

## **WEEKLY NEW BRUNSWICK INFLUENZA REPORT**

**Reporting period: March 6, 2011 – March 12, 2011 (week 10)**

### **Summary**

#### **In New Brunswick, influenza activity remained stable and was within expected levels**

In New Brunswick, the ILI consultation rate in week 10 was 29.2, a lower rate than the previous week and was below the expected range for this time of year. There have been 130 positive influenza detections during week 10, eight pandemic influenza A (H1N1), one-hundred influenza A (H3), sixteen untyped influenza A and six influenza B. Three ILI/influenza outbreaks were reported in week 10, 2 in long-term care facilities in region 1 and 1 in other facility in region 3.

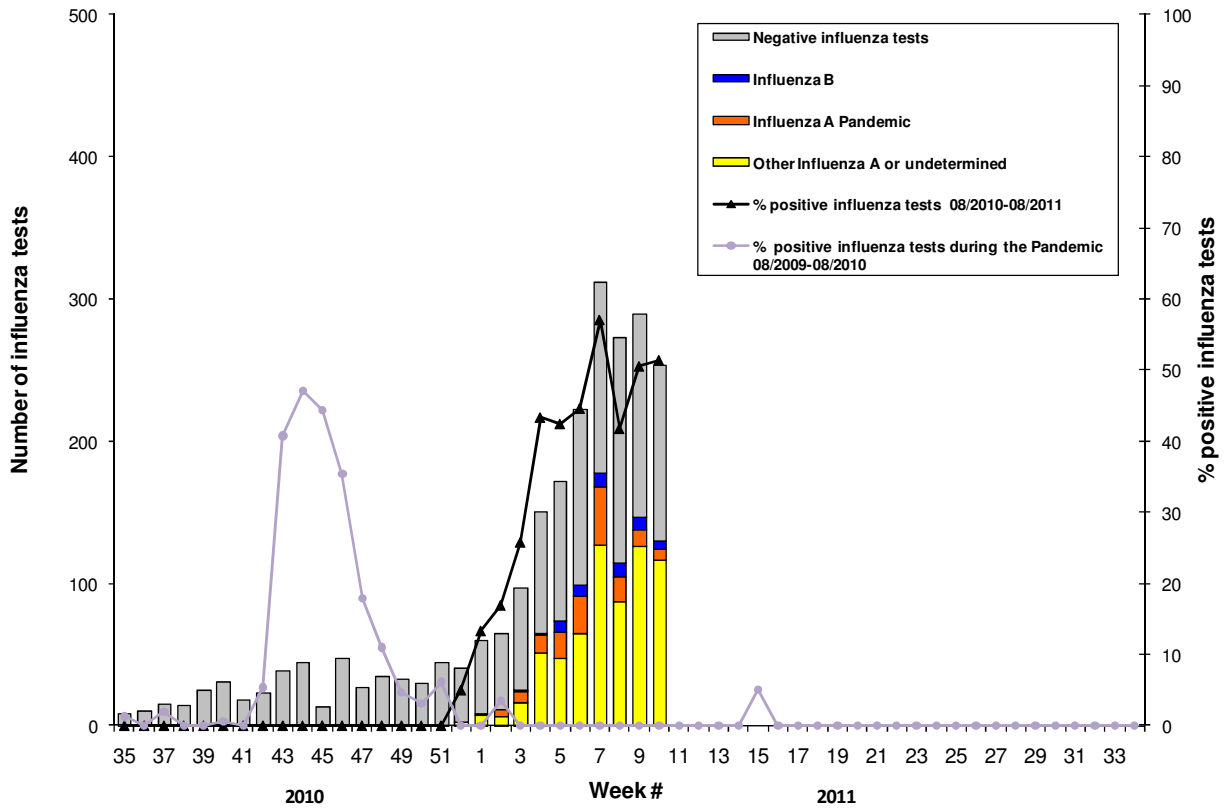
However, in Canada, the ILI consultation rate in week 10 was 25.3 consultations per 1,000 patients visits, which is a decrease from 37.4 in week 9 and slightly below the expected levels for this time of year. The proportion of positive influenza tests overall continued to decline in week 10. The proportion of positive tests peaked in week 52. Of the 833 positive specimens reported during week 10, 282 specimens were reported as influenza A/H3N2 (all provinces except MB), 284 as untyped influenza A (all provinces except PE & NL), 66 as pandemic H1N1 2009 (all provinces except MB) and 201 as influenza B (all provinces except MB, NS & NL). Since the beginning of the season, 85.5% 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 24.1% in week 10. During week 10, the proportion of positive tests for respiratory syncytial virus (RSV) decreased slightly to 17.9% of specimens tested and appears to have peaked at week 7. During week 10, 21 new ILI/influenza outbreaks were reported: 10 in long-term care facilities (LTCF); 8 ILI school outbreaks; 1 pandemic H1N1 outbreak in an adult residential facility; and 2 ILI outbreaks in other settings.

Worldwide, overall, the influenza season of the northern hemisphere appears to be peaking or in decline in most areas, though with continuing active circulation particularly in North America and Eastern Europe. Influenza A(H3N2) comprises the largest proportion of influenza detections in North America. Although influenza A(H1N1)2009 has been the most commonly detected virus in Europe and northern Asia influenza type B has been increasing in Europe and is now the more common virus seen in many countries. The large majority of the viruses characterized are closely related to the vaccine strains included in the current seasonal vaccines. A small number of influenza type B of the Yamagata lineage are reported in North America and Europe, making up about 5 to 7% of B viruses detected. Influenza activity remains low throughout the tropical zone and the most common subtype detected is influenza A(H1N1)2009. Most countries in the southern temperate regions of the world continue to have very little influenza transmission since the end of their winter season.

#### **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 March 12, 2011 (data source: G. Dumont lab results)**



**Table 1: Positive influenza test results by Health Region in New Brunswick up to March 12, 2011 (data source: G. Dumont lab results)**

	Activity level <sup>1</sup>	Reporting period: 06/03/11 –12/03/11					Cumulative: (2010/2011 season) 29/08/10 –12/03/11					Cumulative: (2009/2010 season) 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	66	6	8	2	0	319	48	43	8	2	793	0
<b>Region 2</b>	Sporadic	0	3	0	1	0	0	19	2	4	0	0	292	1
<b>Region 3</b>	Localized	0	17	0	5	1	0	76	14	18	3	1	221	0
<b>Region 4</b>	Sporadic	0	1	1	0	3	0	66	57	11	39	0	290	0
<b>Region 5</b>	Sporadic	0	3	0	0	0	0	20	3	4	0	0	96	0
<b>Region 6</b>	Sporadic	0	7	0	1	0	0	36	25	4	0	0	114	0
<b>Region 7</b>	Sporadic	0	3	1	1	0	0	28	3	2	0	0	68	0
<b>Total NB</b>		0	100	8	16	6	0	564	152	86	50	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

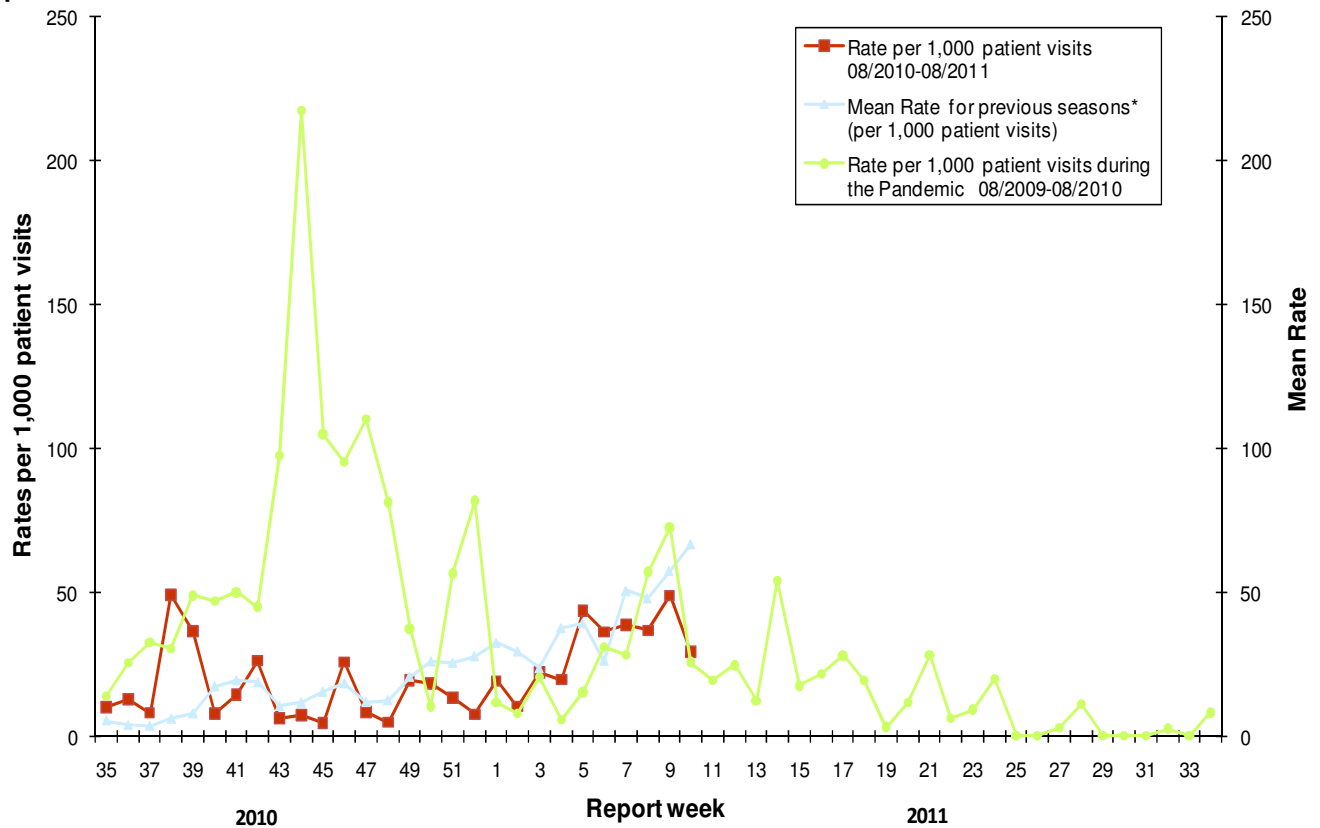
A total of 39 practitioner sites (15 FluWatch sentinel physicians and 24 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

**During week 10:**

**19 practitioner sites (8 FluWatch and 11 NB SPIN) reported a total of 14 cases of ILI of the 480 patients seen for any reason during this reporting period.**

For week 10, the ILI consultation rate was 29.2 consultations per 1,000 patient visits which is a lower rate than the week before and was below than the expected levels for this time of year. The sentinel response rate was 53% for the FluWatch sentinel physicians and 46% 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

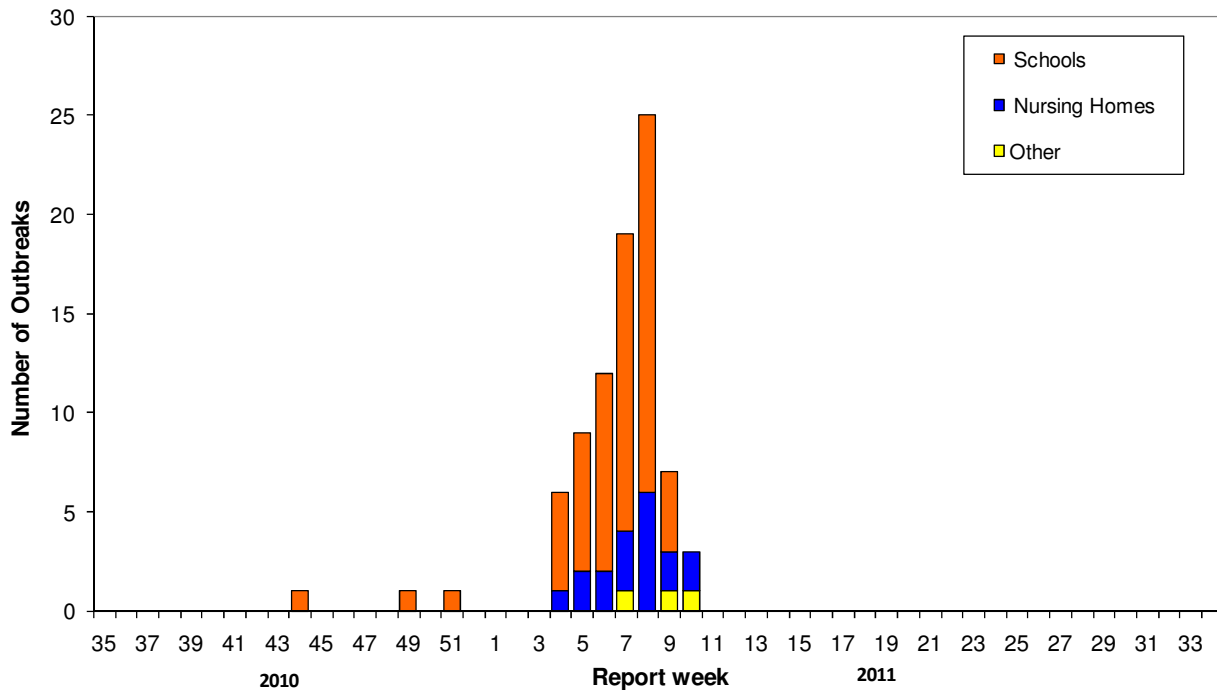
**Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, and cumulative numbers for the 2009/2010 and 2010/2011 seasons, by Health Region.**

	Reporting period: 06/03/11 –12/03/11			Cumulative # of outbreaks (current season) 2010-2011	Cumulative # of outbreaks (past season) 2009-2010
	Lab-confirmed outbreaks in Nursing Homes*	Schools reporting ILI outbreaks**	Lab-confirmed outbreaks in Other Settings*		
<b>Region 1</b>	2 out of 13	0 out of 74	0	13	16
<b>Region 2</b>	0 out of 15	0 out of 81	0	13	49
<b>Region 3</b>	0 out of 14	0 out of 95	1	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	0 out of 18	0	12	5
<b>Region 6</b>	0 out of 9	0 out of 35	0	8	2
<b>Region 7</b>	0 out of 4	0 out of 27	0	15	11
<b>Total NB</b>	<b>2 out of 63</b>	<b>0 out of 352</b>	<b>1</b>	<b>84</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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