

## Influenza Weekly Surveillance Bulletin

Northern Ireland, Week 4 (22–28 January 2011)

### Summary

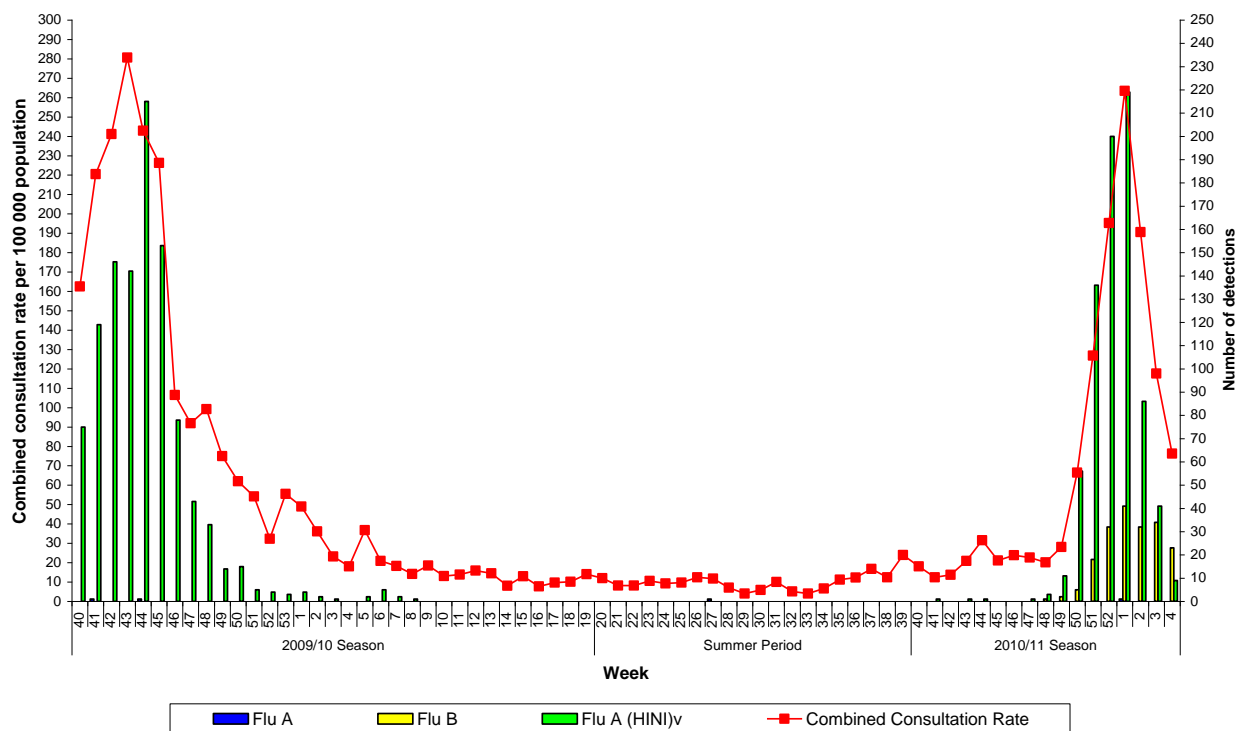
- GP consultation rates for combined flu/ FLI decreased from 117.6/100,000 population (updated) in week 3 to 76.2/100,000 in week 4 (35% decrease).
  - flu/FLI rates continue to decrease and are now marginally above the Northern Ireland threshold (70/100,000 population).
  - flu/FLI rates are now highest in the 5–14 year age group.
- Out-of-hours flu/FLI call rates decreased from 30.4 per 100,000 population in week 3 to 20.2 per 100,000 in week 4 (34% decrease). Out-of-hours Flu/FLI rates remain highest in the 1–4 year age group.
- The number of influenza A (H1N1) 2009 detections decreased from 41 in week 3 to 9 in week 4 (78% decrease).
- Number of influenza B detections decreased from 34 (updated) in week 3 to 23 in week 4 (32% decrease).
- Respiratory syncytial virus (RSV) weekly detections increased by 60% compared with week 3.
- Two swine flu related deaths were reported in week 4 (Saturday 22 January to Friday 28 January).
- The total number of swine flu related deaths reported up to noon, 2 February 2011, is 25. Of these, 22 patients had an underlying health problem, 2 did not, and 1 is not yet known.

### Key messages

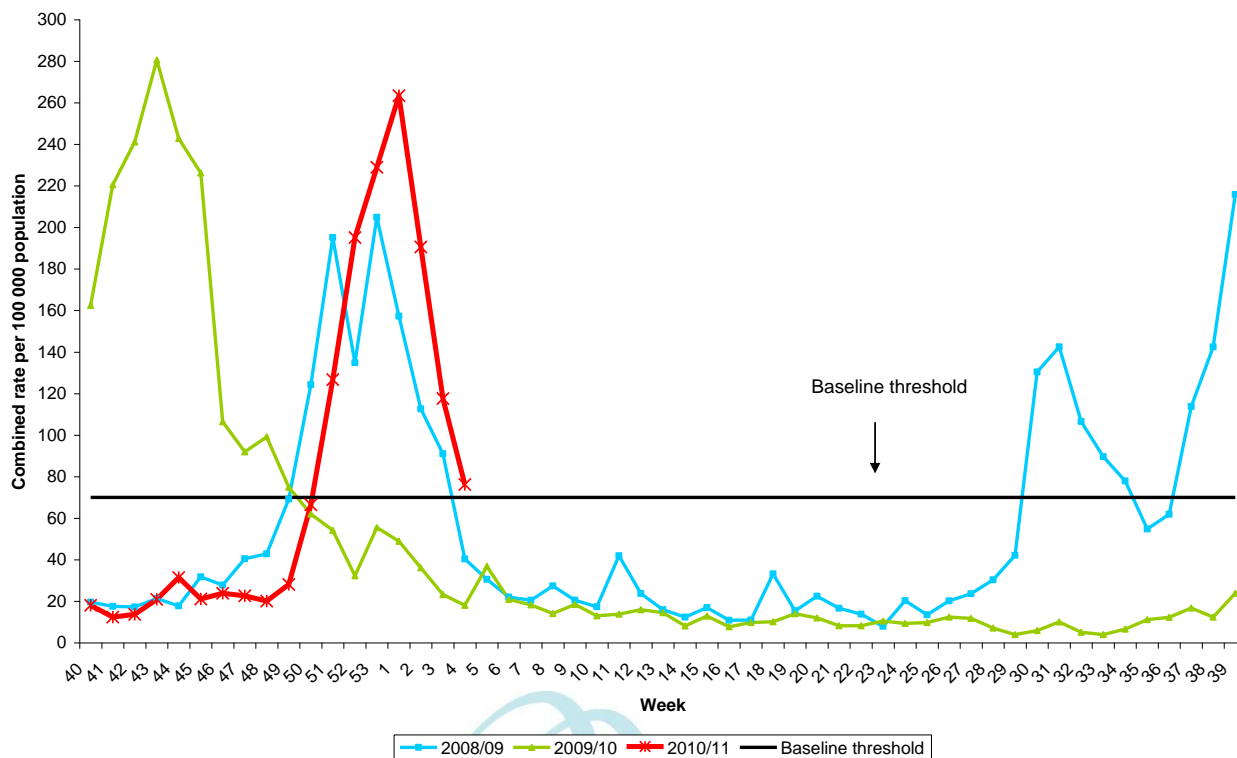
- If the current trend continues, the peak of this year's flu season has passed.
- Both consultation rates and numbers of new cases continue to decrease.
- Influenza viruses are still circulating but at lower levels.
- People with underlying health problems remain at much greater risk of developing serious 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**



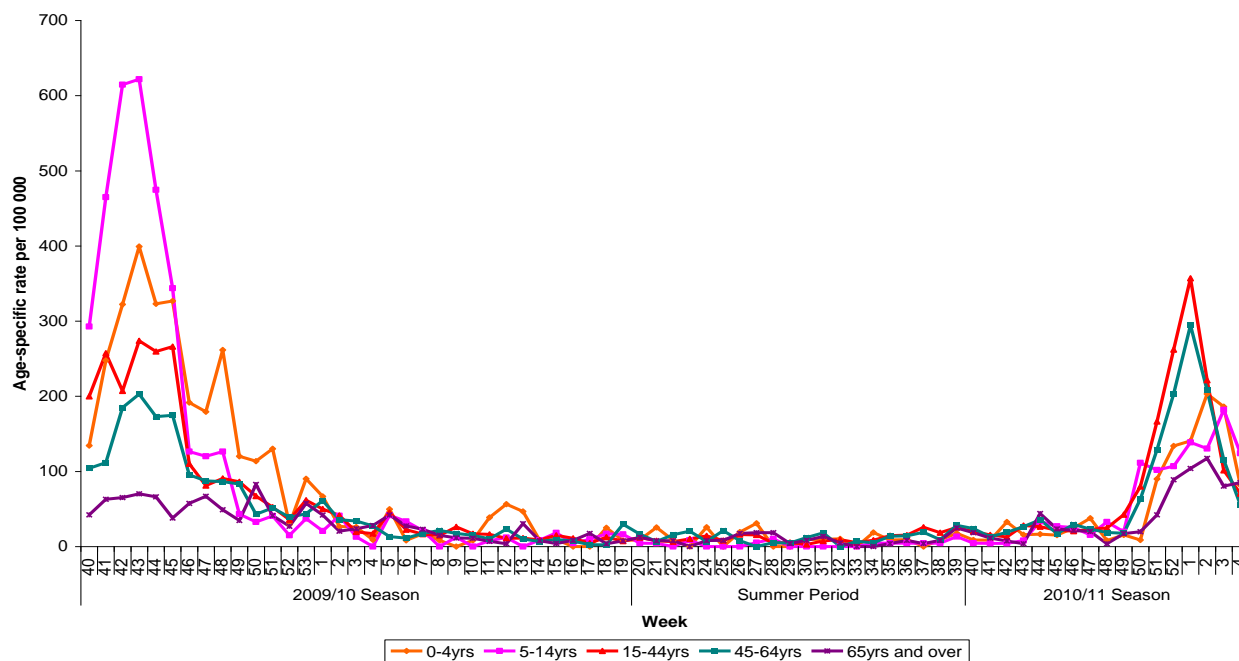
**Figure 2: Sentinel GP consultation rate for combined flu and flu-like illness 2008/09–2010/11**



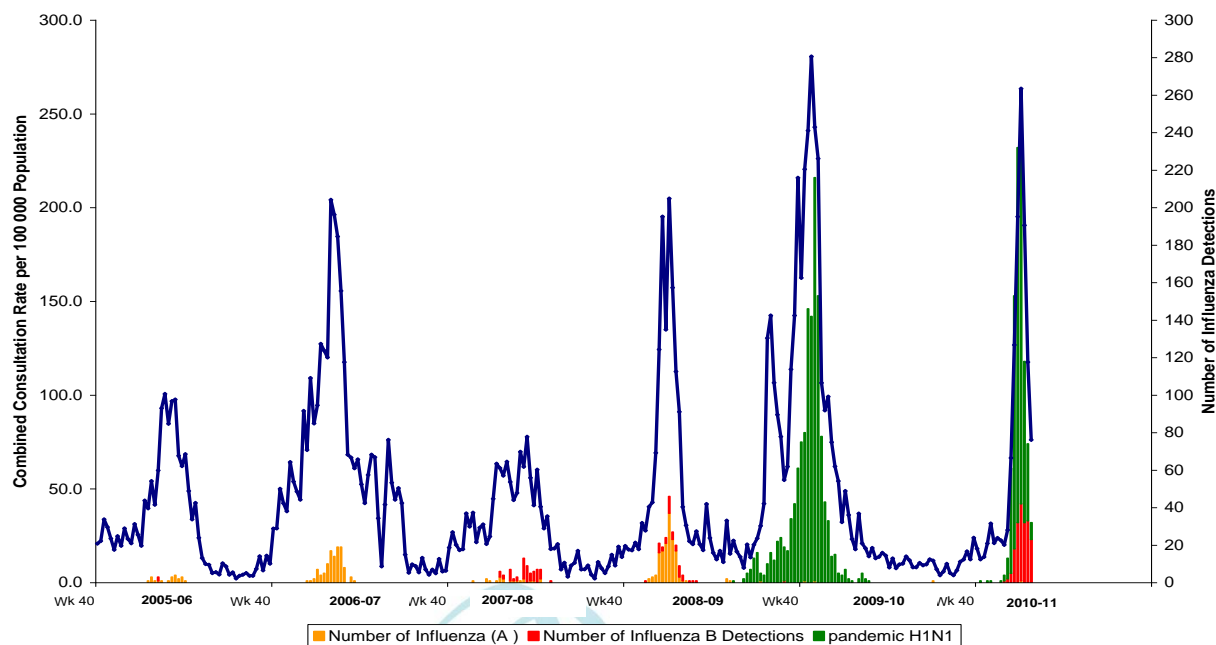
## Comment

The GP consultation rate decreased for the third consecutive week from 117.6 (updated) per 100,000 population in week 3 to 76.2 per 100,000 population in week 4 (35% decrease). Rates are now just marginally 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 40 2009**



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



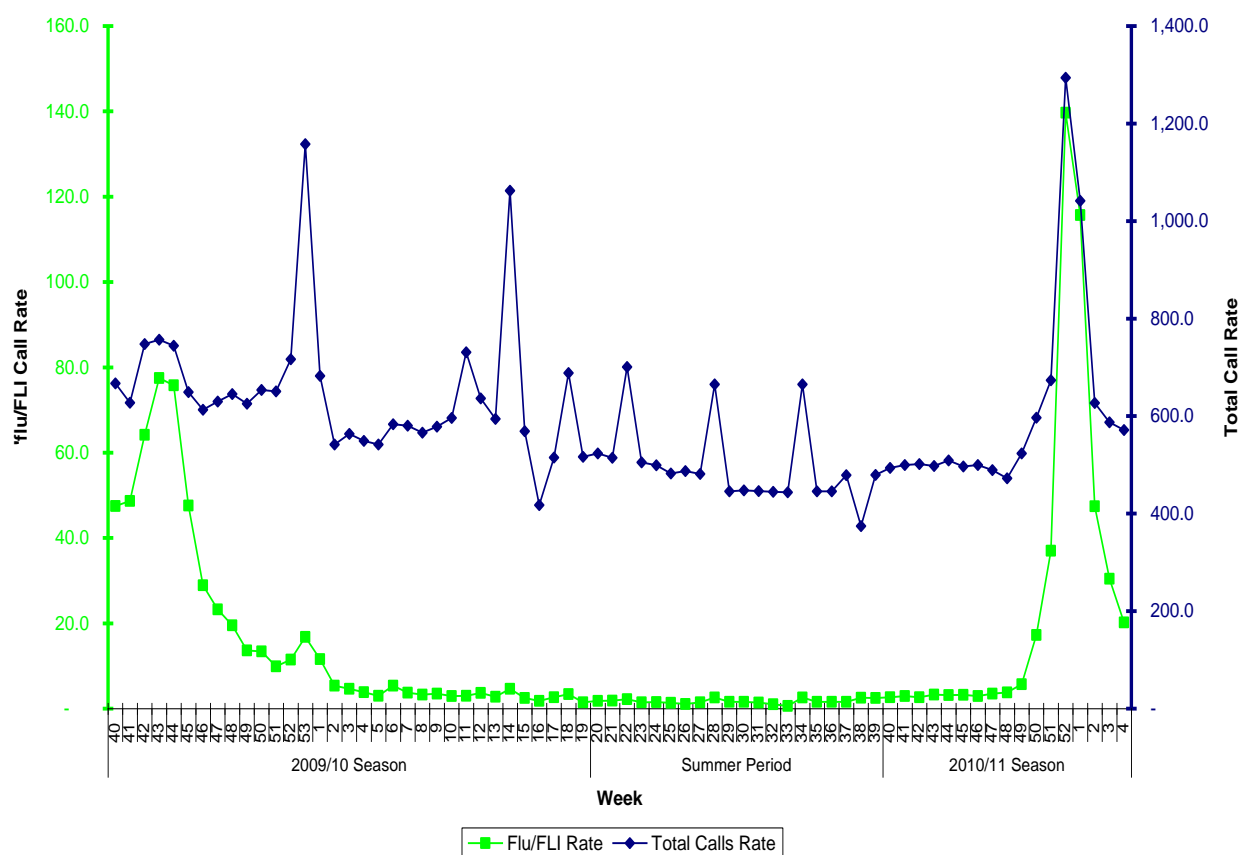
## Comment

All age-specific consultation rates decreased in week 4 with the exception of the over 65 year age group, which increased slightly. The highest age-specific combined rates this week were in the 5–14 year age group (Figure 3).

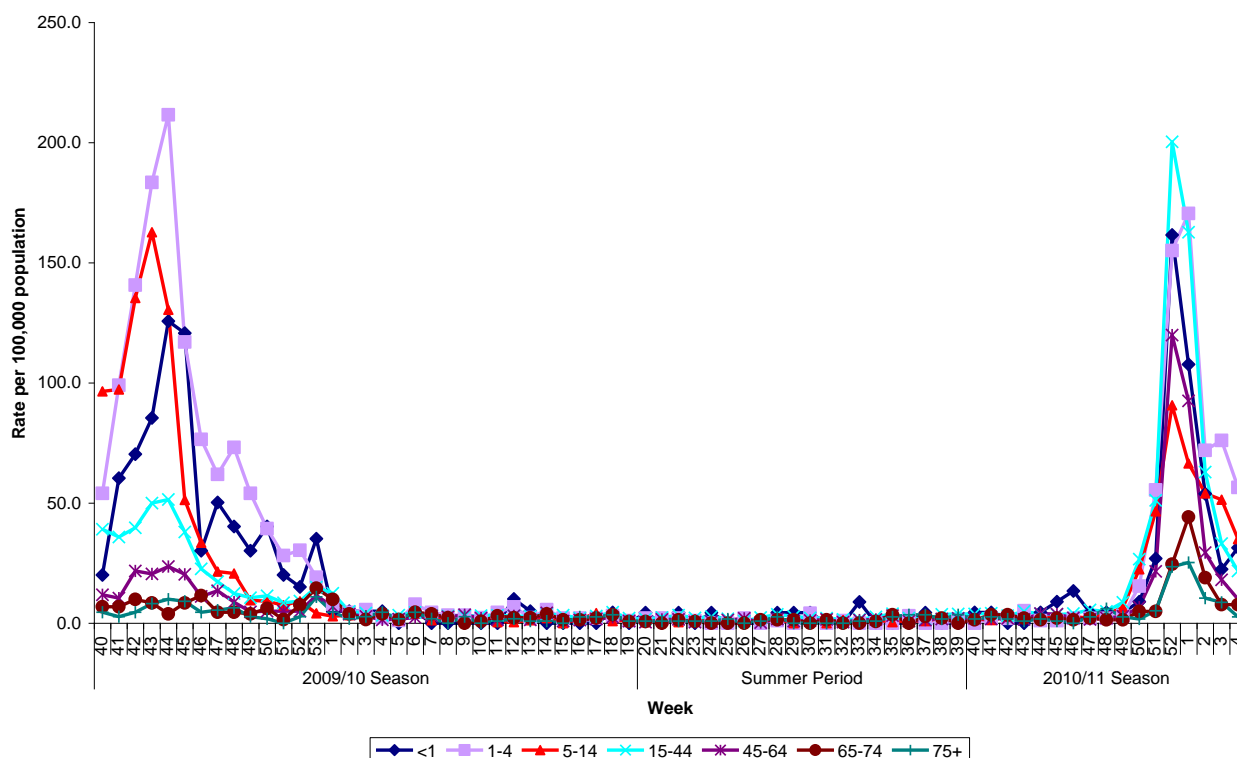
From the start of the current flu season 20% of flu detections are influenza B in contrast to the pandemic period when all flu detections were influenza A (H1N1) 2009 (Figure 4).

## 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 4 decreased by 3% compared with week 3. OOH call rates for flu/FLI also decreased from 30.4 per 100,000 population in week 3 to 20.2 per 100,000 population in week 4 (34% decrease). The highest age-specific rates remain in the 1–4 year age group followed by the 5–14 year age group (Figure 6).

The proportion of total calls due to flu/FLI decreased from 5.2% in week 3 to 3.5% in week 4 (33% decrease).

### Note:

Data from week 15 onwards represents all seven OOH databases.

## Virology data

**Table 1. Virus activity in Northern Ireland Week 4 2011**

Source	Specimens tested	(H1N1) 2009	Influenza B	RSV	Total influenza positive	% Influenza positive
Sentinel	19	2	6	1	8	42%
Non-sentinel	240	7	17	87	24	10%
<b>Total</b>	<b>259</b>	<b>9</b>	<b>23</b>	<b>88</b>	<b>32</b>	<b>12%</b>

**Table 2. Cumulative total Week 40 – Week 4 2011**

	(H1N1) 2009	AH3	Flu B	RSV	Total
<b>0–4</b>	150	0	37	378	<b>565</b>
<b>5–14</b>	56	0	42	9	<b>107</b>
<b>15–64</b>	504	0	92	31	<b>627</b>
<b>65+</b>	55	1	17	20	<b>93</b>
<b>Unknown</b>	1	0	0	2	<b>3</b>
<b>All ages</b>	<b>766</b>	<b>1</b>	<b>188</b>	<b>440</b>	<b>1395</b>

**Table 3. Cumulative total Week 40 – Week 4 2011**

Age	Sentinel				Non-sentinel				
	(H1N1) 2009	Flu B	RSV	Total	(H1N1) 2009	AH3	Flu B	RSV	Total
<b>0–4</b>	3	1	2	<b>6</b>	147	0	36	376	<b>559</b>
<b>5–14</b>	15	6	0	<b>21</b>	41	0	36	9	<b>86</b>
<b>15–64</b>	75	20	3	<b>98</b>	429	0	72	28	<b>529</b>
<b>65+</b>	0	0	0	<b>0</b>	55	1	17	20	<b>93</b>
<b>Unknown</b>	0	0	0	<b>0</b>	1	0	0	2	<b>3</b>
<b>All ages</b>	<b>93</b>	<b>27</b>	<b>5</b>	<b>125</b>	<b>673</b>	<b>1</b>	<b>161</b>	<b>435</b>	<b>1270</b>

**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.

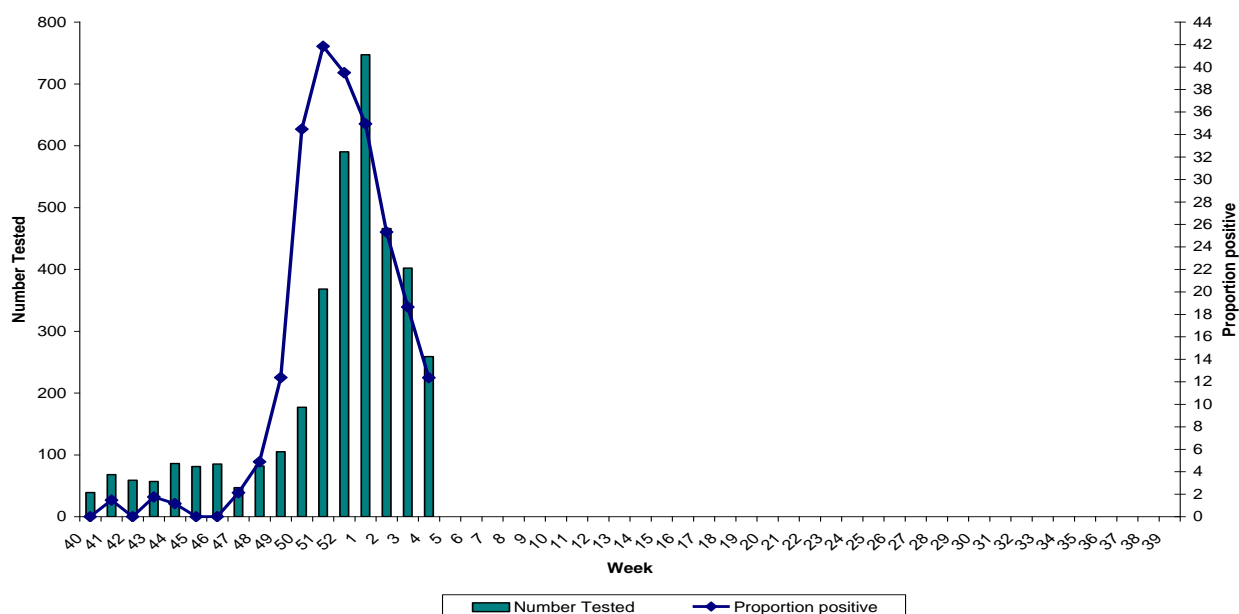
**Comment**

In week 4 there were 259 specimens (19 sentinel) submitted for testing to the Regional Virus Laboratory. There were 32 positive influenza specimens in this period; Nine influenza A (H1N1) 2009 and 23 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 has been steadily increasing from 8% in week 50 to 72% in week 4.

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

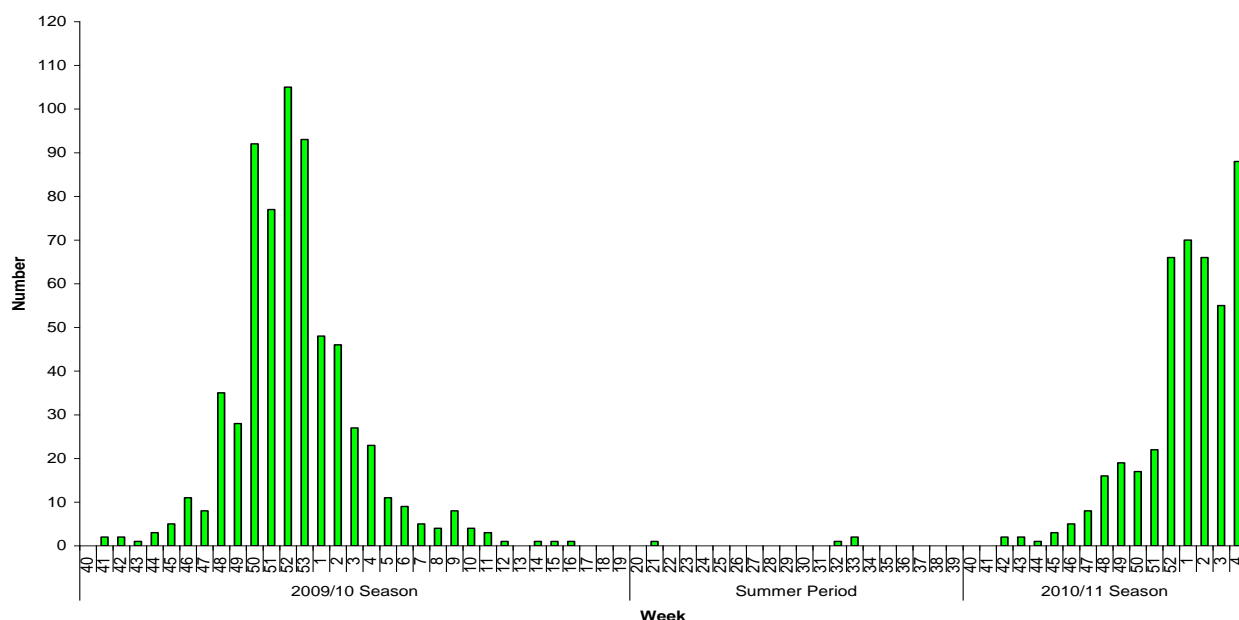


### Comment

The proportion of samples (sentinel and non-sentinel) that tested positive for all flu types decreased from 20% in week 3 to 12% (3% influenza A and 9% influenza B) in week 4.

### Other respiratory viruses

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



### Comment

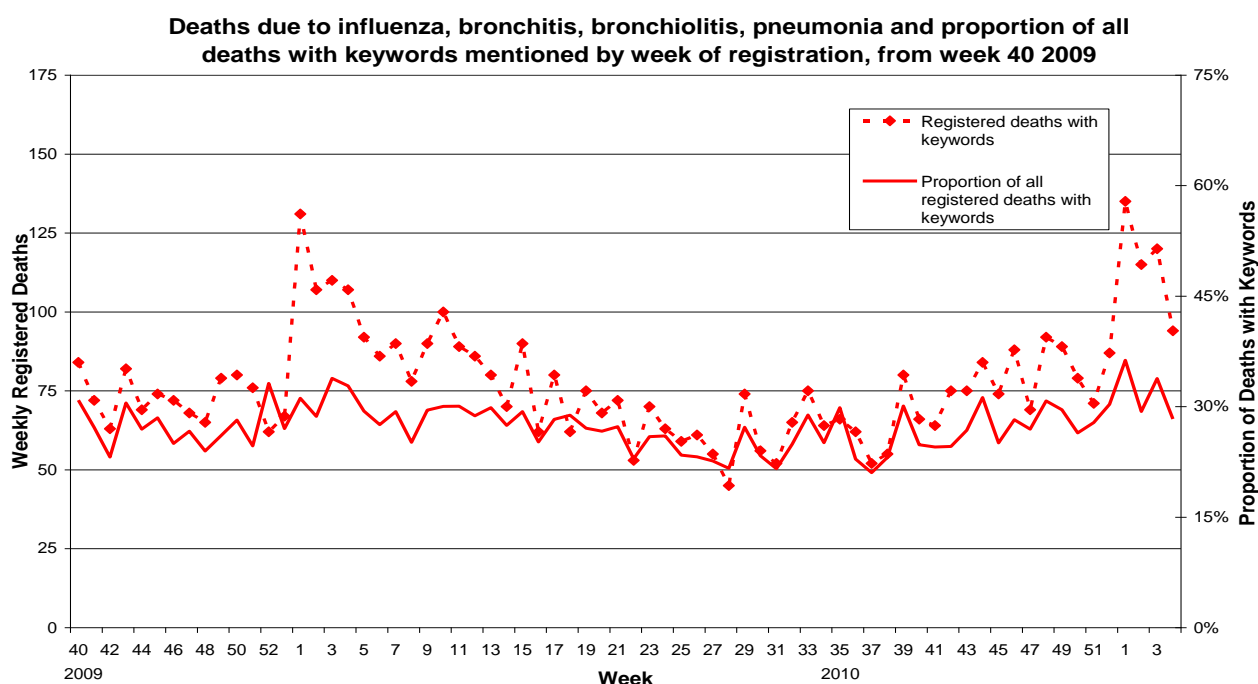
RSV detections increased to 88 in week 4 from 55 (updated) in week 3 (60% increase) with 86% of all RSV detections in the 0–4 year age group.



## 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**



## Comment

The proportion of deaths related to respiratory keywords decreased from 34% in week 3 to 28% in week 4. In week 4 there were 332 registered deaths of which 94 related to these specific respiratory infections.

Two swine flu related deaths were reported in week 4 (Saturday 22 January to Friday 28 January). 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 2 February 2011, is 25. Of these, 22 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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## Acknowledgements

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