

## **WEEKLY NEW BRUNSWICK INFLUENZA REPORT**

**Reporting period: December 14 to December 20 2014 (week 51)**

### **Summary:**

#### **In New Brunswick, influenza activity remains within expected levels**

##### **New Brunswick:**

- There have been 5 positive influenza detections during week 51, 4 A (H3) viruses and 1 A (unsubtyped).
- The ILI consultation rate was 7.6 consultations per 1,000 patients visits, and was below the expected level for this time of year.
- No new influenza or ILI outbreaks were reported.

##### **Canada:**

- No new updates were available on the national influenza activity at the time of this report.

##### **International:**

- Globally, influenza activity increased in the northern hemisphere and in several countries has passed the seasonal threshold. Influenza A(H3N2) viruses predominated so far. The antigenic characterization of most recent A(H3N2) viruses so far indicated differences from the A(H3N2) virus used in the influenza vaccines for the northern hemisphere 2014-2015.
- Human infection with Avian Influenza: As of December 18 2014, a total of 458 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 177 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.
- Other Respiratory Viruses:
  - MERS-CoV: From April 2012 to December 17 2014, 938 laboratory-confirmed cases of MERS-CoV have been reported from 23 countries. 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 938 cases, 343 were fatal. Investigations to identify the source of infection and routes of exposure are still ongoing. The number of MERS-CoV cases in September and October 2014 has been slightly higher than in July and August 2014. This pattern was also observed previously.

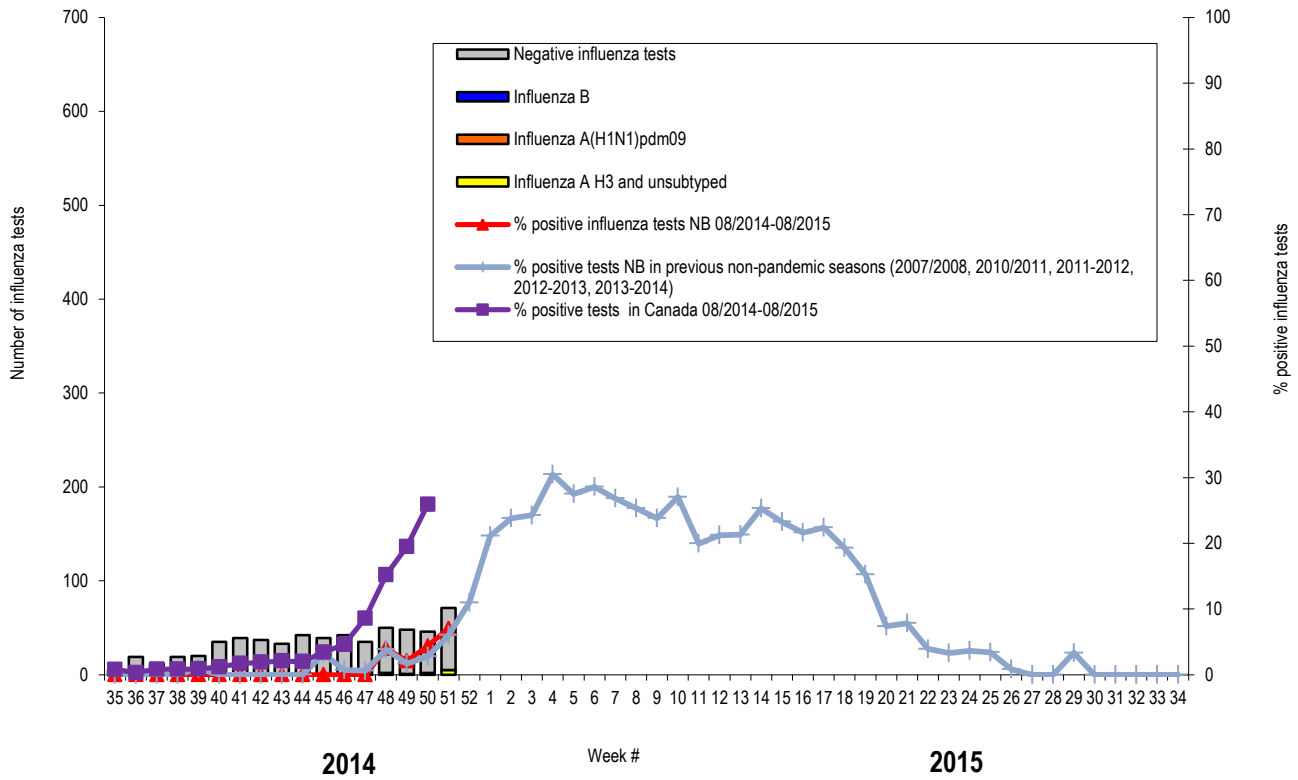
### **A. New Brunswick Influenza Activity**

#### **1) Influenza Laboratory Data**<sup>1</sup>

- Influenza activity remains within expected levels.
- Five influenza detections were reported during the reporting period; 4 A (H3) viruses and 1 A (unsubtyped).
- Since the beginning of the season, ten positive influenza detections were reported, 9 were A (H3) and 1 was A (unsubtyped).

<sup>1</sup> Surveillance specimens are submitted by recruited New Brunswick Sentinel Practitioner Influenza Network (NB SPIN) practitioners, which are comprised of 8 sites in Emergency Rooms, 2 sites in Family Practice, 2 sites in First Nations communities, 1 site in a Nursing Home, 2 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 December 20 2014 (data source: G. Dumont Lab results)**



**Table 1:** Positive influenza test results by Health Region, in New Brunswick for reporting week, cumulative current and previous seasons.  
(data source: G. Dumont lab results up to December 20 2014)

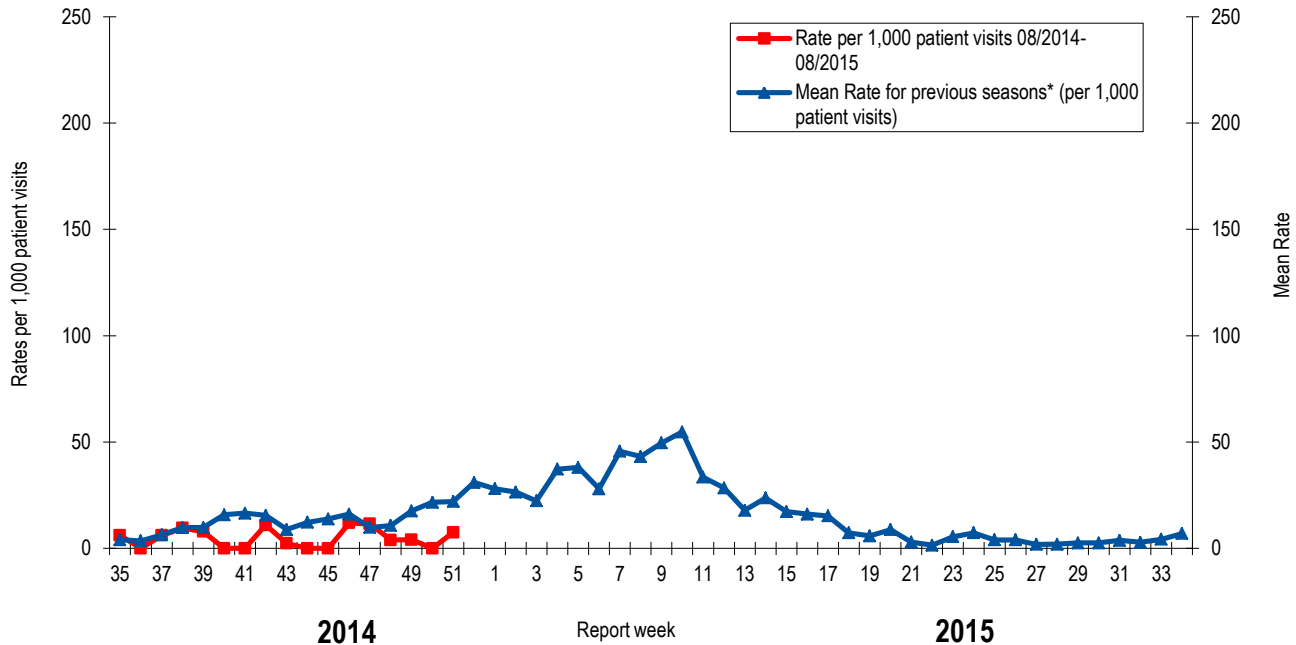
Region	Reporting period: December/14/2014–December/20/2014						Cumulative: (2014/2015 season) Aug./24/2014 –Dec./20/2014					Cumulative: (2013/2014 season) Aug./25/2013 – Aug./23/2014				
	Activity level <sup>2</sup>	A				B	A				B	A				B
		A(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total	A(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total	(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total
Region 1	Sporadic	2	0	0	2	0	4	0	0	2	0	2	205	442	39	688
Region 2	Sporadic	0	0	1	1	0	0	0	1	0	0	0	86	219	2	307
Region 3	No activity	0	0	0	0	0	0	0	0	0	0	0	41	80	4	125
Region 4	Sporadic	2	0	0	2	0	3	0	0	1	0	0	52	61	49	162
Region 5	No activity	0	0	0	0	0	0	0	0	0	0	0	10	23	6	39
Region 6	Sporadic activity	0	0	0	0	0	2	0	0	2	0	0	42	49	25	116
Region 7	No activity	0	0	0	0	0	0	0	0	0	0	0	4	11	3	18
<b>Total NB</b>		<b>4</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>1</b>	<b>10</b>	<b>0</b>	<b>2</b>	<b>440</b>	<b>885</b>	<b>128</b>	<b>1455</b>

<sup>2</sup> Influenza activity level definition is available on the PHAC FluWatch website: <http://www.phac-aspc.gc.ca/fluwatch/14-15/def14-15-eng.php>

### ILI Consultation Rates<sup>3</sup>

- During week 51, the ILI consultation rate was 7.6 consultations per 1,000 patient visits, and was below the expected level for this time of year.
- During week 51, the sentinel response rate was 16%, for both the FluWatch sentinel physicians and the NB SPIN practitioners.

**Graph 2: ILI Consultation Rates in New Brunswick, by report week, season 2014/15 compared to previous seasons\***



\* The mean rate was based on data from the 1996/97 to 2013/2014 seasons and excludes the Pandemic

### 2) 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.**

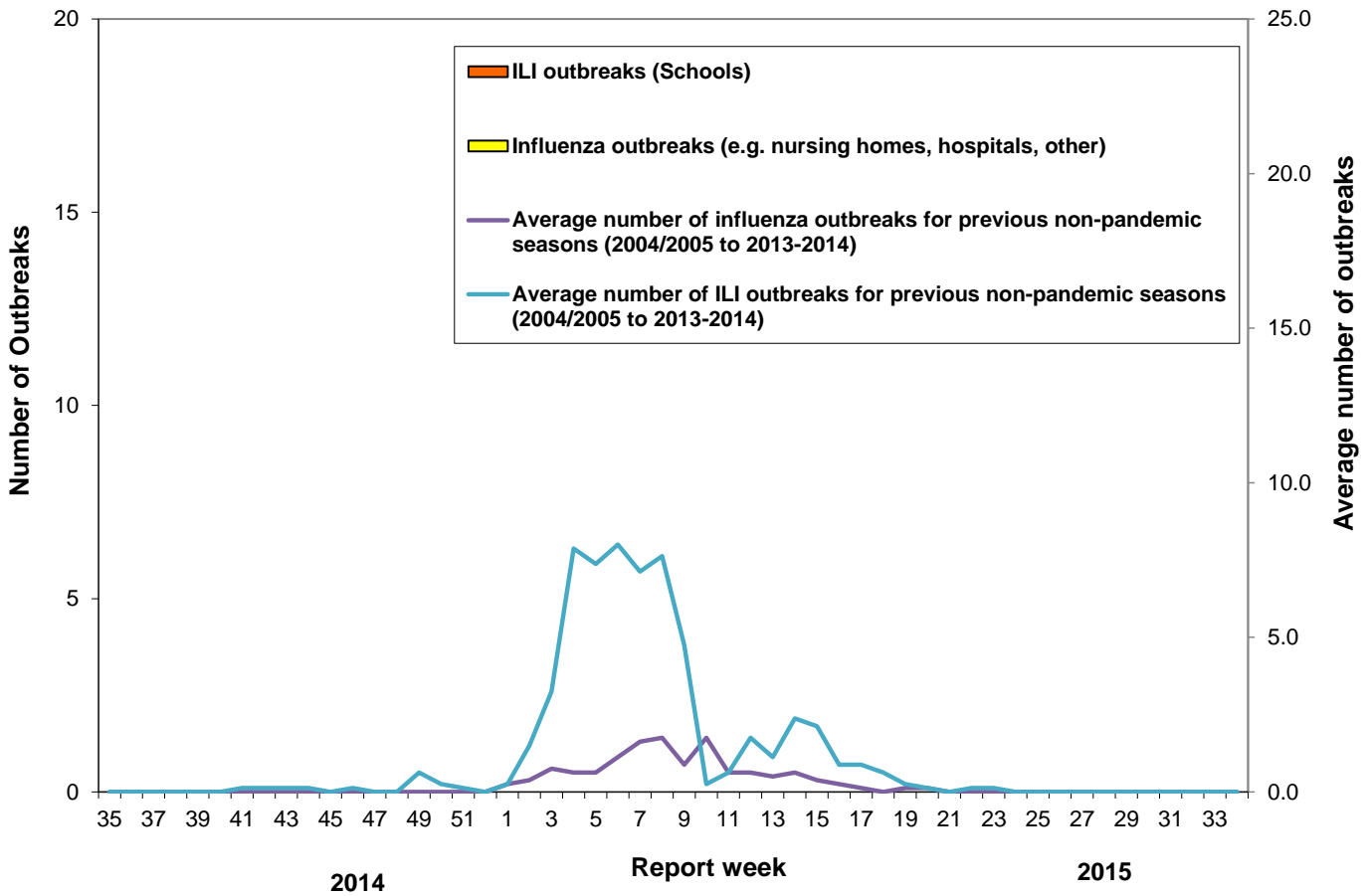
	Reporting period: December/14/2014–December/20/2014			Cumulative # of outbreaks season 2014-2015	Cumulative # of outbreaks season 2013-2014
	Lab-confirmed outbreaks in Nursing homes	ILI school outbreaks	Lab-confirmed outbreaks in Other settings		
Region 1	0 out of 13	0 out of 74	0	0	3
Region 2	0 out of 15	0 out of 81	0	0	2
Region 3	0 out of 14	0 out of 95	0	0	4
Region 4	0 out of 6	0 out of 22	0	0	1
Region 5	0 out of 2	0 out of 18	0	0	0
Region 6	0 out of 9	0 out of 35	0	0	3
Region 7	0 out of 4	0 out of 27	0	0	2
<b>Total NB</b>	<b>0 out of 63</b>	<b>0 out of 352</b>	<b>0</b>	<b>0</b>	<b>15</b>

\*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 which is likely due to ILI.

<sup>3</sup> A total of 31 practitioner sites (18 FluWatch sentinel physicians and 13 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 (nursing homes, hospitals, other)<sup>4</sup> and ILI Outbreaks (schools)<sup>5</sup> reported to Public Health in New Brunswick, by report week, season 2014/15.



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](http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html)

Europe: [http://www.ecdc.europa.eu/en/healthtopics/seasonal\\_influenza/epidemiological\\_data/Pages/Weekly\\_Influenza\\_Surveillance\\_Overview.aspx](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](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](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/](http://www.cdc.gov/flu/weekly/)

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