

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: August 14 to August 27 2016 (weeks 33 & 34)

Summary:

In New Brunswick, influenza activity returned to inter-seasonal levels

New Brunswick:

- There has been 1 positive influenza detection in weeks 33 & 34. To date this season, a total of 1220 influenza detections have been reported, 960 influenza A (unsubtyped), 97 influenza A (H1N1)pdm09, 6 influenza A (H3) and 157 influenza B.
- There have been no new influenza associated hospitalizations during weeks 33 & 34. So far this season, a total of 250 influenza associated hospitalizations were reported in New Brunswick, including 20 deaths.
- The ILI consultation rate was 0.0 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:

- Overall, influenza activity is at inter-seasonal levels with all regions of Canada reporting low to no influenza activity.
- Twenty-three positive influenza tests (less than 1% positive) were reported in weeks 33 & 34, most influenza A (H3N2).
- No influenza outbreaks have been reported since week 22 (beginning of June).
- Three hospitalizations were reported in weeks 33 & 34.
- This is the last national update for the 2015-2016 season. Bi-weekly reporting for the 2016-2017 season will occur until week 40 when weekly reporting will resume.

International:

Seasonal influenza:

- Influenza activity varied in countries of temperate South America and increased steadily in the last few weeks in South Africa and Oceania. Influenza activity in the temperate zone of the northern hemisphere was at inter-seasonal levels.

Emerging Respiratory Viruses:

- MERS CoV:
 - WHO: http://www.who.int/csr/disease/coronavirus_infections/en/
 - CDC: <http://www.cdc.gov/coronavirus/mers/>
- Avian Influenza
 - WHO: www.who.int/csr/disease/avian_influenza/en/index.html

Note: This is the final report of the 2015-2016 influenza season. The next report will be the first for the 2016-2017 influenza season. Bi-weekly reports will continue until October 17, 2016.

1) Influenza Laboratory Data¹

- Influenza activity returned to inter-seasonal levels.
- 1 influenza detection was reported during weeks 33 & 34.
- Since the beginning of the season, 1220 positive influenza detections were reported, 157 influenza B and 960 influenza A (unsubtyped), 6 influenza A (H3) and 97 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 August 27 2016
 (data source: G. Dumont Lab results)

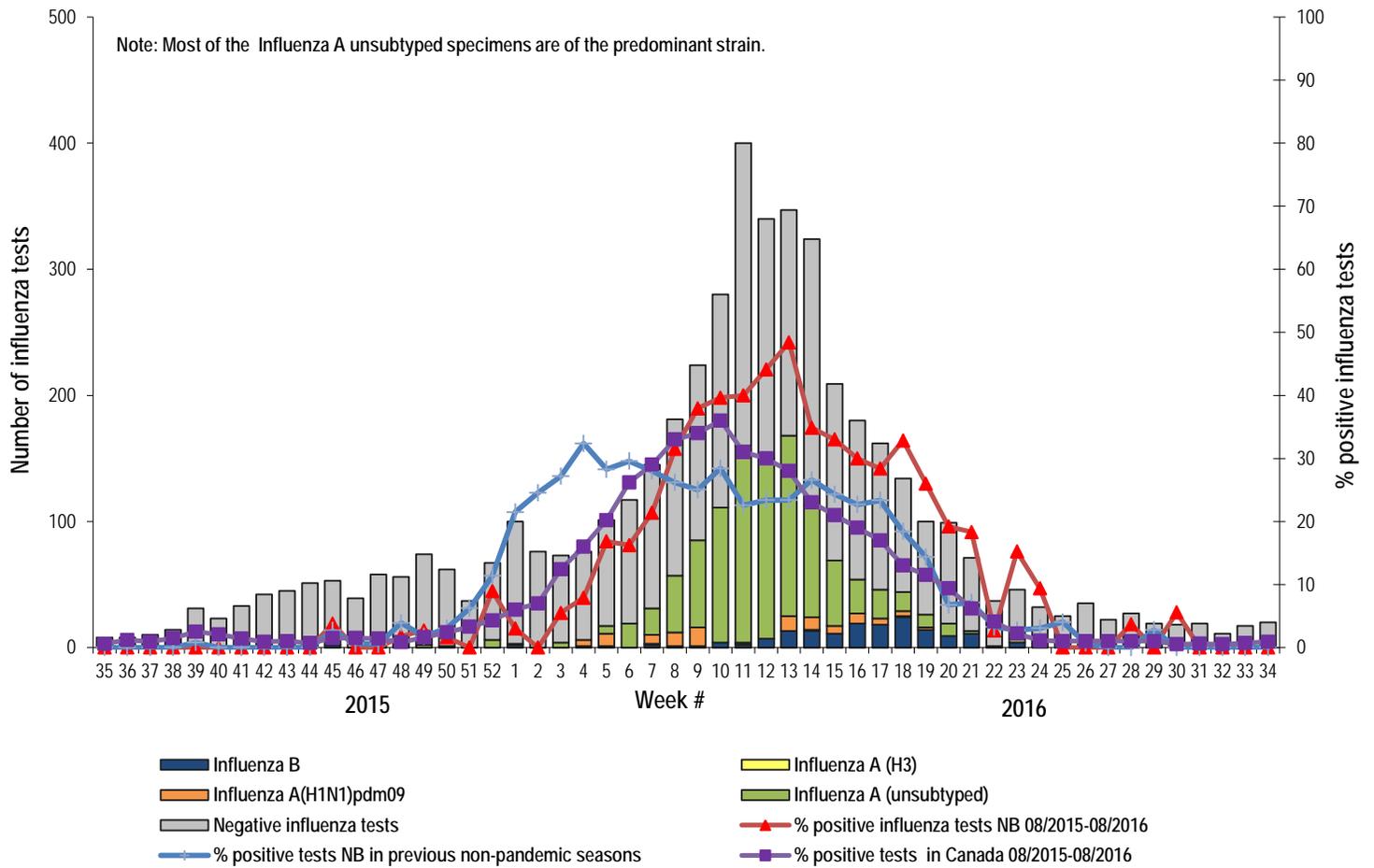


Table 1: Positive influenza test results by Health Region, in New Brunswick for reporting week, cumulative current and previous seasons.
(data source: G. Dumont lab results up to August 27 2016)

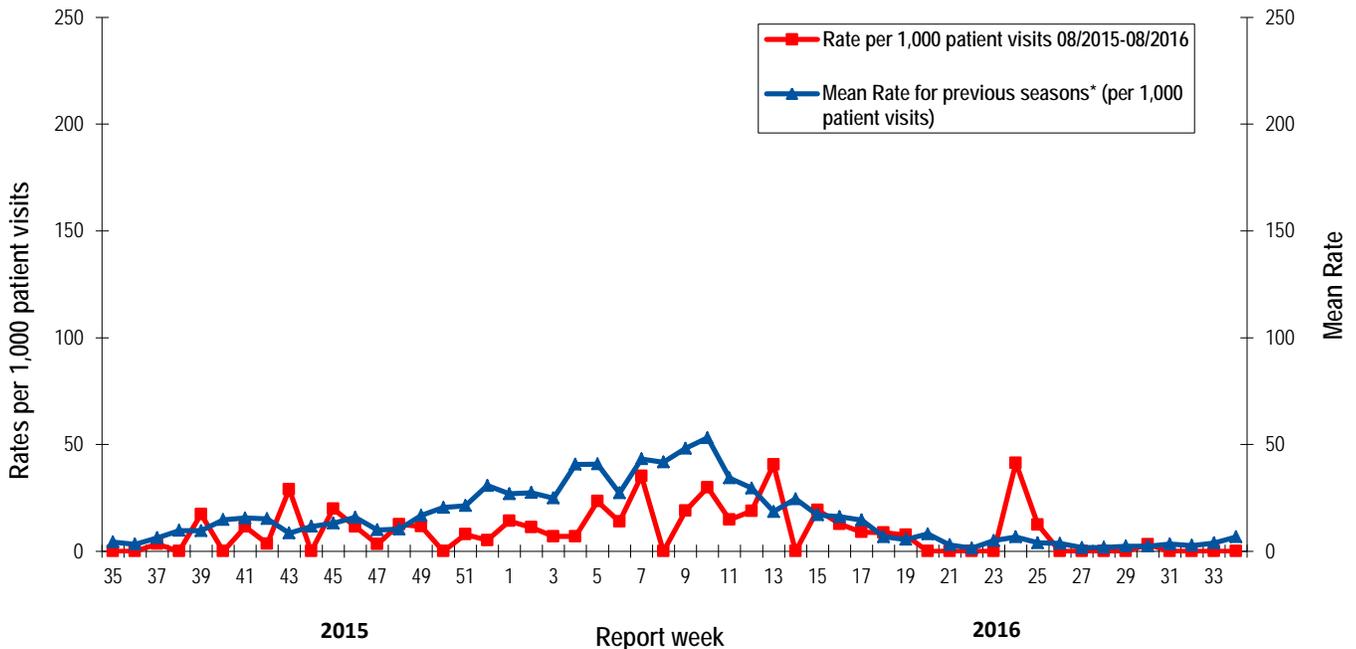
Zone	Reporting period: August/14/2016–August/27/2016						Cumulative: (2015/2016 season) Aug./30/2015 –August/27/2016					Cumulative: (2014/2015 season) Aug./24/2014 – Aug./29/2015				
	Activity level ²	A				B	A				B	A				B
		A(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total	A(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total	(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total
Zone 1	Sporadic	0	0	1	1	0	3	40	576	619	113	88	0	353	441	280
Zone 2	No activity	0	0	0	0	0	0	9	131	140	7	19	0	69	88	58
Zone 3	No activity	0	0	0	0	0	0	9	57	66	13	19	0	69	88	55
Zone 4	No activity	0	0	0	0	0	0	11	86	97	8	56	0	31	87	27
Zone 5	No activity	0	0	0	0	0	0	4	9	13	3	8	0	14	22	2
Zone 6	No activity	0	0	0	0	0	3	18	79	100	5	81	0	95	176	29
Zone 7	No activity	0	0	0	0	0	0	6	22	28	8	12	0	24	36	19
Total NB		0	0	1	1	0	6	97	960	1063	157	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 weeks 33 & 34, the ILI consultation rate was 0.0 consultations per 1,000 patients visits, for both weeks, and was within the expected levels for this time of year.
- During weeks 33 & 34, the sentinel response rate was 27% and 38%, respectively, 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.

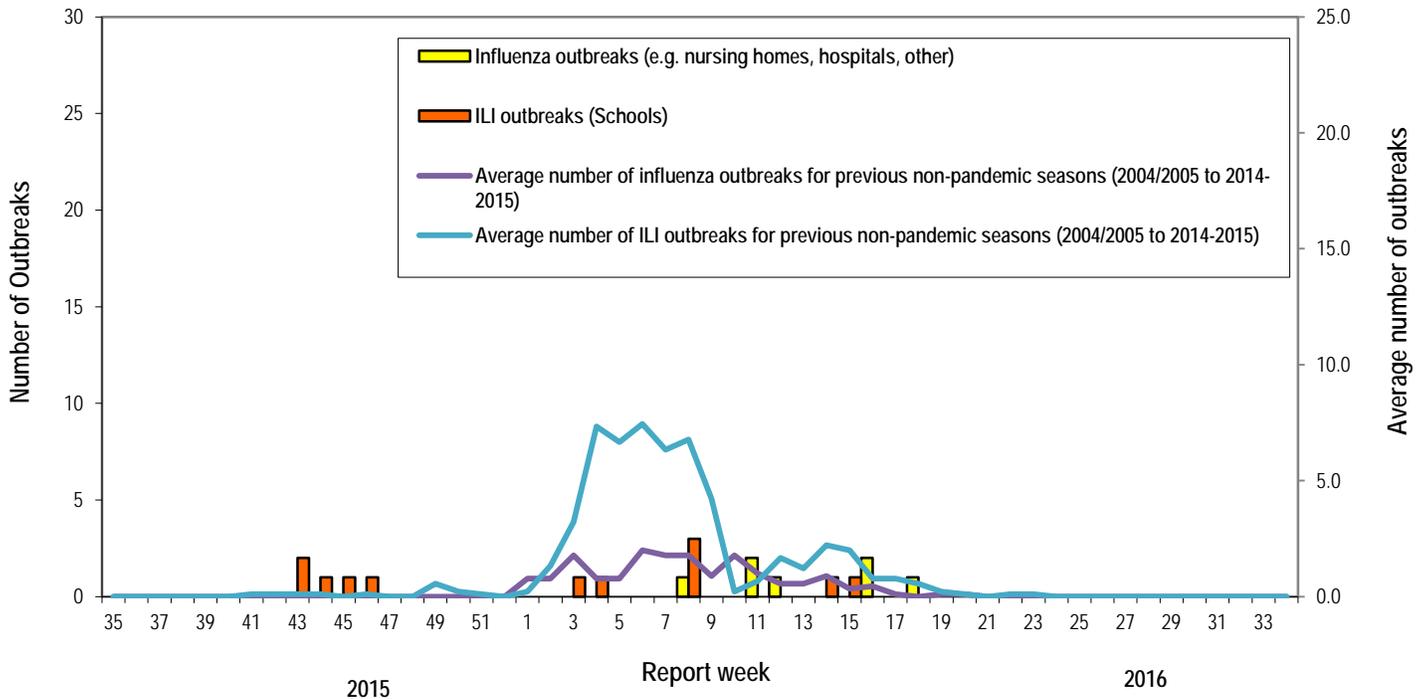
	Reporting period: August/14/2016–August/27/2016			Cumulative # of outbreaks season 2015-2016	Cumulative # of outbreaks season 2014-2015
	Lab-confirmed outbreaks in Nursing homes*	ILI school outbreaks**	Lab-confirmed outbreaks in Other settings*		
Zone 1	0 out of 13	0 out of 74	0	6	14
Zone 2	0 out of 15	0 out of 81	0	4	15
Zone 3	0 out of 14	0 out of 95	0	1	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	3	5
Zone 7	0 out of 4	0 out of 27	0	5	8
Total NB	0 out of 63	0 out of 352	0	19	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.

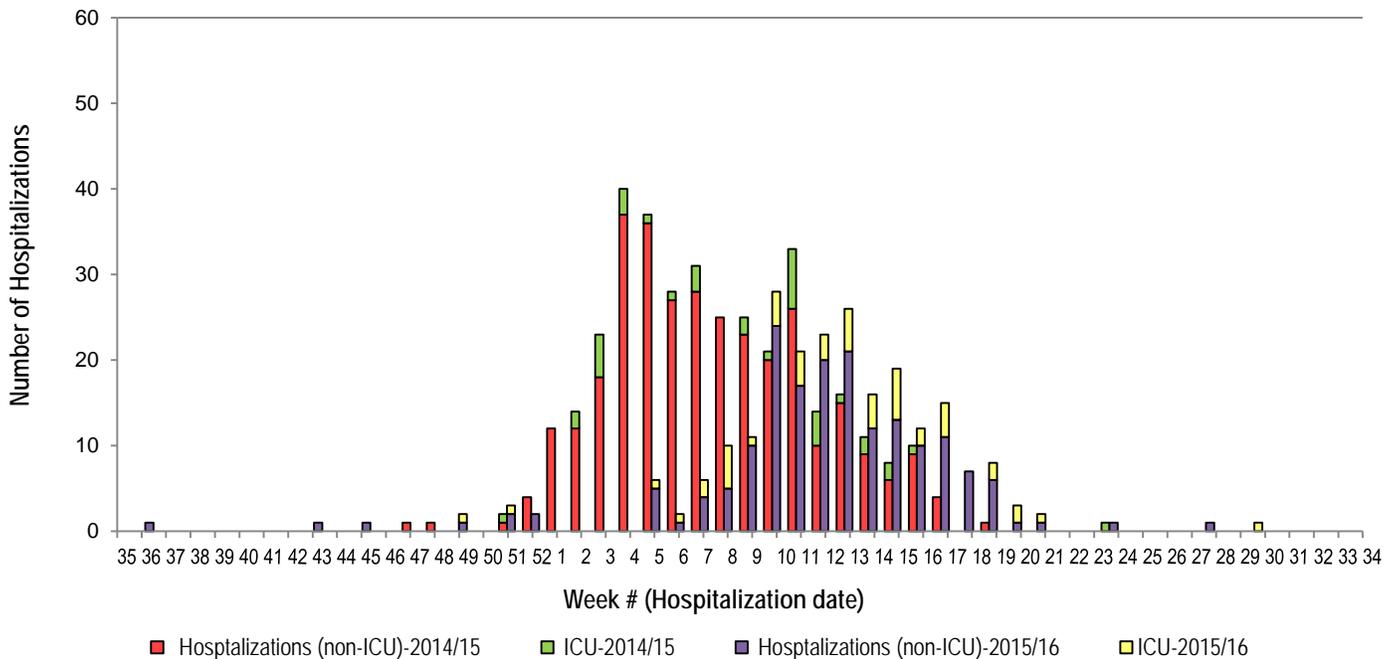
³ A total of 28 practitioner sites (16 FluWatch sentinel physicians and 12 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

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 deaths were reported in season 2015-2016.

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/

Prepared by the Communicable Disease Control Unit
Office of the Chief Medical Officer of Health, Tel: (506) 444-3044