

## Influenza Weekly Surveillance Bulletin

Northern Ireland, Weeks 44 - 45 (27 October – 09 November 2014)

### Summary

- Influenza activity in Northern Ireland remains at low levels.
- GP consultation rates for combined flu and flu-like illness (flu/FLI) remain below the updated pre-epidemic Northern Ireland threshold of 52.0 per 100,000 population at 7.7 and 10.8 per 100,000 population in weeks 44 and 45 respectively, with all indicators remaining at low levels.
- The OOH consultation rate for flu/FLI remained low in weeks 44 and 45 at 2.0 and 2.6 per 100,000 population respectively. The rate remained low in all age groups with the highest rate noted among the 15-44 years age group.
- RSV activity has remained low in weeks 44 and 45.
- There were no admissions to ICU with confirmed influenza reported in weeks 44 and 45, 2014.
- There were no deaths in ICU patients with laboratory confirmed influenza reported in weeks 44 and 45, 2014.
- There were no confirmed influenza outbreaks reported to PHA in weeks 44 and 45, 2014.
- In weeks 44 and 45, 2014 EuroMOMO did not report an excess in mortality.
- In weeks 44 and 45, 2014 there were fewer than five attendances for influenza like illness across the contributing emergency departments.

### Introduction

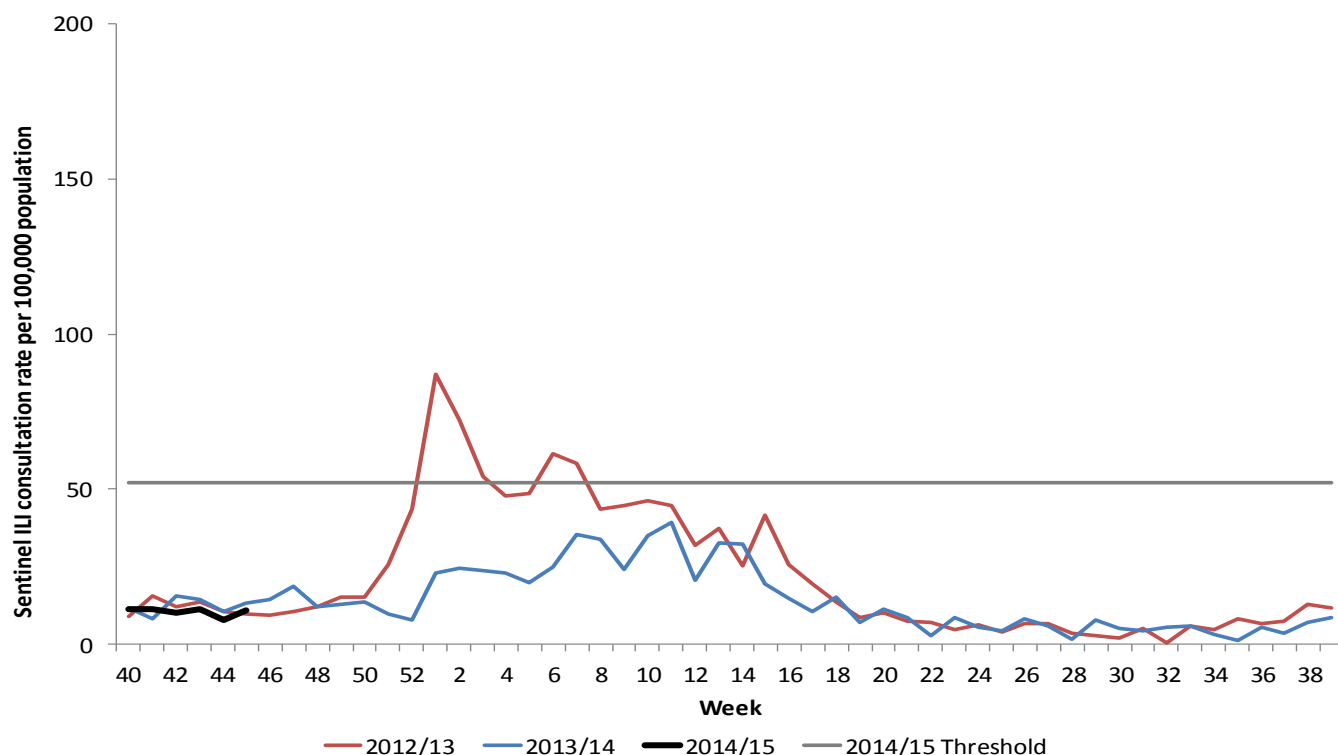
In order to monitor influenza activity in Northern Ireland a number of surveillance systems are in place.

Additional surveillance systems are:

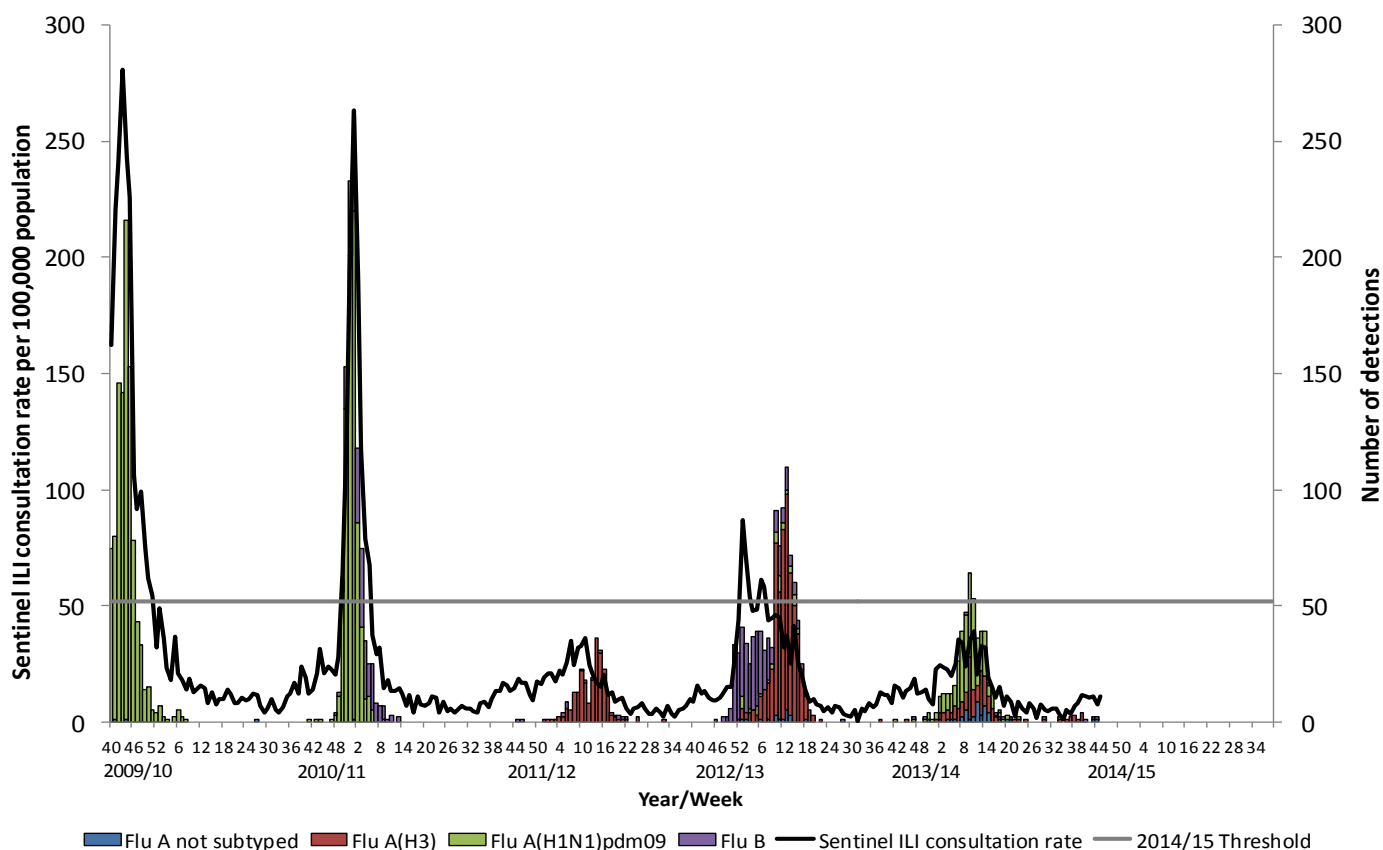
- GP sentinel surveillance representing 11.7% of Northern Ireland population;
- GP Out-of-Hours surveillance system representing the entire population;
- Virological reports from the Regional Virus Laboratory (RVL);
- Mortality data from Northern Ireland Statistics and Research Agency (NISRA);
- Excess mortality estimations are also provided by Public Health England using the EuroMOMO (Mortality Monitoring in Europe) model based on raw death data supplied by NISRA
- Critical Care Network for Northern Ireland reports on critical care patients with confirmed influenza.
- Emergency department syndromic surveillance system (EDSSS) which includes attendance data from 4 emergency departments in Northern Ireland.

## Sentinel GP Consultation Data

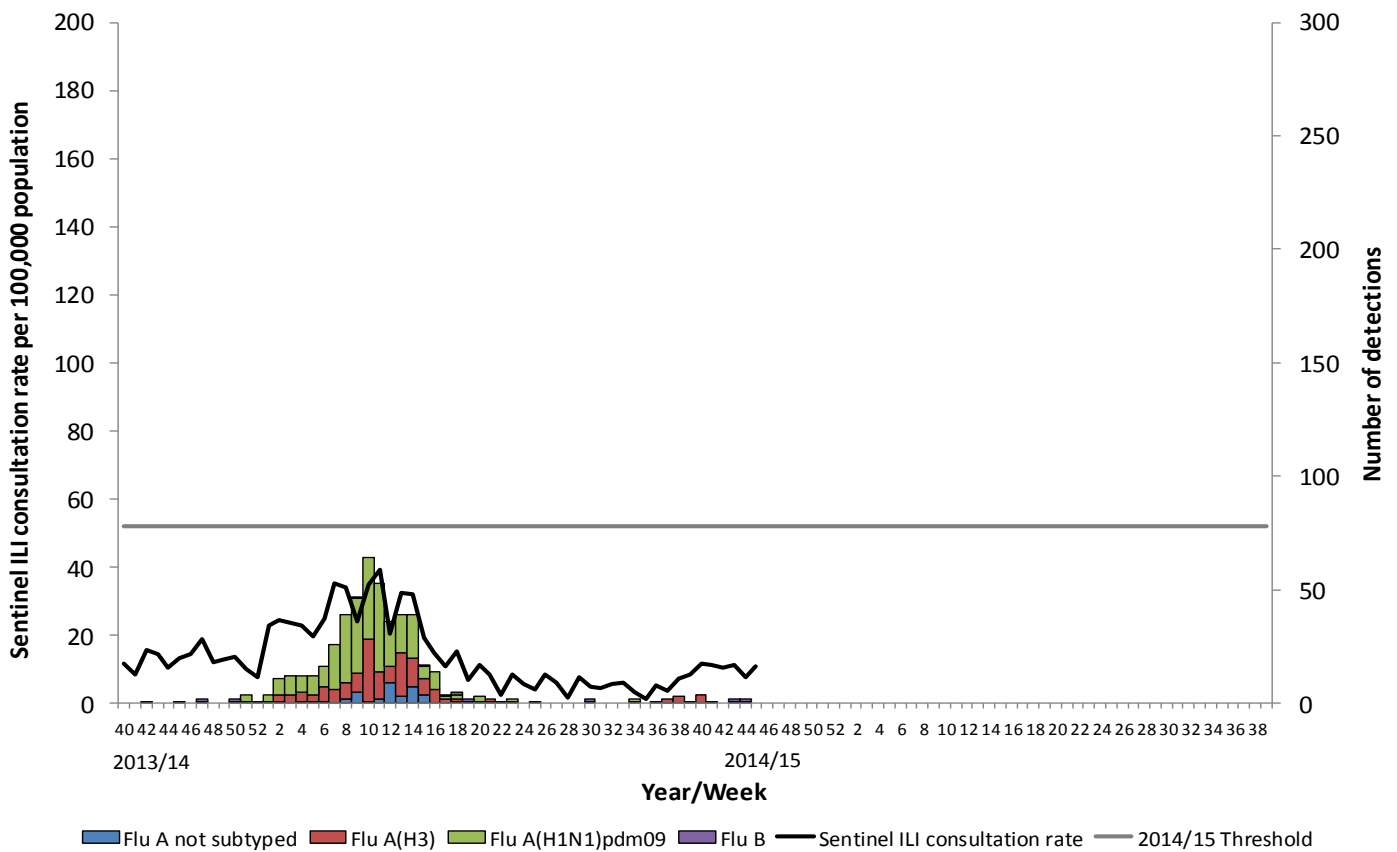
**Figure 1. Sentinel GP consultation rates for flu/FLI 2012/13 - 2014/15**



**Figure 2. Sentinel GP combined consultation rates for flu/FLI and number of influenza positive detections 2009/10 – 2014/15**



**Figure 3. Sentinel GP consultation rates for flu/FLI and number of virology 'flu detections from week 40, 2013**

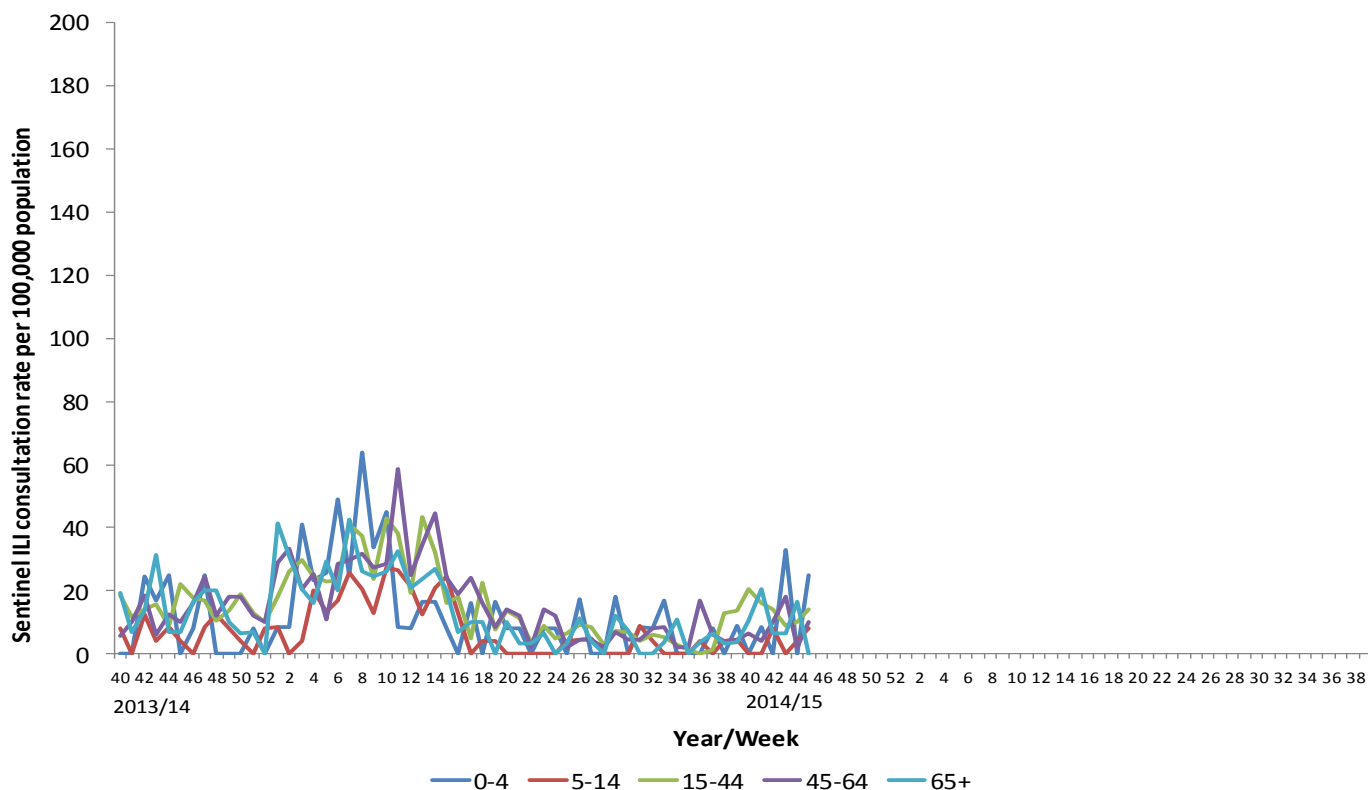


### Comment

GP consultation rates remained low throughout weeks 44 to 45. In week 44 the GP consultation rate decreased from the previous week to 7.7 per 100,000 population, increasing in week 45 to 10.8 per 100,000 population. The rate for week 45, 2014 is lower than the same week in previous years.

Rates remain well below the pre-epidemic Northern Ireland 2014/15 threshold of 52.0 per 100,000 population (Figures 1, 2 and 3).

**Figure 4. Sentinel GP age-specific consultation rates for flu/FLI from week 40, 2013**



### Comment

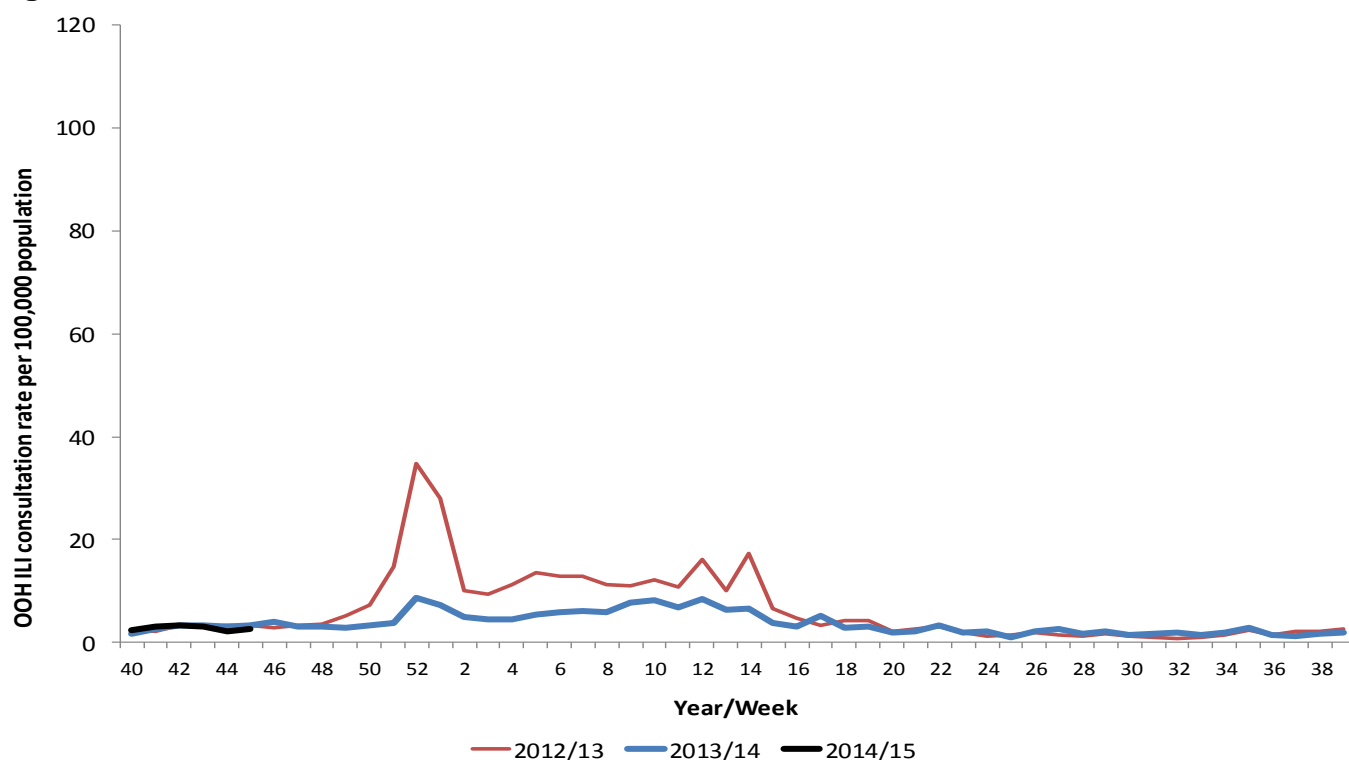
GP consultations remained low for all age groups in weeks 44 to 45, however small numbers may have contributed to some fluctuations in rates.

In week 44 the 5-14, 15-44 and 65 years and over age groups showed an increase in consultation rates when compared with the previous week, while rates among those aged 0-4 and 45-64 decreased. In week 45, rates among almost all age groups showed an increase, with the exception of those aged 65 years and over among which GP consultation rates decreased.

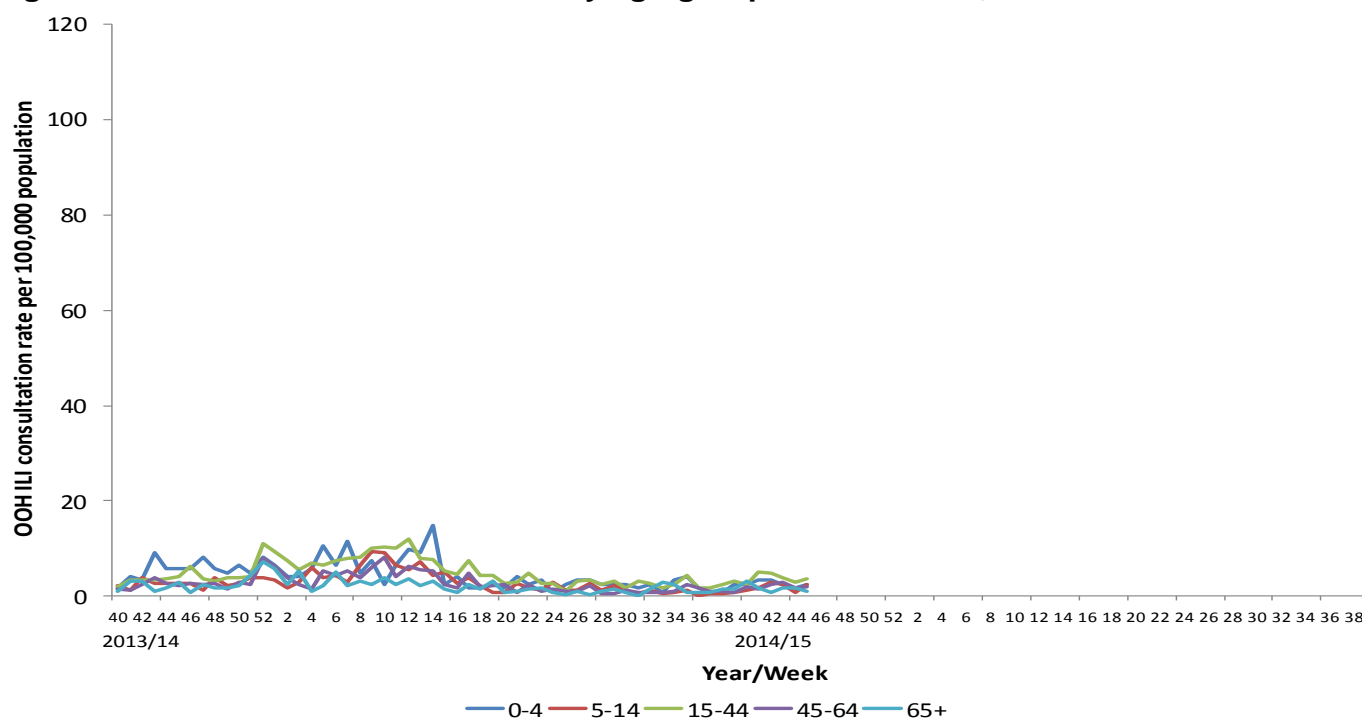
In general, GP consultation rates for combined flu' and flu'-like-illness in all age groups have fluctuated in recent weeks while remaining low. The highest age-specific consultation rate in week 45 2014, was again noted in the 0-4 years age group (Figure 4).

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

**Figure 5. OOH call rate for flu/FLI, 2012/13 – 2014/15**



**Figure 6. OOH Call rates of flu/FLI by age-group from week 40, 2013**



## Comment

The OOH consultation rate for flu/FLI remained low throughout weeks 44-45, similar to previous years, at 2.0 and 2.6 per 100,000 population respectively. The OOH flu/FLI rate remained low in all age groups, again similar to the same period in 2013/14. In weeks 44 and 45, 2014 rates remained stable then decreased among those aged 65 years and over while rates among all

other age groups fluctuated slightly throughout the two-week period, decreasing in week 44 and increasing in week 45. This fluctuation however may be accounted for by small numbers (Figures 5 and 6).

## Virology Data

**Table 1. Virus activity in Northern Ireland, Week 44 - 45, 2014/15**

Source	Specimens Tested	Flu AH3	Flu A (H1N1) 2009	A (untyped)	Flu B	RSV	Total influenza Positive	% Influenza Positive
Sentinel	4	0	1	1	1	0	3	75%
Non-sentinel	158	0	0	0	2	5	2	1%
<b>Total</b>	<b>162</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>3%</b>

**Table 2. Cumulative virus activity in Northern Ireland, Week 40 - 45, 2014/15**

	Flu AH3	Flu A (H1N1) 2009	A (untyped)	Flu B	Total Influenza	RSV
0-4	0	0	1	2	3	11
5-14	0	0	0	2	2	0
15-64	2	1	1	1	5	1
65+	2	0	0	0	2	0
Unknown	0	0	0	0	0	0
<b>All ages</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>12</b>	<b>12</b>

**Table 3. Cumulative virus activity, Week 40 - Week 45, 2014/15**

	Sentinel						Non-sentinel					
	Flu AH3	Flu A (H1N1) 2009	A (untyped)	Flu B	Total Influenza	RSV	Flu AH3	Flu A (H1N1) 2009	A (untyped)	Flu B	Total Influenza	RSV
0-4	0	0	1	0	1	0	0	0	0	2	2	11
5-14	0	0	0	0	0	0	0	0	0	2	2	0
15-64	0	1	0	1	2	0	2	0	1	0	3	1
65+	0	0	0	0	0	0	2	0	0	0	2	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>All ages</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>9</b>	<b>12</b>

### Note

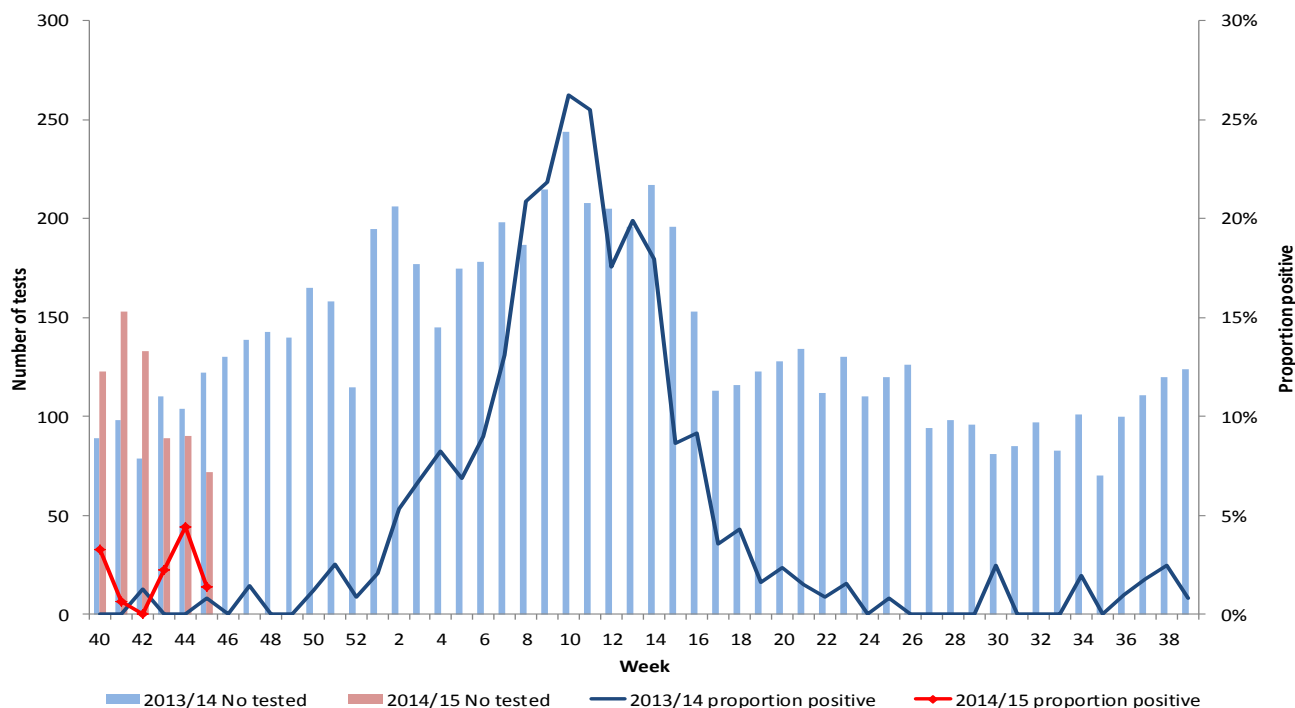
All virology data is provisional. The virology figures for previous weeks included in this or future bulletins are updated with data from laboratory returns received after the production of the last bulletin. The current bulletin reflects the most up-to-date information available.

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

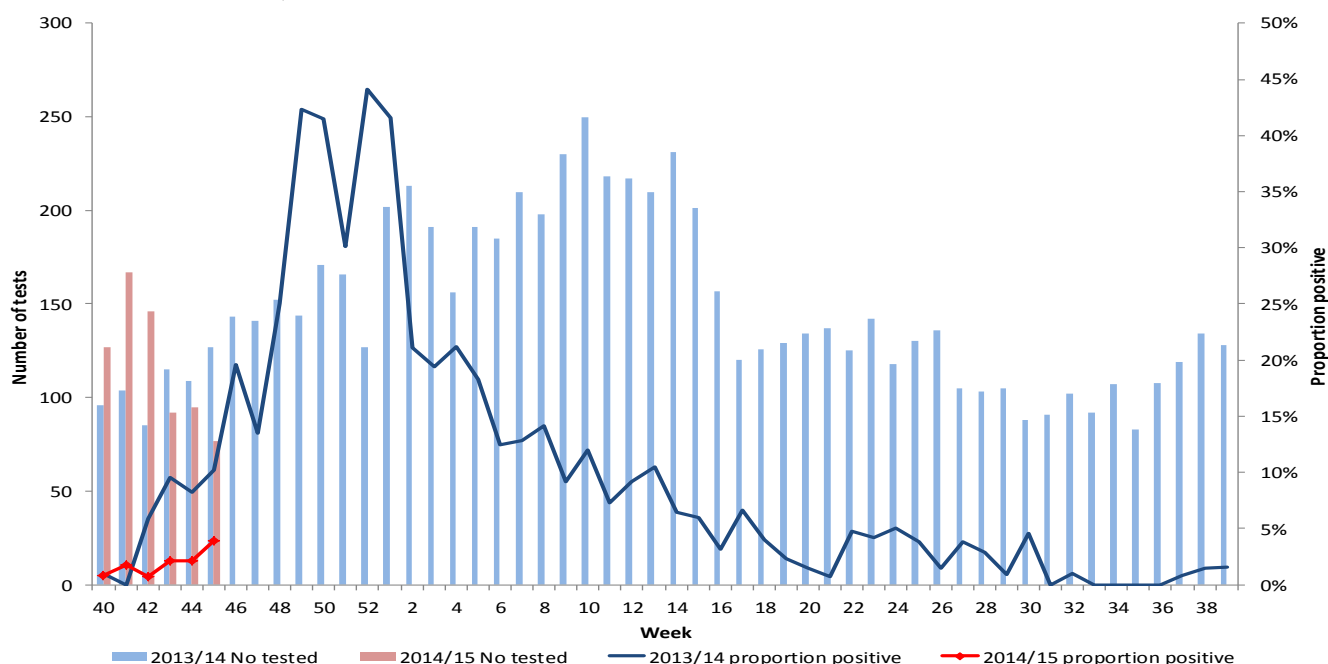
During weeks 44 to 45, there were 162 specimens submitted for testing, of which 1 was confirmed as influenza A (H1N1)pdm09, 1 as influenza A (typing awaited) and 3 as influenza B, higher than the previous week and also than the same period last year. Positivity rates for influenza have however remained low throughout the 2-week period (Figure 7).

**Figure 7. Number of samples tested for influenza and proportion positive, 2013/14 and 2014/15, all sources**



## Respiratory Syncytial Virus

**Figure 8. Number of samples tested for RSV and proportion positive, 2013/14 and 2014/15, all sources**



### Comment

There were five positive RSV detections during weeks 44 and 45 with positivity rates remaining low although steadily increasing. (Figure 8 and table 2).

## Influenza Vaccine Uptake

Vaccine uptake figures for 2014/15 will be reported in the bulletin later in the season.

## Emergency Department Syndromic Surveillance System

In weeks 44 and 45 there were fewer than five influenza-like-illness (ILI) attendances reported in EDSSS. Later in the season the bulletin will include a graphical representation of ILI attendances if numbers increase.

## ICU/HDU Surveillance

There were no admissions to ICU or deaths in ICU patients confirmed with influenza reported in weeks 44 and 45, 2014.

## Outbreak Surveillance

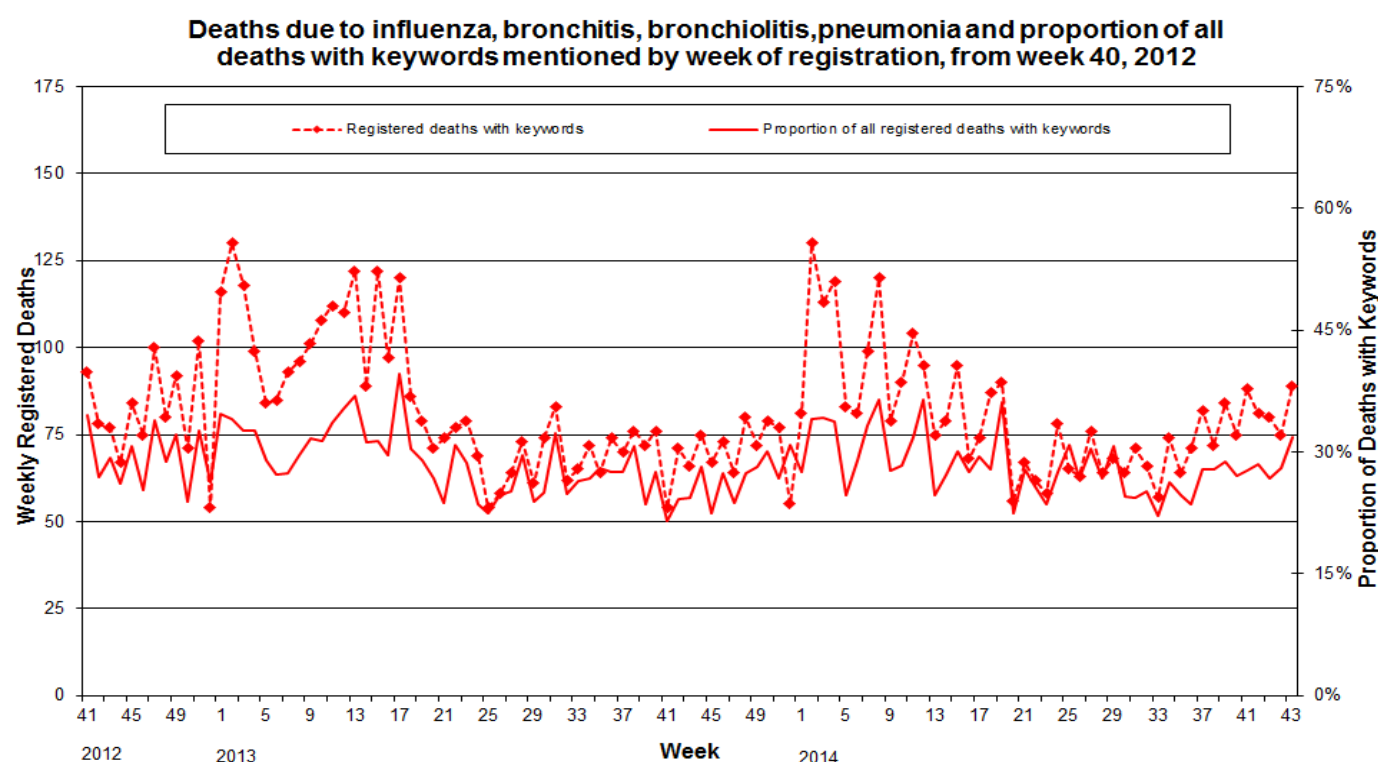
There were no confirmed influenza outbreaks reported in weeks 44 and 45, 2014.



## 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 has steadily increased across the 2-week period. During week 44, 2014 the proportion of registered deaths increased slightly to 28%, from 27% the previous week, increasing further to 32% in week 45, higher than the same period in 2013.

The number of registered deaths due to respiratory keywords decreased to 75 in week 44 compared with 80 in week 43. In week 45, 2014, there were 280 registered deaths of which 89 related to these specific respiratory infections.

## EuroMOMO

In weeks 44 and 45, no excess all-cause mortality was reported in Northern Ireland. This data will be presented in a chart later in the season.

## International Summary

### Europe

Week 44, 2014:

- In the fifth week of the surveillance season, all 41 countries submitting data reported low intensity influenza activity, but eight countries reported sporadic cases and two countries, increasing trends.
- For week 44/2014, of 459 sentinel influenza-like illness (ILI) and acute respiratory infections (ARI) specimens tested across 27 countries, 11 (2%) from five countries tested positive for influenza.
- No hospitalised laboratory-confirmed influenza cases were reported.

Season:

- As is typical for this time of year, influenza activity in the WHO European Region is low, and there is no indication that the influenza season has started in the Region.
- No indications of increased mortality due to influenza have been reported through the European monitoring of excess mortality for public health action project (EuroMOMO – <http://www.euromomo.eu>).

<http://www.flunewseurope.org/>

### Worldwide (WHO)

As at 3<sup>rd</sup> November 2014:

Globally, influenza activity was low, with the exception of some Pacific Islands.

- In North America, influenza activity began to increase slightly but remained low.
- In Europe overall influenza activity remained at inter-seasonal levels.
- In tropical countries of the Americas, influenza detections decreased with respiratory syncytial virus (RSV) causing most influenza-like illness (ILI) and severe acute respiratory infections (SARI).
- In Africa, eastern and, western Asia, influenza activity was low.
- In tropical Asia, influenza activity continued to decrease or remained low with influenza B predominant in India and Viet Nam.
- In the southern hemisphere, influenza activity reached inter-seasonal levels except in several Pacific Islands where ILI activity remained high.
- Based on FluNet reporting (as of 31 October 2014 08:20 UTC), during weeks 41 to 42 (5 October 2014 to 18 October 2014), National Influenza Centres (NICs) and other national influenza laboratories from 43 countries, areas or territories reported data. The WHO GISRS laboratories tested more than 31 820 specimens. 1318 were positive for influenza viruses, of which 778 (59%) were typed as influenza A and 540 (41%) as influenza B. Of the sub-typed influenza A viruses, 46 (11%) were influenza A(H1N1)pdm09 and 374 (89%) were influenza A(H3N2). Of the characterized B viruses, 28 (100%) belonged to the B-Yamagata lineage and 0 (0%) to the B-Victoria lineage.
- Due to changes in data collection platforms, data from the WHO Regional Office for Europe are temporarily not available at the global level. Those data will be uploaded to

FluNet and FluID as soon as possible. Information on European influenza activity can be found at <http://www.flunewseurope.org/>.

[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)

## Acknowledgments

We would like to extend our thanks to all those who assist us in the surveillance of influenza in particular the sentinel GPs, Out-of-Hours Centres, Regional Virus Laboratory, Critical Care Network for Northern Ireland, Public Health England and NISRA. Their work is greatly appreciated and their support vital in the production of this bulletin.

## Further information

Further information on influenza is available at the following websites:

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

<https://www.gov.uk/government/organisations/public-health-england>

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

<http://www.who.int>

<http://ecdc.europa.eu>

<http://euroflu.org>

Flusurvey, an online flu surveillance system run by the PHE and London School of Hygiene and Tropical Medicine was launched in 2013/14 and will continue into 2014/15. For further information and please see the [Flusurvey website](#).

## Detailed influenza weekly reports can be found at the following websites:

Northern Ireland:

<http://www.publichealth.hscni.net/directorate-public-health/health-protection/seasonal-influenza>

England, Scotland and Wales:

<https://www.gov.uk/government/collections/seasonal-influenza-guidance-data-and-analysis#epidemiology>

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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