

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: June 4 to June 17 2017 (weeks 23 & 24)

Summary:

In New Brunswick, influenza activity remains low in weeks 23 & 24

New Brunswick:

- There have been 8 positive influenza detections in weeks 23 & 24. To date this season, 1193 influenza detections have been reported, 190 influenza A (H3), 844 influenza A (unsubtyped), 1 influenza A (H1N1)pdm09 and 158 influenza B.
- There has been 1 influenza associated hospitalization during weeks 23 & 24. So far this season, 327 influenza associated hospitalizations were reported with 14 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.
- One new influenza outbreak was reported in a nursing home during week 24.

Canada:

- Influenza activity has crossed the seasonal threshold indicating the end of the 2016-2017 influenza season, although regions across the country continue to report low-level circulation of influenza.
- Influenza B continued to be the predominant circulating influenza virus in Canada. The majority of influenza B viruses characterized this season are similar to the strain included only in the quadrivalent influenza vaccine for 2016-2017.
- Updates from the National Influenza Surveillance will only be available on a monthly basis during the summer months.

International:

Seasonal influenza:

- In the temperate zone of the southern hemisphere, influenza activity continued to increase and was above seasonal threshold levels in South America but remained low in general in Oceania. Influenza activity in the temperate zone of the northern hemisphere continued to decrease. Worldwide, influenza A(H3N2) and B viruses co-circulated

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: While influenza surveillance continues to be monitored weekly at provincial and national levels, the full length version of this report as well as the abbreviated web version will be distributed biweekly during the month of June and monthly during the months of July and August.

1) Influenza Laboratory Data¹

- Influenza activity remains low in weeks 23 & 24.
- Eight influenza detections were reported during weeks 23 & 24.
- Since the beginning of the season, 1193 influenza detections were reported, 190 influenza A (H3), 844 influenza A (unsubtyped), 1 influenza A (H1N1)pdm09 and 158 influenza B.

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 June 17 2017
 (data source: G. Dumont Lab results)

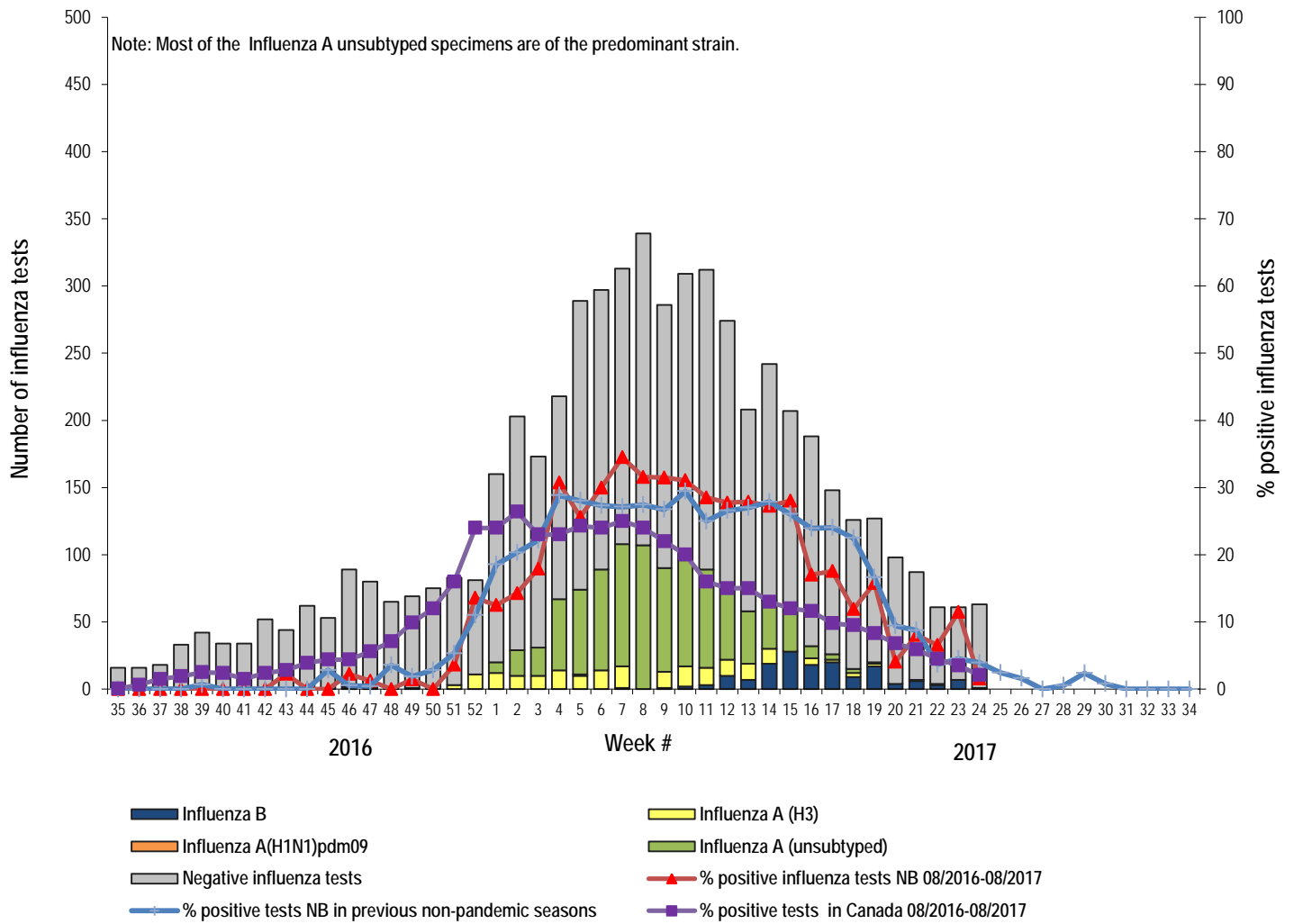


Table 1: Positive influenza test results by Health Region, in New Brunswick for reporting week, cumulative current and previous seasons.
(data source: G. Dumont lab results up to June 17 2017)

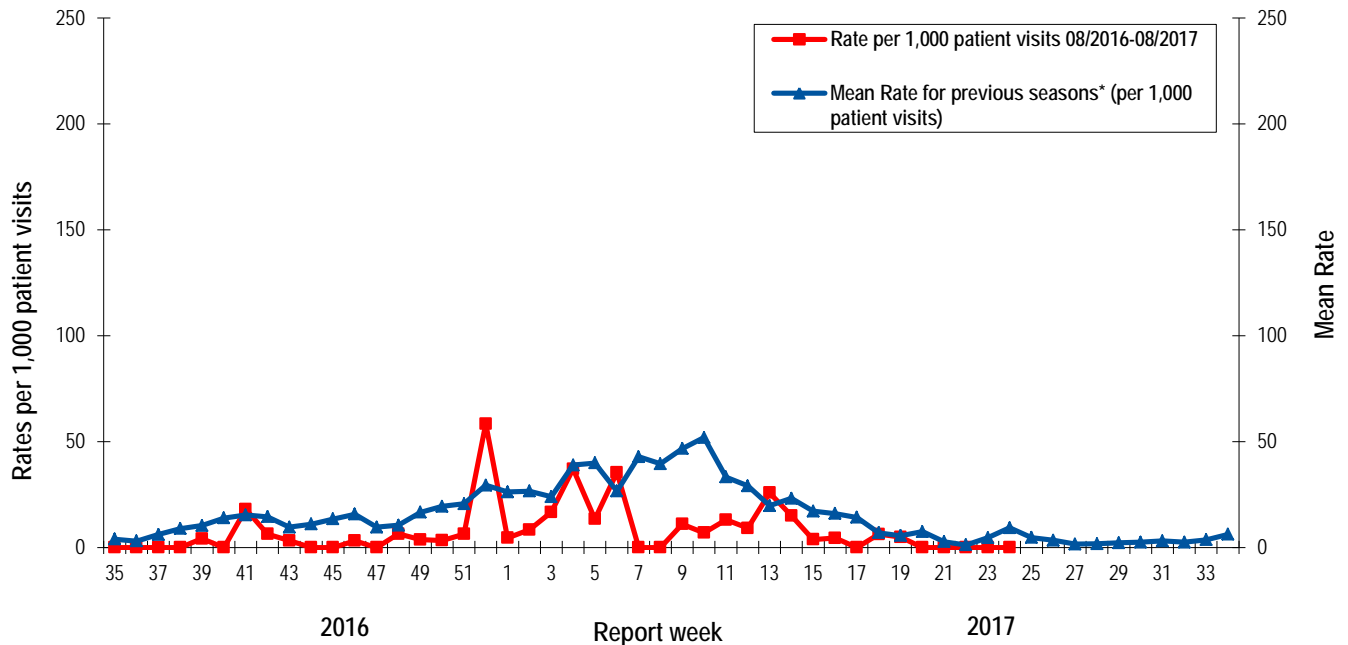
Zone	Reporting period: June/04/2017–June/17/2017						Cumulative: (2016/2017 season) Aug./28/2016 –June/17/2017					Cumulative: (2015/2016 season) Aug./30/2015 – Aug./27/2016				
	Activity level ²	A				B	A				B	A				B
		A(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total	A(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total	(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total
Zone 1	Localized activity	0	0	0	0	5	76	0	502	578	88	3	40	576	619	113
Zone 2	No activity	0	0	0	0	0	21	1	77	99	8	0	9	131	140	7
Zone 3	No activity	0	0	0	0	0	25	0	116	141	23	0	9	57	66	13
Zone 4	No activity	0	0	0	0	0	18	0	32	50	6	0	11	86	97	8
Zone 5	No activity	0	0	0	0	0	2	0	3	5	6	0	4	9	13	3
Zone 6	No activity	0	0	0	0	0	27	0	62	89	11	3	18	79	100	5
Zone 7	Sporadic activity	0	0	0	0	3	21	0	52	73	16	0	6	22	28	8
Total NB		0	0	0	0	8	190	1	844	1035	158	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

- During weeks 23 & 24, 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 23 & 24, the sentinel response rate was 26% and 19%, 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).

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.

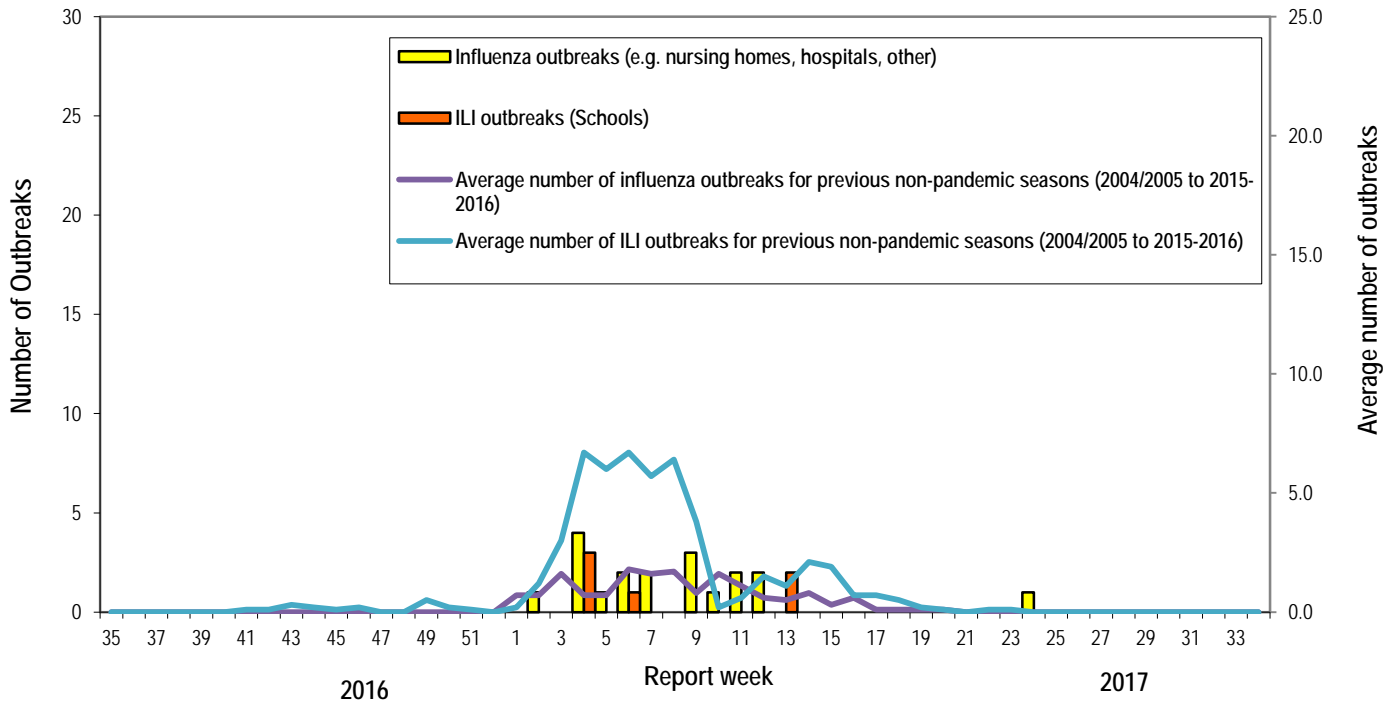
	Reporting period: June/04/2017–June/17/2017			Cumulative # of outbreaks season 2016-2017	Cumulative # of outbreaks season 2015-2016
	Lab-confirmed outbreaks in Nursing homes ⁴	ILI school outbreaks ⁵	Lab-confirmed outbreaks in Other settings ⁴		
Zone 1	1 out of 13	0 out of 74	0	3	6
Zone 2	0 out of 16	0 out of 81	0	5	4
Zone 3	0 out of 14	0 out of 95	0	14	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	1	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	2	5
Total NB	1 out of 64	0 out of 352	0	25	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.

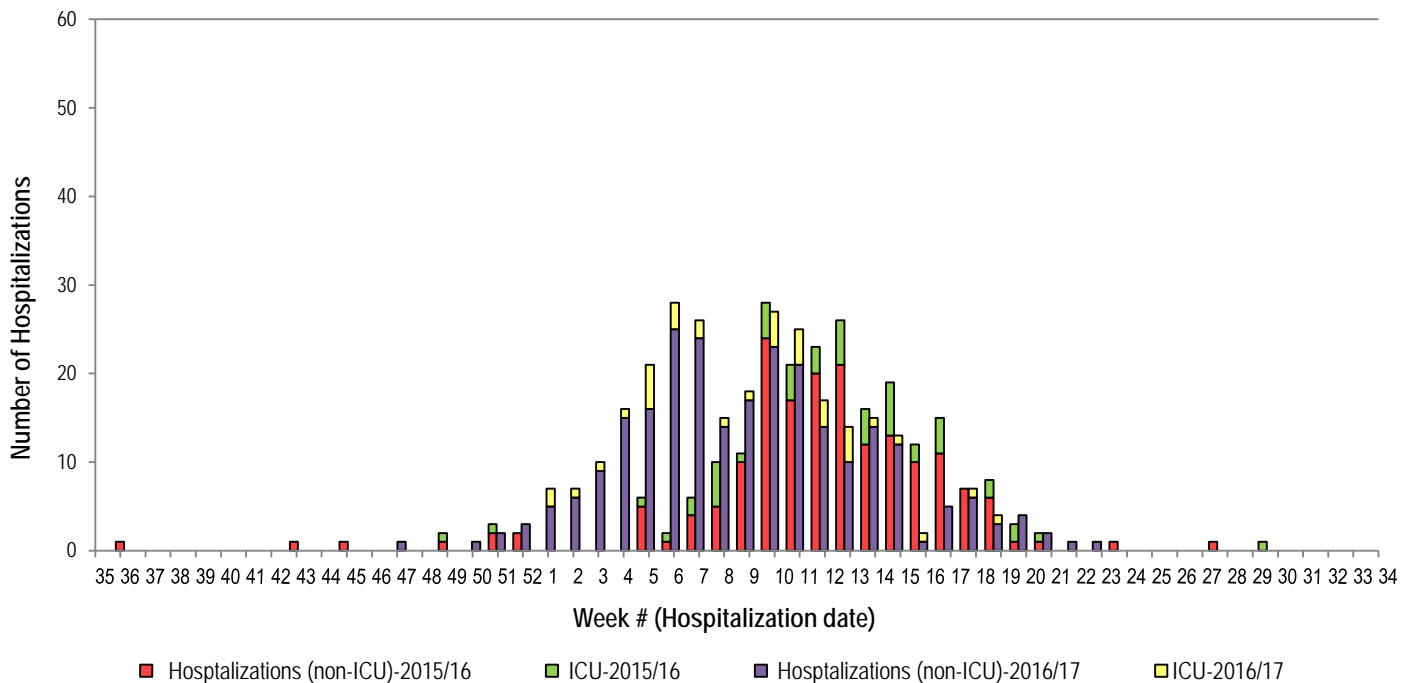
⁵ Schools reporting greater than 10% absenteeism which is likely due to ILI.

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.



4) 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

** Fourteen 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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