

Influenza Weekly Surveillance Bulletin

Northern Ireland, Week 43- 44 (22 October – 4 November 2012)

Summary

- Influenza activity in Northern Ireland remains at low levels.
- The GP combined 'flu/FLI consultation rate increased slightly from 11.9 per 100,000 population in week 42 to 13.7 per 100,000 population in week 43, 2012; with a decrease in week 44 to 10.5 per 100,000 population. Rates are similar to the same weeks last year and are well below the Northern Ireland threshold (70 per 100,000 population).
- OOH 'flu/FLI call rates remained stable over the two week period.
- There have been no influenza positive detections since week 32, 2012.
- There were 17 RSV positive detections in weeks 43 and 44, 2012.
- During week 43 and 44 there were thirty five rhinovirus, four respiratory adenovirus, two bocavirus, two coronavirus, two metapneumovirus, one mycoplasma pneumoniae and one parainfluenza detections reported.
- There were no confirmed influenza cases admitted to critical care in Northern Ireland in weeks 43 and 44, 2012.
- There have been no reports of any laboratory confirmed influenza deaths in patients admitted to critical care in weeks 43 and 44, 2012.
- There were no confirmed influenza or other respiratory outbreaks reported to PHA in weeks 43 and 44, 2012.

Introduction

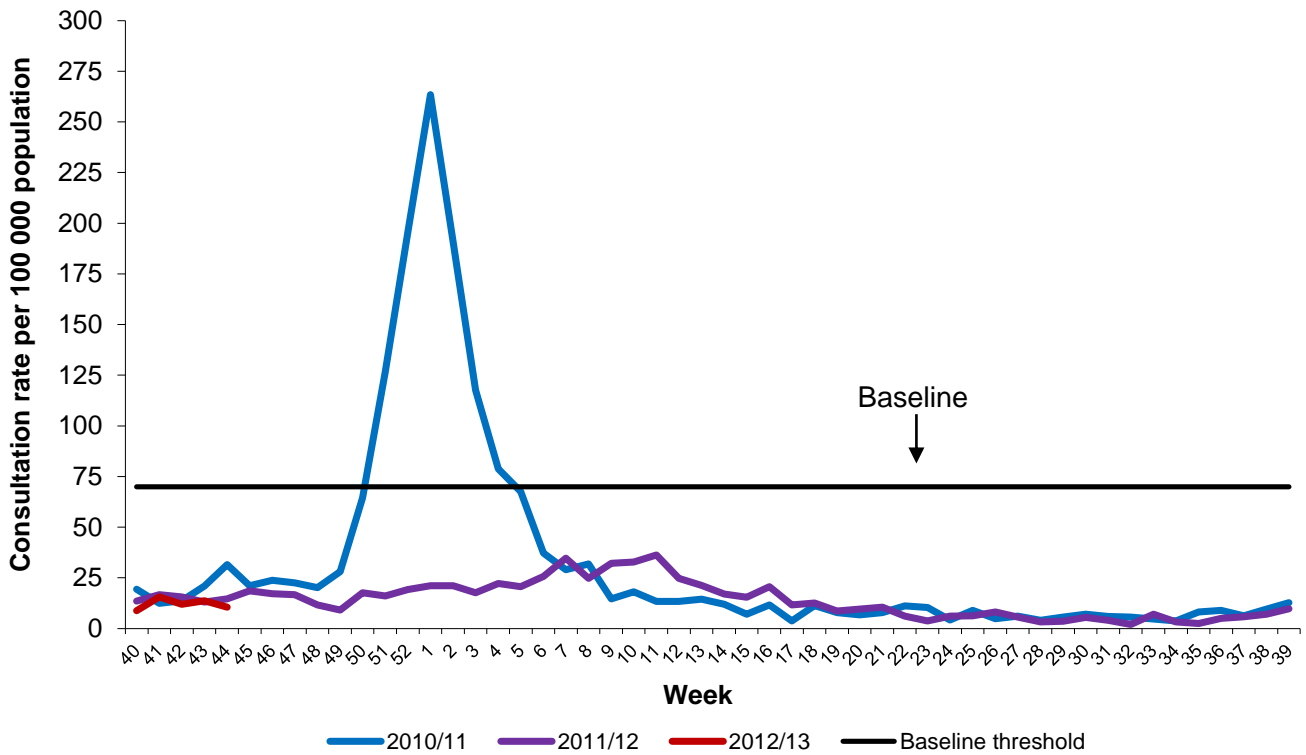
In order to monitor influenza activity in Northern Ireland a number of surveillance systems are in place.

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

GP consultation rates for combined ‘flu/FLI remain low and stable. The GP combined ‘flu/FLI consultation rate increased slightly from 11.9 per 100,000 population in week 42 to 13.7 per 100,000 population in week 43, 2012; with a decrease in week 44 to 10.5 per 100,000 population. The rate for week 44, 2012, is lower than the same week in the previous years. Rates 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

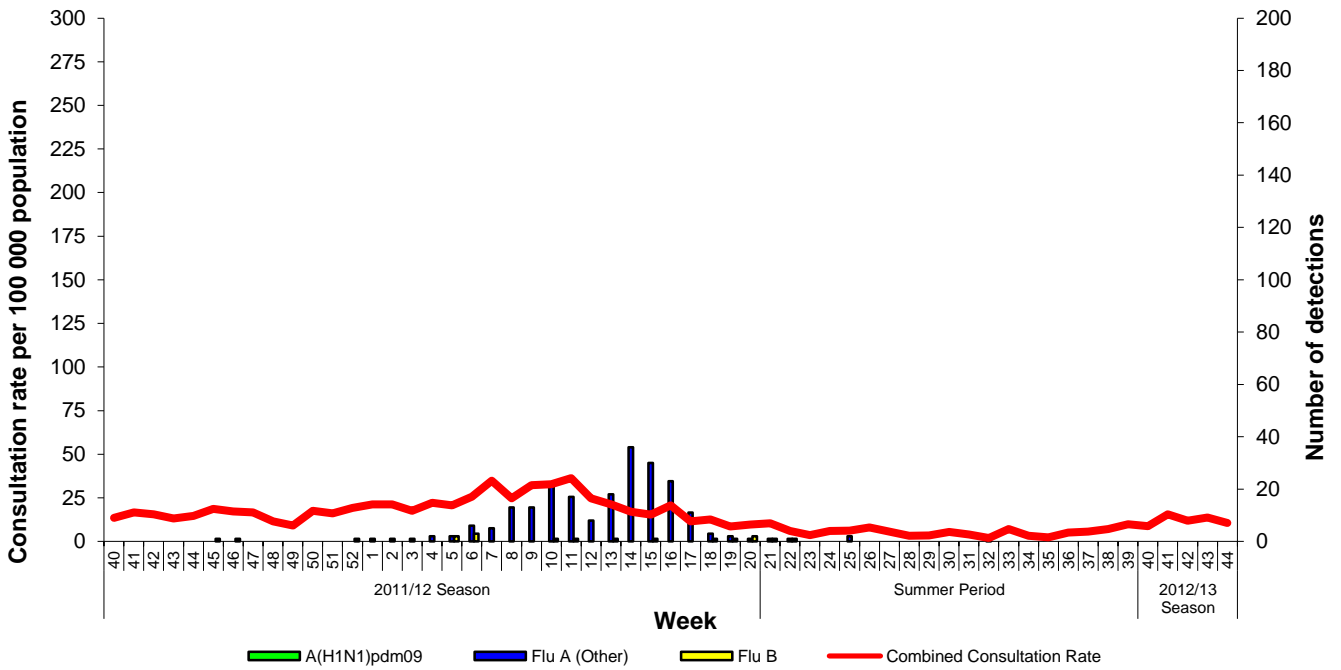
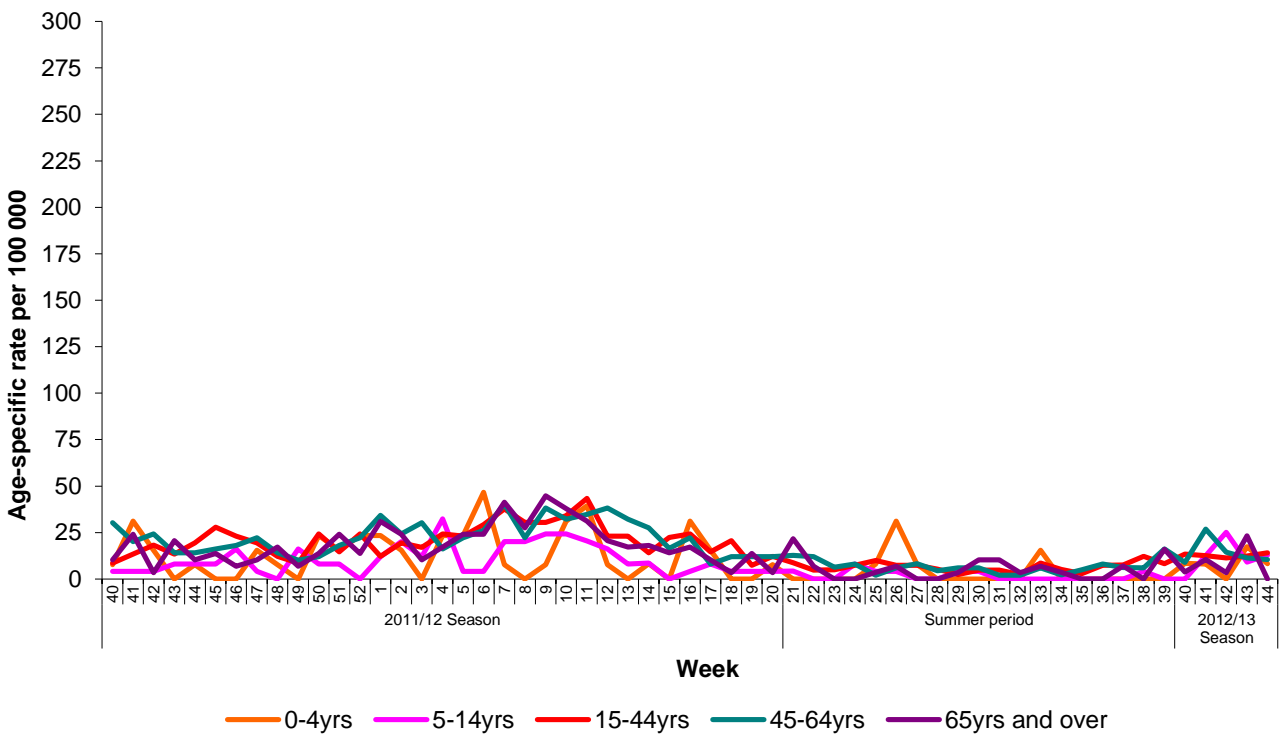


Figure 3. Sentinel GP age-specific consultation rates for combined flu and flu-like illness from week 40 2011



Comment

All age specific consultation rates remain at low levels with small numbers in some of the age groups contributing to fluctuations in rates. The highest age specific rate in week 43 was in the over 65 year age group and in week 44 it was in the 15-44 year age group. (Figure 3).

Out-of-Hours (OOH) Centres Call Data

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

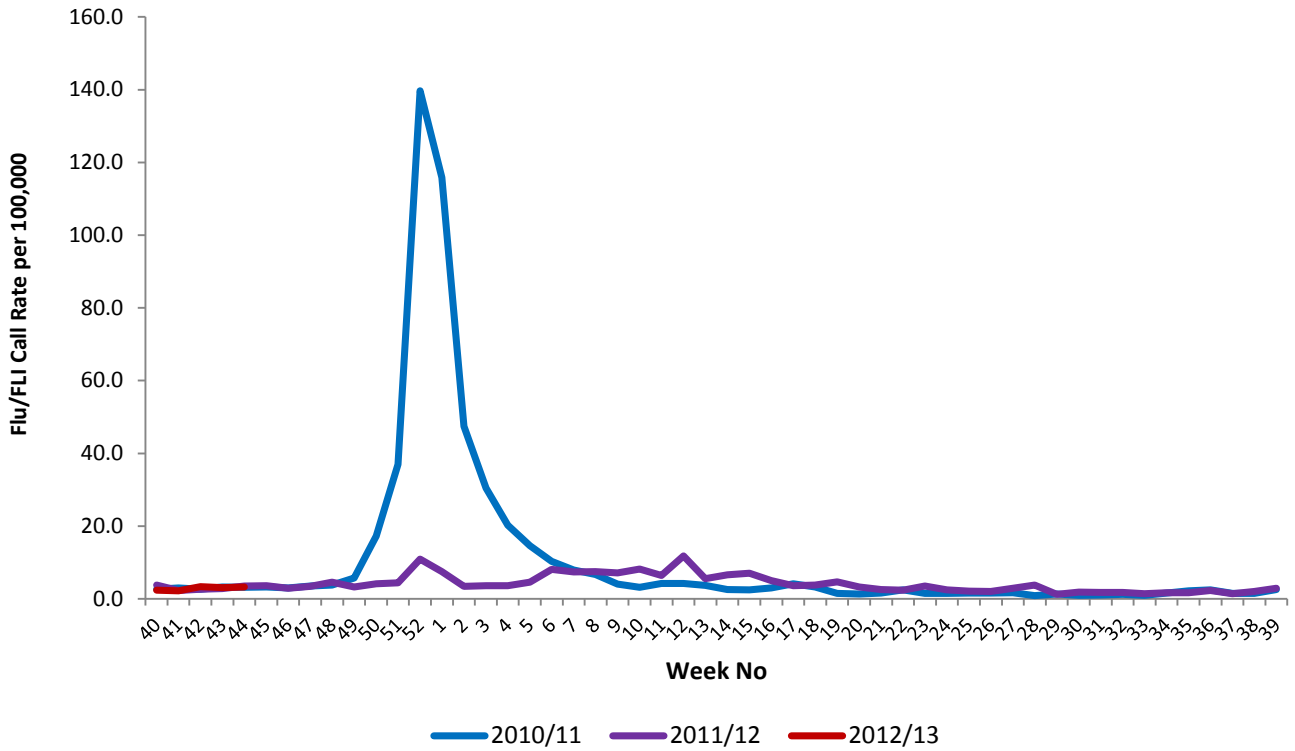
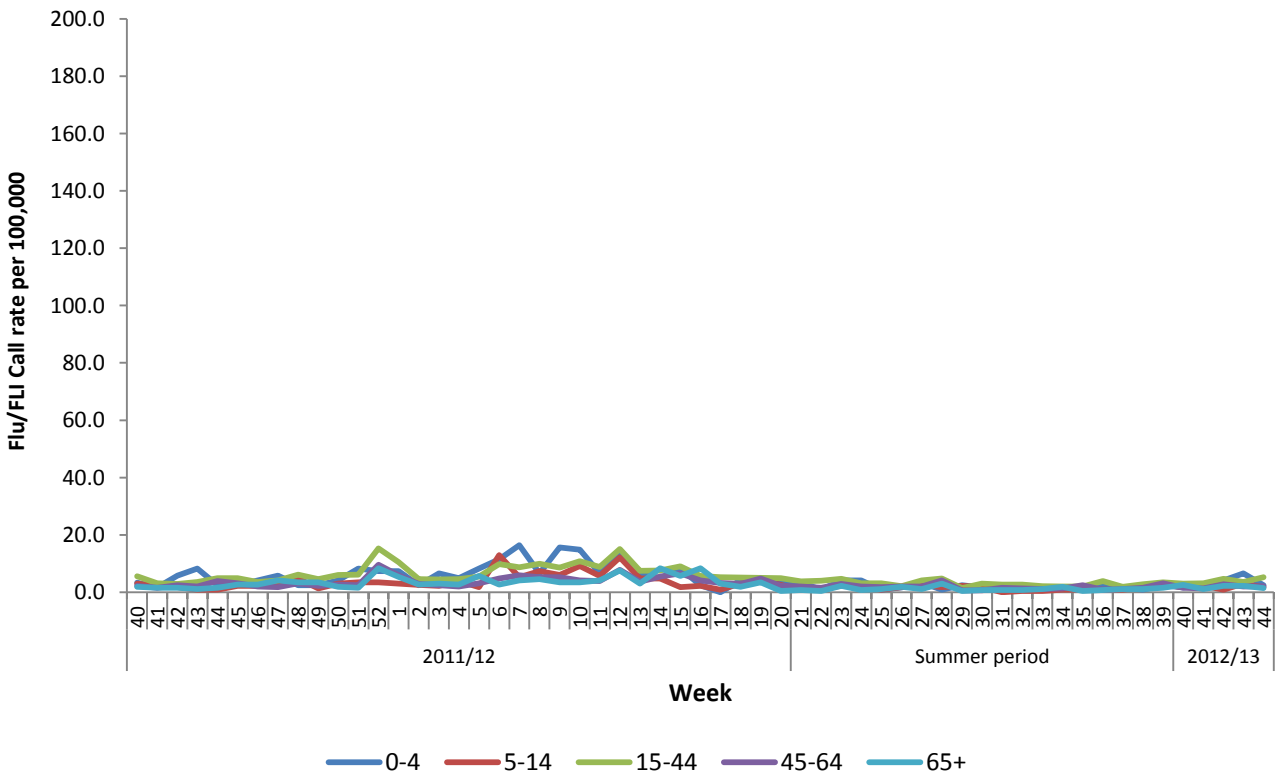


Figure 5. OOH Call rates of flu and flu-like illness by age-group from week 40 2011



Comment

OOH 'flu/FLI call rates also remain low and stable. Consultation rates for 'flu/FLI decreased slightly from 3.3 per 100,000 population in week 42 to 3.1 per 100,000 population in week 43 but increased again to 3.3 per 100,000 population in week 44, 2012. Call rates for 'flu/FLI for weeks 43 and 44 are similar to previous years. Age specific rates remain at low levels with the highest 'flu/FLI consultation rate in week 43 in the 0-4 year age group, and in week 44 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 43 and 44, 2012

| Source | Specimens Tested | AH3 | A (untyped) | Influenza B | RSV | Total influenza Positive | % Influenza Positive |
|--------------|------------------|----------|-------------|-------------|-----------|--------------------------|----------------------|
| Sentinel | 96 | 0 | 0 | 0 | 0 | 0 | 0% |
| Non-sentinel | 0 | 0 | 0 | 0 | 17 | 0 | 0% |
| Total | 96 | 0 | 0 | 0 | 17 | 0 | 0% |

Table 2. Cumulative Total Week 40 - Week 44 2012

| | AH3 | A (untyped) | Flu B | Total Influenza | RSV |
|-----------------|----------|-------------|----------|-----------------|-----------|
| 0-4 | 0 | 0 | 0 | 0 | 23 |
| 5-14 | 0 | 0 | 0 | 0 | 1 |
| 15-64 | 0 | 0 | 0 | 0 | 3 |
| 65+ | 0 | 0 | 0 | 0 | 3 |
| Unknown | 0 | 0 | 0 | 0 | 0 |
| All ages | 0 | 0 | 0 | 0 | 30 |

Table 3. Cumulative Total Week 40 - Week 44 2012

| | Sentinel | | | | | Non-sentinel | | | | |
|-----------------|----------|-------------|----------|-----------------|----------|--------------|-------------|----------|-----------------|-----------|
| | AH3 | A (untyped) | Flu B | Total Influenza | RSV | AH3 | A (untyped) | Flu B | Total Influenza | RSV |
| 0-4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 22 |
| 5-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 15-64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 65+ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| All ages | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 29 |

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.

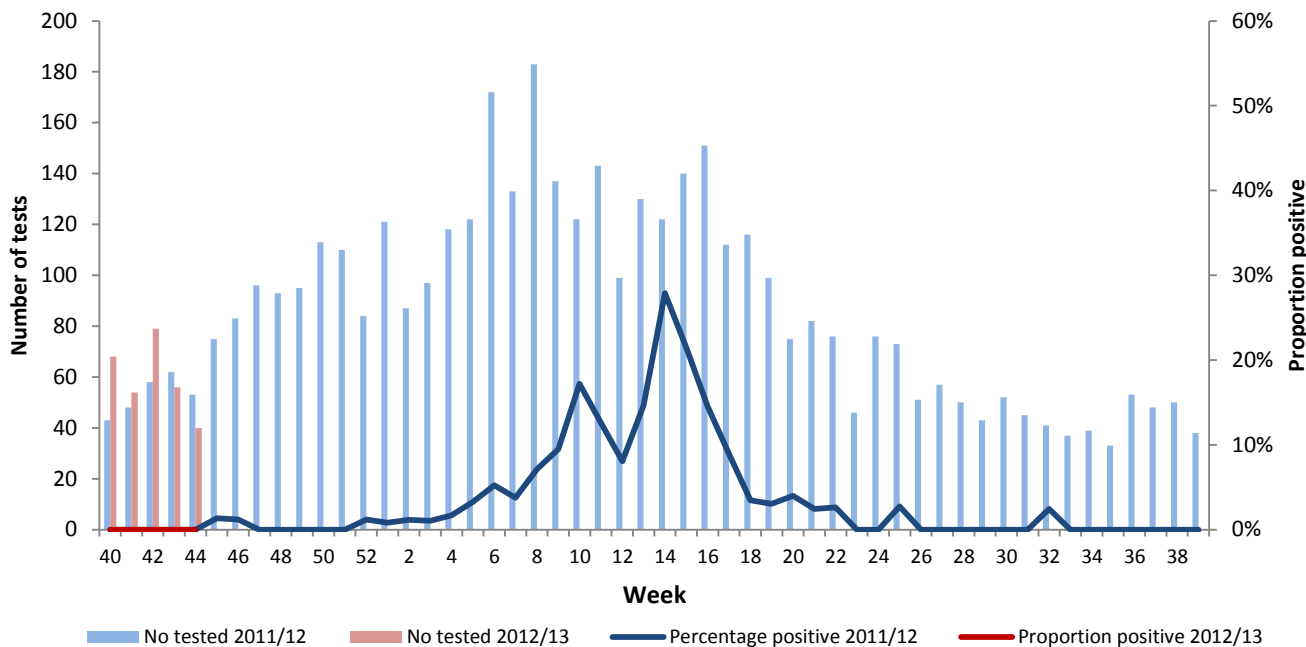
Sentinel and non-sentinel samples are tested for influenza and for RSV.

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

Comment

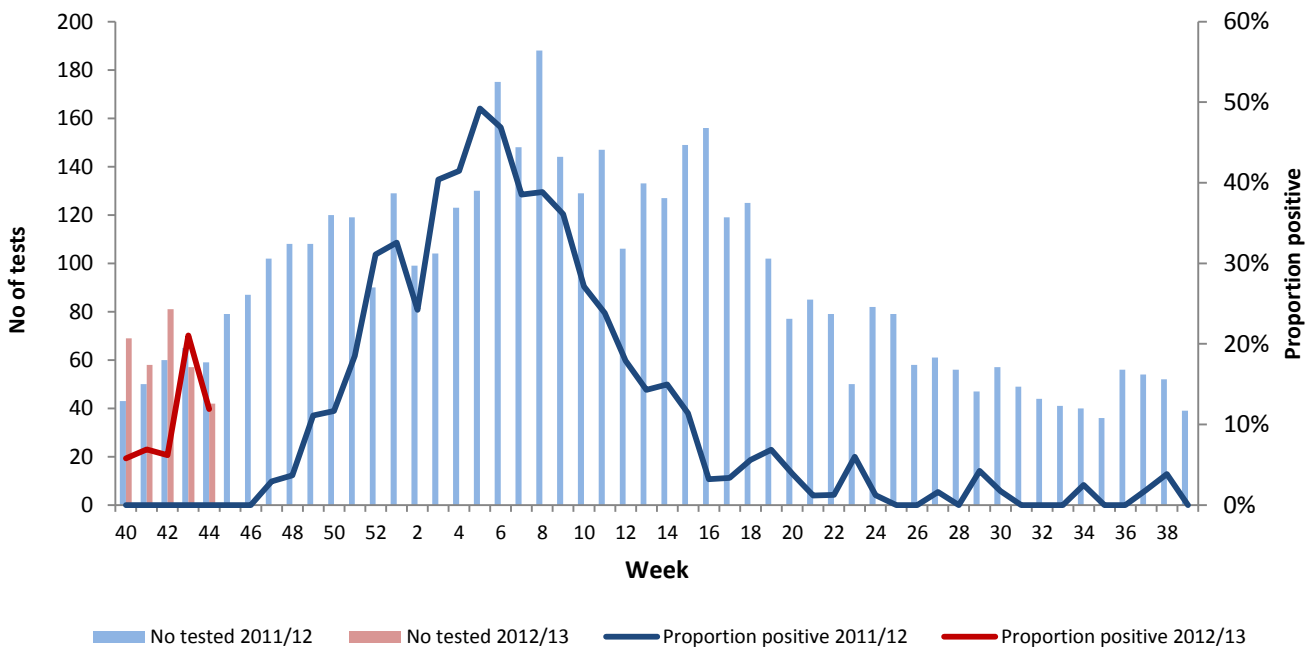
The number of specimens submitted for testing in weeks 43 and 44 remains low (n=96). There have been no positive detections of influenza reported this season to date with the last detection in week 32, 2012 (Figure 6). (Please see note above re caveat about reports received after publication of previous bulletin)

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



Respiratory Syncytial Virus

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

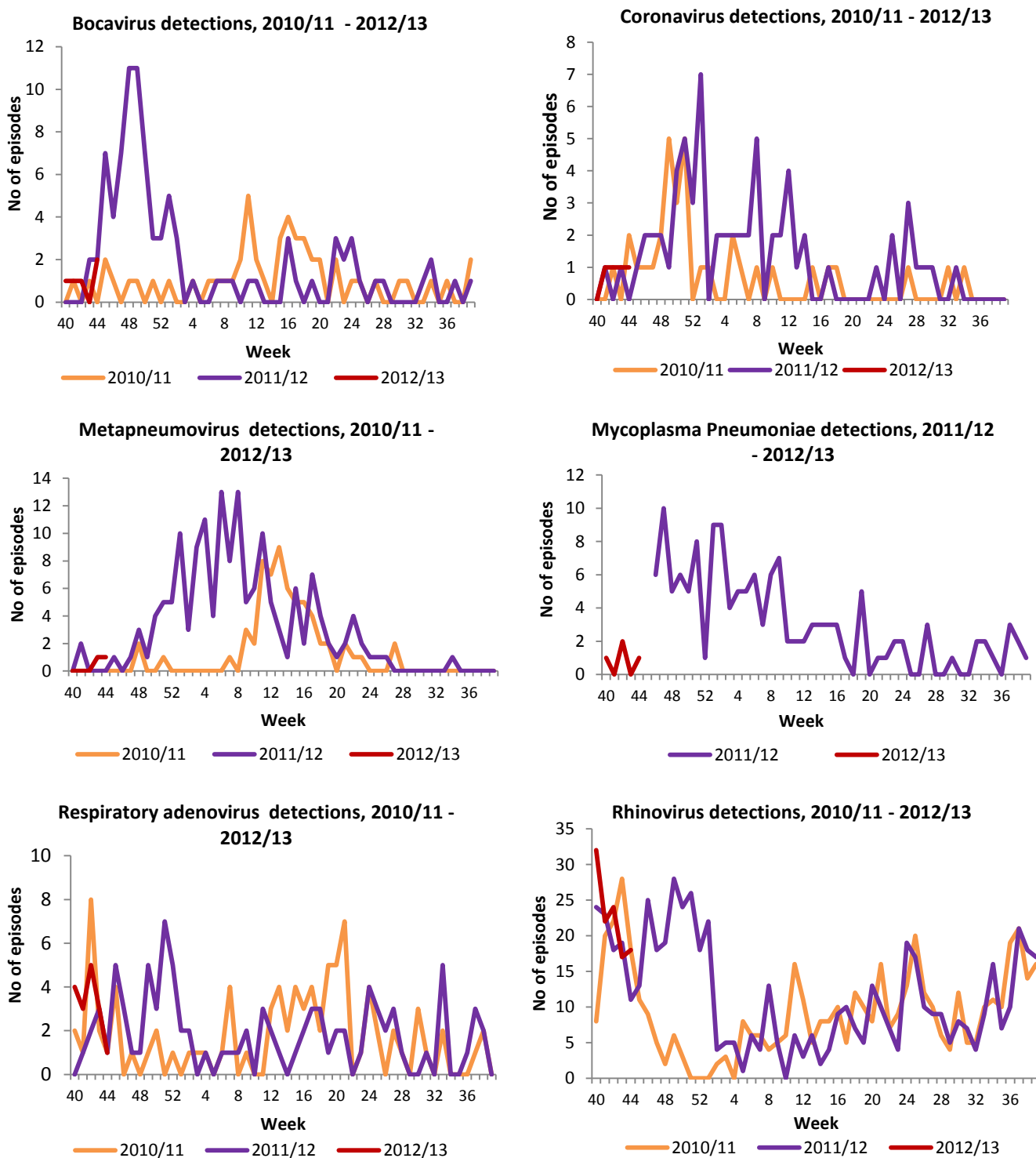


Comment

There were 17 RSV positive detections during weeks 43 and 44, 2012. From week 40 of the current season there have been a total of 30 RSV positive detections reported. In the previous season there were no RSV detections until week 46 (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 at low levels. During week 43 and 44 there were thirty five rhinovirus, four respiratory adenovirus, two bocavirus, two coronavirus, two metapneumovirus, one mycoplasma pneumoniae and one parainfluenza. (Note: additional respiratory virus results reported after the last bulletin have increased the numbers for some of the other respiratory viruses above, particularly rhinovirus).

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 weeks 43 and 44, 2012.

Mortality Surveillance

There were no reports of any laboratory confirmed influenza deaths in patients admitted to critical care in week 43 and 44, 2012.

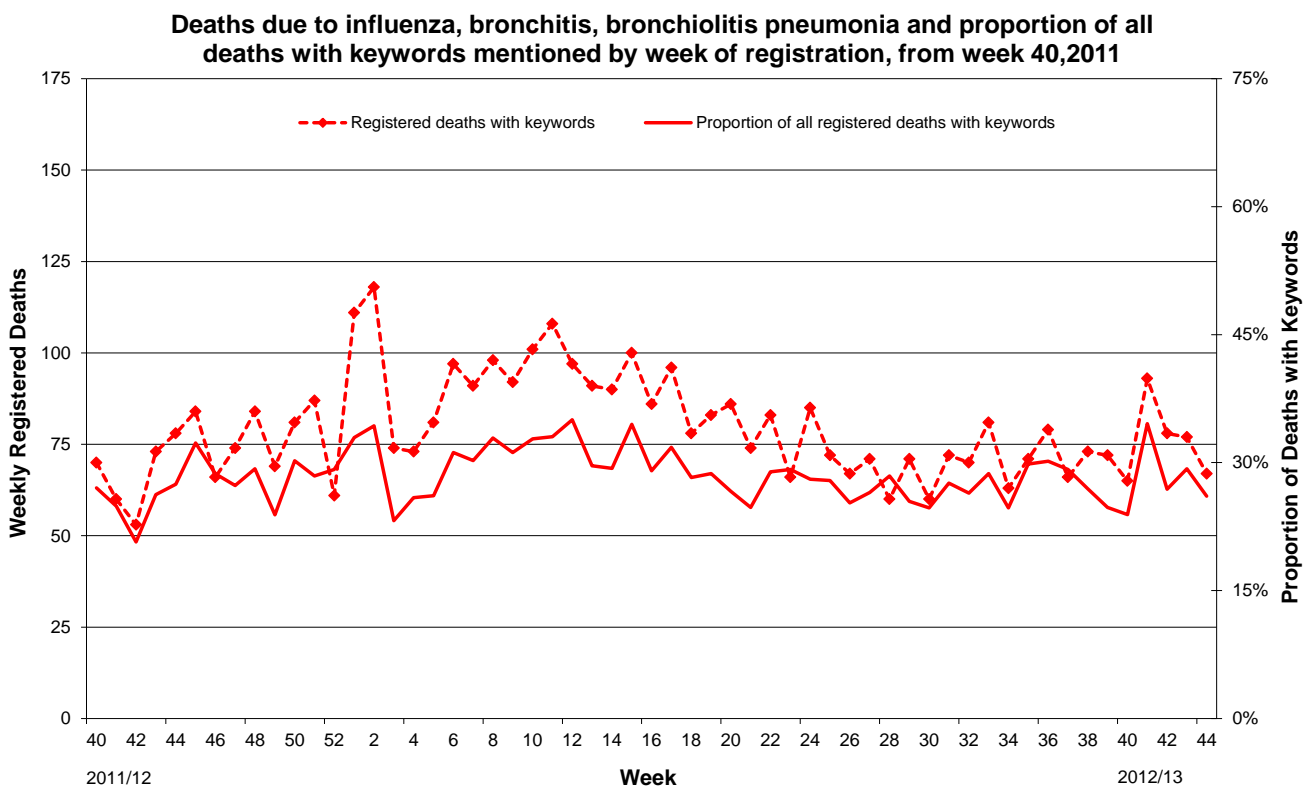
Outbreak Surveillance

There were no confirmed influenza or other respiratory outbreaks in residential care units reported to the Public Health Agency during week 43 and 44, 2012.

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 increased slightly from 27% in week 42 to 29% in week 43, however, it subsequently decreased to 26% in week 44. In weeks 43 and 44 there were 520 registered deaths of which 144 related to these specific respiratory infections.

International Summary

Europe

- In week 43/2012, all 18 reporting countries experienced low intensity of clinical influenza activity.
- Of 241 sentinel specimens tested across 17 countries, only one was positive for influenza A(H3) virus.
- No hospitalised laboratory-confirmed influenza case was reported.

Four weeks into the surveillance season for influenza, there has been no evidence of sustained influenza transmission in EU/EEA countries.

http://ecdc.europa.eu/EN/HEALTHTOPICS/SEASONAL_INFLUENZA/EPIDEMIOLOGICAL_DATA/Pages/Weekly_Influenza_Surveillance_Overview.aspx

Worldwide (WHO)

As of week 42 seasonal influenza transmission has not been picked up yet in the northern temperate zone.

- In the tropical areas most countries are reporting low or decreasing trends of influenza virus detections. The exceptions are Costa Rica in the Americas and India; Nepal, Lao PDR and Thailand in Asia.
- In Sub-Saharan Africa, Cameroon has reported an increase in influenza virus detections.
- The influenza season seems to have come to an end in the temperate countries of the southern hemisphere.

http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html

USA

Influenza activity in the United States remains low nationwide. This FluView update reports on influenza activity for the week between October 21 and October 27, 2012 of the 2012-2013 influenza season.

- The proportion of visits to doctors for influenza-like illness (ILI) was below the national baseline. All 10 U.S. regions reported ILI activity below region-specific baseline levels. One state (Louisiana) experienced low ILI activity. New York City and 49 states experienced minimal ILI activity. The District of Columbia did not report.
- Alaska, Iowa, New York, North Dakota and Wyoming reported local influenza activity. This represents a slight increase in flu activity. Three states, Iowa, Texas, and Wyoming, reported local influenza activity last week. The District of Columbia and 33 states reported

sporadic influenza activity. Guam and twelve states reported no influenza activity. Puerto Rico and the U.S. Virgin Islands did not report.

- The proportion of deaths attributed to pneumonia and influenza (P&I) based on the 122 Cities Mortality Reporting System was above the epidemic threshold.
- Nationally, the percentage of respiratory specimens testing positive for influenza viruses in the United States during the week of October 21 through October 27 was 6.2%. This is somewhat elevated for this time of year. The regional percentage of respiratory specimens testing positive for influenza viruses ranged from 0.2% to 13.9%.
- Both influenza A and influenza B viruses have been identified this season. This includes both of the currently circulating subtypes of influenza A viruses, H3N2 and 2009 H1N1. During the week of October 21 through October 27, 119 of the 188 influenza positive tests reported to CDC were influenza A and 69 were influenza B viruses. Among the 119 influenza A viruses identified that week, approximately 49.6% were H3N2 viruses and less than 1% were 2009 H1N1 viruses; 49.6% were not subtyped.

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 and was similar to the previous week
- In week 43, a total of 25 laboratory detections of influenza were reported, 88% of which were for influenza A viruses (68.2% A(H3) and 31.8% A(un-subtyped)).
- Two influenza outbreaks in long-term care facilities were reported in week 43
- Five influenza A-associated hospitalizations (in persons ≥ 65 years of age) were reported in week 43
- The ILI consultation rate increased in week 43 to 20.0 per 1,000 patient visits but is 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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This report was compiled by Cathriona Kearns, Paul Cabrey, and Dr. Brian Smyth.