

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: October 27 to November 2 2019 (week 44)

Summary

In New Brunswick, influenza activity remained at inter-seasonal levels in week 44

New Brunswick:

- There has been 1 positive influenza case in week 44. Since the beginning of the new season, 4 cases has been reported, 1 influenza A (H1N1)pdm09, 1 influenza A (H3) and 2 influenza B.
- There have been no influenza associated hospitalizations during week 44. So far this season, 1 influenza associated hospitalization has been reported and no deaths.
- The ILI consultation rate was 0.0 consultations per 1,000 patients visits in week 44. The ILI rate was within the expected levels for this time of year.
- No new ILI/influenza outbreaks were reported in week 44. So far this season, no ILI or influenza outbreaks have been reported.

Canada:

- Influenza activity remains at interseasonal levels at the national level.
- The number of regions in Canada reporting influenza activity in week 44 was similar to the previous week.
- Influenza A(H3N2) is the most common influenza virus circulating in Canada.

International:

Seasonal influenza:

In the temperate zone of the northern hemisphere, influenza activity remained at inter-seasonal levels in most countries. However, influenza activity continued to increase across the countries of the Arabian Peninsula. In the Caribbean, and tropical South American countries, influenza activity was low overall, except for Cuba and Jamaica. In Central American countries, influenza activity was elevated in El Salvador and Nicaragua. In tropical Africa, influenza activity remained elevated in some countries of Western Africa. In Southern Asia, influenza activity was low across reporting countries, but started to increase in Iran. In South East Asia, influenza activity continued to be reported in Lao PDR. In the temperate zones of the southern hemisphere, influenza activity was low in most countries, though influenza B virus detections continued to be reported in Chile. Worldwide, seasonal influenza A viruses continued to account for the majority of detections.

Emerging Respiratory Viruses:

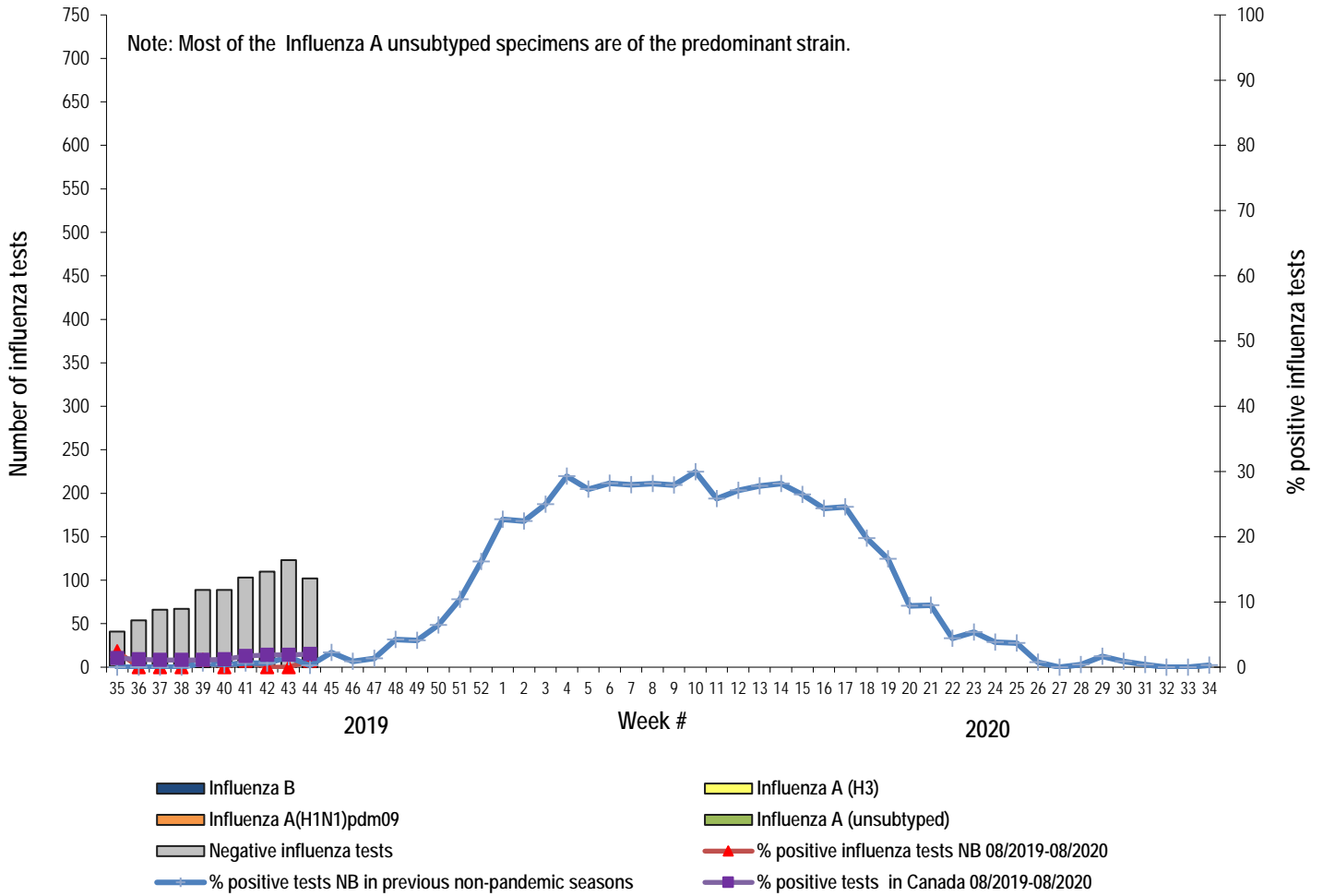
- MERS CoV:
 - WHO: http://www.who.int/csr/disease/coronavirus_infections/en/
 - CDC: <http://www.cdc.gov/coronavirus/mers/>
 - Updated Risk Assessment (August 2018): http://www.who.int/csr/disease/coronavirus_infections/risk-assessment-august-2018.pdf?ua=1
- Avian Influenza:
 - WHO: www.who.int/csr/disease/avian_influenza/en/index.html

1) Influenza Laboratory Data¹

- Influenza activity remained at inter-seasonal levels in week 44.
- One influenza case was reported during week 44, an influenza B.
- Since the beginning of the season, 4 influenza cases have been reported, 1 influenza A (H1N1)pdm09, 1 influenza A (H3) and 2 influenza B.

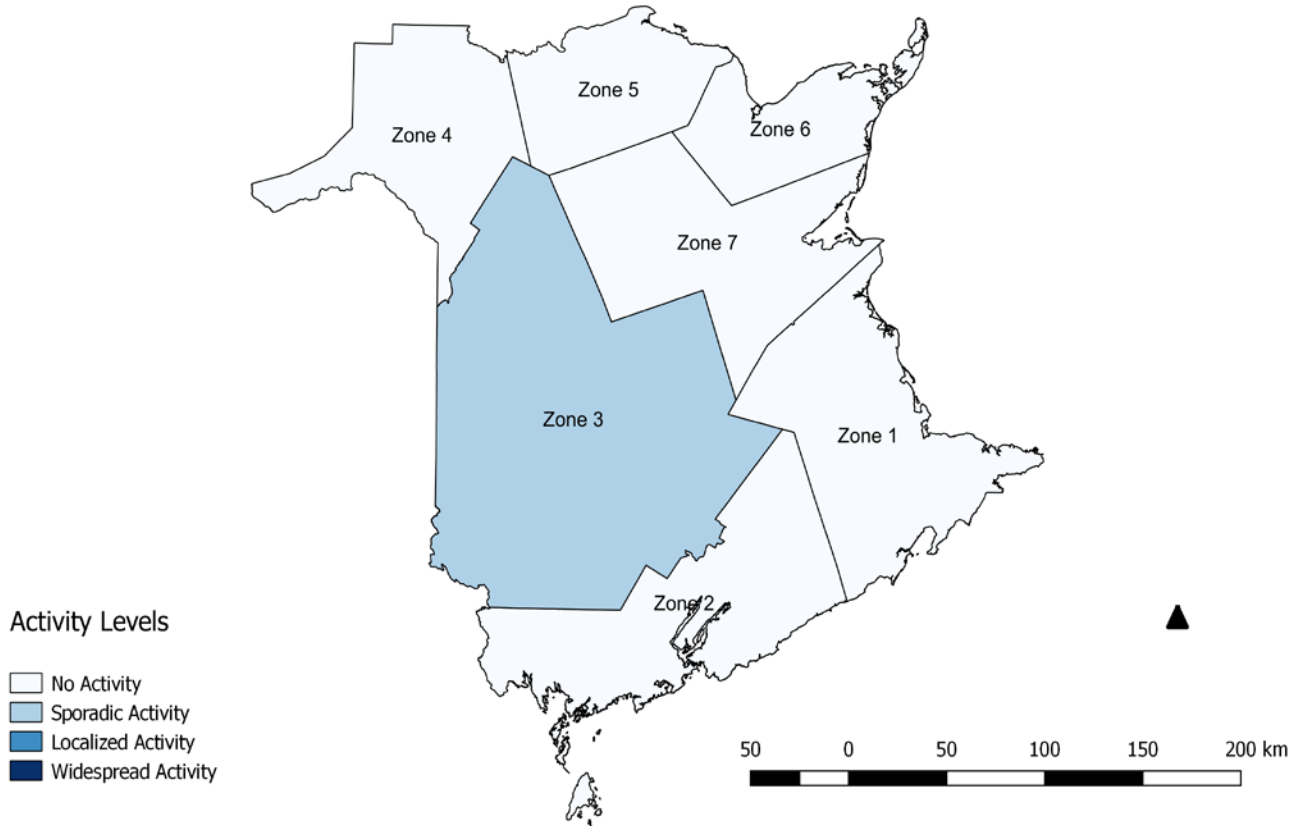
¹ Surveillance specimens are submitted by recruited New Brunswick Sentinel Practitioner Influenza Network (NB SPIN) practitioners, which are comprised of sites in Emergency Rooms, in Family Practice, in First Nations communities, in Nursing Home, in Universities and in Community Health Centers. Diagnostic 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.

Graph 1: Number and percent of positive influenza specimens² in New Brunswick by week, up to November 2, 2019 (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 44, season 2019/2020.



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.

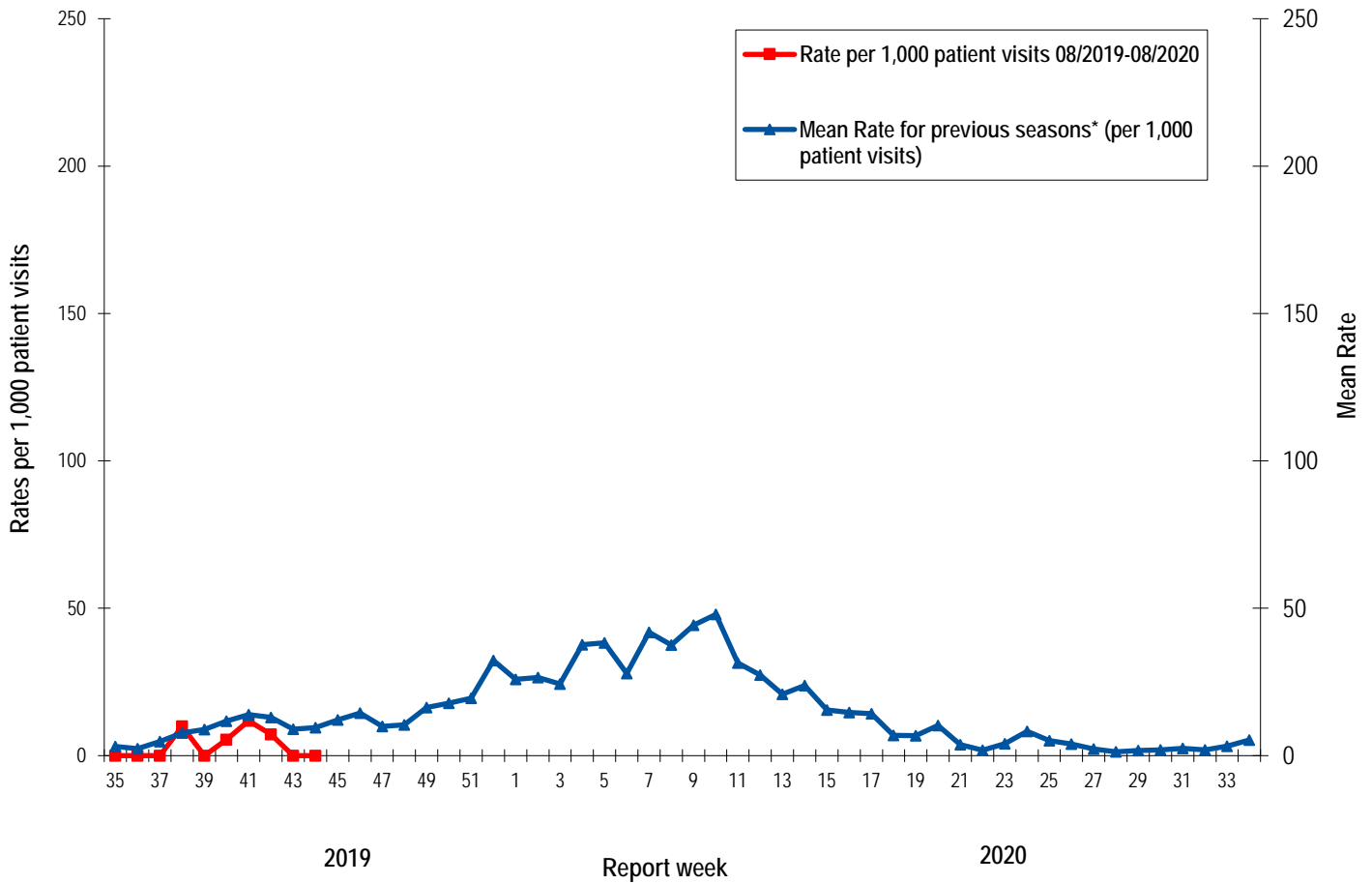
Table 1: Positive influenza cases by Health Region, in New Brunswick for reporting week, cumulative current and previous seasons.
 (data source: G. Dumont lab results up to November 2, 2019)

| Zone | Reporting period: October/27/2019–November/02/2019 | | | | | | Cumulative: (2019/2020 season) Aug./25/2019 –November/02/2019 | | | | | | Cumulative: (2018/2019 season) Aug./26/2018 –Aug./24/2019 | | | | | |
|---------------------|---|-----------------|--------------------------|------------|----------|----------|--|-----------------|--------------------------|------------|----------|----------|---|-----------------|--------------------------|---------------------------|------------|----------|
| | 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 | 1 | 0 | 1 | 1 | 0 | 29 | 97 | 1163 | 1289 | 130 | 3 |
| Zone 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 6 | 47 | 293 | 346 | 58 | 0 |
| Zone 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 9 | 39 | 260 | 308 | 3 | 0 |
| Zone 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 28 | 135 | 165 | 6 | 0 |
| Zone 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 20 | 84 | 106 | 127 | 1 |
| Zone 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 36 | 200 | 241 | 14 | 0 |
| Zone 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 23 | 160 | 192 | 19 | 0 |
| Total NB | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 2 | 2 | 0 | 62 | 290 | 2295 | 2647 | 357 | 4 |

2) ILI Consultation Rates⁴

- For week 44, the ILI consultation rate was 0.0 consultations per 1,000 patients visits. The ILI rate was within the expected levels for this time of year.
- During week 44, the sentinel response rate was 32%, for both the FluWatch sentinel physicians and the NB SPIN practitioners.
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Graph 2: ILI Consultation Rates in New Brunswick, by report week, season 2019/20 compared to previous seasons*



* The mean rate was based on data from the 1996/97 to 2018/2019 seasons and excludes the Pandemic season (2009/10).

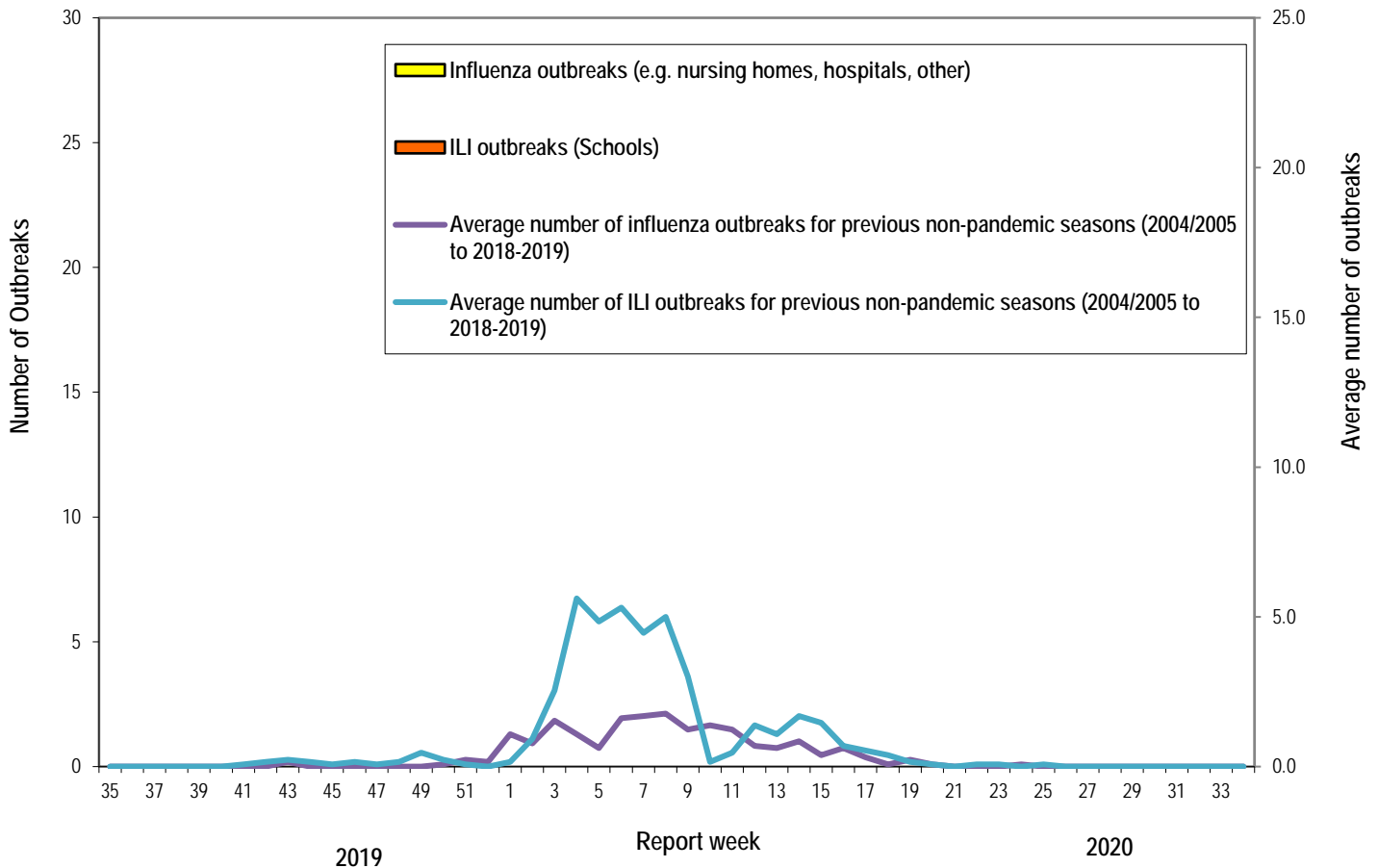
⁴ A total of 28 practitioner sites (16 FluWatch sentinel physicians and 12 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

3) ILI and Laboratory-Confirmed Outbreak Data

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

| | Reporting period: October/27/2019November/02/2019 | | | Cumulative # of outbreaks season 2019-2020 | Cumulative # of outbreaks season 2018-2019 |
|----------|---|-----------------------------------|--|--|--|
| | Lab-confirmed outbreaks in Nursing homes ⁵ | ILI school outbreaks ⁶ | Lab-confirmed outbreaks in Other settings ⁴ | | |
| Zone 1 | 0 out of 13 | 0 out of 74 | 0 | 0 | 12 |
| Zone 2 | 0 out of 16 | 0 out of 81 | 0 | 0 | 13 |
| Zone 3 | 0 out of 14 | 0 out of 95 | 0 | 0 | 6 |
| Zone 4 | 0 out of 6 | 0 out of 22 | 0 | 0 | 0 |
| Zone 5 | 0 out of 2 | 0 out of 18 | 0 | 0 | 0 |
| Zone 6 | 0 out of 9 | 0 out of 35 | 0 | 0 | 4 |
| Zone 7 | 0 out of 4 | 0 out of 27 | 0 | 0 | 8 |
| Total NB | 0 out of 64 | 0 out of 352 | 0 | 0 | 43 |

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 2019/20.

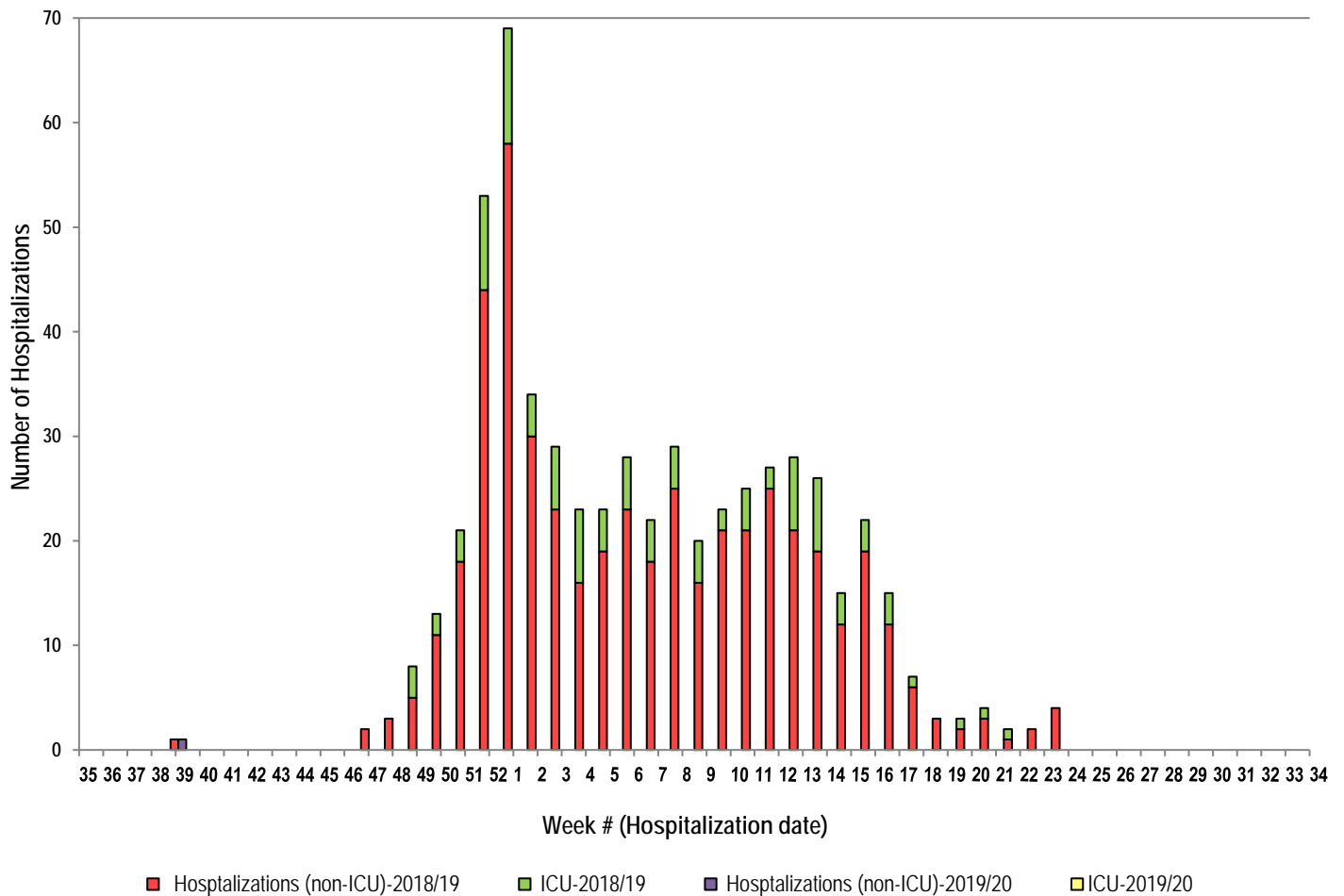


⁵ Two or more ILI cases within a seven day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

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 2019-2020.

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.