

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: October 2 to October 15, 2022 (weeks 40-41)

Summary

In New Brunswick, influenza activity remains at low levels

New Brunswick:

- There have been 11 positive influenza cases in weeks 40 and 41. Since the beginning of the season, 12 cases have been reported, 7 influenza A(H3N2) viruses and 5 influenza A (unsubtyped).
- There have been 3 new influenza associated hospitalizations during weeks 40 and 41. Since the beginning of the season, 3 hospitalizations have been reported and no deaths.
- The ILI consultation rate was 0.0 per 1,000 patients visits for week 40 and was 24.7 per 1,000 visits for week 41. The ILI rate was below the expected levels for week 40 but was slightly higher than expected levels for week 41.
- No new influenza/ILI outbreaks have been reported in weeks 40 and 41.

Canada:

- At the national level, influenza activity is increasing but remains at inter-seasonal levels.
- In weeks 40 and 41, a total of 394 laboratory detections (380 influenza A and 14 influenza B) were reported. Among detections with detailed age information, 45% were in children and teenagers (ages 0 to 19 years).
- The percentage of FluWatchers reporting fever and cough was 2 % in week 41. The percentage of FluWatchers reporting cough and fever is within levels typical of this time of year.

International:

Seasonal influenza:

Countries are recommended to monitor the 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 remained low with influenza A(H3N2) viruses predominately detected. In the temperate zones of the southern hemisphere, overall influenza activity appeared to further decrease this reporting period, except in temperate South America where activity increased. In Oceania, influenza detections of primarily influenza A(H1N1)pdm09 (among the subtyped influenza A viruses) and influenza-like activity (ILI) activity were at low levels overall. In Southern Africa, there was a decrease in influenza activity with influenza A and B viruses reported. In temperate South America, influenza detections increased due to increased activity in Argentina. Elsewhere, influenza activity remained low or below the seasonal threshold. Influenza A viruses predominated with A(H1N1)pdm09 predominant among subtyped viruses in Argentina and other countries reporting mostly A(H3N2) viruses. In the Caribbean and Central American countries, low influenza activity was reported with influenza A(H3N2) most frequently detected. In the tropical countries of South America, influenza detections were low and A(H3N2) detections predominated. In tropical Africa, influenza activity remained low with predominantly influenza B/Victoria lineage and A(H3N2) viruses detected but also A(H1N1)pdm09 detections reported in a few countries. In Southern Asia, influenza detections were generally low or decreasing with predominantly A(H1N1)pdm09 viruses detected, but with influenza A(H3N2) and influenza B viruses also reported. In South-East Asia, influenza activity continued to be reported, with trends varying by country. Influenza A(H3N2) viruses accounted for the majority of detections but influenza A(H1N1)pdm09 and B viruses were also reported. In the countries of North America, influenza activity remained low at levels typically observed at this time of year. Influenza A(H3N2) was predominant among the few subtyped viruses. In Europe, overall influenza activity remained at inter-seasonal levels with influenza detections and ILI activity slightly increased in only a few countries. Influenza A viruses predominated among the reported detections in general with A(H3N2) viruses accounting for the majority of subtyped influenza A virus detections. In central Asia, Kazakhstan reported a few influenza B virus detections and ILI and severe acute respiratory infections (SARI) activity increased slightly in recent weeks. In Northern Africa, no influenza detections were reported. In East Asia, influenza activity of predominantly influenza A(H3N2) remained stable in general. In Western Asia, detections of influenza slightly increased in some countries of the Arab Peninsula.

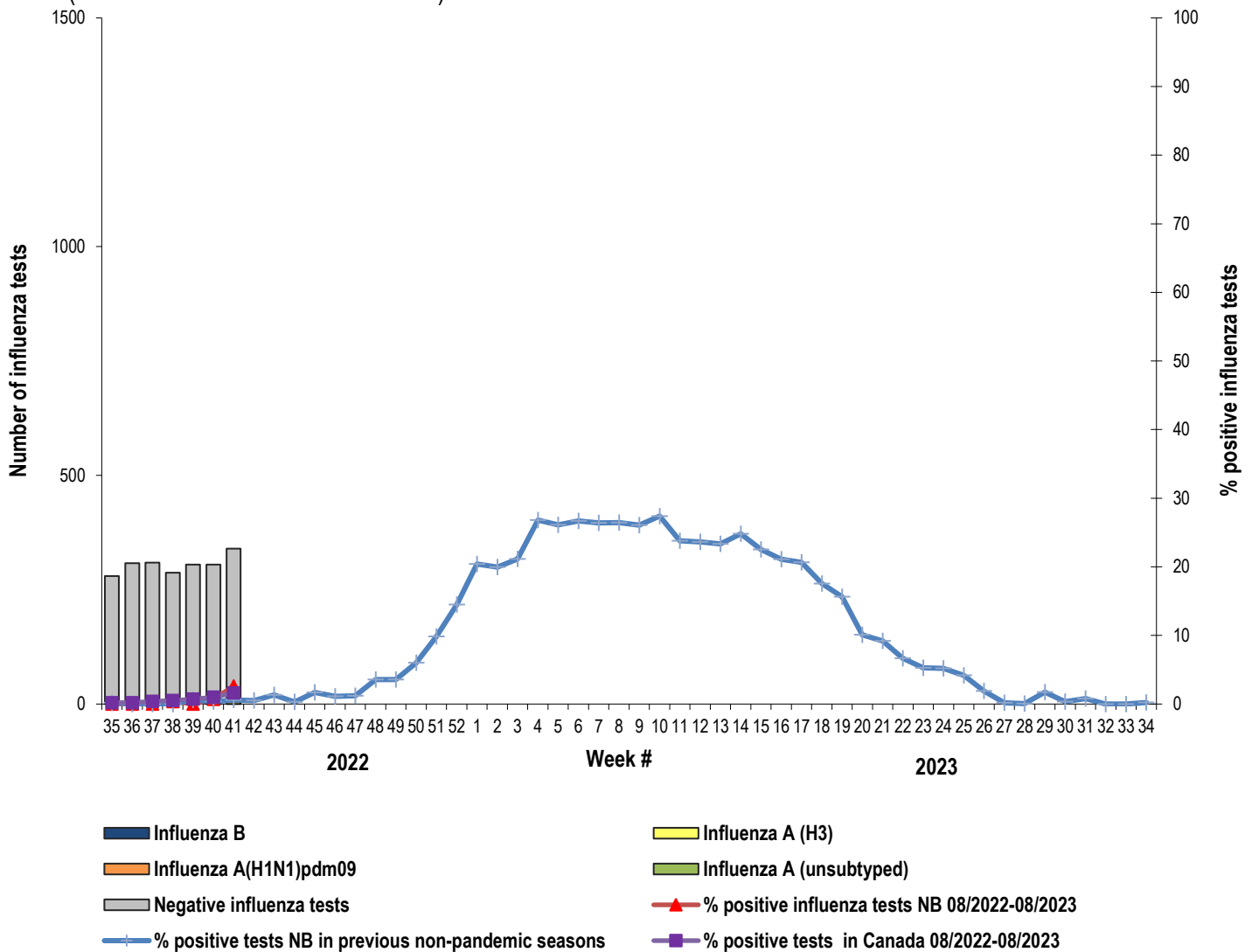
Emerging Respiratory Viruses:

- **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 October 21, 2022, 4,314,718 cases of COVID-19 infection in Canada have been identified with 46,025 deaths. Seventy-nine thousand four hundred and thirty-four cases have been identified in New Brunswick with 576 deaths. As of October 24, the WHO reported globally 624 235 272 confirmed cases and 6 555 270 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](#)

1) Influenza Laboratory Data¹

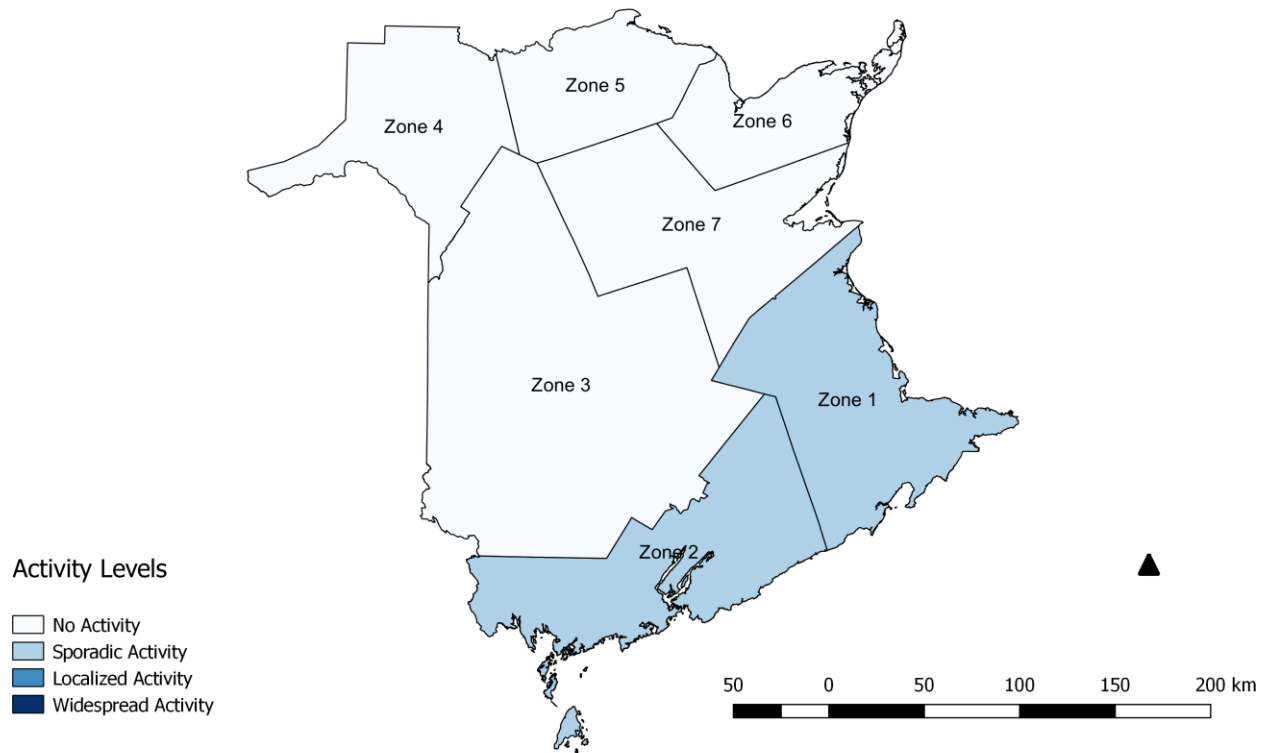
- Influenza activity remains at low levels.
- Eleven influenza cases were reported during weeks 40 and 41, 7 influenza A(H3) viruses and 4 influenza A (unsubtyped).
- Since the beginning of the season, 12 cases have been reported, 7 influenza A(H3) viruses and 5 influenza A (unsubtyped).

Graph 1: Number and percent of positive influenza specimens in New Brunswick by week, up to October 15, 2022 (data source: G. Dumont Lab results)



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.

Figure 2: Influenza/ILI activity levels² by Health Zones, in New Brunswick, for week 41, 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 cases³ by Health Region, in New Brunswick for reporting week, cumulative current and season 2019-2020.
(data source: G. Dumont lab results up to October 15, 2022)

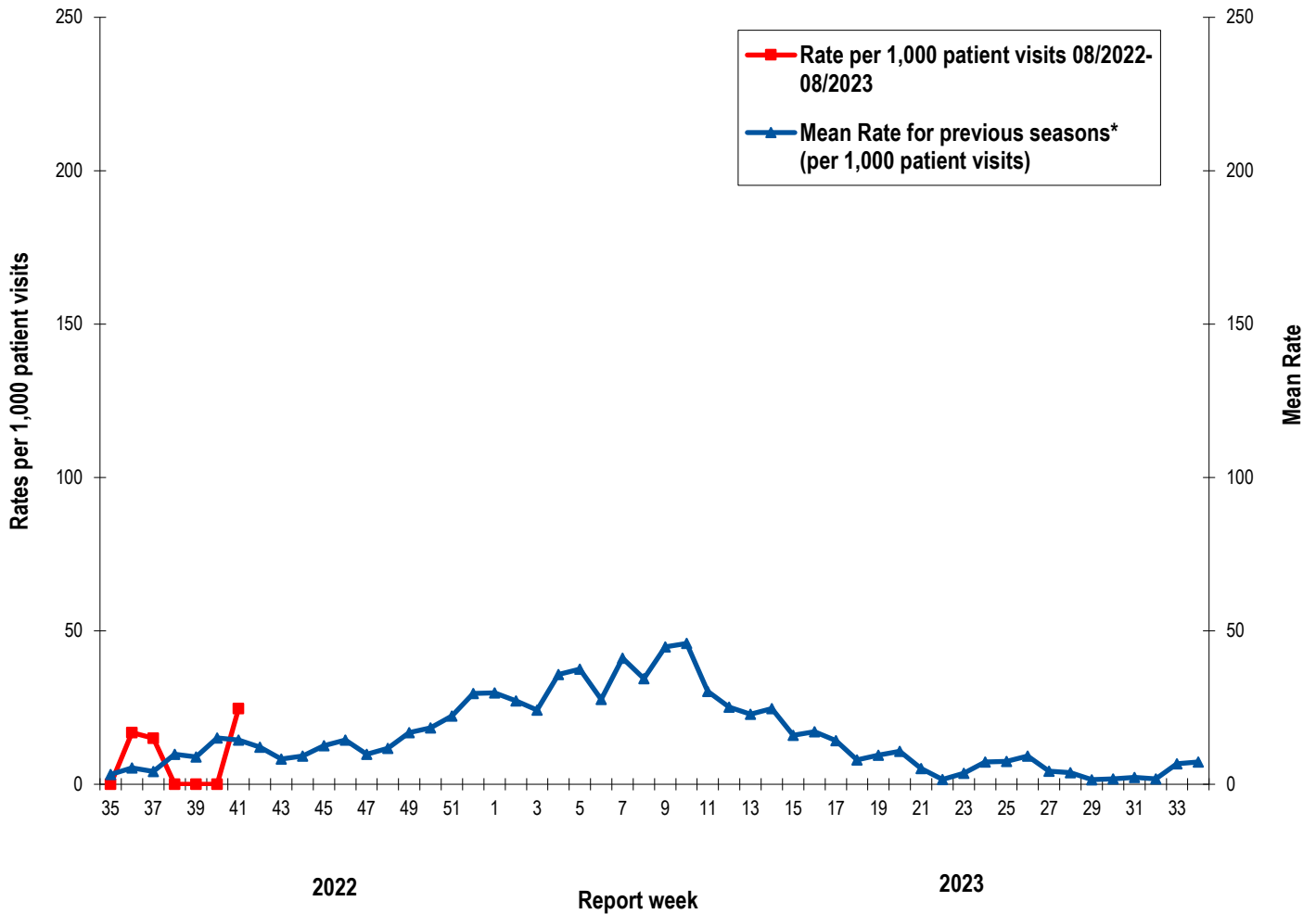
Zone	Reporting period: October/02/2022–October/15/2022						Cumulative: (2022/2023 season) Aug./28/2022 –October/15/2022						Cumulative: (2021/2022 season) Aug./29/2021 –Aug./27/2022					
	A				B	A & B co- infection	A				B	A & B co- infection	A				B	A & B co- infection
	A(H3)	(H1N1) pdm09	Unsubty ped/ Other	A Total	Total	Total	A(H3)	(H1N1) pdm09	Unsubty ped/ Other	A Total	Total	Total	(H3)	(H1N1) pdm09	Unsubty ped/ Other	A Total	Total	Total
Zone 1	1	0	0	1	0	0	1	0	1	2	0	0	124	0	115	239	0	0
Zone 2	6	0	4	10	0	0	6	0	4	10	0	0	11	0	60	71	0	0
Zone 3	0	0	0	0	0	0	0	0	0	0	0	0	33	0	55	88	1	0
Zone 4	0	0	0	0	0	0	0	0	0	0	0	0	4	0	10	14	0	0
Zone 5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	7	8	0	0
Zone 6	0	0	0	0	0	0	0	0	0	0	0	0	5	0	13	18	0	0
Zone 7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3	0	0
Total NB	7	0	4	11	0	0	7	0	5	12	0	0	179	0	262	441	1	0

³ A small proportion of specimens tested using Rapid Tests are not included in the total number of cases.

2) ILI Consultation Rates⁴

- The ILI consultation rate 0.0 per 1,000 patients visits for week 40 and was 24.7 per 1,000 visits for week 41. The ILI rate was below the expected levels for week 40 but was slightly higher than expected levels for week 41.
- During week 40 and 41, the sentinel response rate was between 17% and 22% 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).

⁴ 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.

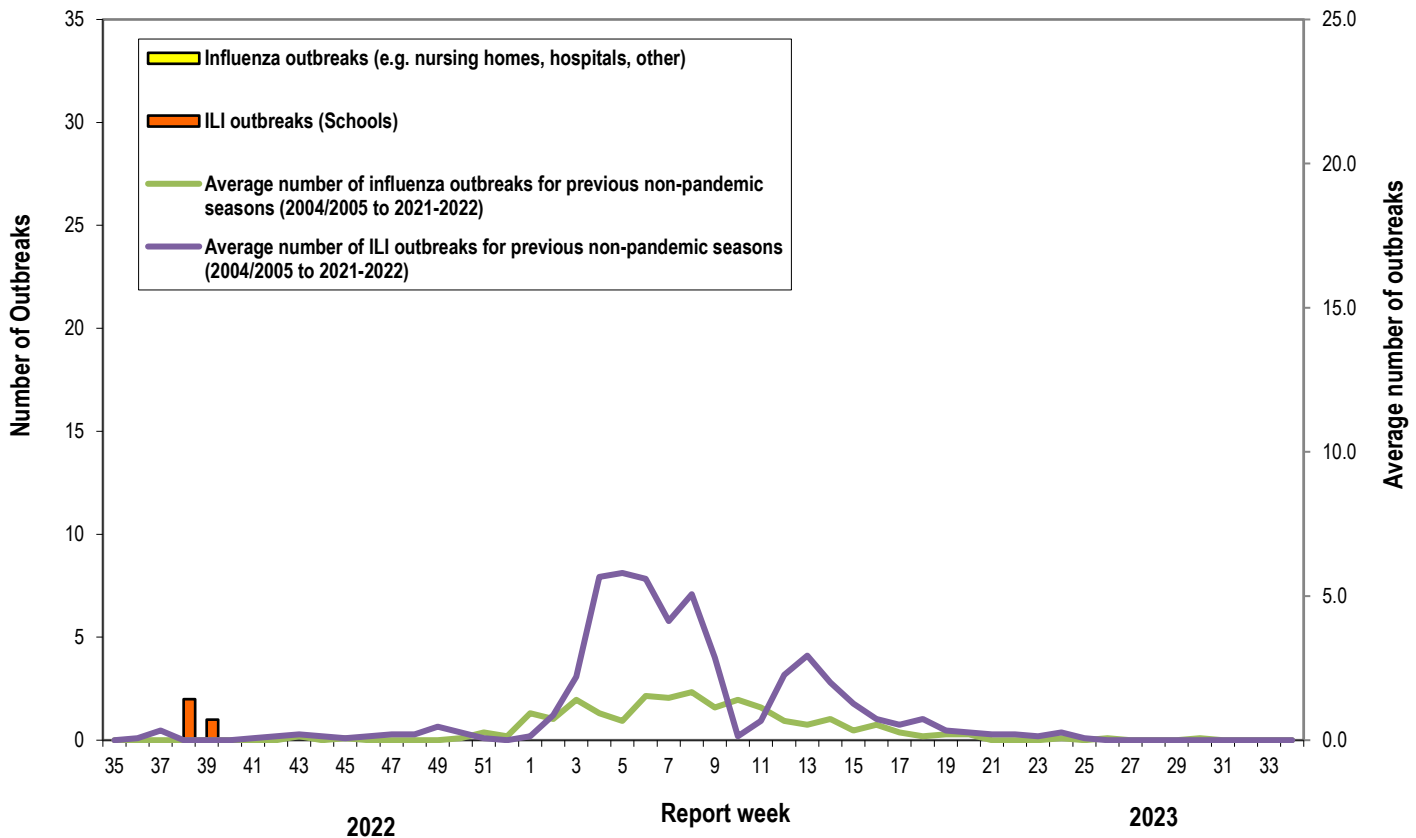
3) ILI and Laboratory-Confirmed Outbreak Data

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

	Reporting period: October/02/2022 to October/15/2022			Cumulative # of outbreaks season 2022-2023*
	Lab-confirmed outbreaks in Nursing homes ⁵	ILI school outbreaks ⁶ *	Lab-confirmed outbreaks in Other settings ⁴	
Zone 1	0 out of 15	0 out of 74	0	1
Zone 2	0 out of 16	0 out of 81	0	2
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	3*

*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)⁴ and ILI Outbreaks (schools)⁵ reported to Public Health in New Brunswick, by report week, season 2022/23.

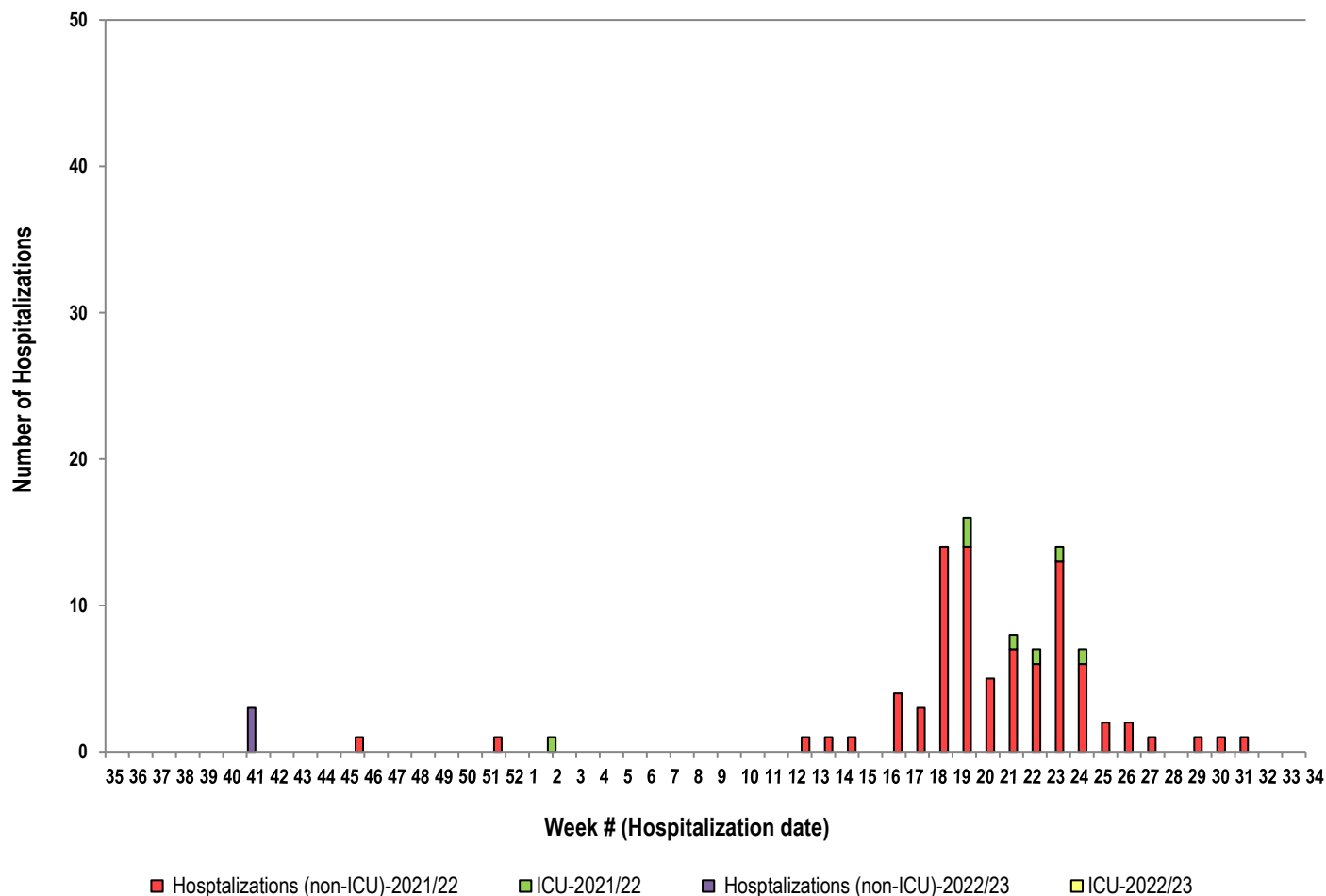


⁵ Two or more ILI cases within a seven-day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

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 (2022-2023).*



*No 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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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.