WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: December 16 to December 29 2012 (weeks 51 & 52)

Summary

In New Brunswick, increase in percent positive lab results since week 50 and Influenza A (H3N2) predominates

New Brunswick:

- There have been 41 positive influenza detections during weeks 51 & 52, 40 influenza A (H3) viruses and 1 influenza B.
- The ILI consultation rate was low and was slightly below the expected range for this time of year.
- No ILI or influenza outbreaks were reported.

Canada:

- Influenza activity in Canada continues to rise with increases in all indicators in weeks 51 & 52.
- 4632 laboratory detections of influenza were reported, proportion of positive tests was 26.7% and 31.1% in weeks 51 & 52 respectively.
- The ILI consultation rate was within the expected level for this time of year. 127 influenza outbreaks were reported, 87 in long-term care facilities, 9 in hospitals, 1 in a school and 30 in other settings.

International:

- United States: From July 12 through December 29, 2012, a total of 312 infections with variant influenza viruses (308 H3N2v viruses, 3 H1N2v viruses and 1 H1N1v virus) have been reported in 11 states.

1) Influenza Laboratory Data[1]

- Increase in percent positive lab results since week 50.
- 41 influenza detections were reported during that period.
- Since the beginning of the season, 55 positive influenza detections have been reported, 2 influenza A (H1N1)pdm09, 52 influenza A (H3) viruses and 1 influenza B.

[1] Surveillance specimens are submitted by recruited New Brunswick Sentinel Practitioner Influenza Network (NB SPIN) practitioners, which are comprised of 7 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 December 29, 2012 (data source: G. Dumont lab results)

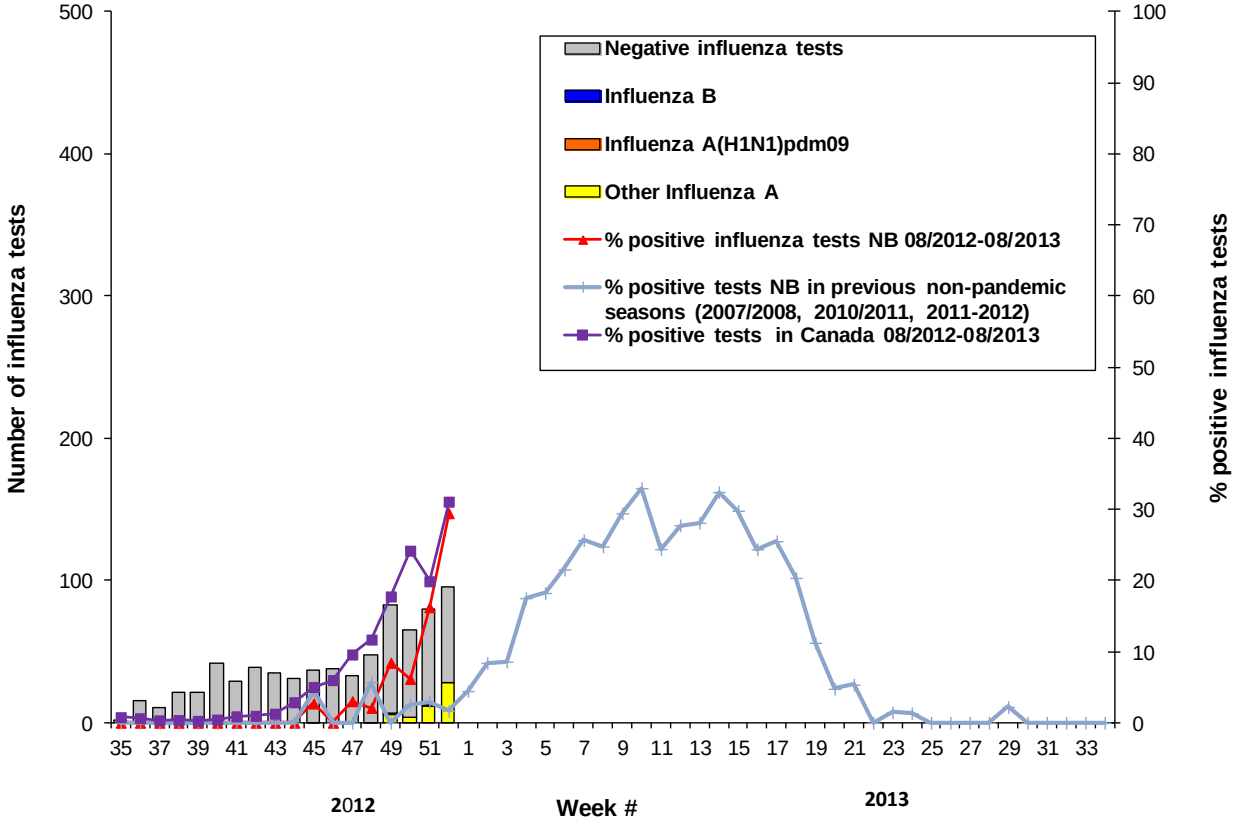


Table 1: Positive influenza test results by Health Region in New Brunswick up to December 29, 2012 (data source: G. Dumont lab results)

Region	Reporting period: December/16/2012–December/29/2012						Cumulative: (2012/2013 season) Aug./26/2012 –Dec./29/2012					Cumulative: (2011/2012 season) Aug./28/2011 – Aug./25/2012		
	Activity level[2]	A				B	A				B	A		B
		A(H1)	A(H3)	(H1N1) pdm09	unsubtyped		A(H1)	A(H3)	(H1N1) pdm09	unsubtyped		Non-(H1N1) pdm09	(H1N1) pdm09	
Region 1	Sporadic	0	17	0	0	1	0	24	1	0	1	24	17	206
Region 2	Sporadic	0	3	0	0	0	0	4	1	0	0	1	2	18
Region 3	Sporadic	0	5	0	0	0	0	7	0	0	0	1	0	3
Region 4	Sporadic	0	2	0	0	0	0	2	0	0	0	2	9	2
Region 5	Sporadic	0	1	0	0	0	0	1	0	0	0	0	2	4
Region 6	Sporadic	0	10	0	0	0	0	11	0	0	0	1	6	16
Region 7	Sporadic	0	2	0	0	0	0	3	0	0	0	1	1	12
Total NB		0	40	0	0	1	0	52	2	0	1	30	37	259

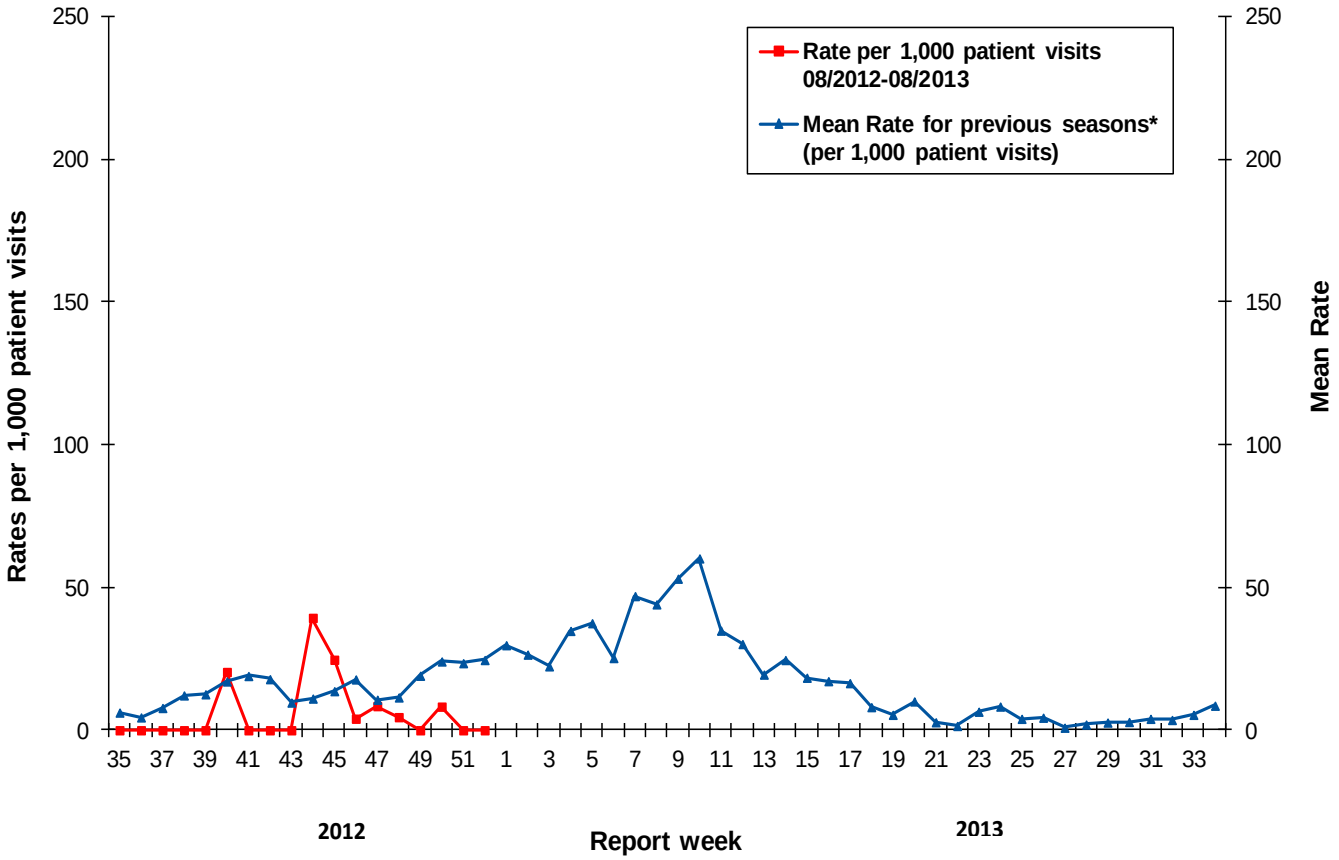
[2] Influenza activity level definition is available on the PHAC FluWatch website: http://www.phac-aspc.gc.ca/fluwatch/12-13/def12-13-eng.php

2) ILI Consultation Rates[3]

- During weeks 51 & 52, the ILI consultation rate was 0.0 consultations per 1,000 patient visits for both weeks, and was slightly below the expected levels for this time of year.

- During weeks 51 & 52, the sentinel response rate was 29% and 11% (respectively) 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

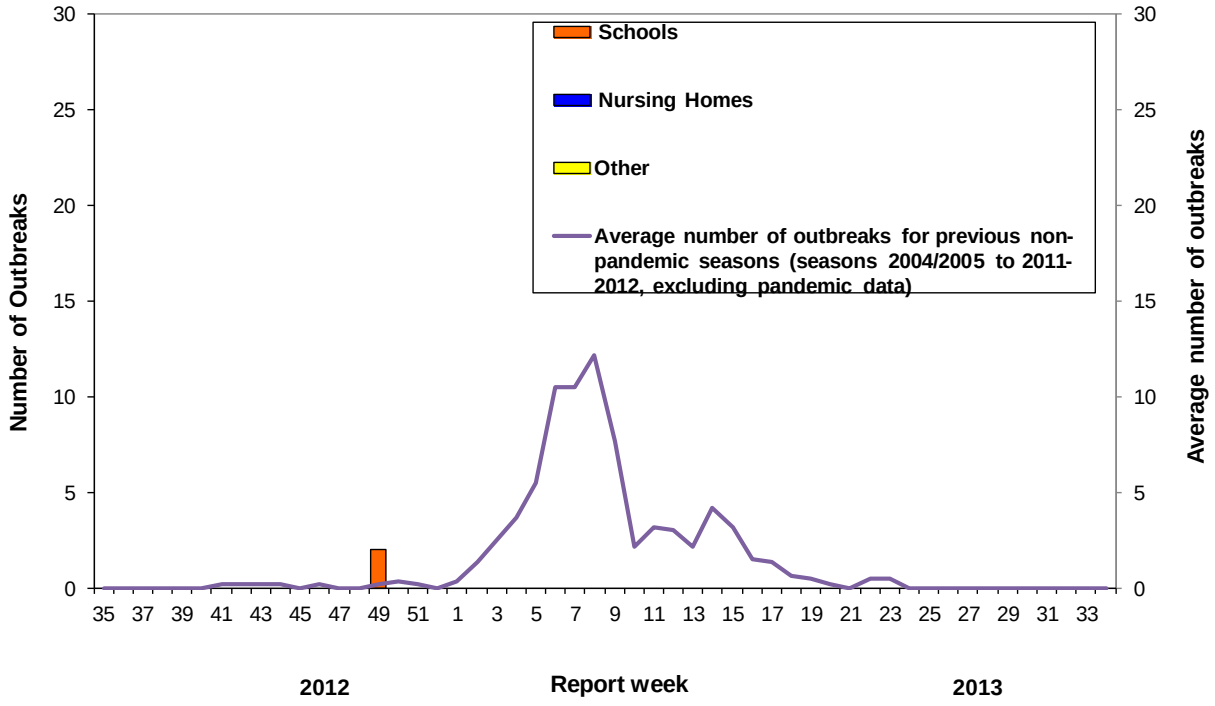
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, current and previous seasons.

	Reporting period: December/16/2012 –December/29/2012			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	0	4
Region 2	0 out of 15	0 out of 81	0	0	6
Region 3	0 out of 14	0 out of 95	0	1	8
Region 4	0 out of 6	0 out of 22	0	0	2
Region 5	0 out of 2	0 out of 18	0	1	7
Region 6	0 out of 9	0 out of 35	0	0	2
Region 7	0 out of 4	0 out of 27	0	0	2
Total NB	0 out of 63	0 out of 352	0	2	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 Homes[1] and ILI Outbreaks in Schools[2] 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/

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