

Influenza Weekly Surveillance Bulletin

Northern Ireland, Weeks 47 and 48 (21 November – 4 December 2011)

Initially this bulletin will be released on a bi-weekly basis. However once flu activity begins to increase it will be produced on a weekly basis.

As the season develops additional charts and tables will be added where necessary.

Summary

- GP consultation rates for combined flu/FLI decreased from 19.9 in week 46 to 11.7/100,000 population in week 48. Rates in weeks 47 and 48 are lower than the same weeks last year and remain well below the Northern Ireland threshold (70/100,000 population).
- Out of hours flu/FLI call rates remain stable and low.
- There were no influenza detections in weeks 47 and 48.
- There were five RSV detections in weeks 47 and 48.

Introduction

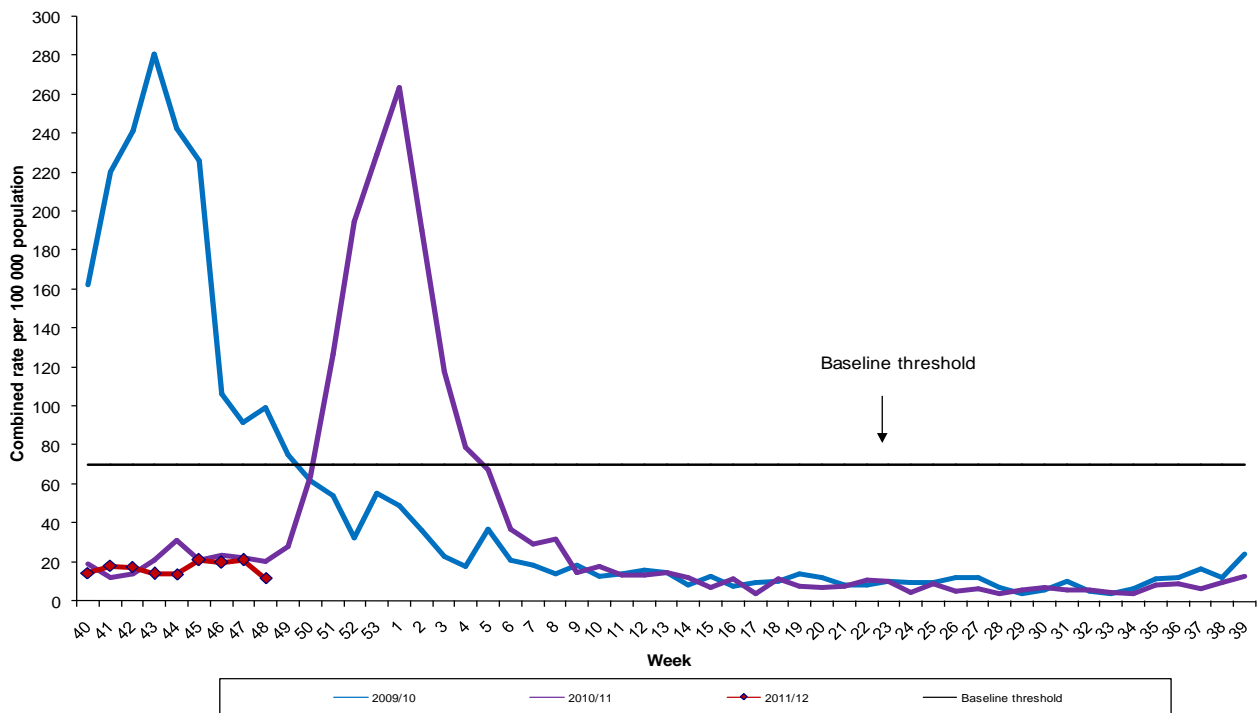
In order to monitor influenza activity in Northern Ireland a number of surveillance systems are in place. A new development for this winter will be surveillance of critical care patients in hospitals with confirmed influenza.

Additional surveillance systems are:

- GP sentinel surveillance representing 11.7% of Northern Ireland population;
- GP out of hours surveillance system;
- Virological reports from the Regional Virus Laboratory (RVL);
- Mortality data from Northern Ireland Statistics and Research Agency (NISRA);

Sentinel GP consultation data

Figure 1. Sentinel GP consultation rate for combined flu and flu-like illness 2009/10 – 2011/12



Note: 2009 had 53 weeks for surveillance purposes, therefore, an additional data point has been inserted in the graph for 2010/11 at week 53 based on the average of weeks 52 and 1.

Figure 2. Sentinel GP consultation rate for combined flu and flu-like illness and number of virology flu detections from week 40 2010

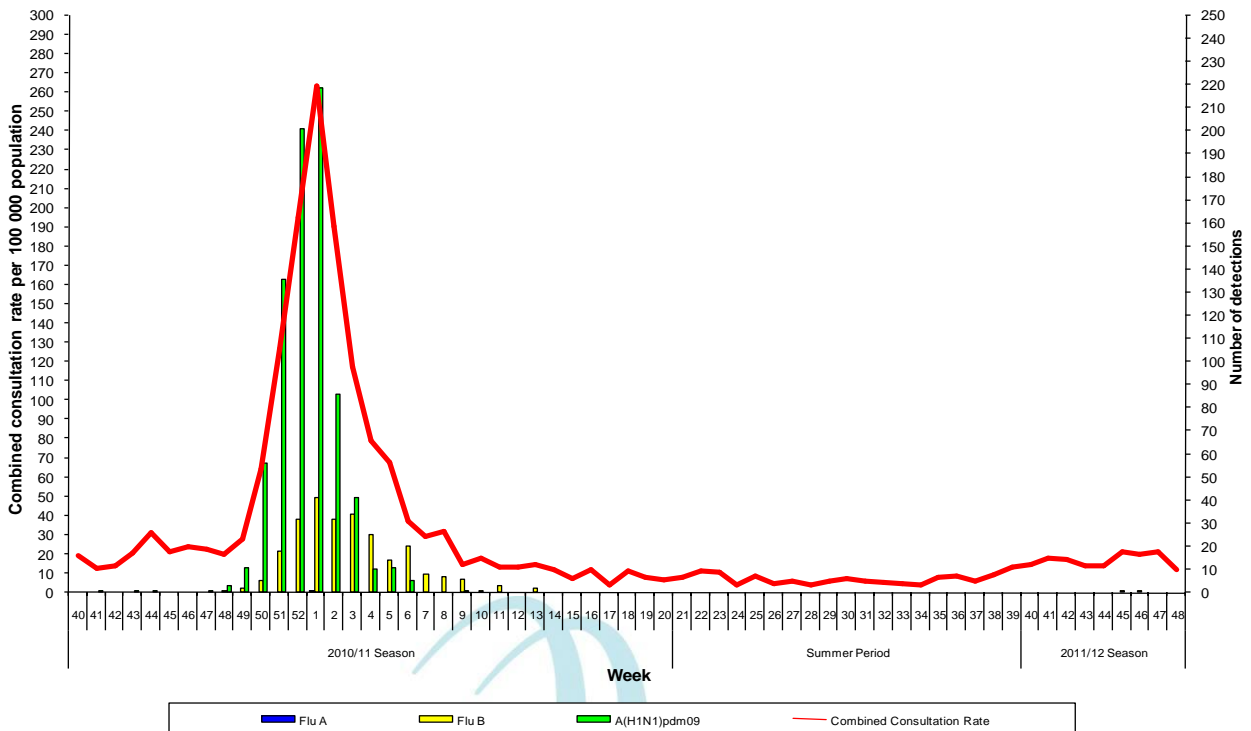
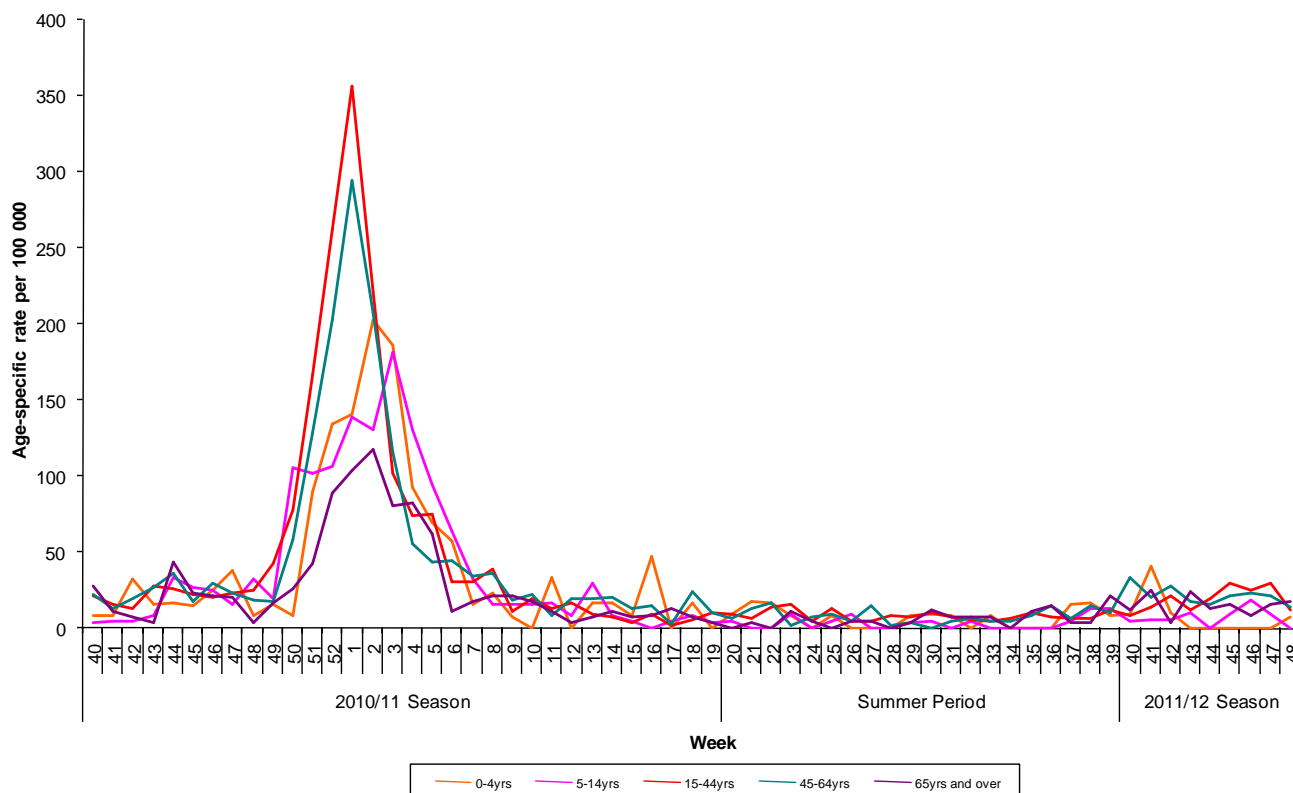


Figure 3. Sentinel GP age-specific consultation rates for combined flu and flu-like illness from week 40 2010



Comment

The GP combined consultation rate has decreased from 19.9 per 100,000 population in week 46 to 11.7 per 100,000 population in week 48 (41% decrease). Rates for week 47 and 48 are lower than the same weeks last year (22.6 and 20.1 per 100,000 population, respectively) and are well below the Northern Ireland threshold of 70 per 100,000 population (Figure 1).

Age specific rates remain low with the highest age specific combined rates in week 47 in the 15–44 year age group, and in week 48 in the over 65 year age group. Small numbers in some of the age groups will contribute to weekly fluctuation in rates.

Out of hours centres call data

Figure 4. Out of hours total call rate (all diagnoses) and call rate for flu and flu-like illness from week 40 2010

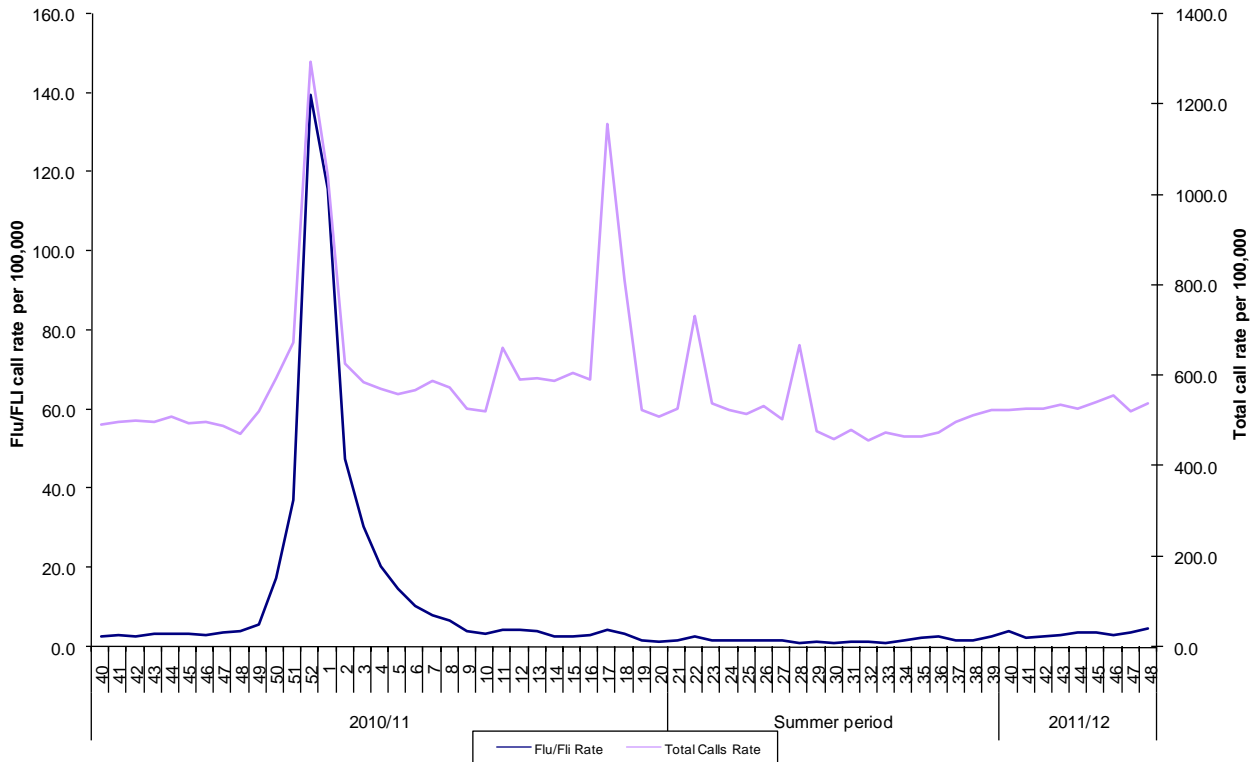
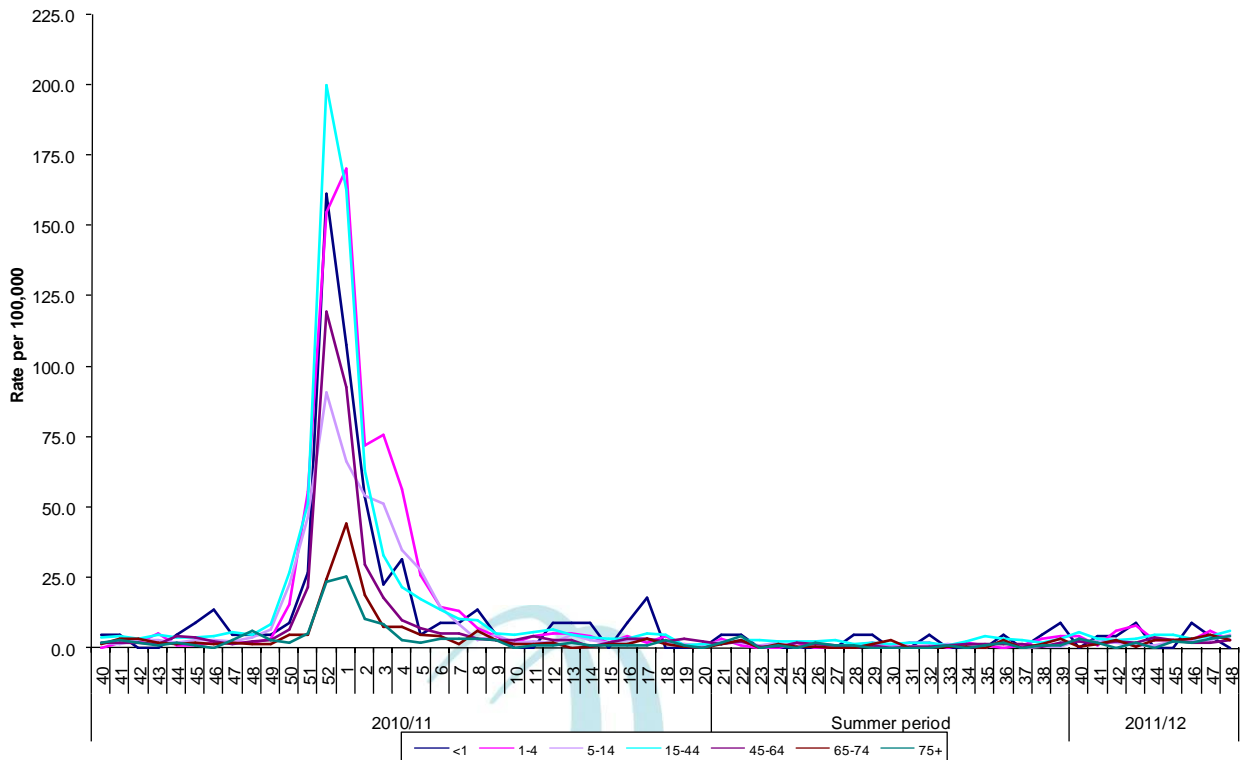


Figure 5. Out of hours call rates of flu and flu-like illness by age-group from week 40 2010



Comment

Out of hours call rates for flu/FLI in weeks 47 and 48 remain low (3.5 and 4.6 per 100,000 population, respectively) and stable. In week 47 the highest flu/FLI consultation rate was in the 1–4 year age group and in week 48 in the 15–44 year age group (6.0 and 6.2 per 100,000 population, respectively). Flu/FLI rates for week 47 are similar to the same week last year last year (3.5 per 100,000 population), however, rates for week 48 are higher (3.5 per 100,000 population in week 48 2010). Small numbers in some of the age groups will contribute to weekly fluctuation in rates.

Virology data

Table 1. Virus activity in Northern Ireland Weeks 47 and 48 2011						
Source	Specimens tested	(H1N1) 2009	Influenza B	RSV	Total influenza positive	% Influenza positive
Sentinel	7	0	0	0	0	0%
Non-sentinel	207	0	0	5	0	0%
Total	214	0	0	5	0	0%

Table 2. Cumulative total Week 40 – Week 48 2011					
Age	A(H1N1)pdm09	AH3	Flu B	Total influenza	RSV
0–4	0	0	1	1	5
5–14	0	0	0	0	0
15–64	0	0	1	1	0
65+	0	0	0	0	0
Unknown	0	0	0	0	0
All ages	0	0	2	2	5

Table 3. Cumulative total Week 40 – Week 48 2011								
Age	Sentinel				Non-sentinel			
	A(H1N1) pdm09	Flu B	Total influenza	RSV	A(H1N1) pdm09	Flu B	Total influenza	RSV
0–4	0	0	0	0	0	1	1	5
5–14	0	0	0	0	0	0	0	0
15–64	0	1	1	0	0	0	0	0
65+	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0
All ages	0	1	1	0	0	1	1	5

Note

All virology data is provisional.

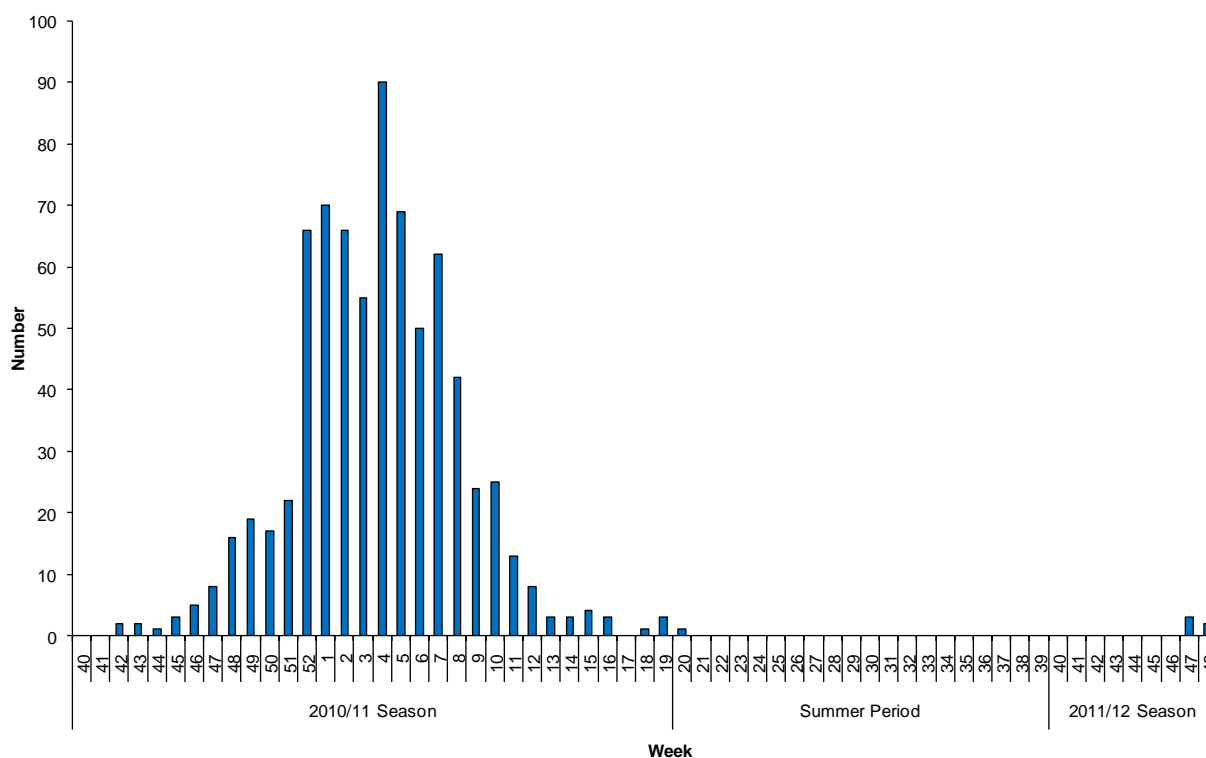
Sentinel and non-sentinel samples are tested for influenza and for RSV.

Comment

The number of specimens submitted for testing remains low but is increasing. During weeks 47 and 48 a total of 214 specimens (seven sentinel) were tested by the Regional Virus Laboratory. There were no samples that tested positive for influenza.

Other respiratory viruses

Figure 6. Weekly cases of RSV viruses in Northern Ireland from week 40 2010



Comment

RSV detections remain low, with five RSV detections in weeks 47 and 48.

Hospital surveillance

There were no confirmed influenza patients or confirmed influenza deaths in critical care (level 2 and 3) in Northern Ireland in weeks 47 and 48.

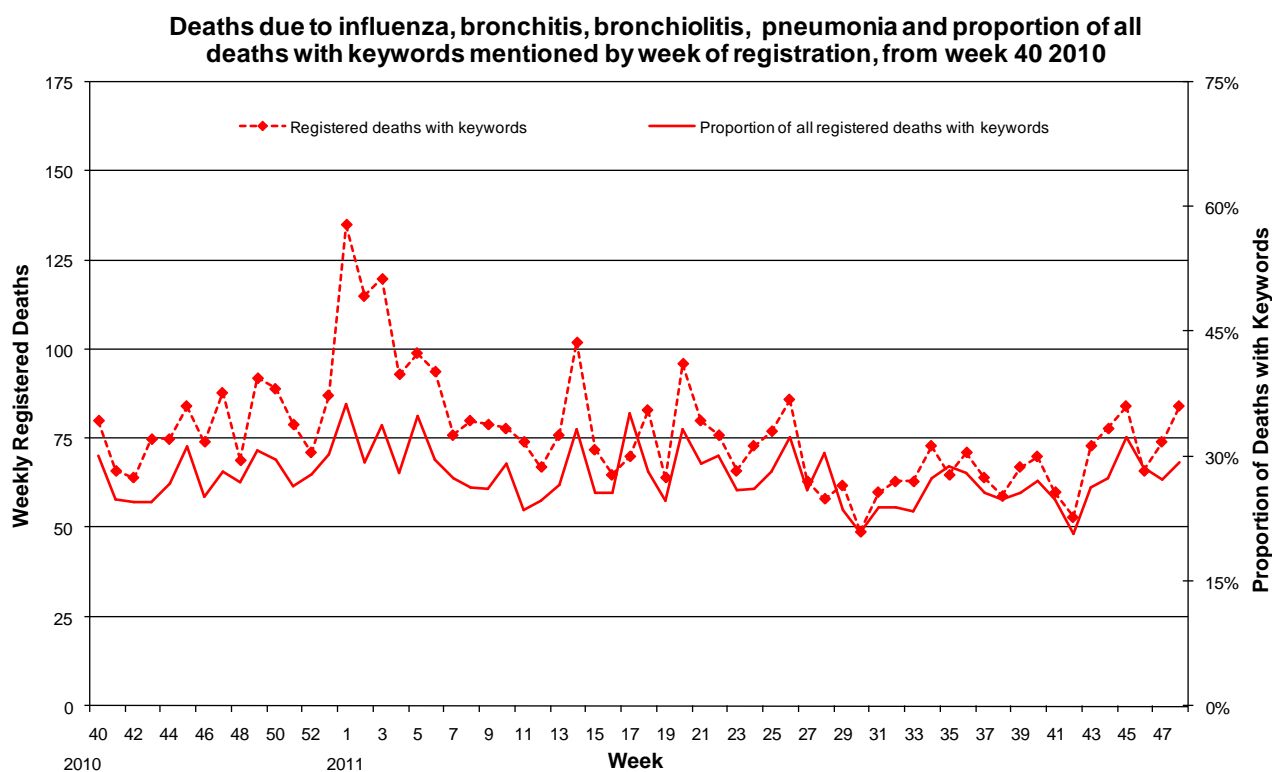
Additional information on confirmed influenza hospitalised patients will be available from the Health and Social Care Board (HSCB) once influenza starts to circulate.

Mortality data

Weekly mortality data is provided from NISRA. 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.

In addition this winter there will be reporting of deaths with confirmed influenza in patients in critical care (level 2 and level 3).

Figure 7. Weekly registered deaths



Comments

The proportion of deaths related to respiratory keywords over this period remained steady at 29% in week 48 compared to week 46 and similar to that for the same period last year. In weeks 47 and 48 there were 558 registered deaths of which 158 related to these specific respiratory infections.

Vaccine uptake

As at the end of October 2011, the proportion of people in Northern Ireland aged 65 years and over who had received the seasonal influenza vaccine was 63.3%, while the uptake in those aged under 65 in an at-risk group was 60.4% (provisional data). This compares with 55% uptake in the over 65 years, and 42.8% in the under 65 at-risk group for the same period last year.

International summary

Europe

During week 47/2011, low influenza activity was notified by all 28 countries reporting.

Of 561 sentinel specimens tested during week 47/2011, six (1.1%) were positive for influenza virus. Of the 43 influenza virus detections in sentinel specimens since week 40/2011, 69.8% were type A and 30.2% were type B viruses. Of 22 influenza A viruses subtyped, 13.6% were A(H1)pdm09 and 86.4% were A(H3) viruses.

Since week 40/2011, 38 SARI cases have been reported by four countries. Twelve of these patients were confirmed as influenza positive.

Eight weeks after the beginning of the surveillance season for influenza in the Northern Hemisphere, there has been no evidence of sustained transmission in EU/EAA countries, but more influenza viruses are being detected.

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

USA

During week 47 (November 20-26, 2011), influenza activity remained low in the United States.

- U.S. Virological Surveillance: Of the 2,130 specimens tested by U.S. World Health Organisation (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories and reported to CDC/Influenza Division, 40 (1.9%) were positive for influenza..
- Pneumonia and influenza (P&I) Mortality Surveillance: The proportion of deaths attributed to P&I was below the epidemic threshold.
- Influenza-associated paediatric mortality: Two influenza-associated paediatric deaths were reported. These deaths occurred during the 2010–11 influenza season.
- Outpatient illness surveillance: The proportion of outpatient visits for flu-like illness (FLI) was 1.4%, which is below the national baseline of 2.4%. All 10 regions reported FLI below region-specific baseline levels. All 50 states and New York City experienced minimal FLI activity and the District of Columbia had insufficient data.
- Geographic spread of influenza: the geographic spread of influenza in one state was reported as local; the District of Columbia, Guam, and 29 states reported sporadic activity; the U.S. Virgin Islands and 21 states reported no influenza activity, and Puerto Rico did not report.

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

Canada

Influenza activity in Canada is starting to increase in some regions, but remains low overall. 14 regions (within British Columbia, Alberta, Ontario and Quebec) reported sporadic influenza activity. In week 47, 20 laboratory detections of influenza were reported (11 A/H3, one A/H1, five A untyped and three B). Two adult influenza hospitalisations were reported from Alberta and Ontario. The national FLI consultation rate remains low

www.phac-aspc.gc.ca/fluwatch/11-12/w45_11/index-eng.php

Worldwide (WHO)

Influenza activity in the temperate regions of the northern hemisphere remains at low levels, with sporadic influenza activity reported in Canada and some European countries.

Significant influenza activity was reported in only a few countries of the tropical zone including Nicaragua, Costa Rica, and Brazil in the Americas, Cameroon in central Africa, and Cambodia and Lao People's Democratic Republic in South East Asia.

Transmission in the temperate countries of the southern hemisphere has returned to inter seasonal levels, with some persistence of influenza A(H3N2) in Australia.

In the United States of America limited human-to-human transmission of a novel influenza A(H3N2) virus was detected with no further reported spread to date.

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

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:

www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/SeasonalInfluenza/EpidemiologicalData/

Republic of Ireland:

www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/Surveillance/InfluenzaSurveillanceReports/20112012Season/

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.