

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: May 11 to May 17 2014 (week 20)

Summary:

In New Brunswick, low influenza activity in week 20, all detections were influenza B.

New Brunswick:

- There have been 3 positive influenza detections during week 20, all were influenza B.
- The ILI consultation rate was similar to previous week and was slightly below the expected levels for this time of year.
- No new influenza or ILI outbreaks were reported.

Canada:

- In week 20, influenza activity in Canada continued to decline, although some regions reported small increases in circulation of influenza B. Late-season influenza B activity is past its peak, and remains within expected levels for this time of year. Influenza A activity has been steadily declining over the last 5 weeks.
- 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.
- 283 laboratory detections of influenza were reported in week 20. The percentage of laboratory tests positive for influenza was 9.2%.
- The national ILI consultation rate was 17.2 consultations per 1,000 patients' visits, which was within the expected range for week 20.
- Four new influenza outbreaks were reported: 3 in long-term care facilities and 1 in another setting. Also, 1 ILI outbreak was reported in another setting.

International:

- <u>Human infection with Avian Influenza:</u> As of May 22 2014, a total of 439 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 156 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 23 2014, 635 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, 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 635 cases, 193 were fatal. Onset of illness was between April 2012 and May 2014. A recent increase in cases since April 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.

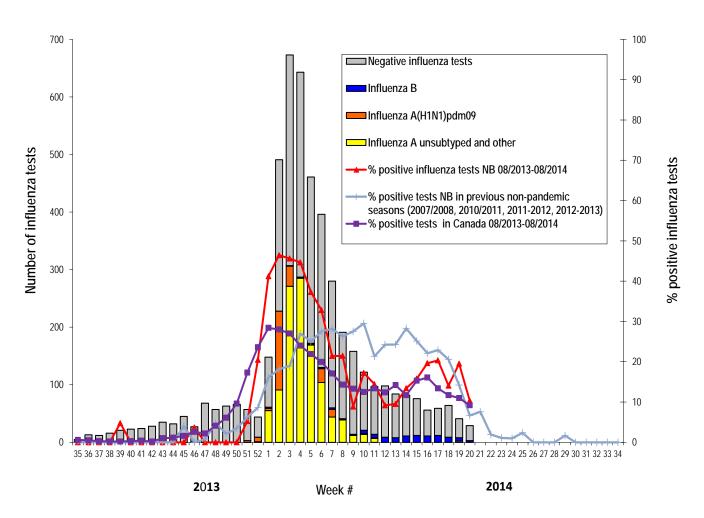
<u>Note:</u> This is the final weekly influenza report for the 2013-14 influenza season. While influenza surveillance continues to be monitored weekly at provincial and national levels, the full length version of this report as well as the abbreviated web version will be distributed biweekly during the summer season.

Influenza Laboratory Data¹

- Low influenza activity, all positive detections were influenza B.
- 3 influenza detections were reported during this current reporting period.
- Since the beginning of the season, 1435 positive influenza detections were reported, 440 influenza A (H1N1)pdm09, 2 influenza A (H3), 885 influenza A (unsubtyped) and 108 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.

<u>Graph 1</u>: Number and percent of positive influenza specimens in New Brunswick by week, up to May 17 2014 (data source: G. Dumont Lab results)



<u>Table 1</u>: Positive influenza test results by Health Region, in New Brunswick up to May 17 2014 (data source: G. Dumont lab results)

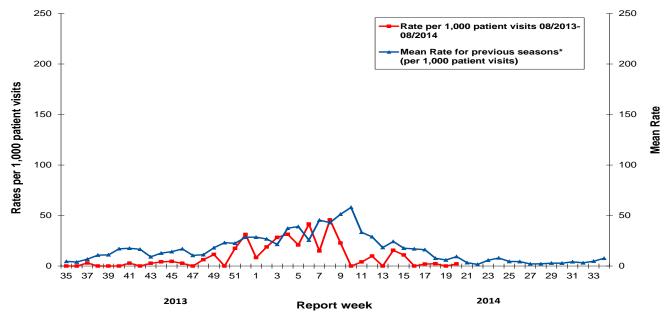
Region	Reporting period: May/11/2014-May/17/2014						Cumulative: (2013/2014 season) Aug./25/2013 -May/17/2014					Cumulative: (2012/2013 season) Aug./26/2012 – Aug./24/2013					
		А				В		АВВ				A B					
	Activity level ²	A(H1)	A(H3)	(H1N1) pdm09	unsubt yped		Total	A(H1)	A(H3)	(H1N1) pdm09	unsubt yped		Total	Non- (H1N1) pdm09	(H1N1) pdm09		Total
Region 1	Sporadic	0	0	0	0	1	1	0	2	205	442	25	674	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	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	Sporadic	0	0	0	0	2	2	0	0	42	49	20	111	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	3	3	0	2	440	885	108	1435	1352	38	98	1488

 $^{^2 \} Influenza\ activity\ level\ definition\ is\ available\ on\ the\ PHAC\ FluWatch\ website: \\ \underline{http://www.phac-aspc.gc.ca/fluwatch/13-14/def13-14-eng.php}$

2) ILI Consultation Rates³

- During week 20, the ILI consultation rate was 2.1 consultations per 1,000 patient visits, and was slightly below the expected levels for this time of year.
- During week 20, the sentinel response rate was 44% 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

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

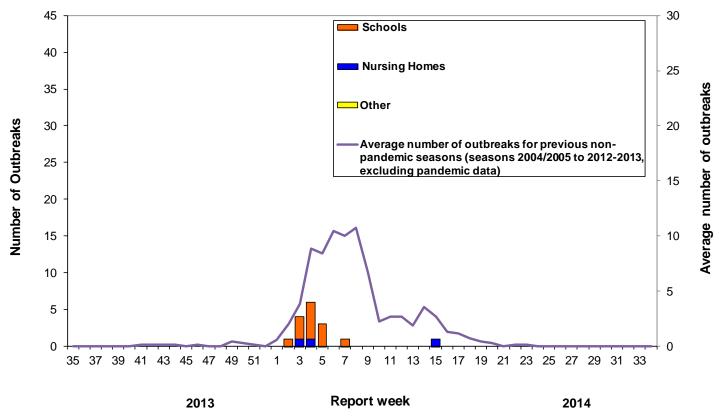
	M	Reporting period: lay/11/2014-May/17/201	Cumulative # of	Cumulative # of outbreaks		
	Lab-confirmed outbreaks in Nursing Homes*	Schools reporting ILI outbreaks**	Lab-confirmed outbreaks in Other Settings*	outbreaks season 2013-2014	season 2012-2013	
Region 1	0 out of 13	0 out of 74	0	3	15	
Region 2	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.

<u>Graph 3</u>: 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.

<u>National Flu Watch Program</u> - 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/cqi-files/bulletin_v2.cqi 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/

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.