WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: June 1 to June 14 2014 (weeks 23 & 24)

Summary:

In New Brunswick, low influenza activity in weeks 23 & 24, all positive detections were influenza B.

New Brunswick:

- There have been a total of 7 positive influenza detections during weeks 23 & 24, all were influenza B.
- The ILI consultation rate was 3.0 and 0.00 consultations per 1,000 patients visits, respectively in weeks 23 & 24 and was within the expected levels for week 23 but slightly lower than expected levels for week 24.
- No new influenza or ILI outbreaks were reported.

Canada:

- In weeks 23 & 24, influenza activity in Canada continued to decline and is approaching inter-seasonal levels. Influenza B has circulated later into the spring than in previous seasons, but overall activity remains within expected levels.
- There have been slightly more hospitalizations but fewer deaths with influenza reported this season than last season.
- 117 laboratory detections of influenza were reported in weeks 23 & 24. The percentage of laboratory tests positive for influenza in week 24 was 2.8%.
- The national ILI consultation rate was 11.6 and 8.4 consultations per 1,000 patients' visits for weeks 23 & 24, respectively. The rate for week 23 was slightly above the expected range for this time of year but the rate for week 24 was within the expected range.
- Two new influenza outbreaks were reported for the 2-week period: both in long-term care facilities.

International:

- Human infection with Avian Influenza: As of June 24 2014, a total of 448 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 158 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 June 23 2014, 701 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 701 cases, 249 were fatal. Onset of illness was between April 2012 and June 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.

Note: 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.

1) Influenza Laboratory Data[1]

- Low influenza activity, all positive detections were influenza B.
- 7 influenza detections were reported during the 2-week reporting period.
- Since the beginning of the season, 1450 positive influenza detections were reported, 440 influenza A (H1N1)pdm09, 2 influenza A (H3), 885 influenza A (unsubtyped) and 123 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 June 14 2014 (data source: G. Dumont Lab results)

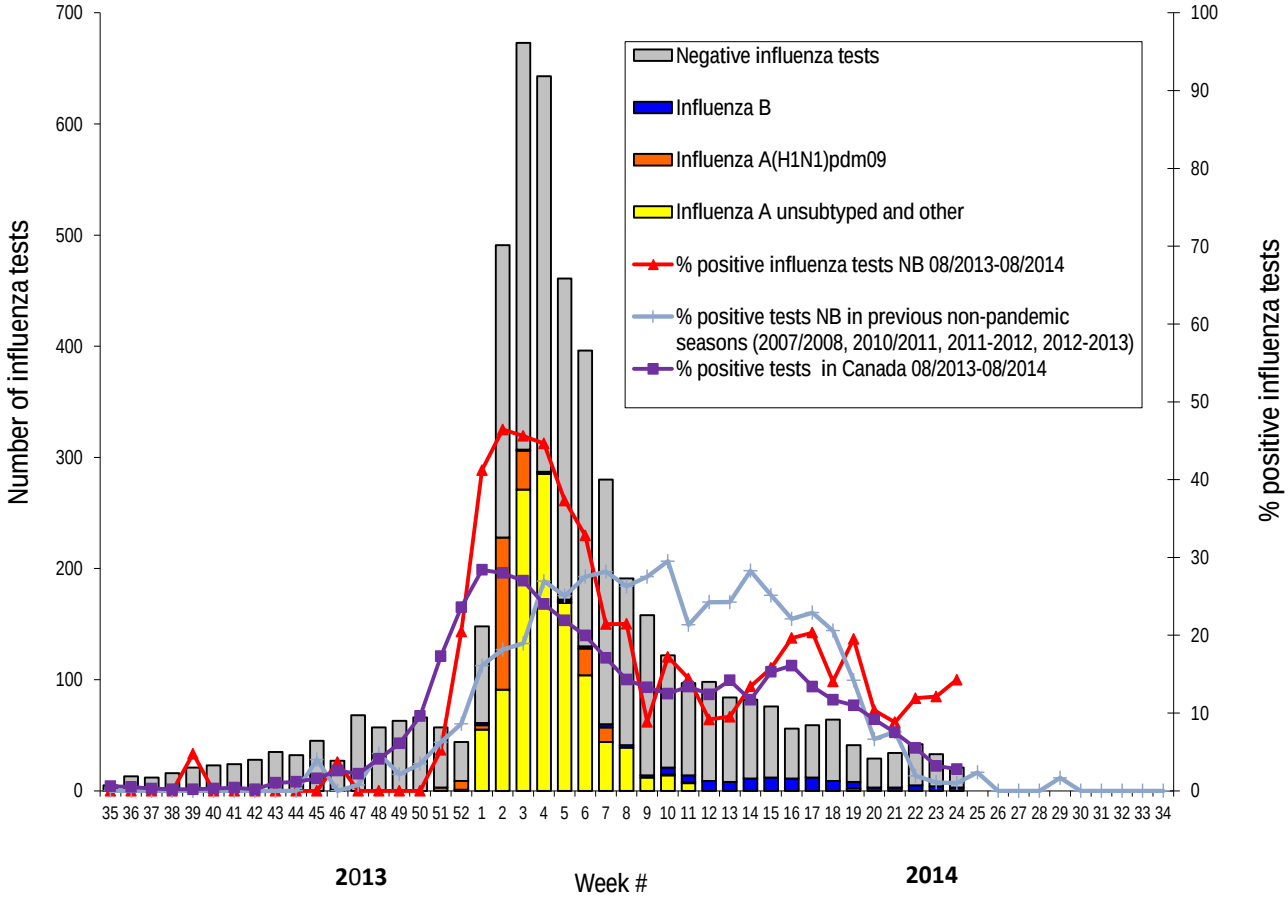


Table 1: Positive influenza test results by Health Region, in New Brunswick up to June 14 2014 (data source: G. Dumont lab results)

Region	Reporting period: June/01/2014–June/14/2014							Cumulative: (2013/2014 season) Aug./25/2013 –June/14/2014						Cumulative: (2012/2013 season) Aug./26/2012 – Aug./24/2013			
	Activity level[2]	A				B		A				B		A		B	
		A(H1)	A(H3)	(H1N1) pdm09	unsubtyped		Total	A(H1)	A(H3)	(H1N1) pdm09	unsubtyped		Total	Non-(H1N1) pdm09	(H1N1) pdm09		Total
Region 1	Sporadic	0	0	0	0	5	5	0	2	205	442	34	683	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	Sporadic	0	0	0	0	2	2	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	7	7	0	2	440	885	123	1450	1352	38	98	1488

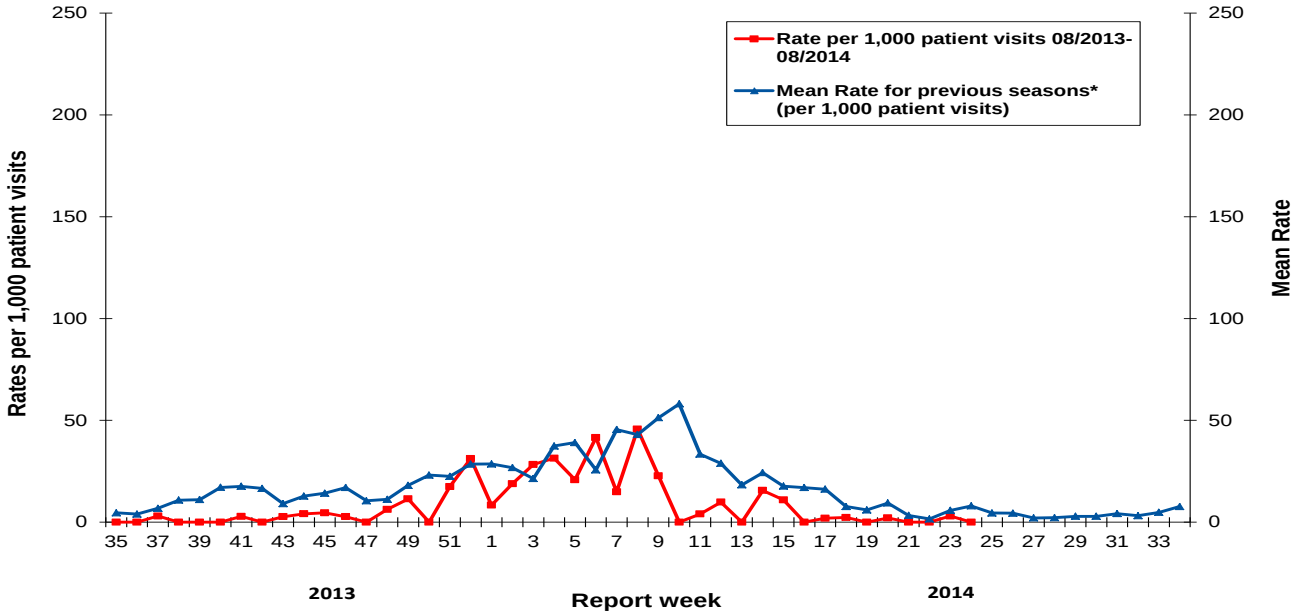
[2] Influenza activity level definition is available on the PHAC FluWatch website: http://www.phac-aspc.gc.ca/fluwatch/13-14/def13-14-eng.php

2) ILI Consultation Rates[3]

- During weeks 23 & 24, the ILI consultation rate was 3.0 and 0.0 consultations per 1,000 patient visits, respectively for weeks 23 & 24, and was within the expected levels for week 23 but slightly lower than expected levels for week 24.

- During weeks 23 & 24, the sentinel response rate was 38% and 36%, 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.

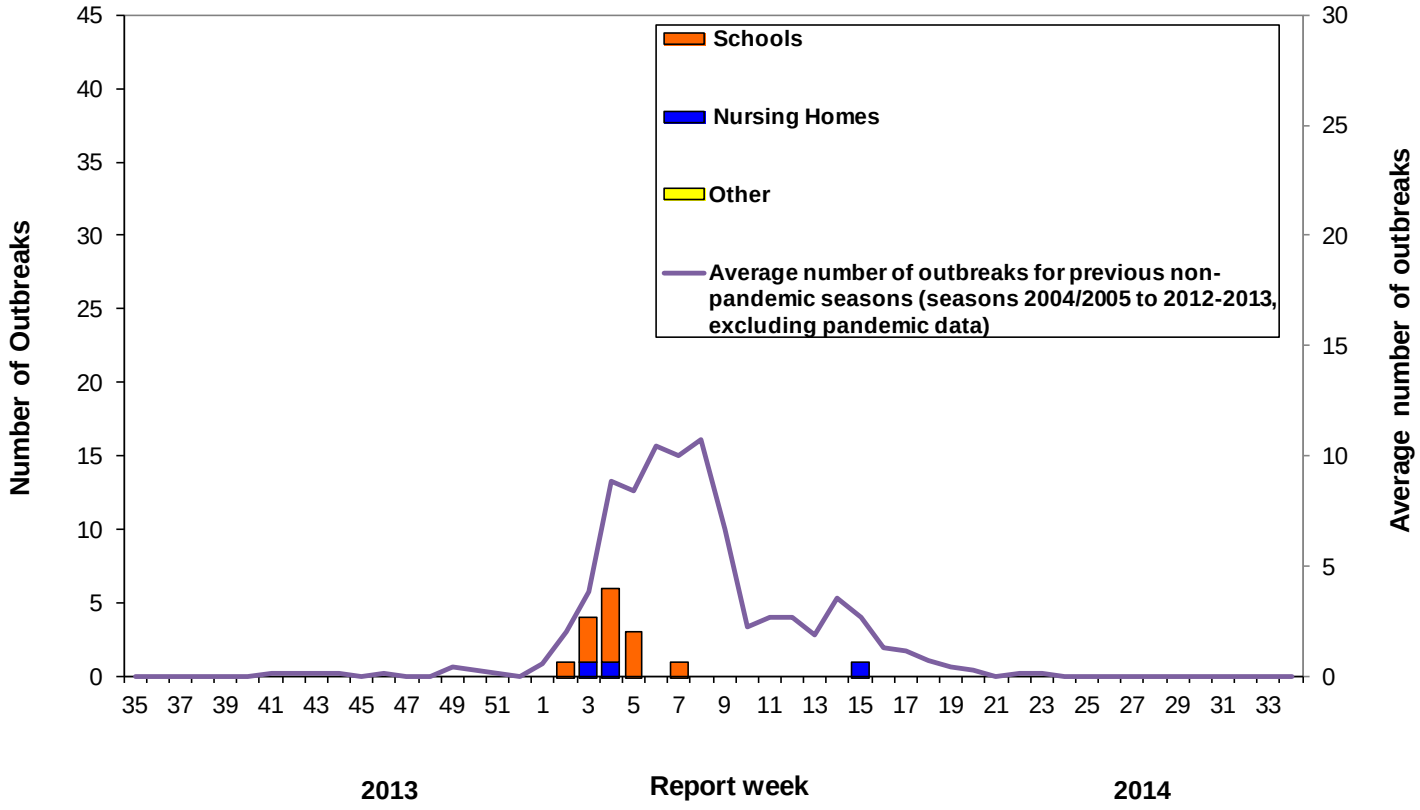
	Reporting period: June/01/2014–June/14/2014			Cumulative # of outbreaks season 2013-2014	Cumulative # of outbreaks season 2012-2013
	Lab-confirmed outbreaks in Nursing Homes*	Schools reporting ILI outbreaks**	Lab-confirmed outbreaks in Other Settings*		
Region 1	0 out of 13	0 out of 74	0	3	15
Region 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 Homes[1] and ILI Outbreaks in Schools[2] 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/

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