

## WEEKLY NEW BRUNSWICK INFLUENZA REPORT

#### Reporting period: March 25, 2012 – March 31, 2012 (week 13)

## Summary

### In New Brunswick, continued increase in percent positive lab results

#### New Brunswick:

- There have been 46 positive influenza detections during week 13, 3 influenza A (H3), 2 influenza A (H1N1) pdm09 and 41 influenza B.
- The ILI consultation rate was low and is within the expected range for this time of year.
- 5 new ILI school outbreaks were reported.

#### Canada:

- Overall Influenza activity has started to decline; however activity remains elevated in some regions of the country (i.e. Atlantic Region, Ontario & Alberta).
- 998 laboratory detections of influenza were reported, proportion of positive tests was 20.4%. The proportion of positive detections for both influenza A & B viruses declined compared to the previous week.
- The ILI consultation rate was within the expected levels for this time of year. 57 influenza or ILI outbreaks were reported: 30 in long-term care facilities, 12 in schools, 7 in hospitals and 8 in other settings.

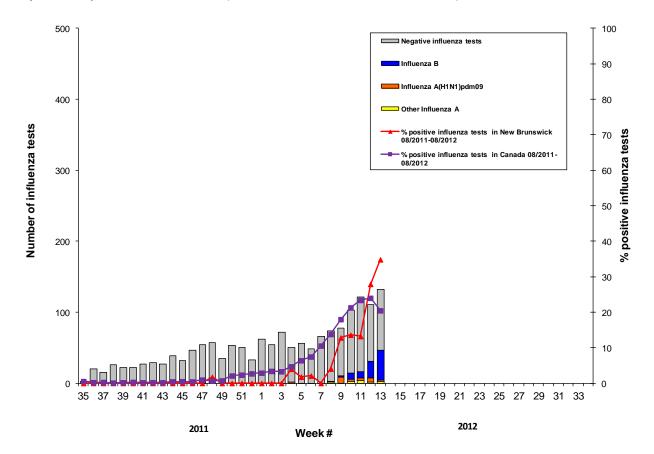
#### International:

• WHO: As of March 30, The most commonly detected virus type or subtype in the northern hemisphere has been influenza A(H3N2), although the proportion of influenza B detections is increasing. In Mexico, influenza A(H1N1) pdm09 is the predominant subtype circulating; China and the surrounding countries which are still reporting a predominance of influenza type B.

## 1) Influenza Laboratory Data<sup>1</sup>

- Slight increase in percent positive lab results in week 13.
- 46 influenza detections were reported during that period.
- Since the beginning of the season, 125 positive influenza detections have been reported; 23 were influenza A (H1N1)pdm09 (18%), 15 were influenza A (H3)(12%) and 87 were influenza B viruses(70%).

<sup>1</sup> Surveillance specimens are submitted by recruited New Brunswick Sentinel Practitioner Influenza Network (NB SPIN) practitioners, which are comprised of 7 sites in Emergency Rooms, 5 sites in Family Practice, 3 sites in First Nations communities, 1 site in a Nursing Home, 3 sites in Universities and 8 sites in Community Health Centers. Diagnostic specimens are submitted by physicians in the community/hospital setting. Influenza laboratory data is comprised of results from surveillance and diagnostic specimens. All laboratory specimens are tested using a real-time PCR assay, which is a rapid detection method designed for detection of all known variants of influenza A and B. All laboratory-confirmed cases are reported for the week when laboratory confirmation was received.



<u>Graph 1</u>: Number and percent of positive influenza specimens in New Brunswick, by week, up to March 31, 2012 (data source: G. Dumont lab results)

Table 1: Positive influenza test results by Health Region in New Brunswick up to March 31, 2012 (data source: G. Dumont lab results)

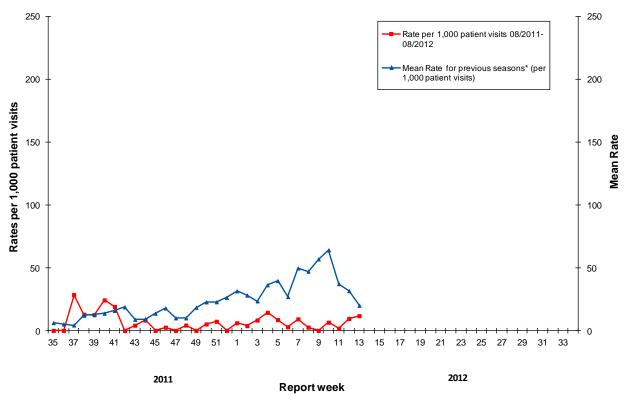
| Region   | Reporting period:<br>March/25/2012–March /31/2012 |       |       |                 |                |    | Cumulative: (2011/2012 season)<br>Aug./28/2011 –Mar./31/2012 |       |                 |                | Cumulative:<br>(2010/2011 season)<br>Aug./29/2010 –<br>Aug./27/2011 |               |       |     |
|----------|---|-------|-------|-----------------|----------------|----|--|-------|-----------------|----------------|---|---------------|-------|-----|
|          | Activity<br>level <sup>2</sup>                    | А     |       |                 |                | В  | А  |       |                 | В              | A <sup>B</sup>  |               | В     |     |
|          |   | A(H1) | A(H3) | (H1N1)<br>pdm09 | unsubt<br>yped |    | A(H1)  | A(H3) | (H1N1)<br>pdm09 | unsubt<br>yped |   | Non-<br>pH1N1 | pH1N1 |     |
| Region 1 | Localized   | 0     | 3     | 0               | 0              | 38 | 0  | 12    | 13              | 0              | 82  | 433           | 56    | 29  |
| Region 2 | No activity                                       | 0     | 0     | 0               | 0              | 0  | 0  | 1     | 2               | 0              | 0   | 57            | 2     | 13  |
| Region 3 | No activity                                       | 0     | 0     | 0               | 0              | 0  | 0  | 1     | 0               | 0              | 0   | 112           | 16    | 19  |
| Region 4 | Localized   | 0     | 0     | 0               | 0              | 1  | 0  | 1     | 3               | 0              | 1   | 79            | 58    | 56  |
| Region 5 | No activity                                       | 0     | 0     | 0               | 0              | 0  | 0  | 0     | 1               | 0              | 1   | 26            | 3     | 1   |
| Region 6 | Localized   | 0     | 0     | 2               | 0              | 1  | 0  | 0     | 3               | 0              | 2   | 46            | 27    | 5   |
| Region 7 | Sporadic  | 0     | 0     | 0               | 0              | 1  | 0  | 0     | 1               | 0              | 1   | 32            | 3     | 3   |
| Total NB |   | 0     | 3     | 2               | 0              | 41 | 0  | 15    | 23              | 0              | 87  | 785           | 165   | 126 |

<sup>&</sup>lt;sup>2</sup> Influenza activity level definition is available on the PHAC FluWatch website: <u>http://www.phac-aspc.gc.ca/fluwatch/11-12/def11-12-eng.php</u>

# 2) ILI Consultation Rates<sup>3</sup>

- During week 13, the ILI consultation rate was 11.7 consultations per 1,000 patient visits, and is within the expected levels for this time of year.
- During week 13, the sentinel response rate was 43% for the FluWatch sentinel physicians and 33% for the NB SPIN practitioners. (6 FluWatch and 6 NB SPIN)

<u>Graph 2</u>: ILI Consultation Rates in New Brunswick, by report week, season 2011/12 compared to previous seasons\*



\* The mean rate was based on data from the 1996/97 to 2010/2011 seasons and excludes the Pandemic season (2009-2010).

<sup>&</sup>lt;sup>3</sup> A total of 32 practitioner sites (14 FluWatch sentinel physicians and 18 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

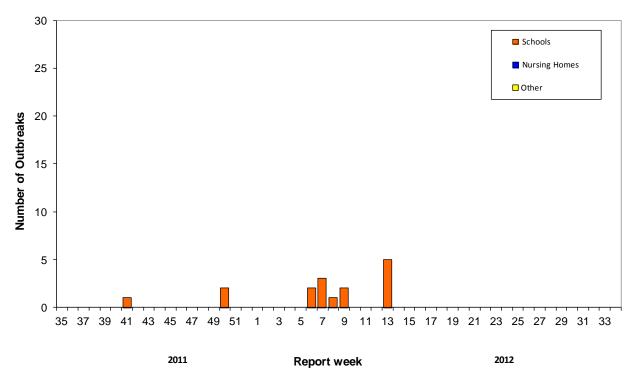
## 3)ILI and Laboratory-Confirmed Outbreak Data

|          | March/25  | Reporting period:<br>5/2012 –March/31/20 | Cumulative # of                                  | Cumulative # of<br>outbreaks  |                     |  |
|----------|---|--|--|-------------------------------|---------------------|--|
|          | Lab-confirmed<br>outbreaks in<br>Nursing Homes* | Schools reporting<br>ILI outbreaks**     | Lab-confirmed<br>outbreaks in<br>Other Settings* | outbreaks season<br>2011-2012 | season<br>2010-2011 |  |
| Region 1 | 0 out of 13                                     | 1 out of 74                              | 0  | 1                             | 17                  |  |
| Region 2 | 0 out of 15                                     | 0 out of 81                              | 0  | 1                             | 21                  |  |
| Region 3 | 0 out of 14                                     | 1 out of 95                              | 0  | 8                             | 12                  |  |
| Region 4 | 0 out of 6                                      | 1 out of 22                              | 0  | 1                             | 12                  |  |
| Region 5 | 0 out of 2                                      | 1 out of 18                              | 0  | 3                             | 17                  |  |
| Region 6 | 0 out of 9                                      | 1 out of 35                              | 0  | 1                             | 10                  |  |
| Region 7 | 0 out of 4                                      | 0 out of 27                              | 0  | 1                             | 22                  |  |
| Total NB | 0 out of 63                                     | 5 out of 352                             | 0  | 16                            | 111                 |  |

<u>Table 2:</u> ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, current and previous seasons.

\*Two or more ILI cases within a seven day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

\*\*Schools reporting greater than 10% absenteeism (or absenteeism that is higher (e.g. >5-10%) than expected level as determined by school or Public Health Authority) which is likely due to ILI.



<u>Graph 3</u>: Number of Influenza Outbreaks in Nursing Homes<sup>1</sup> and ILI Outbreaks in Schools<sup>2</sup> reported to Public Health in New Brunswick, by report week, season 2011/12.

<sup>1</sup> The National FluWatch definition of an outbreak in a nursing home is stated as two or more cases of ILI within a seven-day period, including at least one laboratory confirmed case.

<sup>2</sup> The National FluWatch definition of an ILI outbreak in a school is stated as absenteeism greater than 10% (or absenteeism that is higher (e.g.>5-10%) than expected level as determined by school or Public Health Authority) which is likely due to ILI.

# <u>National Flu Watch Program</u> - Additional information on influenza activity in Canada and around the world is available on the Public Health Agency of Canada's website at: www.phac-aspc.gc.ca/fluwatch/index.html

Other Links:

World-

<u>http://www.who.int/influenza/surveillance\_monitoring/updates/latest\_update\_GIP\_surveillance/en/index.html</u> Europe: <u>http://www.euroflu.org/cgi-files/bulletin\_v2.cgi</u> and

http://www.ecdc.europa.eu/en/healthtopics/seasonal\_influenza/epidemiological\_data/Pages/Weekly\_Influenza\_ Surveillance\_Overview.aspx

PAHO:<u>http://new.paho.org/hq/index.php?option=com\_content&task=blogcategory&id=805&Itemid=569</u>] Australia: <u>http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm</u>] New Zealand: [http://www.surv.esr.cri.nz/virology/influenza\_weekly\_update.php

Argentina:<u>http://www.msal.gov.ar/archivos/INFORME%20INFLUENZA%20PANDÉMICA%20\_H1N1\_%2005-08-2009.pdf</u>

South Africa: <u>http://www.nicd.ac.za/</u>

US: www.cdc.gov/flu/weekly/

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