

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: January 3 to January 9 2016 (week 1)

Summary:

In New Brunswick, influenza activity remains low in week 1

New Brunswick:

- There have been 3 positive influenza detections during week 1, one influenza A (H1N1)pdm09 and 2 influenza B viruses. To date this season, a total of 15 influenza detections have been reported, 10 influenza A (unsubtyped), 1 influenza A (H1N1)pdm09 and 4 influenza B.
- There has been no influenza associated hospitalizations during week 1. So far this season, a total of 8 influenza associated hospitalizations were reported in New Brunswick.
- The ILI consultation rate was 14.1 consultations per 1,000 patients visits, and was below the expected levels for this time of year.
- No new influenza or ILI outbreaks were reported.

Canada:

- Overall, seasonal influenza activity increased in Canada. Laboratory detections of influenza increased but remain below expected levels for this time of the year.
- There was an increase in the number of laboratory detections and hospitalizations associated with influenza A (H1N1).
- To date, the majority of influenza laboratory detections and hospitalizations have been in seniors greater than 65 years of age.
- 306 laboratory detections of influenza were reported during week 1, and the percentage of laboratory tests positive for influenza was 6.0%.
- The national ILI consultation rate was 28.4 consultations per 1,000 patients' visits for week 1, the highest ILI rate was found in the 0-4 age group.
- Antigenic characterization: NML has antigenically characterized 86 H3N2 viruses, all of which showed a match to the vaccine strain, 39 A (H1N1)pdm09 that was a match to the vaccine strain and 31 B viruses, all of which were a match to the vaccine strain (quadrivalent).

International:

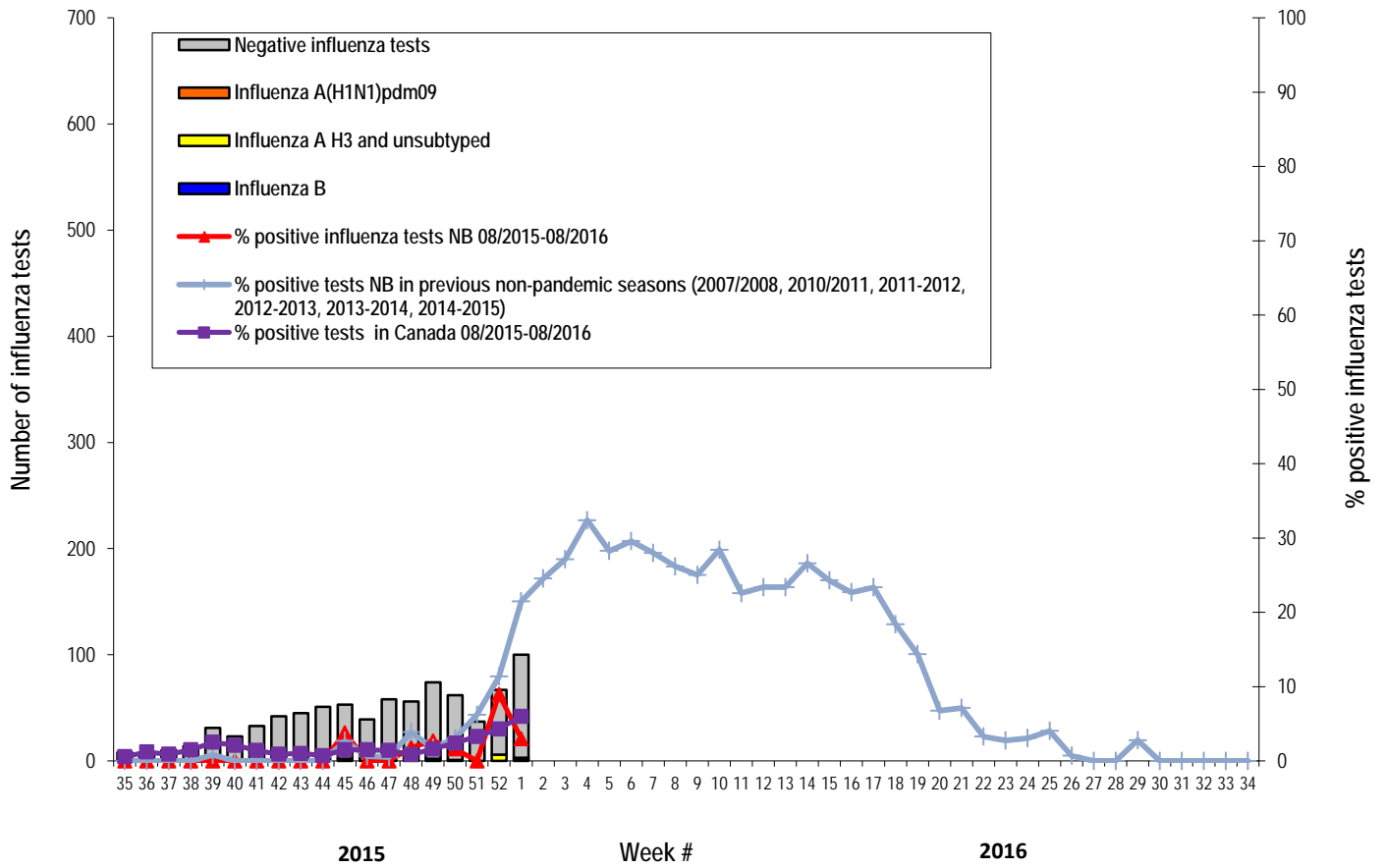
- High levels of influenza activity were reported from some countries in Western Asia. Globally influenza activity was picking up in some temperate countries of the Northern Hemisphere, but in general remained low.

1) Influenza Laboratory Data¹

- Influenza activity remains low.
- Three influenza detections were reported during week 1.
- Since the beginning of the season, 15 positive influenza detections were reported, 4 influenza B and 10 influenza A (unsubtyped) and 1 influenza A (H1N1)pdm09.

¹ Surveillance specimens are submitted by recruited New Brunswick Sentinel Practitioner Influenza Network (NB SPIN) practitioners, which are comprised of sites in Emergency Rooms, in Family Practice, in First Nations communities, in Nursing Home, in Universities and 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 January 9 2016
 (data source: G. Dumont Lab results)



Note: Most of the Influenza A untyped specimens are of the predominant strain.

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 January 9 2016)

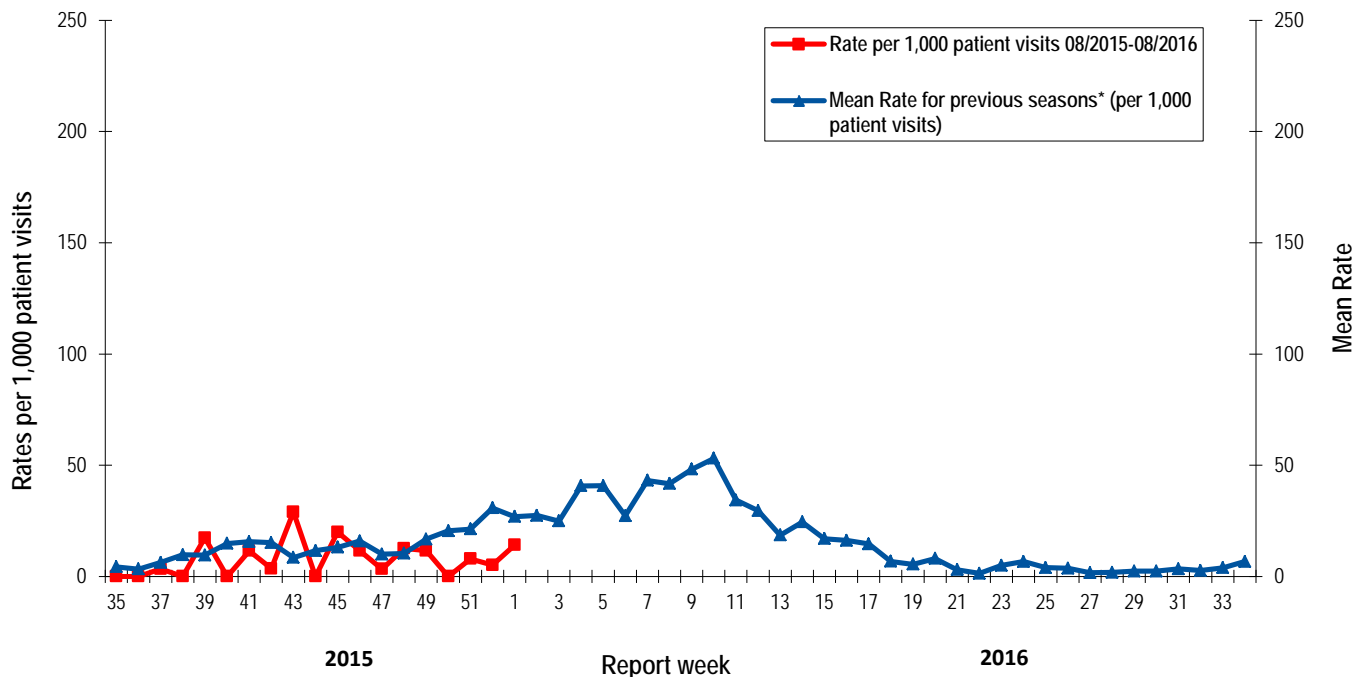
Zone	Reporting period: Jan./03/2016–Jan./09/2016						Cumulative: (2015/2016 season) Aug./30/2015 –Jan./09/2016					Cumulative: (2014/2015 season) Aug./24/2014 – Aug./29/2015				
	Activity level ²	A				B	A				B	A				B
		A(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total	A(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total	(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total
Zone 1	Sporadic	0	1	0	1	2	0	1	5	6	4	88	0	353	441	280
Zone 2	No activity	0	0	0	0	0	0	0	2	2	0	19	0	69	88	58
Zone 3	No activity	0	0	0	0	0	0	0	0	0	0	19	0	69	88	55
Zone 4	No activity	0	0	0	0	0	0	0	1	1	0	56	0	31	87	27
Zone 5	No activity	0	0	0	0	0	0	0	0	0	0	8	0	14	22	2
Zone 6	No activity	0	0	0	0	0	0	0	1	1	0	81	0	95	176	29
Zone 7	No activity	0	0	0	0	0	0	0	1	1	0	12	0	24	36	19
Total NB		0	1	0	1	2	0	1	10	11	4	283	0	655	938	470

² Influenza activity level definition is available on the PHAC FluWatch website: <http://healthycanadians.gc.ca/diseases-conditions-maladies-affections/disease-maladie/flu-grippe/surveillance/season-definitions-saison-eng.php#/>

2) ILI Consultation Rates³

- During week 1, the ILI consultation rate was 14.1 consultations per 1,000 patients visits, and was below the expected levels for week 1.
- During week 1, the sentinel response rate was 32%, for both the FluWatch sentinel physicians and the NB SPIN practitioners.

Graph 2: ILI Consultation Rates in New Brunswick, by report week, season 2015/16 compared to previous seasons*



* The mean rate was based on data from the 1996/97 to 2014/2015 seasons and excludes the Pandemic season (2009-2010).

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.

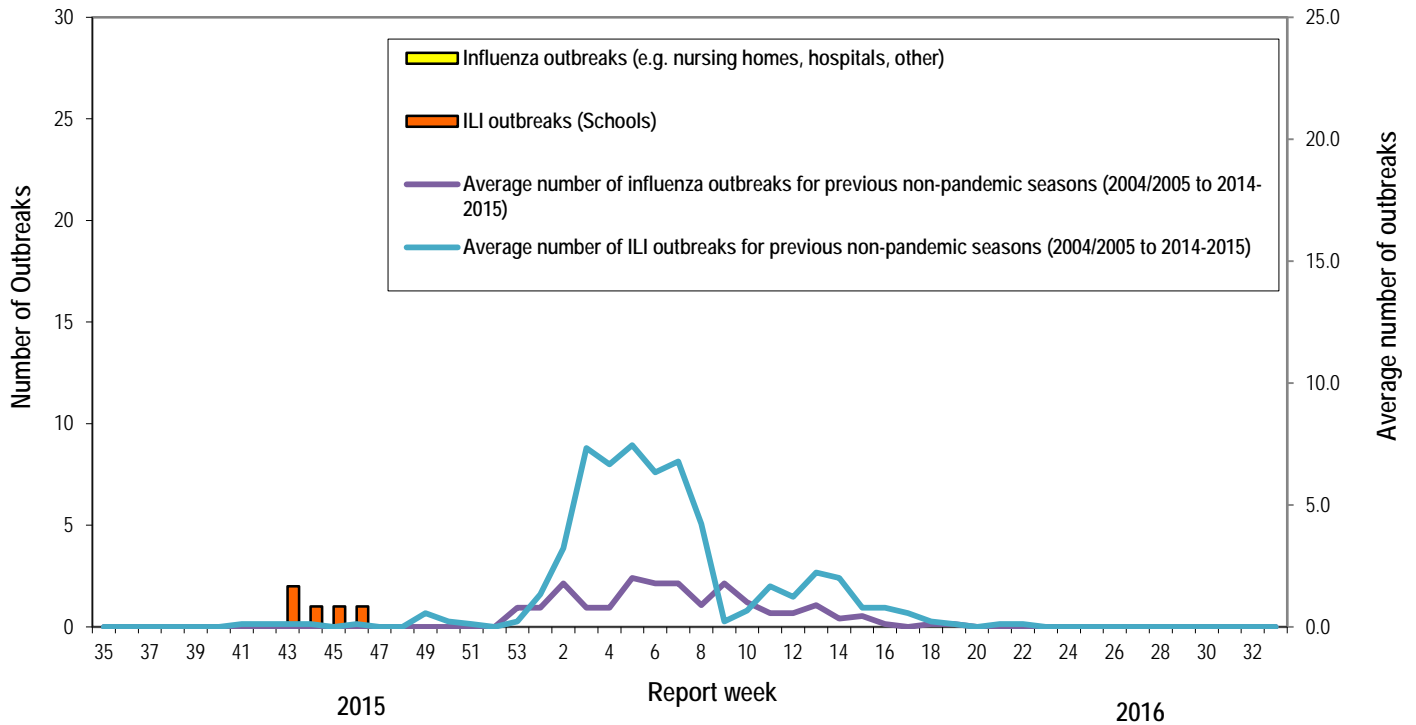
	Reporting period: Jan./03/2016–Jan./09/2016			Cumulative # of outbreaks season 2015-2016	Cumulative # of outbreaks season 2014-2015
	Lab-confirmed outbreaks in Nursing homes*	ILI school outbreaks**	Lab-confirmed outbreaks in Other settings*		
Zone 1	0 out of 13	0 out of 74	0	1	14
Zone 2	0 out of 15	0 out of 81	0	0	15
Zone 3	0 out of 14	0 out of 95	0	0	12
Zone 4	0 out of 6	0 out of 22	0	0	6
Zone 5	0 out of 2	0 out of 18	0	0	4
Zone 6	0 out of 9	0 out of 35	0	2	5
Zone 7	0 out of 4	0 out of 27	0	2	8
Total NB	0 out of 63	0 out of 352	0	5	64

*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.

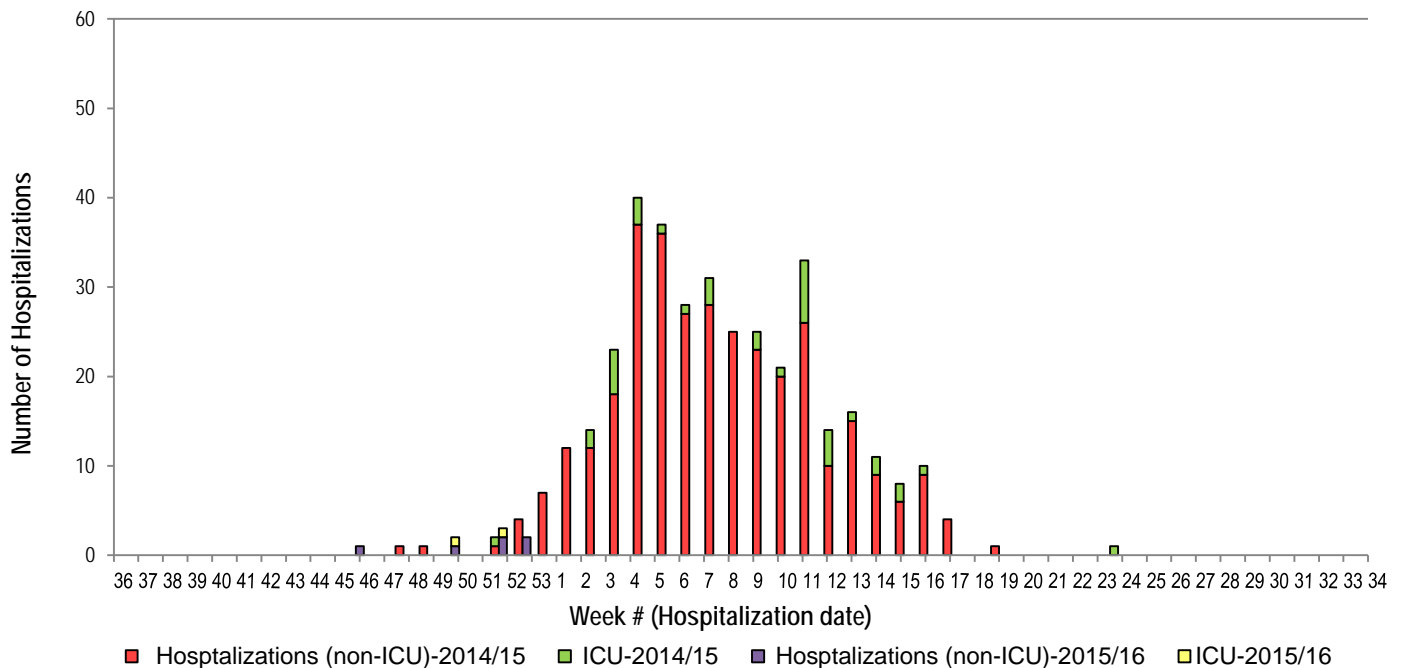
³ A total of 28 practitioner sites (16 FluWatch sentinel physicians and 12 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

Graph 3: Number of Influenza Outbreaks (nursing homes, hospitals, other)⁴ and ILI Outbreaks (schools)⁵ reported to Public Health in New Brunswick, by report week, season 2015/16.



4) Influenza associated Hospitalization⁴ and Death⁵ Surveillance⁶

Graph 4: Influenza associated Hospitalizations and ICU admissions in New Brunswick, by week of hospitalization for current and past season.*



*Those who had been hospitalized 15 days or more prior to laboratory confirmation date were excluded from the graph

** Twenty-six deaths were reported during season 2014-2015.

⁴ Hospitalizations (including ICU admissions) are influenza associated; they may or may not be due to influenza.

⁵ Deaths are influenza associated; influenza may not be the direct cause of death.

⁶ In early January 2014, the Office of the Chief Medical Officer of Health implemented a new provincial surveillance system in collaboration with the Regional Health Authorities to monitor influenza-associated hospitalizations, intensive care unit admissions and deaths.

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.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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