

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: May 13, 2012 - May 19, 2012 (week 20)

Summary

In New Brunswick, the decline in influenza activity since week 15 continues

New Brunswick:

- There have been 7 positive influenza detections during week 20, 1 influenza A (H3), 2 influenza A (H1N1)pdm09 and 4 influenza B.
- The ILI consultation rate was low and is within the expected range for this time of year.
- No ILI or influenza outbreaks were reported.

Canada:

- Overall influenza activity in Canada continues to decline; most indicators of influenza activity have declined compared to the previous week.
- 181 laboratory detections of influenza were reported, proportion of positive tests was 8.6%. The proportion of positive detections for influenza A viruses increased slightly while the percent positive for influenza B viruses declined.
- The ILI consultation rate was within the expected levels for this time of year. 5 influenza or ILI outbreaks were reported: 2 in long-term care facilities, 1 in a hospital and 2 in other settings.

International:

WHO: As of May 25, early in the season, most viruses tested were antigenically related to those found in the current trivalent seasonal vaccine. However, by mid-season, divergence was noted in both the USA and Europe in the A(H3N2) viruses tested. Significant numbers of A(H3N2) viruses tested in recent months have shown reduced cross reactivity with the 2011-12 vaccine virus. Influenza type B virus detections have been both from the Victoria and Yamagata lineages with the former slightly more common in China and parts of Europe.

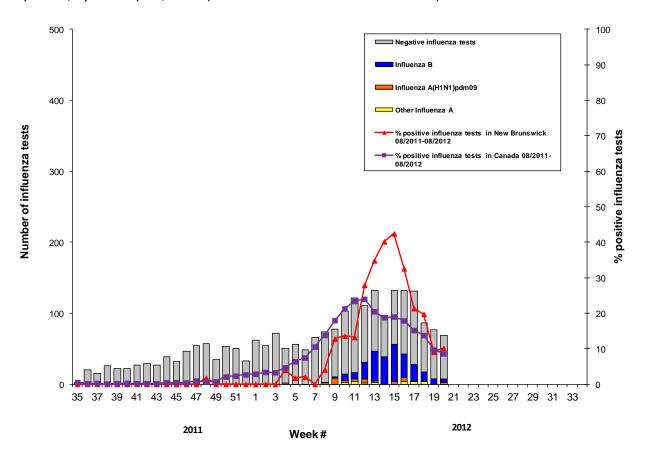
<u>Note:</u> This is the final weekly influenza report for the 2011-12 influenza season. While influenza surveillance continues to be monitored weekly at provincial and national levels, reporting will occur on a biweekly basis during the summer season.

1) <u>Influenza Laboratory Data¹</u>

- The decline in influenza activity since week 15 continues.
- 7 influenza detections were reported during that period.
- Since the beginning of the season, 322 positive influenza detections have been reported; 36 were influenza A (H1N1)pdm09 (11%), 30 were influenza A (H3)(9%) and 256 were influenza B viruses(80%).

Surveillance specimens are submitted by recruited New Brunswick Sentinel Practitioner Influenza Network (NB SPIN) practitioners, which are comprised of 7 sites in Emergency Rooms, 5 sites in Family Practice, 3 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 19, 2012 (data source: G. Dumont lab results)



<u>Table 1</u>: Positive influenza test results by Health Region in New Brunswick up to May 19, 2012 (data source: G. Dumont lab results)

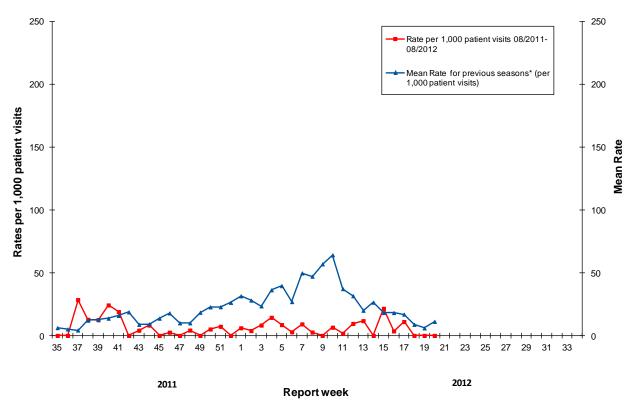
Region	Reporting period: May/13/2012–May/19/2012						Cumulative: (2011/2012 season) Aug./28/2011 –May/19/2012				Cumulative: (2010/2011 season) Aug./29/2010 – Aug./27/2011			
	Activity level ²	А				В	A				В	А		В
		A(H1)	A(H3)	(H1N1) pdm09	unsubt yped		A(H1)	A(H3)	(H1N1) pdm09	unsubt yped		Non- pH1N1	pH1N1	
Region 1	Sporadic	0	1	2	0	1	0	24	17	0	205	433	56	29
Region 2	Sporadic	0	0	0	0	1	0	1	2	0	14	57	2	13
Region 3	No activity	0	0	0	0	0	0	1	0	0	3	112	16	19
Region 4	No activity	0	0	0	0	0	0	2	8	0	2	79	58	56
Region 5	No activity	0	0	0	0	0	0	0	2	0	4	26	3	1
Region 6	Sporadic	0	0	0	0	1	0	1	6	0	16	46	27	5
Region 7	Sporadic	0	0	0	0	1	0	1	1	0	12	32	3	3
Total NB		0	1	2	0	4	0	30	36	0	256	785	165	126

² Influenza activity level definition is available on the PHAC FluWatch website: http://www.phac-aspc.gc.ca/fluwatch/11-12/def11-12-eng.php

2) ILI Consultation Rates³

- During week 20, the ILI consultation rate was 0.0 consultations per 1,000 patient visits, and is within the expected levels for this time of year.
- During week 20, the sentinel response rate was 43% for the FluWatch sentinel physicians and 39% for the NB SPIN practitioners. (6 FluWatch and 7 NB SPIN)

<u>Graph 2</u>: ILI Consultation Rates in New Brunswick, by report week, season 2011/12 compared to previous seasons*



^{*} The mean rate was based on data from the 1996/97 to 2010/2011 seasons and excludes the Pandemic season (2009-2010).

³ A total of 32 practitioner sites (14 FluWatch sentinel physicians and 18 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

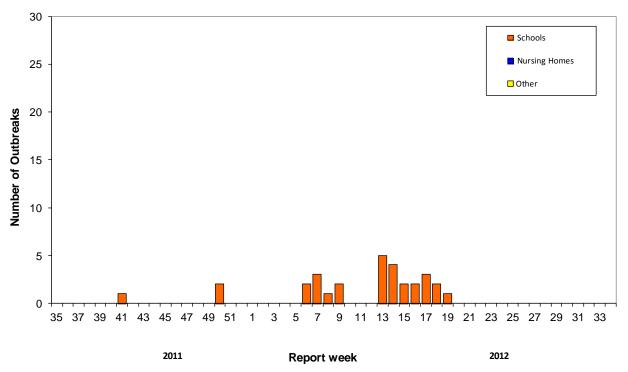
<u>Table 2:</u> ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, current and previous seasons.

	Ma	Reporting period: y/13/2012 –May/19/2	Cumulative # of	Cumulative # of outbreaks		
	Lab-confirmed outbreaks in Nursing Homes*	Schools reporting ILI outbreaks**	Lab-confirmed outbreaks in Other Settings*	outbreaks season 2011-2012	season 2010-2011	
Region 1	0 out of 13	0 out of 74	0	4	17	
Region 2	0 out of 15	0 out of 81	0	6	21	
Region 3	0 out of 14	0 out of 95	0	8	12	
Region 4	0 out of 6	0 out of 22	0	2	12	
Region 5	0 out of 2	0 out of 18	0	6	17	
Region 6	0 out of 9	0 out of 35	0	2	10	
Region 7	0 out of 4	0 out of 27	0	2	22	
Total NB	0 out of 63	0 out of 352	0	30	111	

^{*}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.

<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 2011/12.



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: <u>www.phac-aspc.gc.ca/fluwatch/index.html</u>

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/archivos/INFORME%20INFLUENZA%20PANDÉMICA%20_H1N1_%2005-08-2009.pdf

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.