

WEEKLY NEW BRUNSWICK INFLUENZA REPORT
Reporting period: March 20, 2011 – March 26, 2011 (week 12)

Summary

In New Brunswick, decreases in percent positive lab results (since week 11) and ILI outbreaks have been observed

In New Brunswick, the ILI consultation rate in week 12 was 25.7, a lower rate than the previous week and was within the expected range for this time of year. There have been 38 positive influenza detections during week 12, two pandemic influenza A (H1N1), twenty-three influenza A (H3), six untyped influenza A and seven influenza B. Three ILI/influenza outbreaks were reported in week 12, one in a long-term care facility in region 1 and two in schools in regions 2 & 7.

However, in Canada, the ILI consultation rate in week 12 was 23.4 consultations per 1,000 patients visits, which is decreased slightly compared to 25.9 in week 11 and within the expected levels for this time of year. The proportion of positive influenza tests overall continued to decline in week 12, although influenza B continues to increase steadily in most regions of the country except the Atlantic provinces. The proportion of positive tests peaked in week 52. Of the 520 positive specimens reported during week 12, 110 specimens were reported as influenza A/H3N2 (all provinces except MB), 146 as untyped influenza A (all provinces except MN, PE & NL), 33 as pandemic H1N1 2009 (all provinces except MN, QC & NL) and 231 as influenza B (all provinces except MB, NS & NL). Since the beginning of the season, 84.8% 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 44.4% in week 12. During week 12, the proportion of positive tests for respiratory syncytial virus (RSV) was stable at 16.7% of specimens tested and appears to have peaked at week 7. During week 12, 23 new ILI/influenza outbreaks were reported: 13 in long-term care facilities (LTCF); 2 outbreaks of influenza B in schools; 7 ILI school outbreaks; 1 ILI outbreak in a facility.

Worldwide, influenza activity in most areas of the northern hemisphere temperate regions appears to have peaked and is declining. Although the level of pneumonia and influenza mortality in the United States is above the epidemic threshold and many states still are reporting on widespread activity, most indicators on influenza activity in North America are indicating decreasing influenza activity. As activity in the Americas declines, influenza A(H1N1) 2009 has increased proportionately and now accounts for 38% of all virus detections. In Europe, the peak has been passed in most countries and all countries now report medium to low influenza activity. Cases of Severe Acute Respiratory Infections in Europe are decreasing but still above baseline in some parts of Eastern Europe. Influenza viruses in Europe continue to be primarily influenza A(H1N1) 2009, about 70% of all viruses characterized, and influenza type B, making up about 28% of all viruses. Data from parts of Northern Africa show that there is ongoing community transmission of both influenza A(H1N1) 2009 and influenza type B in Tunisia and Algeria. The large majority of the viruses characterized are closely related to the vaccine strains included in the current seasonal vaccines. 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 March 26, 2011 (data source: G. Dumont lab results)

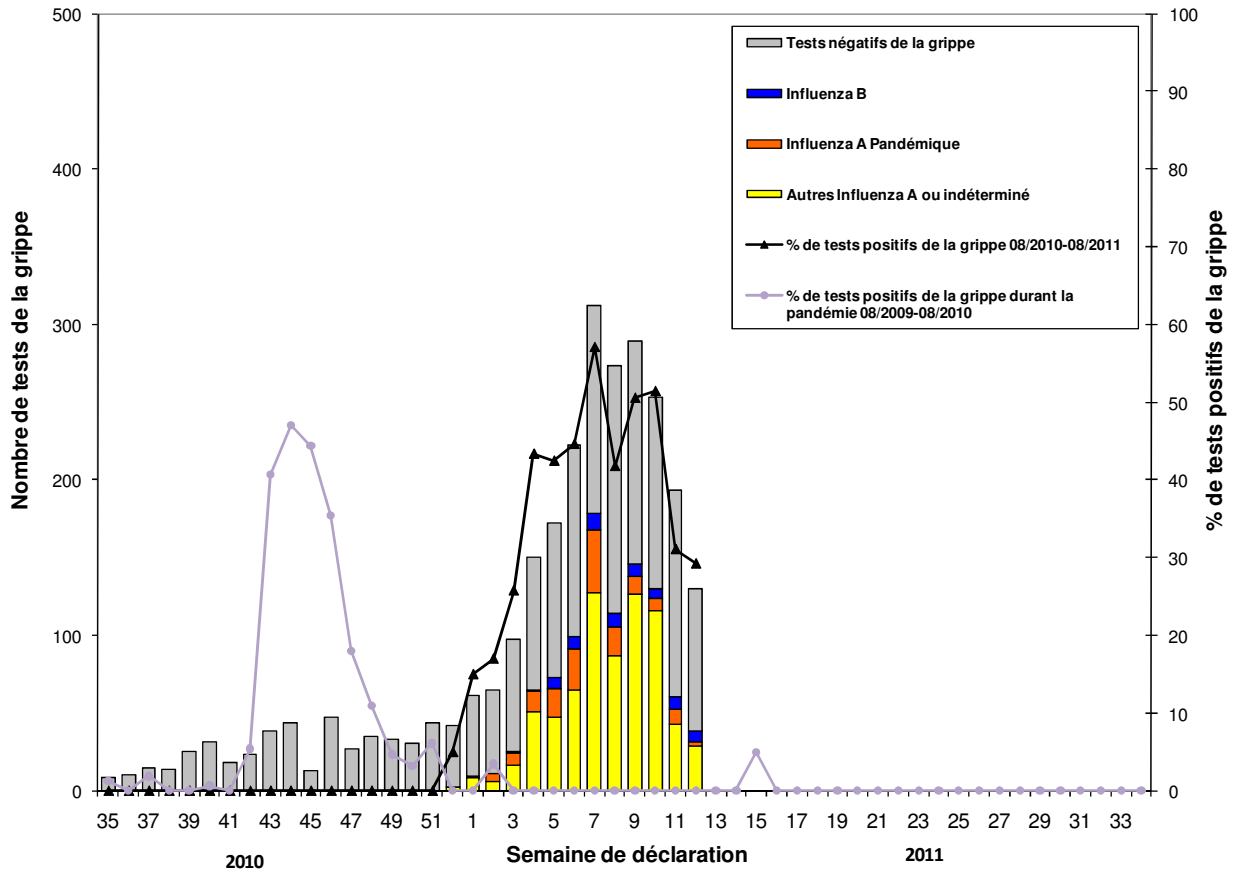


Table 1: Positive influenza test results by Health Region in New Brunswick up to March 26, 2011 (data source: G. Dumont lab results)

	Activity level ¹	Reporting period: 20/03/11 –26/03/11					Cumulative: (2010/2011 season) 29/08/10 –26/03/11					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	Localized	0	16	0	0	1	0	357	54	49	10	2	793	0
Region 2	Localized	0	2	0	3	0	0	24	2	7	0	0	292	1
Region 3	Sporadic	0	5	2	2	0	0	85	16	25	6	1	221	0
Region 4	Sporadic	0	0	0	0	4	0	67	58	11	47	0	290	0
Region 5	Sporadic	0	0	0	0	1	0	21	3	4	1	0	96	0
Region 6	Sporadic	0	0	0	1	0	0	37	27	5	0	0	114	0
Region 7	Localized	0	0	0	0	1	0	28	3	2	1	0	68	0
Total NB		0	23	2	6	7	0	619	163	103	65	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

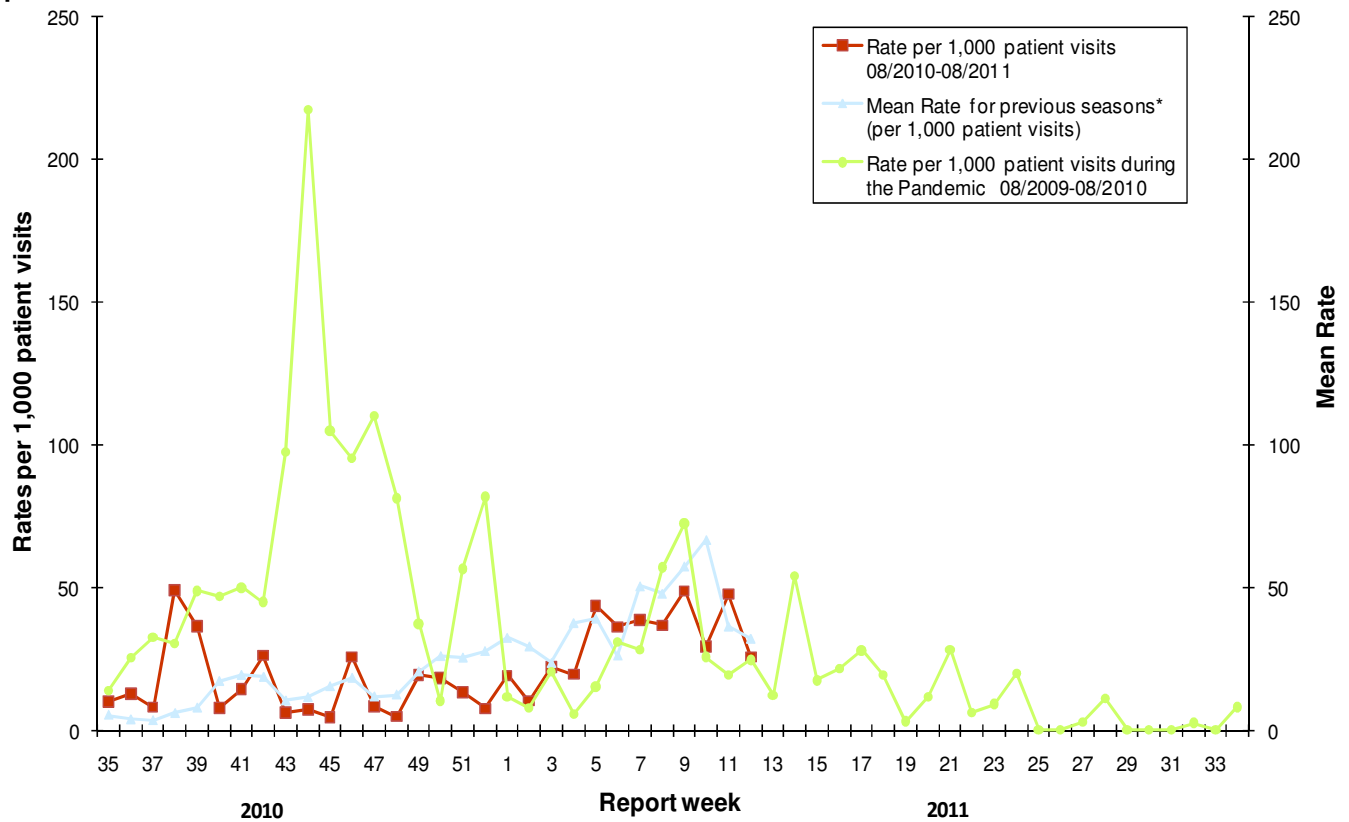
A total of 39 practitioner sites (15 FluWatch sentinel physicians and 24 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

During week 12:

20 practitioner sites (10 FluWatch and 10 NB SPIN) reported a total of 17 cases of ILI of the 661 patients seen for any reason during this reporting period.

For week 12, the ILI consultation rate was 25.7 consultations per 1,000 patient visits which is a lower 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 42% 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

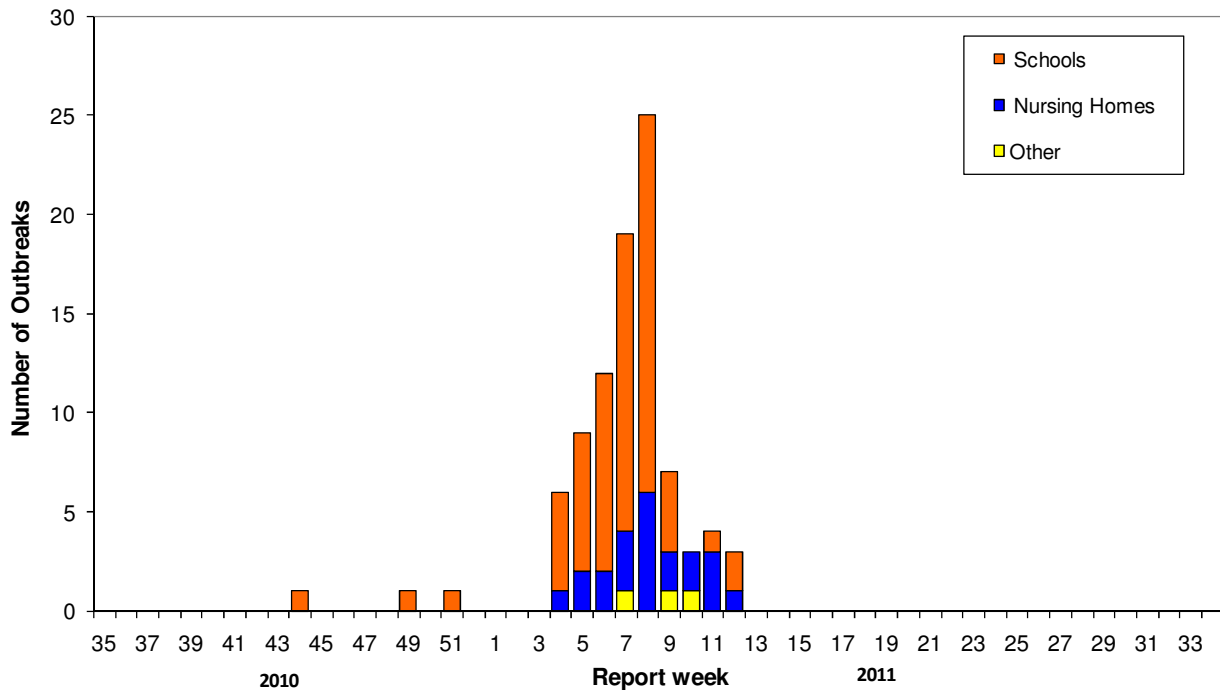
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, and cumulative numbers for the 2009/2010 and 2010/2011 seasons, by Health Region.

	Reporting period: 20/03/11 –26/03/11			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	1 out of 13(ongoing)	0 out of 74	0	15	16
Region 2	0 out of 15	1 out of 81	0	15	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	12	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	17	11
Total NB	1 out of 63	2 out of 352	0	91	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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