WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: May 18 to May 31 2014 (weeks 21 & 22)

Summary:

In New Brunswick, low influenza activity in weeks 21 & 22, all positive detections were influenza B.

New Brunswick:

- There have been a total of 8 positive influenza detections during weeks 21 & 22, all were influenza B.
- The ILI consultation rate was 0.00 consultations per 1,000 patients visits for both weeks and was within the expected levels for this time of year.
- No new influenza or ILI outbreaks were reported.

Canada:

- In weeks 21 & 22, influenza activity in Canada continued to decline. Low-level circulation of influenza B continued to be reported, but activity remains within the expected levels for this time of year.
- 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. The number of hospitalizations with influenza is similar to the number reported last year.
- 336 laboratory detections of influenza were reported in weeks 21 & 22. The percentage of laboratory tests positive for influenza in week 22 was 5.5%.
- The national ILI consultation rate was 18.1 and 13.2 consultations per 1,000 patients' visits for weeks 21 & 22, respectively. The rates for weeks 21& 22 were above the expected range for this time of year.
- Three new influenza outbreaks were reported for the 2-week period: all in long-term care facilities. Also, 3 outbreaks of ILI were reported in other settings.

International:

- Human infection with Avian Influenza: As of June 5 2014, a total of 442 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 June 11 2014, 683 laboratory-confirmed cases have been reported from Saudi Arabia, Qatar, Jordan, United Arab Emirates, Kuwait, United Kingdom, Oman, Yemen, Iran, 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 683 cases, 204 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.

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.
- 8 influenza detections were reported during the 2-week reporting period.
- Since the beginning of the season, 1443 positive influenza detections were reported, 440 influenza A (H1N1)pdm09, 2 influenza A (H3), 885 influenza A (unsubtyped) and 116 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 31 2014 (data source: G. Dumont Lab results)

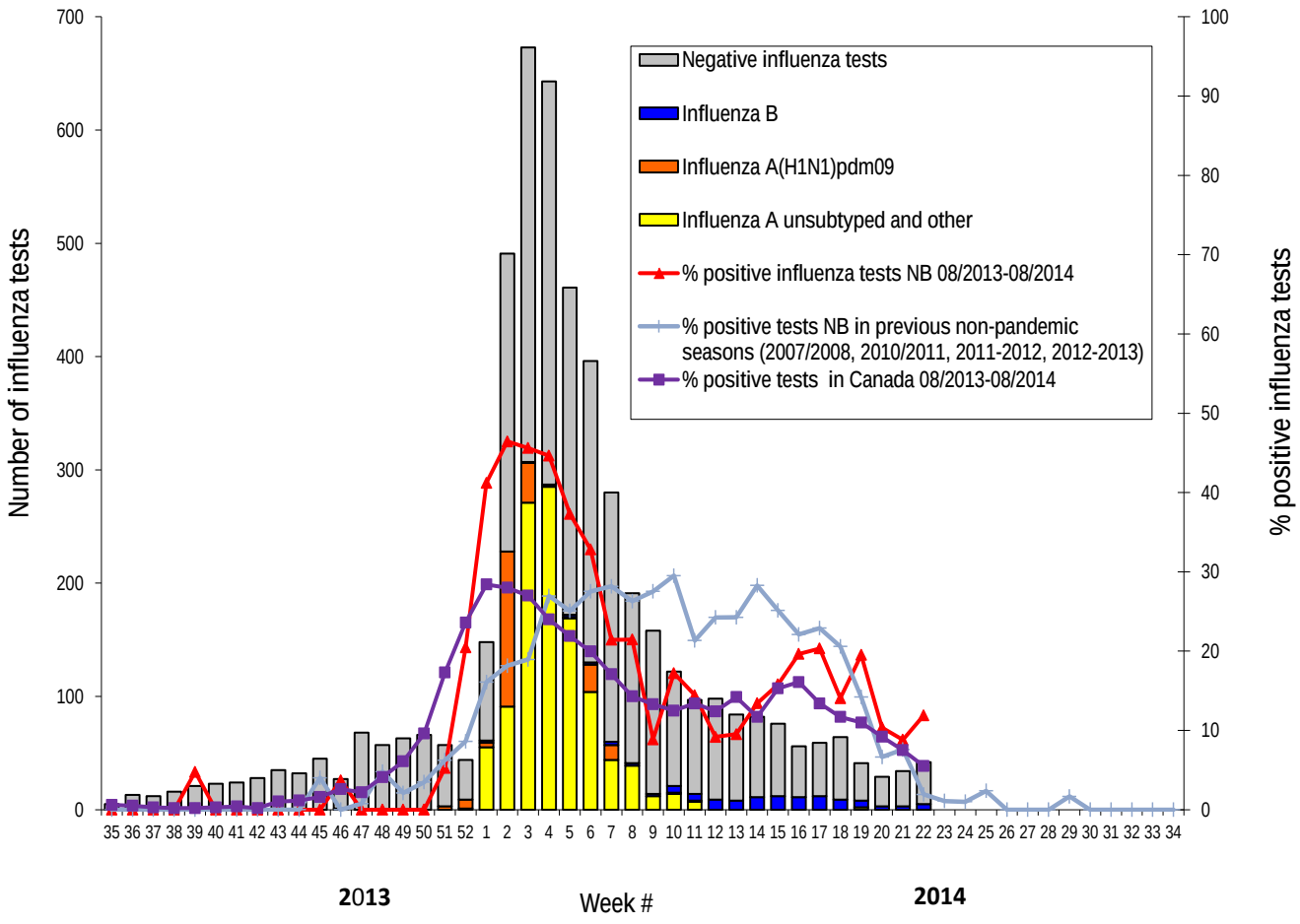


Table 1: Positive influenza test results by Health Region, in New Brunswick up to May 31 2014 (data source: G. Dumont lab results)

Region	Reporting period: May/18/2014–May/31/2014							Cumulative: (2013/2014 season) Aug./25/2013 –May/31/2014						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	4	4	0	2	205	442	29	678	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	Sporadic	0	0	0	0	1	1	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	3	3	0	0	42	49	23	114	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	8	8	0	2	440	885	116	1443	1352	38	98	1488

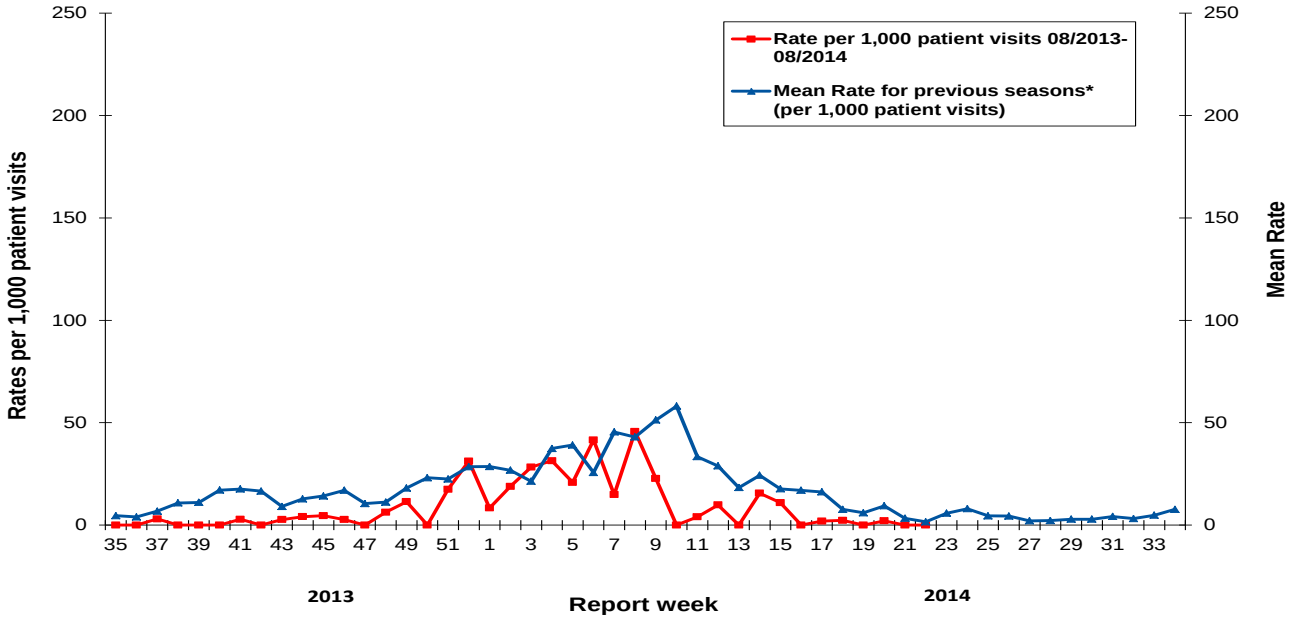
[2] Influenza activity level definition is available on the PHAC FluWatch website: http://www.phac-aspc.gc.ca/fluwatch/13-14/def13-14-eng.php

2) ILI Consultation Rates[3]

- During weeks 21 & 22, the ILI consultation rate was 0.0 consultations per 1,000 patient visits for both weeks, and was within the expected levels for this time of year.

- During weeks 21 & 22, the sentinel response rate was 28% and 22%, 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.

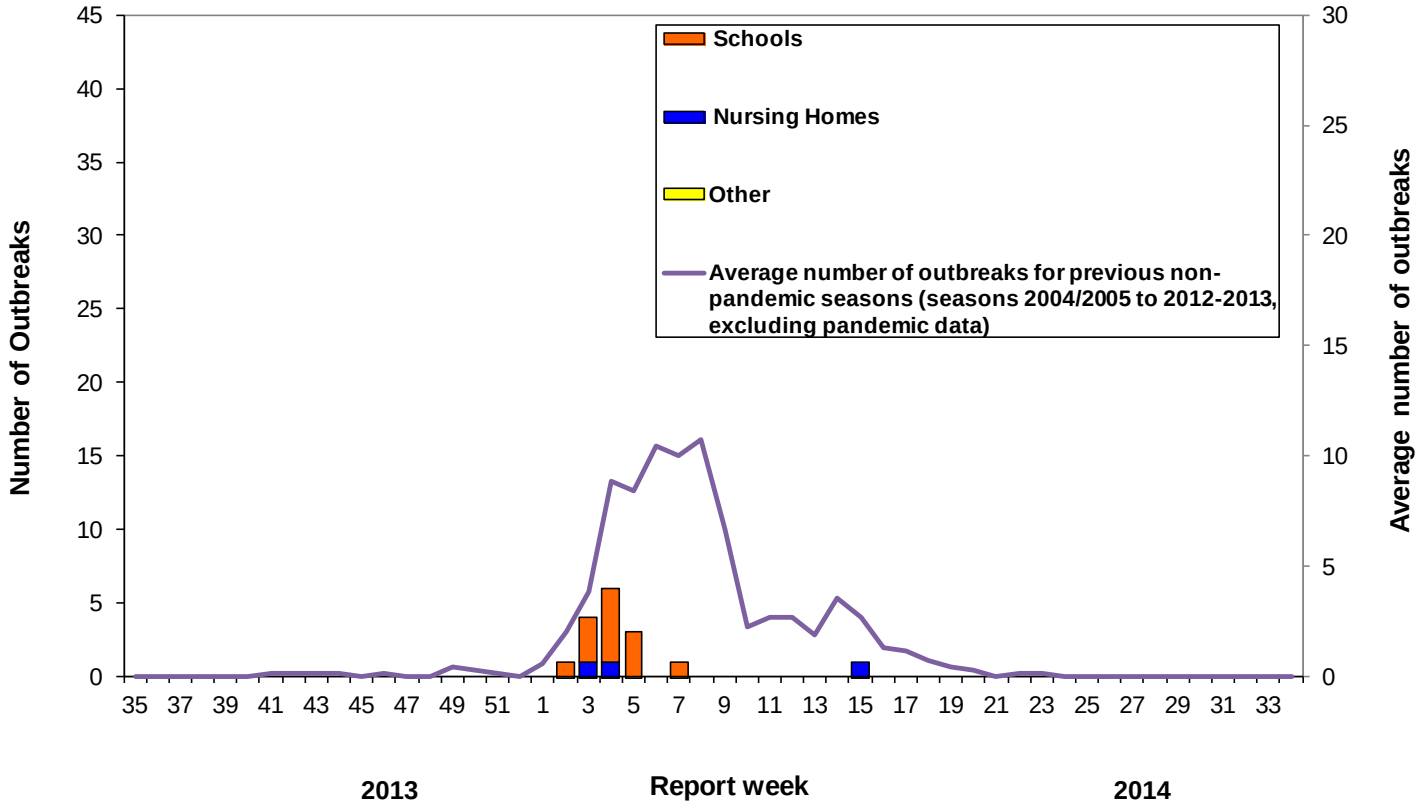
	Reporting period: May/18/2014–May/31/2014			Cumulative # of outbreaks season 2013-2014	Cumulative # of outbreaks season 2012-2013
	Lab-confirmed outbreaks in Nursing Homes*	Schools reporting ILI outbreaks**	Lab-confirmed outbreaks in Other Settings*		
Region 1	0 out of 13	0 out of 74	0	3	15
Region 2	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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