# WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: November 7 to November 13, 2021 (week 45)


Summary

## In New Brunswick, influenza activity remained at inter-seasonal levels in week 45

New Brunswick:

- There have been no positive influenza cases in week 45. Since the beginning of the season, no cases of influenza have been reported.
- There has been no influenza associated hospitalizations during week 45. Since the beginning of the season, no hospitalizations have been reported and no deaths.
- The ILI consultation rate was 9.8 per 1,000 patients visits for week 45. The ILI rate was within the expected levels for this time of year.
- No influenza or ILI outbreaks were reported in week 45. So far this season, no influenza outbreaks have been reported.

Canada:

- In week 45, influenza activity across Canada was low with 85% of regions reporting no influenza activity. In the past week, all influenza indicators were at low interseasonal levels.
- Nationally, 22 laboratory detections of influenza were reported in week 45. Among the 12 detections with detailed age information, all were individuals under the age of 44 years.
- In week 45, 12,590 participants reported to FluWatchers with 0.6% 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 remains low but in comparison with last year a slight increase in influenza detections is noticed. In the temperate zones of the northern hemisphere, influenza activity remained at interseasonal levels. Both influenza A and B were detected. Severe acute respiratory infections (SARI) as well as respiratory syncytial virus (RSV) were increased and higher than in previous years in some countries. 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, no influenza detection was reported, however RSV activity remained elevated in some countries. In tropical Africa, a few influenza detections of predominately influenza A and some influenza B were reported. Previously increased activity in West African appeared to be decreasing. In Southern Asia, the number of influenza virus detections reported was in a similar range to previous seasons with detections of influenza A and B viruses. In South East Asia, few detections of influenza A(H3N2) and influenza B were reported from Malaysia. In the temperate zones of the southern hemisphere, influenza activity remained at interseasonal levels, with exception of South Africa where increased influenza activity is reported out of season. Elevated RSV activity continued to be reported in some countries. Worldwide, among influenza detections, influenza B viruses predominated.

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 November 22, 2021, 1,770,106 cases of COVID-19 infection in Canada have been identified with 29,526 deaths. Seven thousand eight hundred and six cases have been identified in New Brunswick with 124 deaths. As of November 22, the WHO reported globally 256 966 237 confirmed cases and 5 151 643 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
  - NB : https://www2.gnb.ca/content/gnb/en/departments/ocmoh/cdc/content/respiratory_diseases/coronavirus.html
- MERS CoV:
  - WHO: http://www.who.int/csr/disease/coronavirus_infections/en/
  - CDC: http://www.cdc.gov/coronavirus/mers/
  - Updated Risk Assessment (August 2018): http://www.who.int/csr/disease/coronavirus_infections/risk-assessment-august-2018.pdf?ua=1


## 1) Influenza Laboratory Data[1]

[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 remained at inter-seasonal levels in week 45.
- No influenza cases were reported during week 45.
- Since the beginning of the season, no influenza cases have been reported.

Graph 1: Number and percent of positive influenza specimens in New Brunswick by week, up to November 13, 2021 (data source: G. Dumont Lab results)

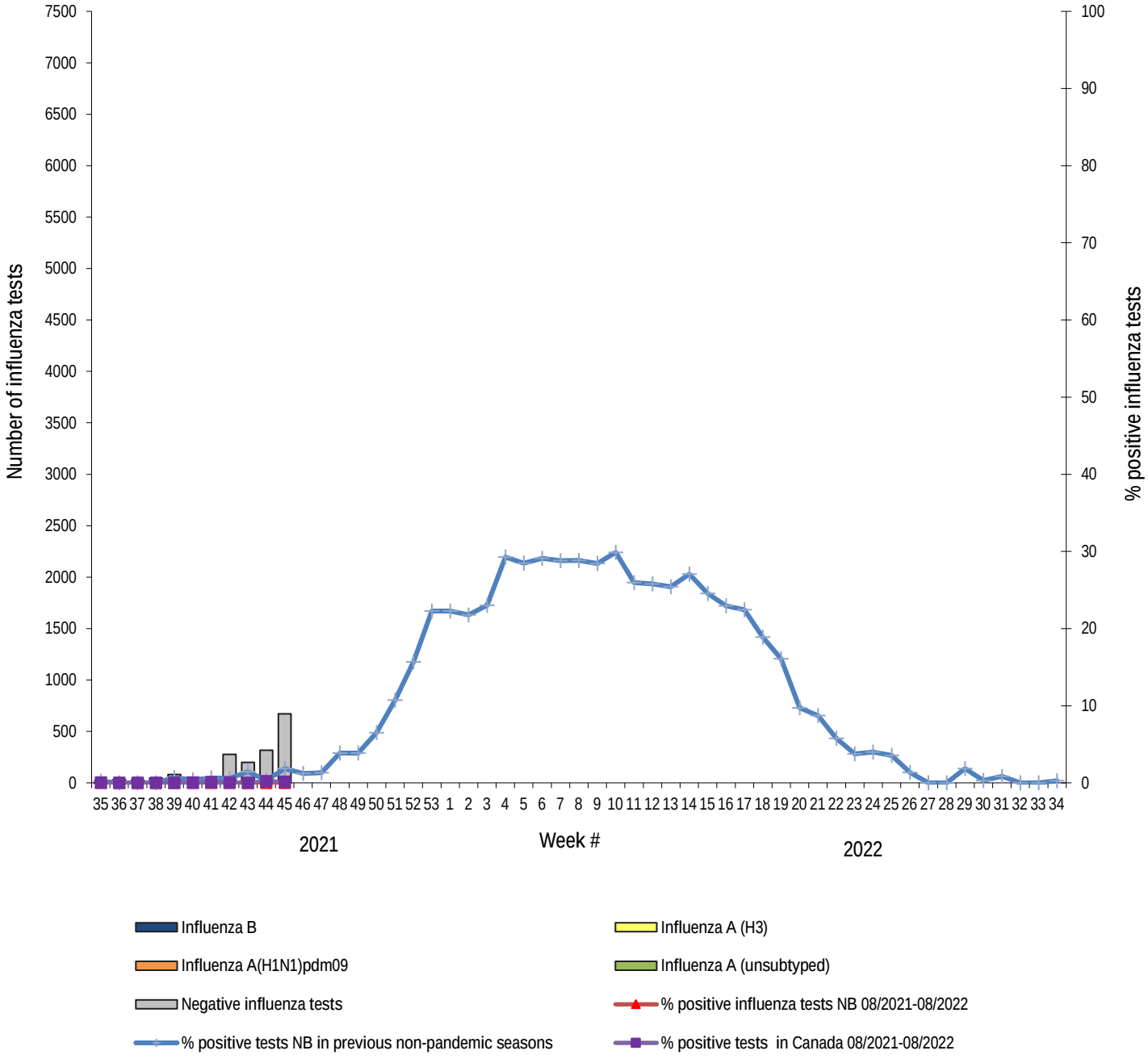
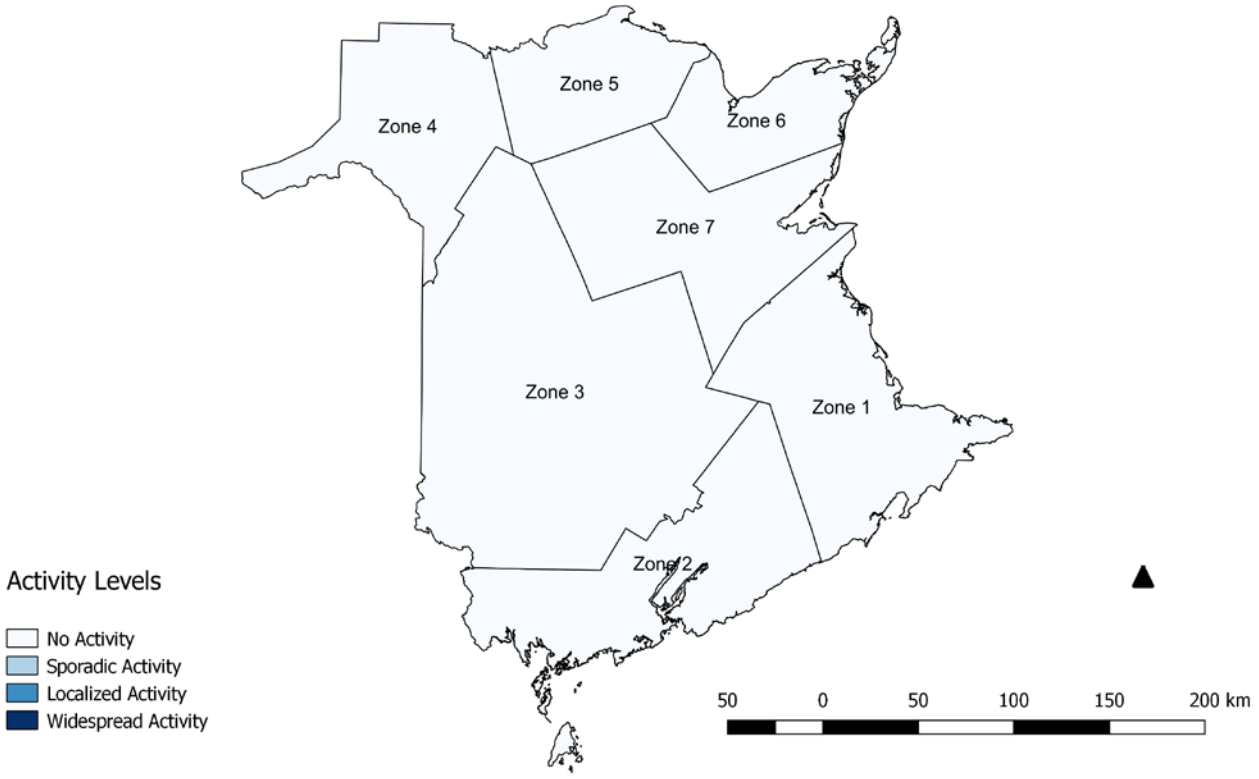


Figure 2: Influenza/ILI activity levels[2] by Health Zones, in New Brunswick, for week 45, season 2021/2022.




[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.
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.

Table 1: 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 November 13, 2021)

| Zone | Reporting period: November/07/2021–November/13/2021 | | | | | | Cumulative: (2021/2022 season) Aug./29/2021 –November/13/2021 | | | | | | Cumulative: (2020/2021 season) Aug./23/2020 –Aug./28/2021 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | | | | B | A & B co-infection | A | | | | B | A & B co-infection | A | | | | B | A & B co-infection |
| | A(H3) | (H1N1) pdm09 | Unsubtyped/ Other | A Total | Total | Total | A(H3) | (H1N1) pdm09 | Unsubtyped/ Other | A Total | Total | Total | (H3) | (H1N1) pdm09 | Unsubtyped/ 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** | **0** | **0** | 0 | 0 | 0 | **0** | **0** | **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** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **1*** | **0** |

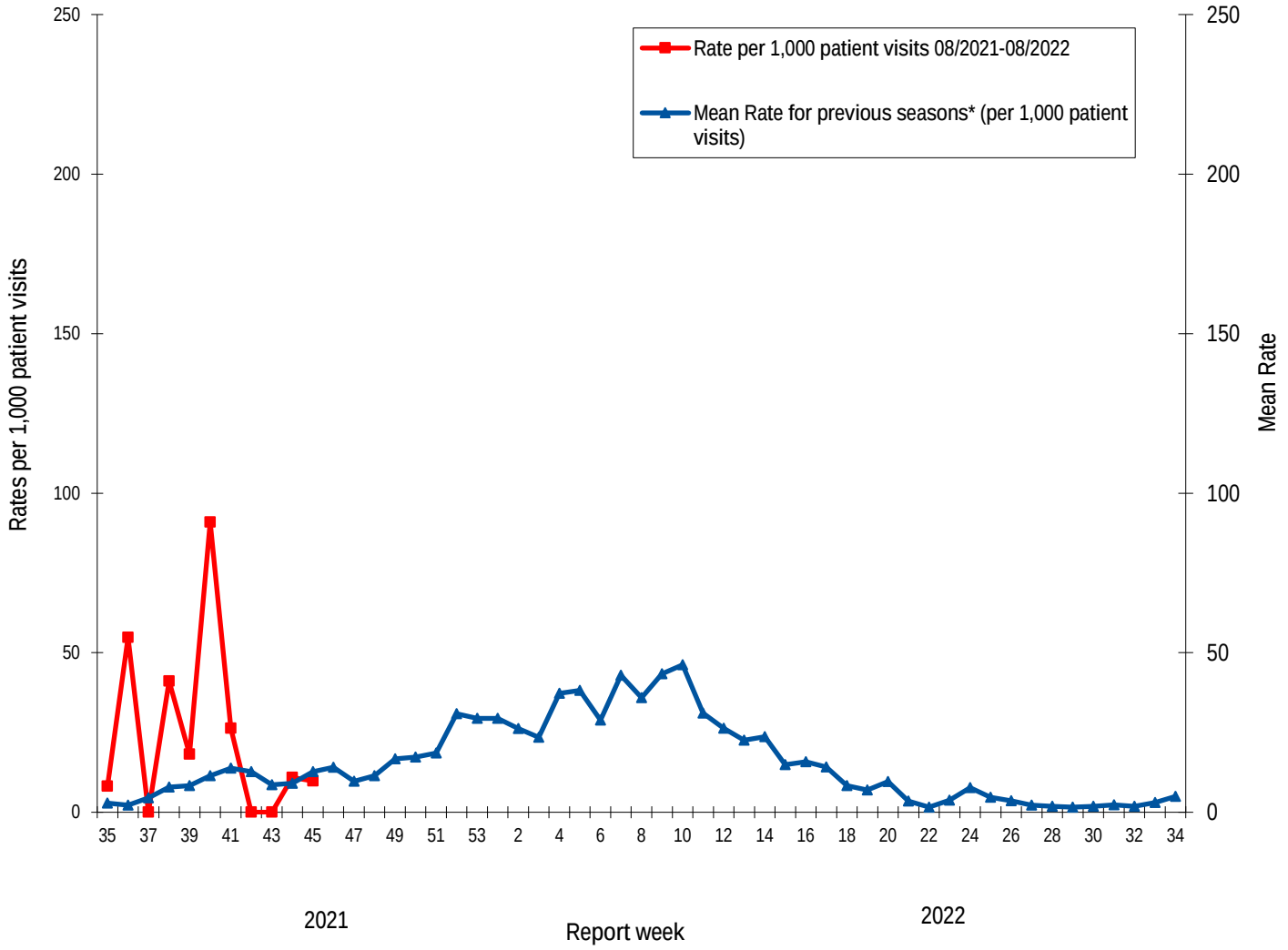
*This positive influenza detection is associated with recent live attenuated influenza vaccine receipt and does not represent community circulation of seasonal influenza viruses.

2) ILI Consultation Rates[3]

- During week 45, the ILI consultation rate was 9.8 per 1,000 patients visits. The ILI rate was within the expected levels for this time of year.

- During week 45, the sentinel response rate was 14% 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.

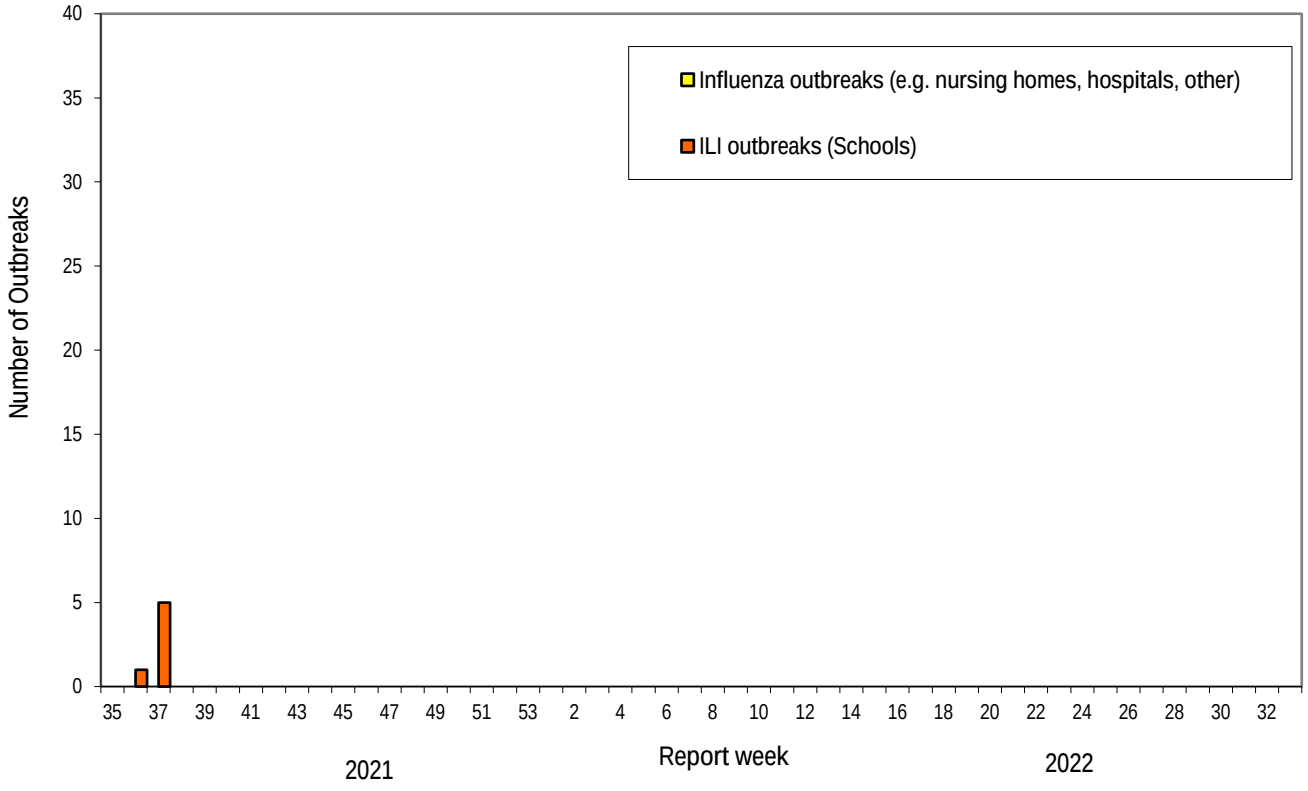
## 3) ILI and Laboratory-Confirmed Outbreak Data

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

| | Reporting period: November/07/2021 to November/13/2021 | | | Cumulative # of outbreaks season 2021-2022* |
|---|---|---|---|---|
| | Lab-confirmed outbreaks in Nursing homes[4] | ILI school outbreaks[5] * | Lab-confirmed outbreaks in Other settings[4] | |
| Zone 1 | 0 out of 15 | 0 out of 74 | 0 | 4 |
| Zone 2 | 0 out of 16 | 0 out of 81 | 0 | 0 |
| 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 | 0 out of 352 | 0 | 4* |

*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.

Graph 3: 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.

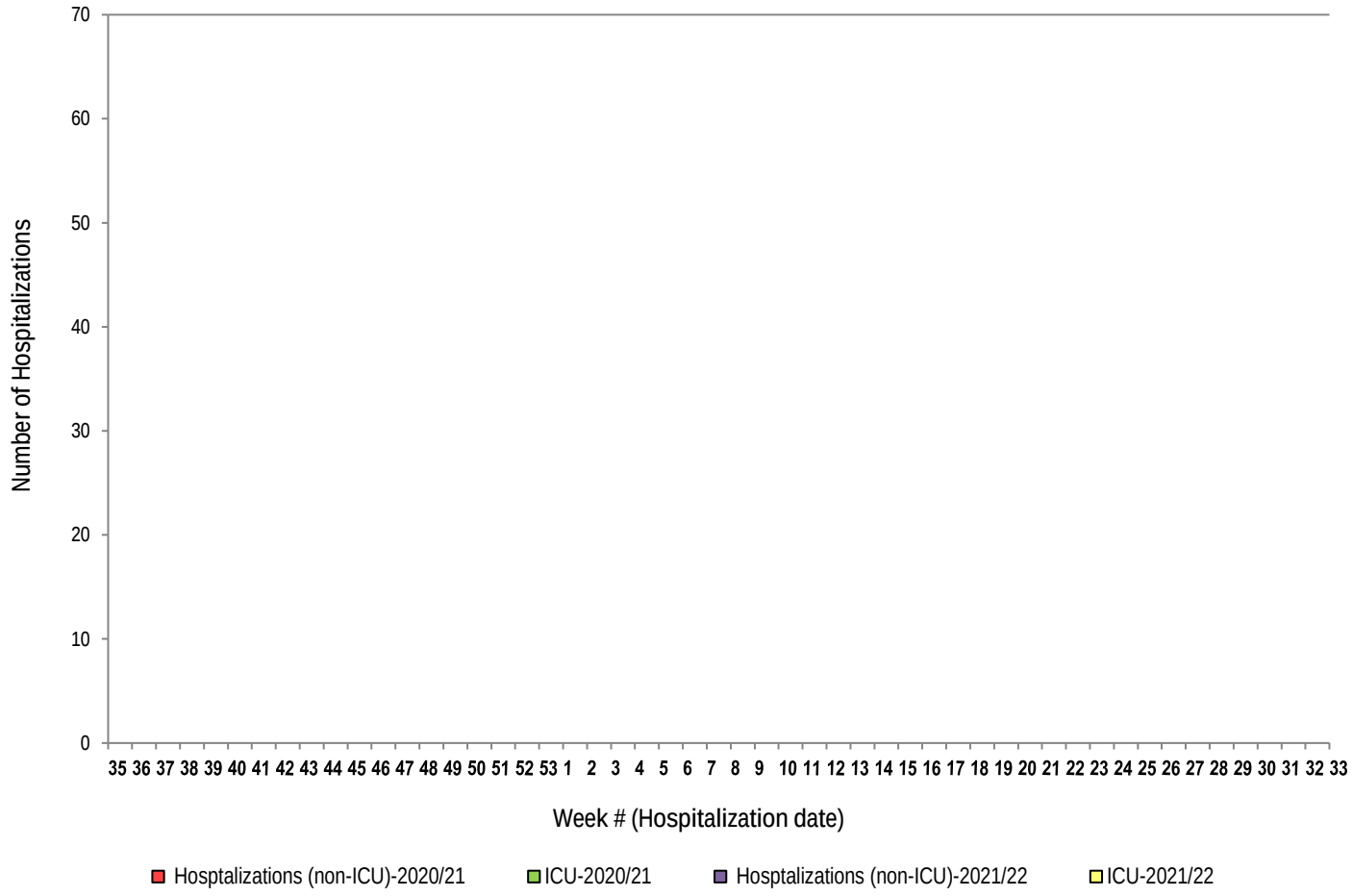



[4] Two or more ILI cases within a seven-day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

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

4) Influenza associated Hospitalization[6] and Death[7] Surveillance[8]

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/

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.