

WEEKLY NEW BRUNSWICK INFLUENZA REPORT
Reporting period: December 19, 2010 – January 1, 2011 (weeks 51 & 52)

Summary

Low influenza activity and two positive influenza detections in New Brunswick

In New Brunswick, the ILI consultation rate in week 51 decreased compared to the previous week and continued to decrease in week 52. ILI consultation rates in weeks 51 & 52 were below the expected range for this time of year. There have been no positive influenza detections during week 51 and two positive influenza detections during week 52, both influenza A (H3). One ILI school outbreak was reported for week 51 in Region 7 and no ILI/influenza outbreaks were reported for week 52.

However, in Canada, the ILI consultation rate in week 51 was 27.5 consultations per 1,000 patients visits and it continued to increase during week 52 to 49.8 consultations per 1,000 patients visits. This is still within the expected levels for this time of year. The proportion of positive influenza specimens has increased since week 45 and was higher than what was usually observed at this time of year, reflecting an early start to the influenza season. Of the 2300 positive specimens reported during week 51 & 52, 658 specimens were reported as influenza A/H3N2 (all provinces except MB, PEI, NL), 1561 as untyped influenza A (all provinces except NS, PEI, NL), 40 as pandemic H1N1 2009 (BC, AB, ON, QC, PEI) and 40 as influenza B (BC, AB, QC & ON). In addition, one non-pandemic A (H1N1) specimen was detected during week 52 in BC. Since the beginning of the season, 94.2% of the subtyped positive influenza A specimens were for influenza A/H3N2. During week 51 & 52, the proportion of respiratory syncytial virus (RSV) increased slightly to 11.1% of specimens tested while low levels of parainfluenza detections, adenovirus detections continue to be reported.

Worldwide, the winter influenza season is now under way in parts of the Northern Hemisphere. North America is seeing increases of influenza-like illness (ILI) now above baseline levels in parts of Canada and the United States associated primarily with influenza viruses A(H3N2) and type B. The United Kingdom has been experiencing a surge in both mild and severe cases, primarily associated with influenza A(H1N1) 2009 virus and to a lesser extent influenza type B. On the European continent, the Middle East and in northern Asia rates of influenza-like illness are low but recent increases have been noted in some areas. No significant influenza transmission has been reported in Southern Hemisphere temperate regions.

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 January 1, 2011 (data source: G. Dumont lab results)

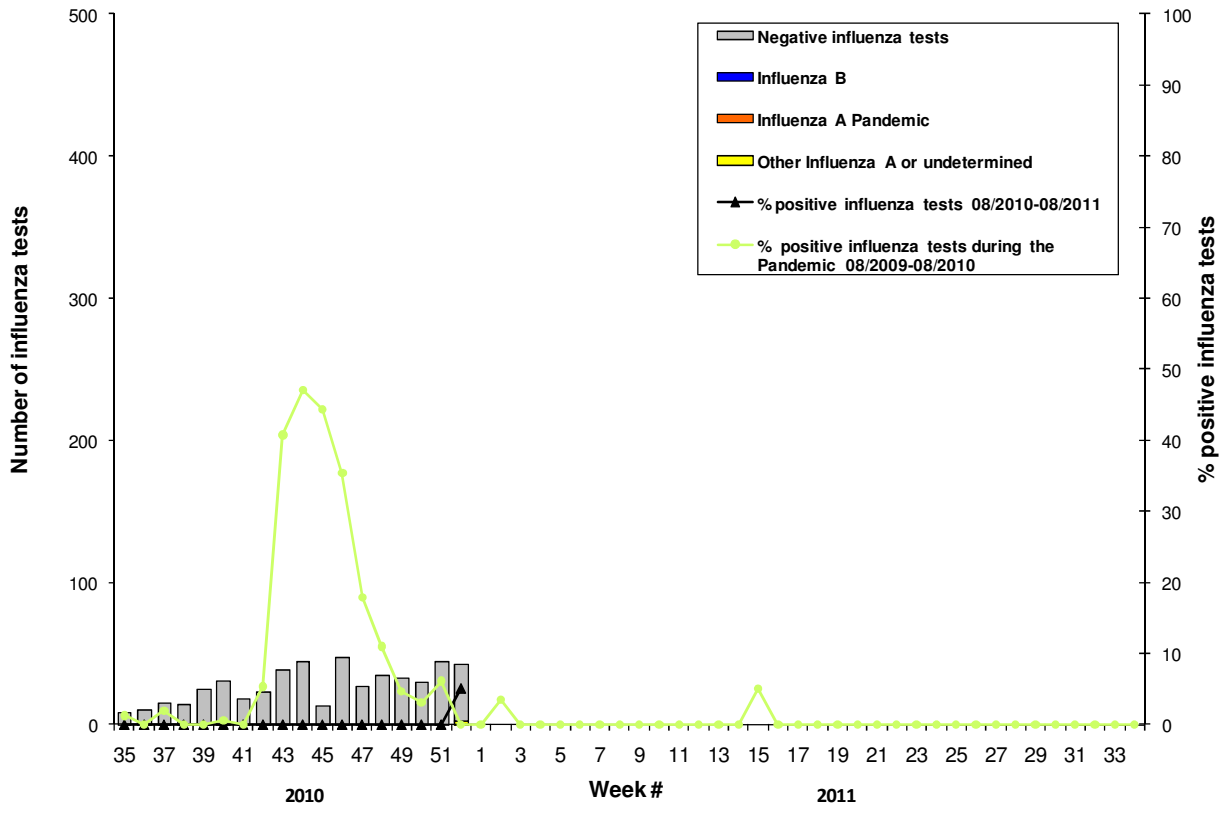


Table 1: Positive influenza test results by Health Region in New Brunswick up to January 1, 2011 (data source: G. Dumont lab results)

	Reporting period: 19/12/10 –01/01/11					Cumulative: (2010/2011 season) 29/08/10 –01/01/11					Cumulative: (2009/2010 season) 30/08/09 –28/08/10			
	Activity level ¹	Influenza A				Influenza B	Influenza A				Influenza B	Influenza A		Influenza B
		A(H1)	A(H3)	Pand H1N1	A (unsub)		A(H1)	A(H3)	Pand H1N1	A (unsub)		Non-Pandemic or undeterm.	Pand (H1N1)	
Region 1	Sporadic	0	2	0	0	0	0	2	0	0	0	2	793	0
Region 2	No activity	0	0	0	0	0	0	0	0	0	0	0	292	1
Region 3	No activity	0	0	0	0	0	0	0	0	0	0	1	221	0
Region 4	No activity	0	0	0	0	0	0	0	0	0	0	0	290	0
Region 5	No activity	0	0	0	0	0	0	0	0	0	0	0	96	0
Region 6	No activity	0	0	0	0	0	0	0	0	0	0	0	114	0
Region 7	No activity	0	0	0	0	0	0	0	0	0	0	0	68	0
Total NB		0	2	0	0	0	0	2	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 40 practitioner sites (15 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 51:

22 practitioner sites (9 FluWatch and 13 NB SPIN) reported a total of 8 cases of ILI of the 592 patients seen for any reason during this reporting period.

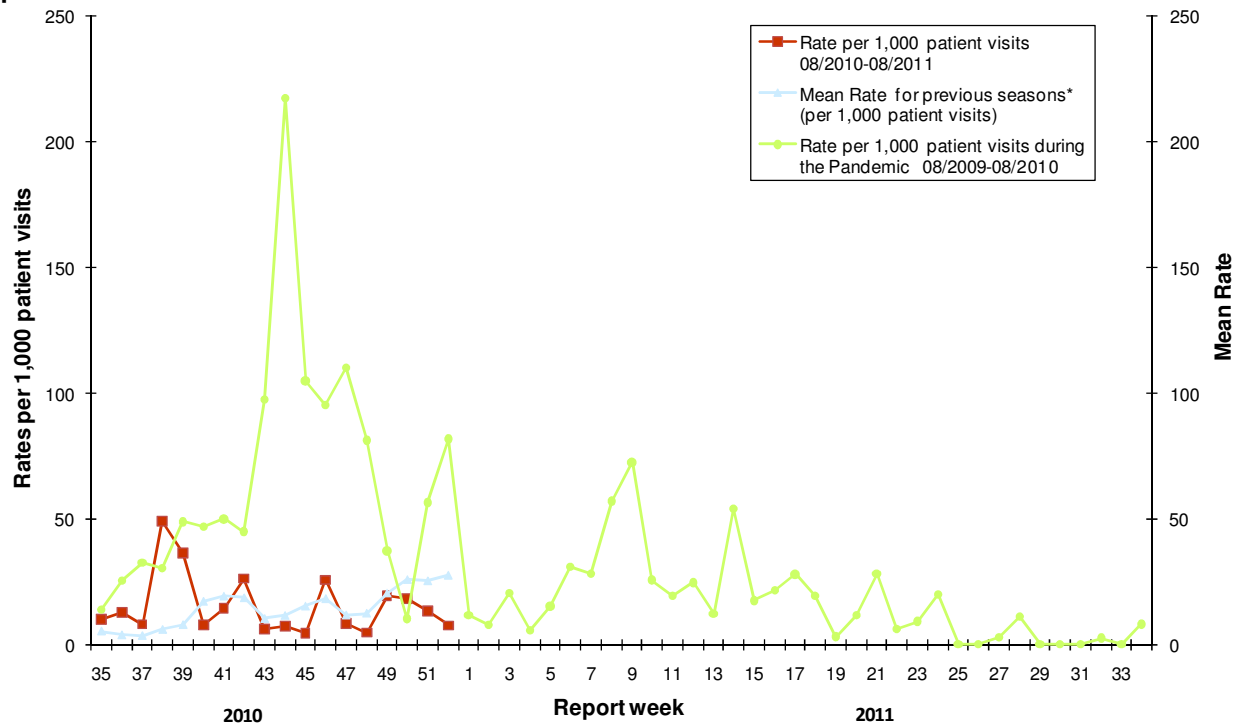
For week 51, the ILI consultation rate was 13.5 consultations per 1,000 patient visits which is a lower rate than the week before and also below the expected levels for this time of year. The sentinel response rate was 60% for the FluWatch sentinel physicians and 52% for the NB SPIN practitioners.

During week 52:

9 practitioner sites (4 FluWatch and 5 NB SPIN) reported a total of 2 cases of ILI of the 262 patients seen for any reason during this reporting period.

For week 52, the ILI consultation rate was 7.6 consultations per 1,000 patient visits which is a lower rate than week 51 and still below the expected levels for this time of year. The sentinel response rate was 27% for the FluWatch sentinel physicians and 20% 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

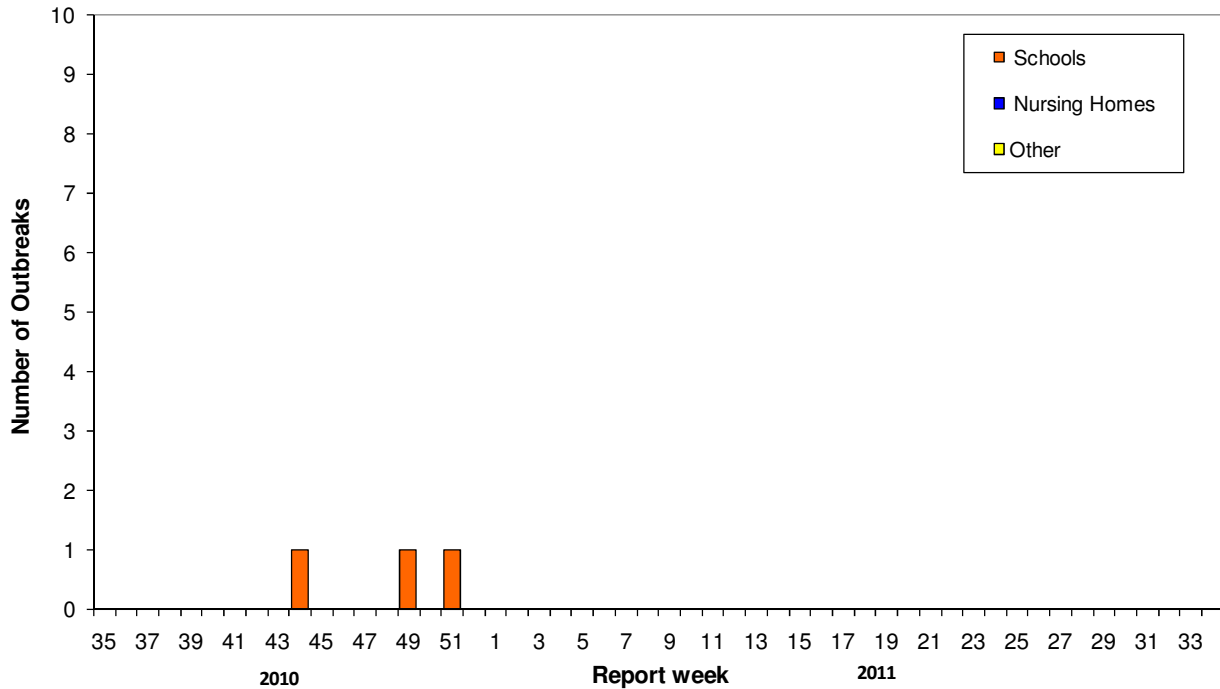
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, and cumulative numbers for the 2009/2010 and 2010/2011 seasons, by Health Region.

	Reporting period: 19/12/10 –01/01/11			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	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	1	5
Region 6	0 out of 9	0 out of 36	0	0	2
Region 7	0 out of 4	1 out of 27	0	2	11
Total NB	0 out of 63	1 out of 353	0	3	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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