WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: April 3, 2011 – April 9, 2011 (week 14)

Summary

In New Brunswick, overall influenza activity remains stable in week 14

In New Brunswick, the ILI consultation rate in week 14 was 23.3, a higher rate than the previous week and was within the expected range for this time of year. There have been 31 positive influenza detections during week 14, no pandemic influenza A (H1N1) were reported, nineteen influenza A (H3), two unsubtyped influenza A and ten influenza B were reported. Four ILI/influenza outbreaks were reported in week 14, two in long-term care facilities in region 2 and two in schools in regions 2 & 7.

However, in Canada, the ILI consultation rate in week 14 was 17.2 consultations per 1,000 patients visits, which is decreased compared to previous weeks and is slightly below the expected levels for this time of year. During week 14, all indicators of influenza activity have decreased. The proportion of positive influenza tests overall has decreased compared to week 13 and is the first week in which more influenza B detections were reported than influenza A. The proportion of positive tests peaked in week 52. Of the 412 positive specimens reported during week 14, 169 were influenza A and 243 were influenza B (all provinces except NS & PE). Among influenza A detections in week 14, 54 specimens were reported as influenza A/H3N2 (all provinces except MB & NL), 103 as unsubtyped influenza A (all provinces except MB & PE), 12 as pandemic H1N1 2009 (BC, AB & QC). 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 where it accounted for 3.4% of all positive influenza specimens to 59.0% in week 14. During week 14, the proportion of positive tests for respiratory syncytial virus (RSV) increased slightly to 14.3% of specimens tested and appears to have peaked at week 7. During week 14, 11 new ILI/influenza outbreaks were reported: 6 in long-term care facilities (LTCF); 2 outbreaks of influenza in hospitals; 2 ILI school outbreaks; 1 ILI outbreak in a facility.

Worldwide, influenza activity is generally low. Influenza activity in the northern hemisphere temperate regions is continuing to decline or back to baseline levels indicating the season is ending. In countries in the tropical zone, influenza activity is low in most areas. In southern hemisphere countries influenza 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 9, 2011 (data source: G. Dumont lab results)

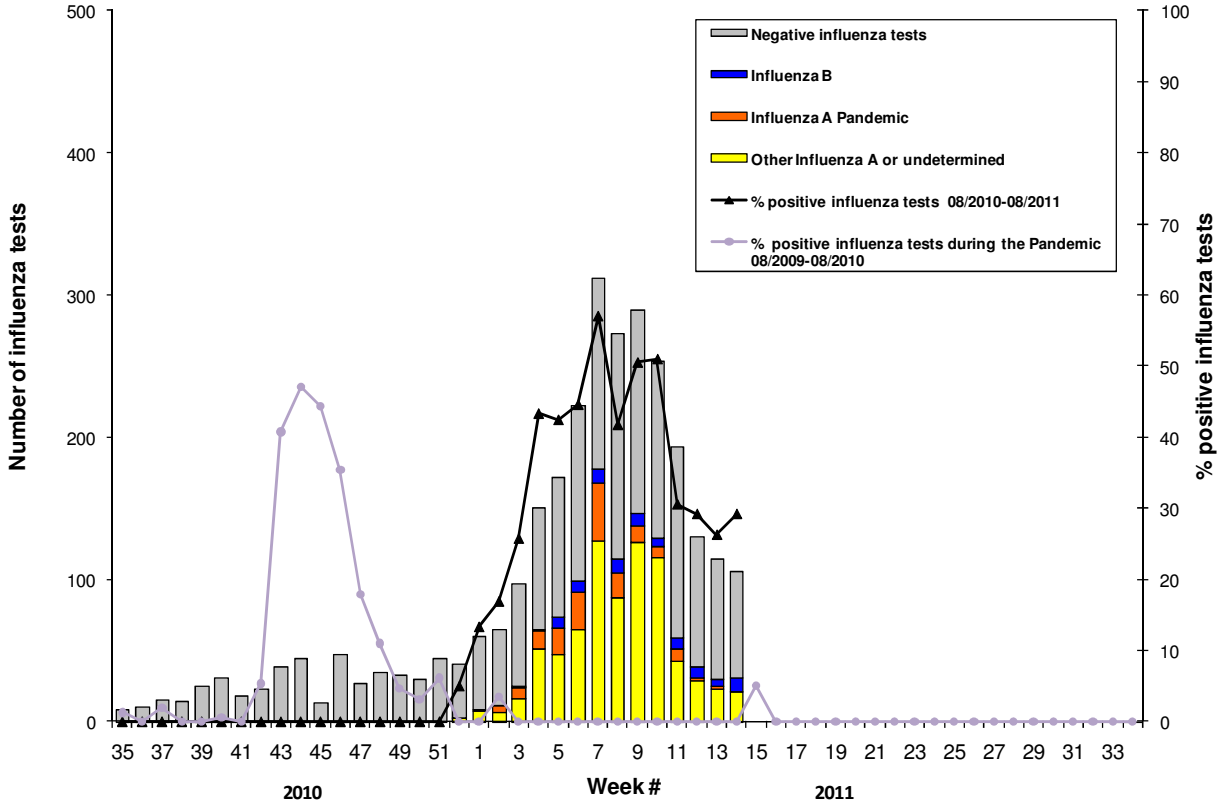


Table 1: Positive influenza test results by Health Region in New Brunswick up to April 9, 2011 (data source: G. Dumont lab results)

	Reporting period: 03/04/11 –09/04/11						Cumulative: (2010/2011 season) 29/08/10 –09/04/11					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)	pH1N1	Unsub typed		A(H1)	A(H3)	pH1N1	Unsub typed		Non-pH1N1 or undeterm	pH1N1	
Region 1	Sporadic	0	8	0	1	3	0	380	56	50	14	2	793	0
Region 2	Localized	0	8	0	0	3	0	34	2	7	3	0	292	1
Region 3	Sporadic	0	1	0	0	0	0	87	16	25	7	1	221	0
Region 4	Sporadic	0	0	0	0	4	0	68	58	11	54	0	290	0
Region 5	Sporadic	0	0	0	1	0	0	21	3	5	1	0	96	0
Region 6	No activity	0	0	0	0	0	0	38	27	6	0	0	114	0
Region 7	Localized	0	2	0	0	0	0	30	3	2	1	0	68	0
Total NB		0	19	0	2	10	0	658	165	106	80	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

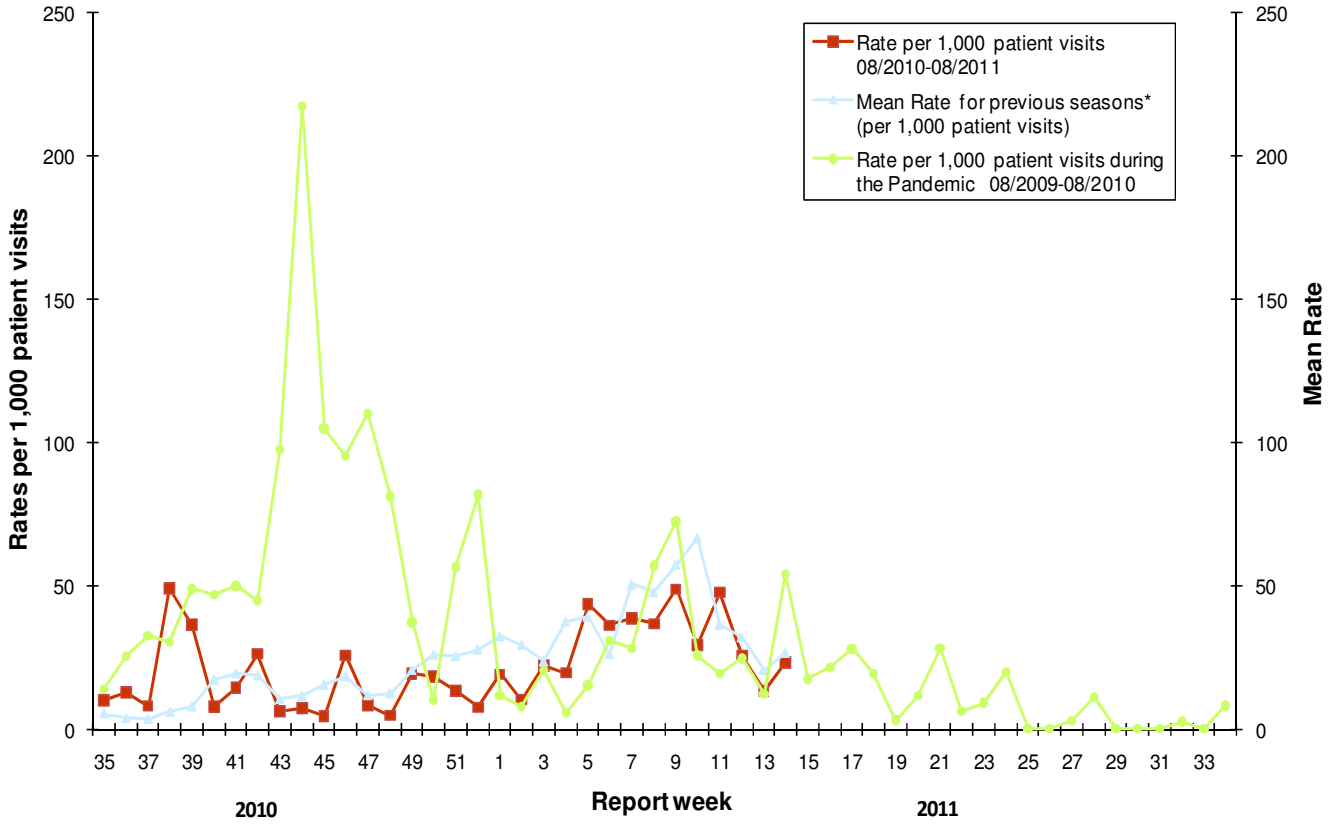
2) ILI Consultation Rates

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 14:
23 practitioner sites (10 FluWatch and 13 NB SPIN) reported a total of 14 cases of ILI of the 600 patients seen for any reason during this reporting period.

For week 14, the ILI consultation rate was 23.3 consultations per 1,000 patient visits which is a higher rate than the week before and was within the expected levels for this time of year. The sentinel response rate was 67% for the FluWatch sentinel physicians and 54% 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

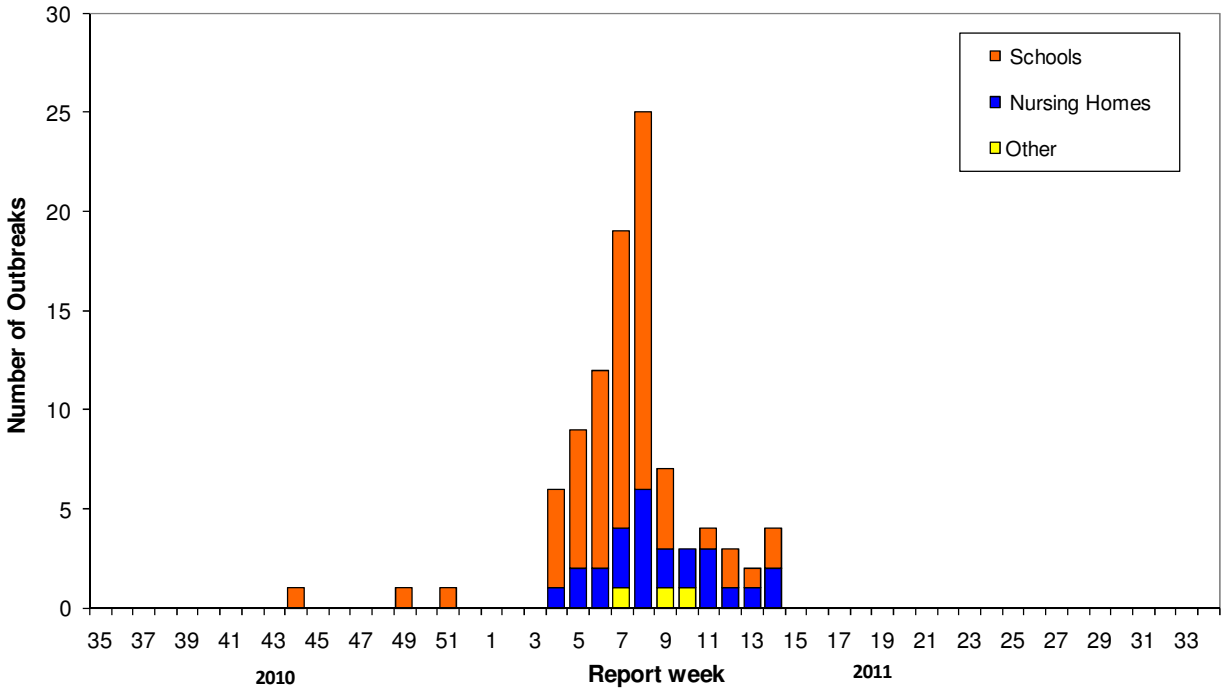
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, and cumulative numbers for the 2009/2010 and 2010/2011 seasons, by Health Region.

	Reporting period: 03/04/11 –09/04/11				
	Lab-confirmed outbreaks in Nursing Homes*	Schools reporting ILI outbreaks**	Lab-confirmed outbreaks in Other Settings*	Cumulative # of outbreaks (current season) 2010-2011	Cumulative # of outbreaks (past season) 2009-2010
Region 1	0 out of 13	0 out of 74	0	16	16
Region 2	2 out of 15	1 out of 81	0	18	49
Region 3	0 out of 14	0 out of 95	0	11	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(ongoing)	0	18	11
Total NB	**2 out of 63**	**2 out of 352**	**0**	**97**	**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 Homes[1] and ILI Outbreaks in Schools[2] 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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