

Influenza Weekly Surveillance Bulletin

Northern Ireland, Weeks 51 and 52 (19 December 2011 – 1 January 2012)

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 increased slightly from 18.2 in week 50 to 20.8/100,000 population in week 52. Rates in weeks 51 and 52 are substantially 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 increased from 4.1 per 100,000 population in week 50 to 11.0 per 100,000 in week 52, reflecting the holiday period.
- There were no influenza detections in weeks 51 and 52, 2011.
- There were 35 RSV detections in weeks 51 and 52, 2011.
- There have been no reports of any patients admitted to critical care units with confirmed influenza for the 2011/2012 influenza season to date.
- There have been no reports of any influenza-associated deaths in those with confirmed influenza this season.

Note: Influenza consultation data will be affected by the holiday period when GP surgeries were closed.

Introduction

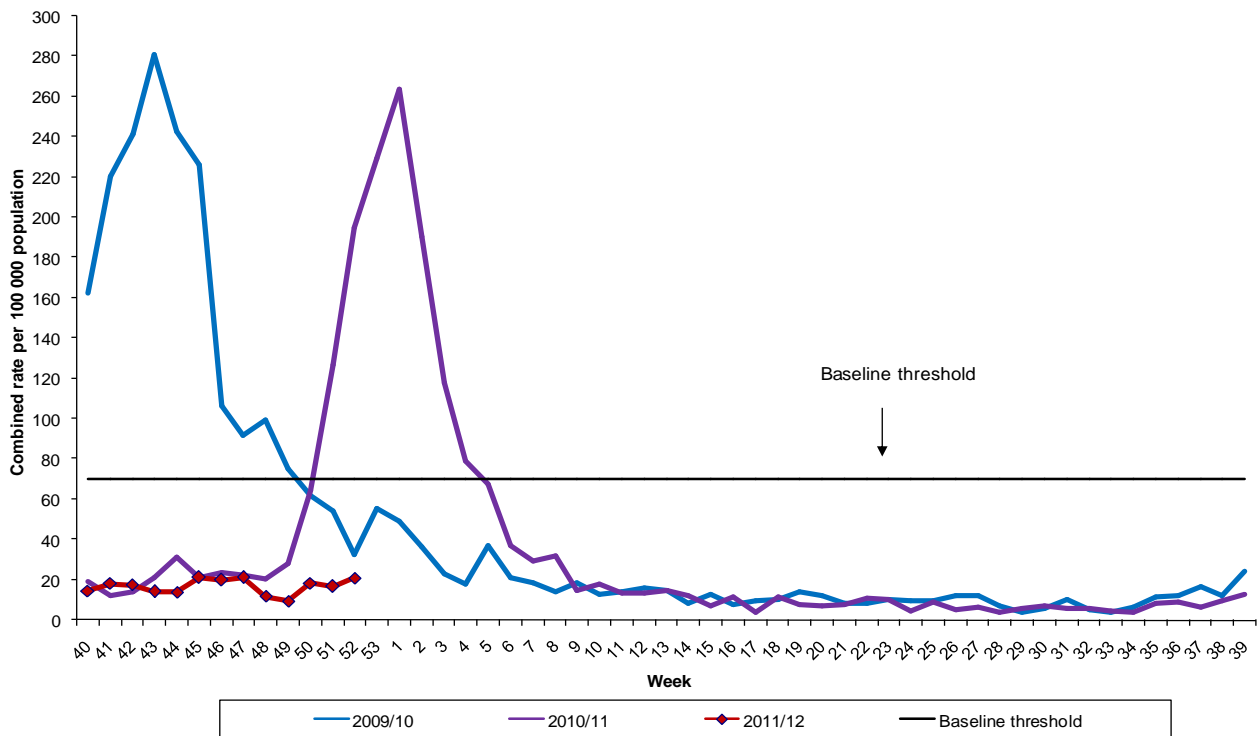
In order to monitor influenza activity in Northern Ireland a number of surveillance systems are in place. A new development for this winter will be surveillance of critical care patients in hospitals with confirmed influenza.

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.

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

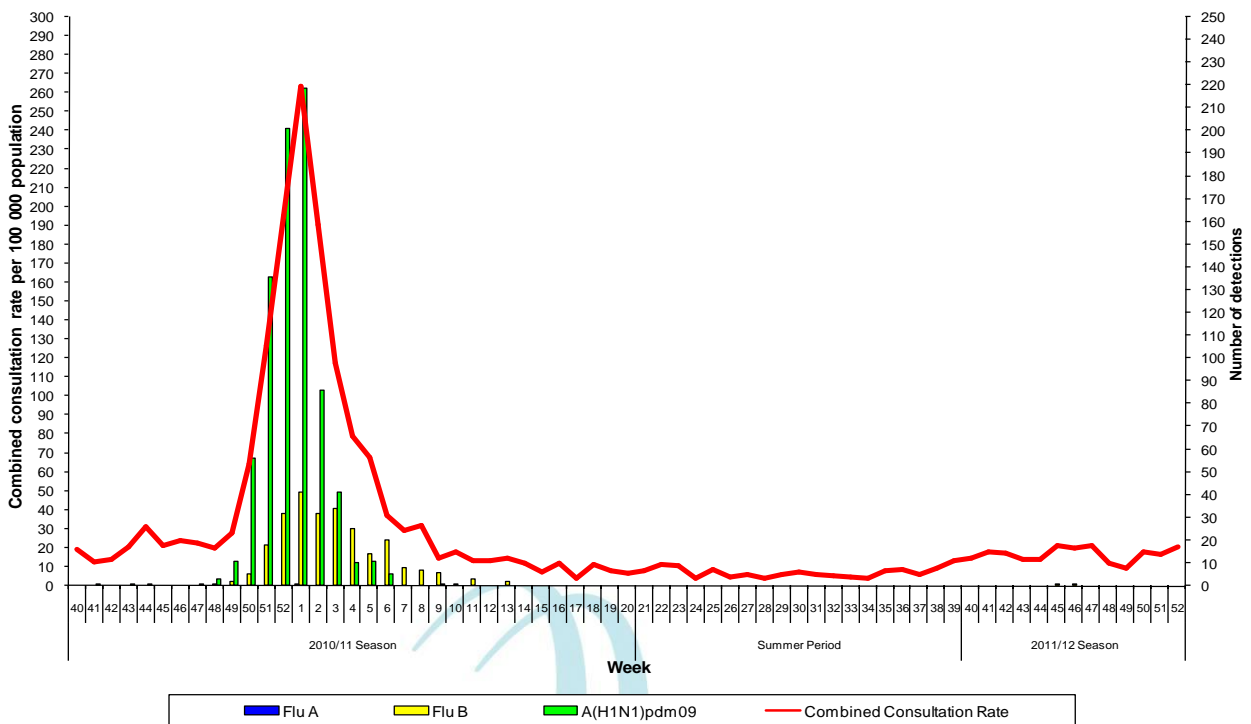


Figure 3. Sentinel GP age-specific consultation rates for combined flu and flu-like illness from week 40 2010

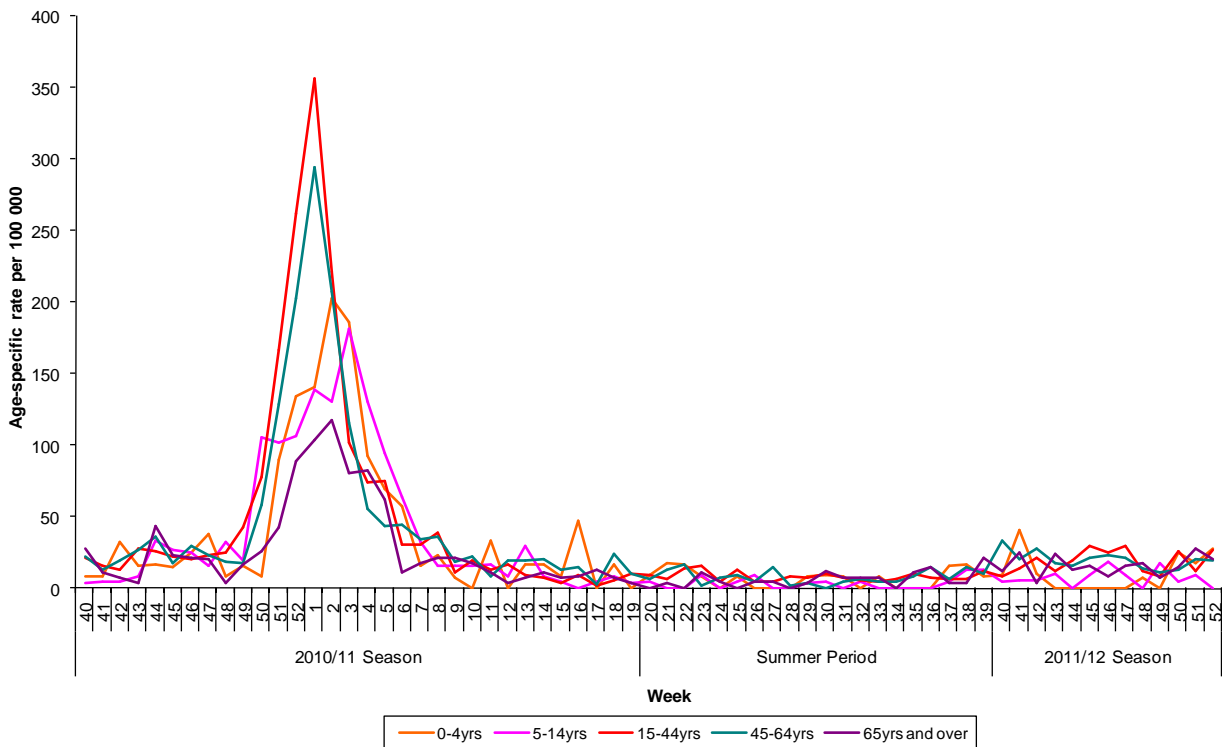
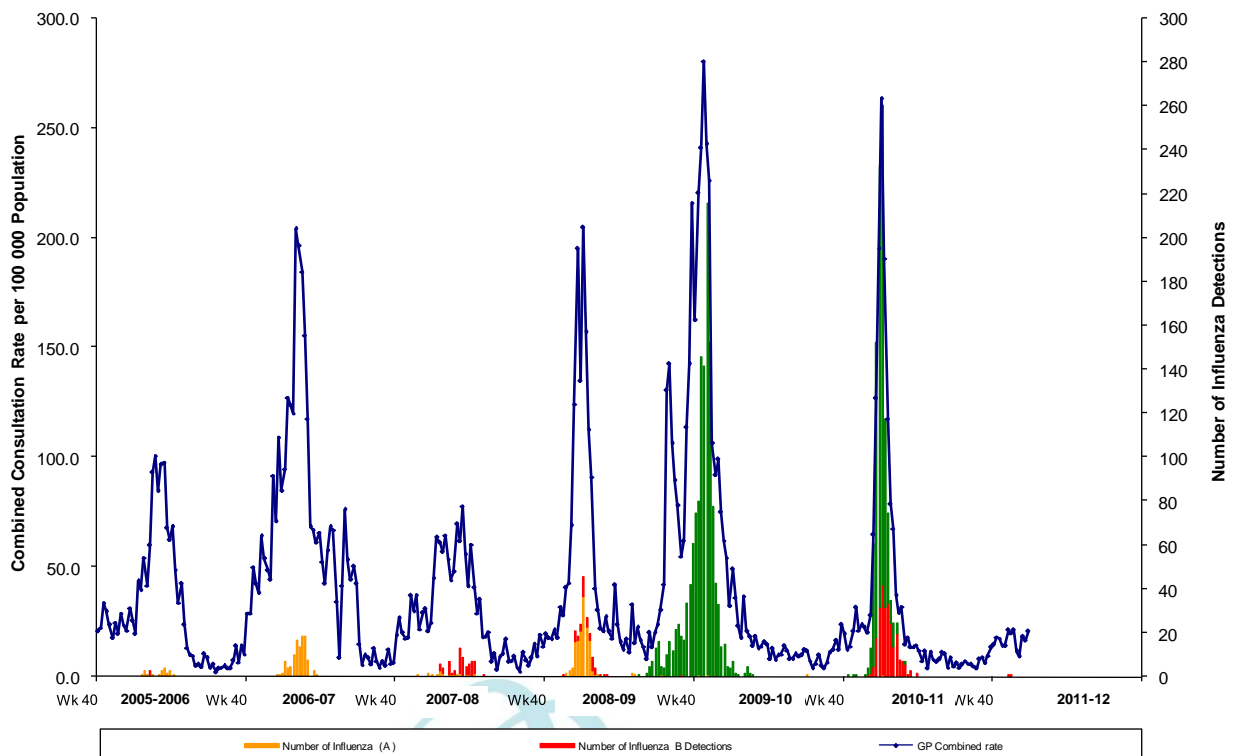


Figure 4. Sentinel GP combined consultation rate and number of influenza positive detections 2005–06 to present.



Comment

The GP combined consultation rate has increased from 18.2 per 100,000 population in week 50 to 20.8 per 100,000 population in week 52 (14% increase). Rates for week 51 and 52 are substantially lower than the same weeks last year (126.8 and 195.2 per 100,000 population, respectively) and remain below the Northern Ireland threshold of 70 per 100,000 population (Figure 1).

Age specific rates remain low with small increases in all age groups with the exception of the 5–14 year age group. Small numbers in some of the age groups will contribute to weekly fluctuation in rates (Figure 3).

There has been a delayed start to the circulation of influenza virus this winter. This is not entirely unusual, for example influenza activity peaked during the 2005/06 and 2006/07 winters in February (Figure 4).

Out-of-hours centres call data

Figure 5. Out-of-hours (OOH) total call rate (all diagnoses) and call rate for flu and flu-like illness from week 40 2010

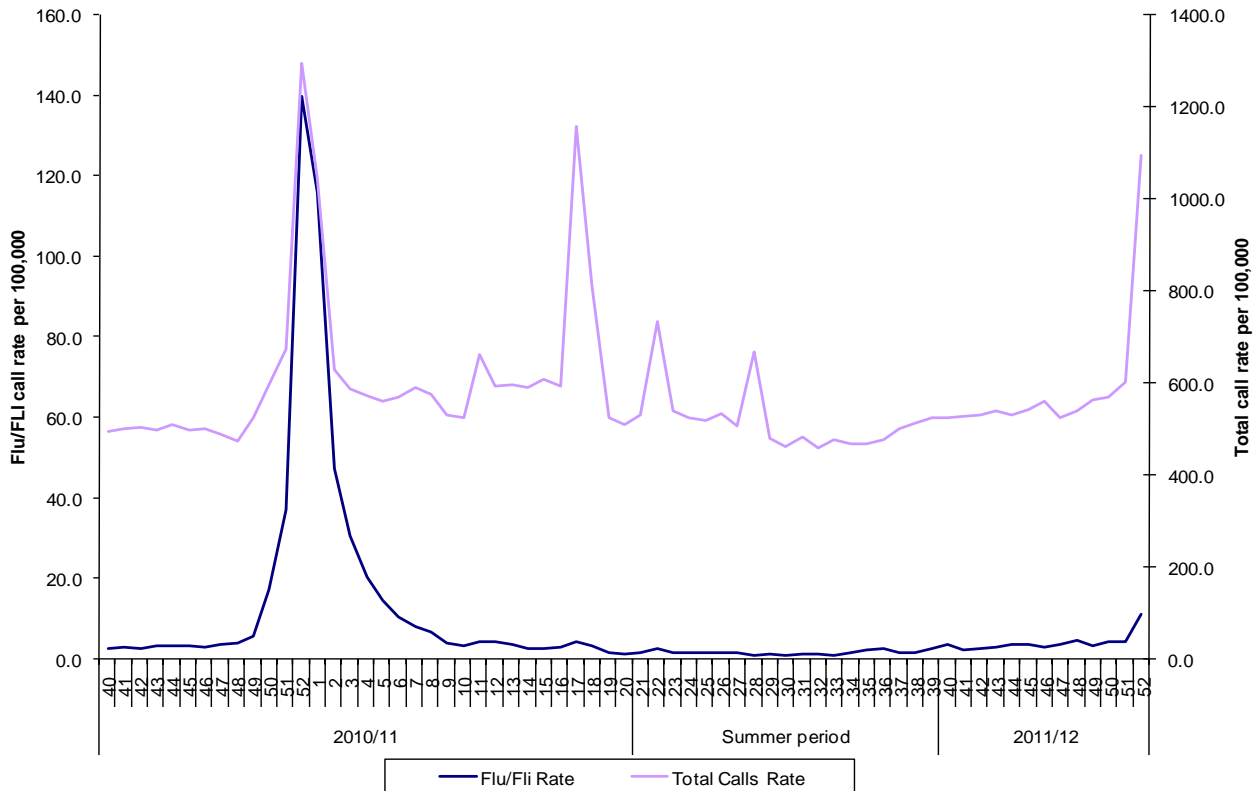
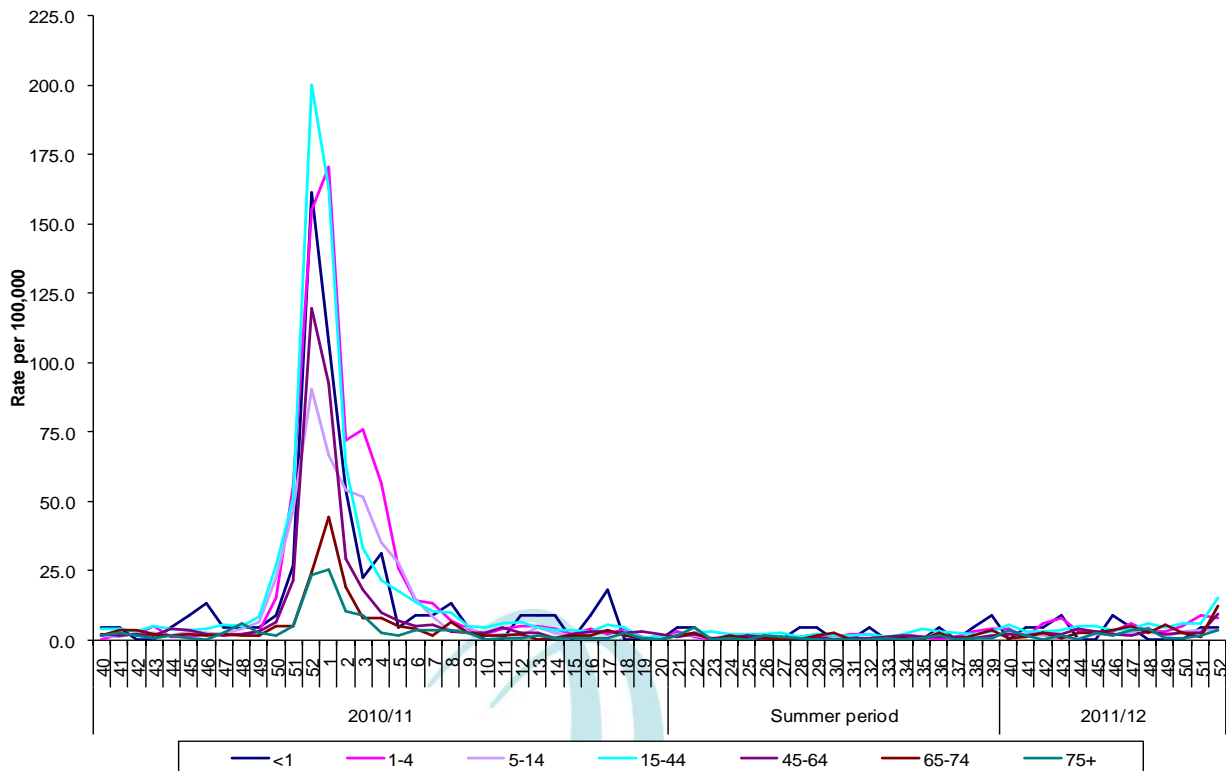


Figure 6. OOH call rates of flu and flu-like illness by age-group from week 40 2010



Comment

Out-of-hours call rates for flu/FLI increased from 4.1 per 100,000 population in week 50 to 11.0 per 100,000 population in week 52 (Figure 5). This increase is expected as it reflects a period when GP surgeries were closed. Rates are much lower than the same weeks last year at 37.0 and 139.7 per 100,000 population, respectively. Age specific flu/FLI rates in weeks 51 and 52 continue to remain low with slight increases in the 15–44 and 65–74 year age groups in week 52. Small numbers in some of the age groups will contribute to weekly fluctuation in rates (Figure 6).

Virology data

Table 1. Virus activity in Northern Ireland Weeks 51 and 52 2011						
Source	Specimens tested	A(H1N1) pdm09	Influenza B	RSV	Total influenza positive	% Influenza positive
Sentinel	8	0	0	0	0	0%
Non-sentinel	185	0	0	35	0	0%
Total	193	0	0	35	0	0%

Table 2. Cumulative total week 40 – week 52 2011					
	A(H1N1)pdm09	AH3	Flu B	Total influenza	RSV
0–4	0	0	1	1	60
5–14	0	0	0	0	2
15–64	0	0	1	1	4
65+	0	0	0	0	2
Unknown	0	0	0	0	0
All ages	0	0	2	2	68

Table 3. Cumulative total week 40 – Week 52 2011								
Age	Sentinel				Non-sentinel			
	A(H1N1)pdm09	Flu B	Total influenza	RSV	(H1N1) 2009	Flu B	Total influenza	RSV
0–4	0	0	0	0	0	1	1	60
5–14	0	0	0	0	0	0	0	1
15–64	0	1	1	1	0	0	0	4
65+	0	0	0	0	0	0	0	2
Unknown	0	0	0	0	0	0	0	0
All ages	0	1	1	1	0	1	1	67

Note

All virology data is provisional. The virology figures for previous weeks included in this bulletin 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.

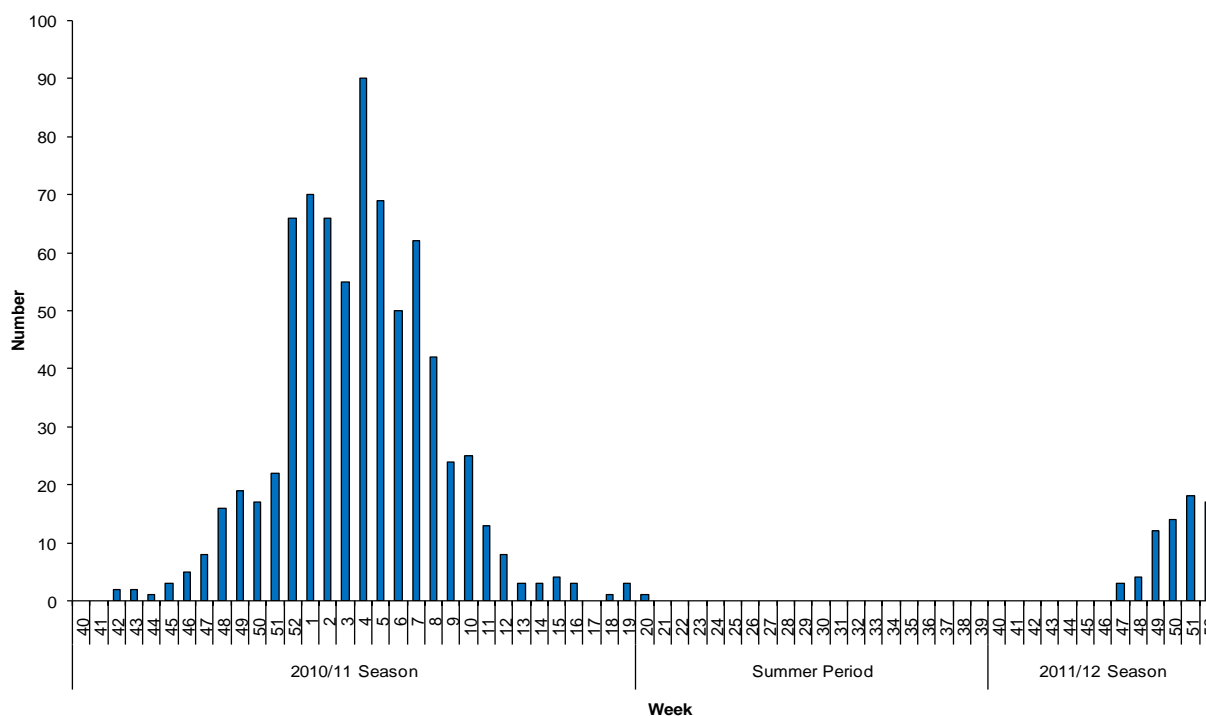
Sentinel and non-sentinel samples are tested for influenza and for RSV.

Comment

There were 193 specimens (eight sentinel and 185 non-sentinel) tested by the Regional Virus Laboratory during weeks 51 and 52, 2011. There were no influenza positive detections during this period (Tables 1 – 3).

Other respiratory viruses

Figure 7. Weekly cases of RSV viruses in Northern Ireland from week 40 2010



Comment

There was a slight increase in RSV detections, with 35 detections reported in weeks 51 and 52 compared with 26 (updated) in weeks 49 and 50 (Figure 7).

Other respiratory viruses are circulating at low levels.

Hospital surveillance

There were no confirmed influenza patients or confirmed deaths in those with laboratory confirmed influenza in critical care (level 2 and 3) in Northern Ireland in weeks 51 and 52.

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

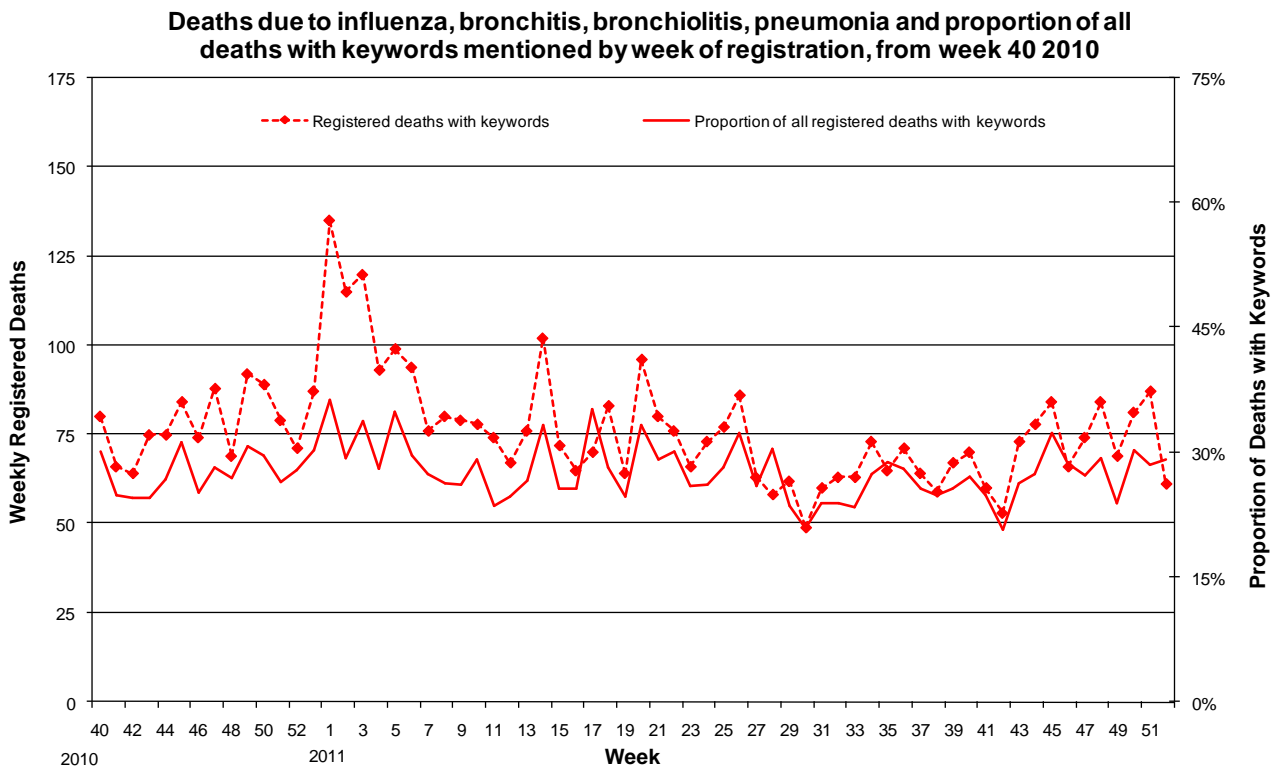
In the UK, since week 40 2011, there have been a total of 22 ICU influenza admissions across the UK Severe Influenza Surveillance System mandatory scheme with 12 (55%) resulting from influenza A(H1N1)pdm09, eight from influenza A unknown subtype and two (9%) from influenza B.

Mortality data

Weekly mortality data is provided from the 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.

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

Figure 8. Weekly registered deaths



Comments

The proportion of deaths related to respiratory keywords over this period decreased slightly from 30% in week 50 to 29% in week 52 and similar to that for the same period last year. In weeks 51 and 52 there were 515 registered deaths of which 148 related to these specific respiratory infections.

Vaccine uptake

As at the end of November 2011, the proportion of people in Northern Ireland aged 65 years and over who had received the seasonal influenza vaccine was 72.6%, while the uptake in those aged under 65 in an at-risk group was 74.6% (provisional data). This compares with 66.5% uptake in the over 65 years, and 56.4% in the under 65 at-risk group for the same period last year.

International Summary

Europe

During week 51/2011, low influenza activity was notified by all 21 countries reporting.

Of 539 sentinel specimens tested during week 51/2011, 35 (6.5%) were positive for influenza viruses. Although this is still a low percentage, it has increased over the last four weeks. Of 271 influenza A viruses from sentinel and non-sentinel sources sub-typed since week 40/2011, 248 (91.5%) were of the H3 subtype. Since week 40/2011, 105 severe acute respiratory infection (SARI) cases have been reported by five countries. Twenty-three of them were confirmed influenza cases and of those typed or subtyped nine were due to A(H1N1)pdm09, three were A(H3) and two were influenza B viruses.

With little evidence of sustained transmission in EU/EEA countries at week 51, the annual influenza seasonal epidemic in Europe is yet to start.

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

USA

During week 51 (December 18-24, 2011), influenza activity remained low in the United States.

- U.S. Virological Surveillance: Of the 2,652 specimens tested by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories and reported to CDC/Influenza Division, 97 (3.7%) 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: No influenza-associated paediatric deaths were reported.
- Outpatient illness surveillance: The proportion of outpatient visits for flu-like illness was 1.5%, which is below the national baseline of 2.4%. All 10 regions reported FLI below region-specific baseline levels. One state experienced moderate FLI activity, New York City and one state experienced low FLI activity, 47 states experienced minimal FLI activity, and the District of Columbia and one state had insufficient data.
- Geographic spread of influenza: The geographic spread of influenza in one state was reported as regional; two states reported local activity; Guam and 37 states reported

sporadic activity; the District of Columbia, the U.S. Virgin Islands and 10 states reported no influenza activity, and Puerto Rico did not report.

An overview of US influenza activity can be viewed on www.cdc.gov/flu/weekly/

Canada

Influenza activity in Canada has remained similar to previous weeks. One region reported localised influenza activity and nine regions reported sporadic influenza activity. One outbreak of influenza in long-term care facility was reported this week. In week 50, 63 laboratory detections of influenza were reported (51 A/H3, three A/H1, seven A unsubtype and two B). Two influenza hospitalisations were reported this week (one paediatric and one adult). The national FLI consultation rate increased compared to the previous week but remains within expected levels for this time of year.

www.phac-aspc.gc.ca/fluwatch/11-12/w50_11/index-eng.php

Worldwide (WHO)

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

Countries in the tropical zone mostly reported low influenza activity except Costa Rica, which was primarily reporting influenza A(H3N2), and Cameroon, which is experiencing transmission of A(H3N2) following on recent peaks of A(H1N2)pdm09 and type B.

Influenza activity in the temperate countries of the southern hemisphere is at inter-seasonal levels.

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:

www.fluawareni.info Now on Facebook (Flu Aware NI)

www.hpa.org.uk

www.publichealth.hscni.net

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.