

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: November 28 to December 4, 2021 (week 48)

Summary

In New Brunswick, influenza activity remains low in week 48

New Brunswick:

- There has been 1 positive influenza case in week 48, an influenza B. Since the beginning of the season, 1 case of influenza B has been reported.
- There has been 1 influenza associated hospitalization during week 48. Since the beginning of the season, 1 hospitalization has been reported and no deaths.
- The ILI consultation rate was 20.2 per 1,000 patients visits for week 48. The ILI rate was slightly above the expected levels for this time of year.
- No influenza outbreaks were reported in week 48. So far this season, no influenza outbreaks have been reported. One new ILI school outbreak was reported for week 48.

Canada:

- In week 48, influenza activity across Canada was low with only 20% of regions reporting any influenza activity. In the past week, all influenza indicators remain at low interseasonal levels.
- Nationally, 61 laboratory detections (33A & 28B) of influenza were reported in week 48. Among the 47 detections with detailed age information, 89% were in individuals under the age of 65 years.
- In week 48, 12,807 participants reported to FluWatchers with 0.52% 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 increase but remains well below levels observed in previous seasons. In the temperate zones of the northern hemisphere, influenza activity remained at interseasonal levels. Both influenza A and B were detected. Detections of respiratory syncytial virus (RSV) were higher than expected in Canada. In the Caribbean and Central American countries, sporadic influenza A and B virus detections as well as elevated RSV activity were reported in some countries. In tropical South America, influenza A(H3N2) detections were reported from Brazil, RSV activity continued to be elevated in some countries. In tropical Africa, influenza A predominated with some detections of influenza B. The number of influenza detections remained within inter-seasonal levels. In Southern Asia, the number of influenza virus detections reported continued on a decreasing trend, with detections of both influenza A and B viruses reported. In South East Asia, no detections of influenza were reported. In the temperate zones of the southern hemisphere, influenza activity remained low in Oceania and temperate South America but was increased in South Africa. Elevated RSV activity continued to be reported in some countries.

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 December 13, 2021, 1,840,919 cases of COVID-19 infection in Canada have been identified with 29,941 deaths. Nine thousand eight hundred and thirteen cases have been identified in New Brunswick with 146 deaths. As of December 13, the WHO reported globally 269 468 311 confirmed cases and 5 304 248 deaths. For more timely updates, please visit the following websites:
 - 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
 - o NB: https://www2.gnb.ca/content/gnb/en/departments/ocmoh/cdc/content/respiratory_diseases/coronavirus.html

• MERS CoV:

- o WHO: http://www.who.int/csr/disease/coronavirus infections/en/
- o CDC: http://www.cdc.gov/coronavirus/mers/
- by Updated Risk Assessment (August 2018): http://www.who.int/csr/disease/coronavirus_infections/risk-assessment-august-2018.pdf?ua=1

Avian Influenza:

o WHO: www.who.int/csr/disease/avian_influenza/en/index.html

Influenza Laboratory Data¹

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.

- Influenza activity remains low in week 48.
- One influenza case was reported during week 48, an influenza B.
- Since the beginning of the season, 1 influenza case has been reported, an influenza B virus.

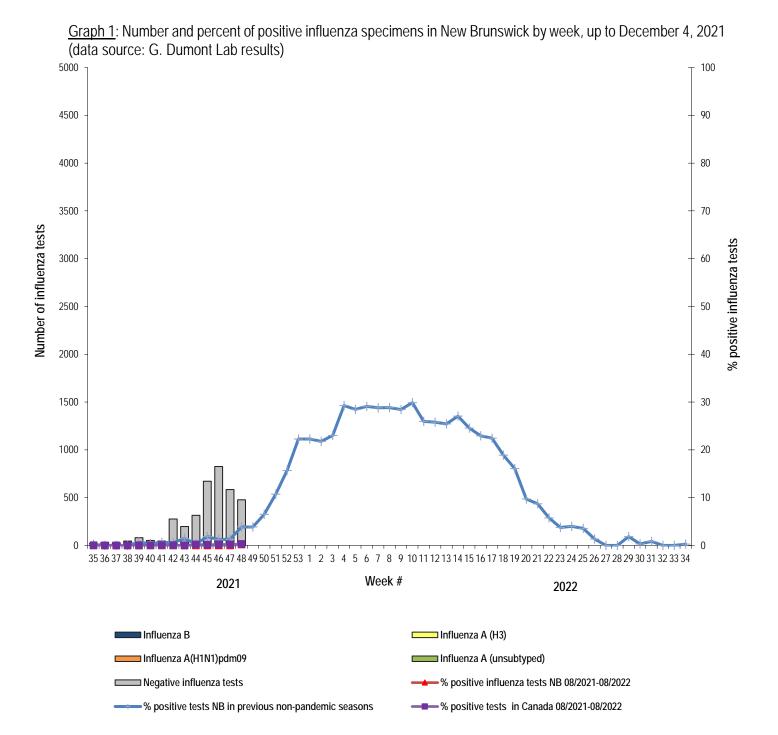
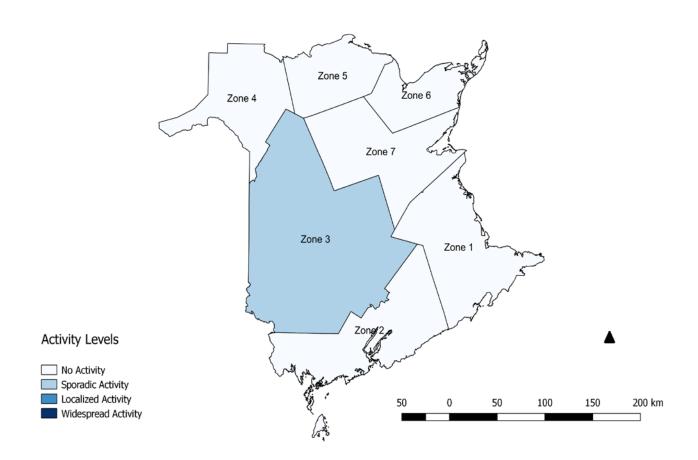


Figure 2: Influenza/ILI activity levels² by Health Zones, in New Brunswick, for week 48, season 2021/2022.



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 cases by Health Region, in New Brunswick for reporting week, cumulative current and previous seasons. (data source: G. Dumont lab results up to December 4, 2021)

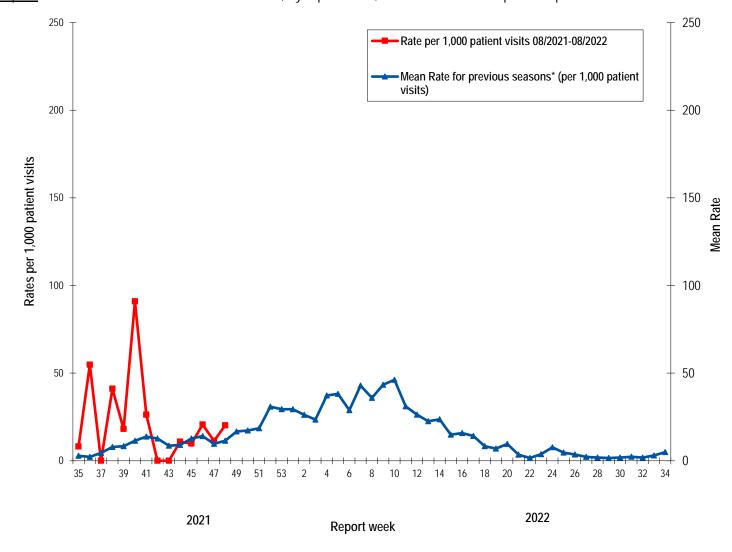
| | Reporting period: | | | | | | Cumulative: (2021/2022 season) | | | | | Cumulative: (2020/2021 season) | | | | | | |
|----------|-----------------------------------|-----------------|-----------------------|------------|-------|------------------|---------------------------------|-----------------|-----------------------|------------|-------|-----------------------------------|----------------------------|-----------------|-----------------------|------------|----------------------|-------|
| | November/28/2021-December/04/2021 | | | | | | Aug./29/2021 - December/04/2021 | | | | | | Aug./23/2020 –Aug./28/2021 | | | | | |
| | | | | | В | A & B | | B A&B | | | A & B | | | | | В | A & B | |
| Zone | А | | | | | co- infection | А | | | | | co- infection | А | | | | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1* | 0 |
| Zone 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Zone 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Zone 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 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.

2) ILI Consultation Rates³

- During week 48, the ILI consultation rate was 20.2 per 1,000 patients visits. The ILI rate was slightly above the expected levels for this time of year.
- During week 48, the sentinel response rate was 21% 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 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.

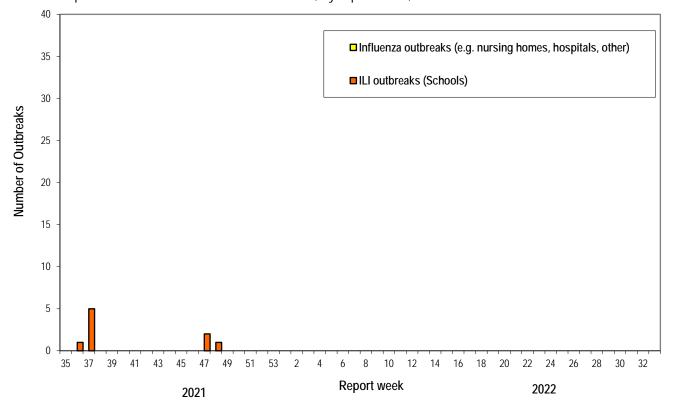
3) ILI and Laboratory-Confirmed Outbreak Data

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

| | Novem | O mar lather that | | | | |
|----------|--|-------------------------------------|--|---|--|--|
| | 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 | 5 | | |
| Zone 2 | 0 out of 16 | 1 out of 81 | 0 | 1 | | |
| Zone 3 | 0 out of 16 | 0 out of 95 | 0 | 0 | | |
| Zone 4 | 0 out of 5 | 0 out of 22 | 0 | 0 | | |
| Zone 5 | 0 out of 2 | 0 out of 18 | 0 | 0 | | |
| Zone 6 | 0 out of 9 | 0 out of 35 | 0 | 0 | | |
| Zone 7 | 0 out of 5 | 0 out of 27 | 0 | 0 | | |
| Total NB | 0 out of 68 | 1 out of 352 | 0 | 6* | | |

^{*}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 ILI, as well as the increased restrictions on attendance for children with symptoms of viral respiratory illness and the prudence of parents/guardians to send their children to school. 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.



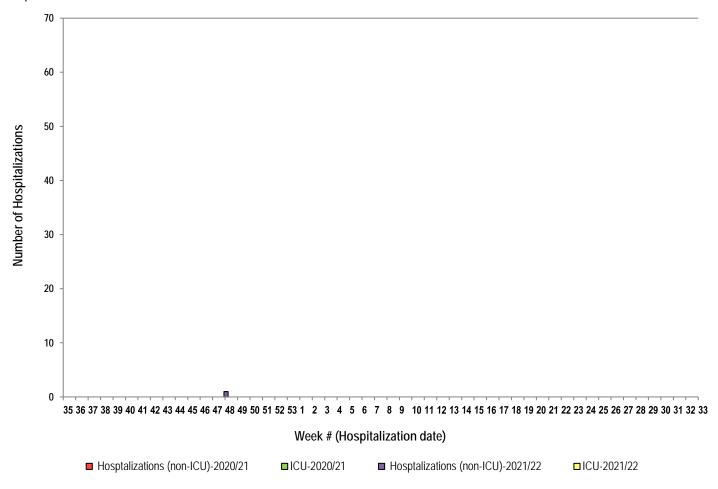
⁴ Two or more ILI cases within a seven-day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

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

4) Influenza associated Hospitalization⁶ and Death⁷ Surveillance⁸

<u>Graph 4</u>: 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.

<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-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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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.