

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: April 27 to May 3 2014 (week 18)

Summary:

In New Brunswick, low influenza activity in week 18, all positive detections were influenza B.

New Brunswick:

- There have been 9 positive influenza detections during week 18, all were influenza B.
- The ILI consultation rate was similar to previous week and was within the expected levels for this time of year.
- No new influenza or ILI outbreaks were reported.

Canada:

- In week 18, influenza B continued to circulate in several regions across Canada. This sustained influenza activity remains within the expected levels for this time of year, and is consistent with late-season circulation of influenza B.
- Influenza B is having a greater impact on adults 65 years of age and older as well as young persons 5 to 19 years of age, compared to influenza A (H1N1)pdm09 which circulated earlier in the year. Fewer numbers of hospitalizations and deaths have been reported compared to last year.
- 441 laboratory detections of influenza were reported in week 18. The percentage of laboratory tests positive for influenza was 11.7%.
- The national ILI consultation rate was 21.7 consultations per 1,000 patients' visits, which is slightly above the expected range for week 18.
- 21 new influenza outbreaks were reported: 19 in long-term care facilities, 1 in a hospital and 1 in another setting. However, overall laboratory detections of influenza declined in 5 of the 6 regions reporting outbreaks.

International:

- Human infection with Avian Influenza: As of May 8 2014, a total of 430 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 146 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.
- MERS-CoV: (As a result of a delay in reporting there may be discrepancy in the reported number of cases on the WHO website to those reported on other websites) From April 2012 to May 9 2014, 536 laboratory-confirmed cases have been reported from Saudi Arabia, Qatar, Jordan, United Arab Emirates, Kuwait, United Kingdom, Oman, Yemen, France, Germany, Tunisia, Italy, Malaysia, Greece, Philippines, Egypt 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 536 cases, 145 were fatal. Onset of illness was between April 2012 and May 2014. A recent increase in cases has been mostly associated with large nosocomial outbreaks including asymptomatic cases identified through case tracking and affecting mostly health care workers.

1) Influenza Laboratory Data¹

- Low influenza activity, all positive detections were influenza B.
- 9 influenza detections were reported during this current reporting period.
- Since the beginning of the season, 1424 positive influenza detections were reported, 440 influenza A (H1N1)pdm09, 1 influenza A (H3), 884 influenza A (unsubtyped) and 99 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 May 3 2014 (data source: G. Dumont Lab results)

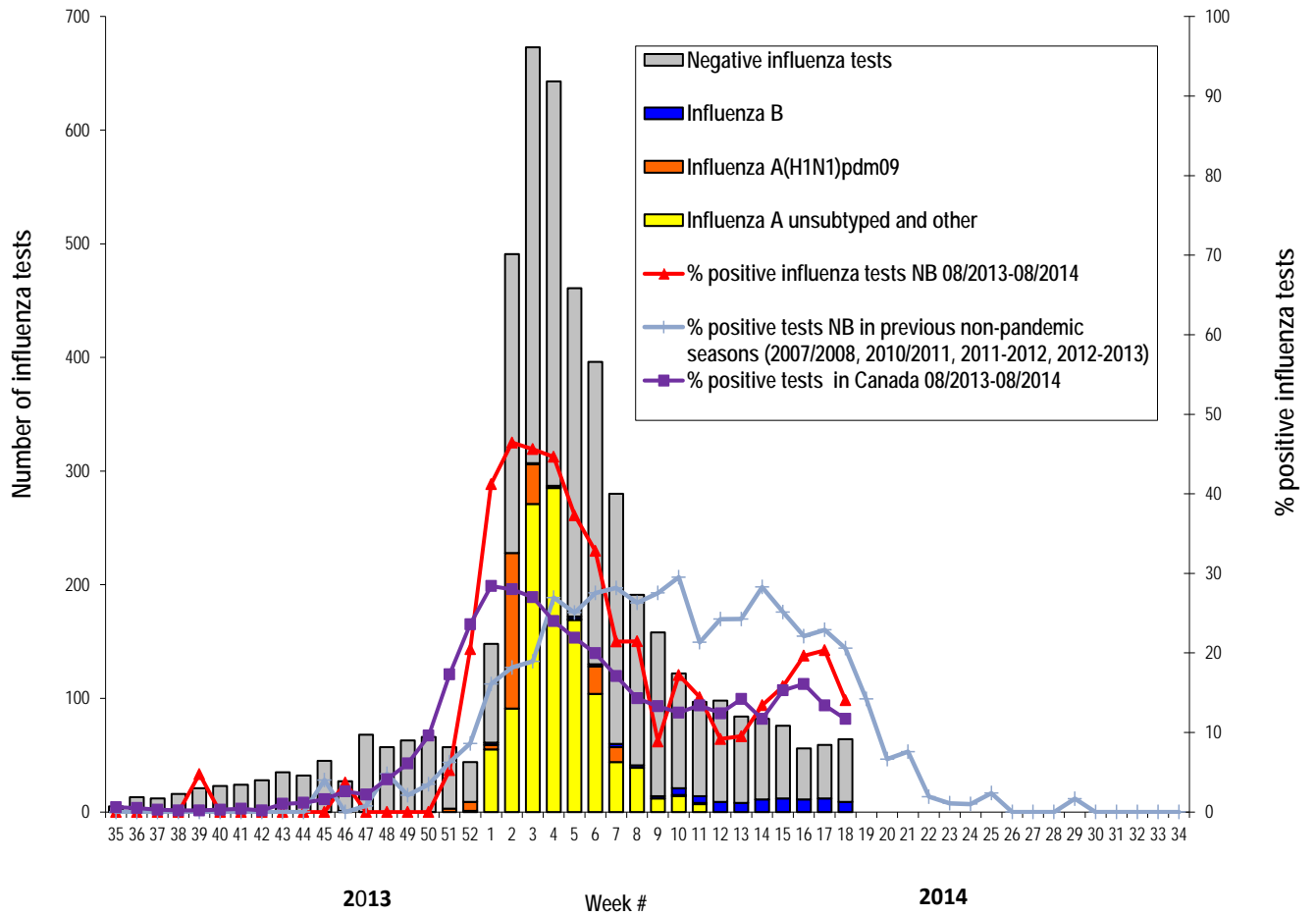


Table 1: Positive influenza test results by Health Region, in New Brunswick up to May 3 2014 (data source: G. Dumont lab results)

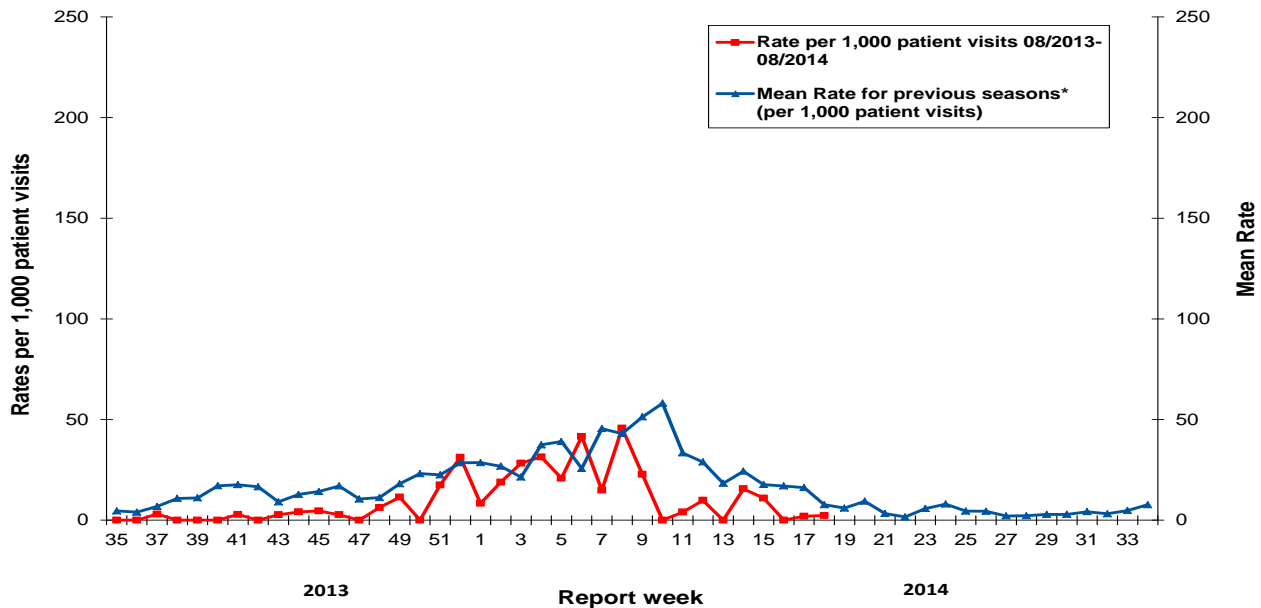
Region	Reporting period: Apr./27/2014–May/03/2014							Cumulative: (2013/2014 season) Aug./25/2013 –May/03/2014						Cumulative: (2012/2013 season) Aug./26/2012 – Aug./24/2013			
	Activity level ²	A				B	Total	A				B	Total	A		B	Total
		A(H1)	A(H3)	(H1N1) pdm09	unsubt yped	A(H1)		A(H3)	(H1N1) pdm09	unsubt yped	Non-(H1N1) pdm09	(H1N1) pdm09					
Region 1	Sporadic	0	0	0	0	3	3	0	1	205	442	20	668	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	3	124	85	9	1	95
Region 4	Sporadic	0	0	0	0	1	1	0	0	52	61	47	160	168	5	3	176
Region 5	No activity	0	0	0	0	0	0	0	0	10	22	6	38	20	1	7	28
Region 6	Sporadic	0	0	0	0	5	5	0	0	42	49	18	109	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	9	9	0	1	440	884	99	1424	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 18, the ILI consultation rate was 2.3 consultations per 1,000 patient visits, and was within the expected levels for this time of year.
- During week 18, the sentinel response rate was 36% 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.

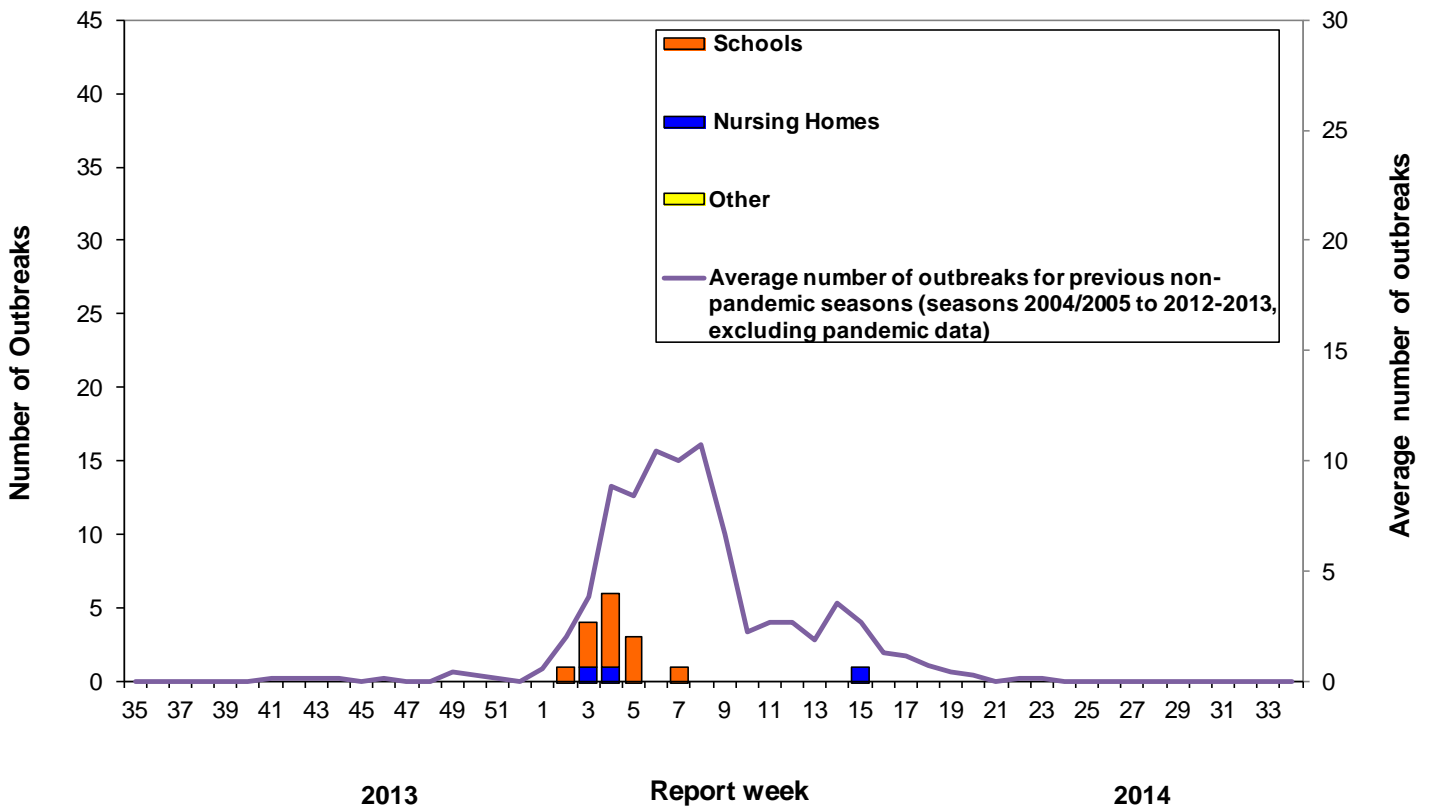
	Reporting period: Apr./27/2014–May/03/2014			Cumulative # of outbreaks season 2013-2014	Cumulative # of outbreaks season 2012-2013
	Lab-confirmed outbreaks in Nursing Homes*	Schools reporting ILI outbreaks**	Lab-confirmed outbreaks in Other Settings*		
Region 1	0 out of 13	0 out of 74	0	3	15
Region 2	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/