

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: May 1, 2011 – May 7, 2011 (week 18)

Summary

In New Brunswick, continued decrease in influenza activity since peak at week 7

In New Brunswick, the ILI consultation rate in week 18 was 0.0, a lower rate than the previous week and was below the expected range for this time of year. There have been 9 positive influenza detections during week 18, no pandemic influenza A (H1N1) were reported, one influenza A (H3), one was untyped influenza A, and seven influenza B were reported. One ILI/influenza outbreak was reported in week 18 in a school in Region 7.

However, in Canada, the ILI consultation rate in week 18 was 15.1 consultations per 1,000 patients visits, which is increased compared to previous week and is within the expected levels for this time of year. The proportion of positive influenza tests decreased compared to week 17 (7.1% to 5.2%). The proportion of positive tests peaked in week 52. Of the 127 positive specimens reported during week 18, 36 were influenza A and 91 were influenza B (all provinces except MB, NS & PE). Among influenza A detections in week 18, 14 specimens were reported as influenza A/H3N2 (AB, SK, NB & NL), 19 as untyped influenza A (all provinces except BC, SK, MB, NL & PE), 3 as pandemic H1N1 2009 (AB & ON). Since the beginning of the season, 84.7% of the subtyped positive influenza A specimens were for influenza A/H3N2. Detections of influenza B have been increasing steadily since week 3 and appear to have reached a peak in week 15. During week 18, the proportion of positive tests for respiratory syncytial virus (RSV) continues to decrease appears to have peaked at week 7. Since week 11, the proportion of positive tests for parainfluenza viruses has been increasing and reaching 6.9% in week 18. During week 18, 7 new ILI/influenza outbreaks were reported: 4 in long-term care facilities (LTCF); 2 ILI outbreaks in schools and 1 ILI outbreak in another facility.

Worldwide, influenza activity is currently low. Influenza activity across the entire temperate northern hemisphere is generally back to baseline or pre-seasonal levels. As levels of influenza activity decrease, influenza type B has become more commonly detected compared to influenza A viruses across the northern hemisphere temperate areas and in much of the tropics. Transmission in the tropical areas of the world is also generally low with some transmission reported in countries of Sub-Saharan Africa with a mixture of viruses and slight predominance of influenza type B. In the temperate areas of the southern hemisphere the influenza season has not yet started. Nearly all influenza A viruses tested continue to be antigenically similar to those found in the current trivalent vaccine. More than 90% of the influenza type B viruses are also of the lineage found in the vaccine (Victoria lineage); however, a small number of B viruses of the Yamagata lineage are also being reported.

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 May 7, 2011 (data source: G. Dumont lab results)

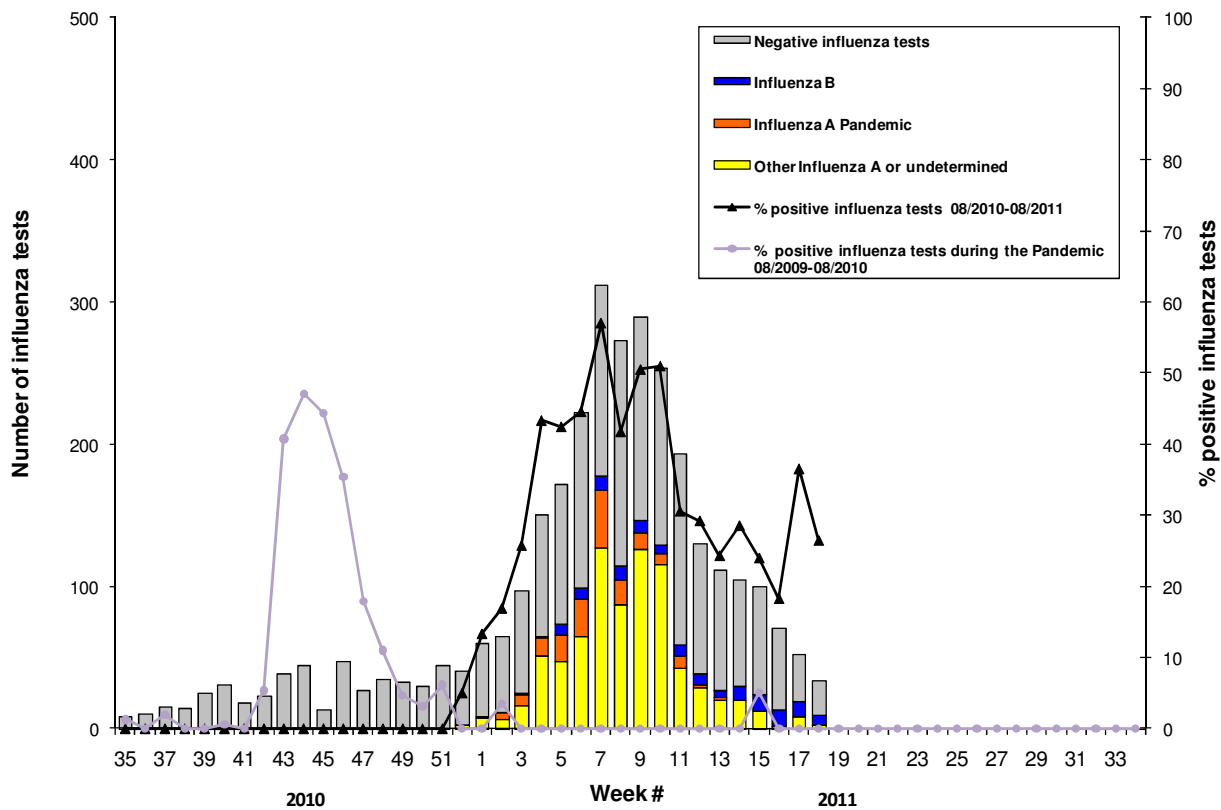


Table 1: Positive influenza test results by Health Region in New Brunswick up to May 7, 2011 (data source: G. Dumont lab results)

	Activity level ¹	Reporting period: 01/05/11 –07/05/11					Cumulative: (2010/2011 season) 29/08/10 –07/05/11					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	
Region 1	Sporadic	0	0	0	0	3	0	379	56	52	27	2	793	0
Region 2	Sporadic	0	1	0	1	1	0	48	2	9	13	0	292	1
Region 3	No activity	0	0	0	0	0	0	87	16	25	19	1	221	0
Region 4	No activity	0	0	0	0	0	0	68	58	11	56	0	290	0
Region 5	No activity	0	0	0	0	0	0	21	3	5	1	0	96	0
Region 6	Sporadic	0	0	0	0	3	0	39	27	7	4	0	114	0
Region 7	No activity	0	0	0	0	0	0	30	3	2	2	0	68	0
Total NB		0	1	0	1	7	0	672	165	111	122	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

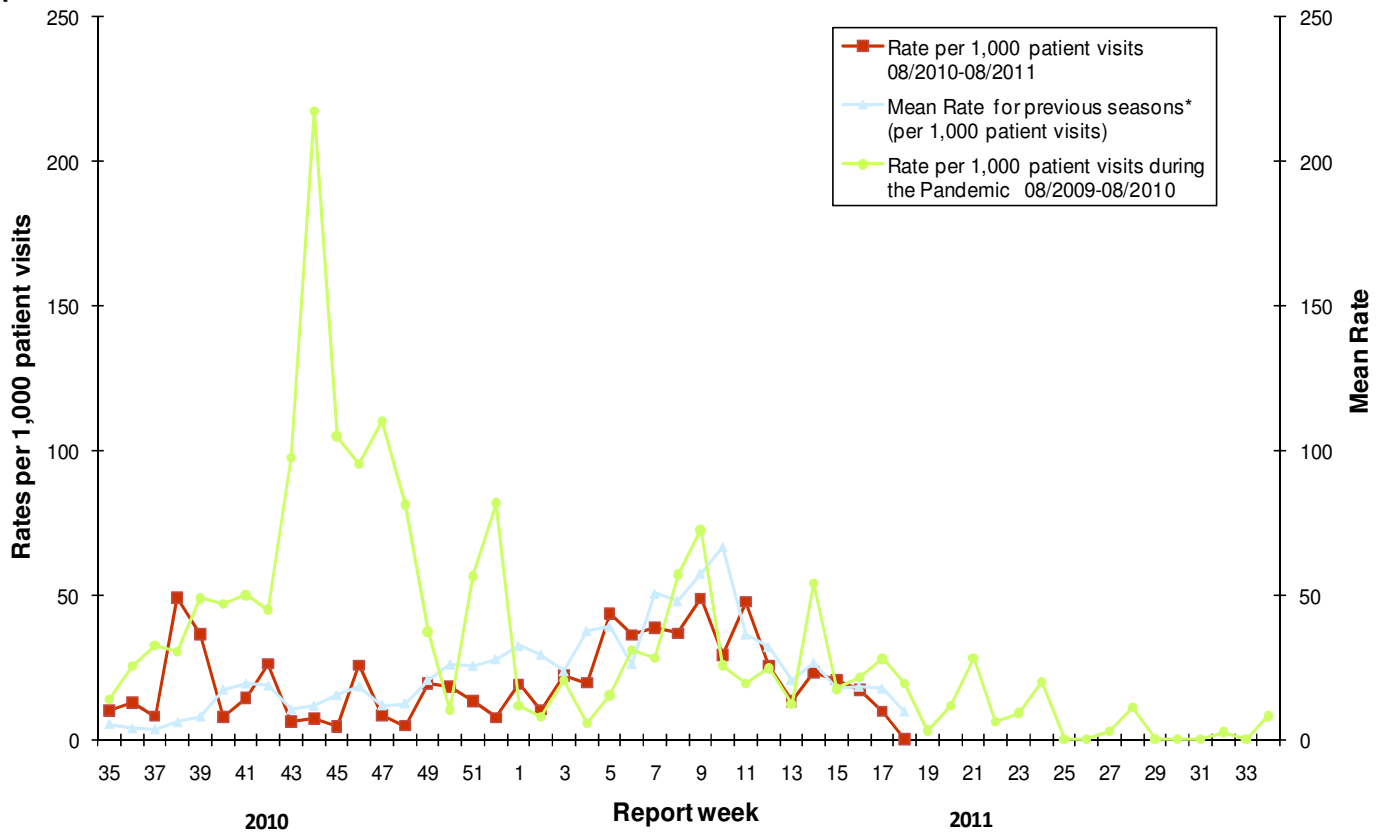
A total of 39 practitioner sites (15 FluWatch sentinel physicians and 24 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

During week 18:

4 practitioner sites (2 FluWatch and 2 NB SPIN) reported a total of 0 cases of ILI of the 186 patients seen for any reason during this reporting period.

For week 18, the ILI consultation rate was 0.0 consultations per 1,000 patient visits which is a lower rate than the week before and was below the expected levels for this time of year. The sentinel response rate was 13% for the FluWatch sentinel physicians and 8% 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

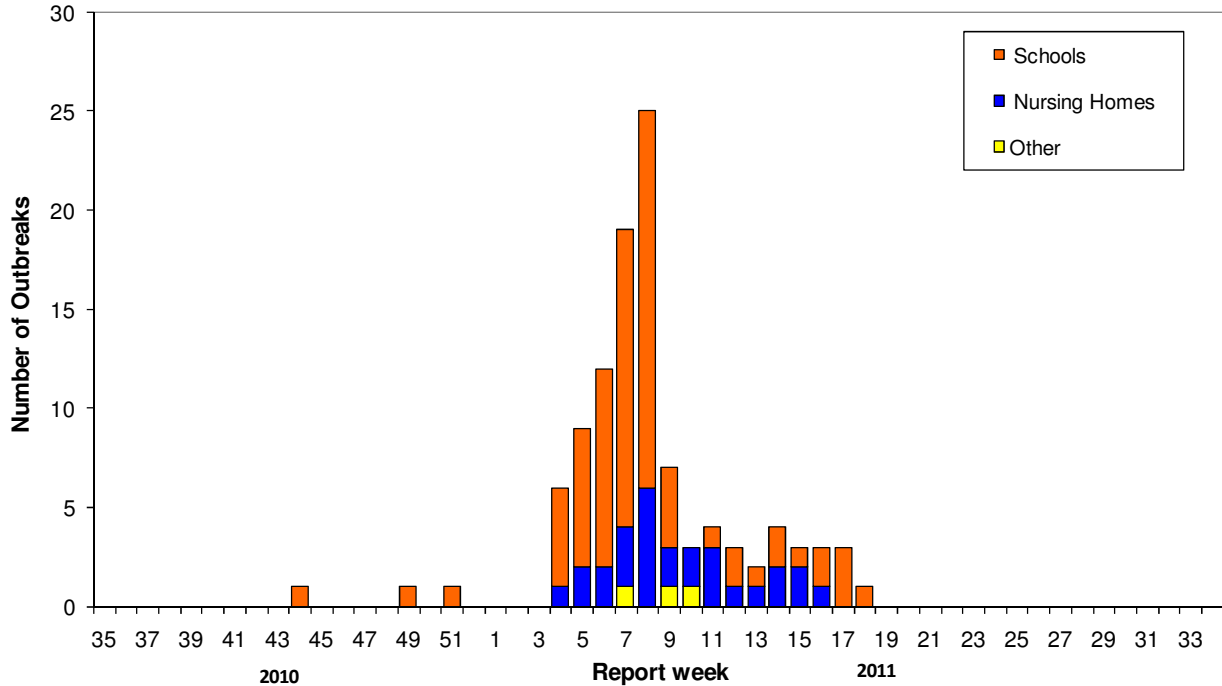
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, and cumulative numbers for the 2009/2010 and 2010/2011 seasons, by Health Region.

	Reporting period: 01/05/11 –07/05/11			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*		
Region 1	0 out of 13	0 out of 74	0	17	16
Region 2	0 out of 15	0 out of 81	0	21	49
Region 3	0 out of 14	0 out of 95	0	12	38
Region 4	0 out of 6	0 out of 22	0	12	9
Region 5	0 out of 2	0 out of 18	0	14	5
Region 6	0 out of 9	0 out of 35	0	10	2
Region 7	0 out of 4	1 out of 27	0	21	11
Total NB	0 out of 63	1 out of 352	0	107	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, season 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 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

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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