

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: April 17 to April 30, 2022 (weeks 16 & 17)

Summary

In New Brunswick, influenza activity has been increasing in the last few weeks, although remains low

New Brunswick:

- There have been 6 positive influenza cases in weeks 16 & 17. Since the beginning of the season, 31 cases have been reported, 30 influenza A (unsubtyped) and 1 influenza B.
- There has been no influenza associated hospitalizations during weeks 16 & 17. Since the beginning of the season, 2 hospitalizations have been reported and no deaths.
- The ILI consultation rate was 45.5 and 15.4 per 1,000 patients visits for weeks 16 & 17, respectively. The ILI rate was higher than the expected levels for week 16 but was within the expected levels for week 17.
- Three new ILI outbreaks were reported in schools in weeks 16 & 17. So far this season, no influenza outbreaks have been reported.

Canada:

No new updates were available on the national influenza activity at the time of this report.

International:

Seasonal influenza:

The current influenza surveillance data should be interpreted with caution as the ongoing COVID-19 pandemic have influenced to varying extents health seeking behaviours, staffing/routines in sentinel sites, as well as testing priorities and capacities in Member States. The various hygiene and physical distancing measures implemented by Member States to reduce SARS-CoV-2 virus transmission have likely played a role in reducing influenza virus transmission. Globally, influenza activity remained low, with a further decrease of activity in some areas. In the temperate zones of the northern hemisphere, influenza activity seems to decrease except in North America. Detections were mainly influenza A(H3N2) viruses and B/Victoria lineage viruses. In North America, influenza activity continued to increase in recent weeks but remained lower than pre-COVID-19 pandemic levels at this time of the year and was predominantly due to influenza A viruses, with A(H3N2) predominant among the subtyped viruses. Respiratory syncytial virus (RSV) activity remained low in the United States of America (USA) and Canada. In Europe, overall influenza activity appeared to decline, with influenza A(H3N2) predominant. In Central Asia, sporadic influenza B detections were reported in Kazakhstan. In East Asia, influenza activity with mainly influenza B/Victoria lineage detections continued to decrease in China. ILI rate and pneumonia hospitalizations remained elevated in Mongolia. Elsewhere, influenza illness indicators and activity remained low. In Northern Africa, decreased detections of influenza A(H3N2) were reported in Tunisia. In Western Asia, Georgia reported increased detections of influenza A(H3N2). In the Caribbean and Central American countries, low influenza activity was reported with influenza A(H3N2) predominant. In tropical South America, low influenza activity was reported with influenza A(H3N2) predominant. In tropical Africa, influenza activity was reported mainly from Eastern Africa with influenza A(H3N2) predominating followed by influenza B viruses. In Southern Asia, influenza virus detections were at low levels overall. In South-East Asia, only Malaysia reported influenza detections of influenza A(H3N2) and B viruses. In the temperate zones of the southern hemisphere, influenza activity remained low overall, although detections of influenza A viruses, predominant with A(H3N2), continued to be reported in some countries in temperate South America and South Africa.

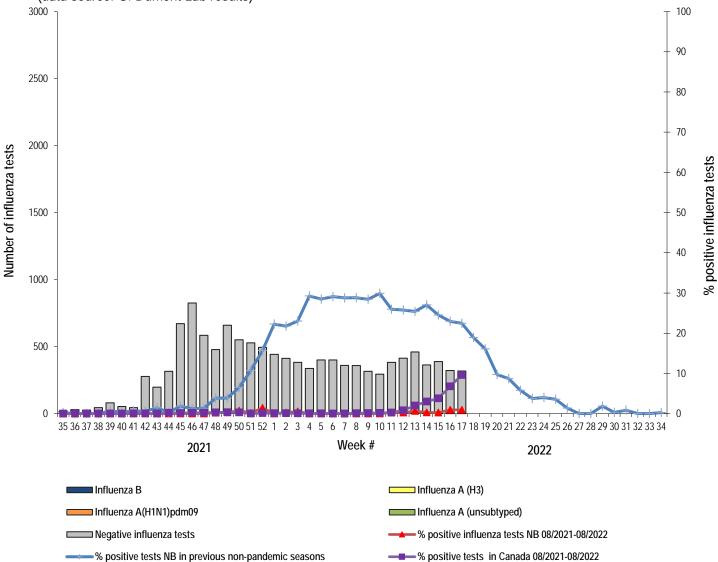
Emerging Respiratory Viruses:

- <u>COVID-19</u>: On December 31, 2019, a cluster of cases of pneumonia was reported in Wuhan, China, and the cause was confirmed as a new coronavirus that had not previously been identified in humans (COVID-19). As of May 8, 2022, 3,792,836 cases of COVID-19 infection in Canada have been identified with 39,627 deaths. Sixty-two thousand one hundred and forty-eight cases have been identified in New Brunswick with 399 deaths. As of May 6, the WHO reported globally 513 955 910 confirmed cases and 6 249 700 deaths. For more timely updates, please visit the following websites:
 - o WHO: https://www.who.int/emergencies/diseases/novel-coronavirus-2019
 - o PHAC: https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html
 - o NB: https://www2.qnb.ca/content/qnb/en/departments/ocmoh/cdc/content/respiratory_diseases/coronavirus.html
- MERS CoV:
 - WHO: WHO EMRO | MERS outbreaks | MERS-CoV | Health topics
 - CDC: http://www.cdc.gov/coronavirus/mers/
- Avian Influenza:
 - o WHO: WHO EMRO | Avian influenza | Avian influenza | Health topics

1) Influenza Laboratory Data¹

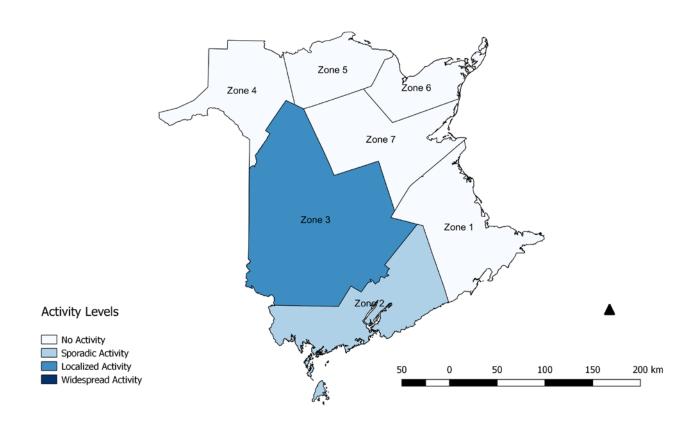
- Influenza activity remains low in weeks 16 & 17, although has been increasing in the last few weeks.
- Six influenza cases were reported during weeks 16 & 17.
- Since the beginning of the season, 31 cases have been reported, 30 influenza A (unsubtyped) viruses and 1 influenza B virus.

<u>Graph 1</u>: Number and percent of positive influenza specimens in New Brunswick by week, up to April 30, 2022 (data source: G. Dumont Lab results)



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.

Figure 2: Influenza/ILI activity levels² by Health Zones, in New Brunswick, for week 17, season 2021/2022.



² No activity is defined as no laboratory-confirmed influenza detections in the reporting week, however, sporadically occurring ILI may be reported. <u>Sporadic activity</u> is defined as sporadically occurring ILI and lab confirmed influenza detection(s) with no outbreaks detected within the influenza surveillance region.

<u>Localized activity</u> is defined as evidence of increased ILI with lab confirmed influenza detection(s) and outbreaks in schools, hospitals, residential institutions and/or other types of facilities occurring in less than 50% of the influenza surveillance region.

Widespread activity is defined as evidence of increased ILI with lab confirmed influenza detection(s) and outbreaks in schools, hospitals, residential institutions and/or other types of facilities occurring in greater than or equal to 50% of the influenza surveillance region.

<u>Table 1</u>: Positive influenza cases by Health Region, in New Brunswick for reporting week, cumulative current and previous seasons. (data source: G. Dumont lab results up to April 30, 2022)

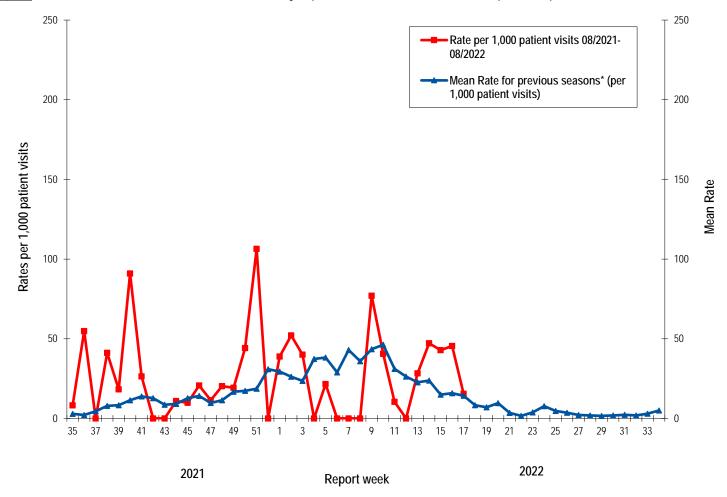
	Reporting period:						Cumulative: (2021/2022 season)						Cumulative: (2020/2021 season)					
	April/17/2022–April/30/2022						Aug./29/2021 –April/30/2022						(2020/2021 season) Aug./23/2020 –Aug./28/2021					
Zone	А				В	A & B co- infection	А				В	A & B co- infection	А			В	A & B co- infectio n	
	A(H3)	(H1N1) pdm09	Unsubty ped/ Other	A Total	Total	Total	A(H3)	(H1N1) pdm09	Unsubty ped/ Other	A Total	Total	Total	(H3)	(H1N1) pdm09	Unsubty ped/ Other	A Total	Total	Total
Zone 1	0	0	1	1	0	0	0	0	11	11	0	0	0	0	0	0	1*	0
Zone 2	0	0	2	2	0	0	0	0	9	9	0	0	0	0	0	0	0	0
Zone 3	0	0	3	3	0	0	0	0	3	3	1	0	0	0	0	0	0	0
Zone 4	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0
Zone 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zone 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zone 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NB	0	0	6	6	0	0	0	0	30	30	1	0	0	0	0	0	1*	0

^{*}This positive influenza detection is associated with recent live attenuated influenza vaccine receipt and does not represent community circulation of seasonal influenza viruses.

ILI Consultation Rates³

- The ILI consultation rate was 45.5 and 15.4 per 1,000 patients visits for weeks 16 & 17, respectively. The ILI rate was higher
 than the expected levels for week 16 but was within the expected levels for week 17.
- During weeks 16 & 17, the sentinel response rate was between 11% and 19% for both the FluWatch sentinel physicians and the NB SPIN practitioners.

Graph 2: ILI Consultation Rates in New Brunswick, by report week, season 2021/22 compared to previous seasons*



^{*} The mean rate was based on data from the 1996/97 to 2020/2021 seasons and excludes the Pandemic season (2009/10, 2020/21).

³ A total of 27 practitioner sites (16 FluWatch sentinel physicians and 11 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

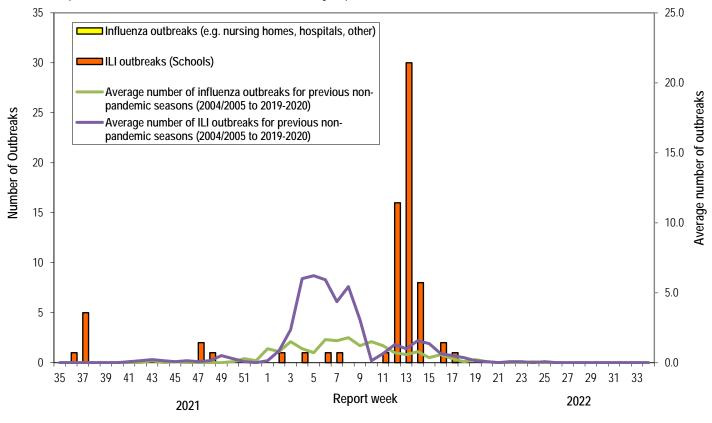
3) ILI and Laboratory-Confirmed Outbreak Data

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

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	Lab-confirmed outbreaks in Nursing homes ⁴	ILI school outbreaks ⁵ *	Lab-confirmed outbreaks in Other settings ⁴	Cumulative # of outbreaks season 2021-2022*		
Zone 1	0 out of 15	0 out of 74	0	18		
Zone 2	0 out of 16	0 out of 81	0	5		
Zone 3	0 out of 16	2 out of 95	0	28		
Zone 4	0 out of 5	0 out of 22	0	3		
Zone 5	0 out of 2	0 out of 18	0	0		
Zone 6	0 out of 9	0 out of 35	0	2		
Zone 7	0 out of 5	1 out of 27	0	12		
Total NB	0 out of 68	3 out of 352	0	68*		

^{*}During this influenza season, 2021-2022, the number of ILI outbreaks in school (based on greater than 10% absenteeism in school due to ILI symptoms, which for many schools cannot be determined) will likely be skewed due to the ongoing COVID-19 pandemic, specifically increased vigilance in schools to monitor and report absenteeism due to influenza-like-illness or COVID-like illness. Therefore, the number of ILI outbreaks in schools should be interpreted with caution and should not be compared to previous non-pandemic seasons.

<u>Graph 3</u>: 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 2021/22.



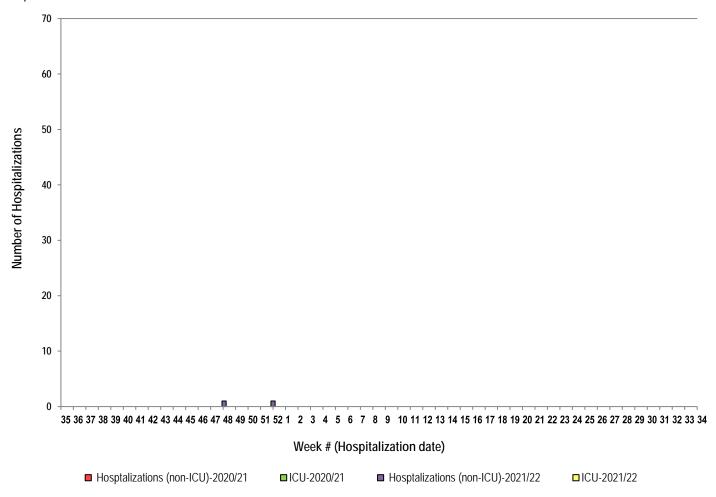
⁴ Two or more ILI cases within a seven-day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

6

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

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.*



*No deaths have been reported so far in season 2021-2022.

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/

World-https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates

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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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. A standardized Enhanced Surveillance Form is used to collect data on hospitalizations.