

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: January 23, 2011 – January 29, 2011 (week 4)

Summary

In New Brunswick, influenza activity is increasing but within expected levels

In New Brunswick, the ILI consultation rate in week 4 decreased slightly compared to the previous week and was below the expected range for this time of year. There have been 65 positive influenza detections during week 4, thirteen pandemic influenza A (H1N1), thirty-eight influenza A (H3), thirteen untyped influenza A and one influenza B. Five ILI school outbreaks were reported for week 4 in Regions 4, 5, 6 & 7, and one influenza outbreak was reported in a long-term care facility in Region 4.

However, in Canada, the ILI consultation rate in week 4 was 33.3 consultations per 1,000 patients visits, which is similar to 36.1 per 1,000 in week 3. This rate is still within the expected levels for this time of year. The proportion of positive influenza specimens increased from week 45 to 52 and now appears to have peaked. Of the 1155 positive specimens reported during week 4, 380 specimens were reported as influenza A/H3N2 (all provinces except MB), 658 as untyped influenza A (all provinces except PEI, NL), 55 as pandemic H1N1 2009 (all provinces except MB, NS, PEI & NL) and 62 as influenza B (BC, AB, QC, ON & NB). Since the beginning of the season, 88.9% of the subtyped positive influenza A specimens were for influenza A/H3N2. In week 4, detections of Pandemic H1N1 2009 represented 12.6% of all subtyped influenza A specimens. During week 4, the proportion of positive tests for respiratory syncytial virus (RSV) increased slightly from 12.5% to 15.0% of specimens tested while low levels of parainfluenza detections, adenovirus detections continue to be reported. During week 4, 28 new ILI/influenza outbreaks were reported: 18 in long-term care facilities & 10 ILI outbreaks were reported in schools.

Worldwide, influenza transmission in North America appears to be leveling off or decreasing according to several national influenza indicators, though not all regions have experienced a peak yet. Influenza activity in North America has been related primarily to influenza A (H3N2) virus with some co-circulation of influenza type B in the United States. Influenza transmission in the United Kingdom, predominantly related to influenza A (H1N1) 2009, is now decreasing. Influenza activity on the European continent is increasing, particularly in the west, and countries are increasingly reporting severe and fatal cases. Severe cases have been reported in association with all three influenza viruses, H1N1 (2009), influenza A (H3N2), and influenza type B, but H1N1 (2009) appears to be disproportionately over-represented among severe cases when compared to the distribution of viruses in the community. Transmission in Northern Africa and Northern Asia has peaked recently and is declining. In the tropics, several countries of southern Asia have seen increasing trends recently mainly due to H1N1 (2009). Other tropical areas of the world and the temperate countries of the Southern Hemisphere are currently reporting very little influenza circulation.

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 29, 2011 (data source: G. Dumont lab results)

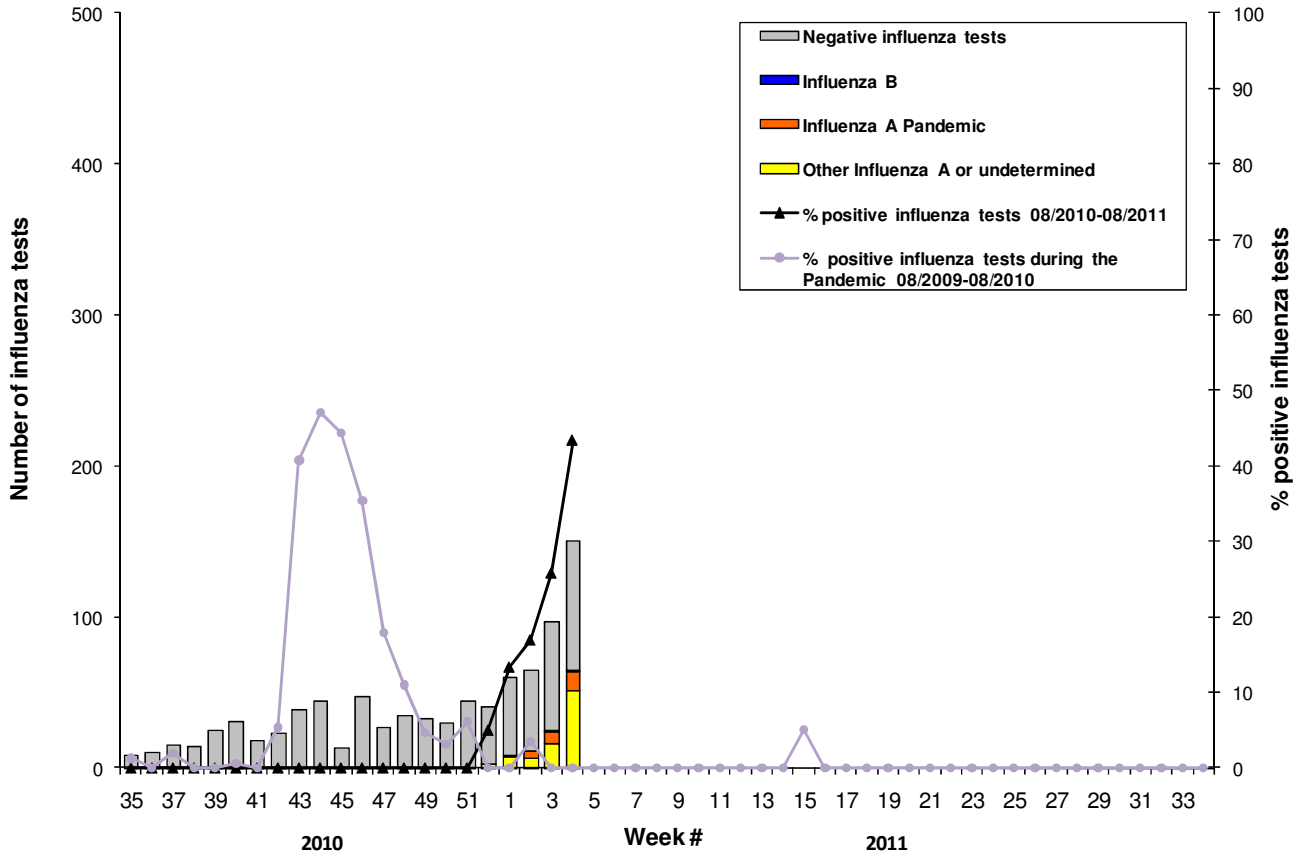


Table 1: Positive influenza test results by Health Region in New Brunswick up to January 29, 2011 (data source: G. Dumont lab results)

	Reporting period: 23/01/11 –29/01/11						Cumulative: (2010/2011 season) 29/08/10 –29/01/11					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	23	2	6	0	0	39	8	9	0	2	793	0
Region 2	Sporadic	0	1	0	0	0	0	1	0	1	0	0	292	1
Region 3	Sporadic	0	2	4	1	0	0	2	4	1	0	1	221	0
Region 4	Localized	0	10	3	6	1	0	14	4	7	2	0	290	0
Region 5	Localized	0	1	0	0	0	0	1	0	0	0	0	96	0
Region 6	Localized	0	1	4	0	0	0	6	11	0	0	0	114	0
Region 7	No activity	0	0	0	0	0	0	1	0	0	0	0	68	0
Total NB		0	38	13	13	1	0	64	27	18	2	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

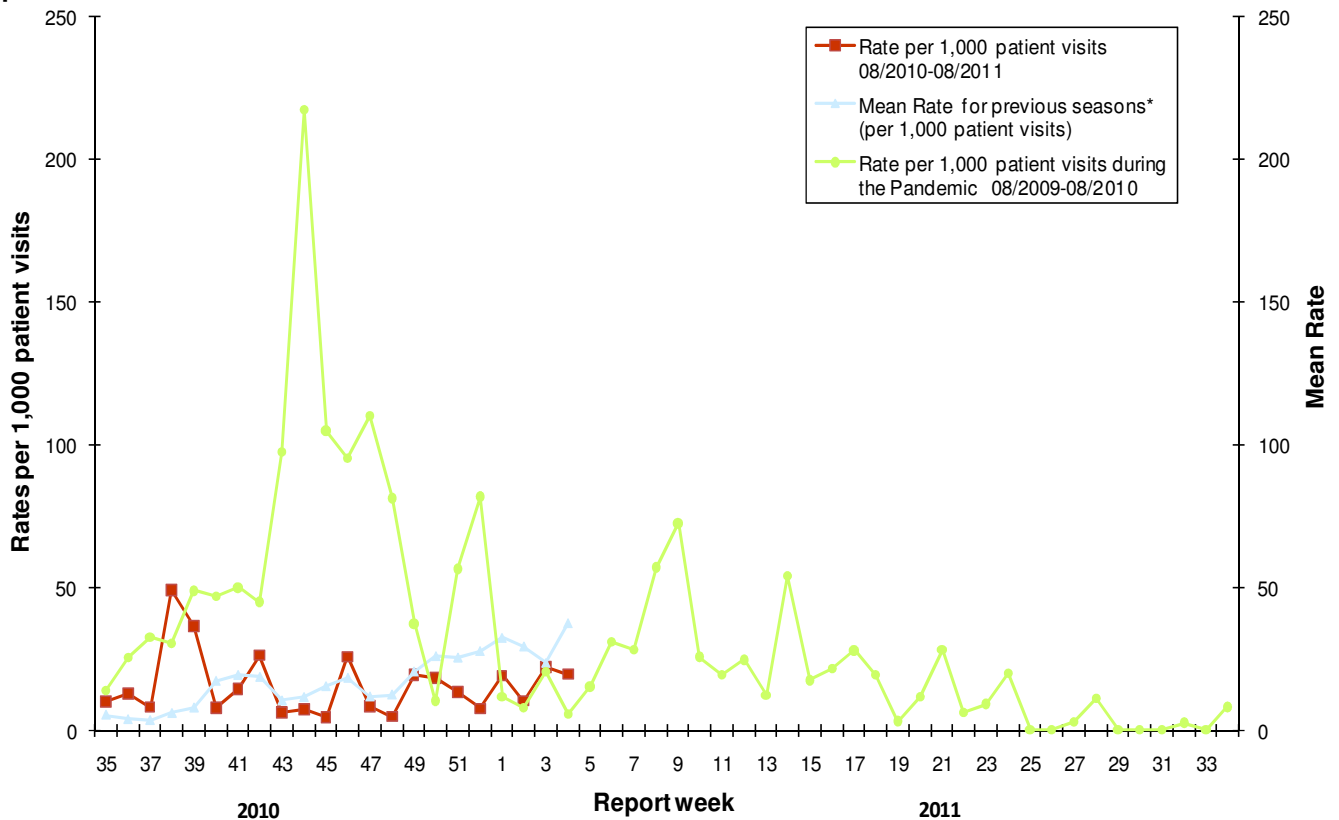
A total of 39 practitioner sites (15 FluWatch sentinel physicians and 24 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

During week 4:

17 practitioner sites (6 FluWatch and 11 NB SPIN) reported a total of 11 cases of ILI of the 561 patients seen for any reason during this reporting period.

For week 4, the ILI consultation rate was 19.6 consultations per 1,000 patient visits which is a slightly lower rate than the week before and below the expected levels for this time of year. The sentinel response rate was 40% 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

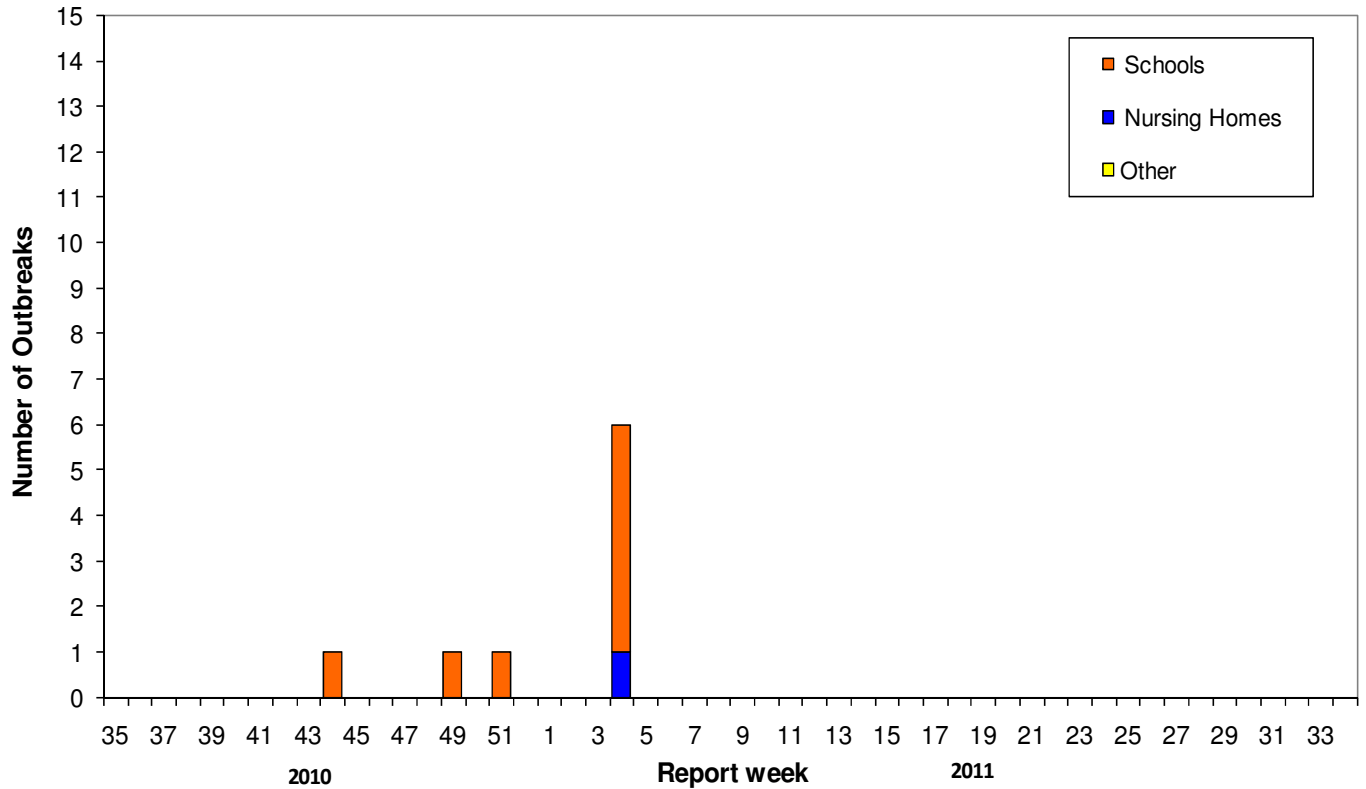
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, and cumulative numbers for the 2009/2010 and 2010/2011 seasons, by Health Region.

	Reporting period: 23/01/11 –29/01/11			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	1 out of 6	1 out of 22	0	2	9
Region 5	0 out of 2	1 out of 18	0	2	5
Region 6	0 out of 9	2 out of 35	0	2	2
Region 7	0 out of 4	1 out of 27	0	3	11
Total NB	1 out of 63	5 out of 352	0	9	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>

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