

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: January 5 to January 11 2014 (week 2)

Summary:

In New Brunswick, continued increase in percent positive lab results since week 51 and influenza A (H1N1)pdm09 predominates

New Brunswick:

- There have been 229 positive influenza detections during week 2, 219 were A(H1N1)pdm09 and 10 were A (unsubtyped).
- The ILI consultation rate was low and was slightly below the expected levels for this time of year.
- One new ILI outbreak was reported in a school in region 3.

Canada:

- Influenza activity in Canada continued to increase with most indicators following a similar trend to the 2012-2013 season but lagging by 2-3 weeks. Over 90% of laboratory detections this season have been A(H1N1)pdm09 compared to 10% in 2012-2013. At this point it is too early in the season to predict when the season will peak.
- 3548 laboratory detections of influenza were reported during week 2, proportion of positive tests was 28.7%. An increase in the number of tests performed was seen this week.
- The ILI consultation rate increased and was above the expected levels for week 2 but in keeping with the trend at this time of year. Eight new influenza outbreaks were reported, 5 in long-term care facilities and 3 in hospitals. Also, 6 outbreaks of ILI were reported, 1 in a school and 5 in other facilities.

International:

- Human infection with Avian Influenza: As of January 16 2013, the WHO reported a total of 181 laboratory-confirmed cases of human infection with an avian influenza A (H7N9) virus in China including 52 deaths. Disease onset (for 171 cases) was between February and January 2014. There is no evidence of sustained human-to-human transmission.
- MERS-CoV: Since April 2012, 178 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 178 cases, 75 were fatal. Onset of illness was between April 2012 and December 2013.
- Novel influenza A viruses:
 - Since summer 2013, 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

- Continued increase in percent positive lab results since week 51 and A (H1N1)pdm09 predominates.
- 229 influenza detections were reported during this current reporting period.
- Since the beginning of the season, 304 positive influenza detections were reported, 288 influenza A (H1N1)pdm09, 1 influenza A (H3), 13 influenza A (unsubtyped) and 2 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, 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 January 11 2014
 (data source: G. Dumont lab results)

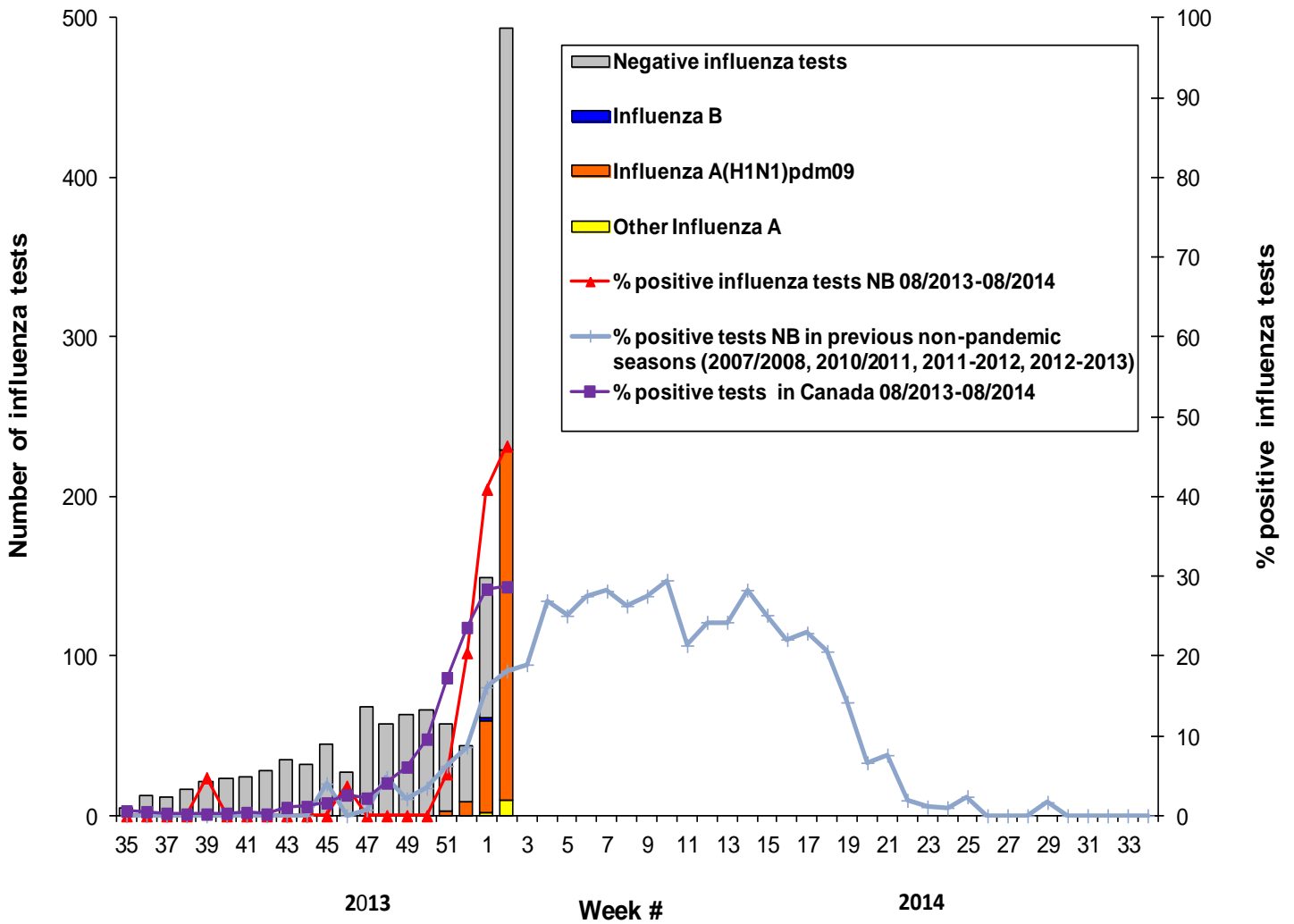


Table 1: Positive influenza test results by Health Region in New Brunswick up to January 11 2014 (data source: G. Dumont lab results)

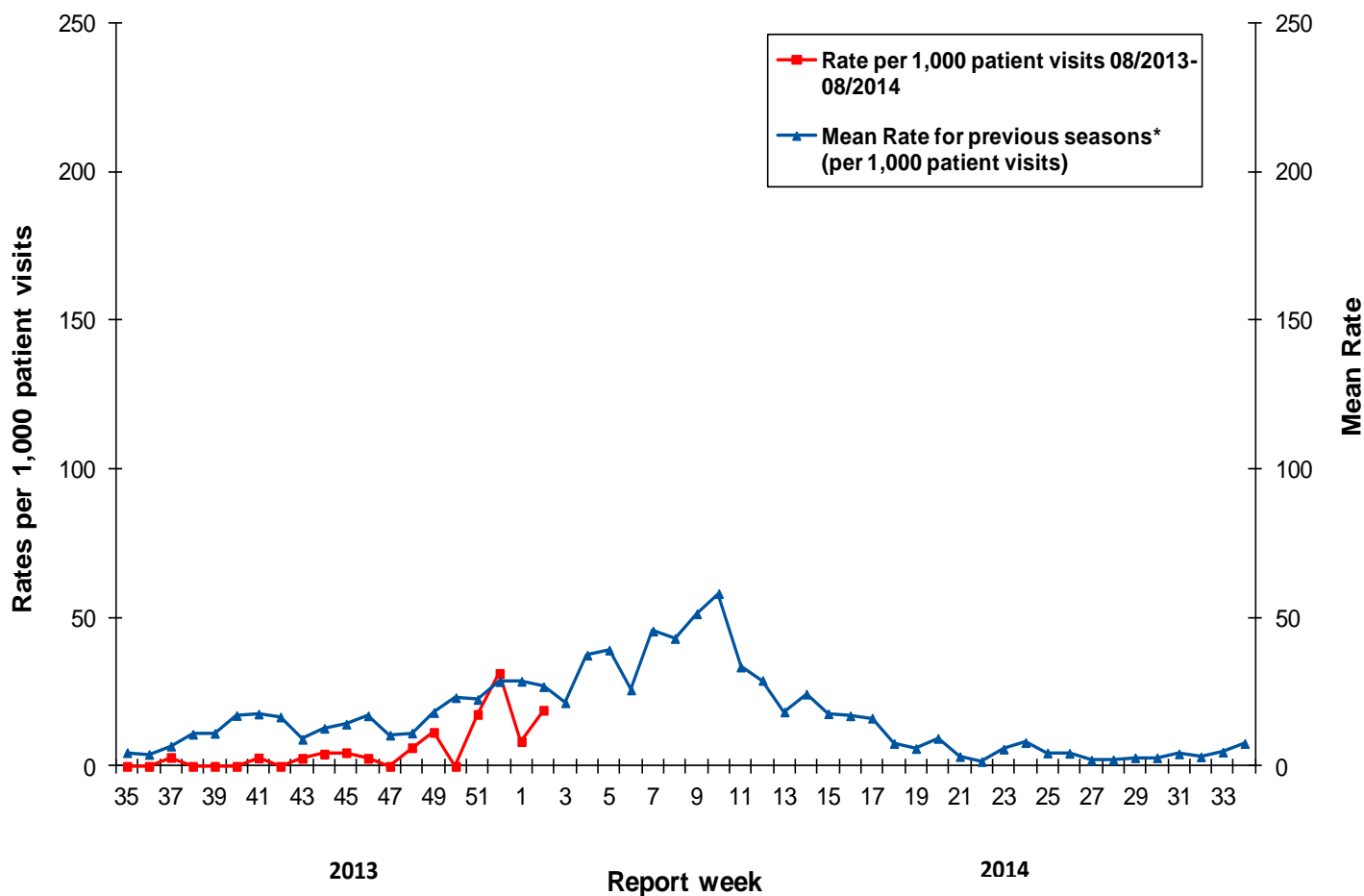
Region	Reporting period: Jan./05/2014–Jan./11/2014							Cumulative: (2013/2014 season) Aug./25/2013 –Jan./11/2014						Cumulative: (2012/2013 season) Aug./26/2012 – Aug./24/2013			
	Activity level ²	A				B	Total	A				B	Total	A		B	Total
		A(H1)	A(H3)	(H1N1) pdm09	unsubt yped	A(H1)		A(H3)	(H1N1) pdm09	unsubt yped	Non-(H1N1) pdm09	(H1N1) pdm09					
Region 1	Sporadic	0	0	102	3	0	105	0	1	134	4	0	139	527	13	18	558
Region 2	Sporadic	0	0	62	5	0	67	0	0	73	6	0	79	211	3	8	222
Region 3	Localized	0	0	12	1	0	13	0	0	23	2	0	25	85	9	1	95
Region 4	Sporadic	0	0	19	0	0	19	0	0	27	0	2	29	168	5	3	176
Region 5	Sporadic	0	0	6	0	0	6	0	0	6	0	0	6	20	1	7	28
Region 6	Sporadic	0	0	16	0	0	16	0	0	22	0	0	22	252	5	50	307
Region 7	Sporadic	0	0	2	1	0	3	0	0	3	1	0	4	89	2	11	102
Total NB		0	0	219	10	0	229	0	1	288	13	2	304	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 2, the ILI consultation rate was 18.9 consultations per 1,000 patient visits, and was slightly below the expected levels for this time of year.
- During week 2, the sentinel response rate was 41% 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

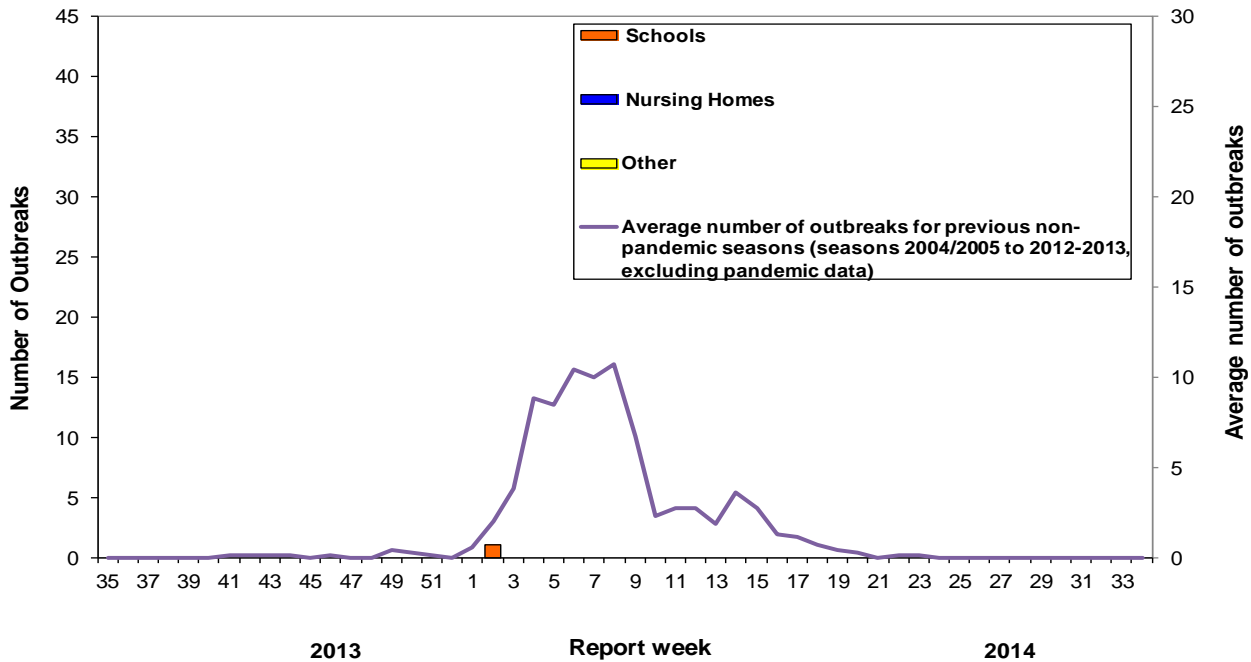
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, current and previous seasons.

	Reporting period: Jan./05/2014–Jan./11/2014			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	1 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	1 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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