WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: February 6, 2011 – February 12, 2011 (week 6)

Summary

In New Brunswick, influenza activity slightly increased (2 indicators) and was within expected levels

In New Brunswick, the ILI consultation rate in week 6 decreased slightly compared to the previous week and was within the expected range for this time of year. There have been 100 positive influenza detections during week 6, twenty-six pandemic influenza A (H1N1), sixty influenza A (H3), six unsubtyped influenza A and eight influenza B. Ten ILI school outbreaks were reported for week 6 in Regions 3, 4, 5, 6 & 7, and two influenza outbreaks were reported in long-term care facilities in Region 4.

However, in Canada, the ILI consultation rate in week 6 was 35.7 consultations per 1,000 patients visits, an increase from week 5, however still within the expected levels for this time of year. The proportion of positive influenza tests increased slightly in weeks 5 and 6, due to an increase in the positive tests in BC, QC and the Atlantic provinces. Of the 1280 positive specimens reported during week 6, 420 specimens were reported as influenza A/H3N2 (all provinces except MB), 653 as unsubtyped influenza A (all provinces except PEI, NL), 88 as pandemic H1N1 2009 (all provinces except MB, PE & NL) and 119 as influenza B (all provinces except MB, NL & PE). Since the beginning of the season, 87.0% of the subtyped positive influenza A specimens were for influenza A/H3N2. In week 6, detections of Pandemic H1N1 2009 represented 17.3% of all subtyped influenza A specimens. During week 6, the proportion of positive tests for respiratory syncytial virus (RSV) increased slightly from 16.9% to 19.0% of specimens tested while low levels of parainfluenza detections and rhinovirus detections continue to be reported. During week 6, 34 new ILI/influenza outbreaks were reported: 21 in long-term care facilities, 9 ILI outbreaks were reported in schools and 4 outbreaks in other facilities

Worldwide, influenza activity is increasing on the European continent, particularly in the central, south and eastern part. In the tropics, several countries of southern Asia have seen a recent increase in influenza virus transmission mainly due to influenza A(H1N1) 2009 virus. Other tropical areas of the world and the temperate countries of the southern hemisphere are currently reporting very little influenza circulation. Influenza transmission in North America, notably in the United States of America has increased this week with a slight increase of (H1N1) 2009 compared to earlier weeks. Transmission in most of northern Africa and the Middle East has peaked recently and is declining. Some countries in northern Asia are seeing an increase in (H1N1) 2009 transmissions and some are seeing an increase in influenza-like illness activity. The majority of the viruses characterized from North America and Europe are closely related to the vaccine viruses for the current seasonal vaccines. In general A(H1N1)2009 and B viruses predominated in Asia and Europe. In the North Americas A (H3N2) activity remained high but A(H1N1)2009 activity increased.

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 February 12, 2011 (data source: G. Dumont lab results)

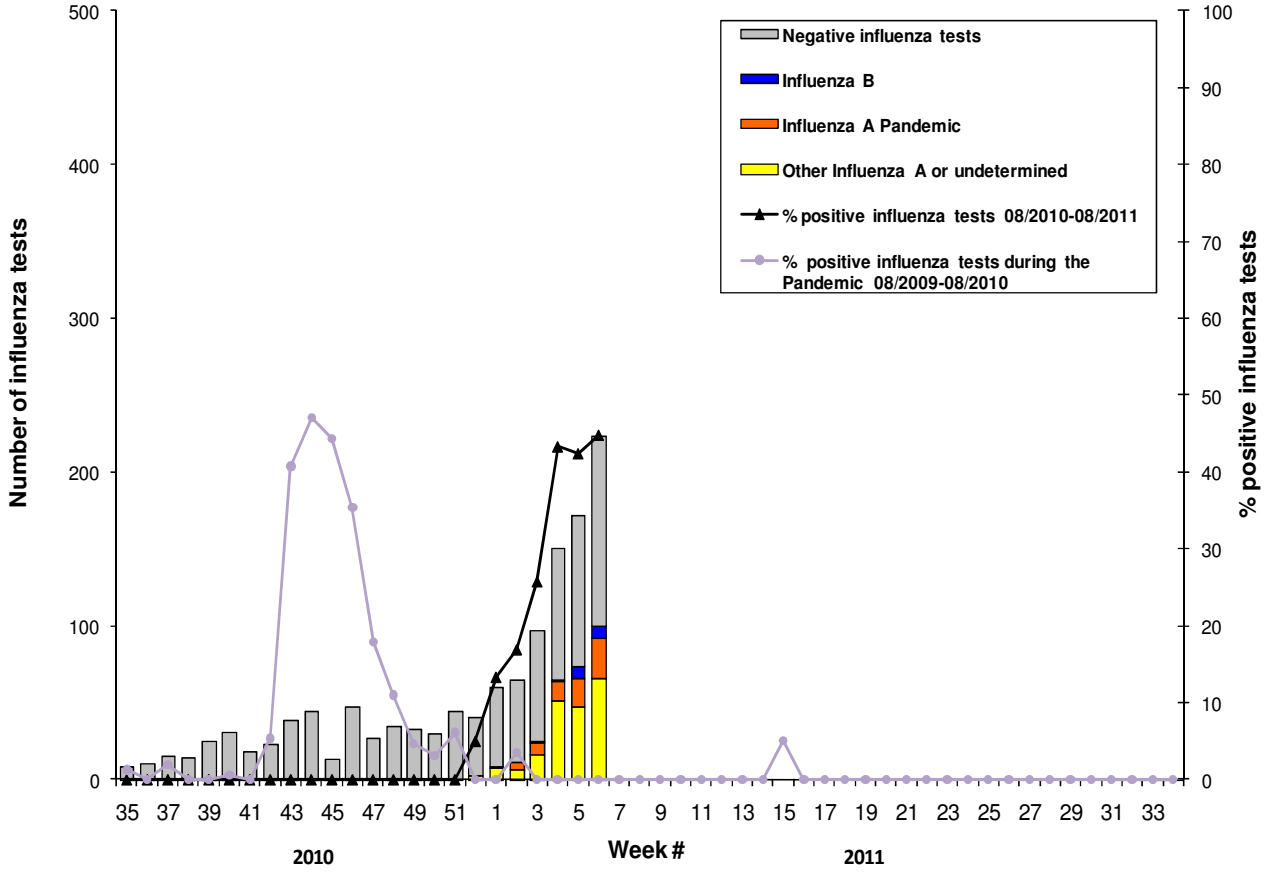


Table 1: Positive influenza test results by Health Region in New Brunswick up to February 12, 2011 (data source: G. Dumont lab results)

	Reporting period: 06/02/11 –12/02/11						Cumulative: (2010/2011 season) 29/08/10 –12/02/11					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	28	4	1	0	0	90	18	8	0	2	793	0
Region 2	Sporadic	0	1	0	0	0	0	2	0	1	0	0	292	1
Region 3	Localized	0	2	0	0	0	0	10	4	0	0	1	221	0
Region 4	Localized	0	13	18	4	8	0	49	34	7	17	0	290	0
Region 5	Localized	0	4	1	1	0	0	6	1	1	0	0	96	0
Region 6	Localized	0	6	2	0	0	0	12	15	0	0	0	114	0
Region 7	Localized	0	6	1	0	0	0	8	1	0	0	0	68	0
Total NB		0	60	26	6	8	0	177	73	17	17	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

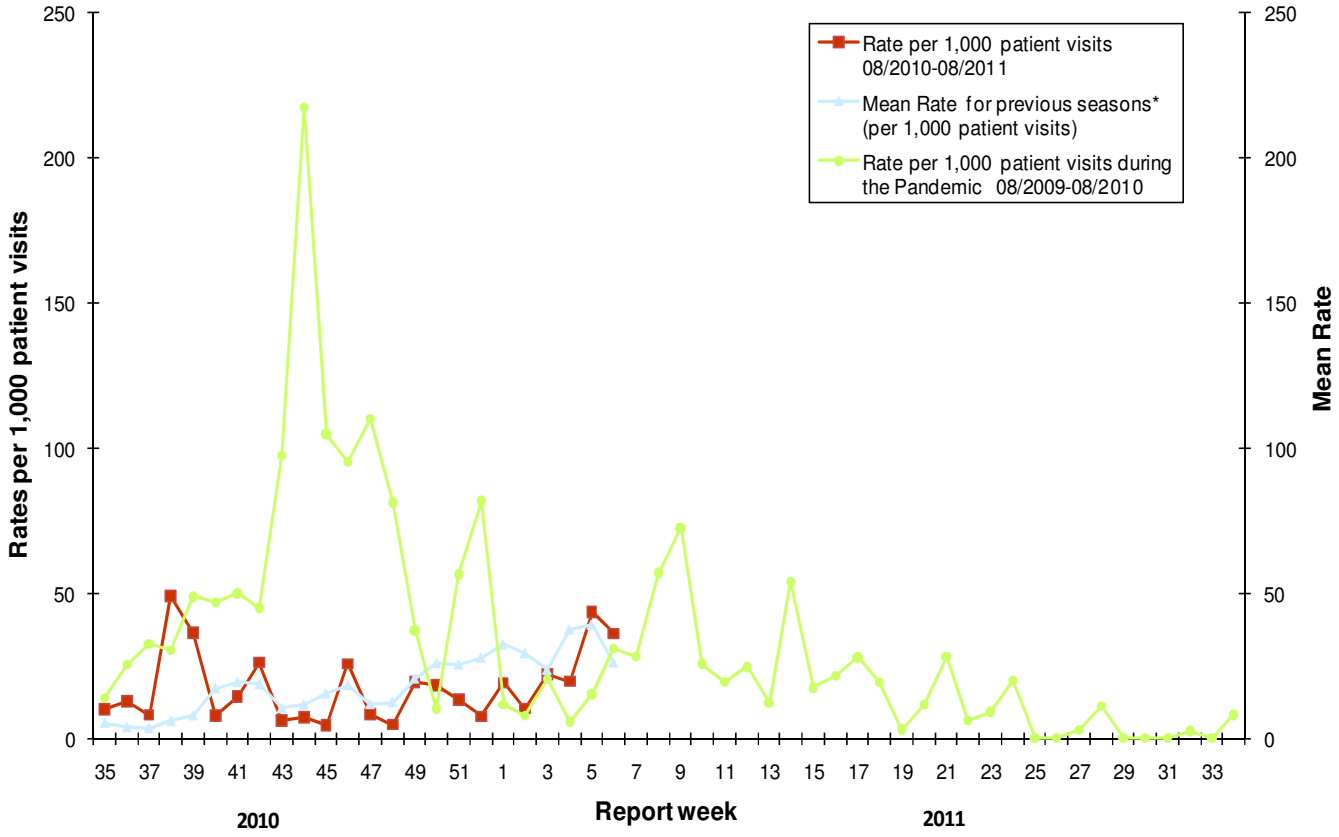
2) ILI Consultation Rates

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 6:
18 practitioner sites (6 FluWatch and 12 NB SPIN) reported a total of 27 cases of ILI of the 745 patients seen for any reason during this reporting period.

For week 6, the ILI consultation rate was 36.2 consultations per 1,000 patient visits which is a slightly lower rate than the week before and within the expected levels for this time of year. The sentinel response rate was 40% for the FluWatch sentinel physicians and 50% 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

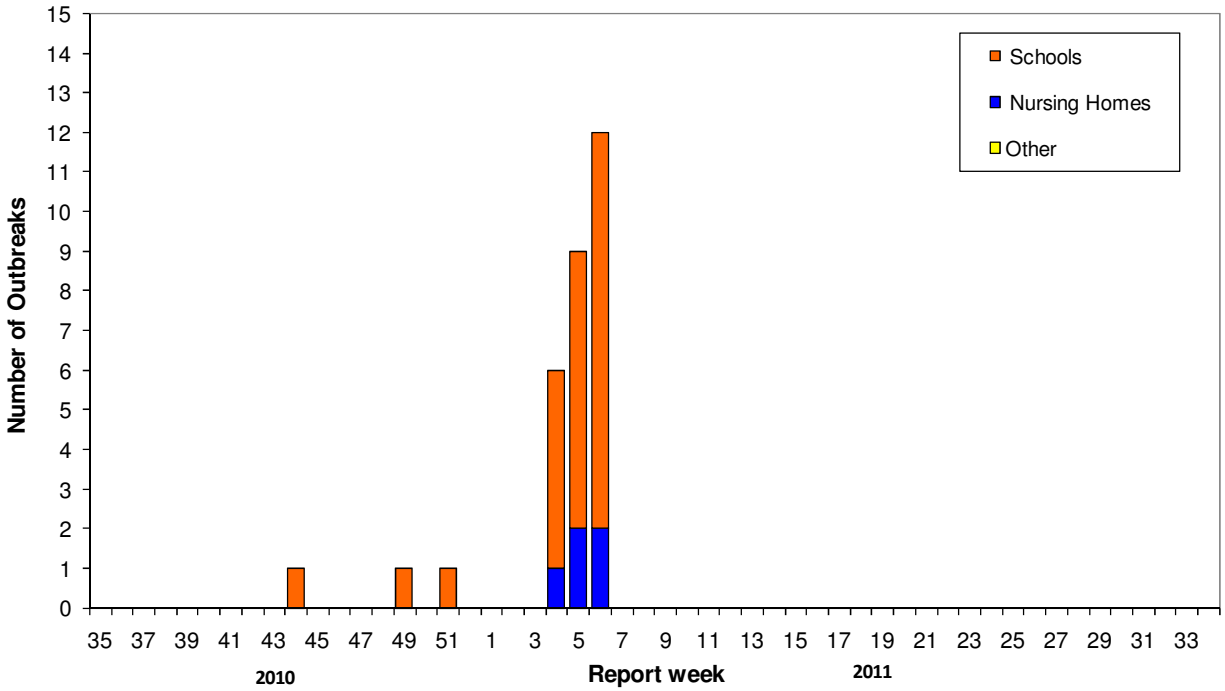
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, and cumulative numbers for the 2009/2010 and 2010/2011 seasons, by Health Region.

	Reporting period: 06/02/11 –12/02/11				
	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	1	16
Region 2	0 out of 15	0 out of 81	0	0	49
Region 3	0 out of 14	2 out of 95	0	2	38
Region 4	2 out of 6(1 ongoing)	2 out of 22	0	9	9
Region 5	0 out of 2	3 out of 18(2 ongoing)	0	9	5
Region 6	0 out of 9	2 out of 35	0	4	2
Region 7	0 out of 4	1 out of 27	0	5	11
Total NB	**2 out of 63**	**10 out of 352**	**0**	**30**	**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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