

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: July 10-July 16, 2022 (week 28)

Summary

In New Brunswick, influenza activity continues to decrease

New Brunswick:

- There have been 3 positive influenza cases in week 28. Since the beginning of the season, 438 cases have been reported, 179 influenza A(H3), 258 influenza A (unsubtyped) and 1 influenza B.
- There has been no new influenza associated hospitalization during week 28. Since the beginning of the season, 86 hospitalizations have been reported with 4 deaths.
- The ILI consultation rate was 33.7 per 1,000 patients visits for week 28. The ILI rate was higher than the expected levels for this time of year.
- No new influenza/ILI outbreaks have been reported in week 28. Since the beginning of the season, 6 influenza outbreaks have been reported in nursing homes.

Canada:

• Updates from the National Influenza Surveillance will only be available on a monthly basis during the summer months.

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. In the temperate zones of the southern hemisphere, overall influenza activity appeared to decrease slightly this reporting period. In Oceania, influenza detections appeared to have peaked in some regions of Australia and in New Zealand, with continued detections of predominantly influenza A(H3N2) viruses. In Southern Africa, influenza activity decreased slightly 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) predominant. In the tropical countries of South America, influenza detections were low, and A(H3N2) detections predominated. In tropical Africa, influenza activity continued to decrease. Influenza A viruses predominated among the reported detections. In Southern Asia, influenza detections of predominantly A(H3N2) increased in some reporting countries but remained at low levels overall. In South-East Asia, influenza virus detections increased. Influenza A(H3N2) predominated. In the countries of North America, influenza activity continued to decrease to levels typically observed at this time of year. Activity was predominantly due to influenza A viruses, with A(H3N2) predominant among the subtyped viruses. In Europe, overall influenza activity remained at low 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) continued to increase and influenza-like illness (ILI) activity decreased this reporting period 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.

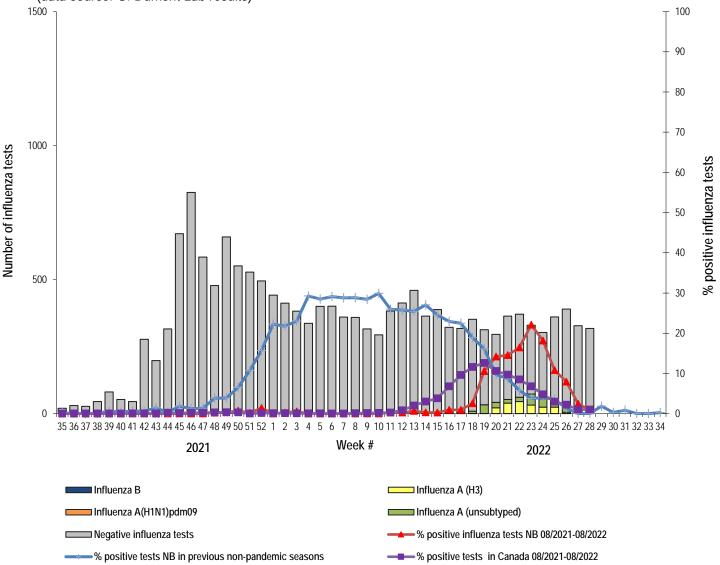
Emerging Respiratory Viruses:

- <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 July 22, 2022, 4,023,104 cases of COVID-19 infection in Canada have been identified with 42,447 deaths. Seventy-one thousand four hundred and seventy-nine cases have been identified in New Brunswick with 443 deaths. As of July 27, the WHO reported globally 570 005 017 confirmed cases and 6 384 128 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
 - 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
 - o CDC: http://www.cdc.gov/coronavirus/mers/
- Avian Influenza:
 - o WHO: WHO EMRO | Avian influenza | Avian influenza | Health topics

1) Influenza Laboratory Data¹

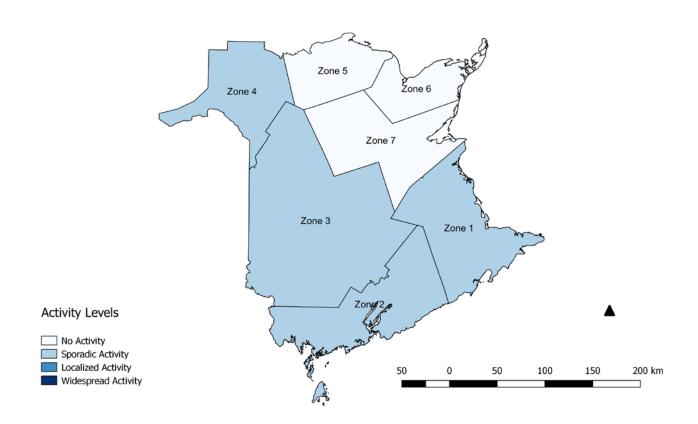
- Influenza activity continues to decrease.
- Three influenza cases were reported during week 28; all were influenza A (unsubtyped).
- Since the beginning of the season, 438 cases have been reported: 179 influenza A(H3), 258 influenza A (unsubtyped) and 1 influenza B.

<u>Graph 1</u>: Number and percent of positive influenza specimens in New Brunswick by week, up to July 16, 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 28, 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. Sporadic activity 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 July 16, 2022)

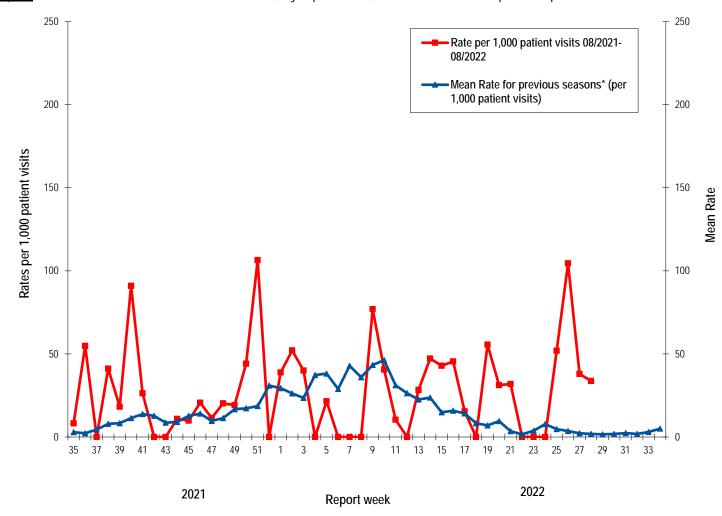
	Reporting period:						Cumulative: (2021/2022 season)						Cumulative: (2019/2020 season)					
Zone	July/10/2022-July/16/2022						Aug./29/2021 –July/16/2022						Aug./25/2019 –Aug./22/2020					
	А				В	A & B co- infection	А				В	A & B co- infection	A			В	A & B co- infection	
	A(H3)	(H1N1) pdm09	Unsubty 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	0	0	2	2	0	0	124	0	114	238	0	0	9	28	324	361	665	3
Zone 2	0	0	0	0	0	0	11	0	57	68	0	0	3	11	121	135	96	2
Zone 3	0	0	1	1	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	3	3	0	0	179	0	258	437	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 33.7 per 1,000 patients visits for week 28. The ILI rate was higher than the expected levels for this time of year.
- During week 28, 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.

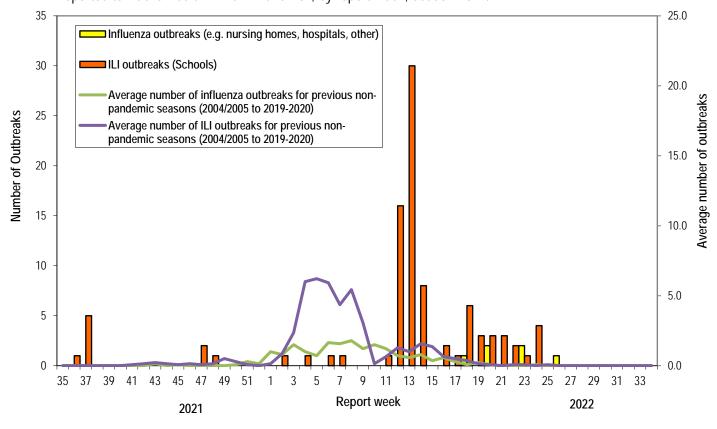
3) ILI and Laboratory-Confirmed Outbreak Data

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

	Ju					
	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.



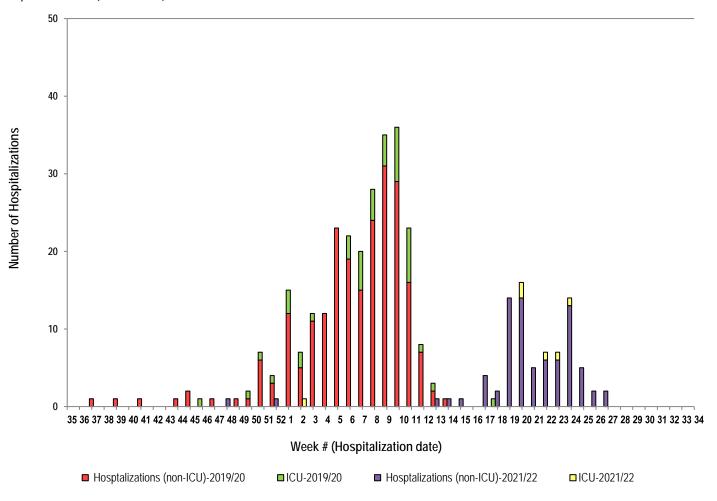
⁵ Two or more ILI cases within a seven-day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

6

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

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/

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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.