

## Influenza Weekly Surveillance Bulletin

Northern Ireland, Week 40 (1– 7 October 2012)

This is the first bulletin of the 2012/13 season and will be released initially on a bi-weekly basis. However once flu activity begins to increase it will be produced on a weekly basis.

This bulletin provides an update on trends since the last bulletin was published in May 2012.

### Summary

- Influenza activity in Northern Ireland remained at low levels over the summer period.
- GP consultation rates for combined flu'/FLI decreased from 9.8 per 100,000 population in week 39 to 8.8 per 100,000 in week 40, 2012. Rates in week 40 are lower compared to the same week last year and are well below the Northern Ireland threshold (70 per 100,000).
- OOH 'flu/FLI call rates decreased slightly from 2.9 per 100,000 in week 39 to 2.3 per 100,000 in week 40, 2012.
- There have been no influenza positive detections since week 32, 2012.
- There were no RSV positive detections in week 40, 2012, the last RSV detection reported was in week 38, 2012.
- There were two rhinovirus positive detections reported in week 40, 2012.
- There were no confirmed influenza cases admitted to critical care in Northern Ireland in week 40, 2012.
- There have been no reports of any laboratory confirmed influenza deaths in patients admitted to critical care in week 40, 2012.
- There were no confirmed influenza outbreaks reported to PHA in week 40, 2012; or during the summer period.

### Introduction

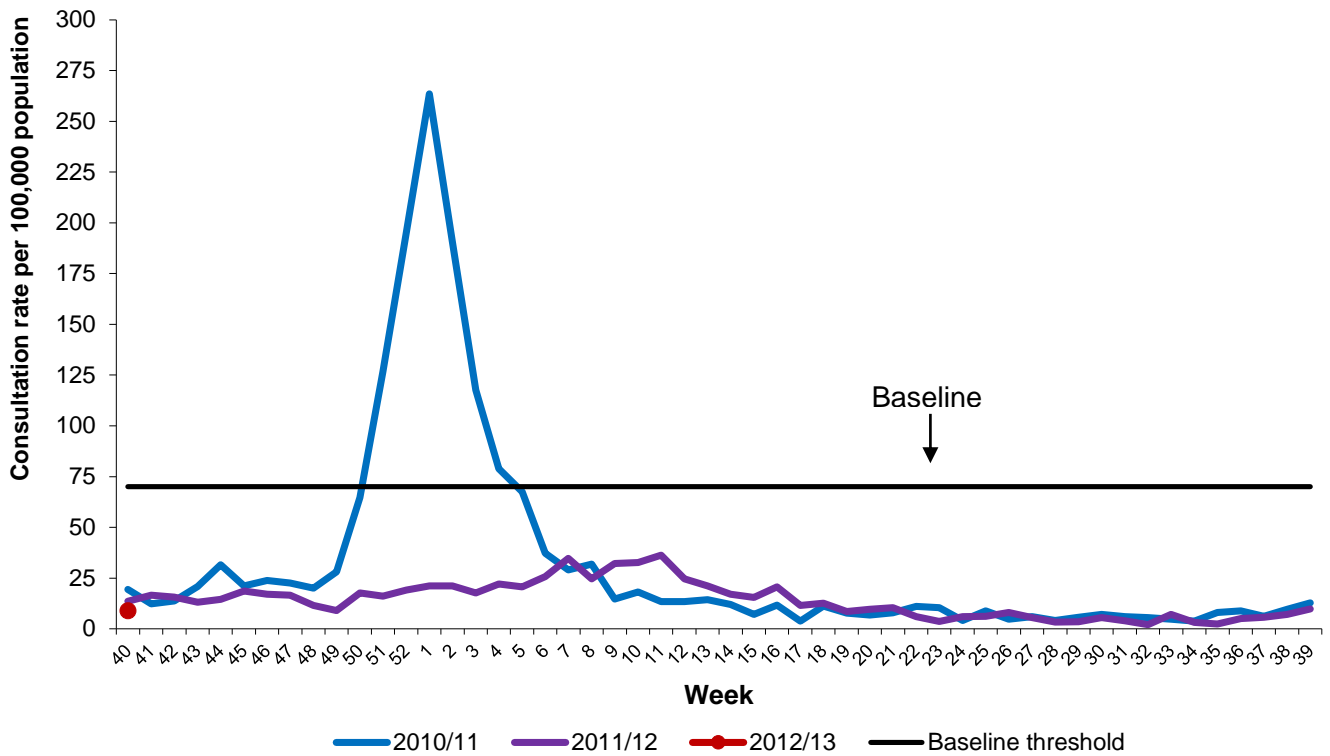
In order to monitor influenza activity in Northern Ireland a number of surveillance systems are in place.

Additional surveillance systems are:

- GP sentinel surveillance representing 11.7% of Northern Ireland population;
- GP Out-of-Hours surveillance system representing the entire population;
- Virological reports from the Regional Virus Laboratory (RVL);
- Mortality data from Northern Ireland Statistics and Research Agency (NISRA);
- Critical Care Network for Northern Ireland reports on critical care patients with confirmed influenza.

## Sentinel GP Consultation Data

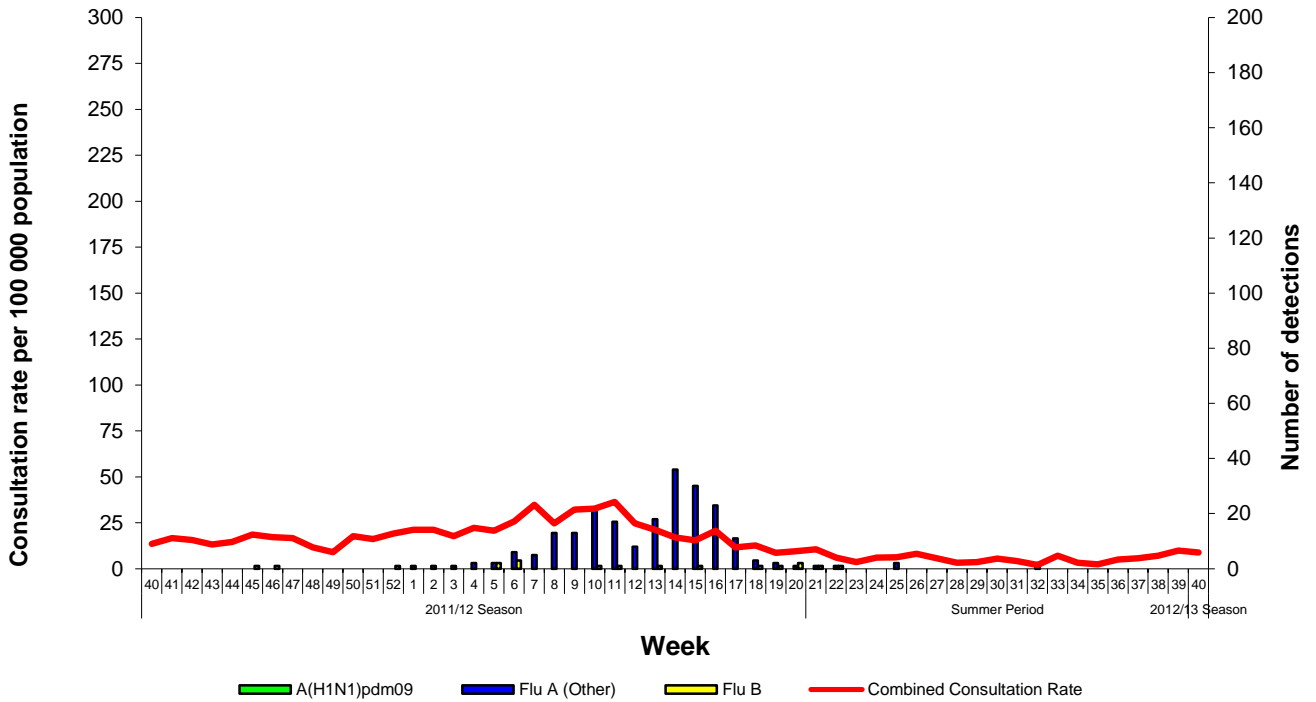
**Figure 1. Sentinel GP consultation rate for combined flu and flu-like illness 2010/11 - 2012/13**



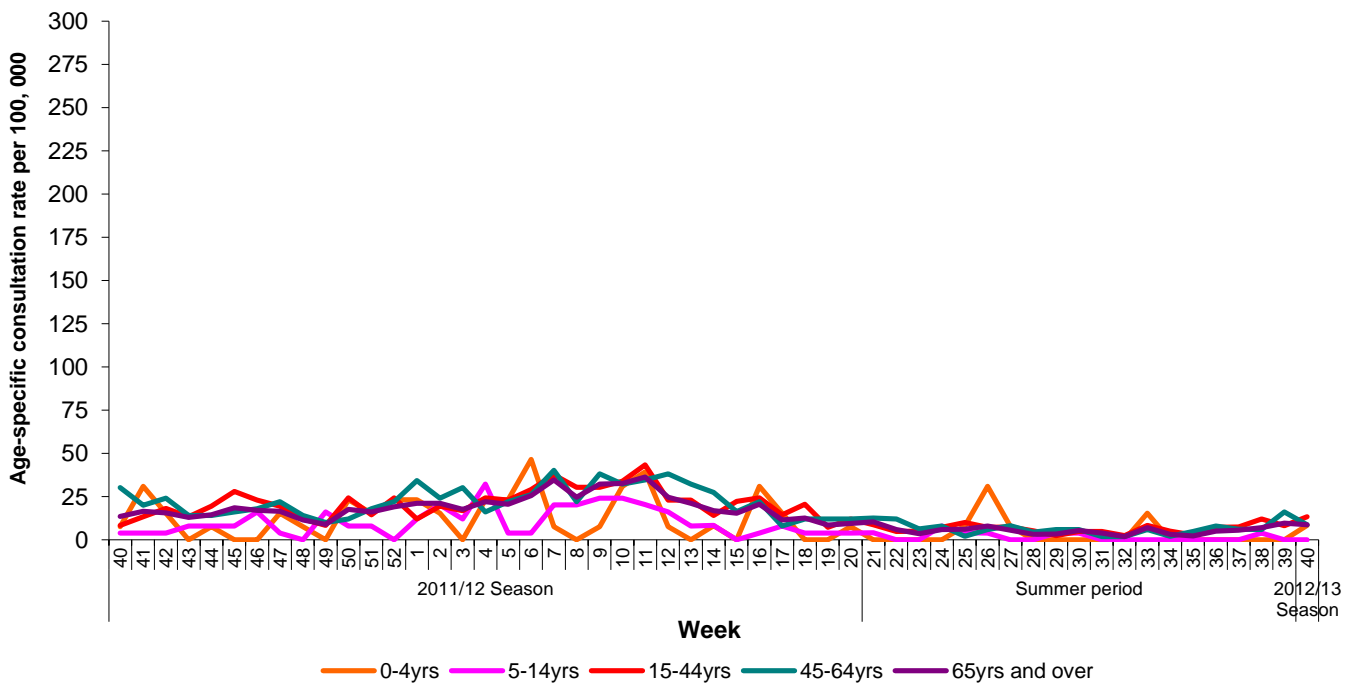
### Comment

Over the summer period GP consultation rates for combined 'flu/FLI remained at low levels. The GP combined 'flu/FLI consultation rate decreased from 9.8 per 100,000 population in week 39 to 8.8 per 100,000 in week 40, 2012. Rates for week 40, 2012, are lower than the same weeks in the past two seasons, and remain well below the Northern Ireland threshold of 70 per 100,000 population (Figures 1 and 2).

**Figure 2. Sentinel GP consultation rate for combined flu and flu-like illness and number of virology 'flu detections from week 40 2011**



**Figure 3. Sentinel GP age-specific consultation rates for combined flu and flu-like illness from week 40 2011**

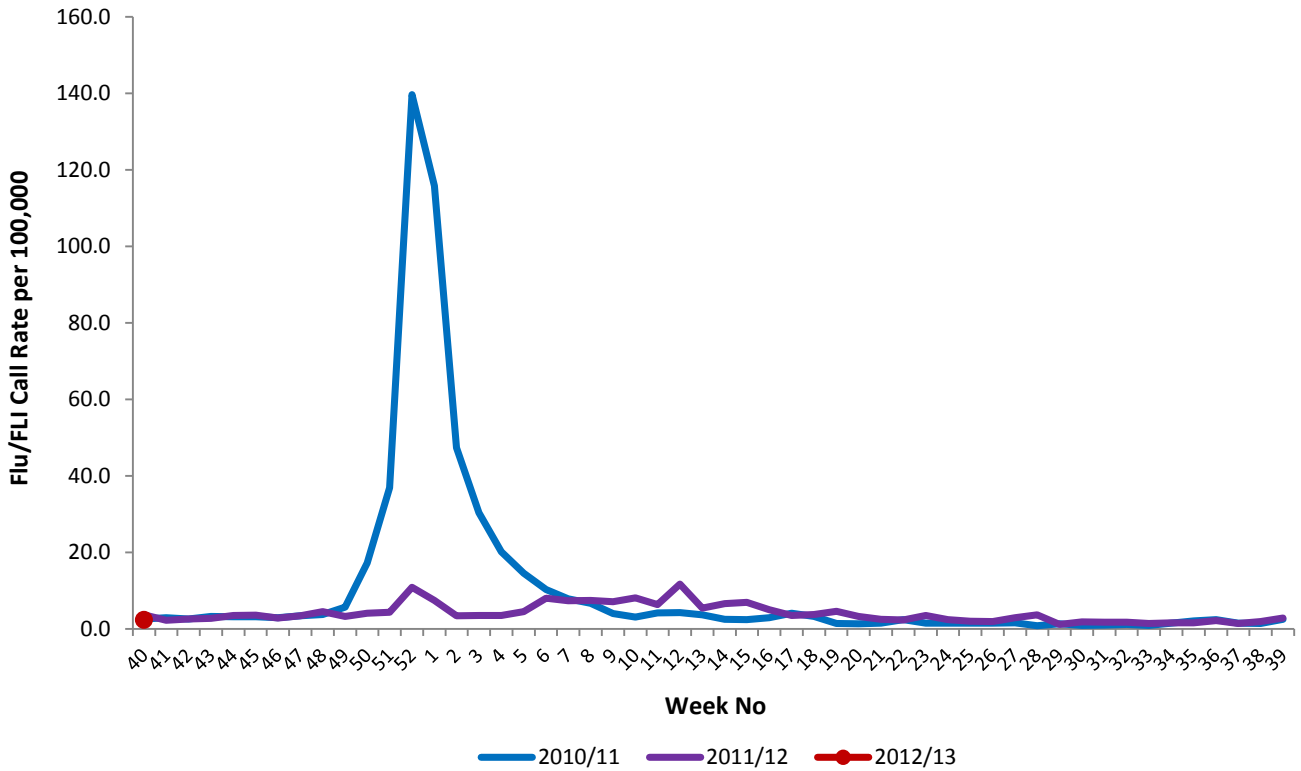


**Comment**

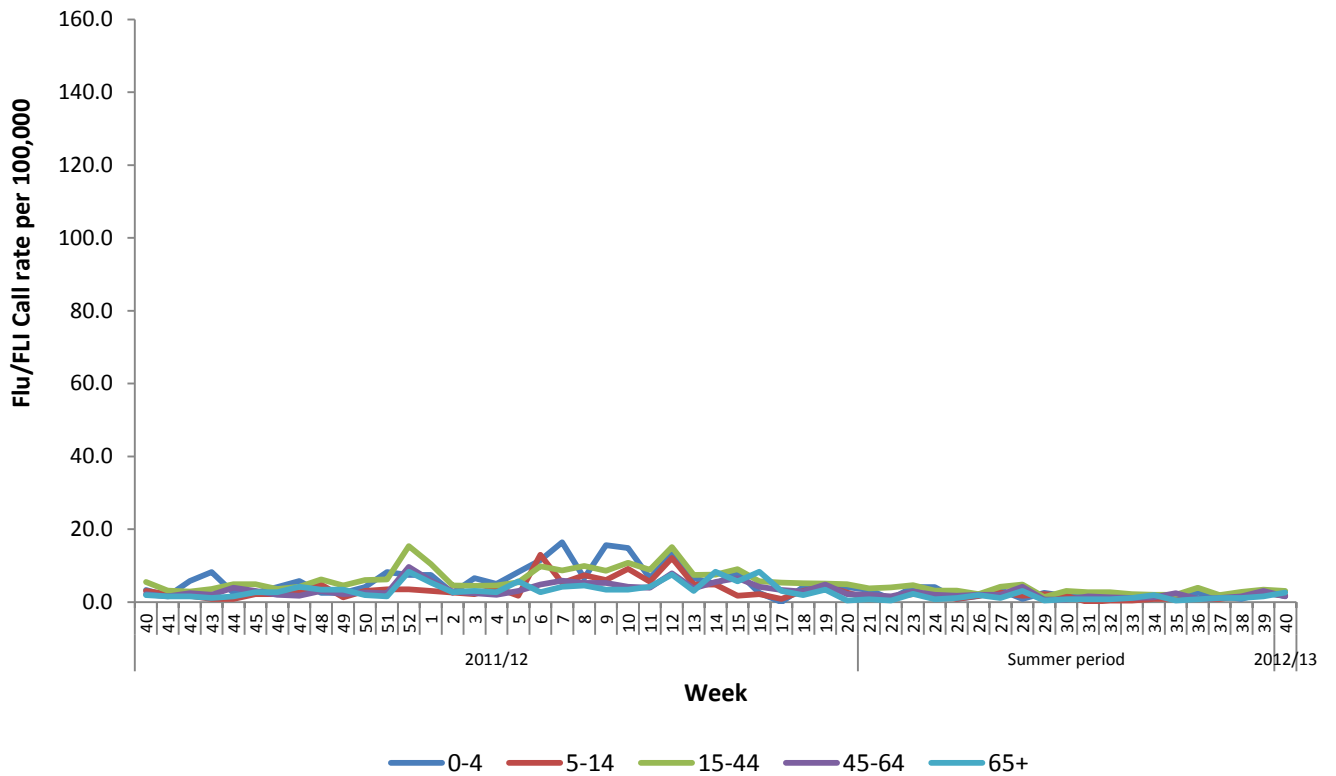
All age specific consultation rates remain low. The highest age specific rate in week 40 was in the 15-44 year age group, however, small numbers in some of the age groups may contribute to fluctuations in rates (Figure 3).

## Out-of-Hours (OOH) Centres Call Data

**Figure 4. OOH call rate for flu and flu-like illness, 2010/11 – 2012/13**



**Figure 5. OOH Call rates of flu and flu-like illness by age-group from week 40 2011**



## Comment

OOH call rates for 'flu/FLI also remained low and stable over the summer period. OOH 'flu/FLI call rates decreased slightly from 2.9 per 100,000 in week 39 to 2.3 per 100,000 in week 40, 2012. Rates for week 40, 2012, are lower than the same week last year (3.7 per 100,000 population). All age specific rates remain low with the highest 'flu/FLI consultation rate being in the 15-44 year age group. Small numbers in some of the age groups can contribute to fluctuations in rates (Figures 4 and 5).

## Virology Data

Table 1. Virus activity in Northern Ireland Week 39 & 40, 2012

Source	Specimens Tested	AH3	A (untyped)	Influenza B	RSV	Total influenza Positive	% Influenza Positive
Sentinel	1	0	0	0	0	0	0%
Non-sentinel	38	0	0	0	0	0	0%
<b>Total</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>

### Note

All virology data is provisional. The virology figures for previous weeks included in this or future bulletins are updated with data from laboratory returns received after the production of the last bulletin. The current bulletin reflects the most up-to-date information available.

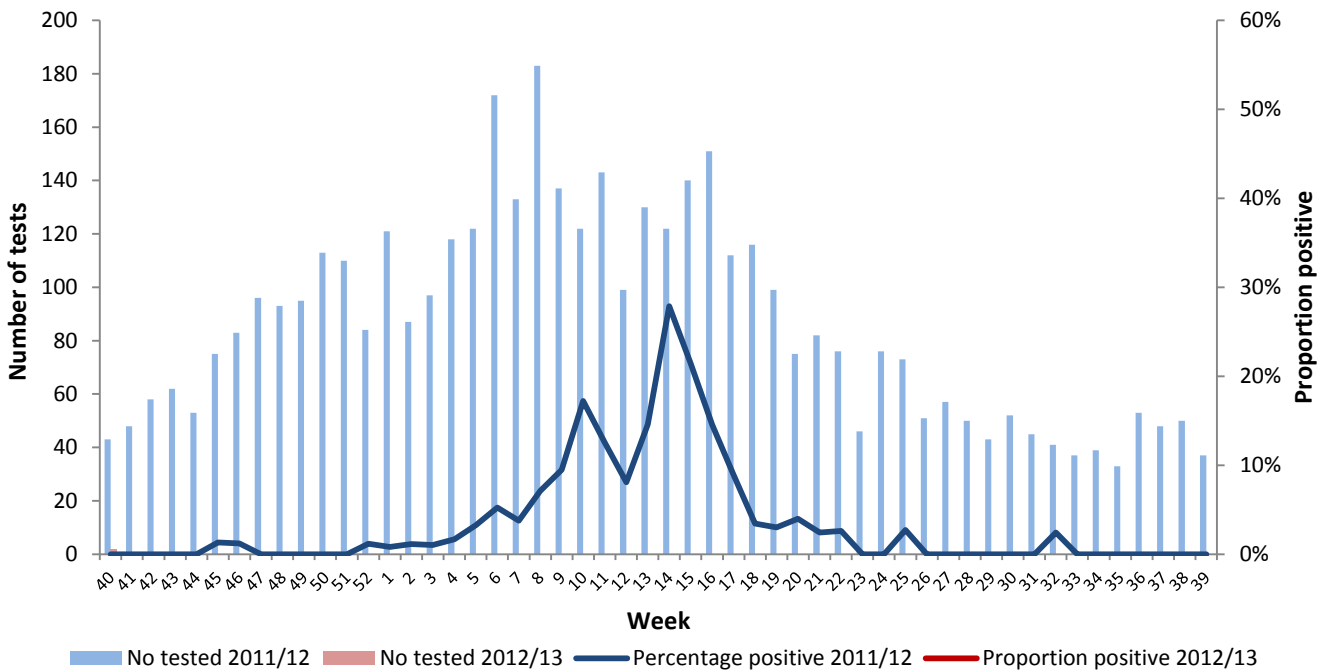
Sentinel and non-sentinel samples are tested for influenza and for RSV.

Cumulative reports of influenza A (untyped) may vary from week to week as these may be subsequently typed in later reports.

## Comment

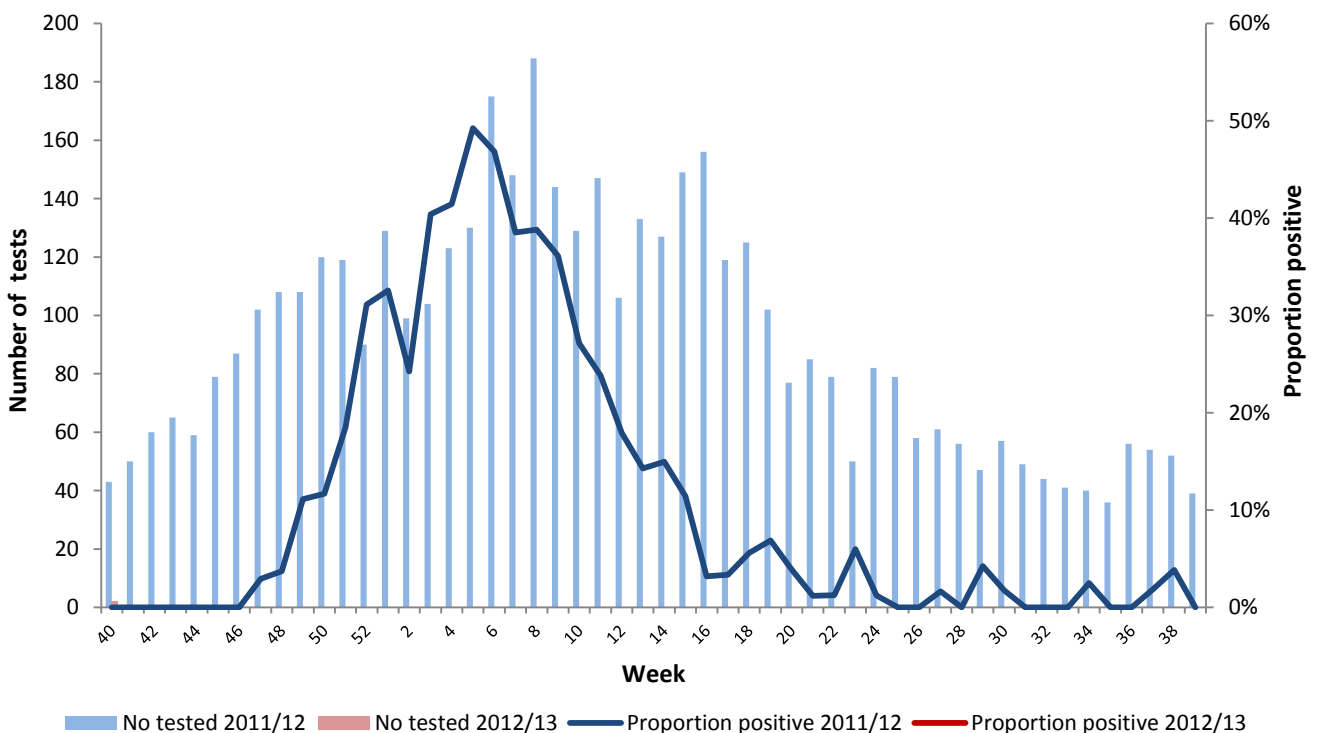
The number of specimens submitted for testing remains low. There were no positive detections of influenza reported in weeks 39 and 40. The last influenza positive detection was in week 32, 2012 (Figure 6).

**Figure 6. Number of samples tested for influenza and proportion positive, 2011/12 and 2012/13**



### Respiratory Syncytial Virus

**Figure 7. Number of samples tested for RSV and proportion positive, 2011/12 and 2012/13**

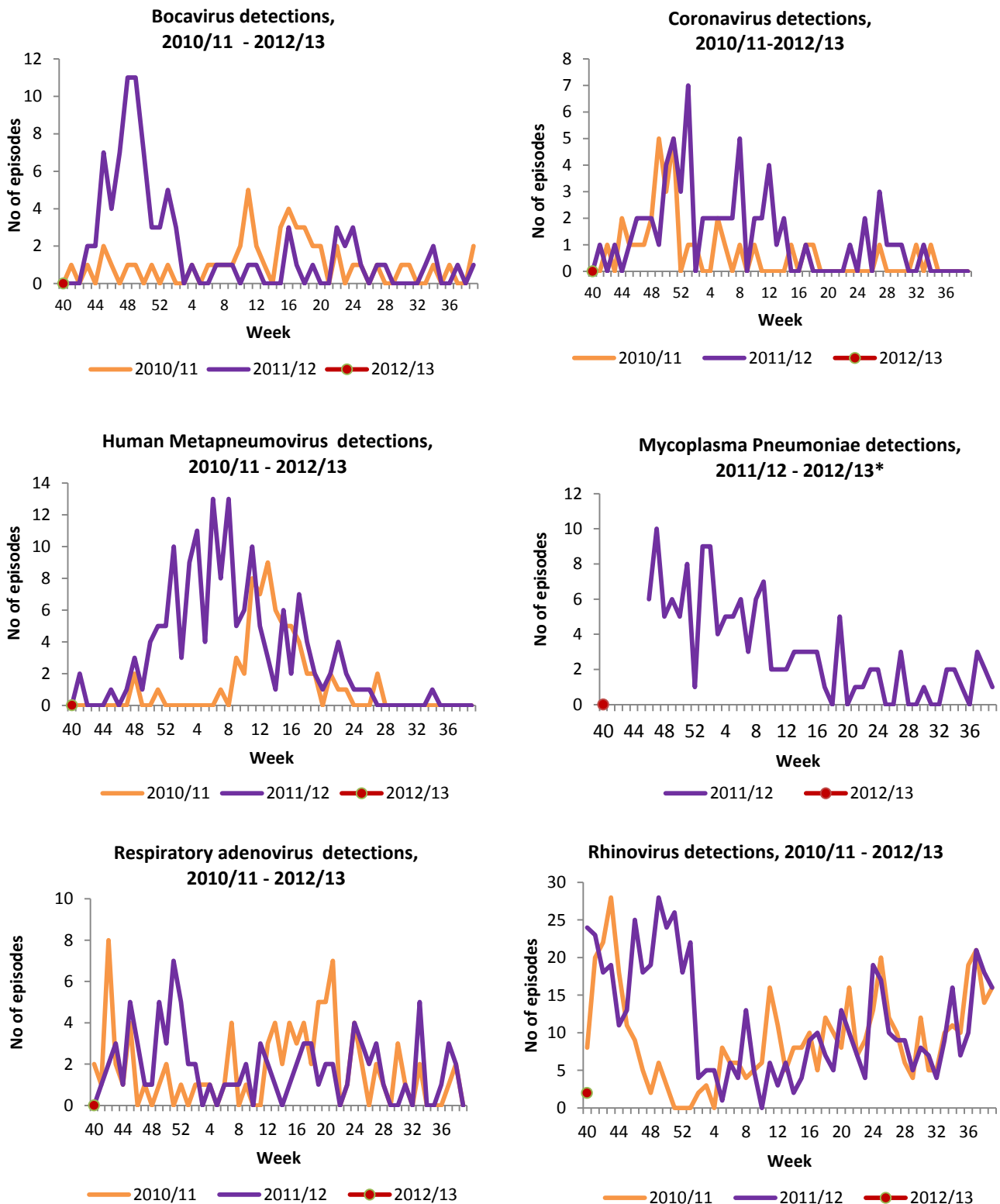


### Comment

Similar to last year there were no RSV positive detections during week 40, 2012. During the summer period (week 21 – week 39) there were a total of 14 RSV detections. (Figure 7).

## Other respiratory viruses

**Figure 8. Number of positive detections for other respiratory viruses, 2010/11 - 2012/13**



\* Mycoplasma pneumoniae was only included in the standard respiratory test panel from 2011 onwards.

Please note the different scales on the Y axis for the above charts.

## Comment

Please note that during periods of peak influenza activity routine testing of samples for other respiratory viruses may not be possible due to workload demands on the laboratory.

The number of specimens submitted for testing for other respiratory viruses remains low. During week 40 there were two rhinovirus positive detections reported. During the summer period there were sporadic detections of: bocavirus, coronavirus, human metapneumovirus, mycoplasma pneumoniae, respiratory adenovirus and rhinovirus (Figure 8).

## Hospital Surveillance

Similar to last year data will be collected on numbers of laboratory confirmed influenza patients and laboratory confirmed influenza deaths in critical care (level 2 and level 3) in Northern Ireland for this coming season.

There were no laboratory confirmed influenza cases admitted to critical care in Northern Ireland in week 40, 2012.

## Mortality Surveillance

There were no reports of any laboratory confirmed influenza deaths in patients admitted to critical care in week 40, 2012.

## Outbreak Surveillance

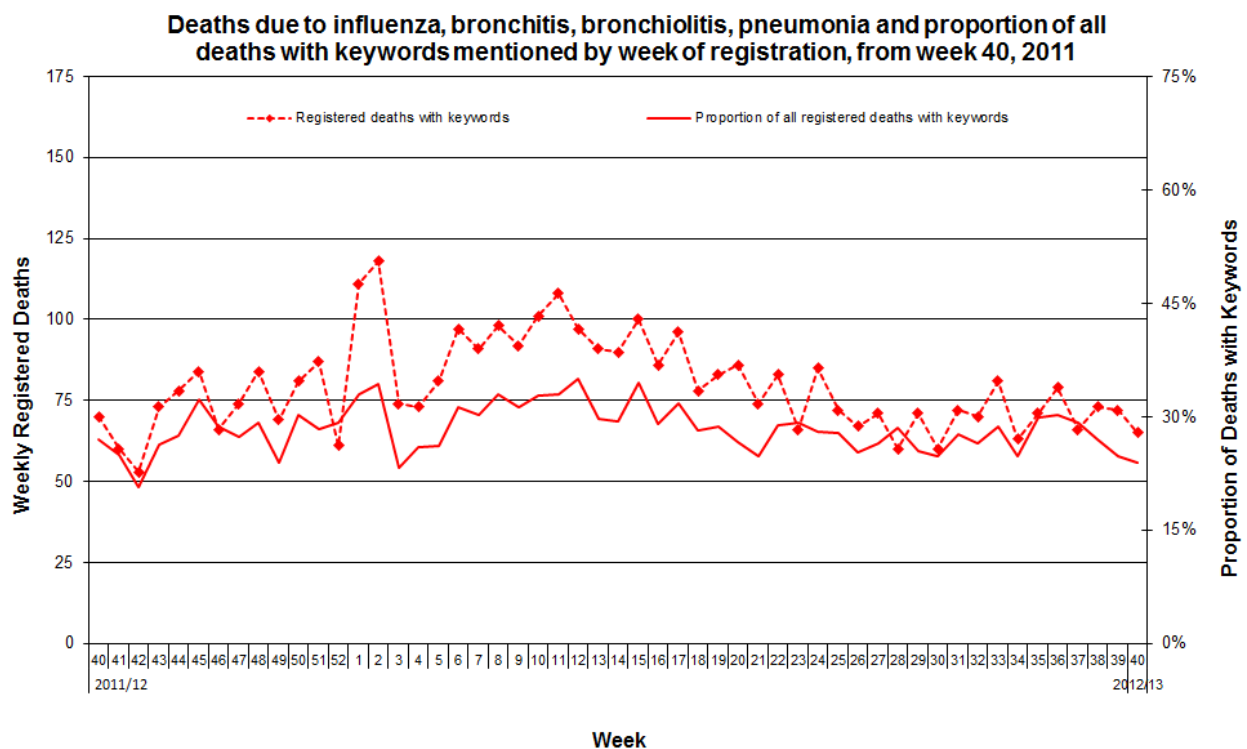
There were no confirmed influenza outbreaks in residential care units reported to the Public Health Agency during week 40, 2012, or during the summer period. However, there were two outbreaks in residential care units that were laboratory confirmed as rhinovirus.



## 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 slightly from 25% in week 39 to 24% in week 40. In week 40 there were 272 registered deaths of which 65 related to these specific respiratory infections.

## International Summary

### Europe

During the influenza 2012 off-season period (weeks 21 to 39), influenza viruses circulated very sporadically: 16 influenza viruses were detected in sentinel sources.

During the last week of the previous season (week 39/2012) the following were noted:

- Low influenza activity and absence of geographic spread (the lowest categories) reported by all reporting countries.
- No influenza virus was detected in sentinel samples from 17 countries reporting virological data.
- As in previous weeks, no hospitalised severe influenza cases were reported.

Although the 2012–2013 influenza season is approaching, there is no evidence as yet that transmission has started in Europe.

[http://ecdc.europa.eu/EN/HEALTHTOPICS/SEASONAL\\_INFLUENZA/EPIDEMIOLOGICAL\\_DATA/Pages/Weekly\\_Influenza\\_Surveillance\\_Overview.aspx](http://ecdc.europa.eu/EN/HEALTHTOPICS/SEASONAL_INFLUENZA/EPIDEMIOLOGICAL_DATA/Pages/Weekly_Influenza_Surveillance_Overview.aspx)

### Worldwide (WHO)

Seasonal influenza transmission has not been picked up yet in the northern temperate zone.

Most countries in this zone have started or are yet to begin seasonal reporting.

- In the tropical areas most countries are reporting low or decreasing trends of influenza detections. The exceptions are Nicaragua in the Americas and India and Thailand in Asia.
- WHO has recommended the influenza vaccine composition for use in the 2013 southern hemisphere influenza season following technical consultations in September 2012. [http://www.who.int/influenza/vaccines/virus/recommendations/201209\\_recommendation.pdf](http://www.who.int/influenza/vaccines/virus/recommendations/201209_recommendation.pdf)
- Influenza activity decreased in most of the temperate countries of the southern hemisphere. Australia, Chile, New Zealand, Paraguay and South Africa continue to report declines in influenza indicators. On the other hand, Argentina has reported some late influenza activity.

[http://www.who.int/influenza/surveillance\\_monitoring/updates/latest\\_update\\_GIP\\_surveillance/en/index.html](http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html)

## USA

Flu activity in the United States is approaching summertime levels in most of the country. While one state continues to report widespread geographic flu activity, flu intensity is low nationwide. Below is a summary of the most recent key indicators:

- The proportion of visits to doctors for influenza-like illness (ILI) remains below the national baseline. All 10 U.S. regions reported ILI activity below region-specific baseline levels as well, which is the same as last week.
- One state reported widespread influenza activity (the same as last week). Regional influenza activity was reported by two states (a decrease from 5 states last week). Eight states reported local influenza activity (three less than last week). Thirty states (the same as last week), the District of Columbia, Puerto Rico and Guam reported sporadic influenza activity. U.S. Virgin Islands and eight states reported no influenza activity (an increase from three last week) and one state did not report.
- Based on data reported to the FluSurv-NET participating sites since October 2011, the cumulative number of patients hospitalized with laboratory-confirmed influenza is 2,374. This remains lower than the numbers reported at this time during previous influenza seasons.
- All three types and subtypes of seasonal influenza viruses have been identified this season: 2009 H1N1 viruses, influenza A (H3) viruses and influenza B viruses. This week, 150 of the 286 influenza positive tests reported to CDC were influenza A and 136 were influenza B viruses. Among the 150 influenza A viruses identified this week, approximately 58.7% were influenza A (H3) viruses and 14% were 2009 H1N1 viruses; 27.3% were not subtyped.
- Although influenza A (H3) viruses have predominated nationally this season, circulating viruses differ from region to region, and even from state to state. In recent weeks, the proportion of influenza B viruses has been increasing.

An overview of the US influenza can be viewed on <http://www.cdc.gov/flu/weekly/summary.htm>

## Canada

- Influenza activity in Canada remains low as only a few regions reported sporadic activity over the two-week period (in ON, QC & NL)
- In weeks 37 and 38, a total of 5 laboratory detections of influenza were reported, all of which were for influenza A viruses [1 A(H1N1)pdm09 and 4 A(un-subtyped)]
- One influenza A-associated hospitalization (in a person >20 years of age) was reported over the two-week period
- The ILI consultation rate increased in week 38 to 17.8 per 1,000 patient visits but remains within the expected level for this time of year

<http://www.phac-aspc.gc.ca/fluwatch/>

## Further information

Further information on influenza is available at the following websites:

<http://www.fluawareni.info> Now on Facebook (Flu Aware NI)

<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.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/Surveillance/InfluenzaSurveillanceReports/>

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.**