

## **WEEKLY NEW BRUNSWICK INFLUENZA REPORT**

**Reporting period: February 27, 2011 – March 5, 2011 (week 9)**

### **Summary**

#### **In New Brunswick, influenza activity increased (2 indicators) compared to the previous week and was within expected levels**

In New Brunswick, the ILI consultation rate in week 9 was 48.9, a higher rate than the previous week and was within the expected range for this time of year. There have been 146 positive influenza detections during week 9, twelve pandemic influenza A (H1N1), one hundred and sixteen influenza A (H3), ten untyped influenza A and eight influenza B. Four ILI school outbreaks were reported for week 9 in regions 2, 5 & 7, two influenza outbreaks were reported in long-term care facilities in regions 1 & 7 and one outbreak in other facility in region 3.

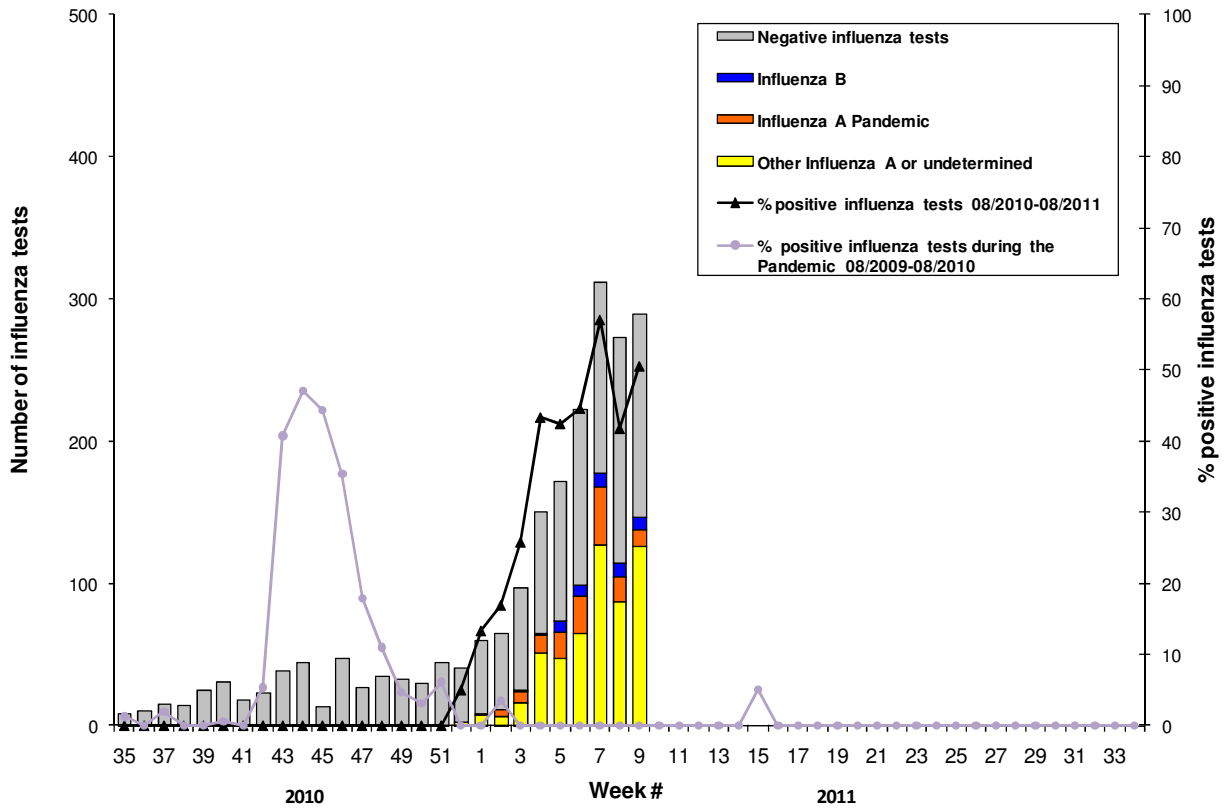
However, in Canada, the ILI consultation rate in week 9 was 37.7 consultations per 1,000 patients visits, a slight increase from 35.8 in week 8, but still within the expected levels for this time of year. The proportion of positive influenza tests overall continued to decline in week 9. The proportion of positive tests peaked in week 52. Of the 870 positive specimens reported during week 9, 317 specimens were reported as influenza A/H3N2 (all provinces except MB & NS), 338 as untyped influenza A (all provinces except PE), 59 as pandemic H1N1 2009 (all provinces except SK, MB & NL) and 156 as influenza B (all provinces except MB, PE & NL). Since the beginning of the season, 86.0% of the subtyped positive influenza A specimens were for influenza A/H3N2. In week 9, detections of Pandemic H1N1 2009 represented 15.7% of all subtyped influenza A specimens. During week 9, the proportion of positive tests for respiratory syncytial virus (RSV) was stable at 19.2% of specimens tested. During week 9, 32 new ILI/influenza outbreaks were reported: 17 in long-term care facilities; 1 influenza outbreak in a hospital; 1 influenza B school outbreak; 1 outbreak in which both influenza B and pandemic H1N1 were detected; 7 ILI school outbreaks; 1 pandemic H1N1 outbreak in a residential facility and 4 ILI outbreak 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 5, 2011 (data source: G. Dumont lab results)**



**Table 1: Positive influenza test results by Health Region in New Brunswick up to March 5, 2011 (data source: G. Dumont lab results)**

	Activity level <sup>1</sup>	Reporting period: 27/02/11 –05/03/11					Cumulative: (2010/2011 season) 29/08/10 –05/03/11					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	62	4	7	4	0	253	42	35	6	2	793	0
<b>Region 2</b>	Localized	0	6	2	0	0	0	16	2	3	0	0	292	1
<b>Region 3</b>	Sporadic	0	32	1	2	0	0	59	14	13	2	1	221	0
<b>Region 4</b>	Sporadic	0	3	3	1	4	0	65	56	11	36	0	290	0
<b>Region 5</b>	Localized	0	4	0	0	0	0	17	3	4	0	0	96	0
<b>Region 6</b>	Sporadic	0	4	1	0	0	0	29	25	3	0	0	114	0
<b>Region 7</b>	Localized	0	5	1	0	0	0	25	2	1	0	0	68	0
<b>Total NB</b>		0	116	12	10	8	0	464	144	70	44	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

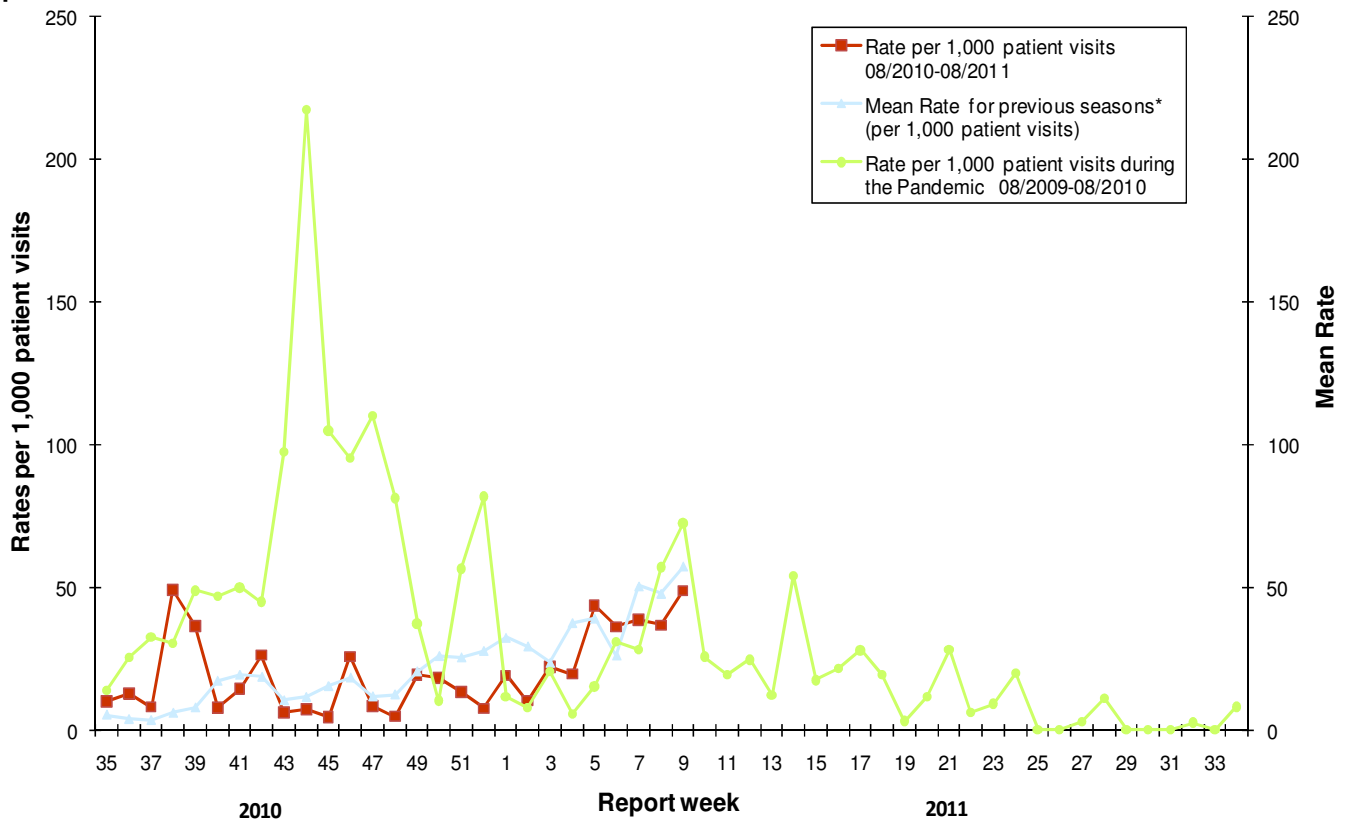
A total of 39 practitioner sites (15 FluWatch sentinel physicians and 24 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

**During week 9:**

**19 practitioner sites (8 FluWatch and 11 NB SPIN) reported a total of 31 cases of ILI of the 634 patients seen for any reason during this reporting period.**

For week 9, the ILI consultation rate was 48.9 consultations per 1,000 patient visits which is a higher rate than the week before and was within 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

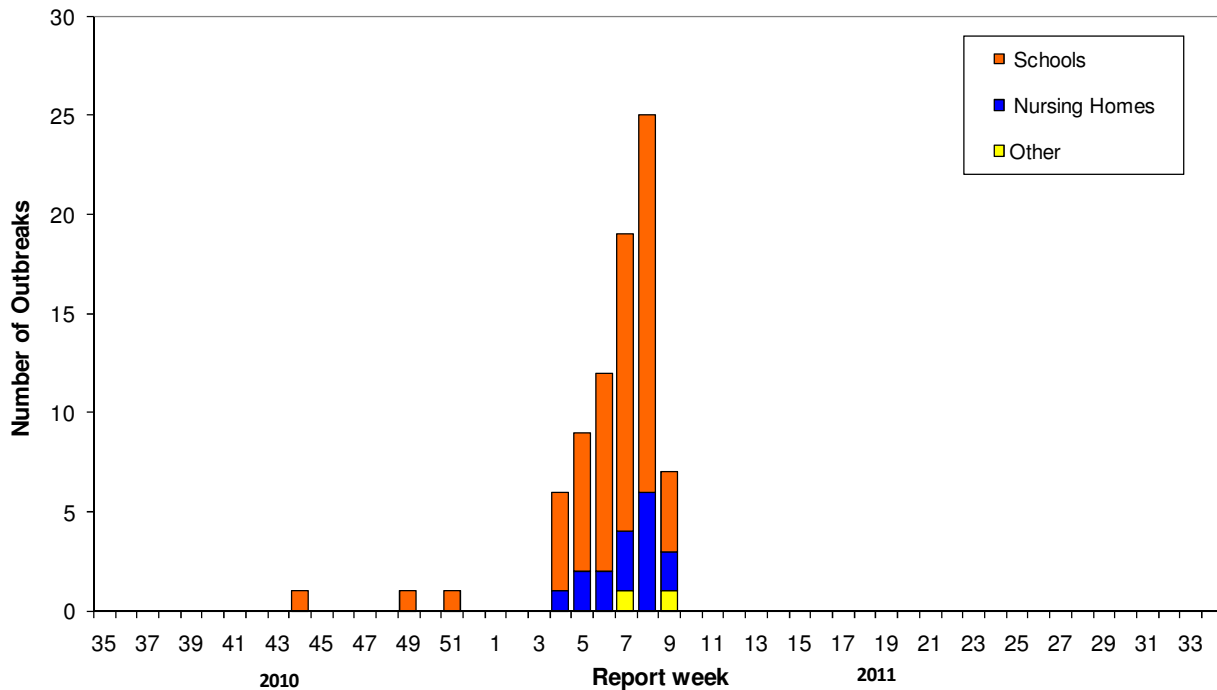
**Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, and cumulative numbers for the 2009/2010 and 2010/2011 seasons, by Health Region.**

	Reporting period: 27/02/11 –05/03/11			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>	1 out of 13	0 out of 74	0	11	16
<b>Region 2</b>	0 out of 15	1 out of 81(ongoing)	0	13	49
<b>Region 3</b>	0 out of 14	0 out of 95	1	10	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	12	5
<b>Region 6</b>	0 out of 9	0 out of 35	0	8	2
<b>Region 7</b>	1 out of 4	2 out of 27(ongoing)	0	15	11
<b>Total NB</b>	<b>2 out of 63</b>	<b>4 out of 352</b>	<b>1</b>	<b>81</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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