

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: March 31 to April 6 2013 (week 14)

Summary

In New Brunswick, low influenza activity for week 14

New Brunswick:

- There have been 12 positive influenza detections during week 14 (3% increase from previous week), 2 influenza A (H3), 3 influenza A (H1N1)pdm09 and 7 influenza B.
- The ILI consultation rate increased and was within the expected range for this time of year.
- No new influenza or ILI outbreaks were reported.

Canada:

- Overall influenza activity continued to decline. The number of regions reporting widespread or localized activity was the same as in the previous week. Laboratory detections of influenza decreased slightly compared to the past 2 weeks. Detections of influenza B also decreased, although influenza B continued to represent 72.7% of positive specimens in week 14.
- 429 laboratory detections of influenza were reported, proportion of positive tests was 11.1%.
- The ILI consultation rate increased and was within the expected level for this time of year. 8 new influenza outbreaks were reported: 7 in long-term care facilities and 1 in another setting.

International:

- Human infection with Avian Influenza: As of April 16 2013, the WHO reported a total of 63 laboratory-confirmed cases of human infection with low-pathogenic avian influenza A (H7N9) in China including 14 deaths. Disease onset was between 19 February and 10 April 2013. Age range is 4-87 years, median is 64 and 71% are males. There is no evidence of ongoing human-to-human transmission. An investigation including follow-up of contacts, source, mode of transmission is ongoing.
- Novel Coronavirus: Since April 2012, 17 laboratory-confirmed cases have been reported from Saudi Arabia (9), Qatar (2), Jordan (2), United Kingdom (3), and United Arab Emirates (1). Among the 17 cases, 11 were fatal. Onset of illness was between April 2012 and March 2013.

1) Influenza Laboratory Data¹

- A 3% increase in percent positive laboratory results compared to previous week.
- 12 influenza detections were reported during that period.
- Since the beginning of the season, 1408 positive influenza detections have been reported, 31 influenza A (H1N1)pdm09, 450 influenza A (H3) viruses, 899 influenza A (unsubtyped) and 28 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 April 6, 2013 (data source: G. Dumont lab results)

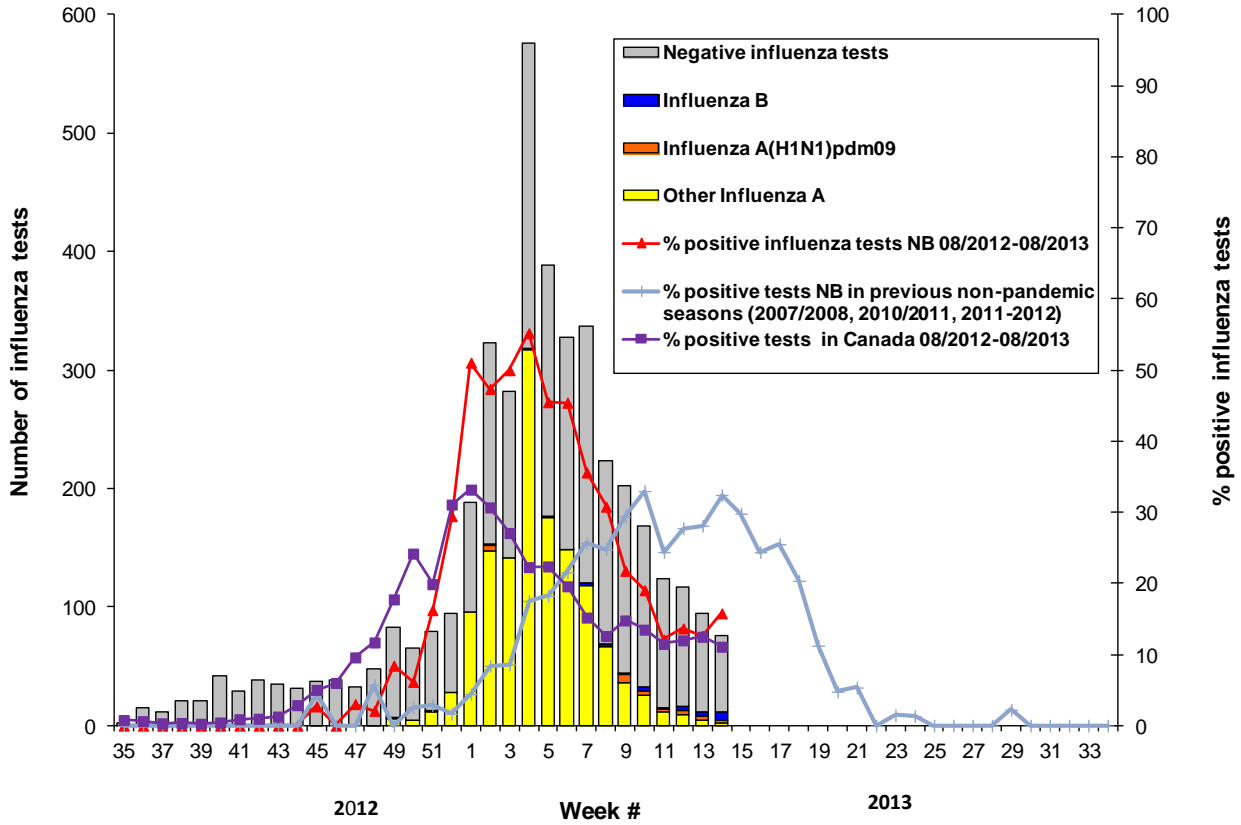


Table 1: Positive influenza test results by Health Region in New Brunswick up to April 6, 2013 (data source: G. Dumont lab results)

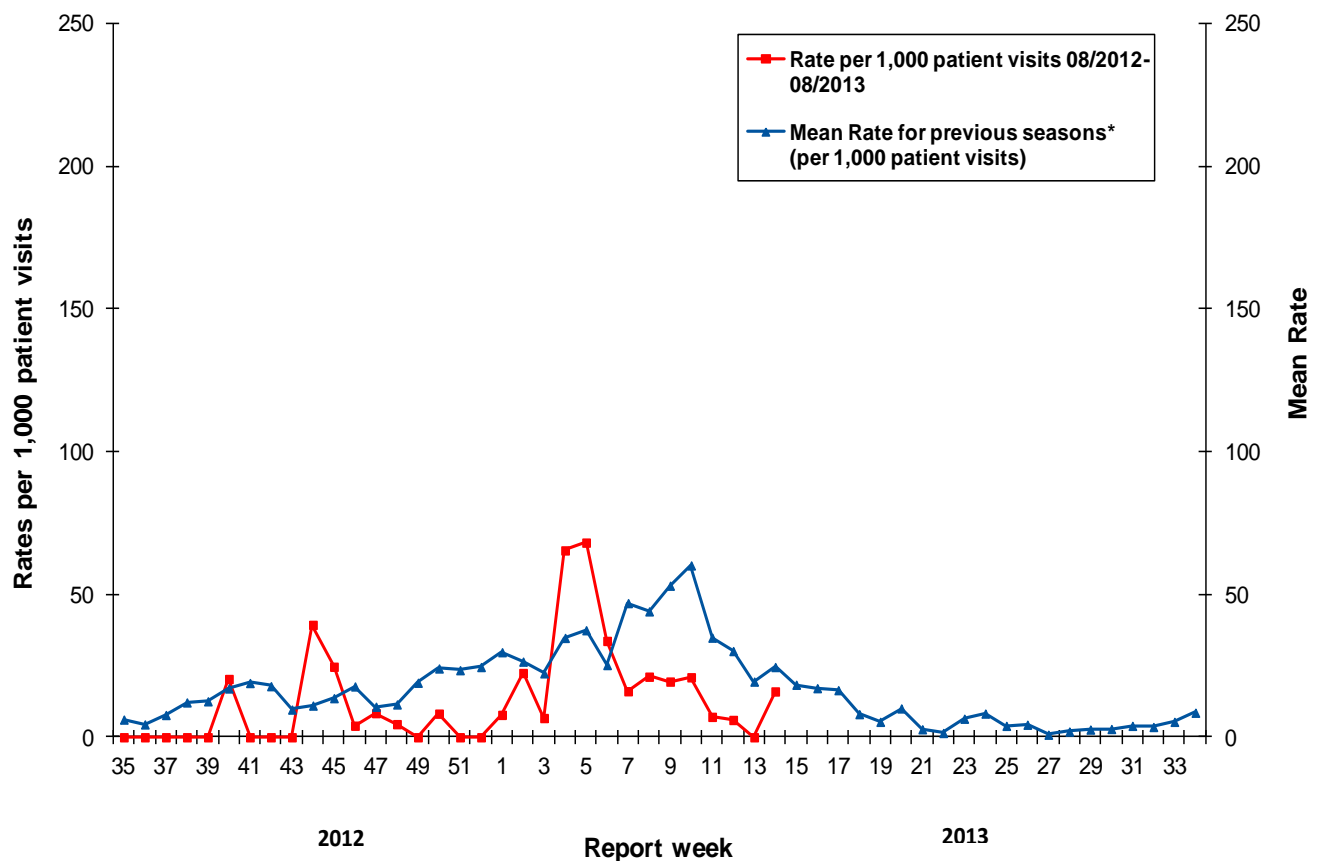
Region	Reporting period: March/31/2012–April/06/2013							Cumulative: (2012/2013 season) Aug./26/2012 –Apr./06/2013						Cumulative: (2011/2012 season) Aug./28/2011 – Aug./25/2012			
	Activity level ²	A				B	Total	A				B	Total	A		B	Total
		A(H1)	A(H3)	(H1N1) pdm09	unsub typed	A(H1)		A(H3)	(H1N1) pdm09	unsub typed	A(H1)	(H1N1) pdm09		Non-(H1N1) pdm09	(H1N1) pdm09		
Region 1	Sporadic	0	0	1	0	1	2	0	156	11	369	10	546	24	17	206	247
Region 2	Sporadic	0	1	0	0	1	2	0	52	3	158	6	219	1	2	18	21
Region 3	Sporadic	0	0	2	0	0	2	0	27	8	58	1	94	1	0	3	4
Region 4	Sporadic	0	1	0	0	1	2	0	34	5	134	1	174	2	9	2	13
Region 5	Sporadic	0	0	0	0	1	1	0	11	1	9	1	22	0	2	4	6
Region 6	Sporadic	0	0	0	0	2	2	0	137	2	115	7	261	1	6	16	23
Region 7	Sporadic	0	0	0	0	1	1	0	33	1	56	2	92	1	1	12	14
Total NB		0	2	3	0	7	12	0	450	31	899	28	1408	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 14, the ILI consultation rate was 16.0 consultations per 1,000 patient visits, and was within the expected levels for this time of year.
- During week 14, the sentinel response rate was 37% 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

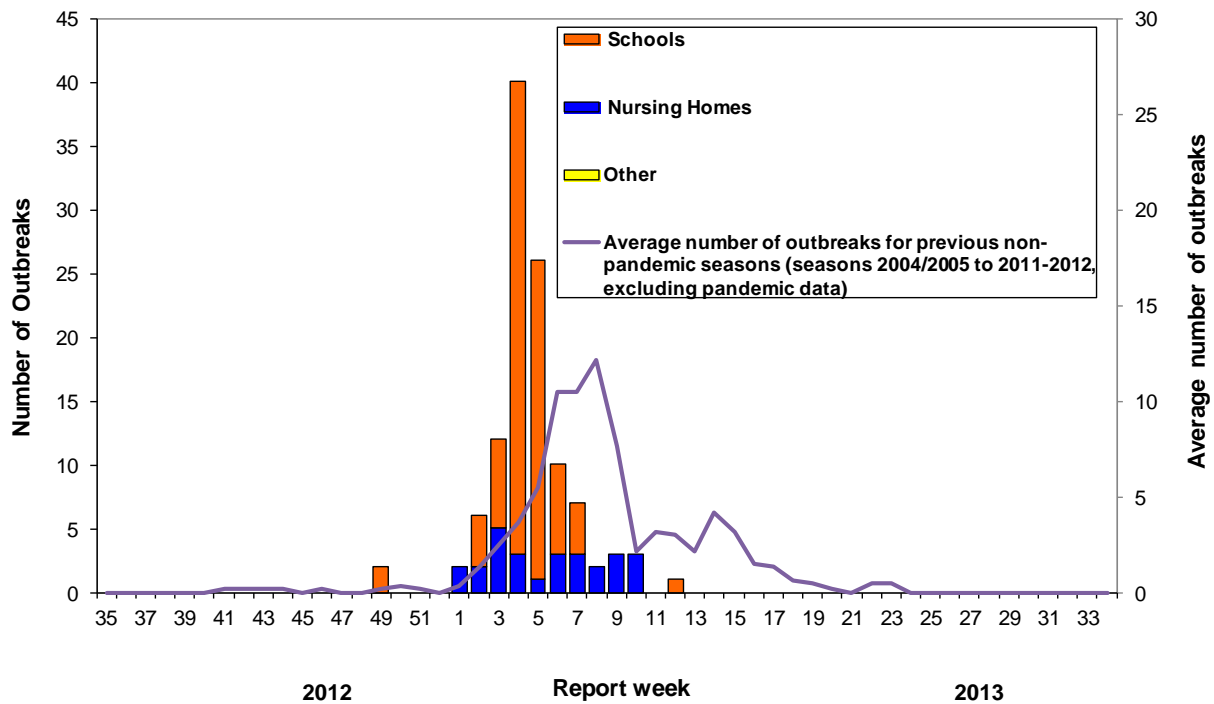
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, current and previous seasons.

	Reporting period: March/31/2012–April/06/2013			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	0 out of 15	0 out of 81	0	38	6
Region 3	0 out of 14	0 out of 95	0	20	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	22	2
Region 7	0 out of 4	0 out of 27	0	10	2
Total NB	0 out of 63	0 out of 352	0	112	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/