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# Influenza Weekly Surveillance Bulletin

Northern Ireland, Weeks 45 and 46 (7 – 20 November 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 influenza/FLI increased from 14.0 in week 44 to 19.9/100,000 population in week 46. Rates in weeks 45 and 46 are similar to the same weeks last year and remain well below the Northern Ireland threshold (70/100,000 population).
- Out of hours influenza/FLI call rates remain stable and low.
- There were two influenza B detections in weeks 45 and 46.
- There were no RSV detections in weeks 45 and 46.

### 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.

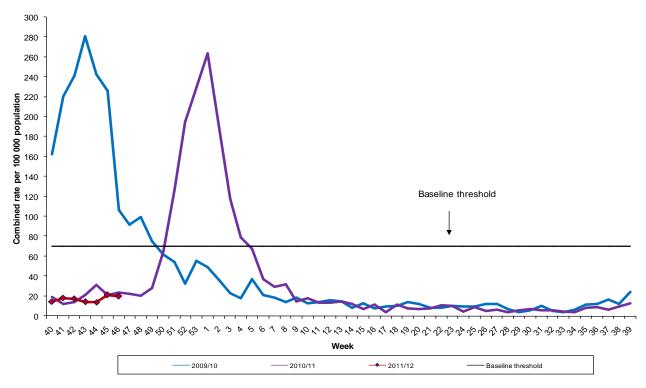
Additional surveillance systems are:

- 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 influenza 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 influenza and flu-like illness and number of virology influenza detections from week 40 2010

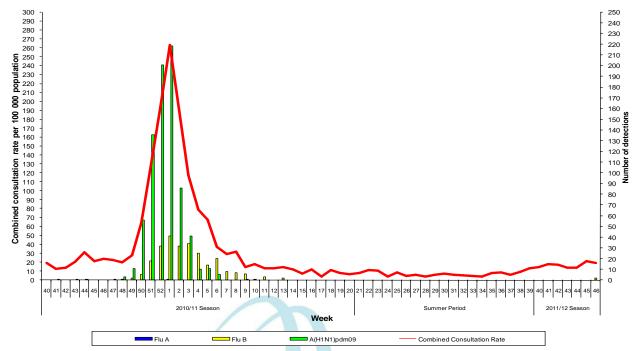
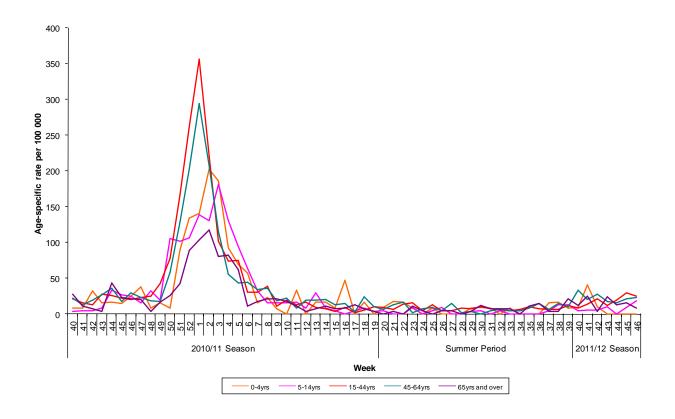




Figure 3. Sentinel GP age-specific consultation rates for combined influenza and flu-like illness from week 40 2010



### **Comment**

The GP combined consultation rate has increased from 14.0 per 100,000 population in week 44 to 19.9 per 100,000 population in week 46. Rates for week 45 and 46 are similar to the same weeks last year (21.1 and 23.8 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 weeks 45 and 46 in the 15–44 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 influenza and flu-like illness from week 40 2010

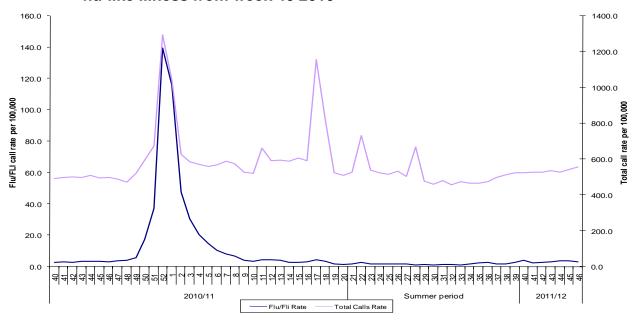
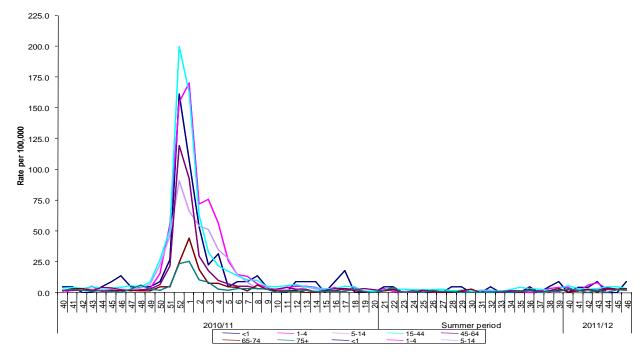


Figure 5. Out of hours call rates of influenza and flu-like illness by age-group from week 40 2010



### Comment

Out of hours call rates for influenza/FLI in weeks 45 and 46 remain low (3.6 and 2.9 per 100,000 population, respectively) and stable. In week 45 the highest influenza/FLI consultation rate was in the 15–44 year age group and in week 46 in the under one year age group (4.9 and 8.9 per 100,000 population, respectively). 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 45 and 46 2011								
Source	Specimens tested	(H1N1) 2009	Influenza B	RSV	Total influenza positive	% Influenza positive		
Sentinel	14	0	1	0	1	7%		
Non-sentinel	145	0	1	0	1	1%		
Total	159	0	2	0	2	1%		

Table 2. Cumulative Total Week 40 - Week 46 2011							
	(H1N1) 2009	AH3	Flu B	Total Influenza	RSV		
0-4	0	0	1	1	0		
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	0		

Table 3. Cumulative Total Week 40 – Week 46 2011								
AGE	Sentinel				Non-sentinel			
	(H1N1) 2009	Flu B	Total influenza	RSV	(H1N1) 2009	Flu B	Total influenza	RSV
0-4	0	0	0	0	0	1	1	0
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	0

### **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. There were two samples that tested positive for influenza B in weeks 45 and 46 (one from a sentinel GP practice).

During weeks 45 and 46 a total of 159 specimens (14 sentinel) were tested by the Regional Virus Laboratory.



# Other respiratory viruses

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

### Comment

There were no RSV detections in weeks 45 and 46, with the last RSV detection being in week 20 (week commencing 14 May 2011).

# **Hospital surveillance**

There were no confirmed influenza patients or confirmed influenza deaths in critical care (level 2 and 3) in Northern Ireland in weeks 45 and 46.

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

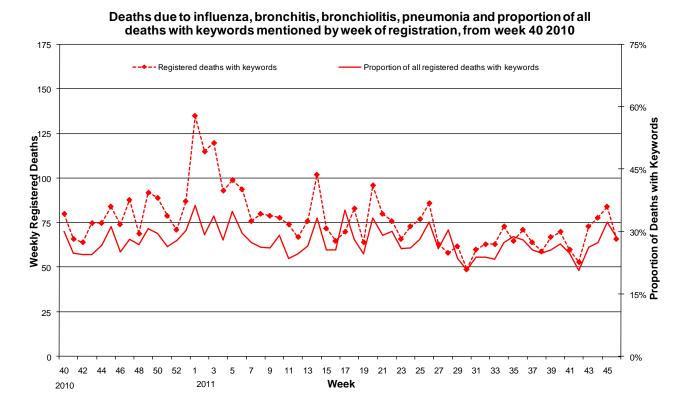


# **Mortality data**

Weekly mortality data is provided from 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 7. Weekly registered deaths



#### **Comments**

The proportion of deaths related to respiratory keywords over this period increased from 27% in week 44 to 29% in week 46. In weeks 45 and 46 there were 490 registered deaths of which 150 related to these specific respiratory infections.



## **International summary**

### **Europe**

During week 45/2011, low influenza activity was notified by all 28 reporting countries. Of 390 sentinel specimens tested, six were positive for influenza virus (1.5%).

Since week 40/2011, five SARI cases have been reported, one of which was a confirmed influenza case.

Six 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. As of week 45, the winter epidemics of influenza have not yet started in Europe.

http://ecdc.europa.eu/EN/HEALTHTOPICS/SEASONAL\_INFLUENZA/EPIDEMIOLOGICAL\_DATA/Pages/Weekly\_Influenza\_Surveillance\_Overview.aspx

### **USA**

During week 45 (November 6-12, 2011), influenza activity remained low in the United States. An overview of the US influenza can be viewed on http://www.cdc.gov/flu/weekly/

#### Canada

Influenza activity continues to increase in some regions (Alberta, British Columbia, Ontario and Quebec) but remains low in the rest of the country. One region (in the north region of Alberta) reported localised influenza activity; six regions reported sporadic influenza activity (within British Columbia, Alberta, Ontario and Quebec). In week 45, 11 laboratory detections of influenza were reported (seven A/H3, two A unsubtyped and two B). Two influenza-associated paediatric hospitalisations were reported from British Columbia and Alberta. The national FLI consultation rate remains low.

http://www.phac-aspc.gc.ca/fluwatch/11-12/w45 11/index-eng.php

### Worldwide

Influenza activity in the temperate regions of the northern hemisphere remains low or undetectable, though a recent outbreak of influenza A (H3N2) in a seniors' lodge has been reported in Alberta, Canada.

Significant influenza activity was reported in only a few countries of the tropical zone including Nicaragua in the Americas, Cameroon in central Africa, and Cambodia in South East Asia.

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

http://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.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/201 12012Season/

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.

