

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: April 17, 2011 – April 23, 2011 (week 16)

Summary

In New Brunswick, overall influenza activity decreased slightly and was within expected levels

In New Brunswick, the ILI consultation rate in week 16 was 17.1, a similar rate than the previous week and was within the expected range for this time of year. There have been 13 positive influenza detections during week 16, no pandemic influenza A (H1N1) were reported, one influenza A (H3) and twelve influenza B were reported. Three ILI/influenza outbreaks were reported in week 16, one in a long-term care facility in region 2 and two in schools in regions 3 & 7.

However, in Canada, the ILI consultation rate in week 16 was 16.7 consultations per 1,000 patients visits, which is decreased 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 15 and is the third week in which more influenza B detections were reported than influenza A. The proportion of positive tests peaked in week 52. Of the 212 positive specimens reported during week 16, 55 were influenza A and 157 were influenza B (all provinces except NS & PE). Among influenza A detections in week 16, 20 specimens were reported as influenza A/H3N2 (all provinces except MB, QC, PE & NL), 34 as unsubtype influenza A (all provinces except BC, MB & PE), 1 as pandemic H1N1 2009 (BC). 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 16, the proportion of positive tests for respiratory syncytial virus (RSV) decreased to 9.2% of specimens tested and appears to have peaked at week 7. During week 16, 14 new ILI/influenza outbreaks were reported: 7 in long-term care facilities (LTCF); 1 outbreak of influenza in a hospital; 5 ILI outbreaks in schools and 1 outbreak in another facility in NL.

Worldwide, influenza activity is generally low and decreasing. Influenza activity in the northern hemisphere temperate regions is back to baseline levels in most areas, indicating the season is now ending. In countries of the tropical zone, influenza activity is generally low with a few recent localized areas of activity reported and ongoing transmission of H3N2 in central Africa. In southern hemisphere temperate countries influenza seasonal activity has not yet started. Viruses which have been characterized antigenically continue to be largely related to the lineages found in the current trivalent seasonal vaccine, except for a small number of influenza B viruses of the Yamagata lineage.

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 April 23, 2011 (data source: G. Dumont lab results)

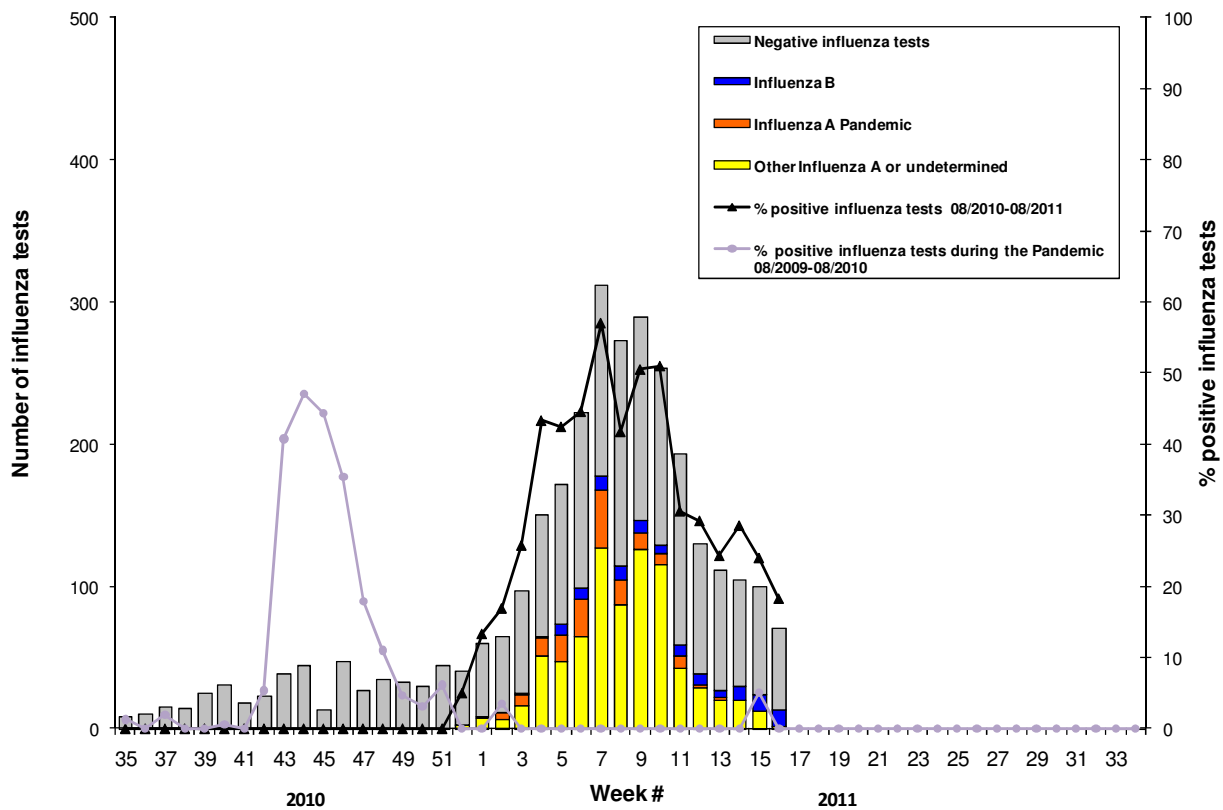


Table 1: Positive influenza test results by Health Region in New Brunswick up to April 23, 2011 (data source: G. Dumont lab results)

	Activity level ¹	Reporting period: 17/04/11 –23/04/11					Cumulative: (2010/2011 season) 29/08/10 –23/04/11					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	51	19	2	793	0
Region 2	Localized	0	0	0	0	5	0	41	2	7	9	0	292	1
Region 3	Localized	0	0	0	0	4	0	87	16	25	17	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	1	0	0	0	0	39	27	7	0	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	0	12	0	665	165	108	104	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

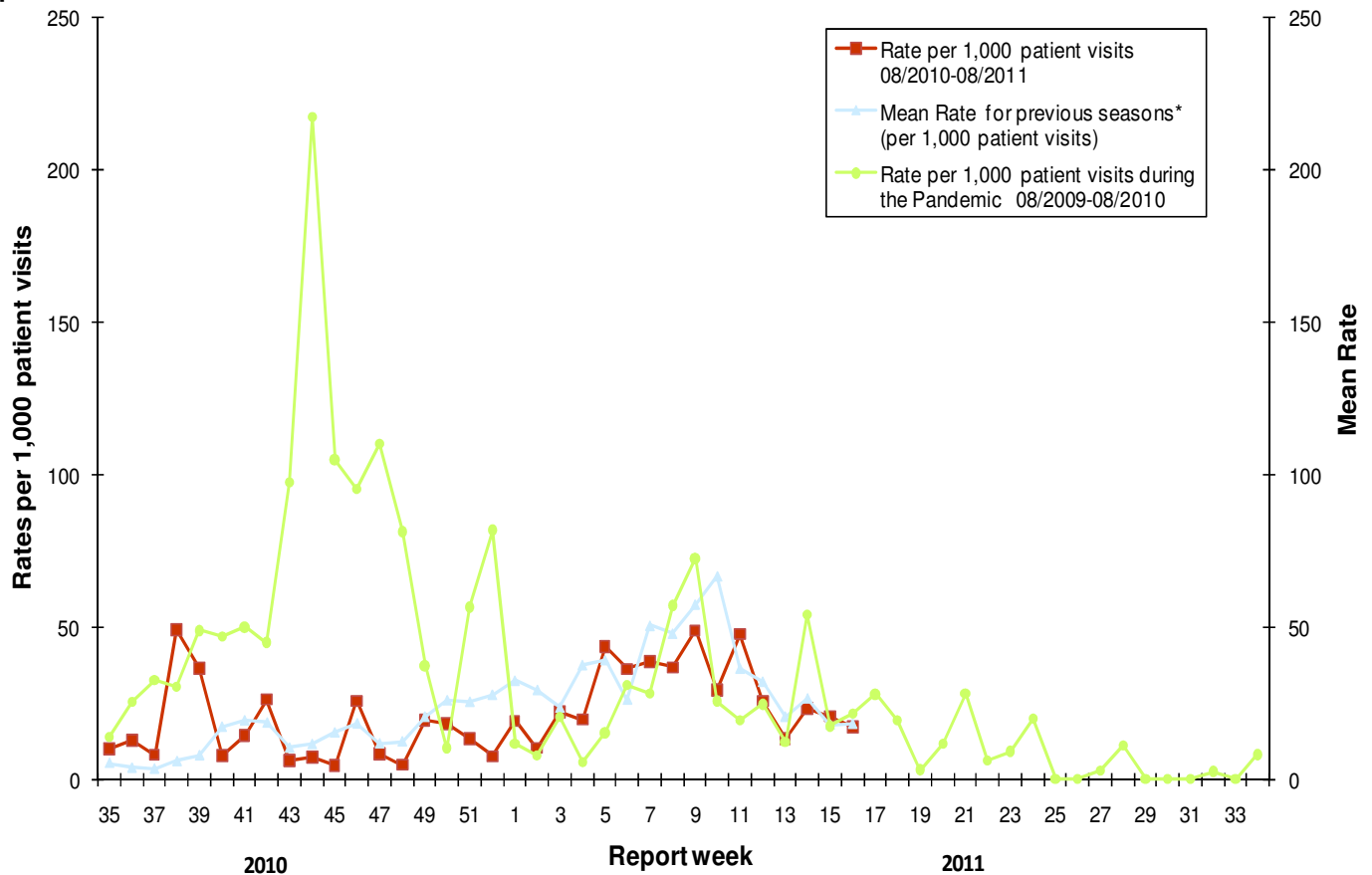
A total of 39 practitioner sites (15 FluWatch sentinel physicians and 24 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

During week 16:

13 practitioner sites (6 FluWatch and 7 NB SPIN) reported a total of 6 cases of ILI of the 351 patients seen for any reason during this reporting period.

For week 16, the ILI consultation rate was 17.1 consultations per 1,000 patient visits which is a similar rate than the week before and was within the expected levels for this time of year. The sentinel response rate was 40% for the FluWatch sentinel physicians and 29% 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

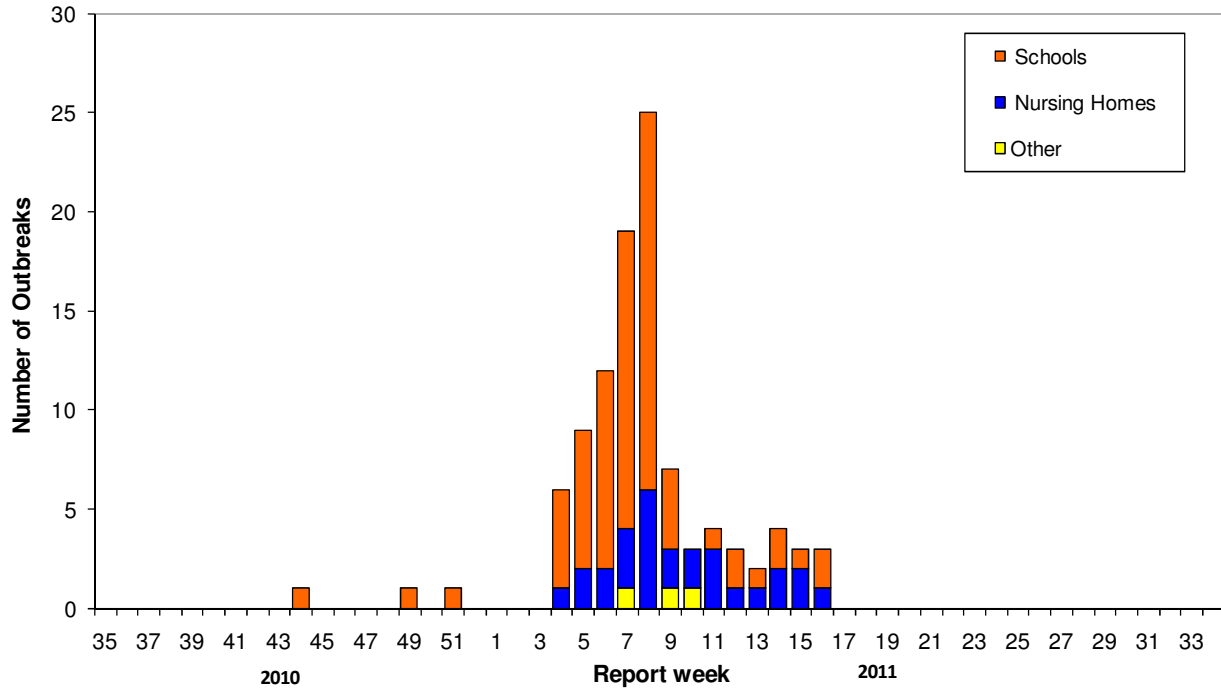
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, and cumulative numbers for the 2009/2010 and 2010/2011 seasons, by Health Region.

	Reporting period: 17/04/11 –23/04/11			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	1 out of 15(ongoing)	0 out of 81	0	21	49
Region 3	0 out of 14	1 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	13	5
Region 6	0 out of 9	0 out of 35	0	9	2
Region 7	0 out of 4	1 out of 27	0	19	11
Total NB	1 out of 63	2 out of 352	0	103	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