

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: August 10 to August 23 2014 (weeks 33 & 34)

Summary:

In New Brunswick, influenza activity remains at inter-seasonal levels

New Brunswick:

- There have been no positive influenza detections during weeks 33 & 34.
- The ILI consultation rate was 0.00 consultations per 1,000 patients visits, for both weeks, and was within the expected levels for both weeks.
- No new influenza or ILI outbreaks were reported.

Canada:

- In weeks 33 & 34, influenza activity in Canada remains at inter-seasonal levels with very few laboratory detections of influenza. Other respiratory virus detections are also at expected levels.
- There have been more hospitalizations but a similar number of deaths with influenza than were reported last season.
- 17 laboratory detections of influenza were reported in weeks 33 & 34. The percentage of laboratory tests positive for influenza in week 34 was less than 1%.
- The national ILI consultation rate was 5.4 and 7.9 consultations per 1,000 patients' visits for weeks 33 & 34, respectively. The rate for both weeks was above the expected range for this time of year. Two new influenza outbreaks were reported in week 34, one in a long-term care facility and one in another setting.

International:

- Human infection with Avian Influenza: As of August 28 2014, a total of 451 laboratory-confirmed cases of human infection with an avian influenza A (H7N9) virus were reported in China (as well as in Taiwan, Hong Kong and Malaysia) including 171 deaths. The majority of cases have presented with severe acute illness, rapidly progressing to severe pneumonia. Most human cases have reported a history of exposure to poultry or live bird markets. There is currently no evidence of sustained human-to-human transmission of H7N9.
- Novel Influenza A virus: One new human infection with novel influenza A virus was reported in the United States (Ohio). The person was infected with an influenza A (H3N2) variant (H3N2v) virus and was not hospitalized as a result of their illness. No ongoing human-to-human transmission has been identified and the case reported close contact with swine in the week prior to illness onset.
- MERS-CoV: From April 2012 to August 28 2014, 839 laboratory-confirmed cases have been reported from Saudi Arabia, Qatar, Jordan, United Arab Emirates, Kuwait, United Kingdom, Oman, Yemen, Iran, France, Germany, Tunisia, Algeria, Italy, Malaysia, Greece, Philippines, Egypt, Lebanon, Netherlands and the United States. All cases have either occurred in the Middle East or have a direct link to a primary case infected in the Middle East. Among the 839 cases, 295 were fatal. Onset of illness was between April 2012 and July 2014. An increase in cases in the spring 2014 can be possibly explained by the 2 ongoing hospital outbreaks in Jeddah, KSA and Abu Dhabi, UAE, as well as using a more sensitive case detection through more active case finding and contact tracing.

Note: This is the final report for the 2013-2014 influenza season. The next report will be the first for the 2014-2015 influenza season. Bi-weekly reports will continue until October 10, 2014.

1) Influenza Laboratory Data¹

- Influenza activity remains at inter-seasonal levels.
- No influenza detections were reported during the 2-week reporting period.
- Since the beginning of the season, 1455 positive influenza detections were reported, 440 influenza A (H1N1)pdm09, 2 influenza A (H3), 885 influenza A (unsubtyped) and 128 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 August 23 2014 (data source: G. Dumont Lab results)

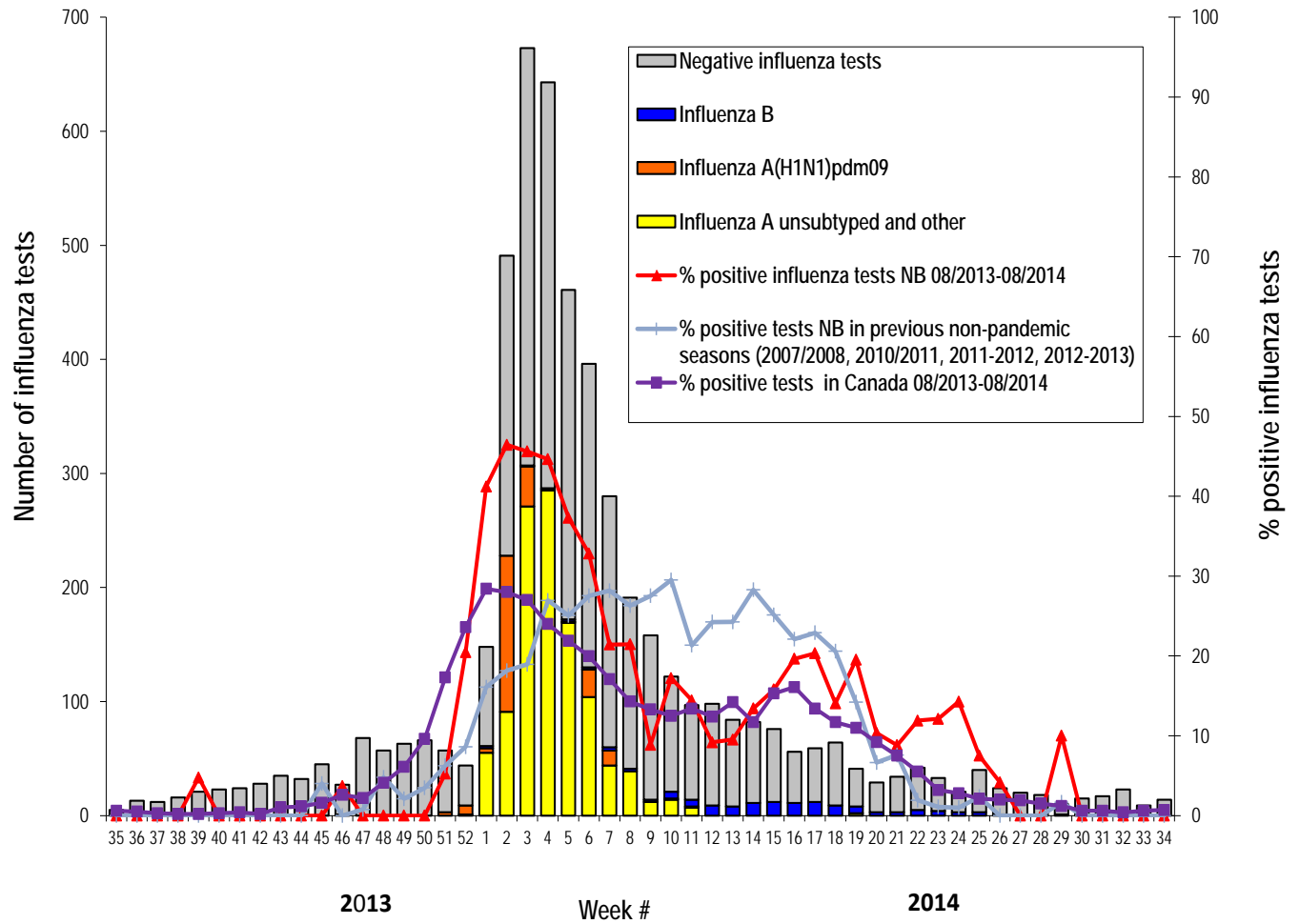


Table 1: Positive influenza test results by Health Region, in New Brunswick up to August 23 2014 (data source: G. Dumont lab results)

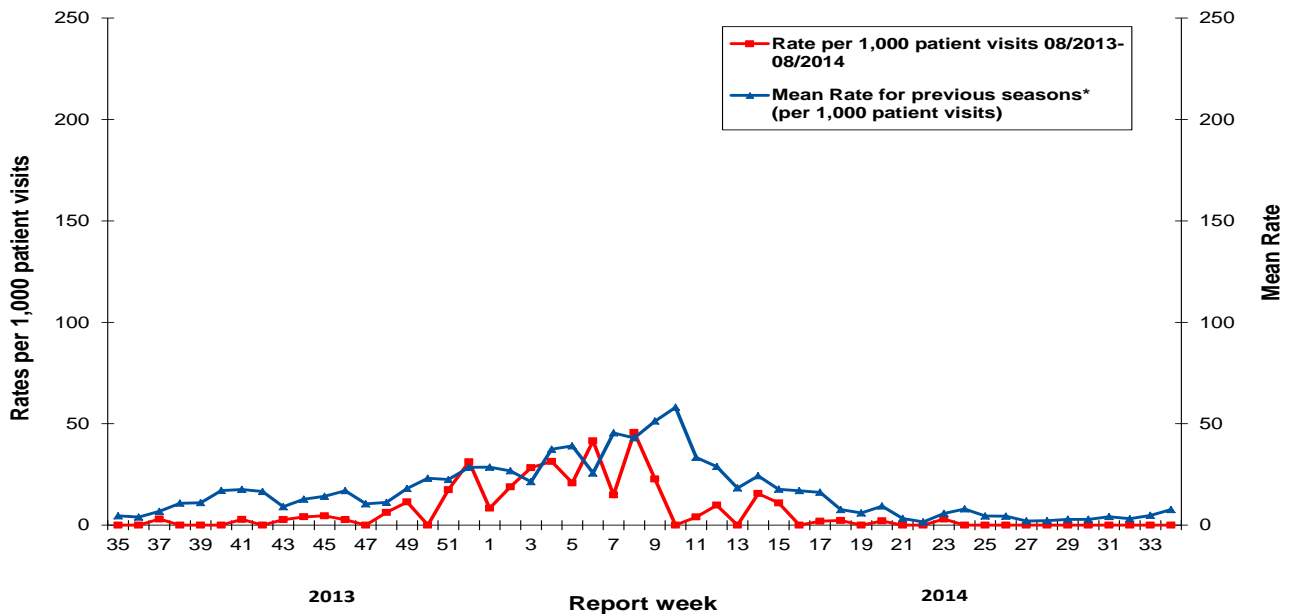
Region	Reporting period: August/10/2014–August/23/2014							Cumulative: (2013/2014 season) Aug./25/2013 –August/23/2014						Cumulative: (2012/2013 season) Aug./26/2012 – Aug./24/2013			
	Activity level ²	A				B	Total	A				B	Total	A		B	Total
		A(H1)	A(H3)	(H1N1) pdm09	unsubt yped	A(H1)		A(H3)	(H1N1) pdm09	unsubt yped	Non-(H1N1) pdm09	(H1N1) pdm09					
Region 1	No activity	0	0	0	0	0	0	0	2	205	442	39	688	527	13	18	558
Region 2	No activity	0	0	0	0	0	0	0	0	86	219	2	307	211	3	8	222
Region 3	No activity	0	0	0	0	0	0	0	0	41	80	4	125	85	9	1	95
Region 4	No activity	0	0	0	0	0	0	0	0	52	61	49	162	168	5	3	176
Region 5	No activity	0	0	0	0	0	0	0	0	10	23	6	39	20	1	7	28
Region 6	No activity	0	0	0	0	0	0	0	0	42	49	25	116	252	5	50	307
Region 7	No activity	0	0	0	0	0	0	0	0	4	11	3	18	89	2	11	102
Total NB		0	0	0	0	0	0	0	2	440	885	128	1455	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 weeks 33 & 34, the ILI consultation rate was 0.0 consultations per 1,000 patient visits, for both weeks, and was within the expected levels for both weeks.
- During weeks 33 & 34, the sentinel response rate was 29% and 24%, respectively, 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) ILI and Laboratory-Confirmed Outbreak Data

Table 3: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, current and previous seasons.

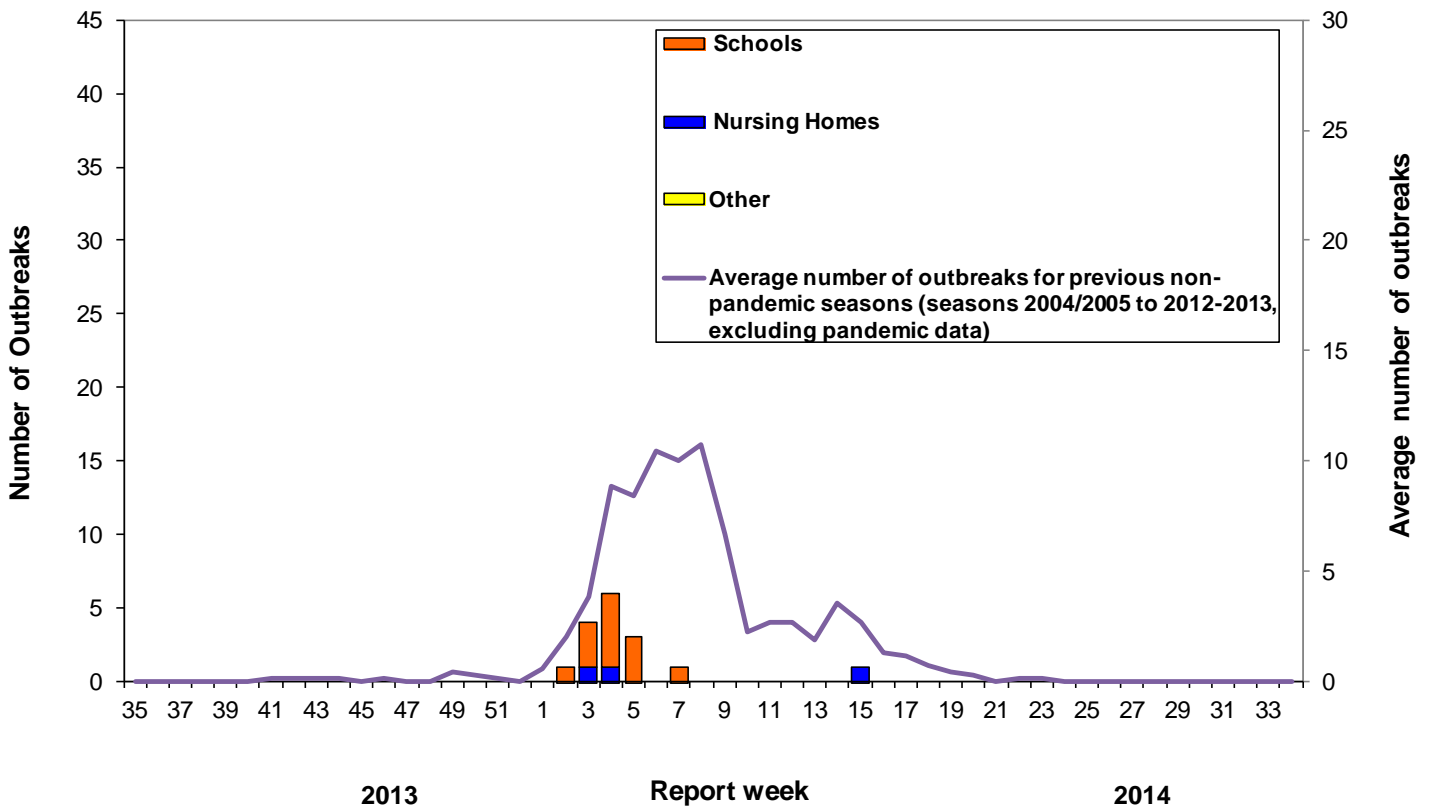
	Reporting period: August/10/2014–August/23/2014			Cumulative # of outbreaks season 2013-2014	Cumulative # of outbreaks season 2012-2013
	Lab-confirmed outbreaks in Nursing Homes*	Schools reporting ILI outbreaks**	Lab-confirmed outbreaks in Other Settings*		
Region 1	0 out of 13	0 out of 74	0	3	15
Region 2	0 out of 15	0 out of 81	0	2	38
Region 3	0 out of 14	0 out of 95	0	4	20
Region 4	0 out of 6	0 out of 22	0	1	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	3	23
Region 7	0 out of 4	0 out of 27	0	2	10
Total NB	0 out of 63	0 out of 352	0	15	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.

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.

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/