

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: October 11 to October 17 2020 (week 42)

Summary

In New Brunswick, influenza activity remained at inter-seasonal levels in week 42

New Brunswick:

- There have been no positive influenza cases in week 42. Since the beginning of the new season, no cases have been reported.
- There has been no new influenza associated hospitalizations during week 42. Since the beginning of the season, no hospitalizations have been reported.
- The ILI consultation rate was 10.8 per 1,000 patients visits for week 42. The ILI rate was within the expected levels for this time of year.
- No influenza outbreaks were reported in week 42. So far this season, no influenza outbreaks have been reported.

Canada:

- Testing for influenza continues at elevated levels; however, influenza activity remains below average for this time of year.
- During week 42, seven influenza-like-illness (ILI) outbreak were reported in a school or daycare. To date, 73 ILI outbreaks have been reported in these settings which is higher than typically reported in these settings for this time of year. These elevated levels are not unexpected and are a signal of public health effectively leveraging existing flu surveillance systems to monitor respiratory viral illness in schools.
- Influenza surveillance indicators may be influenced by the COVID-19 pandemic, including changes in healthcare-seeking behaviour, impacts of public health measures and influenza testing capacity. Current data should be interpreted with consideration to this context.

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, despite continued or even increased testing for influenza in some countries influenza activity remained at lower levels than expected for this time of the year. In the temperate zone of the northern hemisphere, influenza activity remained below interseasonal levels, though influenza detections were reported in some countries. In the temperate zones of the southern hemisphere, the influenza season remained low or below baseline overall. Very few influenza detections were reported across countries. In the Caribbean and Central American countries, there were no influenza detections reported. Severe acute respiratory infection (SARI) activity, likely due to COVID-19, decreased in most reporting countries. In tropical South America, there were no influenza detections across reporting countries. In tropical Africa, influenza activity was reported in Côte d'Ivoire and Mali. In Southern Asia there were sporadic influenza detections across reporting countries. In South East Asia, increased influenza detections were reported in Cambodia and Lao People's Democratic Republic (PDR). Worldwide, of the very low numbers of detections reported, seasonal influenza A(H3N2) viruses accounted for the majority of detections.

Emerging Respiratory Viruses:

- **COVID-19:** On December 31, 2019, a cluster of cases of pneumonia was reported in Wuhan, China, and the cause has been confirmed as a new coronavirus that has not previously been identified in humans (COVID-19). As of October 26, 2020, 220,213 cases of COVID-19 infection in Canada have been identified with 9,973 deaths. Three hundred and thirty-four cases have been identified in New Brunswick with 6 deaths. As of October 27, the WHO reported globally 43,147,494 confirmed cases and 1,155,553 deaths in over 200 countries/territories/areas.

For more timely updates, please visit the following websites:

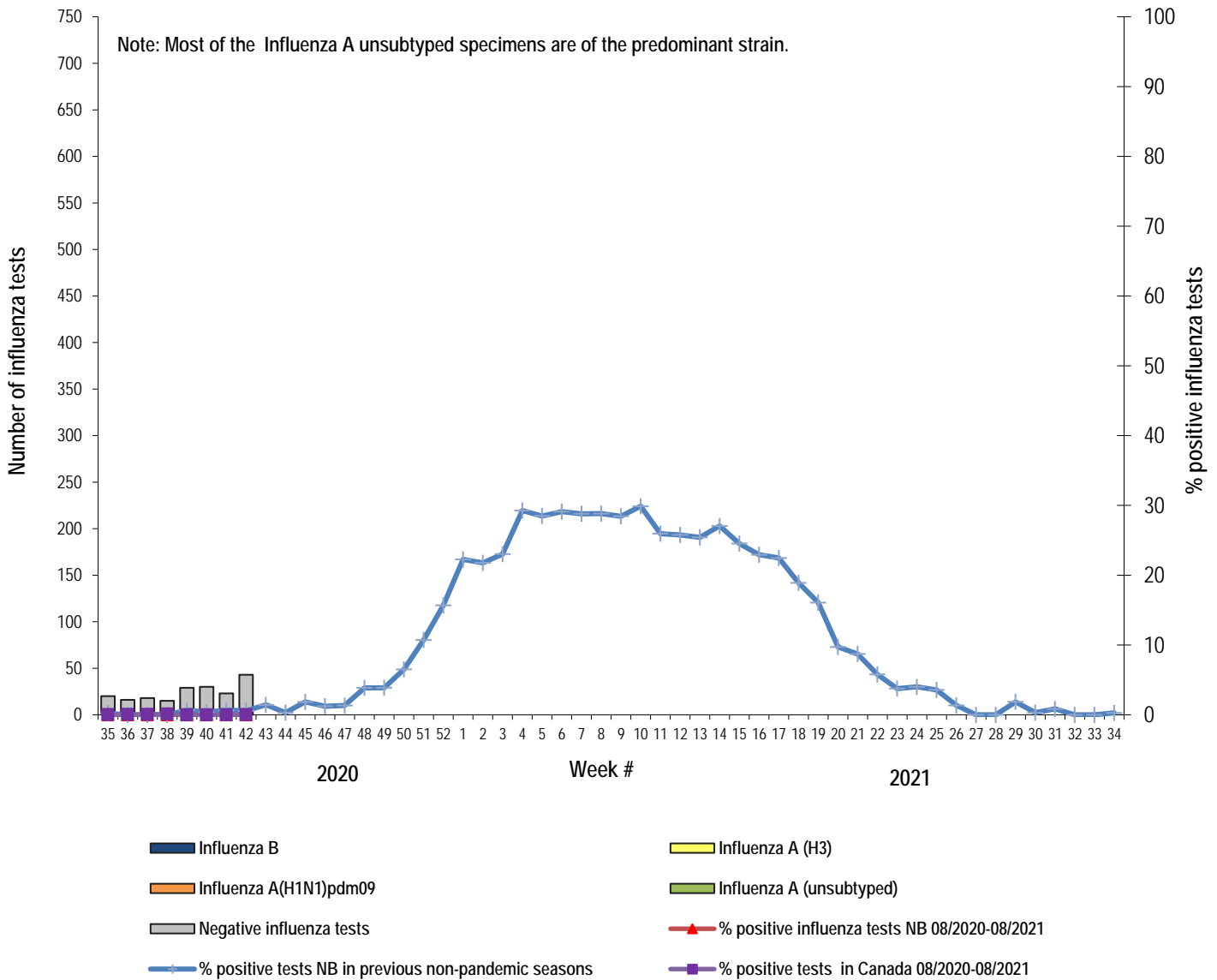
- WHO: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- PHAC: <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html>
- NB : https://www2.gnb.ca/content/gnb/en/departments/ocmoh/cdc/content/respiratory_diseases/coronavirus.html
- **MERS CoV:**
 - 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 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 remained at inter-seasonal levels in week 42.
- No influenza cases were reported during week 42.
- Since the beginning of the season, no influenza cases have been reported.

Graph 1: Number and percent of positive influenza specimens² in New Brunswick by week, up to October 17, 2020 (data source: G. Dumont Lab results)



² Total number of positive influenza tests is higher than number of cases since some individuals had co-infection of A & B simultaneously.

Figure 2: Influenza/ILI activity levels³ by Health Zones, in New Brunswick, for week 42, season 2020/2021.



³ 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.

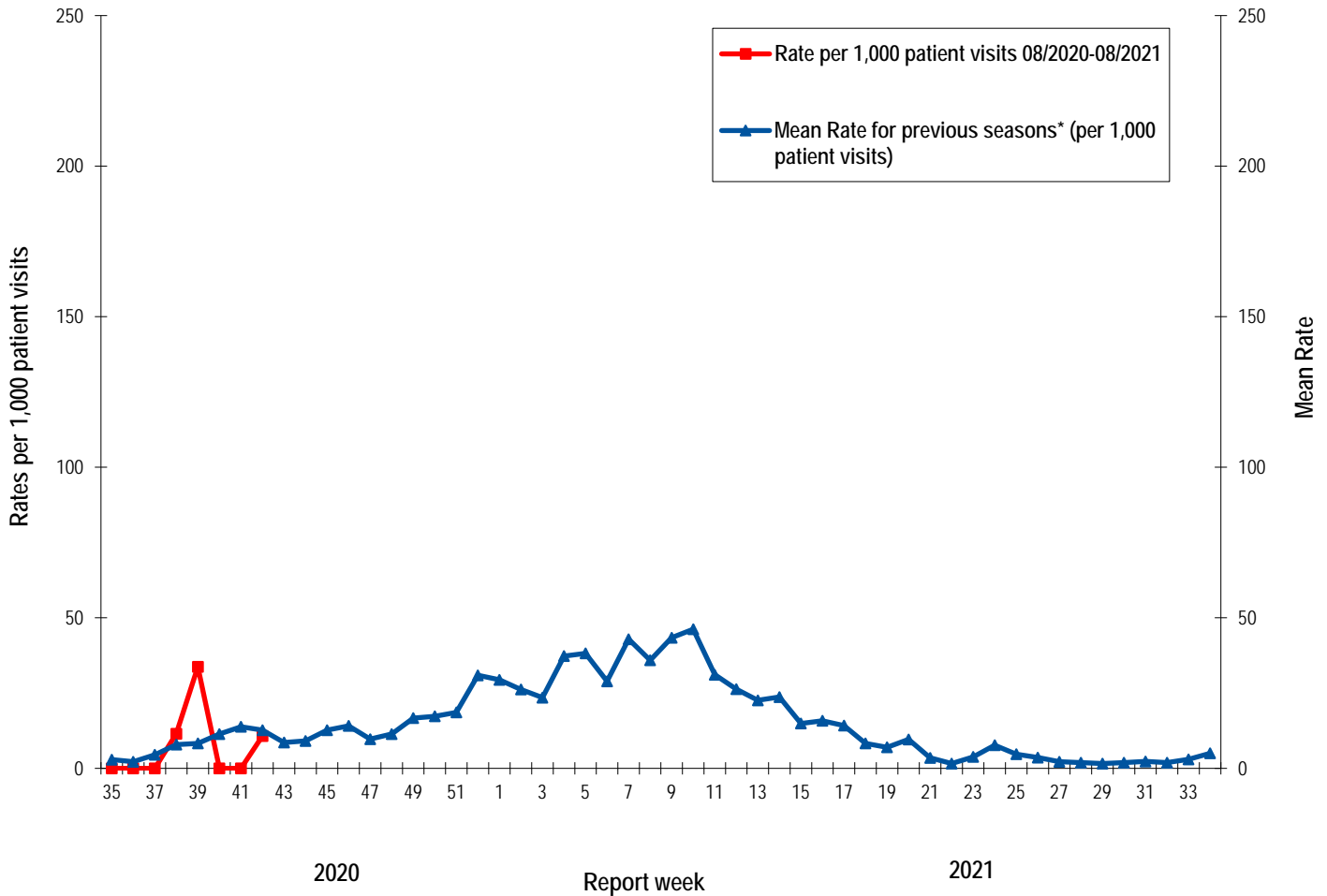
Table 1: Positive influenza cases by Health Region, in New Brunswick for reporting week, cumulative current and previous seasons.
 (data source: G. Dumont lab results up to October 17, 2020)

| Zone | Reporting period: October/11/2020–October/17/2020 | | | | | | Cumulative: (2020/2021 season) Aug./23/2020 –October/17/2020 | | | | | | Cumulative: (2019/2020 season) Aug./25/2019 –Aug./22/2020 | | | | | |
|-----------------|--|-----------------|--------------------------|------------|----------|----------|---|-----------------|--------------------------|------------|----------|----------|---|-----------------|---------------------------|------------|-------------|-----------|
| | A | | | | | B | A & B co- infection | | A | | | | | B | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 28 | 324 | 361 | 665 | 3 |
| Zone 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 11 | 121 | 135 | 96 | 2 |
| Zone 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 102 | 111 | 188 | 5 |
| Zone 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 43 | 51 | 212 | 1 |
| Zone 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 85 | 100 | 17 | 1 |
| Zone 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 7 | 120 | 133 | 98 | 1 |
| Zone 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 65 | 68 | 103 | 0 |
| Total NB | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 69 | 860 | 959 | 1379 | 13 |

2) ILI Consultation Rates⁴

- For week 42, the ILI consultation rate was 10.8 consultations per 1,000 patients visits. The ILI rate was within the expected levels for this time of year.
- During week 42, 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 2020/21 compared to previous seasons*



* The mean rate was based on data from the 1996/97 to 2019/2020 seasons and excludes the Pandemic season (2009/10).

⁴ 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.

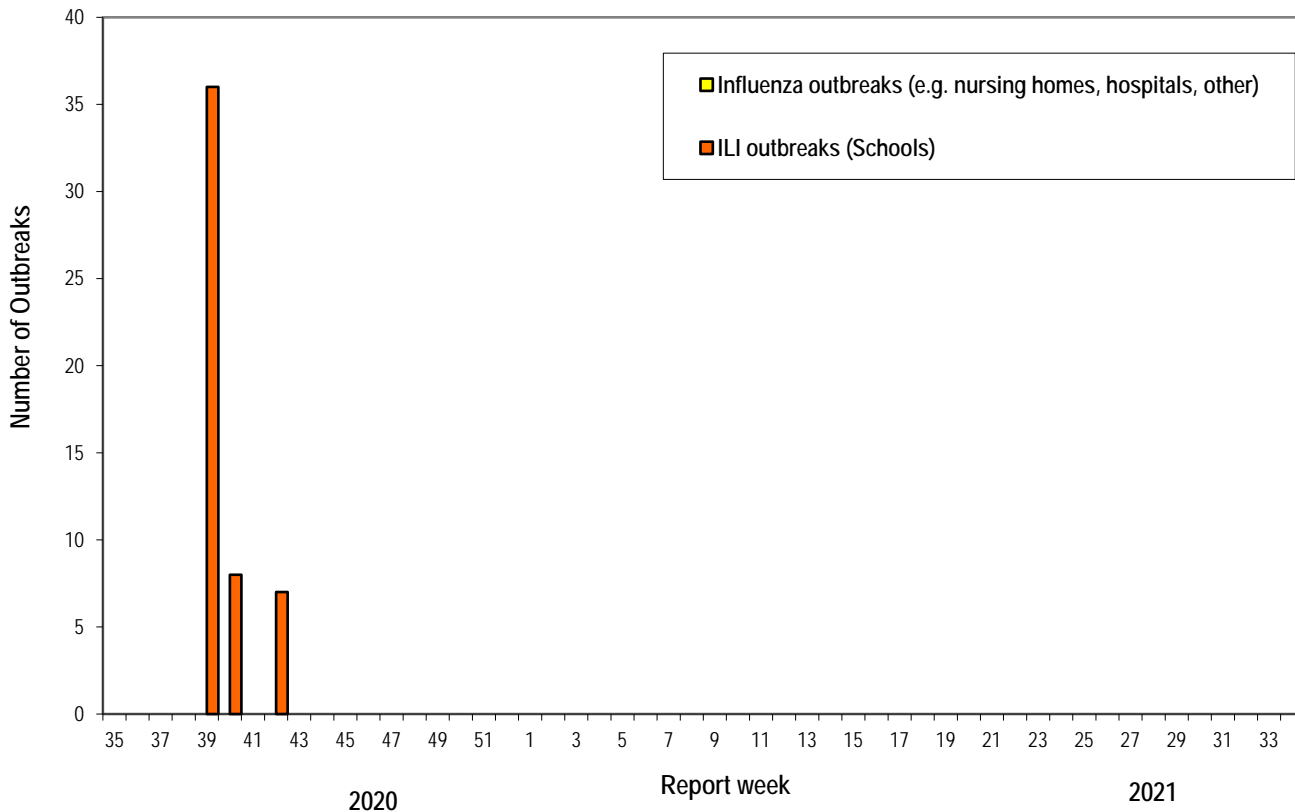
3) ILI and Laboratory-Confirmed Outbreak Data

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

| | Reporting period: October/11/2020 to October/17/2020 | | | Cumulative # of outbreaks season 2020-2021* |
|----------|---|-------------------------------------|--|---|
| | Lab-confirmed outbreaks in Nursing homes ⁵ | ILI school outbreaks ⁶ * | Lab-confirmed outbreaks in Other settings ⁴ | |
| Zone 1 | 0 out of 15 | 6 out of 74 | 0 | 13 |
| Zone 2 | 0 out of 16 | 0 out of 81 | 0 | 14 |
| Zone 3 | 0 out of 16 | 0 out of 95 | 0 | 22 |
| 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 | 1 out of 27 | 0 | 2 |
| Total NB | 0 out of 68 | 7 out of 352 | 0 | 51* |

*During this influenza season, 2020-2021, 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 COVID-19 pandemic, the prudence of parents/guardians to send their children to school and their interpretation of the home isolation requirements. Therefore, the number of ILI outbreaks in schools should be interpreted with caution and should not be compared to previous seasons.

Graph 3: Number of Influenza Outbreaks (nursing homes, hospitals, other) and ILI Outbreaks (schools) reported to Public Health in New Brunswick, by report week, season 2020/21.

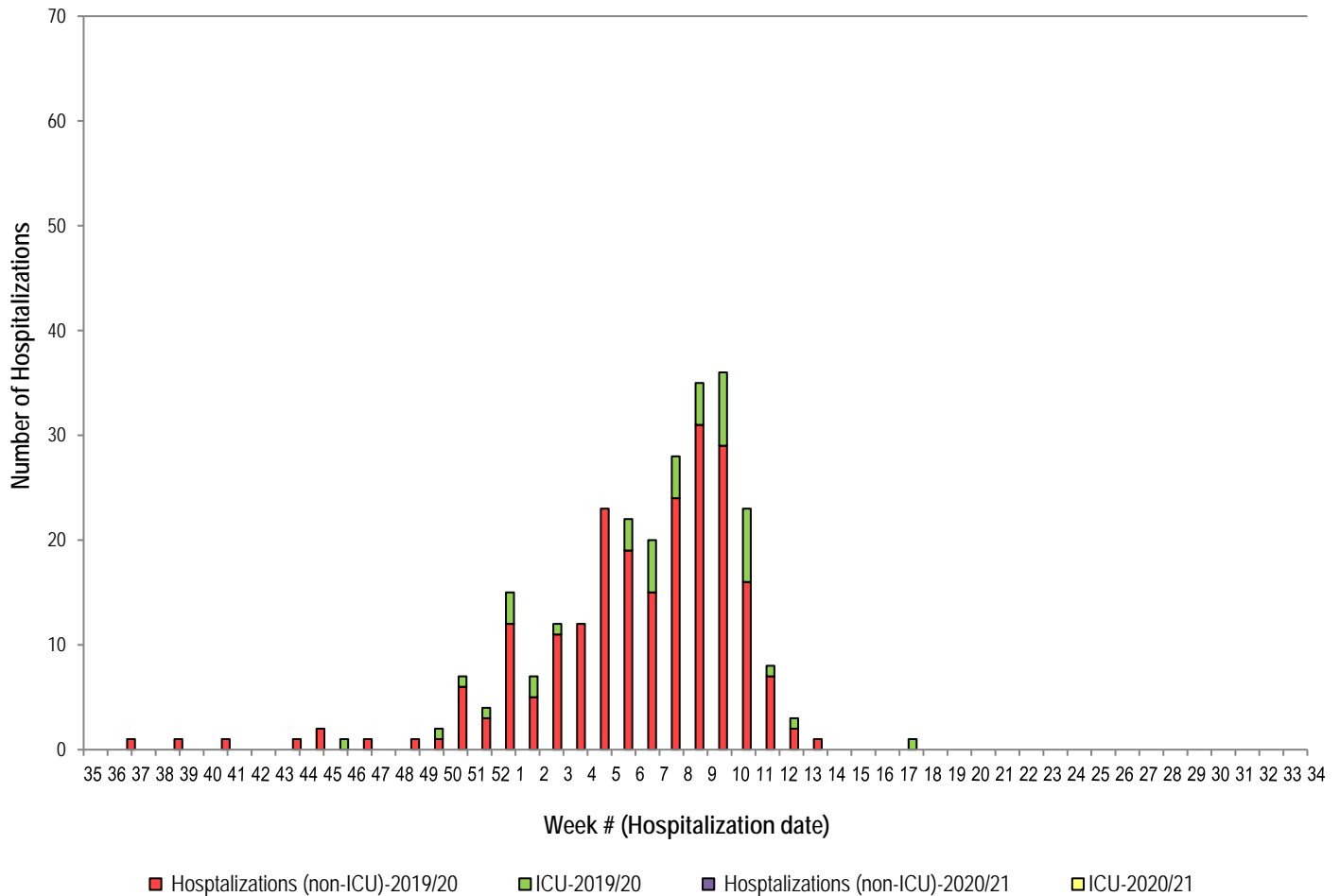


⁵ Two or more ILI cases within a seven day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

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

4) Influenza associated Hospitalization⁷ and Death⁸ Surveillance⁹

Graph 4: Influenza associated Hospitalizations and ICU admissions in New Brunswick, by week of hospitalization for current and past season.*



*Those who had been hospitalized 15 days or more prior to laboratory confirmation date were excluded from the graph

**No deaths have been reported so far in season 2020-2021.

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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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.