WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: October 10 – October 16, 2010 (week 41)

Summary

No positive influenza detections and low influenza activity in New Brunswick, but continued sporadic H3N2 activity in Canada

During week 41, antiviral sales remained stable although there was a slight increase in respiratory related over the counter pharmacy sales in New Brunswick. ILI consultation rates increased slightly in week 41 compared to the previous week but remained within the expected range for this time of year. There is also no indication of positive influenza detections or influenza outbreaks so far this season in New Brunswick.

However, in Canada, ILI consultation rates remained similar to the previous weeks (within seasonal expected values), and antiviral sales demonstrated increases (within expected seasonal values). The proportion of positive influenza tests has increased slightly and was above expected range for this time of year. Of the 14 positive specimens, five specimens were reported as influenza A/H3N2 (BC, QC & ON), one as influenza B (BC) and 8 as unsubtyped influenza A (ON & QC). During this period, there were low levels of other positive respiratory detections such as parainfluenza, adenovirus, respiratory syncytial virus and human metapneumovirus.

Influenza activity in the temperate regions of the Southern Hemisphere is continuing to decline. In most of the temperate regions of the Northern Hemisphere the level of activity is still low. Influenza virus A(H3N2) continues to be the most frequently detected virus worldwide. Most of the influenza A(H3N2) viruses are A/Perth/16/2009-like, which is the virus strain included in the seasonal vaccines for the Northern and Southern Hemispheres.

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 October 16, 2010 (data source: G. Dumont lab results) *

*[Up to week 34 constitutes the 2009/2010 season and week 35 marks the start of season 2010/2011]

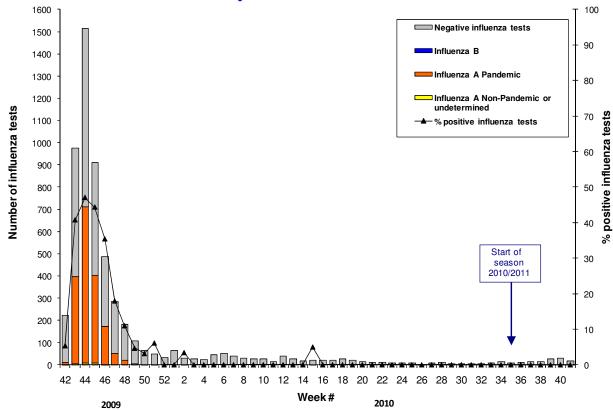


Table 1: Positive influenza test results by Health Region in New Brunswick up to October 16, 2010 (data source: G. Dumont lab results)

| | Reporting period: 10/10/10 –16/10/10 | | | | Cumulative: (2010/2011 season) 29/08/10 –16/10/10 | | | Cumulative: (2009/2010 season) 30/08/09 –28/08/10 | | |
|-------------|---|-------------------------------------|--------------------|----------------|--|--------------------|----------------|--|--------------------|----------------|
| | Activity level ¹ Influenz | | za A | Influenza B | Influenza A | | Influenza B | Influenza A | | Influenza B |
| | | Non- Pandemic or undetermined | Pandemic (H1N1) | | Non- Pandemic or undetermined | Pandemic (H1N1) | | Non-Pandemic or undetermined | Pandemic (H1N1) | |
| Region 1 | No activity | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 793 | 0 |
| Region 2 | No activity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 292 | 1 |
| Region 3 | No activity | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 221 | 0 |
| Region 4 | No activity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 290 | 0 |
| Region 5 | No activity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 0 |
| Region 6 | No activity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 114 | 0 |
| Region 7 | No activity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 0 |
| Total NB | | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1874 | 1 |

_

¹ 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

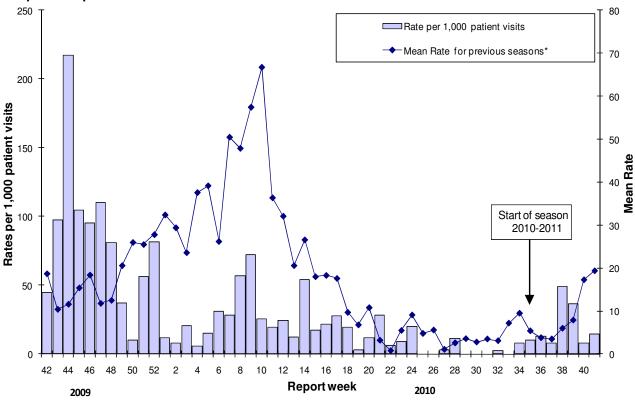
A total of 34 practitioner sites (9 FluWatch sentinel physicians and 25 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

During week 41:

16 practitioner sites (6 FluWatch and 10 NB SPIN) reported a total of 5 cases of ILI of the 346 patients seen for any reason during this reporting period

For week 41, the ILI consultation rate was 14.5 consultations per 1,000 patient visits which is a slightly higher rate than the week before. The sentinel response rate was 67% for the FluWatch sentinel physicians and 40% for the NB SPIN practitioners.

Graph 2: ILI Consultation Rates in New Brunswick, by report week, seasons 2009/10 and 2010/11 compared to previous seasons



^{*} For season 2009/2010 (up to week 34), the mean rate was based on data from the 1996/1997 to 2008/2009 seasons. For season 2010/2011 (starting week 35), the mean rate was based on data from the 1996/97 to 2008/2009 seasons.

3) ILI and Laboratory-Confirmed Outbreak Data

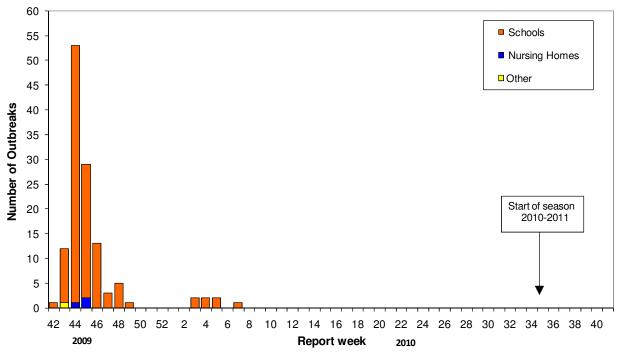
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, and cumulative numbers for the 2009/2010 and 2010/2011 seasons, by Health Region.

| | Rep 10/1 | | | | |
|----------|---|---|--|---|--|
| | Lab-confirmed outbreaks in Nursing Homes* | Schools reporting ILI outbreaks** | Lab-confirmed outbreaks in Other Settings* | Cumulative # of outbreaks (current season) 2010-2011 | Cumulative # of outbreaks (past season) 2009-2010 |
| Region 1 | 0 out of 13 | 0 out of 74 | 0 | 0 | 16 |
| Region 2 | 0 out of 15 | 0 out of 81 | 0 | 0 | 49 |
| Region 3 | 0 out of 14 | 0 out of 95 | 0 | 0 | 38 |
| Region 4 | 0 out of 6 | 0 out of 22 | 0 | 0 | 9 |
| Region 5 | 0 out of 2 | 0 out of 18 | 0 | 0 | 5 |
| Region 6 | 0 out of 9 | 0 out of 36 | 0 | 0 | 2 |
| Region 7 | 0 out of 4 | 0 out of 27 | 0 | 0 | 11 |
| Total NB | 0 out of 63 | 0 out of 353 | 0 | 0 | 130 |

^{*}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 Homes¹ and ILI Outbreaks in Schools² reported to Public Health in New Brunswick, by report week, seasons 2009/10 and 2010/11



¹ 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.

² The National FluWatch definition of an ILI outbreak in a school is stated as absenteeism greater than 10% (or absenteeism that is

<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

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

Prepared by the Communicable Disease Control Unit Office of the Chief Medical Officer of Health, Tel: (506) 444-3044

² 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.