

## Influenza Weekly Surveillance Bulletin

Northern Ireland, Week 52 (25 - 31 December)

### Summary

- All indicators of influenza virus activity continue to increase.
- GP consultation rates for combined flu/ FLI increased from 123.4/100,000 population (updated) in week 51 to 179.5/100,000 in week 52 (45% increase).
  - flu/FLI rates remain well above the Northern Ireland threshold (70/100,000 population);
  - flu/FLI rates were highest in the 15-44 years age group.
- Out-of-hours flu/FLI call rates have increased from 37.0 per 100,000 population in week 51 to 139.7 per 100,000 in week 52, reflecting the holiday period. Flu/FLI rates were also highest in the 15-44 years age group.
- The number of influenza A (H1N1) 2009 detections increased from 136 in week 51 (updated) to 185 in week 52.
- 28 influenza B detections.
- Respiratory syncytial virus (RSV) weekly detections increased from 23 (updated) in week 51 to 68 in week 52 (126% increase).

### 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.

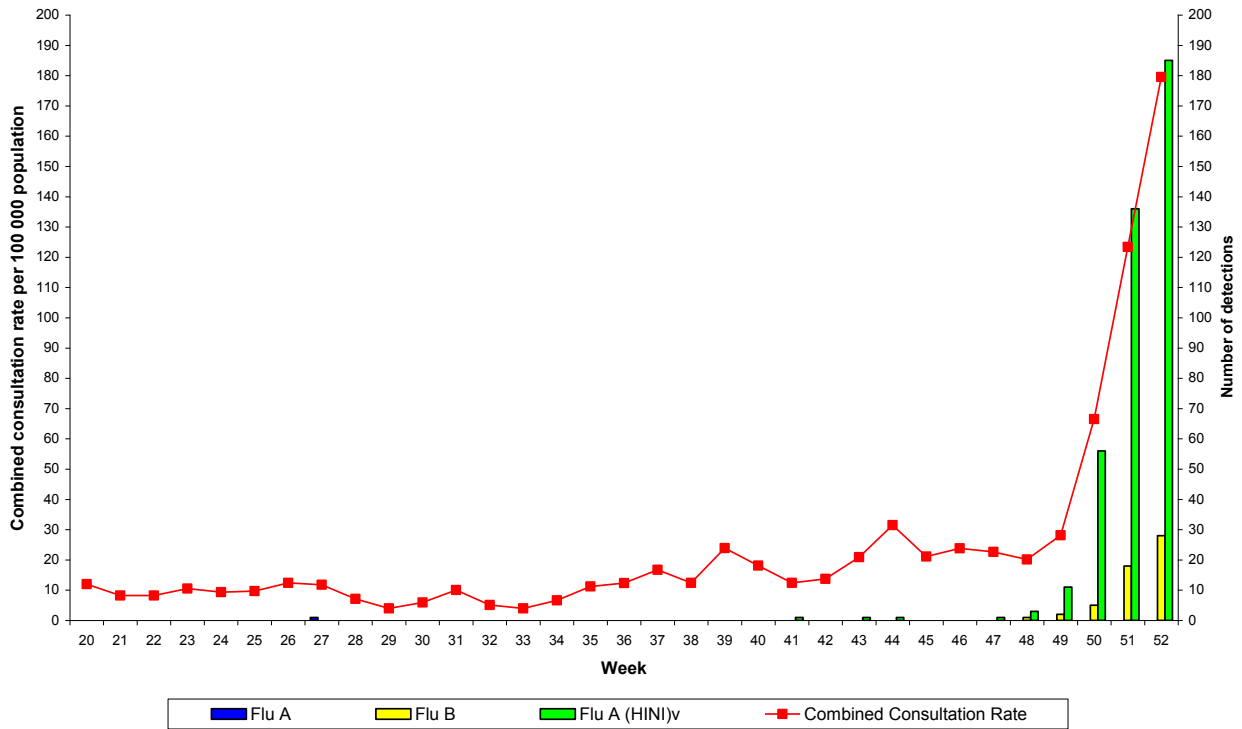
### Introduction

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 the Northern Ireland Statistics and Research Agency (NISRA).

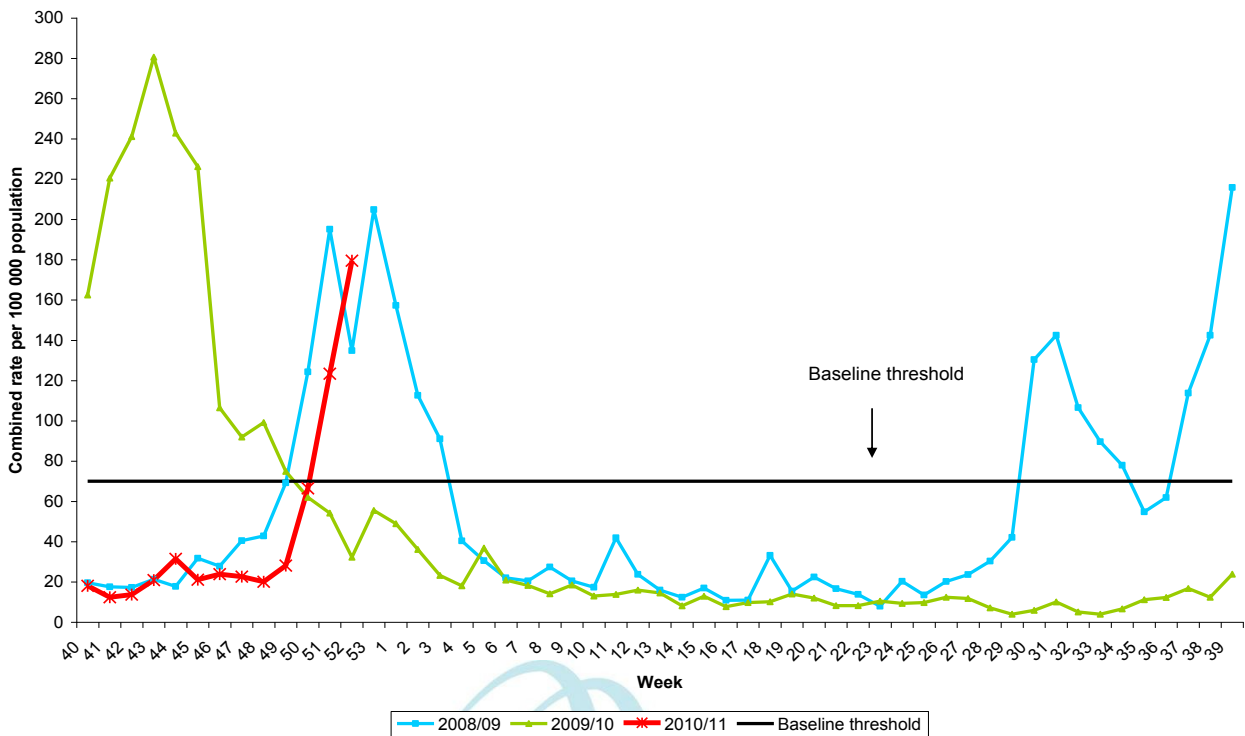
## Sentinel GP consultation data

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

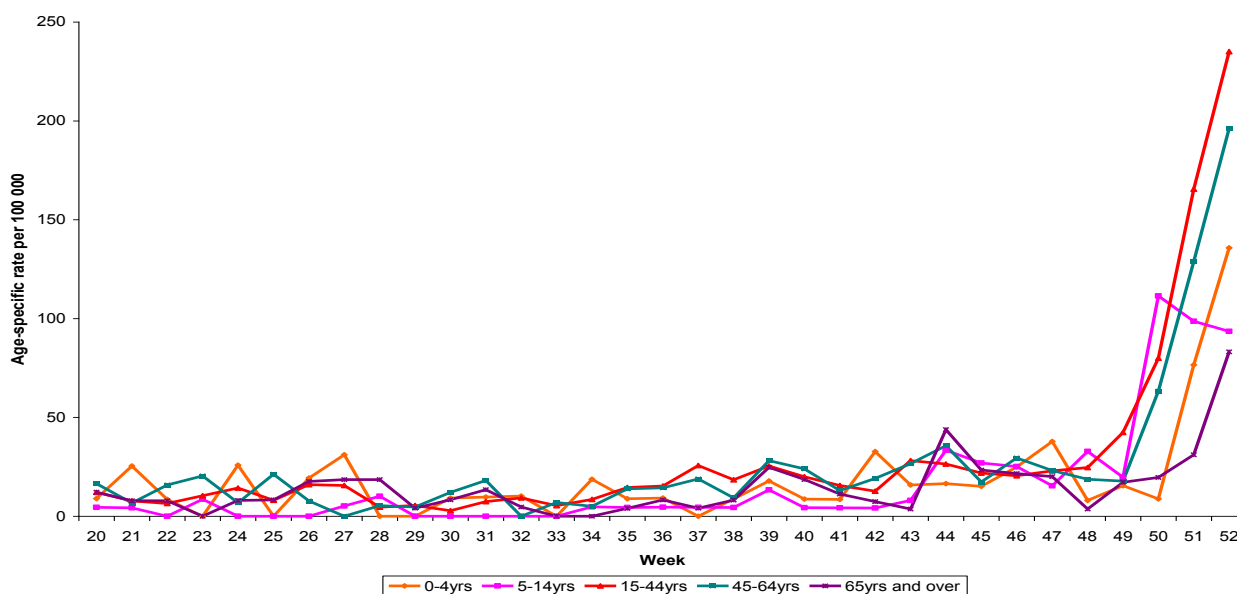


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**Figure 2: Sentinel GP consultation rate for combined flu and flu-like illness 2008/09–2010/11**

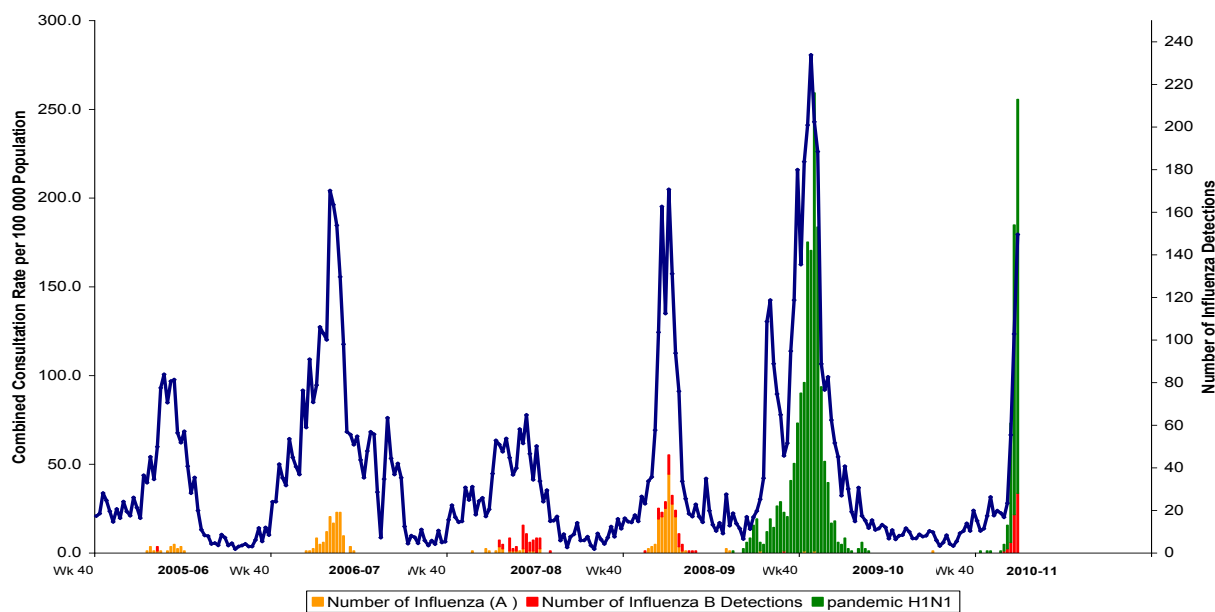


**Figure 3: Sentinel GP age-specific consultation rates for combined flu and flu-like illness from week 20, 2010**



*Please note change in Y axis scale of this graph*

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



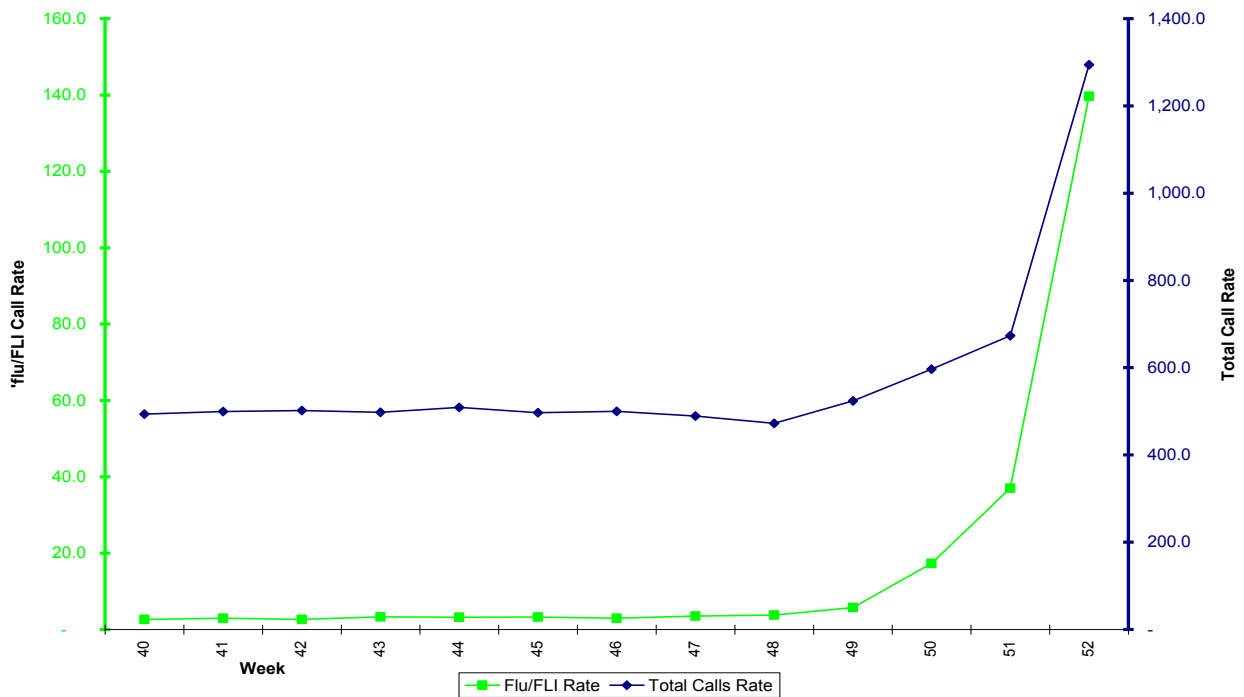
**Comments**

The GP consultation rate increased from 123.4 per 100,000 population (updated) in week 51 to 179.5 per 100,000 population in week 52 (45% increase). Rates are higher than the same week in previous years (Figures 2 and 4).

With the exception of the 5–14 years age group, all age-specific group rates have increased, including the over 65 years age group. The highest age-specific combined rates in week 52 were in the 15–44 years age group where rates increased from 165.5 per 100,000 population in week 51 to 235.0 per 100,000 population (42% increase) in week 52. The second highest rate was in the 45–64 years age group (Figure 3).

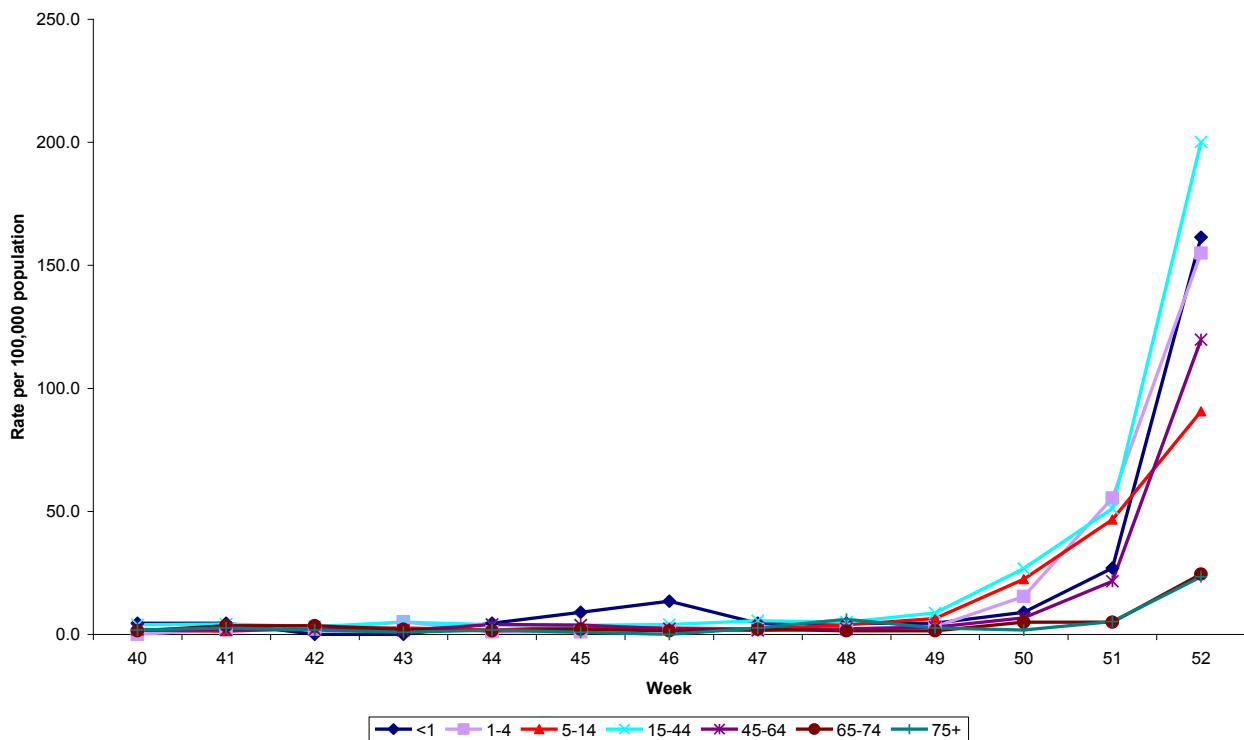
## Out of hours (OOH) centres call data

**Figure 5: OOH total call rate (all diagnoses) and call rate for flu and flu-like illness from week 40, 2010**



*Please note change in X and Y axis scale of this graph*

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



*Please note change in Y axis scale of this graph*

## Comments

The number of calls to OOH centres (all diagnoses) in week 52 increased by 92% compared with week 51. This increase is expected as it reflects a period when GP surgeries were closed. OOH call rates for flu/FLI have also increased significantly from 37.0 per 100,000 population in week 51 to 139.7 per 100,000 population in week 52. Rates increased in all age groups, with the highest age-specific rate in the 15–44 years age group.

The proportion of total calls that were flu/FLI calls increased from 5.5% in week 51 to 10.8% in week 52 (96% increase).

### Note

Data from week 15 onwards represent all seven OOH databases.

## Respiratory outbreaks

There were no further respiratory outbreaks reported to the PHA during week 52.

## Virology data

Table 1: Virus activity in Northern Ireland, week 52, 2010

Source	Specimens tested	(H1N1) 2009	Influenza B	RSV	Total influenza positive	% influenza positive
Sentinel	3	2	0	0	2	67%
Non-sentinel	418	183	28	68	211	50%
<b>Total</b>	<b>421</b>	<b>185</b>	<b>28</b>	<b>68</b>	<b>213</b>	<b>51%</b>

Table 2: Cumulative total, week 40 – week 52, 2010

Age	(H1N1) 2009	Flu B	RSV	Total
0-4	72	11	148	231
5-14	25	13	1	39
15-64	277	27	11	315
65+	21	3	2	26
Unknown	0	0	2	2
<b>All ages</b>	<b>395</b>	<b>54</b>	<b>164</b>	<b>613</b>

Table 3: Cumulative total, week 40 – week 52, 2010

Age	Sentinel				Non-sentinel			
	(H1N1) 2009	Flu B	RSV	Total	(H1N1) 2009	Flu B	RSV	Total
0-4	2	0	1	3	70	11	147	228
5-14	5	0	0	5	20	13	1	34
15-64	30	0	1	31	247	27	10	284
65+	0	0	0	0	21	3	2	26
Unknown	0	0	0	0	0	0	2	2
All ages	37	0	2	39	358	54	162	574

### Note

All virology data are provisional. Positive specimens refer to the date of specimen; however, the 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.

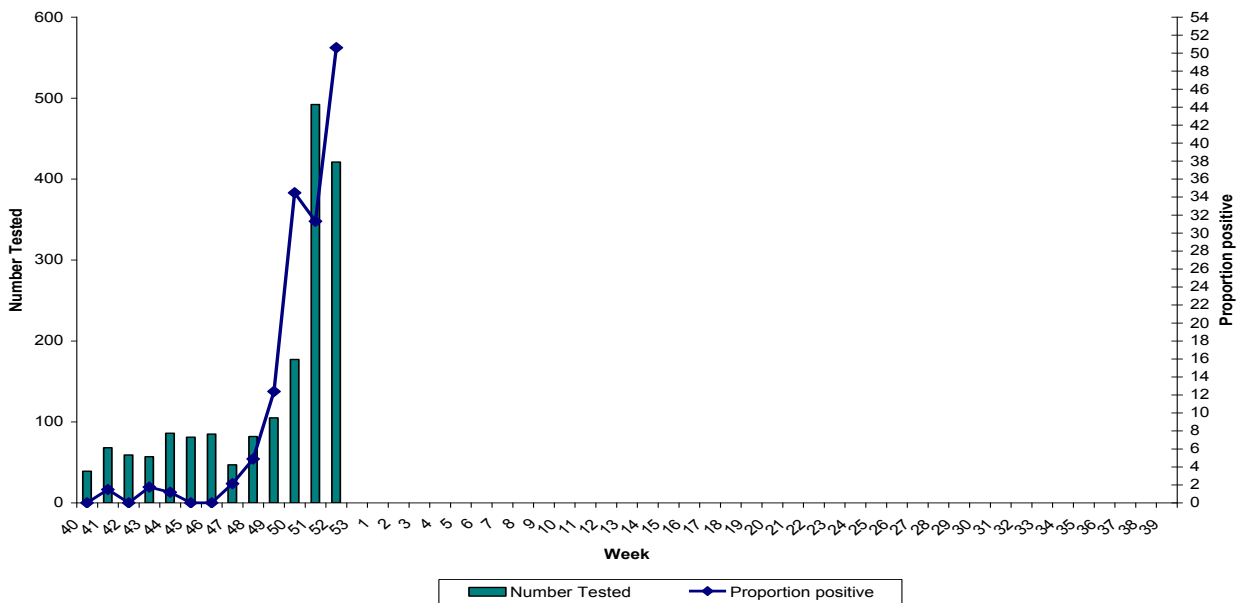
**From week 46, not all specimens will be tested for 'other' respiratory viruses. This may lead to a reduction in the numbers being tested for these viruses. However, this will not affect the numbers being tested for influenza or RSV.**

### Comments

In week 52, there were 421 specimens (3 sentinel) submitted for testing to the Regional Virus Laboratory. There were 213 positive influenza specimens in this period; 185 influenza A (H1N1) 2009 and 28 influenza B. The majority of influenza detections were in the 15–64 years age group.

Currently, the median age for influenza A (H1N1) 2009 is 29 years, with the median age for influenza B at 19.5 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**

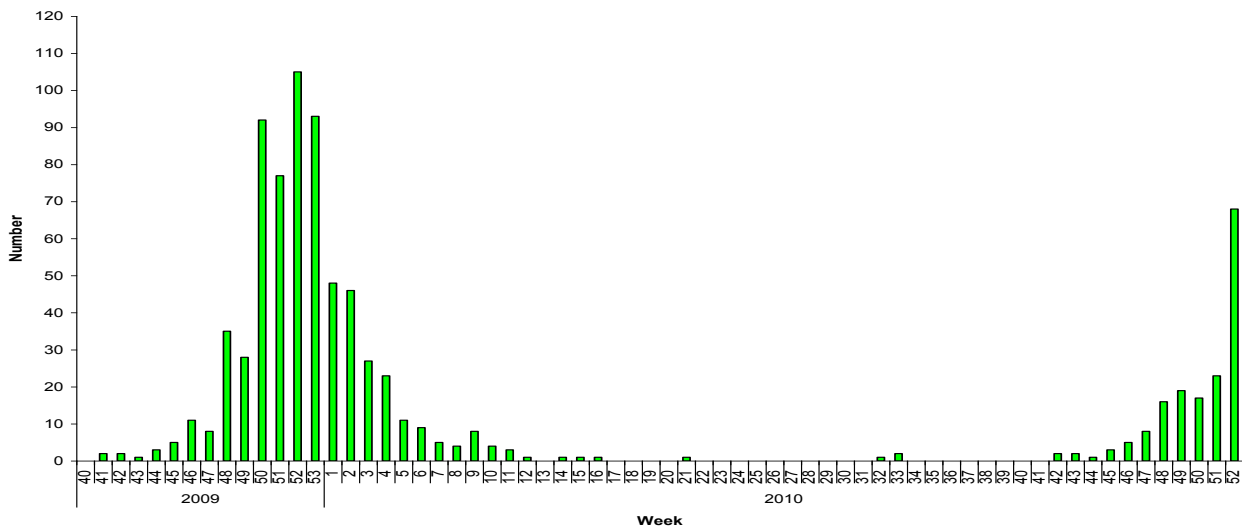


**Comment**

The proportion of samples (sentinel and non-sentinel) that tested positive for all flu types in week 52 was 51% (44% influenza A and 7% influenza B).

**Other respiratory viruses**

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



**Comments**

RSV detections increased from 23 (updated) in week 51 to 68 in week 52 (195% increase) and remain principally in hospitalised infants (0–4 years).

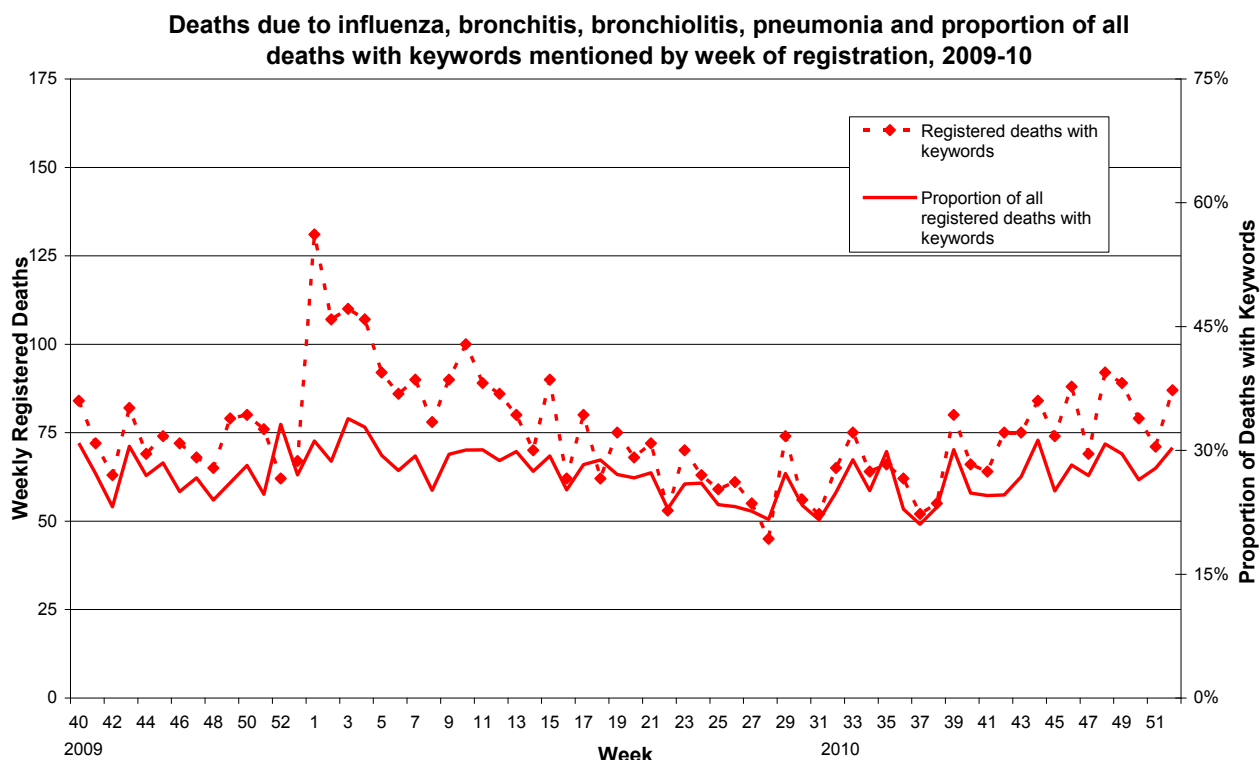
As so few specimens are currently being tested for other respiratory viruses (excluding RSV) we will no longer report on these viruses.

## Mortality data

During last year's pandemic, additional data collection was undertaken to identify deaths related to the H1N1 2009 pandemic (swine flu) virus and these deaths were reported in the bulletin. Now that the pandemic has been declared over by WHO, we have returned to customary reporting of seasonal flu mortality as detailed below. Although a death from H1N1 2009 may occasionally be reported in the media, there will be no cumulative total of deaths from any of the types of influenza viruses, as additional data are no longer collected and any figures would be incomplete and misleading.

Weekly mortality data are provided by the Northern Ireland Statistics and Research Agency (NISRA). The data relate 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 on 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 increased from 28% in week 51 to 30% in week 52. In week 52, there were 287 registered deaths, of which 87 related to these specific respiratory infections.



## Vaccine uptake

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 years in an at-risk group was 56.4% (provisional data). This compares with 73% uptake in those aged over 65 years, and 69.9% in the under 65 years at-risk group for the same period last year.

## Further information

Further information on influenza is available from 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 on 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.