

## **WEEKLY NEW BRUNSWICK INFLUENZA REPORT**

**Reporting period: March 27, 2011 – April 2, 2011 (week 13)**

### **Summary**

#### **In New Brunswick, slight decreases in percent positive lab results (since week 11) have been observed**

In New Brunswick, the ILI consultation rate in week 13 was 13.3, a lower rate than the previous week and was within the expected range for this time of year. There have been 30 positive influenza detections during week 13, two pandemic influenza A (H1N1), twenty-two influenza A (H3), one unsubtype influenza A and five influenza B. Two ILI/influenza outbreaks were reported in week 13, one in a long-term care facility in region 1 and one in a school in region 5.

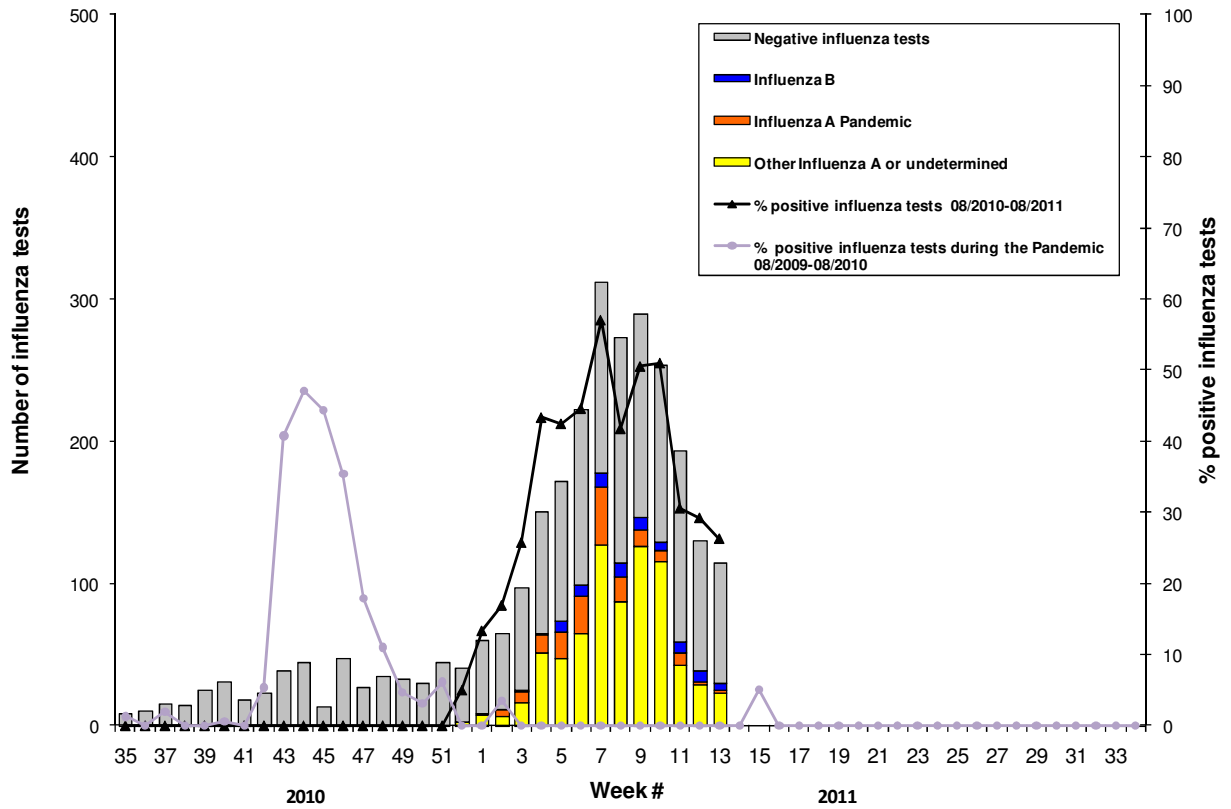
However, in Canada, the ILI consultation rate in week 13 was 24.1 consultations per 1,000 patients visits, which has been similar to the past 3 weeks and within the expected levels for this time of year. The proportion of positive influenza tests overall was similar to that of week 12, although influenza B continues to increase steadily in most regions of the country except the Atlantic provinces and now accounts for almost half of the positive tests for influenza. The proportion of positive tests peaked in week 52. Of the 481 positive specimens reported during week 13, 255 were influenza A and 226 were influenza B. Among influenza A detections in week 13, 78 specimens were reported as influenza A/H3N2 (all provinces except MB, QC & NL), 160 as unsubtype influenza A (all provinces except MB & PE), 17 as pandemic H1N1 2009 (BC, AB, NS & NL). Since the beginning of the season, 84.8% of the subtyped positive influenza A specimens were for influenza A/H3N2. Detections of influenza B have been increasing steadily since week 3 where it accounted for 3.4% of all positive influenza specimens to 47.0% in week 13. During week 13, the proportion of positive tests for respiratory syncytial virus (RSV) decreased from 17.1% to 12.8% of specimens tested and appears to have peaked at week 7. During week 13, 12 new ILI/influenza outbreaks were reported: 4 in long-term care facilities (LTCF); 3 outbreaks of influenza in hospitals; 3 ILI school outbreaks; 2 ILI outbreaks in other facilities.

Worldwide, influenza activity is generally low. Influenza activity in the northern hemisphere temperate regions is continuing to decline or back to baseline levels indicating the season is ending. In countries in the tropical zone, influenza activity is low in most areas. In southern hemisphere countries influenza activity has not yet started. Viruses which have been characterized antigenically continue to be largely related to the lineages found in the current trivalent seasonal vaccine, except for a small number of influenza B viruses of the Yamagata lineage.

#### **1) Influenza Laboratory Data**

Surveillance specimens are submitted by recruited New Brunswick Sentinel Practitioner Influenza Network (NB SPIN) practitioners, which are comprised of 1 site in Urgent Care, 8 sites in Emergency Rooms, 6 sites in Family Practice, 3 sites in First Nations communities, 1 site in a Nursing Home, 4 sites in Universities and 9 sites in Community Health Centres. 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.

**Graph 1: Number and percent of positive influenza specimens in New Brunswick, by week, up to April 2, 2011 (data source: G. Dumont lab results)**



**Table 1: Positive influenza test results by Health Region in New Brunswick up to April 2, 2011 (data source: G. Dumont lab results)**

|                 | Activity level <sup>1</sup> | Reporting period:<br>27/03/11 –02/04/11 |       |       |             |             | Cumulative: (2010/2011 season)<br>29/08/10 –02/04/11 |       |       |             |             | Cumulative: (2009/2010 season)<br>30/08/09 –28/08/10 |       |             |
|-----------------|-----------------------------|---|-------|-------|-------------|-------------|--|-------|-------|-------------|-------------|--|-------|-------------|
|                 |                             | Influenza A                             |       |       |             | Influenza B | Influenza A  |       |       |             | Influenza B | Influenza A  |       | Influenza B |
|                 |                             | A(H1)                                   | A(H3) | pH1N1 | Unsub typed |             | A(H1)  | A(H3) | pH1N1 | Unsub typed |             | Non-pH1N1 or undeterm                                | pH1N1 |             |
| <b>Region 1</b> | Localized                   | 0                                       | 17    | 2     | 0           | 1           | 0  | 372   | 56    | 49          | 11          | 2  | 793   | 0           |
| <b>Region 2</b> | Sporadic                    | 0                                       | 2     | 0     | 0           | 0           | 0  | 26    | 2     | 7           | 0           | 0  | 292   | 1           |
| <b>Region 3</b> | Sporadic                    | 0                                       | 1     | 0     | 0           | 1           | 0  | 86    | 16    | 25          | 7           | 1  | 221   | 0           |
| <b>Region 4</b> | Sporadic                    | 0                                       | 1     | 0     | 0           | 3           | 0  | 68    | 58    | 11          | 50          | 0  | 290   | 0           |
| <b>Region 5</b> | No activity                 | 0                                       | 0     | 0     | 0           | 0           | 0  | 21    | 3     | 4           | 1           | 0  | 96    | 0           |
| <b>Region 6</b> | Sporadic                    | 0                                       | 1     | 0     | 1           | 0           | 0  | 38    | 27    | 6           | 0           | 0  | 114   | 0           |
| <b>Region 7</b> | No activity                 | 0                                       | 0     | 0     | 0           | 0           | 0  | 28    | 3     | 2           | 1           | 0  | 68    | 0           |
| <b>Total NB</b> |                             | 0                                       | 22    | 2     | 1           | 5           | 0  | 639   | 165   | 104         | 70          | 3  | 1874  | 1           |

<sup>1</sup> Influenza activity level definition is available on the PHAC FluWatch website: <http://www.phac-aspc.gc.ca/fluwatch/08-09/def08-09-eng.php>

## 2) ILI Consultation Rates

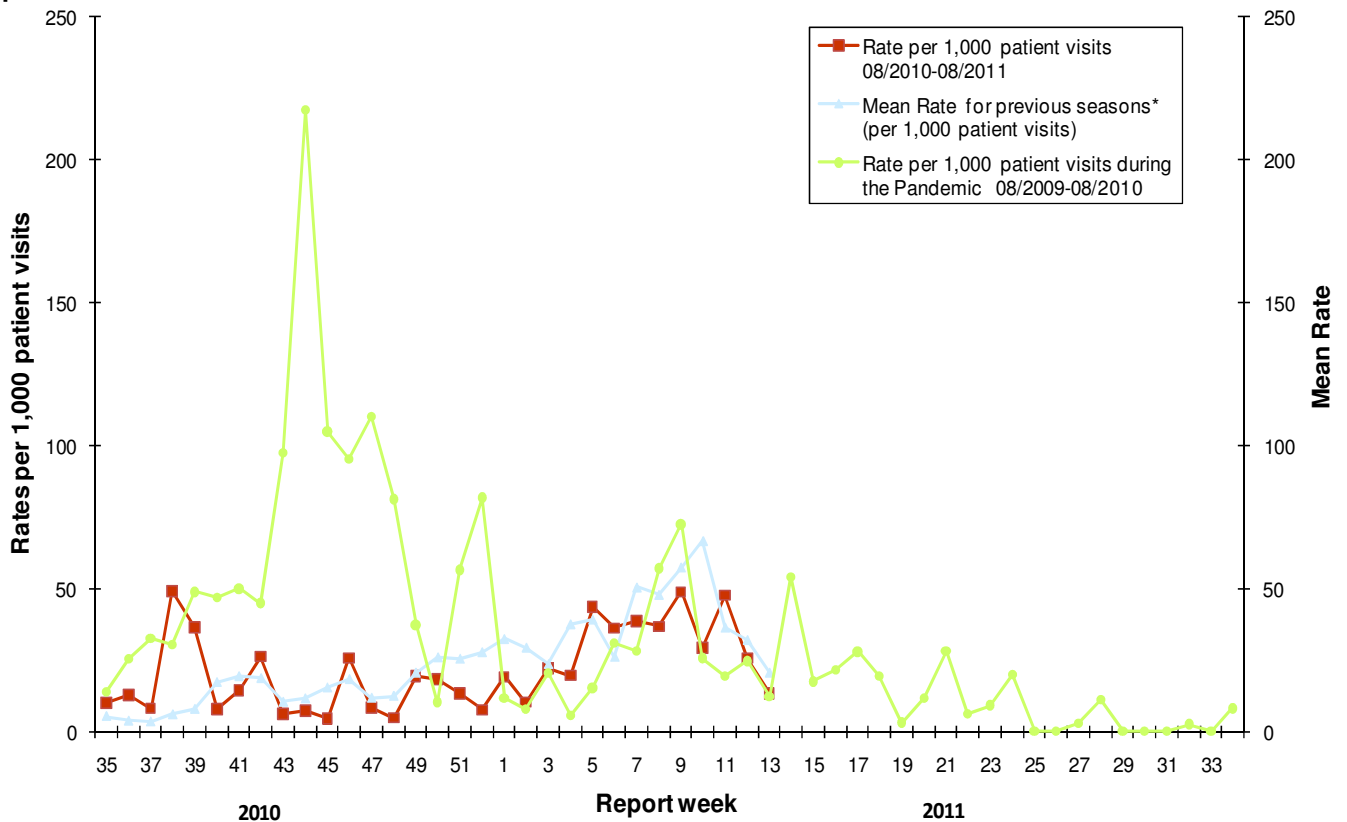
A total of 39 practitioner sites (15 FluWatch sentinel physicians and 24 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

### During week 13:

**22 practitioner sites (10 FluWatch and 12 NB SPIN) reported a total of 9 cases of ILI of the 677 patients seen for any reason during this reporting period.**

For week 13, the ILI consultation rate was 13.3 consultations per 1,000 patient visits which is a lower rate than the week before and was within the expected levels for this time of year. The sentinel response rate was 67% for the FluWatch sentinel physicians and 50% for the NB SPIN practitioners.

**Graph 2: ILI Consultation Rates in New Brunswick, by report week, season 2010/11 compared to previous seasons\***



\* The mean rate was based on data from the 1996/97 to 2008/2009 seasons and excludes the Pandemic.

### 3) ILI and Laboratory-Confirmed Outbreak Data

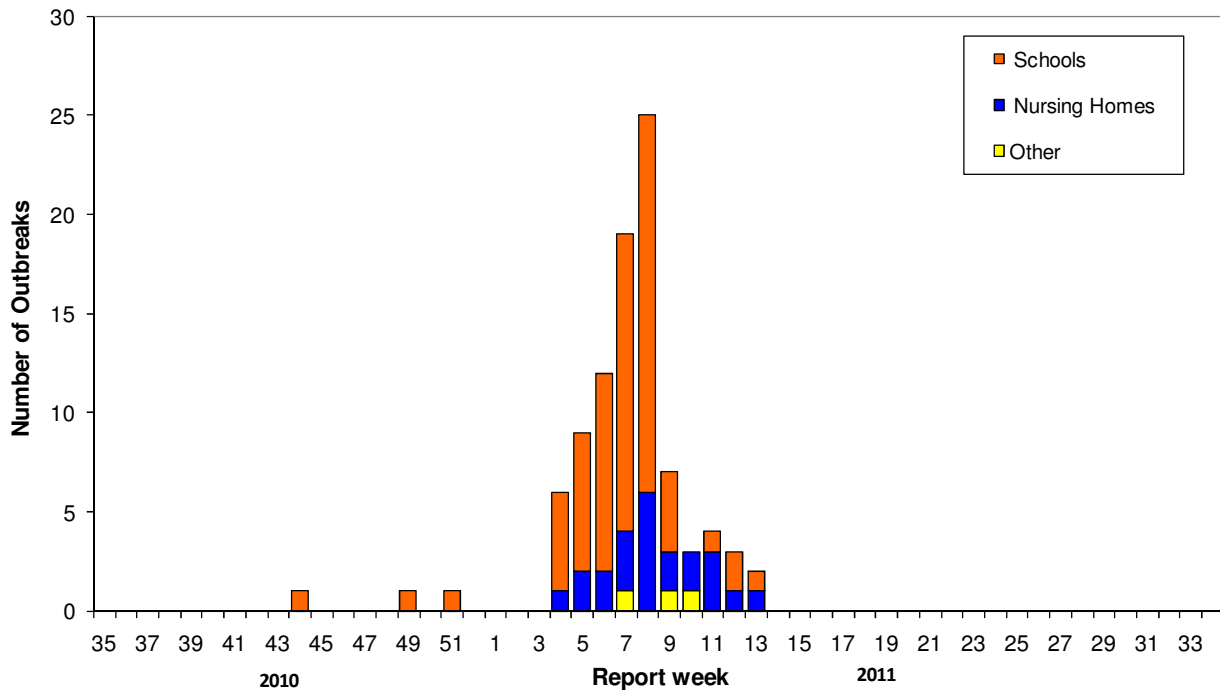
**Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, and cumulative numbers for the 2009/2010 and 2010/2011 seasons, by Health Region.**

|                 | Reporting period:<br>27/03/11 –02/04/11   |                                   |  | Cumulative # of outbreaks<br>(current season)<br>2010-2011 | Cumulative # of outbreaks<br>(past season)<br>2009-2010 |
|-----------------|---|-----------------------------------|--|--|---|
|                 | Lab-confirmed outbreaks in Nursing Homes* | Schools reporting ILI outbreaks** | Lab-confirmed outbreaks in Other Settings* |  |   |
| <b>Region 1</b> | 1 out of 13                               | 0 out of 74                       | 0  | 16   | 16  |
| <b>Region 2</b> | 0 out of 15                               | 0 out of 81                       | 0  | 15   | 49  |
| <b>Region 3</b> | 0 out of 14                               | 0 out of 95                       | 0  | 11   | 38  |
| <b>Region 4</b> | 0 out of 6                                | 0 out of 22                       | 0  | 12   | 9   |
| <b>Region 5</b> | 0 out of 2                                | 1 out of 18                       | 0  | 13   | 5   |
| <b>Region 6</b> | 0 out of 9                                | 0 out of 35                       | 0  | 9  | 2   |
| <b>Region 7</b> | 0 out of 4                                | 0 out of 27                       | 0  | 17   | 11  |
| <b>Total NB</b> | <b>1 out of 63</b>                        | <b>1 out of 352</b>               | <b>0</b>                                   | <b>93</b>  | <b>130</b>  |

\*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.

**Graph 3: 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 2010/11.**



<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.

National Flu Watch Program - 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](http://www.phac-aspc.gc.ca/fluwatch/index.html)

More information on the Pandemic H1N1 Flu virus in New Brunswick is available on the NB Health website at: <http://www.gnb.ca/cnb/Promos/Flu/index-e.asp>

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