WEEKLY NEW BRUNSWICK INFLUENZA REPORT Reporting period: September 12 – September 25, 2010 (weeks 37 & 38)

*While influenza surveillance continues to be monitored every week at provincial and national levels, the abbreviated web version will be distributed biweekly. Weekly influenza reports will commence in the fall.

1) Overall Influenza Summary-Week 37 & 38

Slight increase in some indicators of influenza activity in New Brunswick and Canada, but no increase in positive influenza detections in New Brunswick.

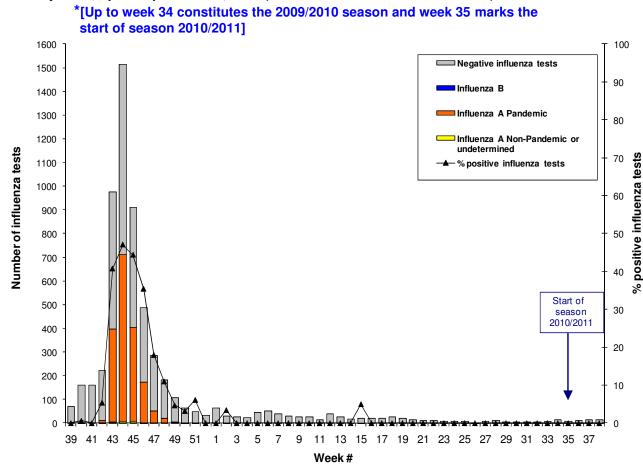
There has been a slight increase in antiviral and over the counter pharmacy sales and with influenza-like illness (ILI) consultation rates starting week 38 (September 19 to 25) in New Brunswick. The increase in antiviral and over the counter pharmacy sales are within expected values for this time of year, although the increase in ILI consultations is above the expected range for this time of year. However, there is no indication of positive influenza detections or influenza outbreaks so far this season.

However, in Canada there are indications that there is a slight increase starting week 37 and 38 in ILI consultation rates (within seasonal expected values), and antiviral sales (above expected seasonal values). The proportion of positive influenza tests has increased slightly during week 37 and 38 from 0.03% to 0.63% but this was slightly higher than what is usually expected this time of year. All of the positive specimens were reported as influenza A, and 5 reported as influenza A/H3N2 from Quebec, Ontario and British Columbia. All of the 3 specimens (2 A/H3N2 from ON and AB, and 1 B from QC) antigenically characterized so far by the National Microbiology Laboratory (NML) were the same strains recommended for the A/H3N2 and B components for the 2010-2011 seasonal influenza vaccine. During this period, there were low levels of other positive respiratory detections such as parainfluenza, adenovirus, and respiratory syncytial virus.

In southern China, and to a lesser extent in northern China, there has been an increasing reemergence of circulating seasonal influenza H3N2 viruses since July 2010.

2) 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, 7 sites in Family Practice, 3 sites in First Nations communities, 1 site in a Nursing Home, 4 sites in Universities and 10 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 September 25, 2010 (data source: G. Dumont lab results) *

Reporting period: Cumulative: (2010/2011 season) Cumulative: (2009/2010 season) 30/08/09 - 28/08/10 12/09/10 -25/09/10 29/08/10 -25/09/10 Activity Influenza Influenza Influenza A Influenza Influenza A Influenza A level¹ В В В Non-Pandemic Non-Non-Pandemic or Pandemic Pandemic or Pandemic Pandemic or undetermined (H1N1) undetermined (H1N1) undetermined (H1N1) Region No 0 0 2 0 0 activity 0 0 793 0 Region No 0 0 0 0 0 0 0 292 1 activity 2 Region No 0 0 0 0 0 0 221 0 activity 1 3 Region No 0 0 activity 0 0 0 0 0 290 0 Region No 0 0 0 0 0 0 0 0 96 5 activity Region No 0 0 0 0 0 0 0 0 activity 114 6 Region No 0 activity 0 0 0 0 0 0 68 0 0 3 1874 0 0 0 0 0 1 Total NB

Table 1: Positive influenza test results by Health Region in New Brunswick up to September 25, 2010 (data source: G. Dumont lab results)

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

3) 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 37:

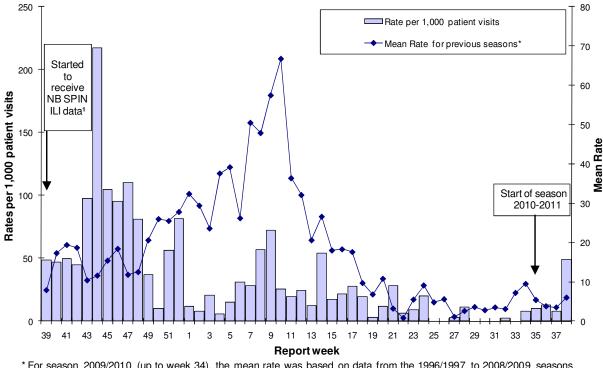
13 practitioner sites (5 FluWatch and 8 NB SPIN) reported a total of 3 cases of ILI of the 372 patients seen for any reason during this reporting period

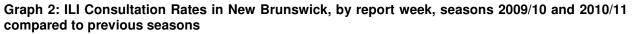
For week 37, the ILI consultation rate was 8.1 consultations per 1,000 patient visits which is a slightly lower rate than the week before. The sentinel response rate was 56% for the FluWatch sentinel physicians and 32% for the NB SPIN practitioners.

During week 38:

15 practitioner sites (5 FluWatch and 10 NB SPIN) reported a total of 23 cases of ILI of the 470 patients seen for any reason during this reporting period

For week 38, the ILI consultation rate was 48.9 consultations per 1,000 patient visits which was a higher rate than week 37. The sentinel response rate was 56% for the FluWatch sentinel physicians and 40% for the NB SPIN practitioners.





* 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. ¹ In week 39, we started to receive ILI consultation data from contributing NB SPIN Practitioners from the Public Health Agency of Canada.

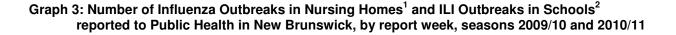
4) ILI and Laboratory-Confirmed Outbreak Data

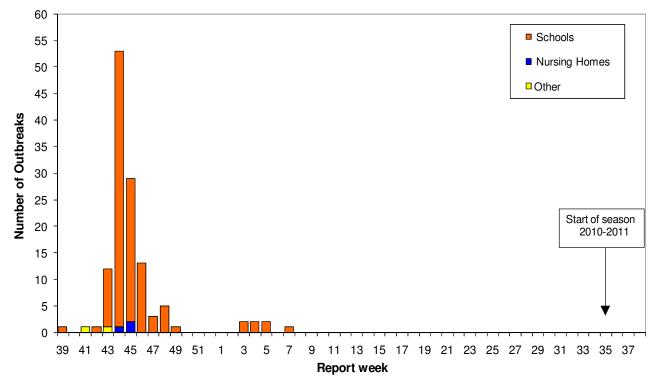
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, and cumulative numbers for the 2009/2010 and 2010/2011 seasons, by Health Region.

	Reporting period: 12/09/10 –25/09/10				
	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.





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

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.

<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: <u>http://www.gnb.ca/cnb/Promos/Flu/index-e.asp</u>

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