

Influenza Weekly Surveillance Bulletin

Northern Ireland, Week 2 (8 –14 January 2011)

Summary

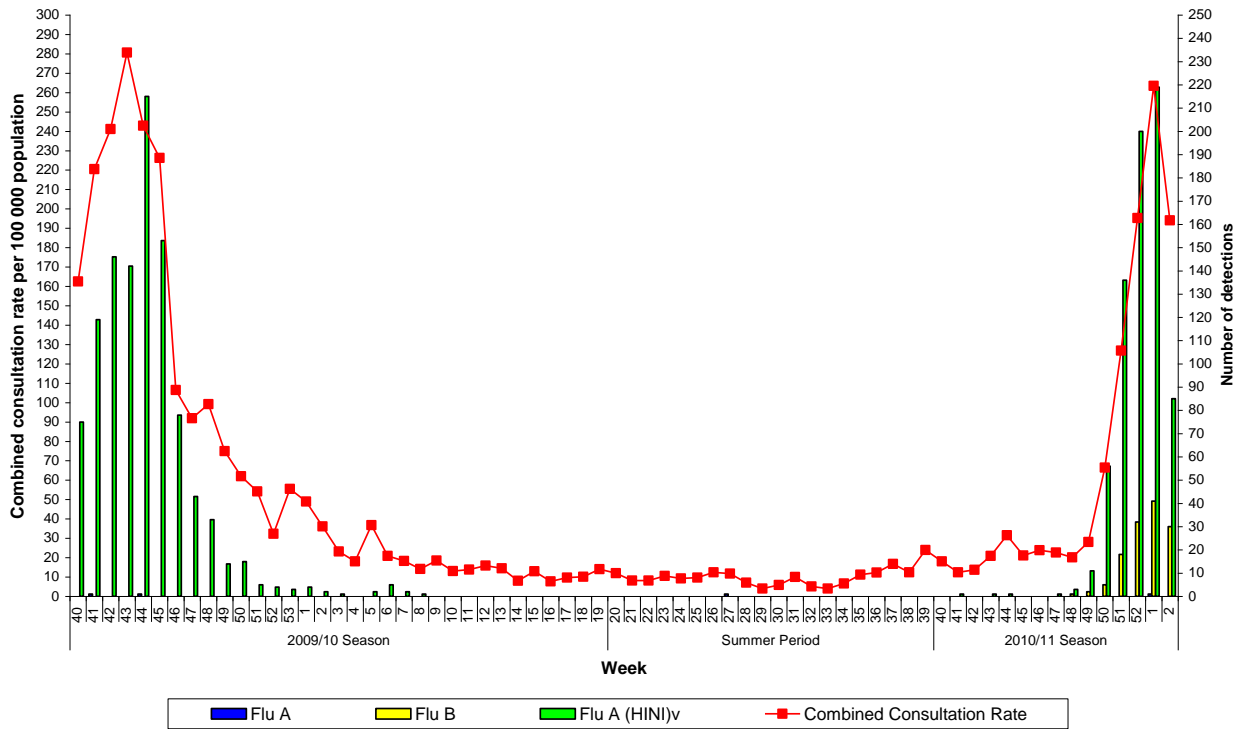
- GP consultation rates for combined flu/ FLI decreased from 263.5/100,000 population (updated) in week 1 to 194.0/100,000 in week 2 (26% decrease).
 - flu/FLI rates continue to remain well above the Northern Ireland threshold (70/100,000 population), but below the 2008/09 peak period.
 - flu/FLI rates remain highest in the 15–44 year age group.
- Out-of-hours flu/FLI call rates decreased from 115.7 per 100,000 population in week 1 to 47.0 per 100,000 in week 2 (59% decrease). Out-of-hours flu/FLI call rates remain highest in the 1–4 year age group.
- The number of influenza A (H1N1) 2009 detections decreased from 219 (updated) in week 1 to 85 in week 2 (61% decrease).
- In 0-4 year olds, the number of new influenza A (H1N1) 2009 detections decreased from 38 in week 1 to 27 in week 2.
- 30 influenza B detections in week 2 compared with 41 (updated) in week 1 (27% decrease).
- Respiratory syncytial virus (RSV) weekly detections decreased by 4% compared with week 1.
- One swine flu related death and one influenza B related death were reported in week 2 (Saturday 8 January to Friday 14 January).
- The total number of swine flu related deaths reported up to noon, Wednesday 19 January 2011, is 21. Of these, 18 patients had an underlying health problem, 2 did not, and 1 is not yet known.

Key messages

- If the current trend continues, the peak of this year's flu season has passed.
- Consultation rates, number of new cases and registered deaths from selected respiratory infections have all decreased.
- 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.

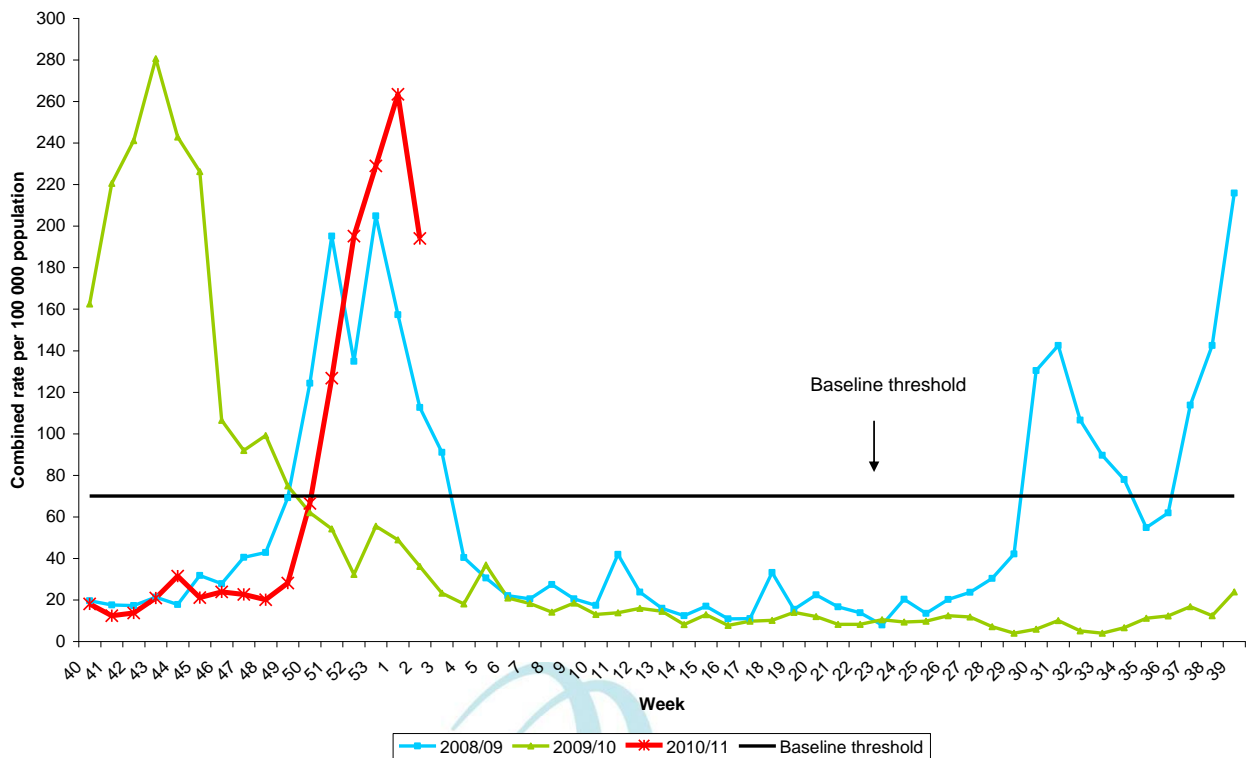
Sentinel GP consultation data

Figure 1: Sentinel GP consultation rate for combined flu and flu-like illness and number of virology flu detections from week 20 2010



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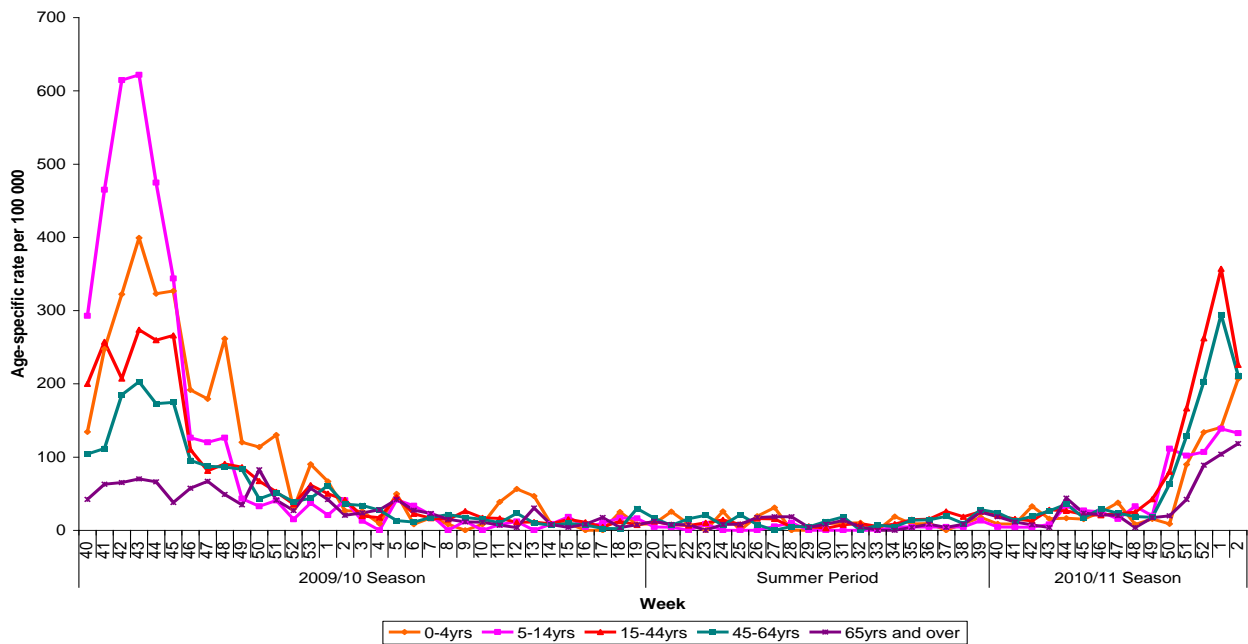
Figure 2: Sentinel GP consultation rate for combined flu and flu-like illness 2008/09–2010/11



Comments

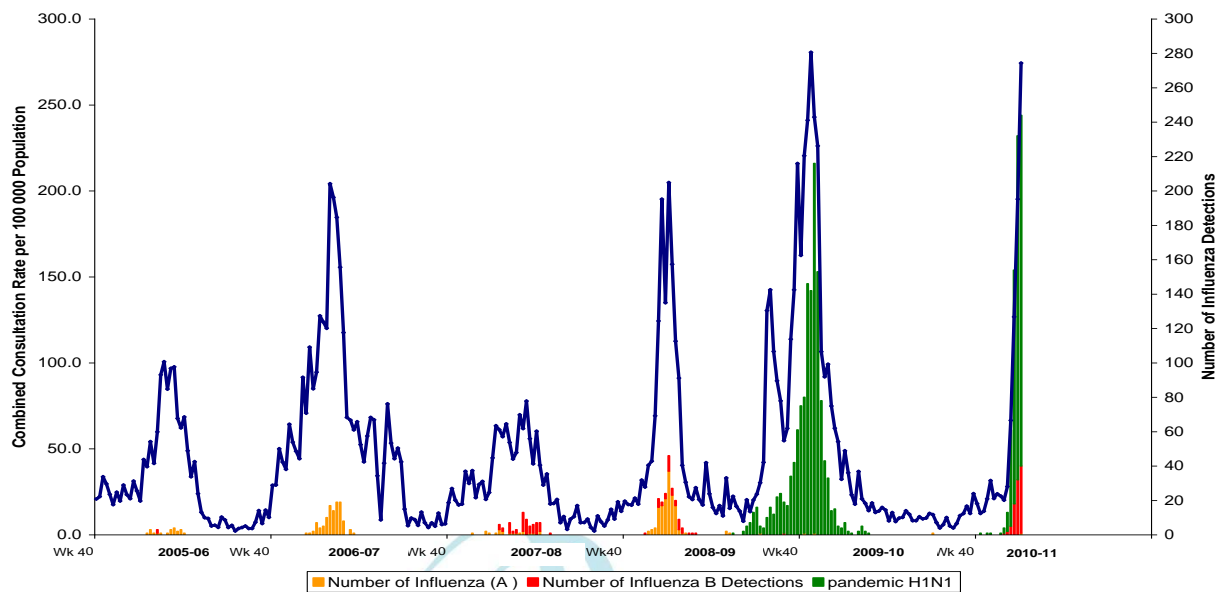
The GP consultation rate decreased from 263.5 (updated) per 100,000 population in week 1 to 194.0 per 100,000 population in week 2 (26% decrease). Rates continue to be higher than previous years, though now below the 2008/09 peak, but remain well above the Northern Ireland threshold (Figures 2 and 4).

Figure 3: Sentinel GP age-specific consultation rates for combined flu and flu-like illness from week 20 2010



Please note change in X axis scale of this graph

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



Comments

Consultation rates decreased in most age groups this week with the highest age-specific combined rates in the 15–44 and 45–64 year age groups (Figure 3). However, the rates increased markedly in the 0–4 year age group (47% increase) with a smaller increase in the over 65 year age group (14% increase).

In the current season 15% 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

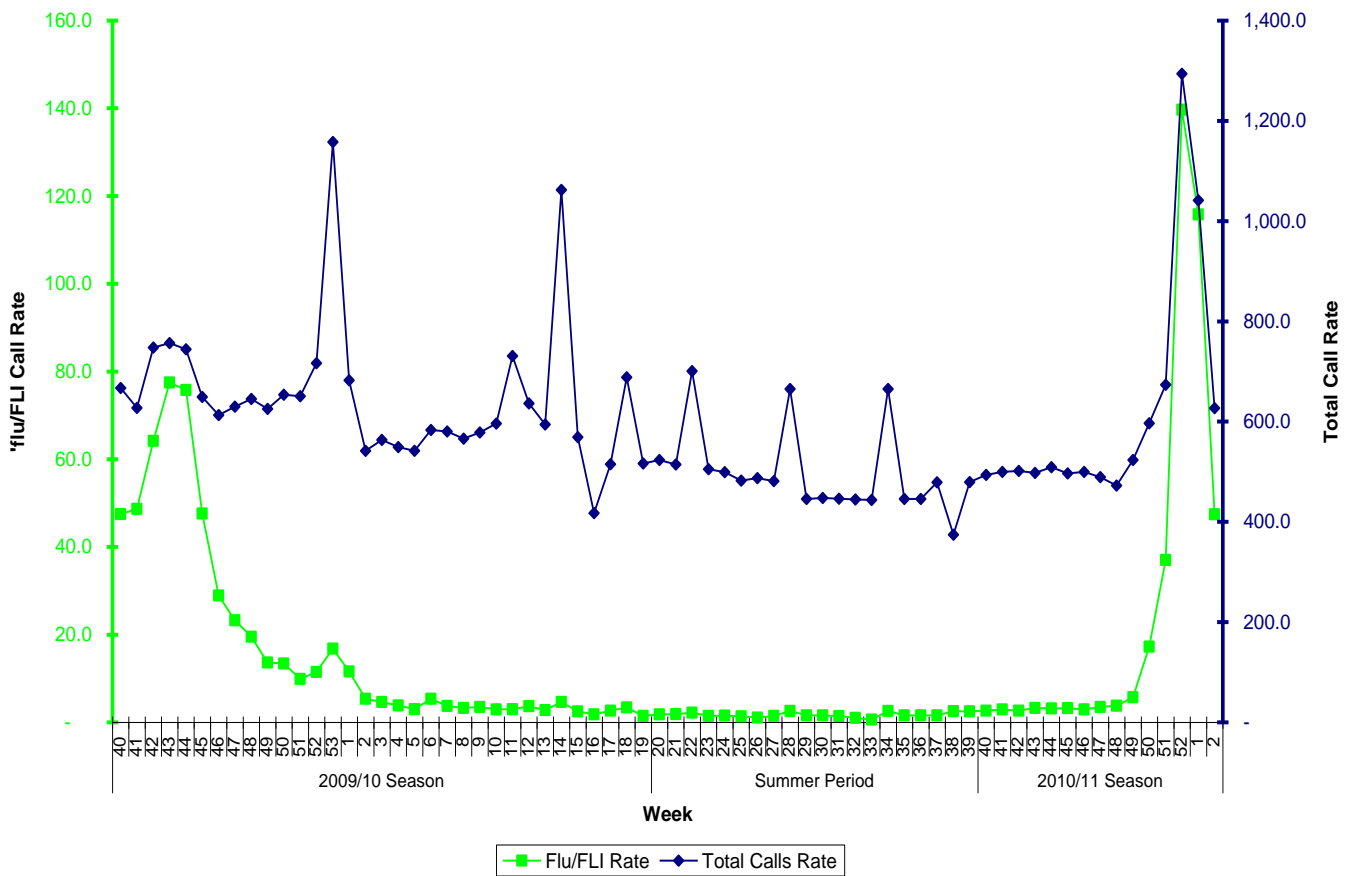
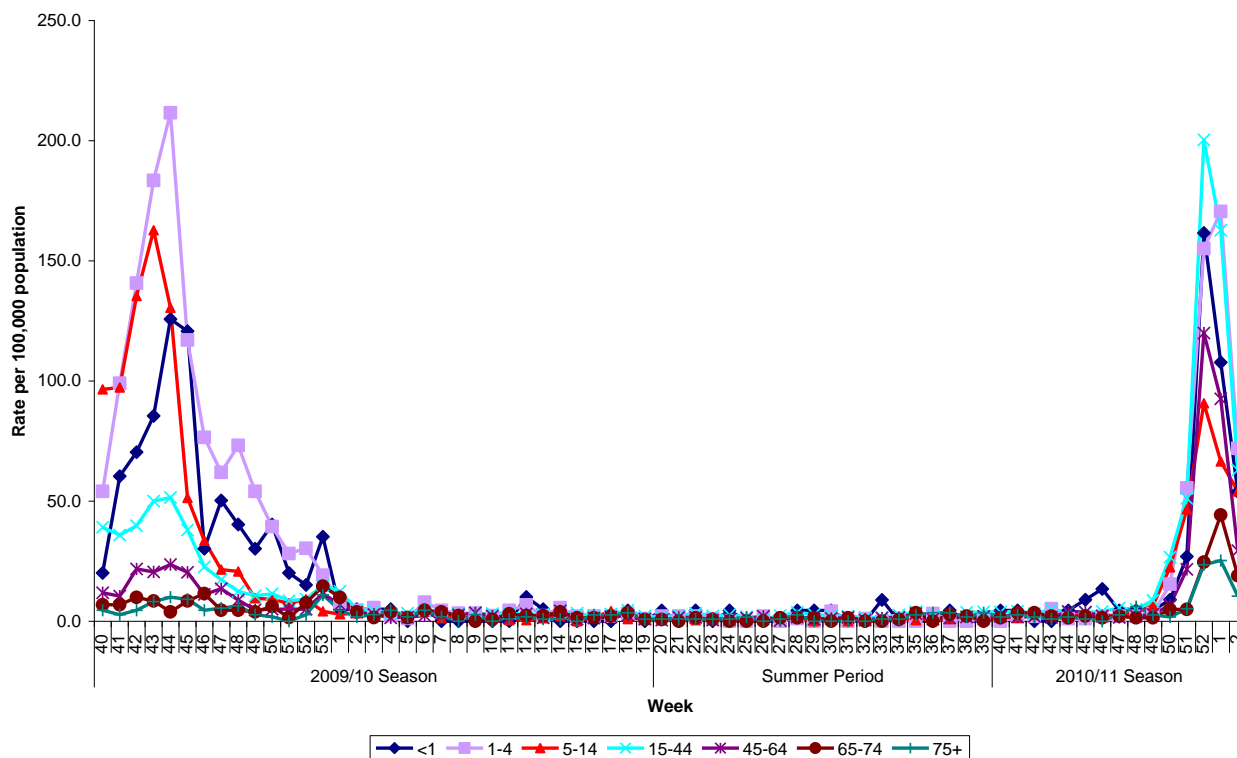


Figure 6: OOH call rates of flu and flu-like illness by age-group from week 40 2010



Comment

The number of calls to OOH centres (all diagnoses) in week 2 decreased by 40% compared with week 1. The decrease was expected as week 1 figures were inflated due to GPs being closed for bank holiday Monday. OOH call rates for flu/FLI have also decreased from 115.7 per 100,000 population in week 1 to 47.4 per 100,000 population in week 2 (59% decrease). Similar to last week the highest age-specific rates are in the 1–4 year age group followed by the 15–44 year age group.

The proportion of total calls due to flu/FLI decreased from 11.1% in week 1 to 7.6% in week 2 (32% decrease).

Note:

Data from week 15 onwards represents all seven OOH databases.

Respiratory outbreaks

There were no further respiratory outbreaks reported to the PHA during week 2.

Virology Data

Table 1. Virus activity in Northern Ireland Week 2 2011

Source	Specimens tested	(H1N1) 2009	Influenza B	RSV	Total influenza positive	% Influenza positive
Sentinel	37	11	3	0	14	38%
Non-sentinel	418	74	27	67	101	24%
Total	455	85	30	67	115	25%

Table 2. Cumulative total Week 40 – Week 2 2011

	(H1N1) 2009	AH3	Flu B	RSV	Total
0-4	137	0	24	252	413
5-14	44	0	24	6	74
15-64	483	0	66	24	573
65+	48	1	15	14	78
Unknown	1	0	0	2	3
All ages	713	1	129	298	1141

Table 3. Cumulative total Week 40 – Week 2 2011

Age	Sentinel				Non-sentinel				
	(H1N1) 2009	Flu B	RSV	Total	(H1N1) 2009	AH3	Flu B	RSV	Total
0-4	2	0	1	3	135	0	24	251	410
5-14	9	1	0	10	35	0	23	6	64
15-64	67	11	2	80	416	0	55	22	493
65+	0	0	0	0	48	1	15	14	78
Unknown	0	0	0	0	1	0	0	2	3
All ages	78	12	3	93	635	1	117	295	1048

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.

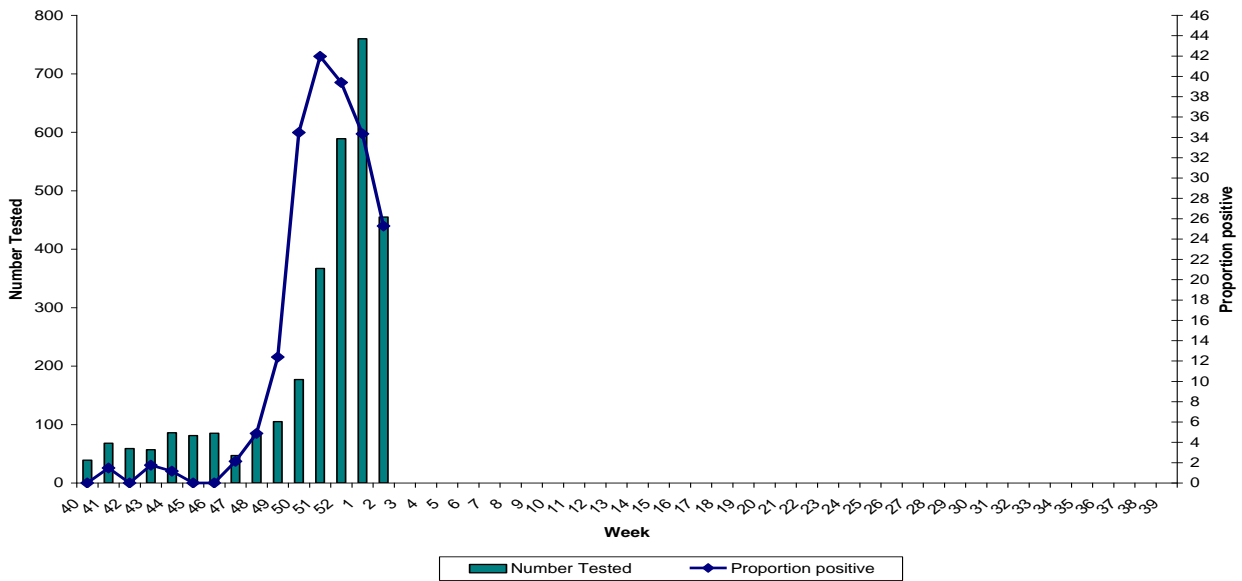
Please note that cumulative virology figures can include updated figures for previous weeks due to laboratory results that may have arrived after publication of the bulletin.

Comments

In week 2 there were 455 specimens (37 sentinel) submitted for testing to the Regional Virus Laboratory. There were 115 positive influenza specimens in this period; 85 influenza A (H1N1) 2009 and 30 influenza B. Similar to last week the majority of influenza detections remain in the 15–64 year age group.

Currently the median age for influenza A (H1N1) 2009 is 29 years with the median age for influenza B 22 years.

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

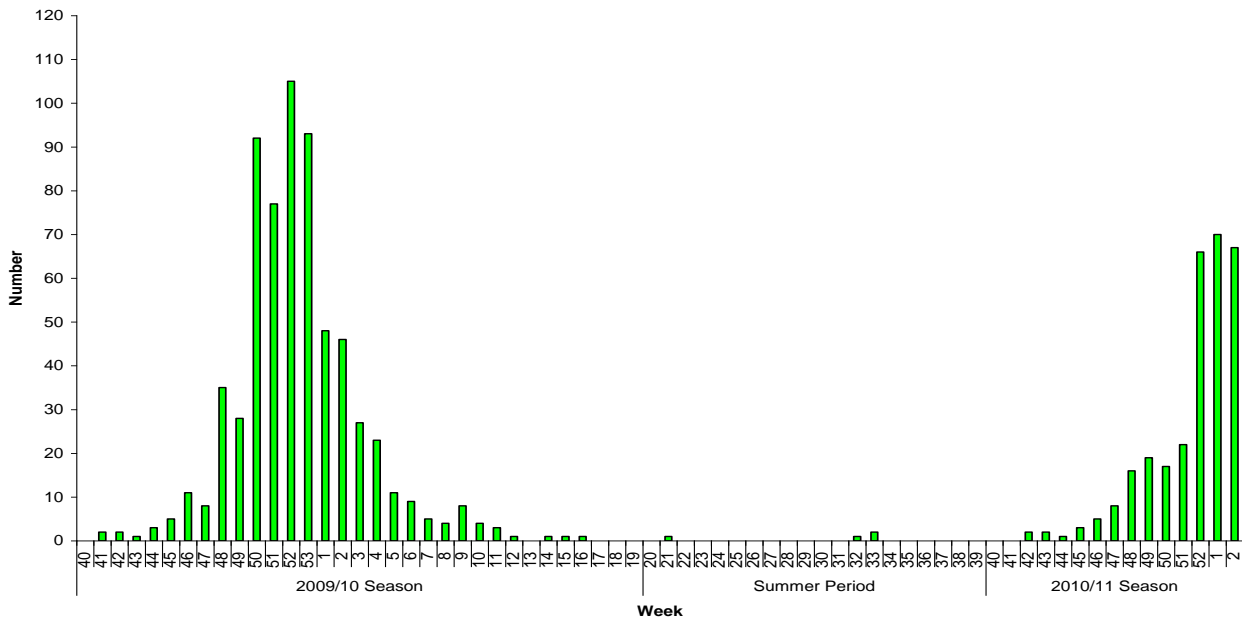


Comment

The proportion of samples (sentinel and non-sentinel) that tested positive for all flu types in week 2 was 25% (19% influenza A and 6% influenza B) and has fallen from a peak positivity rate of 42% in week 51.

Other respiratory viruses

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



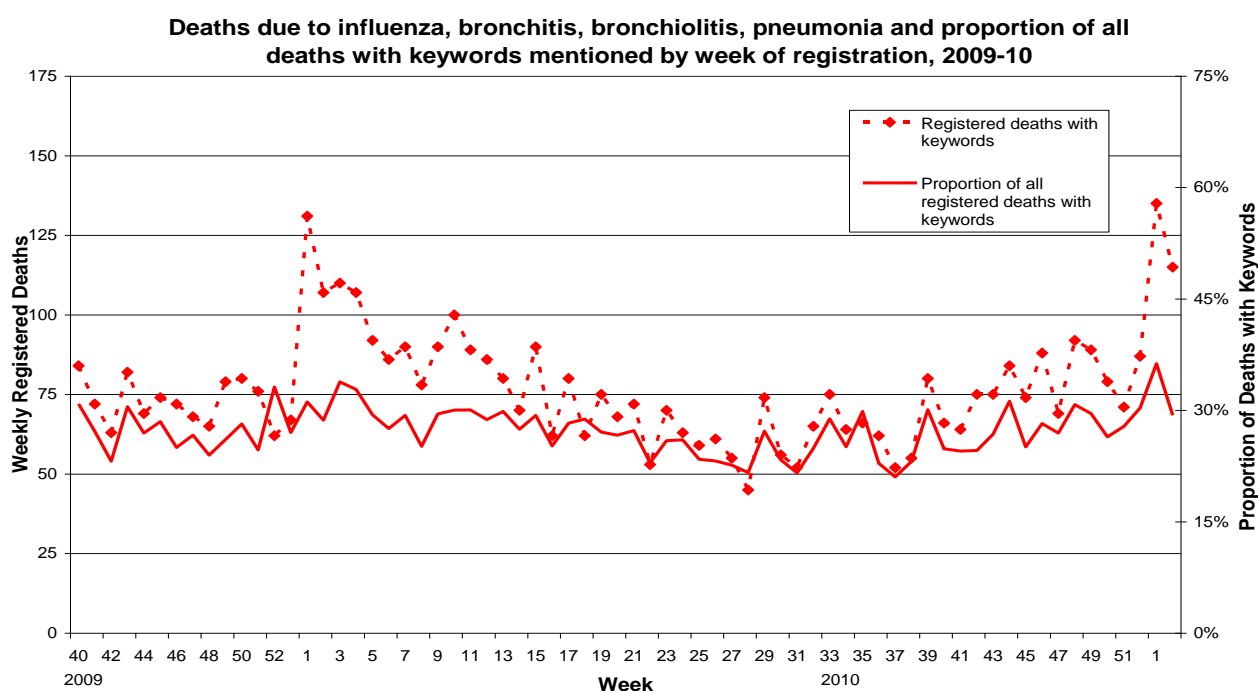
Comment

RSV detections decreased by 4% compared with week 1 with 85% of all RSV detections in the 0–4 year age group.

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



Comments

The proportion of deaths related to respiratory keywords decreased from 36% in week 1 to 29% in week 2. In week 2 there were 392 registered deaths of which 115 related to these specific respiratory infections.

One swine flu and one influenza B related deaths were reported in week 2 (Saturday 8 January to Friday 14 January).

The total number of swine flu related deaths reported up to noon, Wednesday 19 January 2011, is 21. Of these, 18 patients had an underlying health problem, two did not, and one 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 November 2010, the proportion of people in Northern Ireland aged 65 years and over who had received the 2010/11 seasonal influenza vaccine was 66.5%, while the uptake in those aged under 65 in an at risk group was 56.4% (provisional data). This compares with 73% uptake in the over 65 years, and 69.9% in the under 65 at risk group for the same period last year.

Information on vaccines administered in December will be available in next week's bulletin.

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.