

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: May 19 to June 1 2013 (weeks 21 & 22)

Summary:

Low influenza activity with continued decrease in positive detections in New Brunswick

New Brunswick:

- There have been 8 positive influenza detections during weeks 21 & 22 (6% decrease in week 22), 1 influenza A (unsubtyped) and 7 influenza B.
- The ILI consultation rate was low and was within the expected range for this time of year.
- No new influenza/ ILI outbreak were reported.

Canada:

- Influenza activity in Canada continued to decline with only 2 regions reporting localized activity in each of weeks 21 & 22. Influenza B continues to be the predominant circulating type.
- 144 laboratory detections of influenza were reported, proportion of positive tests was 4.0% in week 21 and 3.4% in week 22.
- The ILI consultation rate has been fairly stable over the past 8 weeks and was above the expected level for the past 5 weeks. 1 new influenza outbreak was reported in a long-term care facility in week 21.

International:

- Human infection with Avian Influenza: As of June 7 2013, the WHO reported a total of 132 laboratory-confirmed cases of human infection with an avian influenza A (H7N9) virus in China including 37 deaths. Disease onset was between 19 February and 21 May 2013. There is no evidence of sustained human-to-human transmission. Contacts of confirmed cases are being closely monitored. Investigations into possible sources of infection and reservoirs of the virus are ongoing.
- MERS-CoV: Since April 2012, 55 laboratory-confirmed cases have been reported from Saudi Arabia, Qatar, Jordan, United Arab Emirates, United Kingdom, France, Germany, Tunisia and Italy. Among the 55 cases, 31 were fatal. Onset of illness was between April 2012 and May 2013.

Note: 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) Influenza Laboratory Data¹

- A 6% decrease in percent positive laboratory results in week 22.
- 8 influenza detections were reported during that period.
- Since the beginning of the season, 1486 positive influenza detections have been reported, 38 influenza A (H1N1)pdm09, 450 influenza A (H3) viruses, 902 influenza A (unsubtyped) and 96 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, 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.

Graph 1: Number and percent of positive influenza specimens in New Brunswick, by week, up to June 1, 2013 (data source: G. Dumont lab results)

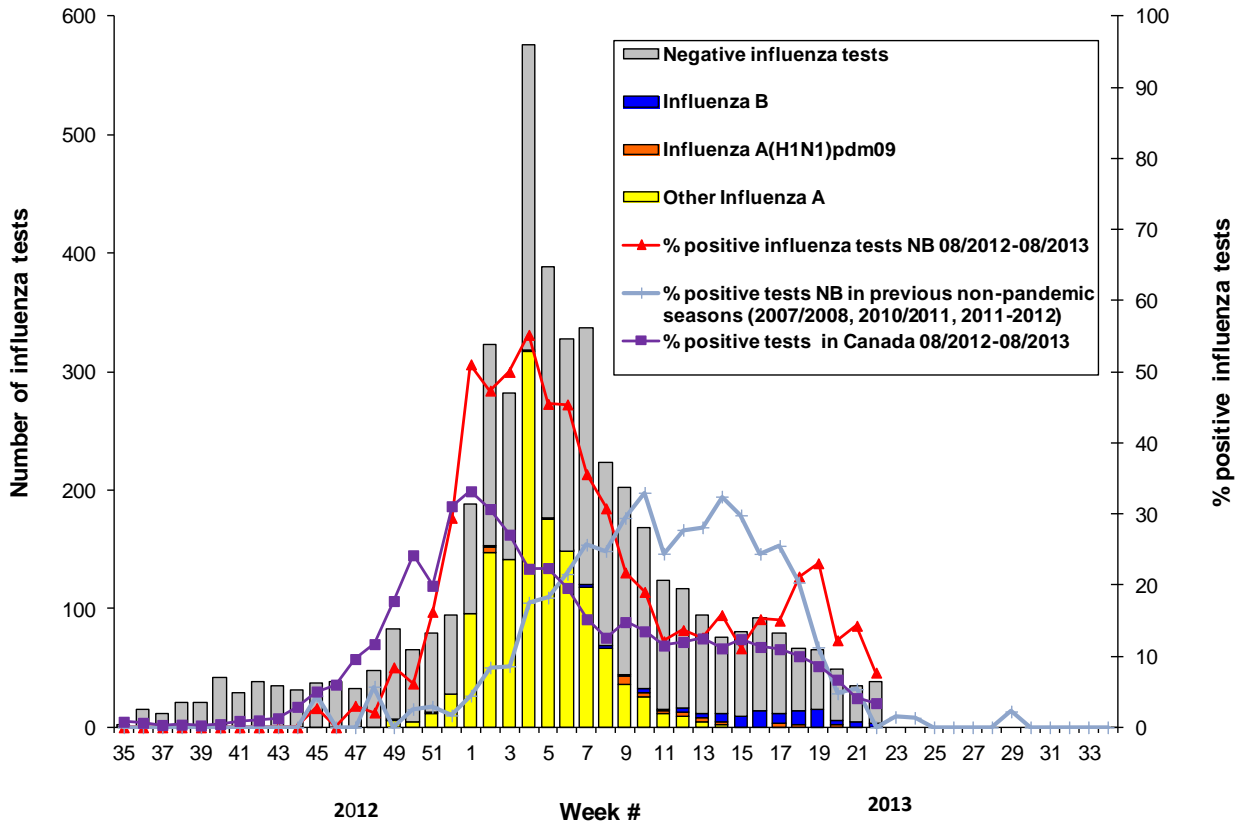


Table 1: Positive influenza test results by Health Region in New Brunswick up to June 1, 2013 (data source: G. Dumont lab results)

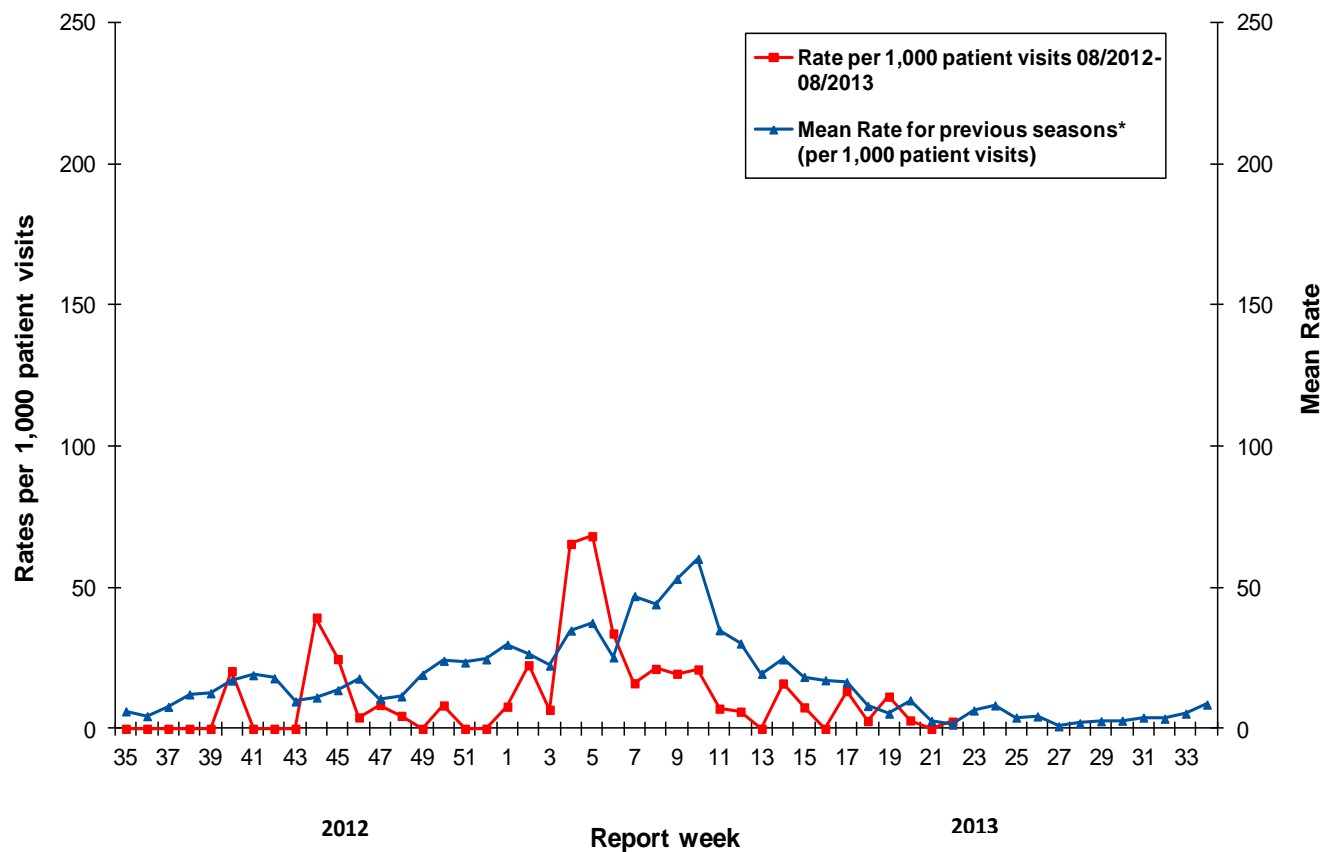
Region	Reporting period: May/19/2012–Jun./01/2013							Cumulative: (2012/2013 season) Aug./26/2012 –Jun./01/2013						Cumulative: (2011/2012 season) Aug./28/2011 – Aug./25/2012			
	Activity level ²	A				B	Total	A				B	Total	A		B	Total
		A(H1)	A(H3)	(H1N1) pdm09	unsubt yped	A(H1)		A(H3)	(H1N1) pdm09	unsubt yped	Non-(H1N1) pdm09	(H1N1) pdm09					
Region 1	Sporadic	0	0	0	1	0	1	0	156	13	371	18	558	24	17	206	247
Region 2	No activity	0	0	0	0	0	0	0	52	3	159	8	222	1	2	18	21
Region 3	No activity	0	0	0	0	0	0	0	27	9	58	1	95	1	0	3	4
Region 4	No activity	0	0	0	0	0	0	0	34	5	134	3	176	2	9	2	13
Region 5	Sporadic	0	0	0	0	1	1	0	11	1	9	7	28	0	2	4	6
Region 6	Sporadic	0	0	0	0	6	6	0	137	5	115	48	305	1	6	16	23
Region 7	No activity	0	0	0	0	0	0	0	33	2	56	11	102	1	1	12	14
Total NB		0	0	0	1	7	8	0	450	38	902	96	1486	30	37	261	328

² Influenza activity level definition is available on the PHAC FluWatch website: <http://www.phac-aspc.gc.ca/fluwatch/12-13/def12-13-eng.php>

2) ILI Consultation Rates³

- During weeks 21 & 22, the ILI consultation rate was 0.00 and 2.5 consultations per 1,000 patient visits, respectively, and was within the expected levels for this time of year.
- During weeks 21 & 22, the sentinel response rate was 37% and 40%, respectively, for both the FluWatch sentinel physicians and the NB SPIN practitioners.

Graph 2: ILI Consultation Rates in New Brunswick, by report week, season 2012/13 compared to previous seasons*



* The mean rate was based on data from the 1996/97 to 2011/2012 seasons and excludes the Pandemic season (2009-2010).

³ A total of 38 practitioner sites (20 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

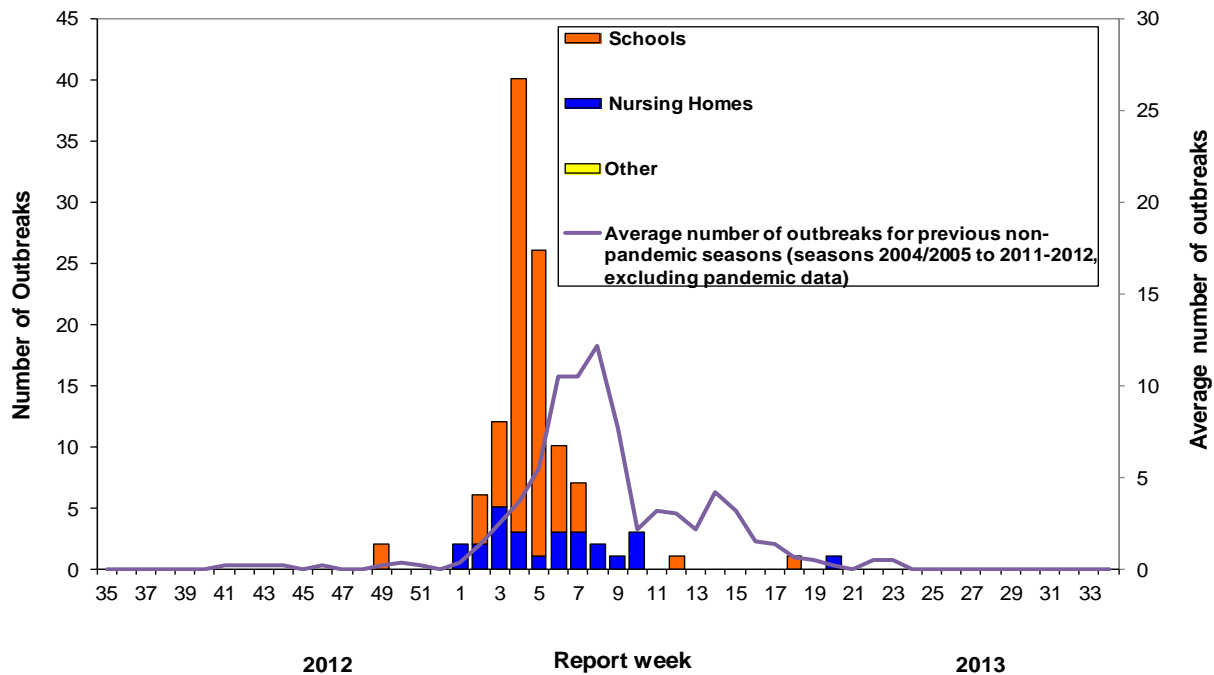
Table 2: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, current and previous seasons.

	Reporting period: May/19/2012–Jun./01/2013			Cumulative # of outbreaks season 2012-2013	Cumulative # of outbreaks season 2011-2012
	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	15	4
Region 2	0 out of 15	0 out of 81	0	38	6
Region 3	0 out of 14	0 out of 95	0	20	8
Region 4	0 out of 6	0 out of 22	0	2	2
Region 5	0 out of 2	0 out of 18	0	6	7
Region 6	0 out of 9	0 out of 35	0	23	2
Region 7	0 out of 4	0 out of 27	0	10	2
Total NB	0 out of 63	0 out of 352	0	114	31

*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 2012/13.



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

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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