

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: July 31-August 27, 2022 (weeks 31-34)

Summary

In New Brunswick, influenza activity has reached inter-seasonal levels

New Brunswick:

- There has been 1 positive influenza case in weeks 31 to 34. Since the beginning of the season, 442 cases have been reported, 179 influenza A(H3), 262 influenza A (unsubtyped) and 1 influenza B.
- There have been 2 new influenza associated hospitalizations during weeks 31 to 34. Since the beginning of the season, 92 hospitalizations have been reported with 5 deaths.
- The ILI consultation rate was 0.0 per 1,000 patients visits for weeks 31 & 32 and was 64.9 per 1,000 visits for week 33 and 46.5 per 1,000 visits for week 34. The ILI rate was within the expected levels for this time of year for week 31 & 32 but was higher than expected levels for weeks 33 & 34.
- No new influenza/ILI outbreaks have been reported in weeks 31 to 34. Since the beginning of the season, 5 influenza outbreaks have been reported in nursing homes.

Canada:

At the national level, influenza activity is low and remains at interseasonal levels.

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. Global influenza activity has steadily decreased from a peak in March 2022, except form in Southeast Asia where influenza activity increased. In the temperate zones of the southern hemisphere, overall influenza activity appeared to further decrease this reporting period. In Oceania, detections of primarily influenza A(H3N2) decreased overall and influenza-like activity (ILI) activity returned to low levels in most Pacific Island countries. In Southern Africa, influenza activity decreased overall with continued detections of influenza A(H1N1)pdm09 and influenza A(H3N2) and a few influenza B viruses. In temperate South America, influenza activity decreased overall. Influenza A(H3N2) viruses predominated among subtyped detections. In the Caribbean and Central American countries, low influenza activity was reported with influenza A(H3N2) most frequently detected. In the tropical countries of South America, influenza detections were low and A(H3N2) detections predominated. In tropical Africa, influenza activity continued to decrease with influenza A(H3N2) viruses predominant among the reported detections. In Southern Asia, influenza detections of predominantly A(H3N2) viruses decreased while detections of influenza A(H1N1)pdm09 increased in recent weeks, especially in India. In South-East Asia, influenza activity increased overall with influenza A(H3N2) viruses predominantly detected. In the countries of North America, influenza activity remained at inter-seasonal levels as typically observed at this time of year. Influenza A(H3N2) was predominant among the subtyped viruses. In Europe, overall influenza activity remained at inter-seasonal levels with influenza A(H3N2) predominant among the subtyped viruses. In Central Asia, no influenza detections were reported. In Northern Africa, no influenza detections were reported. In East Asia, influenza activity of predominantly influenza A(H3N2) seemed to have peaked in the southern provinces of China. Elsewhere, influenza illness indicators and activity remained low. In Western Asia, low numbers of detections of influenza A(H1N1)pdm09, A(H3N2) and B viruses were reported.

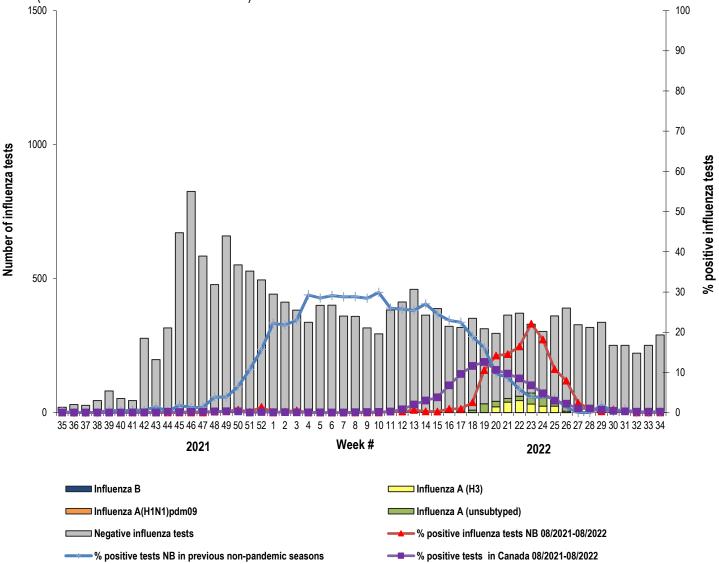
Emerging Respiratory Viruses:

- COVID-19: 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 September 2, 2022, 4,179,337 cases of COVID-19 infection in Canada have been identified with 44,085 deaths. Seventy-five thousand seven hundred and forty-one cases have been identified in New Brunswick with 472 deaths. As of September 6, the WHO reported globally 603 164 436 confirmed cases and 6 482 338 deaths. For more timely updates, please visit the following websites:
 - 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
 - NB: https://www2.anb.ca/content/anb/en/departments/ocmoh/cdc/content/respiratory_diseases/coronavirus.html
- MERS CoV:
 - WHO: WHO EMRO | MERS outbreaks | MERS-CoV | Health topics
 - o CDC: http://www.cdc.gov/coronavirus/mers/
- Avian Influenza:
 - O WHO: WHO EMRO | Avian influenza | Avian influenza | Health topics

1) Influenza Laboratory Data¹

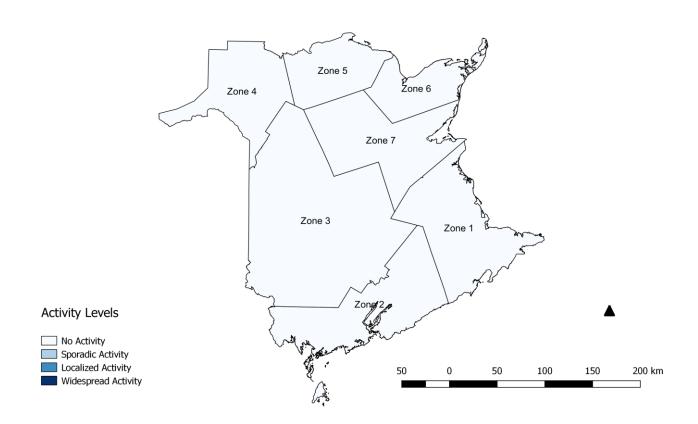
- Influenza activity has reached inter-seasonal levels.
- One influenza case was reported during weeks 31 to 34: an influenza A (unsubtyped) virus.
- Since the beginning of the season, 442 cases have been reported: 179 influenza A(H3), 262 influenza A (unsubtyped) and 1 influenza B.

<u>Graph 1</u>: Number and percent of positive influenza specimens in New Brunswick by week, up to August 27, 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 34, season 2021/2022.



Localized 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 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.

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

<u>Table 1</u>: Positive influenza cases³ by Health Region, in New Brunswick for reporting week, cumulative current and season 2019-2020. (data source: G. Dumont lab results up to August 27, 2022)

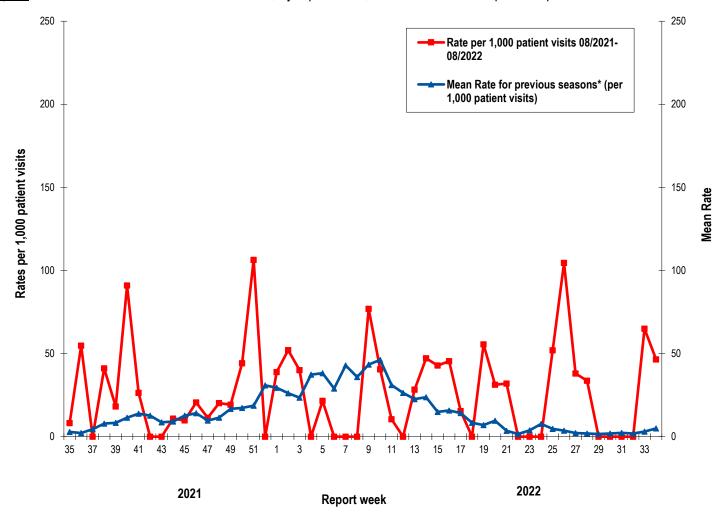
	Reporting period: July/31/2022-August/27/2022						Cumulative: (2021/2022 season) Aug./29/2021 –August/27/2022						Cumulative: (2019/2020 season) Aug./25/2019 –Aug./22/2020					
	А				В	A & B		B A&B								В	A & B	
Zone						co- infection	А					co- infection	А				co- infection	
	A(H3)	(H1N1) pdm09	Unsubty 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	0	0	0	0	124	0	115	239	0	0	9	28	324	361	665	3
Zone 2	0	0	1	1	0	0	11	0	60	71	0	0	3	11	121	135	96	2
Zone 3	0	0	0	0	0	0	33	0	55	88	1	0	1	8	102	111	188	5
Zone 4	0	0	0	0	0	0	4	0	10	14	0	0	1	7	43	51	212	1
Zone 5	0	0	0	0	0	0	1	0	7	8	0	0	10	5	85	100	17	1
Zone 6	0	0	0	0	0	0	5	0	13	18	0	0	6	7	120	133	98	1
Zone 7	0	0	0	0	0	0	1	0	2	3	0	0	0	3	65	68	103	0
Total NB	0	0	1	1	0	0	179	0	262	441	1	0	30	69	860	959	1379	13

³ A small proportion of specimens tested using Rapid Tests are not included in the total number of cases.

2) ILI Consultation Rates⁴

- The ILI consultation rate was 0.0 per 1,000 patients visits for weeks 31 & 32, was 64.9 per 1,000 visits for week 33 and was 46.5 per 1,000 visits for week 34. The ILI rate was within the expected levels for week 31 & 32 but was higher than expected levels for weeks 33 & 34.
- During week 31 to 34, the sentinel response rate was between 12% 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).

⁴ 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.

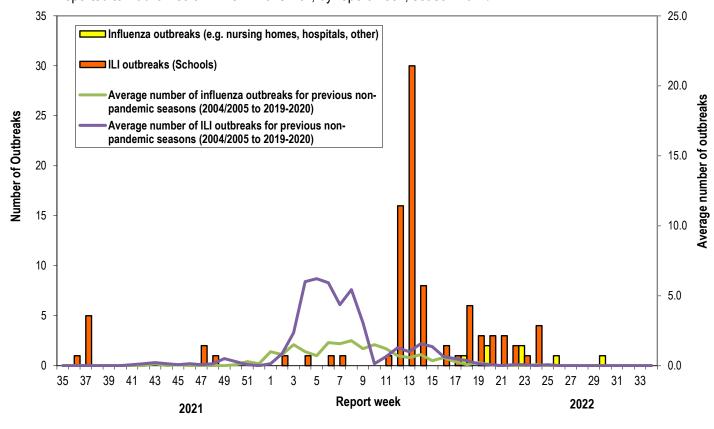
3) ILI and Laboratory-Confirmed Outbreak Data

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

	July	0 - 1-1 - 4 - 1				
	Lab-confirmed outbreaks in Nursing homes ⁵	ILI school outbreaks ⁶ *	Lab-confirmed outbreaks in Other settings ⁴	Cumulative # of outbreaks season 2021-2022*		
Zone 1	0 out of 15	0 out of 74	0	23		
Zone 2	0 out of 16	0 out of 81	0	11		
Zone 3	0 out of 16	0 out of 95	0	32		
Zone 4	0 out of 5	0 out of 22	0	8		
Zone 5	0 out of 2	0 out of 18	0	1		
Zone 6	0 out of 9	0 out of 35	0	5		
Zone 7	0 out of 5	0 out of 27	0	13		
Total NB	0 out of 68	0 out of 352	0	93*		

^{*}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.



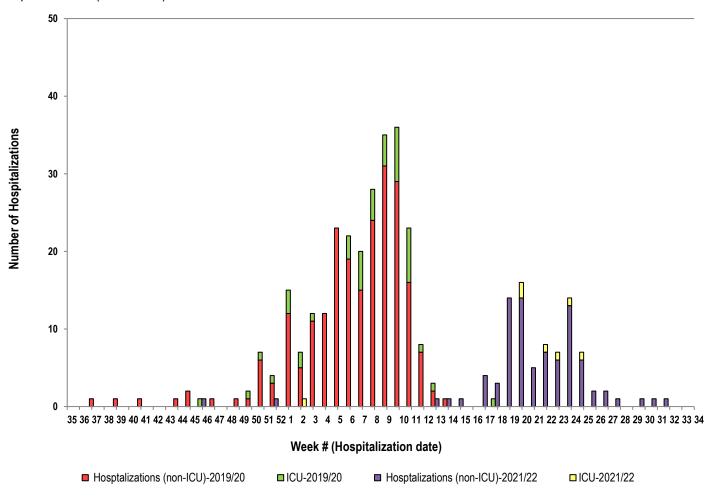
⁵ Two or more ILI cases within a seven-day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

6

⁶ Schools reporting greater than 10% absenteeism which is likely due to ILI.

Influenza associated Hospitalization⁷ and Death⁸ Surveillance⁹

<u>Graph 4</u>: Influenza associated Hospitalizations and ICU admissions in New Brunswick, by week of hospitalization for current and past season (2019-2020).*



^{*}Five 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/

Other Links:

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/hg/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

⁷ Hospitalizations (including ICU admissions) are influenza associated; they may or may not be due to influenza.

⁸ Deaths are influenza associated; influenza may not be the direct cause of death.

⁹ 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.