

Influenza Weekly Surveillance Bulletin

Northern Ireland, Week 41- 42 (8 - 21 October 2012)

Summary

- Influenza activity in Northern Ireland remains at low levels.
- The GP combined 'flu/FLI consultation rate increased from 8.8 per 100,000 population in week 40 to 15.6 per 100,000 population in week 41, 2012; however, the consultation rate subsequently decreased in week 42 to 11.6 per 100,000 population. Rates are lower compared to the same weeks last year and are well below the Northern Ireland threshold (70 per 100,000 population).
- OOH 'flu/FLI call rates decreased slightly from 2.3 per 100,000 population in week 40 to 2.2 per 100,000 population in week 41, 2012 but subsequently increased to 3.3 per 100,000 population in week 42.
- There have been no influenza positive detections since week 32, 2012.
- There were seven RSV positive detections in weeks 41 and 42, 2012.
- During weeks 41 and 42 there were thirty-three rhinovirus, nine respiratory adenovirus, three bocavirus, two parainfluenza, two mycoplasma pneumoniae and one coronavirus detected.
- There were no confirmed influenza cases admitted to critical care in Northern Ireland in weeks 41 and 42, 2012.
- There have been no reports of any laboratory confirmed influenza deaths in patients admitted to critical care in weeks 41 and 42, 2012.
- There were no confirmed influenza outbreaks reported to PHA in weeks 41 and 42, 2012.

Introduction

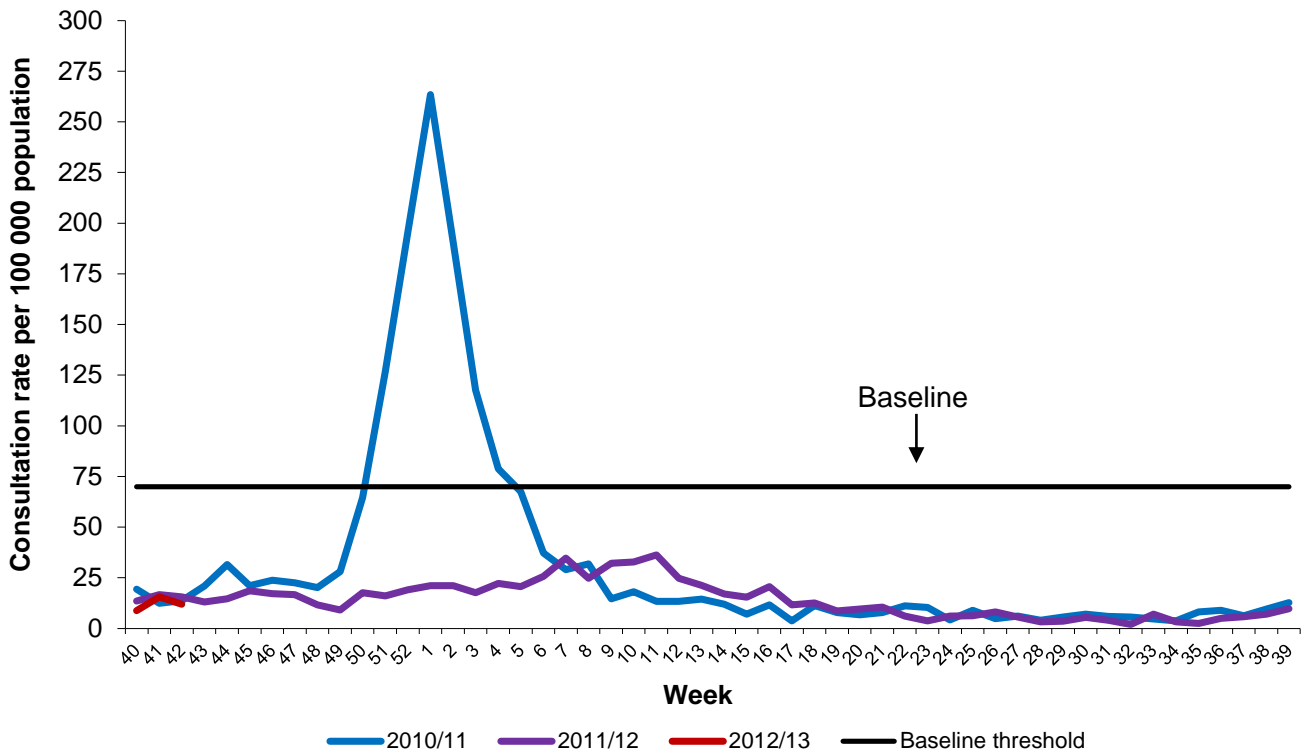
In order to monitor influenza activity in Northern Ireland a number of surveillance systems are in place.

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 at low levels. The GP combined ‘flu/FLI consultation rate increased from 8.8 per 100,000 population in week 40 to 15.6 per 100,000 population in week 41, 2012; however, the consultation rate subsequently decreased in week 42 to 11.6 per 100,000 population. Rates for weeks 41 and 42, 2012, remain lower than the same weeks in the previous year (16.6 and 15.6, respectively) 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

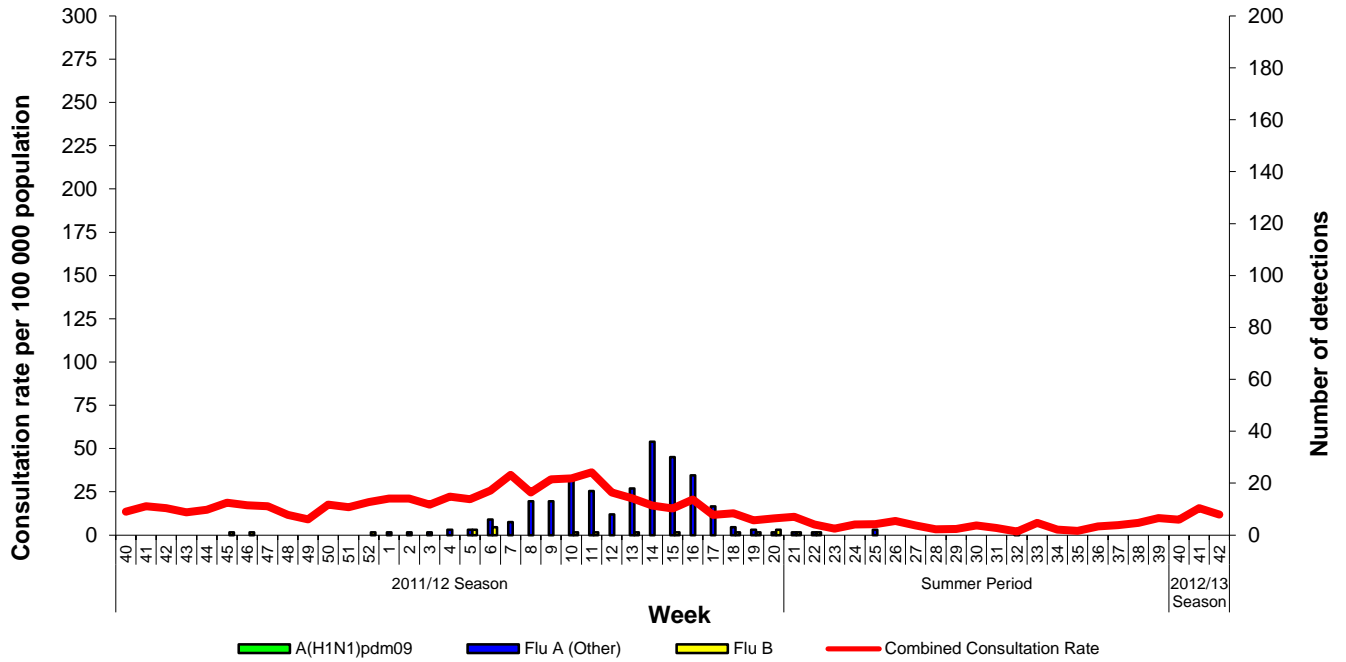
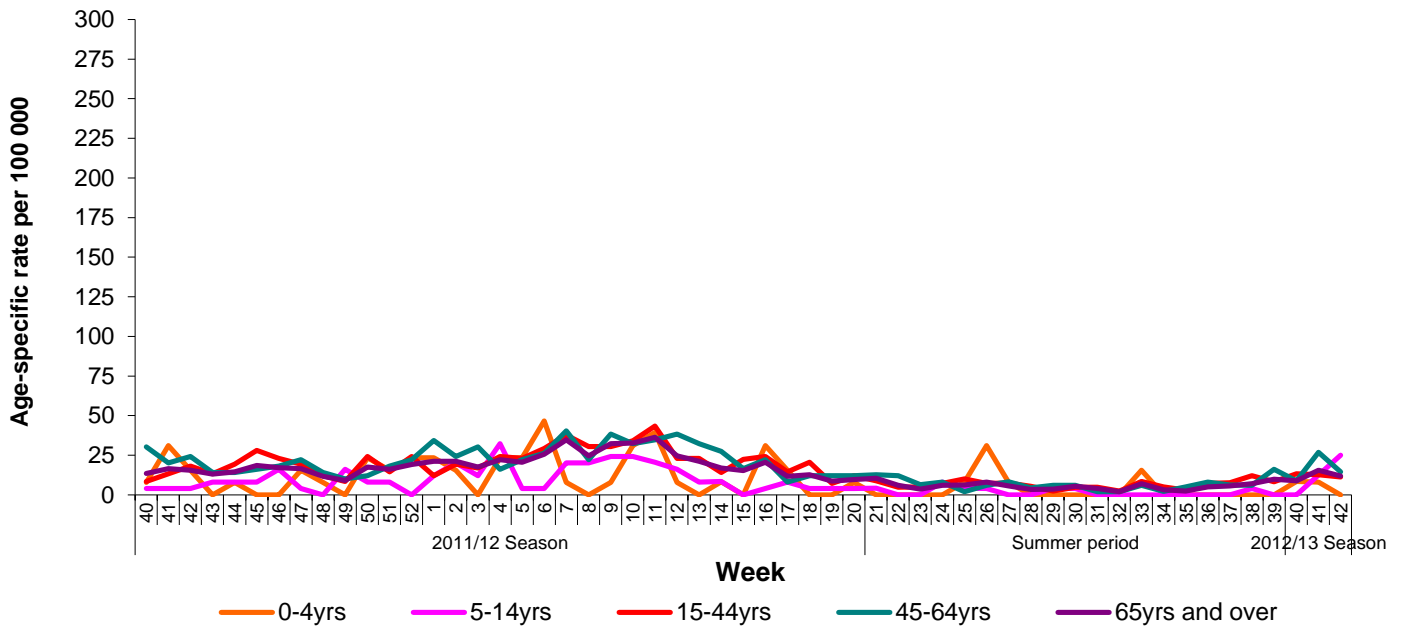


Figure 3. Sentinel GP age-specific consultation rates for combined flu and flu-like illness from week 40 2011



Comment

All age specific consultation rates remain low. Numbers in the 5-15 year age group have increased slightly in weeks 41 and 42. The highest age specific rate in week 41 was in the 45 – 64 year age group and in week 42 it was in the 5-14 year age group. Small numbers in some of the age groups can 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

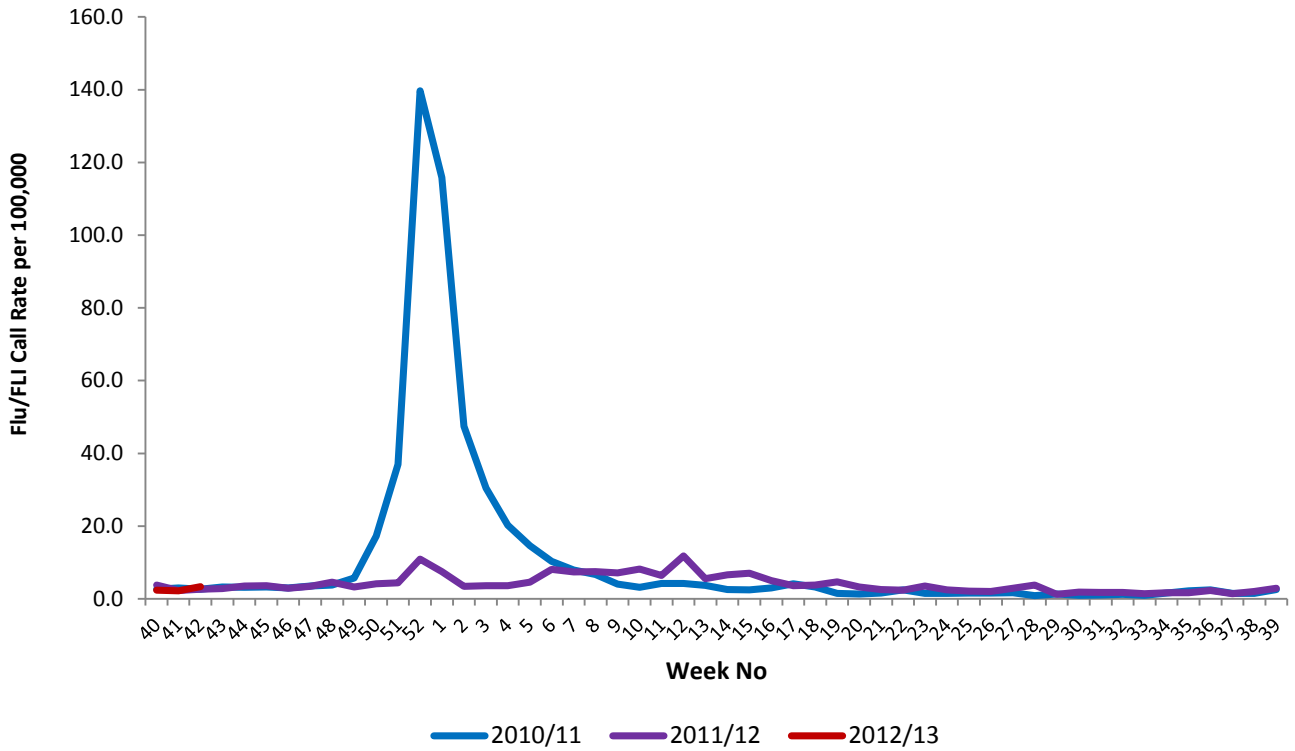
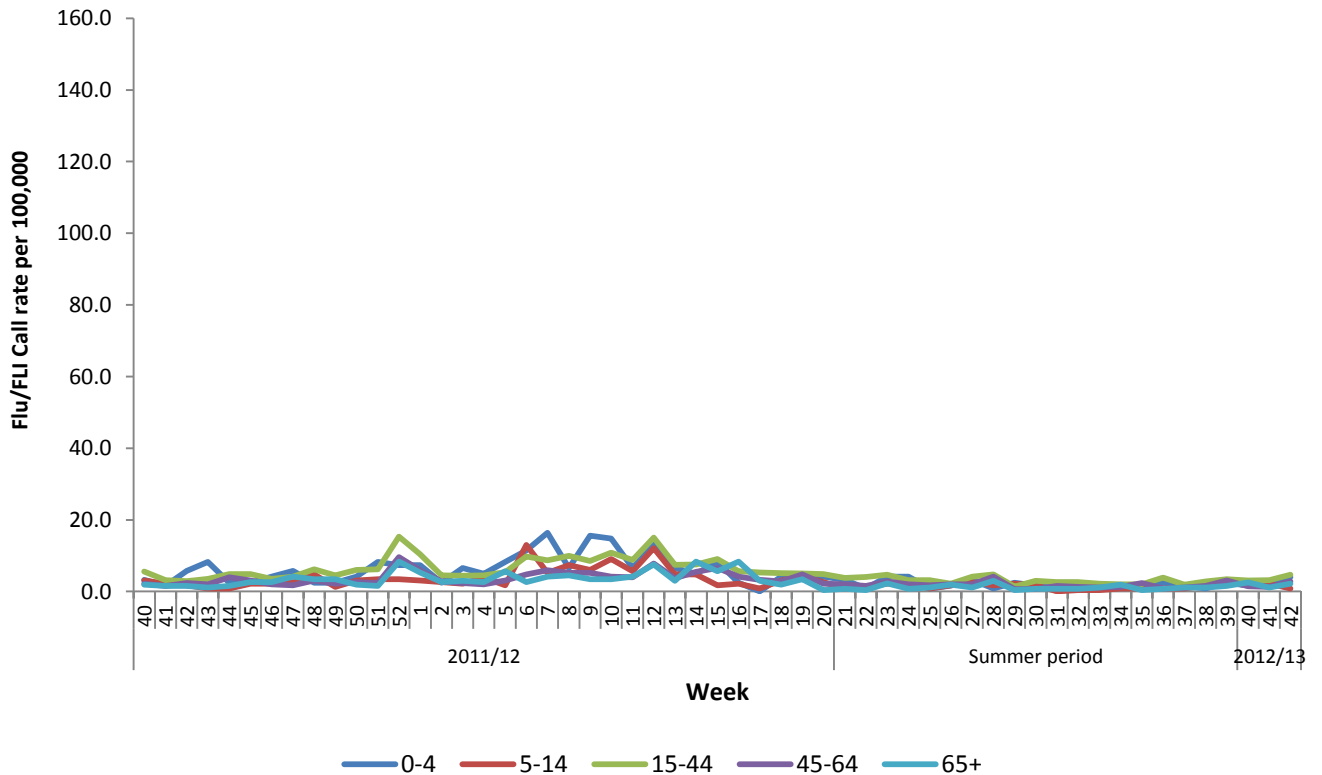


Figure 5. OOH Call rates of flu and flu-like illness by age-group from week 40 2011



Comment

OOH 'flu/FLI call rates also remain low and stable. Rates decreased slightly from 2.3 per 100,000 population in week 40 to 2.2 per 100,000 population in week 41, 2012 but subsequently increased to 3.3 per 100,000 population in week 42. Call rates for 'flu/FLI remain low with rates for weeks 41 and 42 similar to the corresponding weeks in 2011. All age specific rates remain low with the highest 'flu/FLI consultation rate remaining 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 41 and 42, 2012

Source	Specimens Tested	AH3	A (untyped)	Influenza B	RSV	Total influenza Positive	% Influenza Positive
Sentinel	3	0	0	0	0	0	0%
Non-sentinel	93	0	0	0	7	0	0%
Total	96	0	0	0	0	0	0%

Table 2. Cumulative Total Week 40 - Week 42 2012

	AH3	A (untyped)	Flu B	Total Influenza	RSV
0-4	0	0	0	0	8
5-14	0	0	0	0	0
15-64	0	0	0	0	1
65+	0	0	0	0	2
Unknown	0	0	0	0	0
All ages	0	0	0	0	11

Table 3. Cumulative Total Week 40 - Week 42 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	7
5-14	0	0	0	0	0	0	0	0	0	0
15-64	0	0	0	0	0	0	0	0	0	1
65+	0	0	0	0	0	0	0	0	0	2
Unknown	0	0	0	0	0	0	0	0	0	0
All ages	0	0	0	0	1	0	0	0	0	10

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.

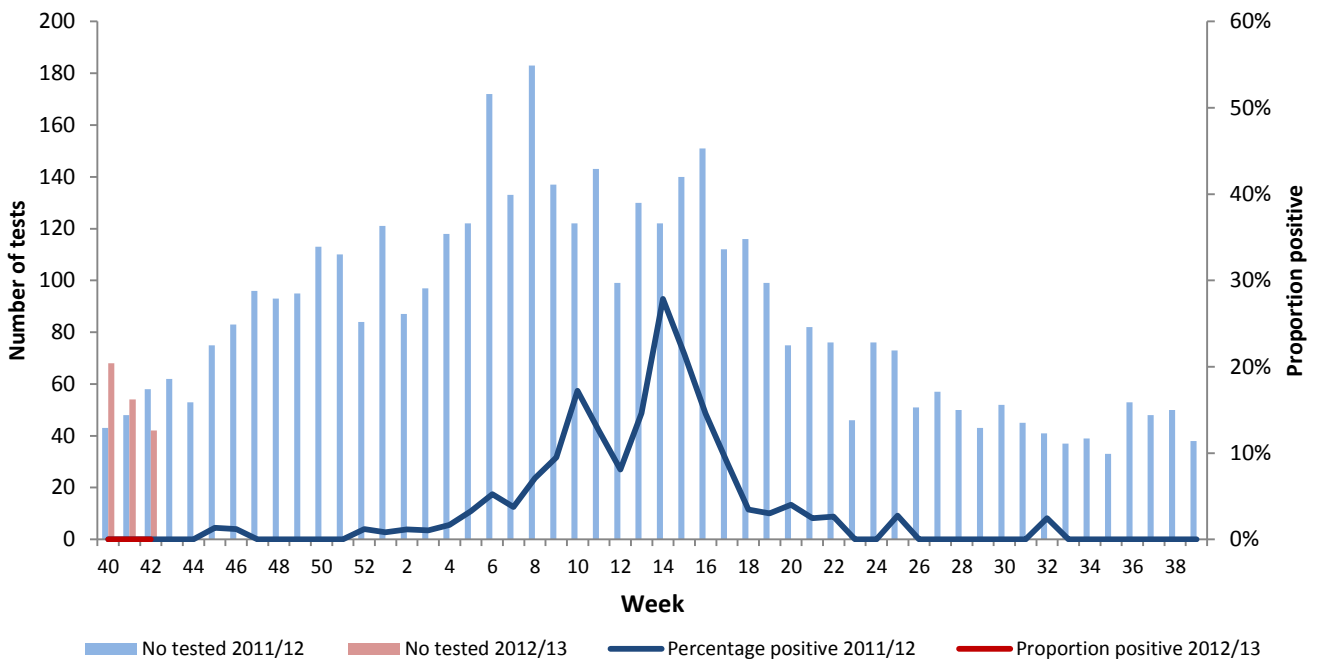
Sentinel and non-sentinel samples are tested for influenza and for RSV.

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

Comment

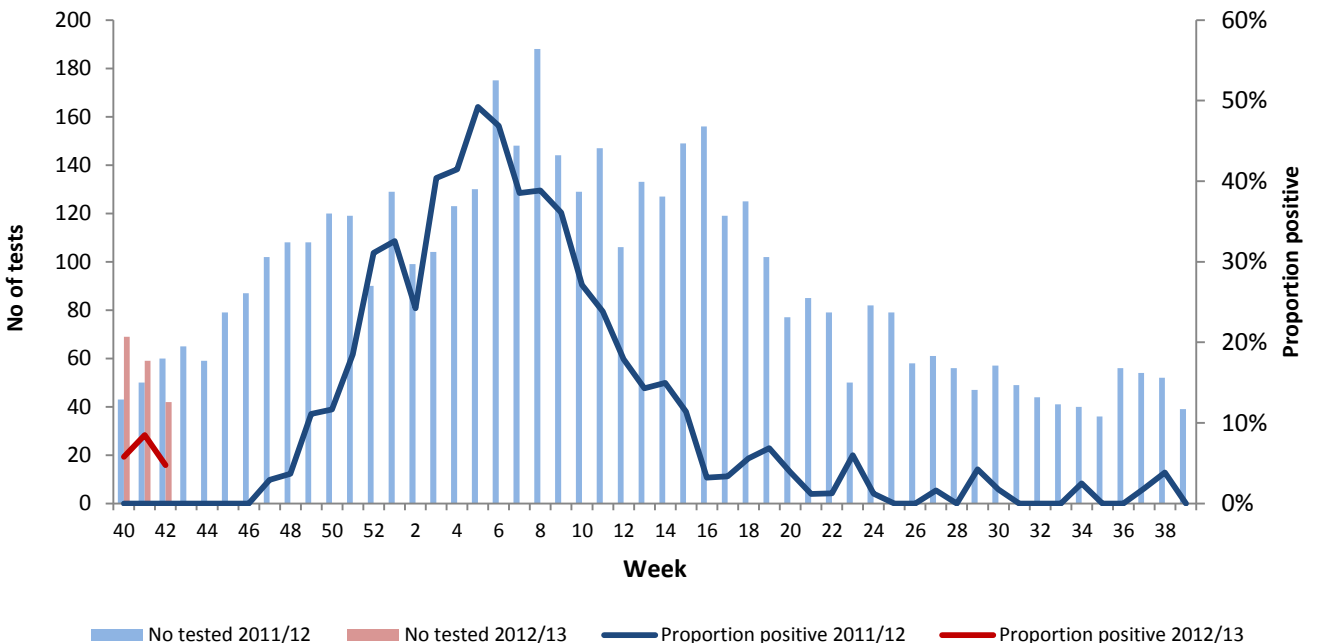
The number of specimens submitted for testing in weeks 41 and 42 remains low (54 and 42, respectively) but is higher than the same period last year. There were no positive detections of influenza reported in weeks 41 and 42. The last influenza positive detection was in week 32, 2012 (Figure 6). (Please 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

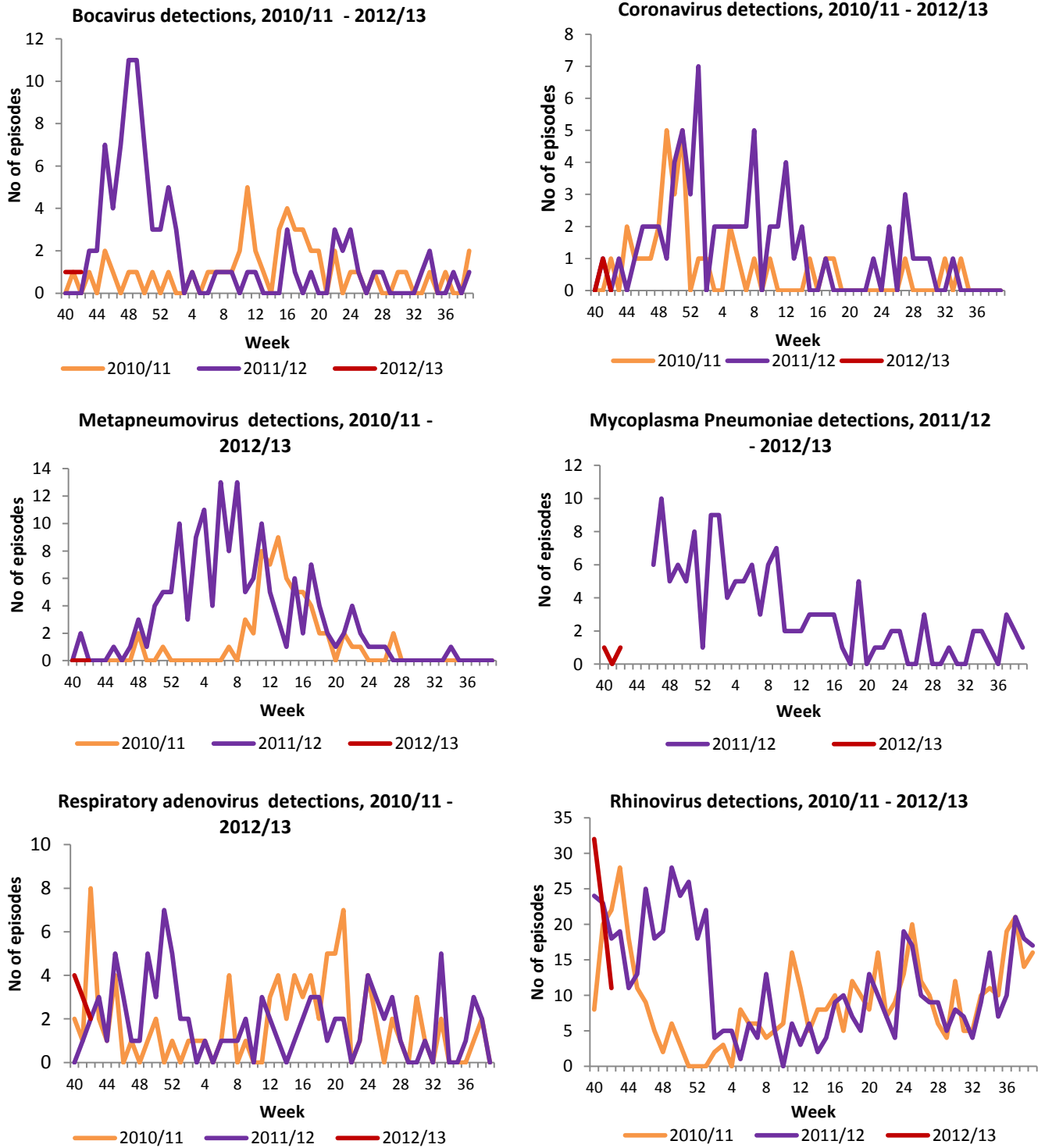


Comment

There were seven RSV positive detections during weeks 41 and 42, 2012. This contrasts with the previous year when 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 low. During week 41 and 42 there were 33 rhinovirus, nine respiratory adenovirus, three bocavirus, two parainfluenza, two *mycoplasma pneumoniae* and one coronavirus. (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 41 and 42, 2012.

Mortality Surveillance

There were no reports of any laboratory confirmed influenza deaths in patients admitted to critical care in week 41 and 42, 2012.

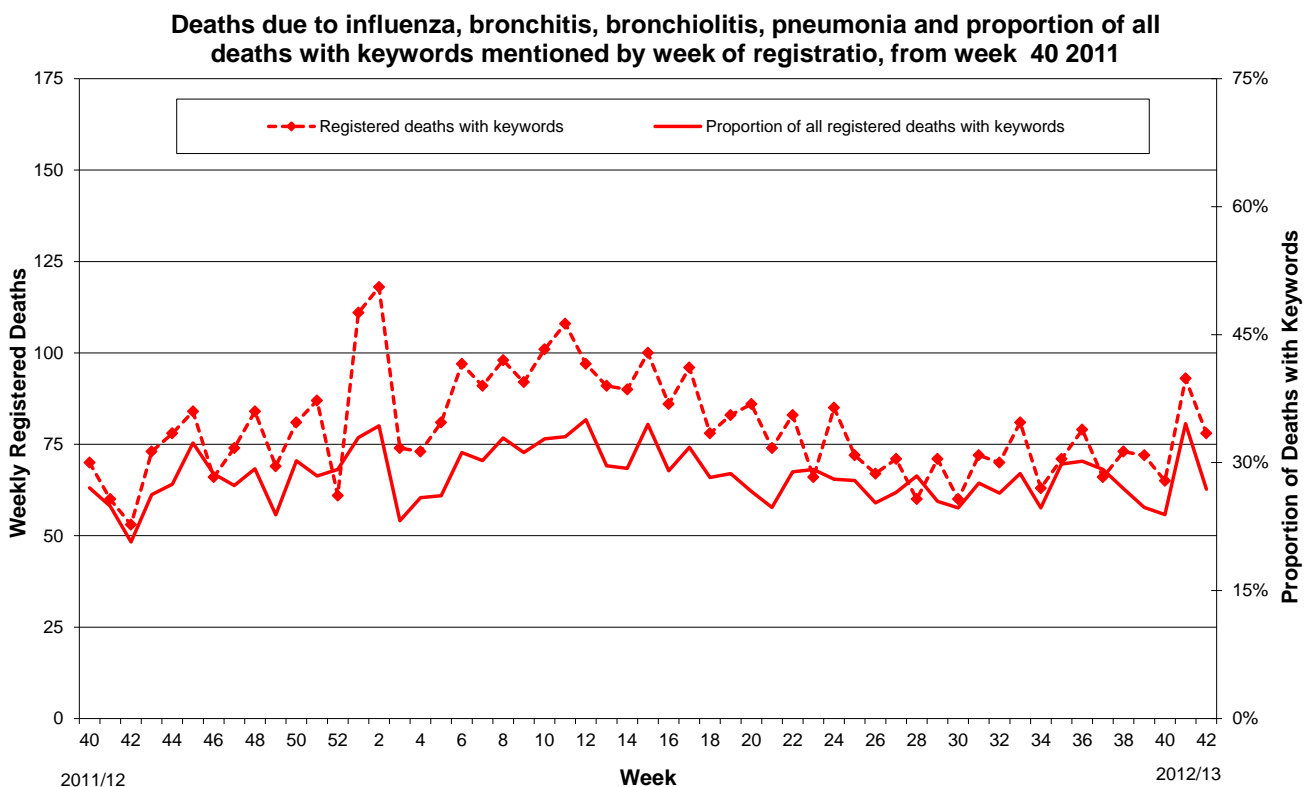
Outbreak Surveillance

There were no confirmed influenza or other respiratory outbreaks in residential care units reported to the Public Health Agency during week 41 and 42, 2012, or during the summer period.

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 substantially from 24% in week 40 to 35% in week 41, however, it decreased to 27% in week 42. In weeks 41 and 42 there were 559 registered deaths of which 171 related to these specific respiratory infections.

International Summary

Europe

- During week 41/2012, all 24 reporting countries experienced low intensity of clinical influenza activity, 20 countries notified no geographic spread. Three countries reported increasing trends.
- Of 219 sentinel specimens tested by 27 countries, three (1.4%) were positive for influenza virus. From non-sentinel sources, eight influenza A viruses and five influenza B viruses were detected.
- No severe hospitalised laboratory-confirmed influenza cases have been reported since week 40/2012.

During the second week of the 2012–2013 influenza surveillance season, there was no evidence of significant influenza activity in Europe..

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.

- 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

According to this week's FluView, flu activity in the United States remains low nationwide. The second FluView update for the 2012-2013 season reports on influenza activity between October 7 and October 13, 2012. Below is a summary of these key indicators:

- 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. Forty-eight states and New York City experienced minimal ILI activity. The District of Columbia and two states did not report.
- One state (Iowa) reported local influenza activity (the same number as last week). The District of Columbia and 32 states reported sporadic influenza activity (an increase from

29 states last week). Guam and 16 states reported no influenza activity. Puerto Rico, the U.S. Virgin Islands, and one state did not report.

- Data regarding influenza-associated hospitalizations for the 2012-2013 influenza season are not yet available, but will be updated weekly starting later in the season.
- The proportion of deaths attributed to pneumonia and influenza (P&I) based on the 122 Cities Mortality Reporting System was at the epidemic threshold. This is an increase from the previous week.
- Nationally, the percentage of respiratory specimens testing positive for influenza viruses in the United States during the week of October 7 through October 13 was 3.9%. This is somewhat elevated for this time of year. The regional percentage of respiratory specimens testing positive for influenza viruses ranged from 0.4% to 7.7%.
- 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 7 through October 13, 61 of the 129 influenza positive tests reported to CDC were influenza A and 68 were influenza B viruses. Among the 61 influenza A viruses identified that week, approximately 43% were H3N2 viruses and 7% were 2009 H1N1 viruses; 51% 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 but has increased slightly from last week as more regions have reported localized and sporadic influenza activity
- In week 41, a total of 16 laboratory detections of influenza were reported, the majority (94%) of which were for influenza A viruses [8 A(H3), 1 A(H1N1)pdm09, 6 A(un-subtyped) and 1 B]
- Four new influenza outbreaks were reported in week 41: 3 in LTCFs and 1 other
- One influenza A-associated hospitalization (in a person ≥ 65 years of age) was reported in week 41
- The ILI consultation rate declined in week 41 to 10.2 per 1,000 patient visits is below 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:

Paul Cabrey
Information Officer
Public Health Agency
028 90263386

Cathriona Kearns
Epidemiological Scientist
Public Health Agency
028 90263386

Email: flusurveillance@hscni.net

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