

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: December 1 to December 7 2013 (week 49)

Summary:

In New Brunswick, low influenza activity but within expected levels

New Brunswick:

- There have been no positive influenza detections during week 49.
- The ILI consultation rate was low and was within the expected levels for this time of year.
- No new influenza or ILI outbreaks were reported.

Canada:

- Influenza activity in Canada continued to increase with 3 regions reporting localized influenza/ILI activity and 23 reporting sporadic activity.
- 200 laboratory detections of influenza were reported, proportion of positive tests was 6.1%.
- The ILI consultation rate decreased in week 49. One new influenza outbreak was reported in a hospital and one outbreak of influenza/ILI was reported in a school.

International:

- Human infection with Avian Influenza: As of December 16 2013, the WHO reported a total of 143 laboratory-confirmed cases of human infection with an avian influenza A (H7N9) virus in China including 47 deaths. Disease onset (for 133 cases) was between February and December 2013. There is no evidence of sustained human-to-human transmission.
- MERS-CoV: Since April 2012, 165 laboratory-confirmed cases have been reported from Saudi Arabia, Qatar, Jordan, United Arab Emirates, Kuwait, United Kingdom, Oman, France, Germany, Tunisia and Italy. Among the 165 cases, 71 were fatal. Onset of illness was between April 2012 and November 2013.
- Novel influenza A virus in the US: So far this year, the United States reported 21 new cases of human infection with variant influenza A viruses (19 H3N2v and 2 H1N1v) from Illinois, Indiana, Ohio, Michigan, Arkansas and Iowa. No human-to-human transmission has been identified. All have reported close contact with swine.

1) Influenza Laboratory Data¹

- Influenza activity was low.
- No influenza detections were reported during this current reporting period.
- Since the beginning of the season, two positive influenza detections were reported, 1 influenza A (H1N1)pdm09 and 1 influenza A (H3).

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, 3 sites in Family Practice, 2 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 7 2013 (data source: G. Dumont lab results)

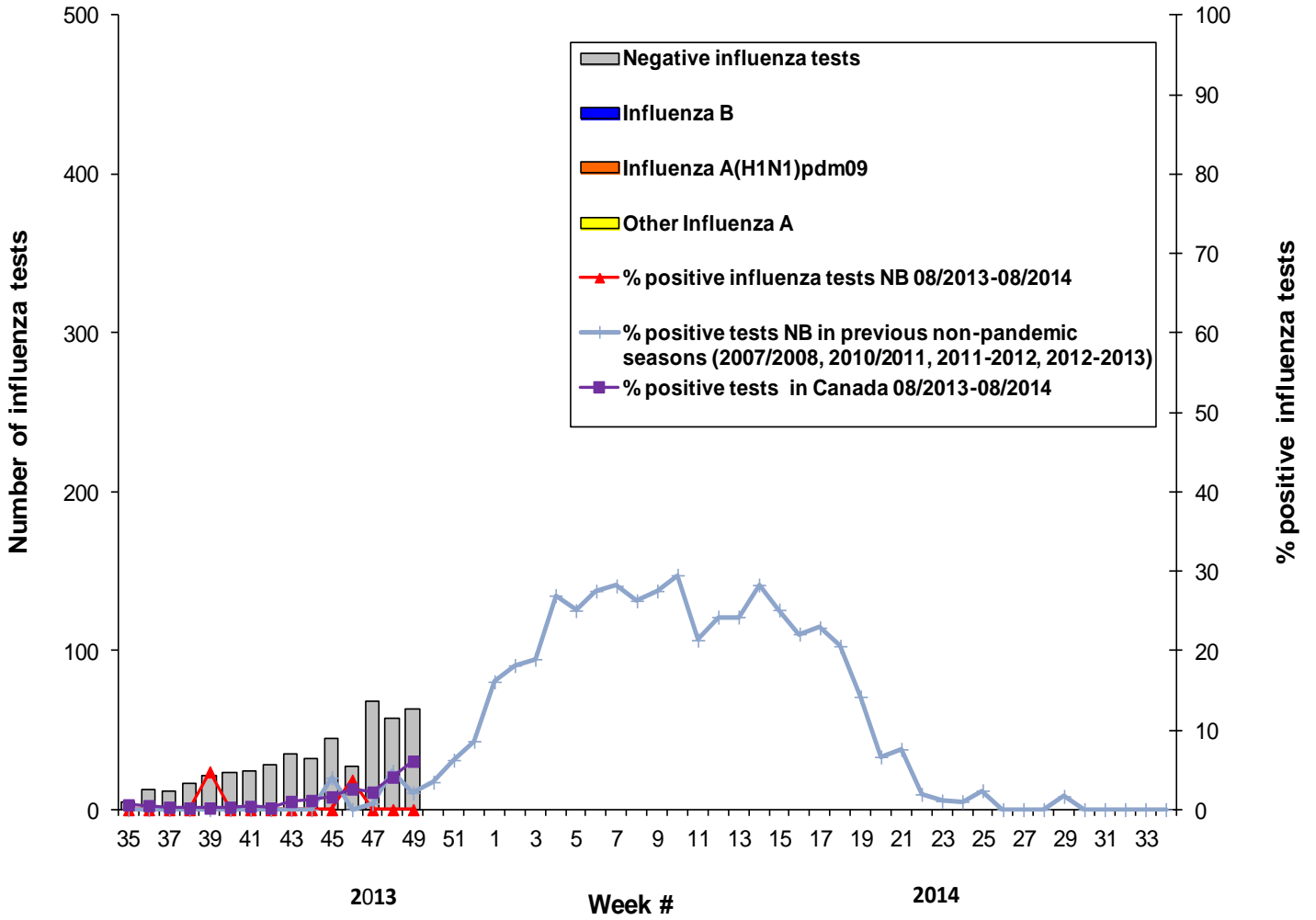


Table 1: Positive influenza test results by Health Region in New Brunswick up to December 7 2013 (data source: G. Dumont lab results)

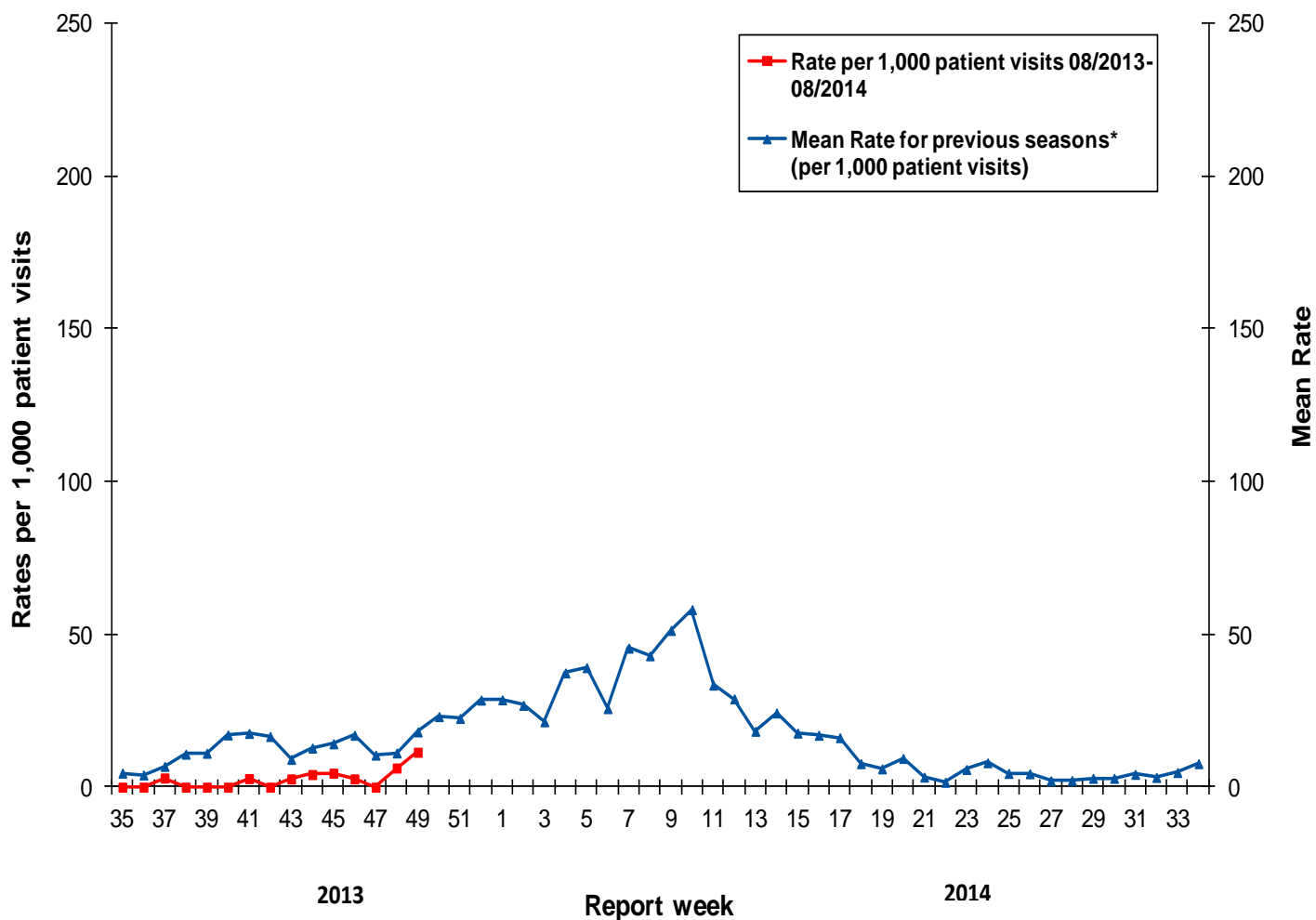
Region	Reporting period: Dec./01/2013–Dec./07/2013							Cumulative: (2013/2014 season) Aug./25/2013 –Dec./07/2013						Cumulative: (2012/2013 season) Aug./26/2012 – Aug./24/2013			
	Activity level ²	A				B	Total	A				B	Total	A		B	Total
		A(H1)	A(H3)	(H1N1) pdm09	unsubt yped	A(H1)		A(H3)	(H1N1) pdm09	unsubt yped	Non-(H1N1) pdm09	(H1N1) pdm09					
Region 1	No activity	0	0	0	0	0	0	0	1	1	0	0	2	527	13	18	558
Region 2	No activity	0	0	0	0	0	0	0	0	0	0	0	0	211	3	8	222
Region 3	No activity	0	0	0	0	0	0	0	0	0	0	0	0	85	9	1	95
Region 4	No activity	0	0	0	0	0	0	0	0	0	0	0	0	168	5	3	176
Region 5	No activity	0	0	0	0	0	0	0	0	0	0	0	0	20	1	7	28
Region 6	No activity	0	0	0	0	0	0	0	0	0	0	0	0	252	5	50	307
Region 7	No activity	0	0	0	0	0	0	0	0	0	0	0	0	89	2	11	102
Total NB		0	0	0	0	0	0	0	1	1	0	0	2	1352	38	98	1488

² Influenza activity level definition is available on the PHAC FluWatch website: <http://www.phac-aspc.gc.ca/fluwatch/13-14/def13-14-eng.php>

2) ILI Consultation Rates³

- During week 49, the ILI consultation rate was 11.4 consultations per 1,000 patient visits, and was within the expected levels for this time of year.
- During week 49, the sentinel response rate was 27%, for both the FluWatch sentinel physicians and the NB SPIN practitioners.

Graph 2: ILI Consultation Rates in New Brunswick, by report week, season 2013/14 compared to previous seasons*



* The mean rate was based on data from the 1996/97 to 2012/2013 seasons and excludes the Pandemic season (2009-2010).

³ A total of 34 practitioner sites (19 FluWatch sentinel physicians and 15 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

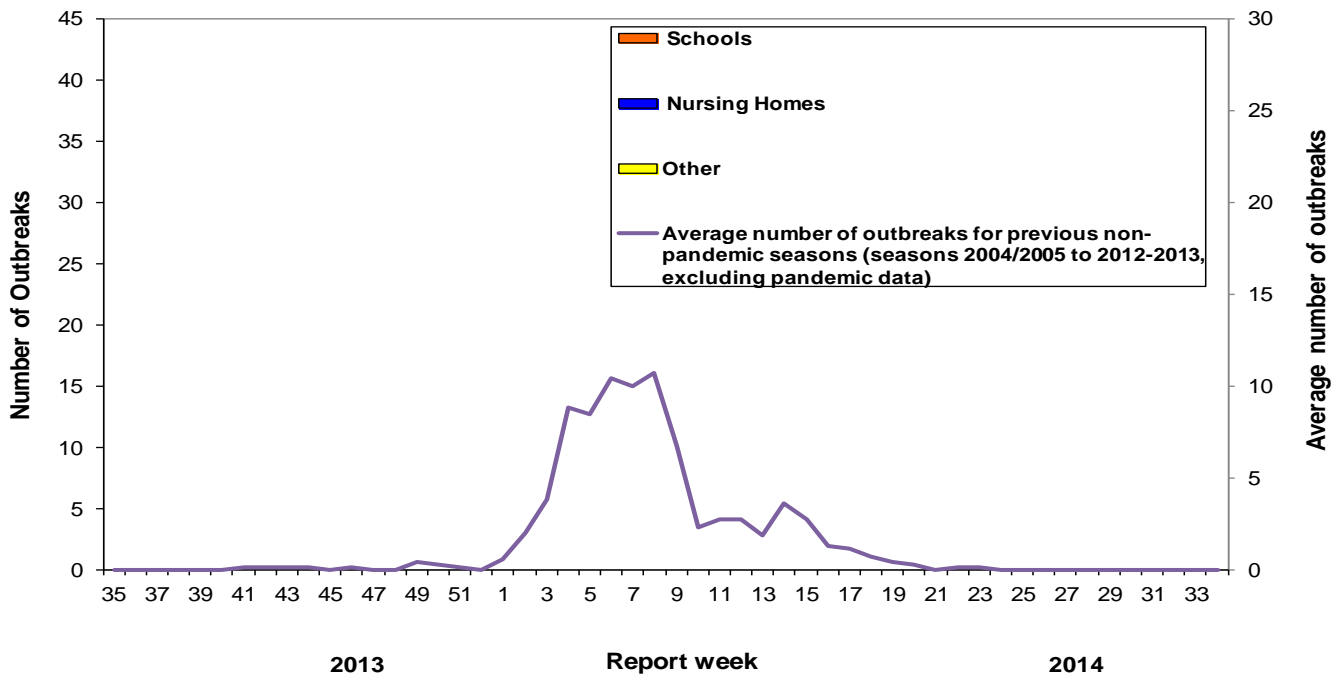
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, current and previous seasons.

	Reporting period: Dec./01/2013–Dec./07/2013			Cumulative # of outbreaks season 2013-2014	Cumulative # of outbreaks season 2012-2013
	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	15
Region 2	0 out of 15	0 out of 81	0	0	38
Region 3	0 out of 14	0 out of 95	0	0	20
Region 4	0 out of 6	0 out of 22	0	0	2
Region 5	0 out of 2	0 out of 18	0	0	6
Region 6	0 out of 9	0 out of 35	0	0	23
Region 7	0 out of 4	0 out of 27	0	0	10
Total NB	0 out of 63	0 out of 352	0	0	114

*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 2013/14.



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: <http://www.phac-aspc.gc.ca/fluwatch/>

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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