

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: September 25 to October 8 2016 (weeks 39 & 40)

Summary:

In New Brunswick, influenza activity remains at inter-seasonal levels

New Brunswick:

- There have been no positive influenza detections in weeks 39 & 40. To date this season, no influenza detections have been reported.
- There have been no influenza associated hospitalizations during weeks 39 & 40. So far this season, no influenza associated hospitalizations were reported.
- The ILI consultation rate was 4.1 and 0.0 consultations per 1,000 patients visits for weeks 39 & 40, respectively, and was within the expected levels for this time of year.
- No new influenza or ILI outbreaks were reported.

Canada:

- Influenza activity is at inter-seasonal levels with the majority regions of Canada reporting no influenza activity.
- Since week 35, the majority of influenza activity has been reported in Western regions of Canada.
- A total of 127 positive influenza detections were reported in weeks 39 & 40. Influenza A (H3N2) was the most common subtype detected and the majority of detections were in adults 65 years of age and older.
- In weeks 39 & 40, approximately 1% of visits to sentinel healthcare professionals were due to ILI.
- A total of 6 laboratory-confirmed influenza outbreaks were reported all of which occurred in week 39.
- Low numbers of hospitalizations and no deaths were reported in weeks 39 & 40.

International:

Seasonal influenza:

- Influenza activity varied in countries of temperate South America, was ongoing in South Africa and decreased in 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 last bi-weekly report, weekly reporting will resume next week.

1) Influenza Laboratory Data¹

- Influenza activity remains at inter-seasonal levels.
- No influenza detections were reported during weeks 39 & 40.
- Since the beginning of the season, no influenza detections were reported.

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 October 8 2016
 (data source: G. Dumont Lab results)

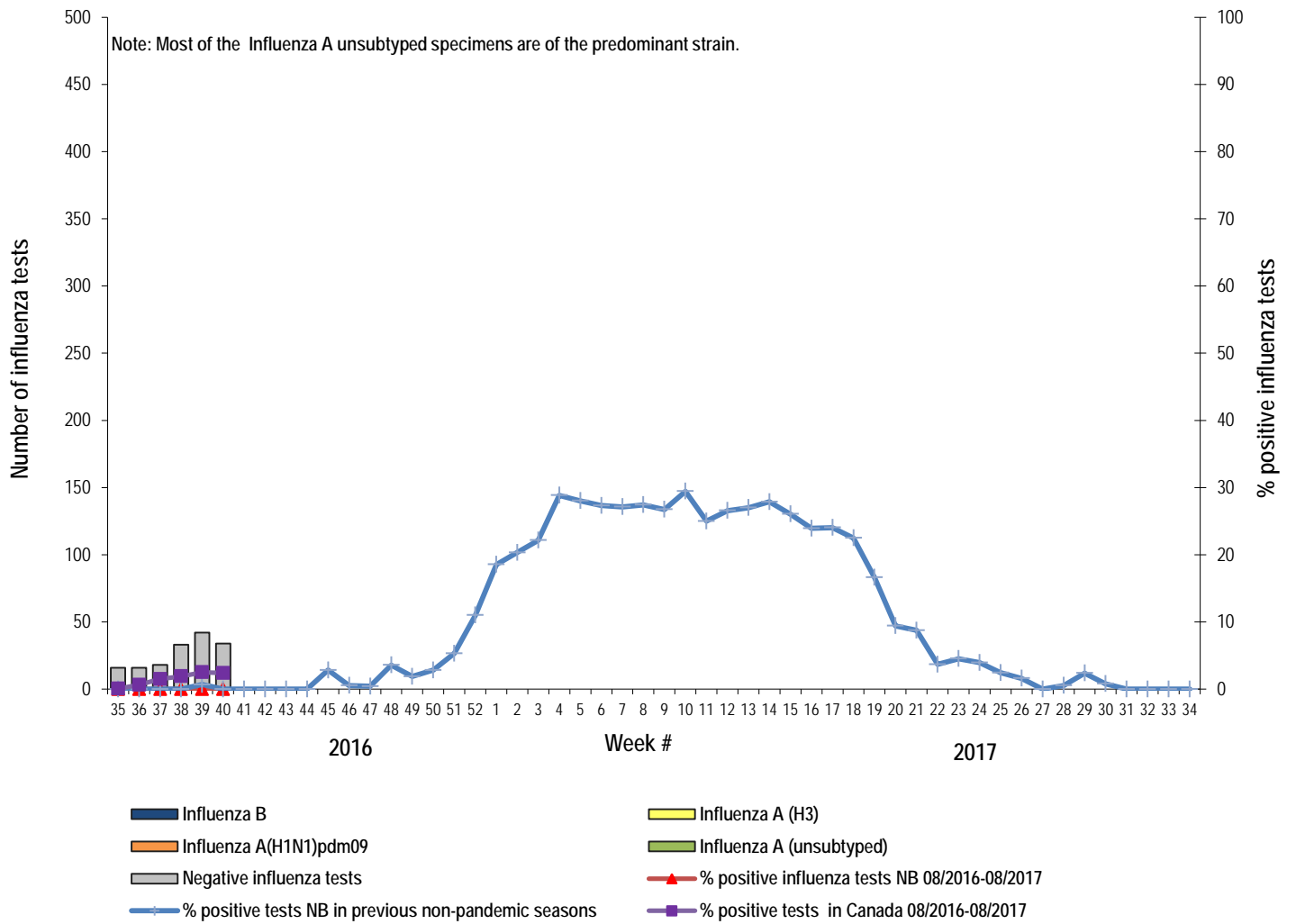


Table 1: Positive influenza test results by Health Region, in New Brunswick for reporting week, cumulative current and previous seasons.
(data source: G. Dumont lab results up to October 8 2016)

Zone	Reporting period: Sept./25/2016–Oct./08/2016						Cumulative: (2016/2017 season) Aug./28/2016 –Oct./08/2016					Cumulative: (2015/2016 season) Aug./30/2015 – Aug./27/2016				
	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	No activity	0	0	0	0	0	0	0	0	0	0	3	40	576	619	113
Zone 2	No activity	0	0	0	0	0	0	0	0	0	0	0	9	131	140	7
Zone 3	No activity	0	0	0	0	0	0	0	0	0	0	0	9	57	66	13
Zone 4	No activity	0	0	0	0	0	0	0	0	0	0	0	11	86	97	8
Zone 5	No activity	0	0	0	0	0	0	0	0	0	0	0	4	9	13	3
Zone 6	No activity	0	0	0	0	0	0	0	0	0	0	3	18	79	100	5
Zone 7	No activity	0	0	0	0	0	0	0	0	0	0	0	6	22	28	8
Total NB		0	0	0	0	0	0	0	0	0	0	6	97	960	1063	157

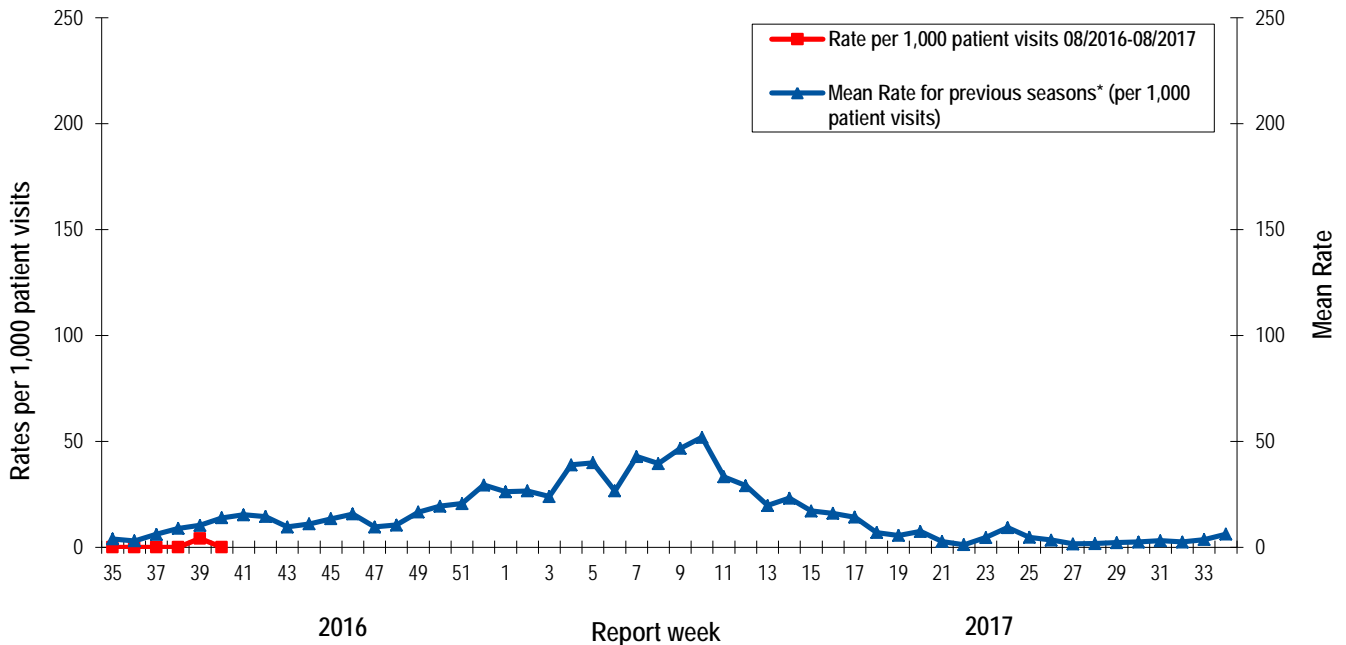
² Influenza activity level definition is available on the PHAC FluWatch website: <http://healthycanadians.gc.ca/diseases-conditions-maladies-affections/disease-maladie/flu-grippe/surveillance/season-definitions-saison-eng.php>

2) ILI Consultation Rates³

3) During weeks 39 & 40, the ILI consultation rate was 4.1 and 0.0 consultations per 1,000 patients visits, for weeks 39 & 40, respectively, and was within the expected levels for this time of year.

4) During weeks 39 & 40, the sentinel response rate was 30% and 37%, respectively, for both the FluWatch sentinel physicians and the NB SPIN practitioners.

Graph 2: ILI Consultation Rates in New Brunswick, by report week, season 2016/17 compared to previous seasons*



* The mean rate was based on data from the 1996/97 to 2015/2016 seasons and excludes the Pandemic season (2009/10).

5) 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.

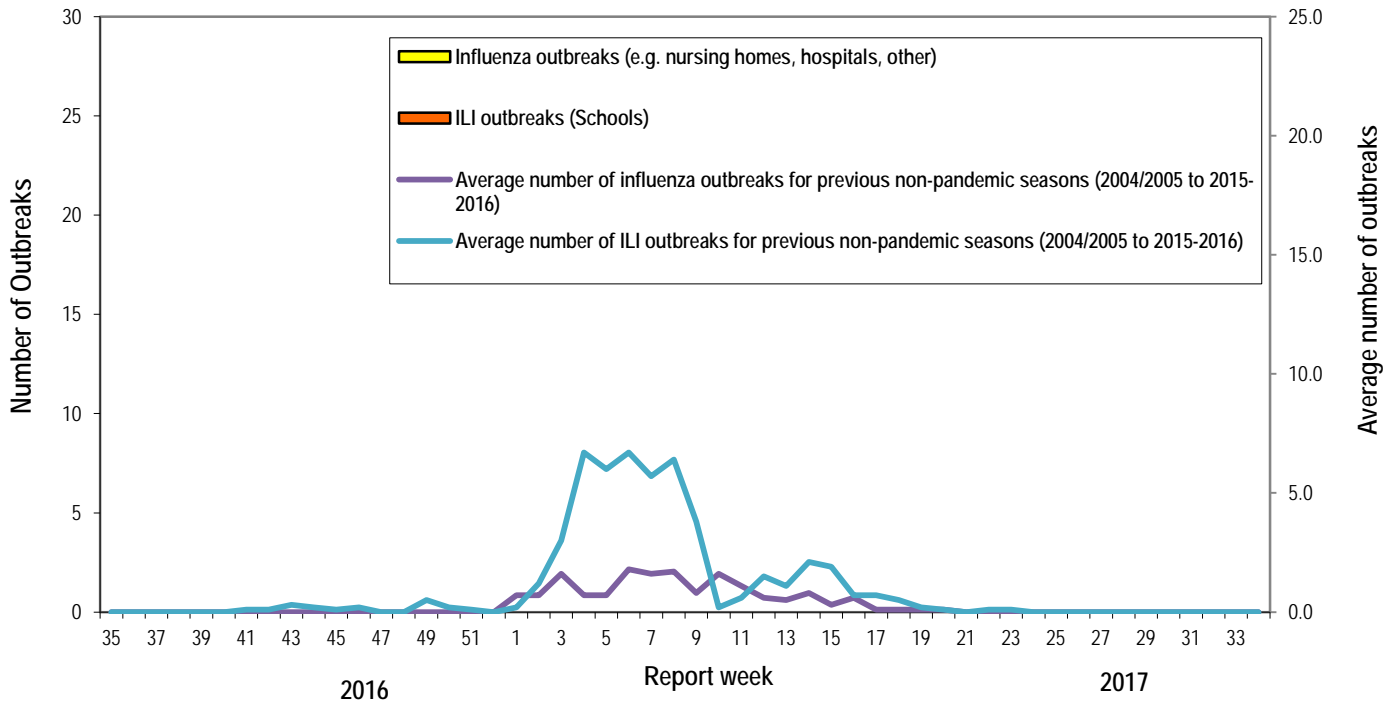
	Reporting period: September/25/2016–October/08/2016			Cumulative # of outbreaks season 2016-2017	Cumulative # of outbreaks season 2015-2016
	Lab-confirmed outbreaks in Nursing homes ⁴	ILI school outbreaks ⁵	Lab-confirmed outbreaks in Other settings ⁴		
Zone 1	0 out of 13	0 out of 74	0	0	6
Zone 2	0 out of 16	0 out of 81	0	0	4
Zone 3	0 out of 14	0 out of 95	0	0	1
Zone 4	0 out of 6	0 out of 22	0	0	0
Zone 5	0 out of 2	0 out of 18	0	0	0
Zone 6	0 out of 9	0 out of 35	0	0	3
Zone 7	0 out of 4	0 out of 27	0	0	5
Total NB	0 out of 64	0 out of 352	0	0	19

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.

⁴ 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.

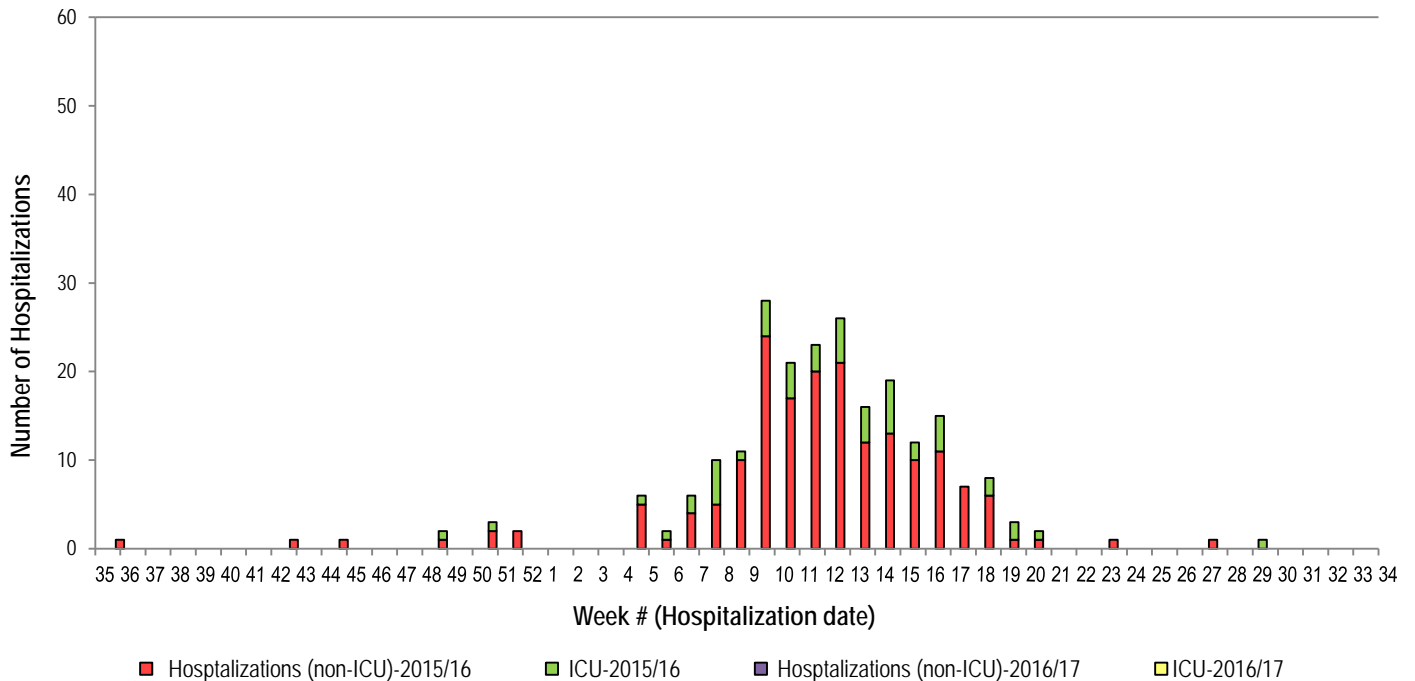
⁵ Schools reporting greater than 10% absenteeism which is likely due to ILI.

Graph 3: Number of Influenza Outbreaks (nursing homes, hospitals, other) and ILI Outbreaks (schools) reported to Public Health in New Brunswick, by report week, season 2016/17.



6) Influenza associated Hospitalization⁶ and Death⁷ Surveillance⁸

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

** No deaths have been reported so far in season 2016-2017.

⁶ Hospitalizations (including ICU admissions) are influenza associated; they may or may not be due to influenza.

⁷ Deaths are influenza associated; influenza may not be the direct cause of death.

⁸ 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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