

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: February 17 to February 23 2013 (week 8)

Summary

In New Brunswick, decrease continues to be observed in positive laboratory detections as well as number of outbreaks reported.

New Brunswick:

- There have been 69 positive influenza detections during week 8 (5% decrease from previous week), 67 influenza A (unsubtyped) and 2 influenza B.
- The ILI consultation rate increased slightly and was slightly below the expected range for this time of year.
- Continued decrease since week 4 in the number of reported ILI and influenza-confirmed outbreaks; 2 in Nursing Homes.

Canada:

- Specific indicators of influenza activity continued to decrease, while indicators of the circulation of respiratory viruses such as the ILI consultation rate were similar to recent weeks. The number of regions reporting widespread or localized activity was similar to recent weeks; however there is an overall decline in influenza/ILI activity from the peak in early January.
- 671 laboratory detections of influenza were reported, proportion of positive tests was 12.7%.
- The ILI consultation rate decreased slightly but is within the expected level for this time of year. 34 influenza outbreaks were reported: 18 in long-term care facilities, 3 in hospitals, 2 in schools and 11 in other settings.

International:

- From September 2012 to date, 13 reports have been received of human infections with a novel coronavirus, 6 from Saudi Arabia, 2 from Qatar, 2 from Jordan and 3 from United Kingdom. There have been 7 fatal cases. Investigation is continuing in order to identify the source, the route of transmission and changes with the virus.
- Recommendations of the WHO for composition of the influenza vaccine (trivalent) for use in the 2013-2014 northern hemisphere influenza season are as follows: an A/California/7/2009 (H1N1)pdm09-like virus, an A(H3N2) virus antigenically like the cell-propagated prototype virus A/Victoria/361/201 and a B/Massachusetts/2/2012-like virus.

1) **Influenza Laboratory Data**¹

- A 5% decrease in percent positive laboratory results compared to previous week.
- 69 influenza detections were reported during that period.
- Since the beginning of the season, 1278 positive influenza detections have been reported, 7 influenza A (H1N1)pdm09, 378 influenza A (H3) viruses, 884 influenza A (unsubtyped) and 9 influenza B.

¹ Surveillance specimens are submitted by recruited New Brunswick Sentinel Practitioner Influenza Network (NB SPIN) practitioners, which are comprised of 8 sites in Emergency Rooms, 5 sites in Family Practice, 3 sites in First Nations communities, 1 site in a Nursing Home, 3 sites in Universities and 8 sites in Community Health Centers. 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 23, 2013 (data source: G. Dumont lab results)

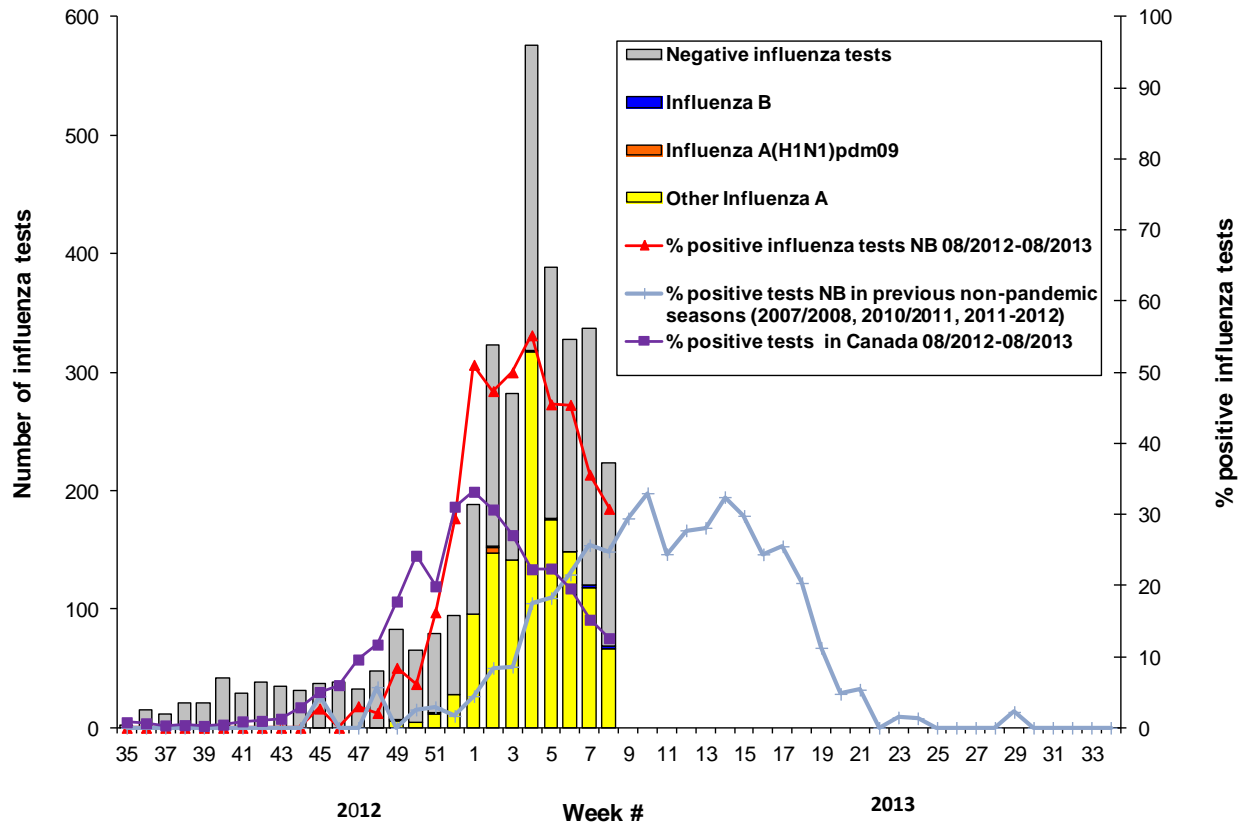


Table 1: Positive influenza test results by Health Region in New Brunswick up to February 23, 2013 (data source: G. Dumont lab results)

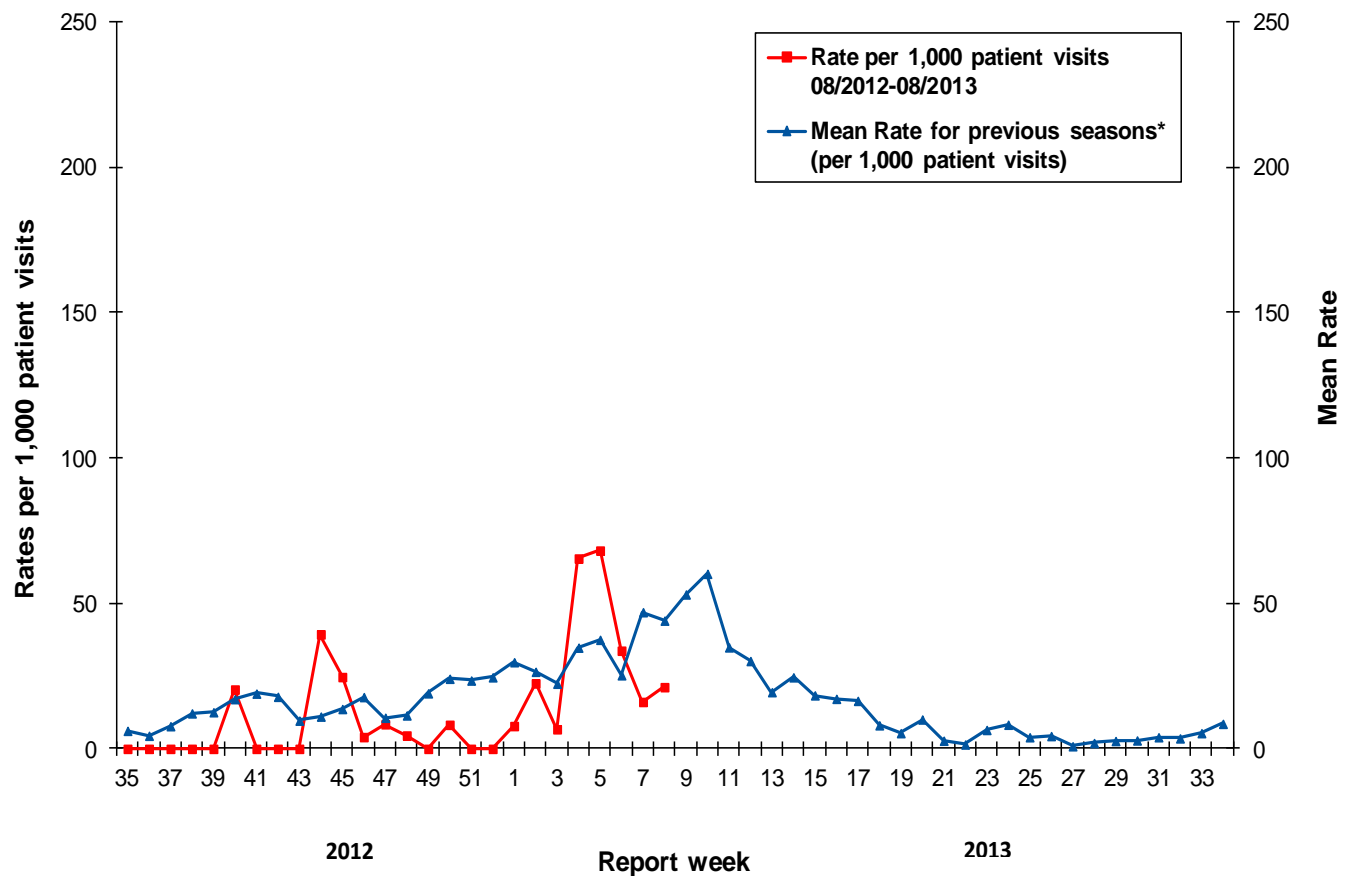
Region	Reporting period: February/17/2012–February/23/2013							Cumulative: (2012/2013 season) Aug./26/2012 –Feb./23/2013						Cumulative: (2011/2012 season) Aug./28/2011 – Aug./25/2012			
	Activity level ²	A				B	Total	A				B	Total	A		B	Total
		A(H1)	A(H3)	(H1N1) pdm09	unsub typed	A(H1)		A(H3)	(H1N1) pdm09	unsub typed	A(H1)	(H1N1) pdm09		(H1N1) pdm09			
Region 1	Sporadic	0	0	0	31	0	31	0	128	6	366	4	504	24	17	206	247
Region 2	Localized	0	0	0	12	1	13	0	30	1	152	4	187	1	2	18	21
Region 3	Localized	0	0	0	4	0	4	0	21	0	53	0	74	1	0	3	4
Region 4	Sporadic	0	0	0	9	0	9	0	33	0	134	0	167	2	9	2	13
Region 5	Sporadic	0	0	0	1	0	1	0	10	0	9	0	19	0	2	4	6
Region 6	Sporadic	0	0	0	0	1	1	0	132	0	114	1	247	1	6	16	23
Region 7	Sporadic	0	0	0	10	0	10	0	24	0	56	0	80	1	1	12	14
Total NB		0	0	0	67	2	69	0	378	7	884	9	1278	30	37	261	328

² Influenza activity level definition is available on the PHAC FluWatch website: <http://www.phac-aspc.gc.ca/fluwatch/12-13/def12-13-eng.php>

2) ILI Consultation Rates³

- During week 8, the ILI consultation rate was 21.2 consultations per 1,000 patient visits, and was slightly below the expected levels for this time of year.
- During week 8, the sentinel response rate was 29% for both the FluWatch sentinel physicians and the NB SPIN practitioners.

Graph 2: ILI Consultation Rates in New Brunswick, by report week, season 2012/13 compared to previous seasons*



* The mean rate was based on data from the 1996/97 to 2011/2012 seasons and excludes the Pandemic season (2009-2010).

³ A total of 38 practitioner sites (20 FluWatch sentinel physicians and 18 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

3) ILI and Laboratory-Confirmed Outbreak Data

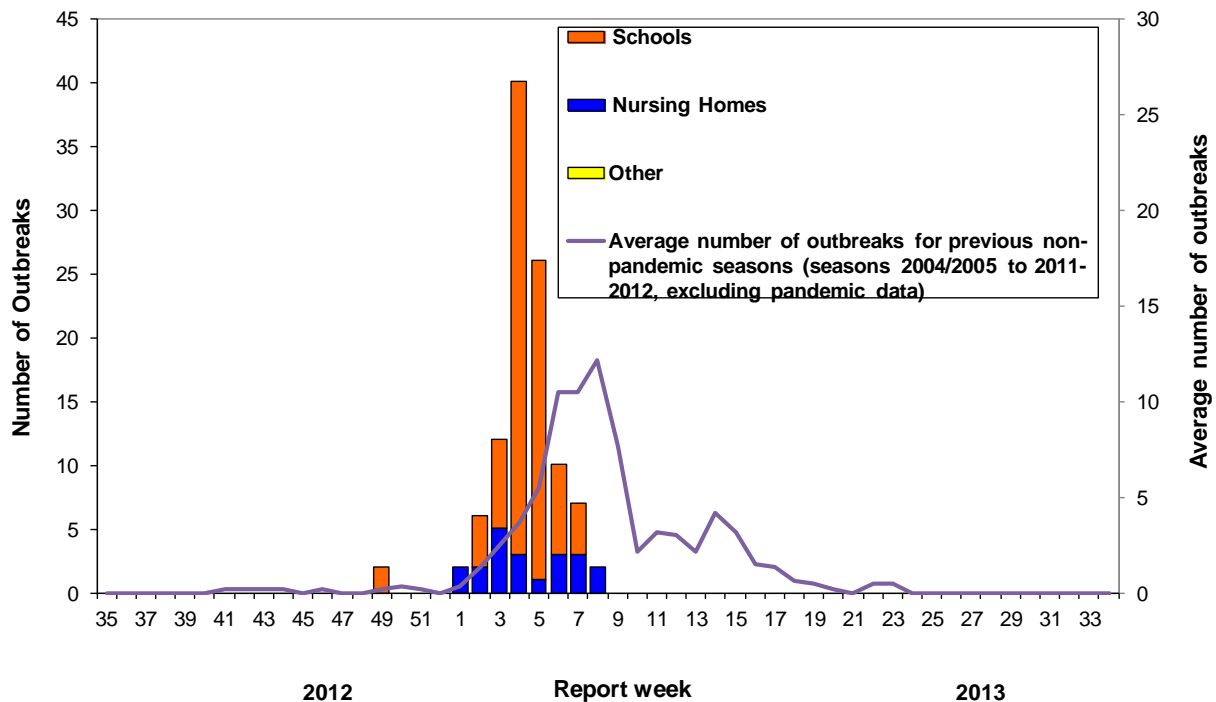
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, current and previous seasons.

	Reporting period: February/17/2012 –February/23/2013			Cumulative # of outbreaks season 2012-2013	Cumulative # of outbreaks season 2011-2012
	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	14	4
Region 2	1 out of 15	0 out of 81	0	36	6
Region 3	1 out of 14	0 out of 95	0	18	8
Region 4	0 out of 6	0 out of 22	0	2	2
Region 5	0 out of 2	0 out of 18	0	6	7
Region 6	0 out of 9	0 out of 35	0	21	2
Region 7	0 out of 4	0 out of 27	0	10	2
Total NB	2 out of 63	0 out of 352	0	107	31

*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 2012/13.



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

Other Links:

- World- http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html
- Europe: http://www.euroflu.org/cgi-files/bulletin_v2.cgi and http://www.ecdc.europa.eu/en/healthtopics/seasonal_influenza/epidemiological_data/Pages/Weekly_Influenza_Surveillance_Overview.aspx
- PAHO: http://new.paho.org/hq/index.php?option=com_content&task=blogcategory&id=805&Itemid=569
- Australia: <http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm>
- New Zealand: http://www.surv.esr.cri.nz/virology/influenza_weekly_update.php
- Argentina: : <http://www.msal.gov.ar/>
- South Africa: <http://www.nicd.ac.za/>
- US: www.cdc.gov/flu/weekly/