

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: June 18 to July 15, 2023 (week 25-28)

Summary

In New Brunswick, influenza activity is low

New Brunswick:

- There have been 4 positive influenza cases in weeks 25 to 28. Since the beginning of the season, 4627* cases have been reported, 166 influenza A(H3) viruses, 19 influenza A(H1N1) pdm09, 4417 influenza A (unsubtyped) and 25 influenza B.
- There have been 2 new influenza associated hospitalization during weeks 25 to 28. Since the beginning of the season, 885 hospitalizations have been reported and 67 deaths.
- The ILI consultation rate was 0.0 and 12.7 per 1,000 patients visits for week 25 and 26 respectively and 32.6 and 0.0 per 1,000 patients visits for weeks 27 and 28. The ILI rate was below the expected levels for this time of the year for weeks 25 and 28, and above the expected levels for this time of the year for weeks 26 and 27.
- No new influenza outbreaks and no new ILI school outbreaks were reported in weeks 25 to 28. So far this season, 34 influenza outbreaks were reported, and 250 ILI school outbreaks were reported.

Canada:

- At the national level, influenza activity has been stable and remains at interseasonal levels. Sporadic influenza activity continues to be reported in many regions across Canada.
- In week 24, a total of 135 laboratory detections (70 influenza A and 65 influenza B) were reported. Among detections for which age information was reported (97), 73 (75%) of detections were in individuals under the age of 65 years.
- The percentage of FluWatchers reporting fever and cough was 0.9 % in week 24. The percentage of FluWatchers reporting cough and fever is below seasonal levels.

International:

Seasonal influenza:

Globally, influenza detections remained low, but in the southern hemisphere, some countries reported increased influenza detections in recent weeks while detections in other countries seemed to have peaked. In Oceania, influenza activity was stable with influenza A viruses predominant. In South Africa, influenza activity appears to have peaked and decreased to a low level in pneumonia surveillance and below baseline in influenza-like illness (ILI) surveillance with influenza A(H3N2) viruses predominately detected. In temperate South America, influenza detections appeared to decrease to low levels with A(H1N1)pdm09 viruses most frequently detected followed by B viruses across all countries. Severe acute respiratory infections (SARI) activity remained elevated in a few countries. In the Caribbean countries, influenza activity remained low overall. In the Central American countries, increased influenza activity was reported in a few countries with A(H1N1)pdm09 most frequently detected followed by B/Victoria lineage viruses. In the tropical countries of South America, overall influenza activity was low with detections of predominantly A(H1N1)pdm09 and B viruses. In tropical Africa, influenza detections were low in reporting countries. Influenza A(H1N1)pdm09 viruses predominated among reported detections. In Southern Asia, influenza activity remained low with all seasonal subtypes detected. In South-East Asia, influenza activity remained stable or decreased in most reporting countries, with continued reporting of predominantly A(H1N1)pdm09 and A(H3N2) virus detections overall. In the temperate zones of the northern hemisphere, influenza activity was reported at low levels or below seasonal threshold in most reporting countries. Detections were predominantly influenza A(H1N1)pdm09 and B viruses.

Emerging Respiratory Viruses:

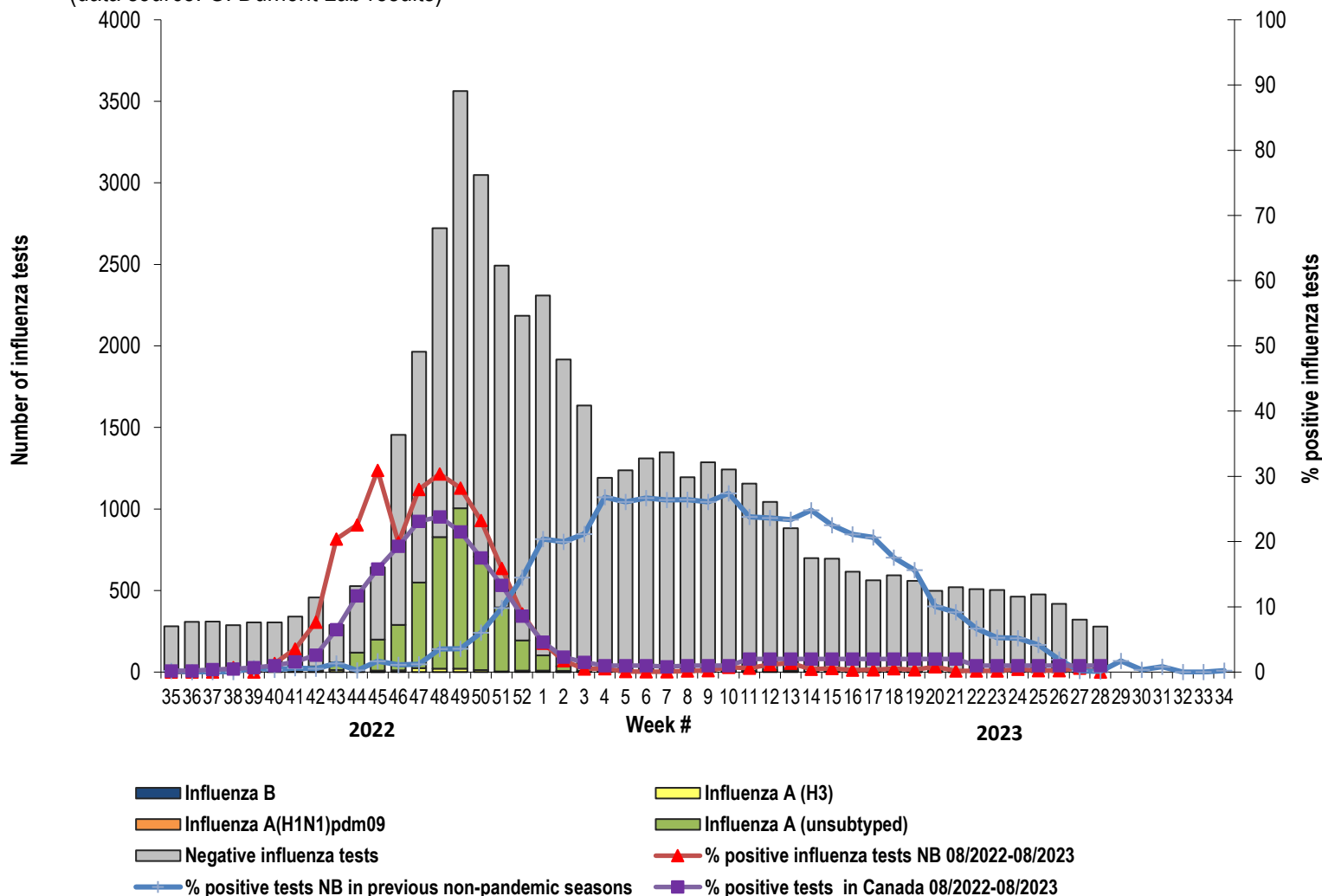
- COVID-19: On December 31, 2019, a cluster of cases of pneumonia was reported in Wuhan, China, and the cause was confirmed as a new coronavirus that had not previously been identified in humans (COVID-19). As of July 25, 2023, 4,695,593 cases of COVID-19 infection in Canada have been identified with 53,086 deaths. Since August 28, 2022, sixteen thousand one hundred and thirteen cases have been identified in New Brunswick with 270 deaths. As of July 19, the WHO reported globally 768 237 788 confirmed cases and 6 951 677 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 case counts have been updated due to data cleaning.**

1) Influenza Laboratory Data¹

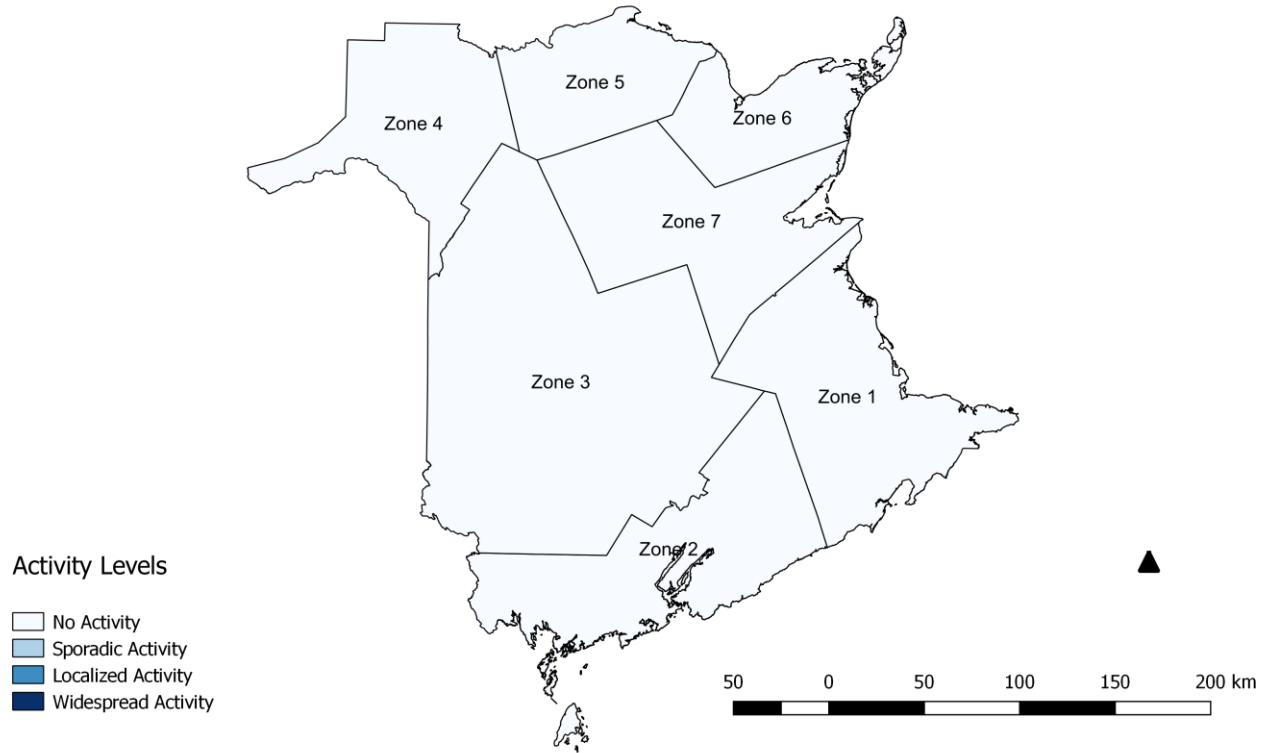
- Influenza activity is low in weeks 25-28.
- Four influenza cases were reported during weeks 25 to 28, one influenza A(H1N1) pdm09, two influenza A (unsubtyped) and one influenza B.
- Since the beginning of the season, 4627 cases have been reported, 166 influenza A(H3) viruses, 19 influenza A(H1N1) pdm09, 4417 influenza A (unsubtyped) and 25 influenza B.

Graph 1: Number and percent of positive influenza specimens in New Brunswick by week, up to July 15, 2023 (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 28, 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.

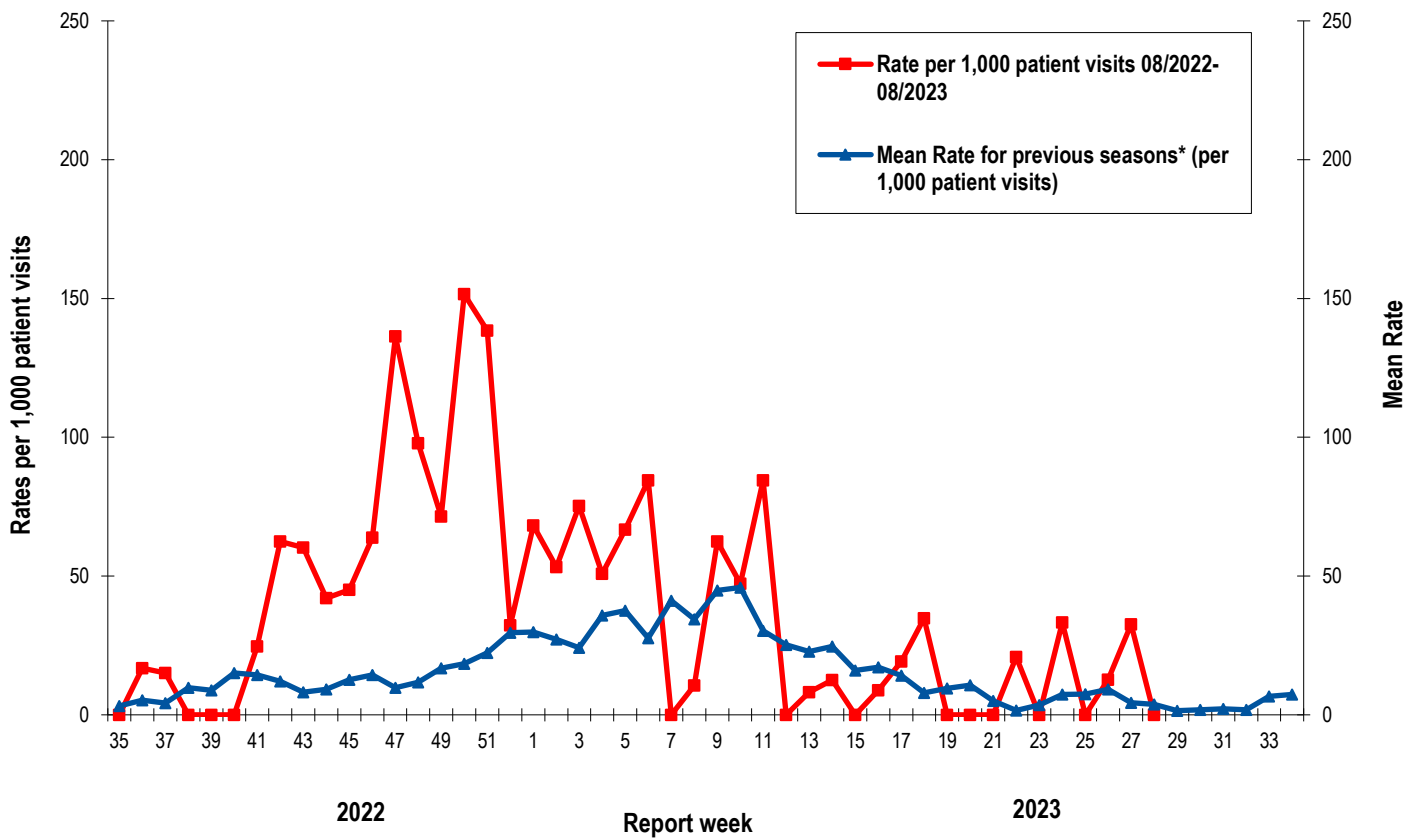
Table 1: Positive influenza cases by Health Region, in New Brunswick for reporting week, cumulative current and season 2019-2020.
 (data source: G. Dumont lab results up to July 15, 2023)

Zone	Reporting period: June/18/2023–July/15/2023						Cumulative: (2022/2023 season) Aug./28/2022 – July/15/2023						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	1	1	2	0	0	88	1	1201	1290	10	0	124	0	115	239	0	0
Zone 2	0	0	0	0	1	0	39	3	992	1034	6	0	11	0	60	71	0	0
Zone 3	0	0	1	1	0	0	12	1	830	843	4	0	33	0	55	88	1	0
Zone 4	0	0	0	0	0	0	9	13	352	374	3	0	4	0	10	14	0	0
Zone 5	0	0	0	0	0	0	4	0	133	137	1	0	1	0	7	8	0	0
Zone 6	0	0	0	0	0	0	10	1	591	602	0	0	5	0	13	18	0	0
Zone 7	0	0	0	0	0	0	4	0	318	322	1	0	1	0	2	3	0	0
Total NB	0	1	2	3	1	0	166	19	4417	4602	25	0	179	0	262	441	1	0

2) ILI Consultation Rates³

- The ILI consultation rate was 0.0 and 12.7 per 1,000 patients visits for week 25 and 26 respectively and 32.6 and 0.0 per 1,000 patients visits for weeks 27 and 28. The ILI rate was below the expected levels for this time of the year for weeks 25 and 28, and above the expected levels for this time of the year for weeks 26 and 27.
- During weeks 25 to 28, the sentinel response rates varied between 13% and 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.

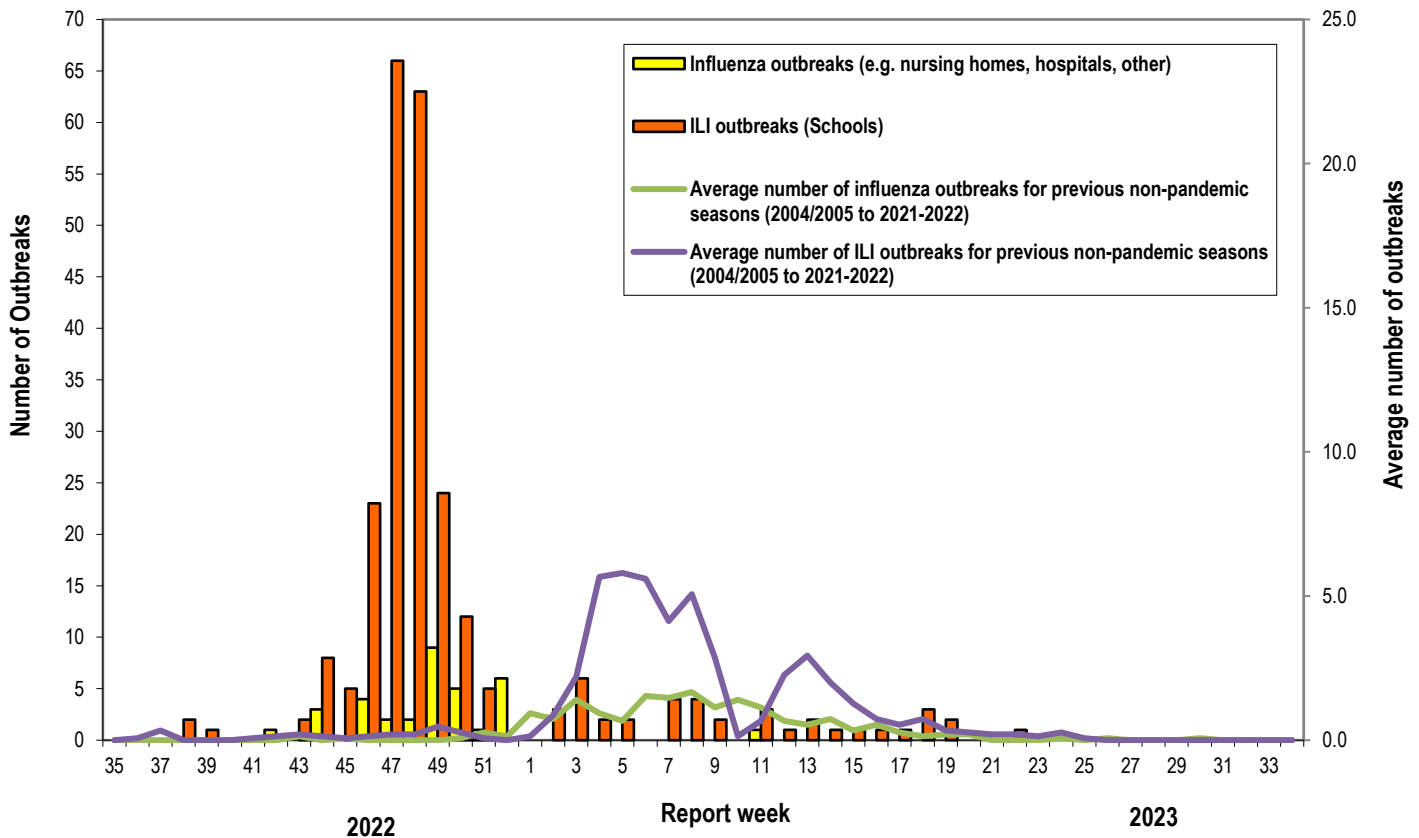
3) ILI and Laboratory-Confirmed Outbreak Data

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

	Reporting period: June/18/2023 to July/15/2023			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	56
Zone 2	0 out of 16	0 out of 81	0	65
Zone 3	0 out of 16	0 out of 95	0	93
Zone 4	0 out of 5	0 out of 22	0	20
Zone 5	0 out of 2	0 out of 18	0	4
Zone 6	0 out of 9	0 out of 35	0	37
Zone 7	0 out of 5	0 out of 27	0	9
Total NB	0 out of 68	0 out of 352	0	284*

*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.

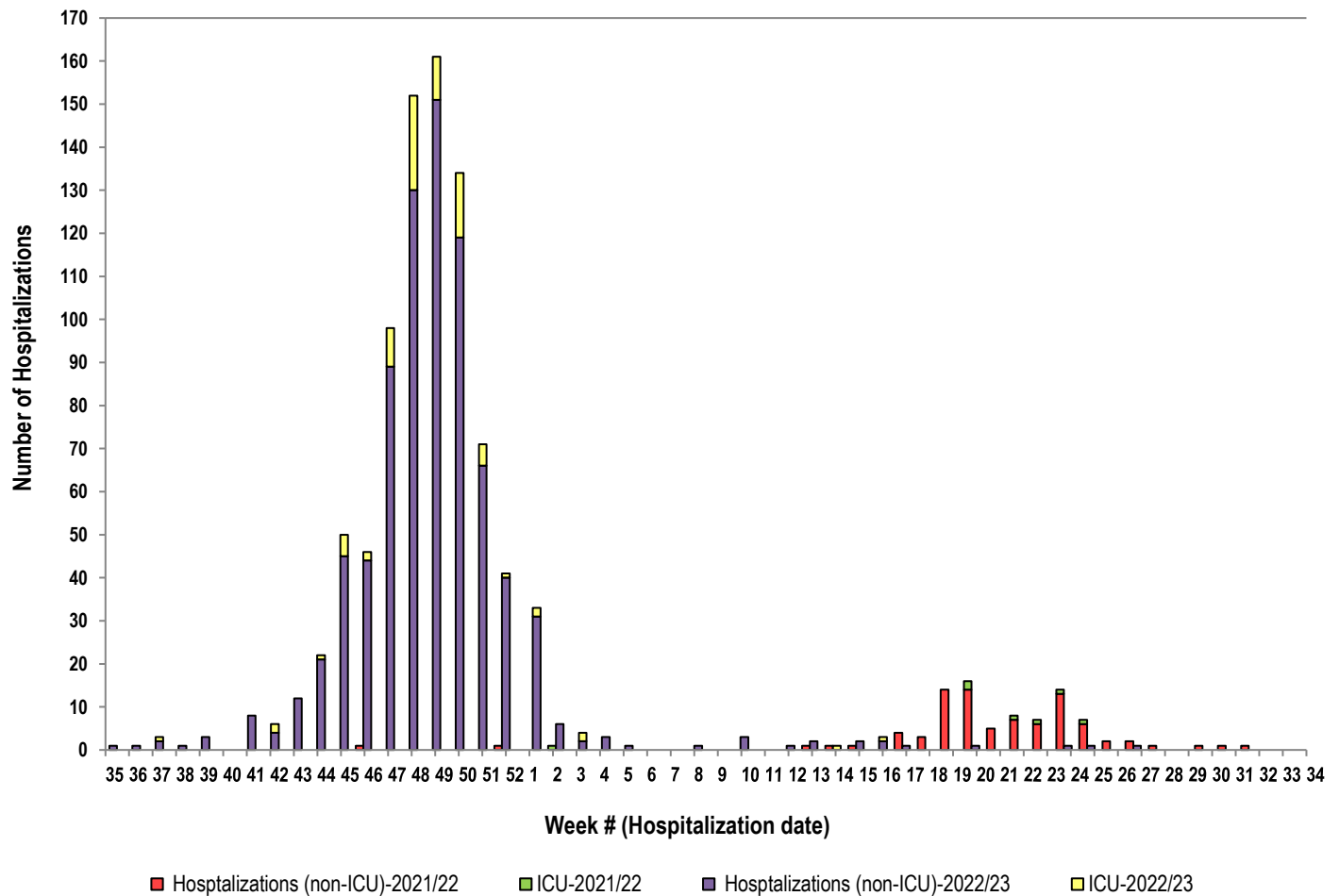


⁴ Two or more ILI cases within a seven-day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

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-seven 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/

Prepared by the Communicable Disease Control Unit, Office of the Chief Medical Officer of Health, Tel: (506) 444-3044

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.