

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: November 6 to November 12 2016 (week 45)

Summary:

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

New Brunswick:

- There have been no positive influenza detections in week 45. To date this season, 1 influenza detection has been reported, an influenza A (H3).
- There have been no influenza associated hospitalizations during week 45. So far this season, no influenza associated hospitalizations were reported.
- The ILI consultation rate was 0.0 consultations per 1,000 patients visits, and was slightly lower than 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.
- A total of 181 positive influenza detections were reported in week 45. Influenza A (H3N2) continues to be the most common subtype detected.
- In week 45, 1.6% of visits to sentinel healthcare professionals were due to ILI, a slight increase from week 44.
- Two laboratory-confirmed influenza outbreaks were reported in week 45, a decrease from the previous week.
- Sixteen hospitalizations were reported in week 45; all due to influenza A. Less than 5 ICU admissions have been reported in week 45.
- To date, the majority of pediatric hospitalizations reported were due to influenza A (H3N2).

International:

Seasonal influenza:

• Influenza activity in temperate southern hemisphere countries is back at inter-seasonal levels. Influenza activity in the temperate zone of the northern hemisphere has not yet picked up and remained at inter-seasonal levels.

Emerging Respiratory Viruses:

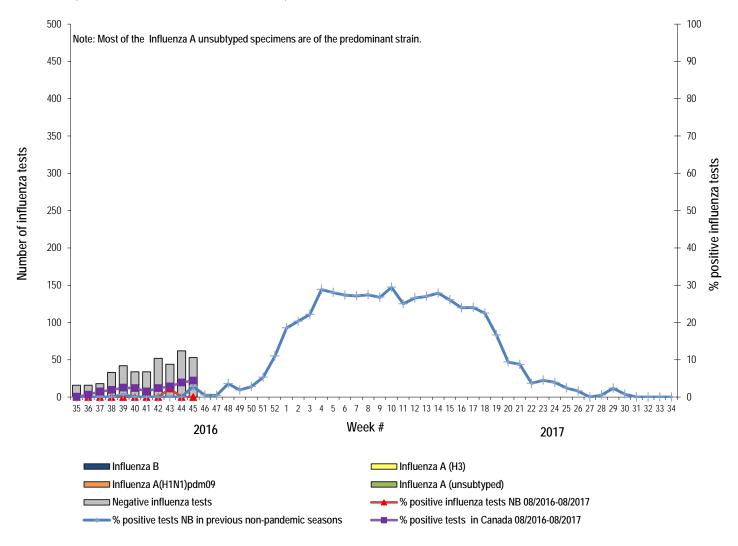
- MERS CoV:
 - o WHO: http://www.who.int/csr/disease/coronavirus_infections/en/
 - o CDC: http://www.cdc.gov/coronavirus/mers/
- Avian Influenza
 - o WHO: www.who.int/csr/disease/avian_influenza/en/index.html

1) Influenza Laboratory Data¹

- Influenza activity remains at inter-seasonal levels.
- No influenza detections were reported during week 45.
- Since the beginning of the season, 1 influenza detection was reported, an influenza A (H3).

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.

<u>Graph 1</u>: Number and percent of positive influenza specimens in New Brunswick by week, up to November 12 2016 (data source: G. Dumont Lab results)



<u>Table 1</u>: 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 November 12 2016)

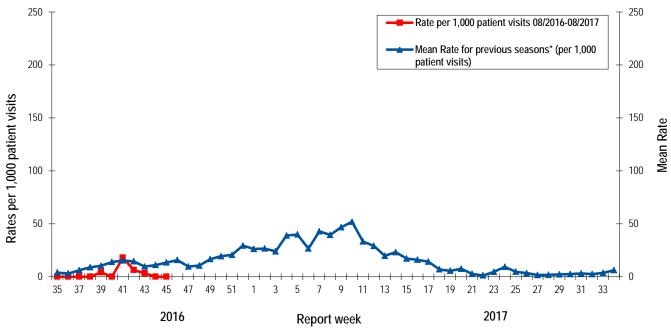
Zone	Reporting period: Nov./06/2016–Nov./12/2016						Cumulative: (2016/2017 season) Aug./28/2016 -Nov./12/2016				Cumulative: (2015/2016 season) - Aug./30/2015 – Aug./27/2016					
																Activity level ²
	A(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total	A(H3)	(H1N1) pdm09	Unsubtyped / Other	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
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	1	0	0	1	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	1	0	0	1	0	6	97	960	1063	157

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

2) ILI Consultation Rates³

- During week 45, the ILI consultation rate was 0.0 consultations per 1,000 patients visits, and was slightly lower than the expected levels for this time of year.
- During week 45, the sentinel response rate was 26%, 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).

ILI and Laboratory-Confirmed Outbreak Data

<u>Table 2</u>: ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, current and previous seasons.

	November	Reporting period: /06/2016–November/12	Cumulative # of outbreaks	Cumulative # of outbreaks		
	Lab-confirmed outbreaks in Nursing homes ⁴	ILI school outbreaks ⁵	Lab-confirmed outbreaks in Other settings ⁴	season 2016-2017	season 2015-2016	
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	

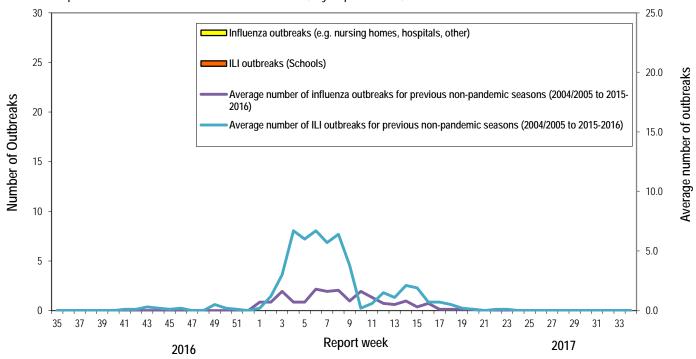
³ A total of 28 practitioner sites (16 FluWatch sentinel physicians and 12 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

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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.

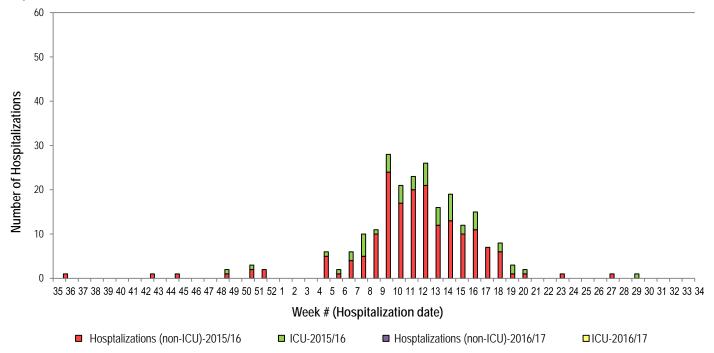
⁵ Schools reporting greater than 10% absenteeism which is likely due to ILI.

<u>Graph 3</u>: 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.



4) Influenza associated Hospitalization⁶ and Death⁷ Surveillance⁸

<u>Graph 4</u>: 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.

 $^{^{\}rm 6}$ Hospitalizations (including ICU admissions) are influenza associated; they may or may not be due to influenza.

 $^{^{\}rm 7}$ 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/

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