

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: June 12 to June 18, 2022 (week 24)

Summary In New Brunswick, influenza activity remained elevated in week 24

New Brunswick:

- There have been 55 positive influenza cases in week 24. Since the beginning of the season, 357 cases have been reported, 150 influenza A(H3), 206 influenza A (unsubtyped) and 1 influenza B.
- There have been 14 new influenza associated hospitalizations during week 24. Since the beginning of the season, 75 hospitalizations have been reported with 4 deaths.
- The ILI consultation rate was 0.0 per 1,000 patients visits for week 24. The ILI rate was slightly lower than the expected levels for this time of year.
- Four new ILI school outbreaks were reported in week 24. Since the beginning of the season, 5 influenza outbreaks have been reported in nursing homes.

Canada:

- At the national level, influenza activity continued to decline to an influenza positivity rate of 4.8% indicating that Canada is nearing the end of its 2021-2022 late onset seasonal influenza epidemic. Despite the decline, sporadic and some limited localized influenza activity continues to be reported in most regions across the country.
- Nationally, 596 laboratory detections (588 A and 8 B) of influenza were reported in week 24. Among detections with detailed age information, nearly half (49%) were in children and teenagers (ages 0 to 19 years).
- Influenza A(H3N2) is the dominant strain among sub-typed infections, representing 99% of sub-typed influenza A infections this season to date.
- In week 24, 10,917 participants reported to FluWatchers with 1.3% of participants reporting cough and fever.

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 continued to decrease, following a peak in March 2022, but increasing activity in some areas of the temperate southern hemisphere has been reported. In the temperate zones of the southern hemisphere, overall influenza activity increased slightly in recent weeks. Detections of influenza A and respiratory syncytial virus (RSV) sharply increased in some regions of Australia. Influenza detections continued to increase in South Africa though the detections rate was at low levels. In temperate South America, influenza activity of predominately influenza A(H3N2) decreased in Argentina and Paraguay but increased in Chile and Uruguay. 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) most frequently detected followed by few influenza B viruses. In tropical Africa, influenza activity remained low with influenza A(H3N2) predominant. In Southern and South-East Asia, influenza virus detections were at low levels overall. In the countries of North America, influenza activity continued to gradually decrease compared to the previous period and influenza positivity was higher than usual for this time of year, compared to past seasonal influenza data reporting. Activity was predominantly due to influenza A viruses, with A(H3N2) predominant among the subtyped viruses. RSV activity remained low in Canada and the United States of America (USA). In Europe, overall influenza activity continues to decline with influenza A(H3N2) predominant among the subtyped viruses. In Central Asia, no influenza detections were reported. In Northern Africa, Tunisia reported a single influenza B detection. In East Asia, influenza activity of predominantly influenza A(H3N2) increased in the southern provinces of China. Respiratory illness indicators remained elevated in Mongolia, though influenza detections were low. Elsewhere, influenza illness indicators and activity remained low. In Western Asia, increased influenza detections were reported in Qatar with influenza A(H3N2) most frequently detected.

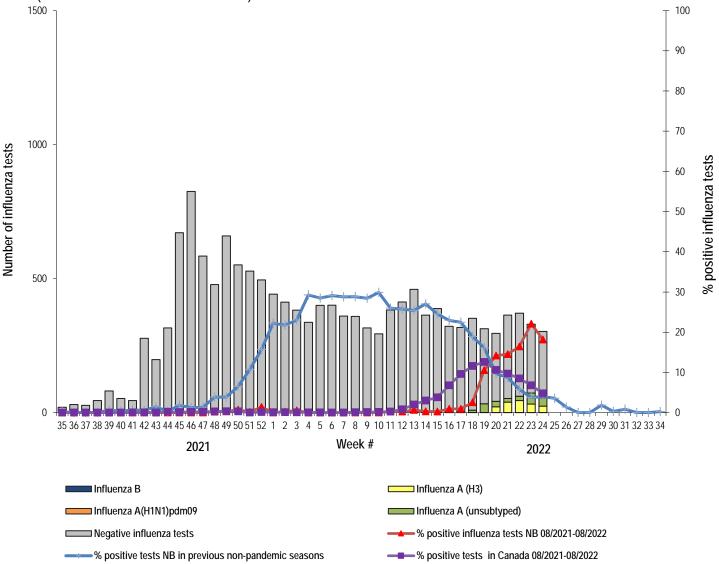
Emerging Respiratory Viruses:

- <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 June 24, 2022, 3,913,975 cases of COVID-19 infection in Canada have been identified with 41,566 deaths. Sixty-seven thousand seven hundred and twenty-five cases have been identified in New Brunswick with 425 deaths. As of June 27, the WHO reported globally 540 923 532 confirmed cases and 6 325 785 deaths. For more timely updates, please visit the following websites:
 - o WHO: https://www.who.int/emergencies/diseases/novel-coronavirus-2019
 - PHAC: https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html
 - NB: https://www2.gnb.ca/content/gnb/en/departments/ocmoh/cdc/content/respiratory_diseases/coronavirus.html
- MERS CoV:
 - o 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

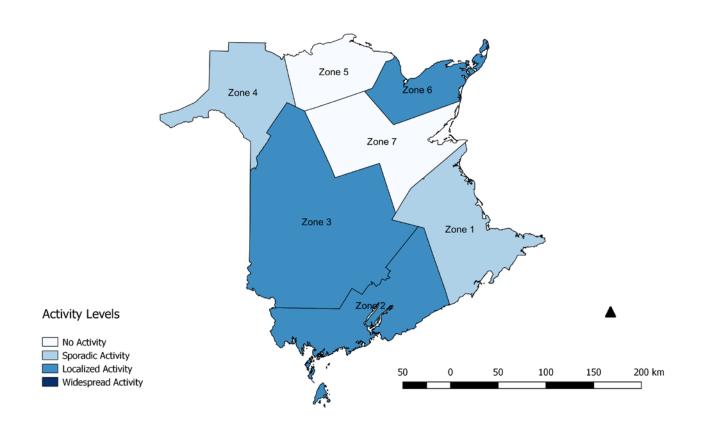
- Influenza activity remained elevated in week 24.
- 55 influenza cases were reported during week 24: 24 influenza A (H3N2) and 31 influenza A (unsubtyped).
- Since the beginning of the season, 357 cases have been reported: 150 influenza A(H3), 206 influenza A (unsubtyped) and 1 influenza B.

<u>Graph 1</u>: Number and percent of positive influenza specimens in New Brunswick by week, up to June 18, 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 24, 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 cases³ by Health Region, in New Brunswick for reporting week, cumulative current and season 2019-2020. (data source: G. Dumont lab results up to June 18, 2022)

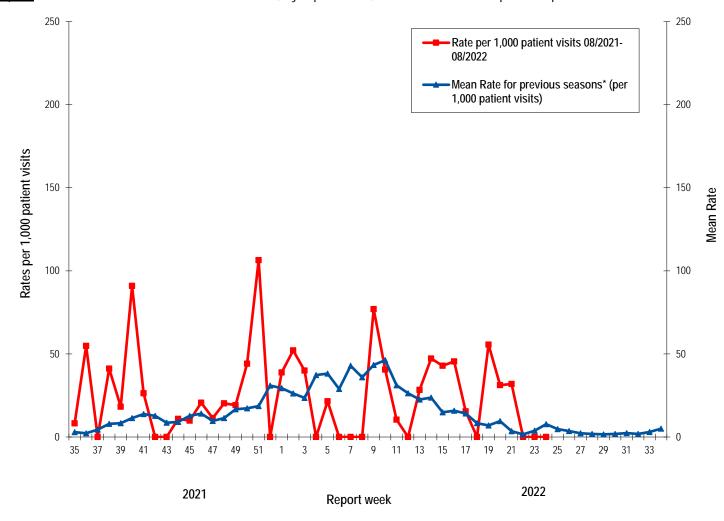
	Reporting period:						Cumulative: (2021/2022 season)						Cumulative: (2019/2020 season)					
Zone	June/12/2022-June/18/2022						Aug./29/2021 –June/18/2022						Aug./25/2019 –Aug./22/2020					
	А				В	A & B co- infection	А				В	A & B co- infection	А			В	A & B co- infection	
	A(H3)	(H1N1) pdm09	Unsubty 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	19	0	16	35	0	0	103	0	90	193	0	0	9	28	324	361	665	3
Zone 2	1	0	5	6	0	0	9	0	39	48	0	0	3	11	121	135	96	2
Zone 3	2	0	5	7	0	0	32	0	54	86	1	0	1	8	102	111	188	5
Zone 4	0	0	2	2	0	0	1	0	9	10	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	2	0	3	5	0	0	3	0	5	8	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	24	0	31	55	0	0	150	0	206	356	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.

ILI Consultation Rates⁴

- The ILI consultation rate was 0.0 per 1,000 patients visits for week 24. The ILI rate was slightly lower than the expected levels for this time of year.
- During week 24, the sentinel response rate was 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.

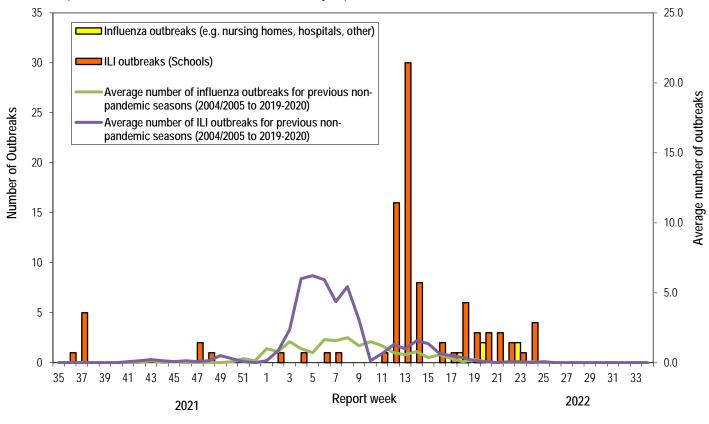
3) ILI and Laboratory-Confirmed Outbreak Data

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

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	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	1 out of 81	0	10		
Zone 3	0 out of 16	2 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	1 out of 35	0	5		
Zone 7	0 out of 5	0 out of 27	0	13		
Total NB	0 out of 68	4 out of 352	0	92*		

^{*}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.



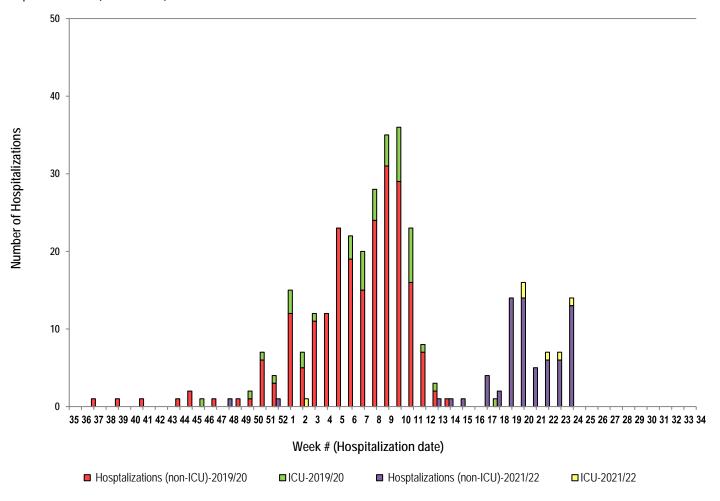
⁵ Two or more ILI cases within a seven-day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

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

4) 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).*



*Four deaths have been reported so far in season 2021-2022.

<u>National Flu Watch Program</u> - 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: <a href="http://new.paho.org/hq/index.php?option=com_content&task=blogcategory&id=805<emid=569">http://new.paho.org/hq/index.php?option=com_content&task=blogcategory&id=805<emid=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.