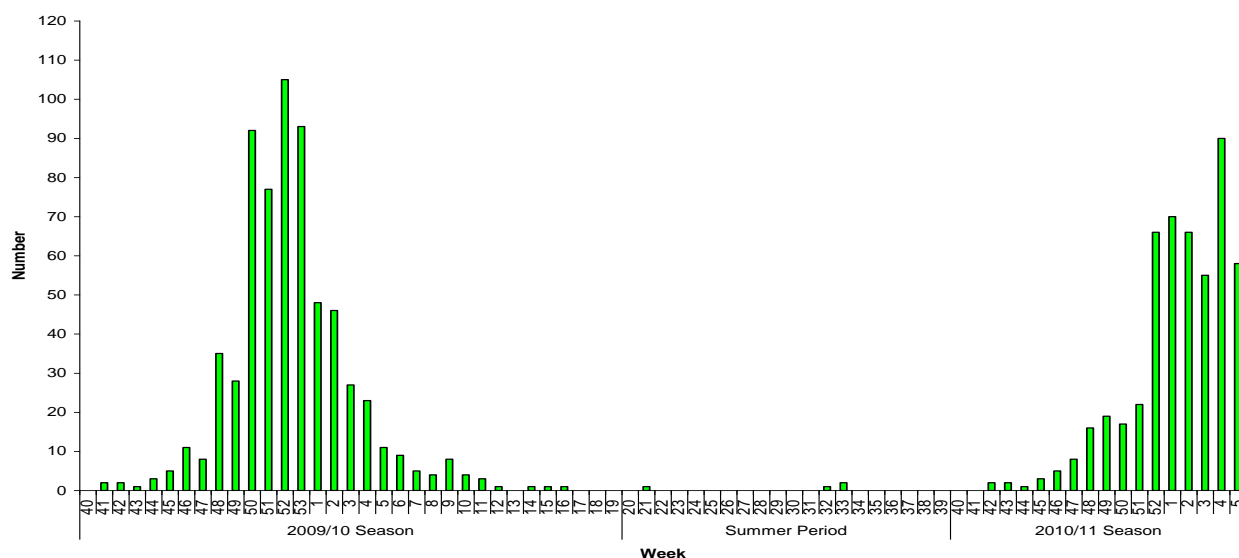


Comment

The proportion of samples (sentinel and non-sentinel) that tested positive for all flu types remained relatively similar to last week at 13% in week 5 (6% influenza A and 7% influenza B).

Other respiratory viruses

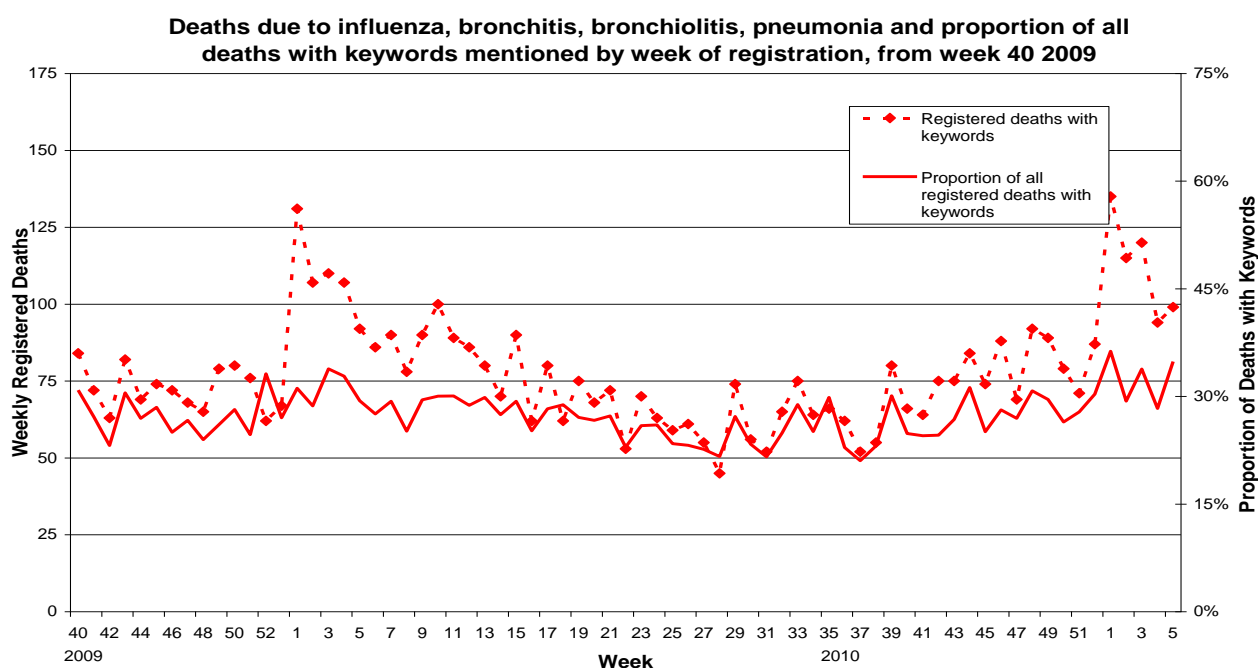
Figure 8. Weekly cases of RSV viruses in Northern Ireland from week 40 2009



Mortality data

Weekly mortality data is provided from Northern Ireland Statistics and Research Agency. The data relates to the number of deaths from selected respiratory infections (some of which may be attributable to influenza, and other respiratory infections or complications thereof) registered each week in Northern Ireland. This is not necessarily the same as the number of deaths occurring in that period. Searches of the medical certificates of the cause of death are performed using a number of keywords that could be associated with influenza (bronchiolitis, bronchitis, influenza and pneumonia). Death registrations containing these keywords are presented as a proportion of all registered deaths.

Figure 9. Weekly registered deaths



Comment

The proportion of deaths related to respiratory keywords increased from 28% in week 4 to 35% in week 5. In week 5 there were 284 registered deaths of which 99 related to these specific respiratory infections.

Four swine flu related deaths were reported in week 5 (Saturday 29 January to Friday 4 February). This does not necessarily mean the deaths occurred during the reporting period.

The total number of swine flu related deaths reported up to noon, Wednesday 9 February 2011, is 29. Of these, 26 patients had an underlying health problem, 2 did not, and 1 is not yet known.

Note: The definition of a swine flu related death is: "Death caused directly by swine flu (Part I of the death certificate); Swine flu contributed to death (Part II of death certificate) and/or patient tested positive for swine flu".

Vaccine uptake

As at the end of December 2010, the proportion of people in Northern Ireland aged 65 years and over who had received the 2010/11 seasonal influenza vaccine was 69.8%, while the uptake in those aged under 65 in an at risk group was 62.7% (provisional data). This compares with 77% uptake in the over 65 years, and 81.8% in the under 65 at risk group for the same period last year.

Data sources

Data to monitor influenza activity in Northern Ireland is collected from the following sources:

- GP sentinel surveillance representing 11.6% of the Northern Ireland population;
- GP out-of-hours surveillance system;
- Virological reports from the Regional Virus Laboratory (RVL);
- Mortality data from Northern Ireland Statistics and Research Agency (NISRA).

Note

The figures for previous weeks included in this bulletin are updated with data from returns received after the production of the last bulletin. The current bulletin reflects the most up-to-date information available.

Further information

Further information on influenza is available at the following websites:

<http://www.hpa.org.uk>

<http://www.publichealth.hscni.net>

<http://www.who.int>

<http://ecdc.europa.eu>

<http://euroflu.org>

Detailed Influenza weekly reports can be found at the following websites:

England, Scotland and Wales:

<http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/SeasonalInfluenza/EpidemiologicalData/>

Republic of Ireland:

<http://www.ndsc.ie/hpsc/>

For further information on the Enhanced Surveillance of Influenza in Northern Ireland scheme or to be added to the circulation list for this bulletin please contact:

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This report was compiled by Cathriona Kearns, Paul Cabrey, and Dr. Brian Smyth.