

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: March 19 to March 25, 2023 (week 12)

Summary

In New Brunswick, influenza activity is low

New Brunswick:

- There have been 12 positive influenza cases in week 12 (percent positivity: 1.15%). Since the beginning of the season, 4341 cases have been reported, 138 influenza A(H3) viruses, 5 influenza A(H1N1) pdm09, 4190 influenza A (unsubtyped) and 8 influenza B.
- There has been 1 new influenza associated hospitalization during week 12. Since the beginning of the season, 873* hospitalizations have been reported and 66 deaths.
- The ILI consultation rate was 0.0 per 1,000 patients visits for week 12. The ILI rate was below the expected levels for this time of the year.
- No new influenza outbreak and 1 new ILI school outbreak were reported in week 12. So far this season, 36 influenza outbreaks were reported, and 238 ILI school outbreaks were reported.

Canada:

- At the national level, influenza activity remains low at levels typically seen in late spring/early summer.
- In week 12, a total of 442 laboratory detections (142 influenza A and 300 influenza B) were reported.
- The percentage of FluWatchers reporting fever and cough was 1.3 % in week 12. The percentage of FluWatchers reporting cough and fever is below seasonal levels.

International:

Seasonal influenza:

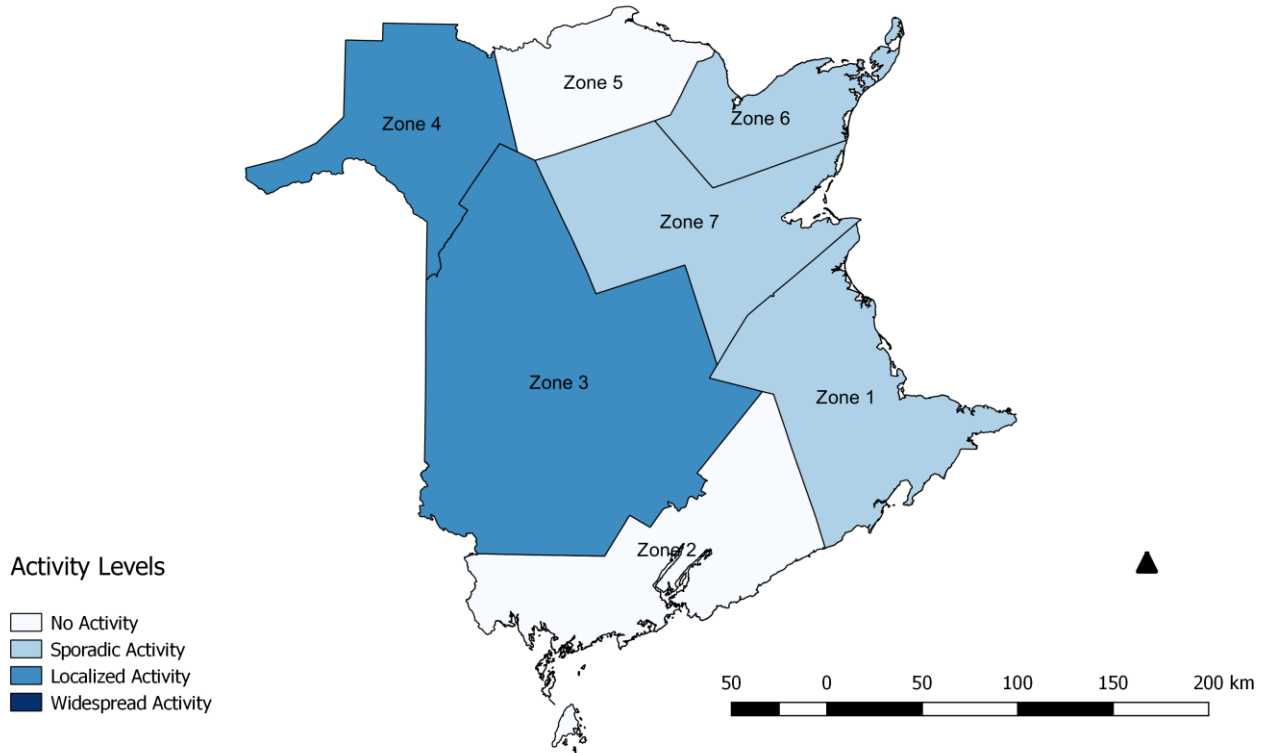
Countries are recommended to monitor the relative co-circulation of influenza and SARS-CoV-2 viruses. They are encouraged to enhance integrated surveillance and step-up their influenza vaccination campaign to prevent severe disease and hospitalizations associated with influenza. Globally, influenza activity continued to decrease following the peak in late 2022. Influenza A viruses predominated with a slightly larger proportion of A(H1N1)pdm09 viruses detected among the subtyped influenza A viruses. The proportion of influenza B virus detections increased in recent weeks. In the countries of North America, most indicators of influenza activity were at levels typically observed towards the end of the season. Influenza A viruses predominated overall, with influenza A(H3N2) accounting for the majority of subtyped influenza A viruses in the United States of America (USA), whereas influenza A and B viruses circulated at similar level in Canada. In Europe, overall influenza detections decreased slightly and influenza positivity from sentinel sites decreased although remaining above the epidemic threshold at the regional level. Out of 39 countries, 17 reported high or moderate intensity, and over half continued to report widespread activity. Overall, influenza B viruses were predominated in both sentinel and non-sentinel surveillance as all subregions experienced a wave of influenza B activity after an initial influenza A wave. In Central Asia, influenza activity decreased overall. In Northern Africa, detections of influenza A and B viruses continued to decrease in Morocco and Tunisia. In Western Asia, influenza activity continued to be reported in some countries with detections of all seasonal influenza subtypes. In East Asia, influenza activity of predominantly A(H1N1)pdm09 steeply increased in China but decreased in the other reporting countries. In the Caribbean and Central American countries, influenza activity of mainly influenza A(H3N2) and B viruses continued to decrease. In the tropical countries of South America, influenza remained low with all seasonal subtypes co-circulating and influenza B/Victoria predominant. In tropical Africa, influenza activity increased in some countries of Western Africa while detections were low across reporting countries in Middle and Eastern Africa. In Southern Asia, influenza activity remained low with influenza A(H3N2) and B/Victoria lineage viruses mostly detected. In South-East Asia, influenza activity remained elevated with influenza B mainly detected in Malaysia and A(H3N2) in Singapore and Thailand. In the temperate zones of the southern hemisphere, influenza activity remained at inter-seasonal levels.

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 April 3, 2023, 4,634,277 cases of COVID-19 infection in Canada have been identified with 52,121 deaths. Since August 28, 2022, fifteen thousand one hundred and forty-two cases have been identified in New Brunswick with 210 deaths. As of March 29, the WHO reported globally 761 402 282 confirmed cases and 6 887 000 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: [WHO EMRO | MERS outbreaks | MERS-CoV | Health topics](#)
 - CDC: <http://www.cdc.gov/coronavirus/mers/>
- **Avian Influenza:**
 - WHO: [WHO EMRO | Avian influenza | Avian influenza | Health topics](#)

*Influenza Hospitalization counts have been updated due to data cleaning.

Figure 2: Influenza/ILI activity levels² by Health Zones, in New Brunswick, for week 12, season 2022/2023.



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.

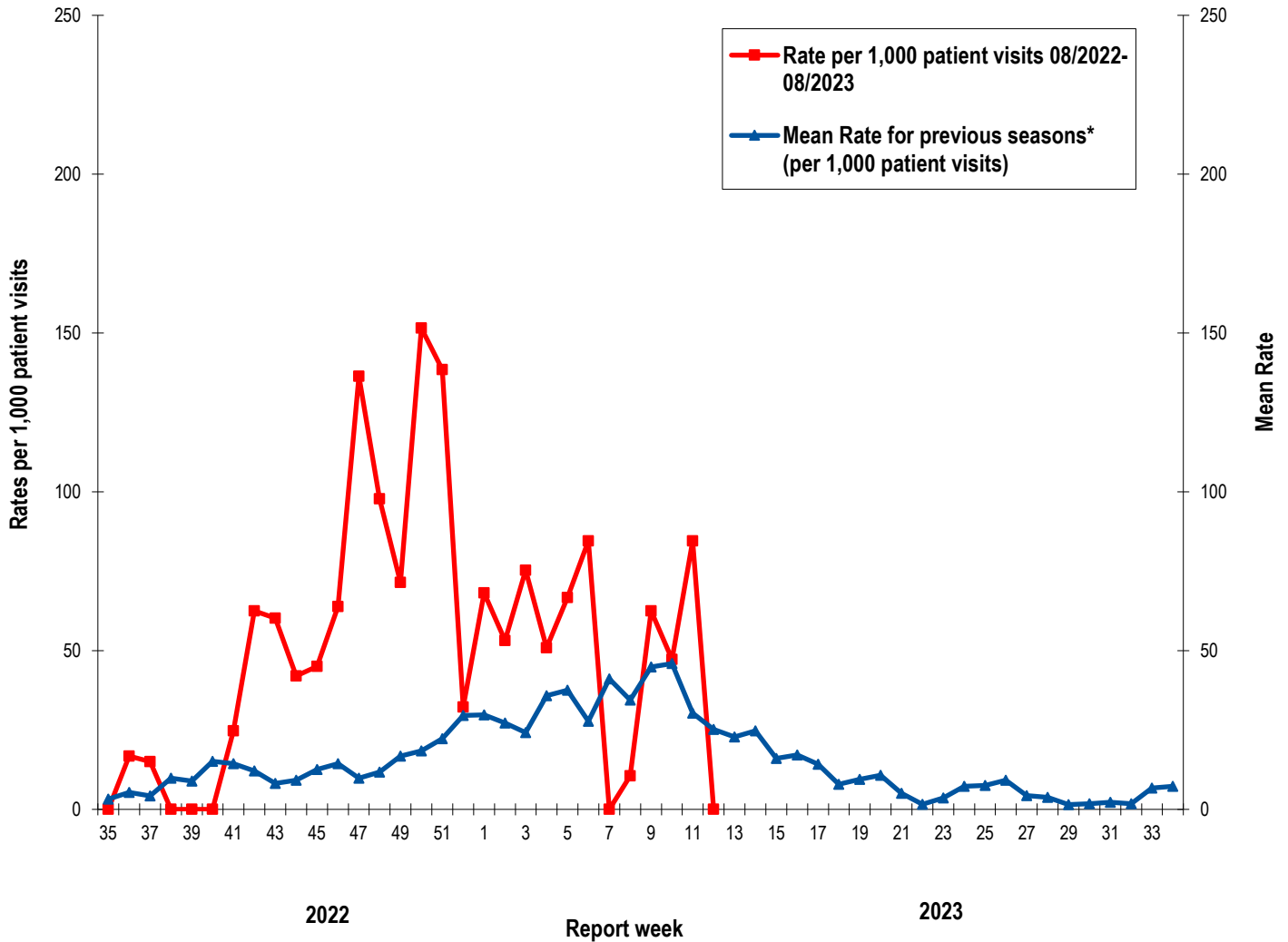
Table 1: Positive influenza cases by Health Region, in New Brunswick for reporting week, cumulative current and season 2019-2020.
 (data source: G. Dumont lab results up to March 25, 2023)

| Zone | Reporting period: March/19/2023–March/25/2023 | | | | | | Cumulative: (2022/2023 season) Aug./28/2022 – March/25/2023 | | | | | | Cumulative: (2021/2022 season) Aug./29/2021 –Aug./27/2022 | | | | | |
|-----------------|--|-----------------|--------------------------|------------|----------|---------------------------|--|-----------------|--------------------------|-------------|----------|---------------------------|---|----------|-----------------|--------------------------|------------|---------------------------|
| | A | | | | B | A & B co- infection | 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 | Total | (H3) | (H1N1) pdm09 | Unsubty ped/ Other | A Total | Total |
| Zone 1 | 0 | 0 | 0 | 0 | 2 | 0 | 79 | 0 | 1160 | 1239 | 3 | 0 | 124 | 0 | 115 | 239 | 0 | 0 |
| Zone 2 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 800 | 828 | 1 | 0 | 11 | 0 | 60 | 71 | 0 | 0 |
| Zone 3 | 0 | 0 | 1 | 1 | 0 | 0 | 9 | 0 | 823 | 832 | 0 | 0 | 33 | 0 | 55 | 88 | 1 | 0 |
| Zone 4 | 0 | 2 | 5 | 7 | 0 | 0 | 7 | 4 | 366 | 377 | 2 | 0 | 4 | 0 | 10 | 14 | 0 | 0 |
| Zone 5 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 135 | 140 | 1 | 0 | 1 | 0 | 7 | 8 | 0 | 0 |
| Zone 6 | 0 | 1 | 0 | 1 | 0 | 0 | 8 | 1 | 596 | 605 | 0 | 0 | 5 | 0 | 13 | 18 | 0 | 0 |
| Zone 7 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 310 | 312 | 1 | 0 | 1 | 0 | 2 | 3 | 0 | 0 |
| Total NB | 0 | 3 | 7 | 10 | 2 | 0 | 138 | 5 | 4190 | 4333 | 8 | 0 | 179 | 0 | 262 | 441 | 1 | 0 |

2) ILI Consultation Rates³

- The ILI consultation rate was 0.0 per 1,000 patients visits for week 12. The ILI rate below the expected levels for this time of year.
- During week 12, the sentinel response rate was 17% for both the FluWatch sentinel physicians and the NB SPIN practitioners.

Graph 2: ILI Consultation Rates in New Brunswick, by report week, season 2022/23 compared to previous seasons*



* The mean rate was based on data from the 1996/97 to 2021/2022 seasons and excludes the Pandemic season (2009/10, 2020/21).

³ A total of 23 practitioner sites (14 FluWatch sentinel physicians and 9 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

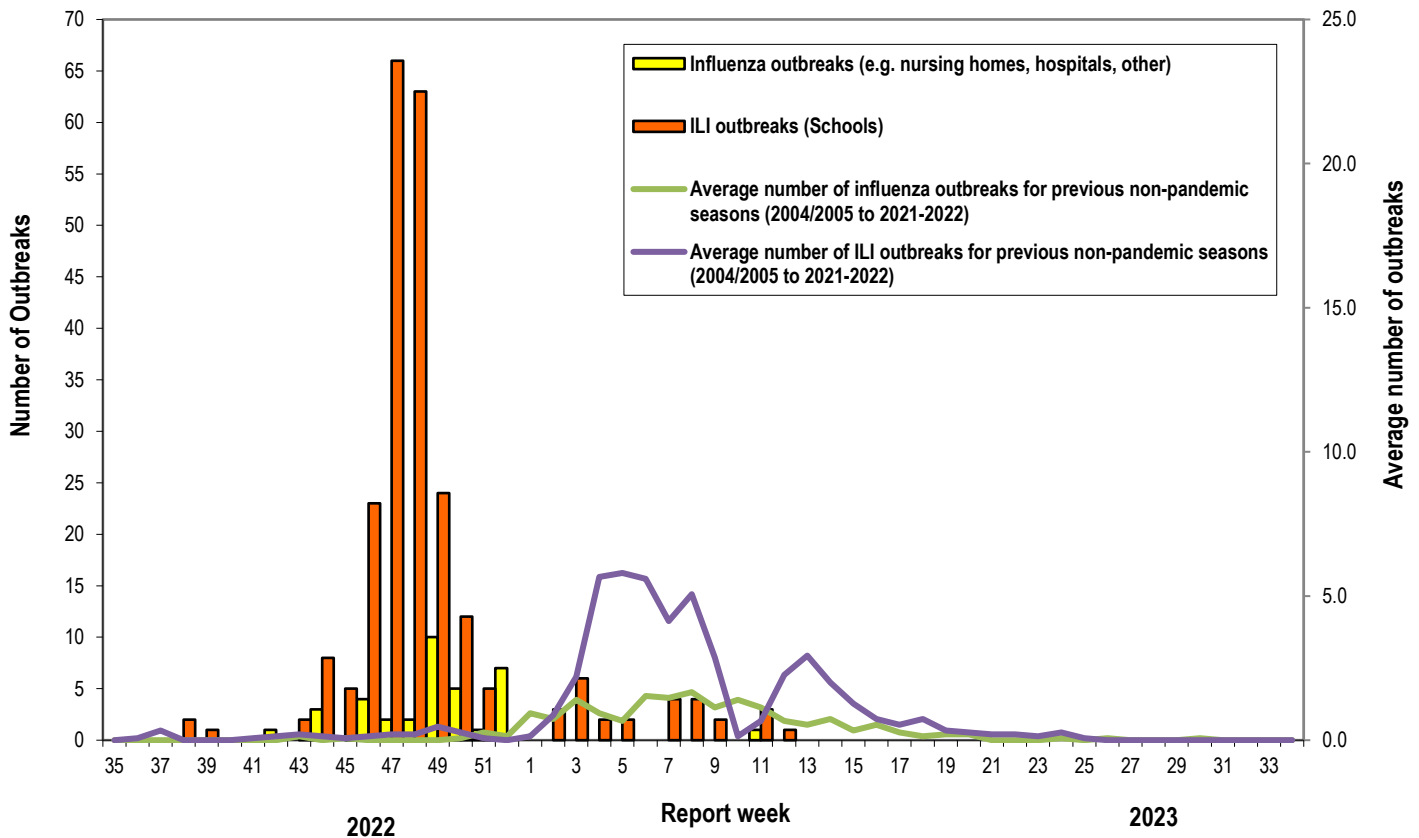
3) ILI and Laboratory-Confirmed Outbreak Data

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

| | Reporting period: March/19/2023 to March/25/2023 | | | Cumulative # of outbreaks season 2022-2023* |
|-----------------|---|-------------------------------------|--|---|
| | Lab-confirmed outbreaks in Nursing homes ⁴ | ILI school outbreaks ⁵ * | Lab-confirmed outbreaks in Other settings ⁵ | |
| Zone 1 | 0 out of 15 | 0 out of 74 | 0 | 55 |
| Zone 2 | 0 out of 16 | 0 out of 81 | 0 | 61 |
| Zone 3 | 0 out of 16 | 1 out of 95 | 0 | 88 |
| Zone 4 | 0 out of 5 | 0 out of 22 | 0 | 19 |
| Zone 5 | 0 out of 2 | 0 out of 18 | 0 | 4 |
| Zone 6 | 0 out of 9 | 0 out of 35 | 0 | 38 |
| Zone 7 | 0 out of 5 | 0 out of 27 | 0 | 9 |
| Total NB | 0 out of 68 | 1 out of 352 | 0 | 274* |

*During this influenza season, 2022-2023, 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) might be misrepresented due to the ongoing circulation of COVID-19, since distinction between influenza-like-illness and COVID-like illness is not always evident. Therefore, the number of ILI outbreaks in schools should be interpreted with caution.

Graph 3: Number of Influenza Outbreaks (nursing homes, hospitals, other)⁵ and ILI Outbreaks (schools)⁶ reported to Public Health in New Brunswick, by report week, season 2022/23.

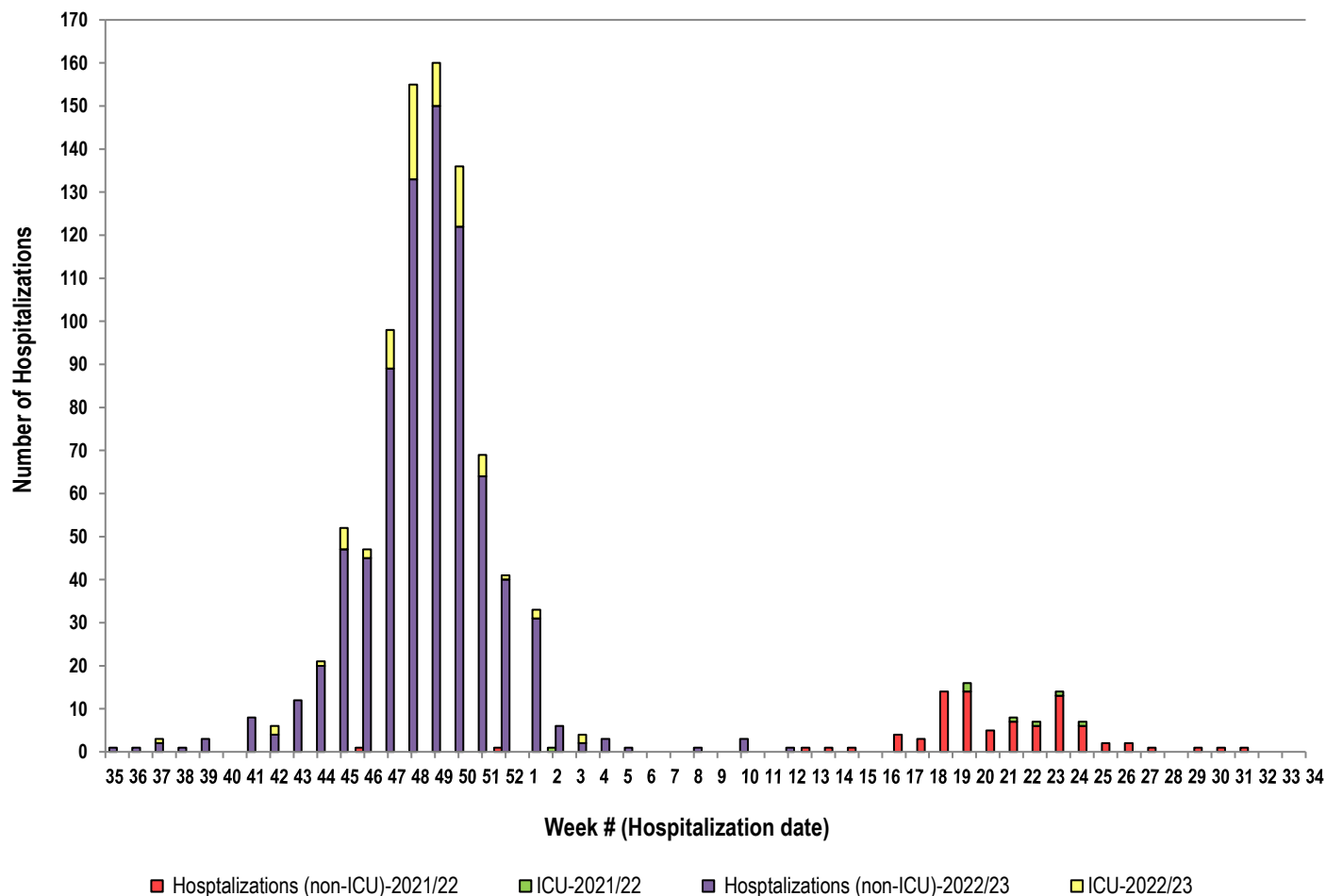


⁴ Two or more ILI cases within a seven-day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

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

4) Influenza associated Hospitalization⁶ and Death⁷ Surveillance⁸

Graph 4: Influenza associated Hospitalizations and ICU admissions in New Brunswick, by week of hospitalization for current and past season (2022-2023).*



*Sixty-six deaths have been reported so far in season 2022-2023.

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: <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: 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.