

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: January 23 to January 29, 2022 (week 4)

Summary

In New Brunswick, influenza activity remains low in week 4

New Brunswick:

- There have been no positive influenza cases in week 4. Since the beginning of the season, 18 cases have been reported, 17 influenza A (unsubtyped) and 1 influenza B.
- There has been no influenza associated hospitalizations during week 4. Since the beginning of the season, 2 hospitalizations have been reported and no deaths.
- The ILI consultation rate was 0.0 per 1,000 patients visits for week 4. The ILI rate was lower than the expected levels for this time of year.
- No influenza outbreaks were reported in week 4. So far this season, no influenza outbreaks have been reported. One ILI school outbreak has been reported in week 4.

Canada:

- For week 4, influenza activity across Canada has decreased in recent weeks and remains low for this time of year. Low number of sporadic detections of influenza continue to be reported. There has been no evidence of community circulation of influenza in the 2021-2022 season to date.
- Nationally, 8 laboratory detections (8 A) of influenza were reported in week 4.
- In week 4, 12,585 participants reported to FluWatchers with 0.56% of participants reporting cough and fever.

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, influenza activity remained low and decreased this period after a peak at the end of 2021. In the temperate zones of the northern hemisphere, influenza activity decreased with detections of mainly influenza A (H3N2) viruses and B-Victoria lineage viruses reported. In North America, influenza virus detections decreased and were predominantly A(H3N2) among those detected and subtyped. Influenza detections remained low compared to similar periods in past seasons (except 2020-2021). Respiratory syncytial virus (RSV) activity decreased in the USA and Canada. In Europe, influenza activity appeared to decrease. Influenza A(H3N2) predominated. In East Asia, influenza activity with mainly influenza B/Victoria lineage continued in an increasing trend in China, while influenza illness indicators and activity remained low in the rest of the subregion. In Western Asia and Northern Africa, continuous influenza transmission has been reported in some countries. In the Caribbean and Central American countries, some influenza activity was reported with influenza A(H3N2) predominating. In tropical South America, some influenza activity was reported with influenza A(H3N2) predominating. In tropical Africa, influenza activity was reported in some countries with influenza A(H3N2) predominating followed by influenza B/Victoria lineage viruses. In Southern Asia, influenza virus detections of predominantly influenza A(H3N2) remained elevated, although several countries reported a decrease in detections. In South-East Asia, sporadic influenza detections were reported by a few countries. In the temperate zones of the southern hemisphere, influenza activity remained low overall, although increased detections of influenza A (H3N2) were reported in some countries in temperate South America.

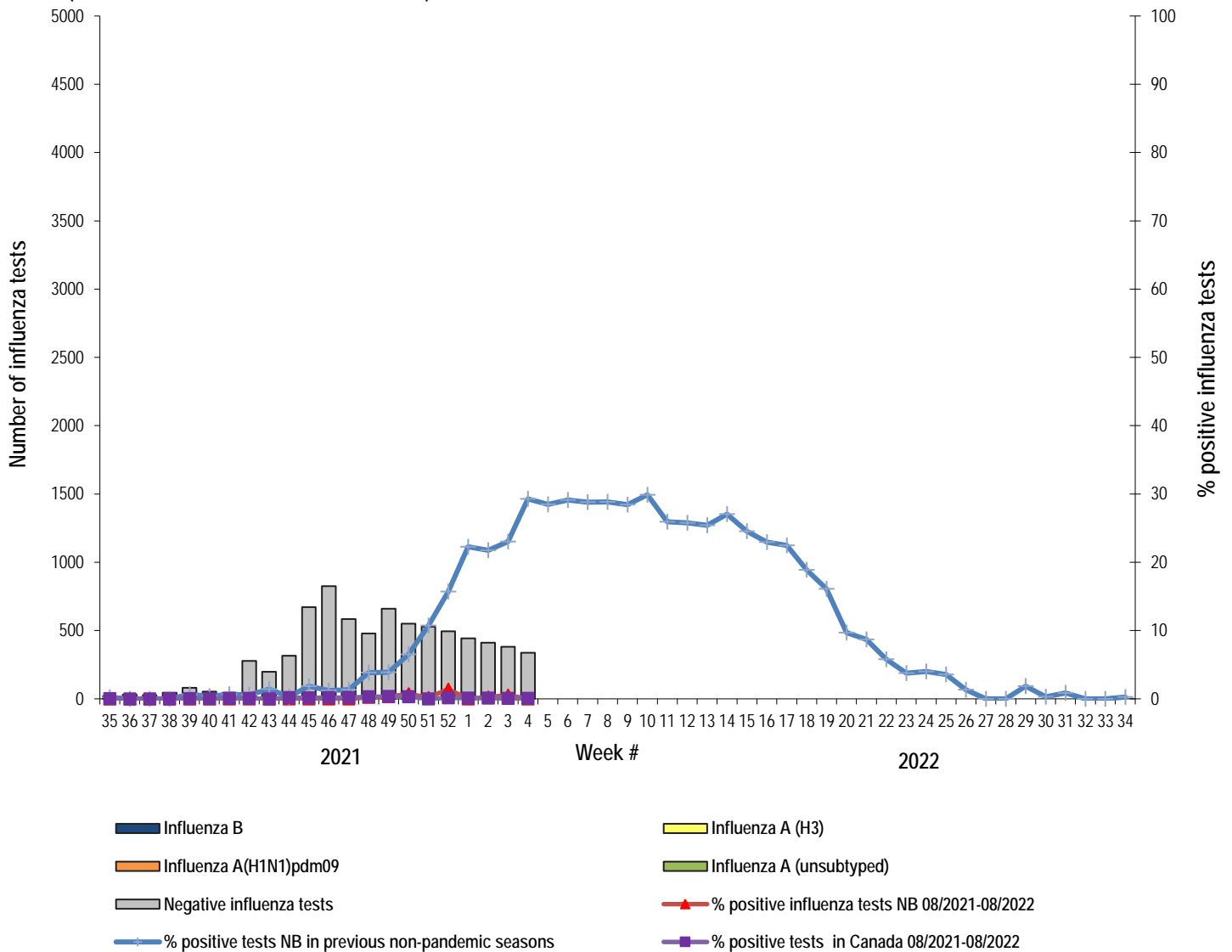
Emerging Respiratory Viruses:

- **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 February 7, 2022, 3,140,025 cases of COVID-19 infection in Canada have been identified with 34,381 deaths. Thirty-one thousand two hundred and seventy-six cases have been identified in New Brunswick with 271 deaths. As of February 7, the WHO reported globally 394 381 395 confirmed cases and 5 735 179 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: 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

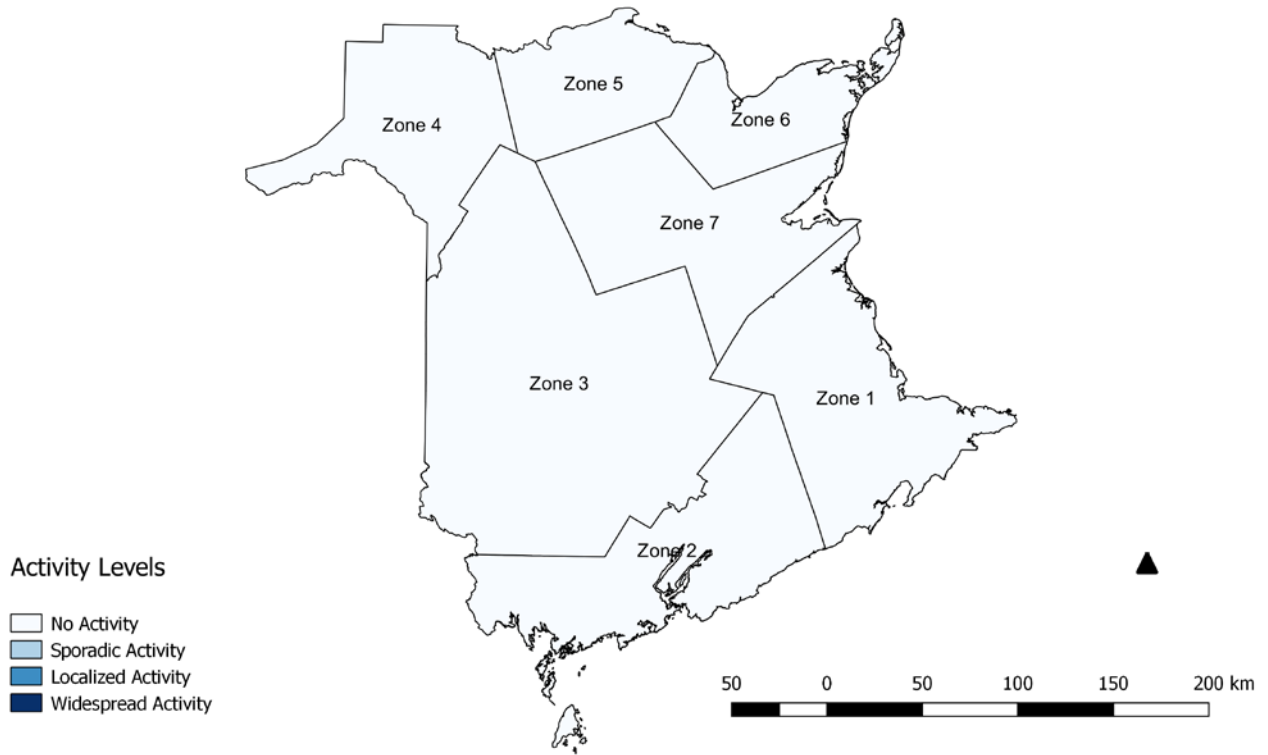
- Influenza activity remains low in week 4.
- No influenza cases were reported during week 4.
- Since the beginning of the season, 18 cases have been reported, 17 influenza A (unsubtyped) viruses and 1 influenza B virus.

Graph 1: Number and percent of positive influenza specimens in New Brunswick by week, up to January 29, 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 4, season 2021/2022.



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 previous seasons.
 (data source: G. Dumont lab results up to January 29, 2022)

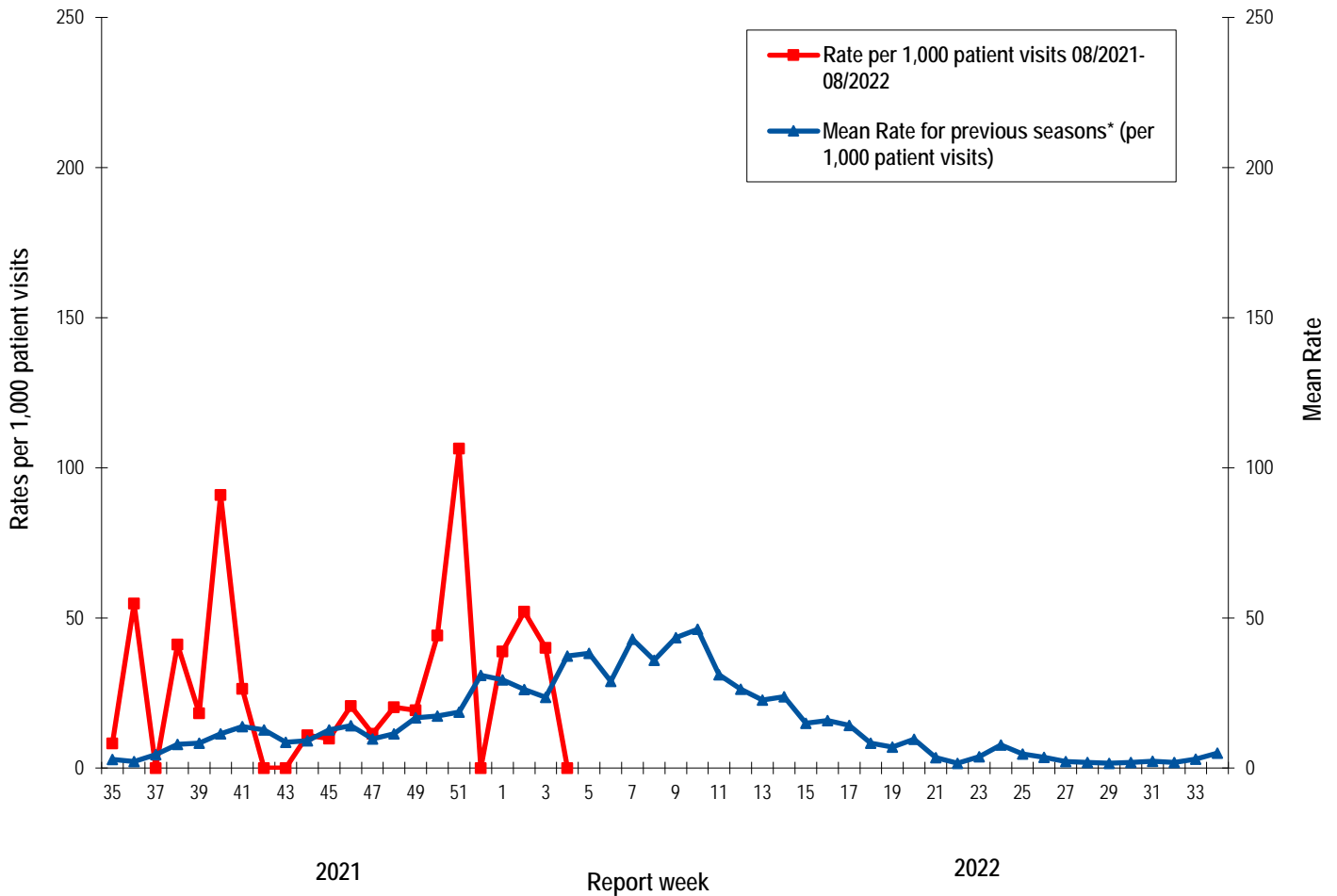
Zone	Reporting period: January/23/2022–January/29/2022						Cumulative: (2021/2022 season) Aug./29/2021 –January/29/2022						Cumulative: (2020/2021 season) Aug./23/2020 –Aug./28/2021										
	A					B	A					B	A					B	A & B co-infection				
	A(H3)	(H1N1) pdm09	Unsubty ped/ Other	A Total	Total	Total	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	4	4	0	0	0	0	0	0	0	1*	0				
Zone 2	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0				
Zone 3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0				
Zone 4	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0				
Zone 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Zone 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Zone 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total NB	0	0	0	0	0	0	0	0	17	17	1	0	0	0	0	0	0	1*	0				

*This positive influenza detection is associated with recent live attenuated influenza vaccine receipt and does not represent community circulation of seasonal influenza viruses.

2) ILI Consultation Rates³

- The ILI consultation rate was 0.0 per 1,000 patients visits for week 4. The ILI rate was lower than the expected levels for this time of year.
- During week 4, the sentinel response rate was 14% for both the FluWatch sentinel physicians and the NB SPIN practitioners.

Graph 2: ILI Consultation Rates in New Brunswick, by report week, season 2021/22 compared to previous seasons*



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

³ 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.

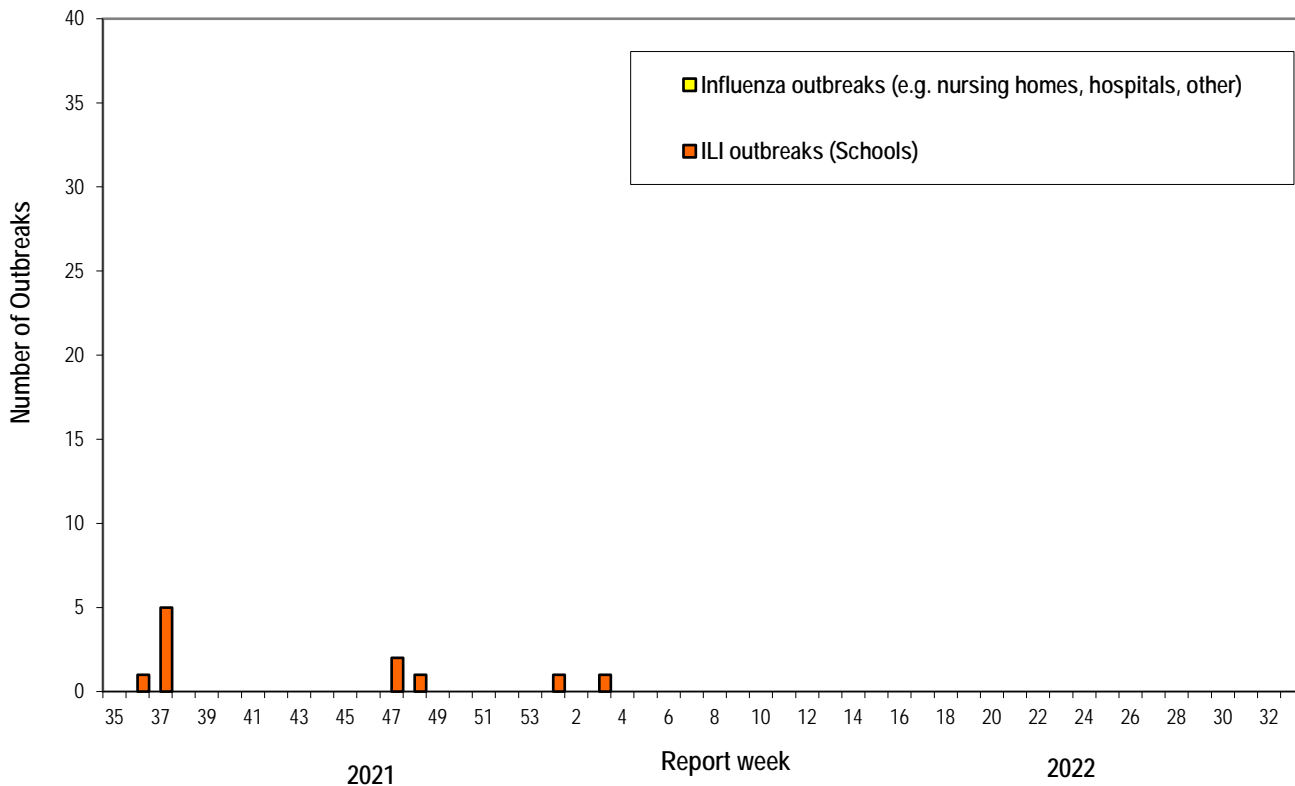
3) ILI and Laboratory-Confirmed Outbreak Data

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

	Reporting period: January/23/2022 to January/29/2022			Cumulative # of outbreaks season 2021-2022*
	Lab-confirmed outbreaks in Nursing homes ⁴	ILI school outbreaks ⁵ *	Lab-confirmed outbreaks in Other settings ⁴	
Zone 1	0 out of 15	1 out of 74	0	7
Zone 2	0 out of 16	0 out of 81	0	1
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	1 out of 352	0	8*

*During this influenza season, 2021-2022, 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 ongoing COVID-19 pandemic, specifically increased vigilance in schools to monitor and report absenteeism due to ILI, as well as the increased restrictions on attendance for children with symptoms of viral respiratory illness and the prudence of parents/guardians to send their children to school. Therefore, the number of ILI outbreaks in schools should be interpreted with caution and should not be compared to previous non-pandemic seasons.

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 2021/22.

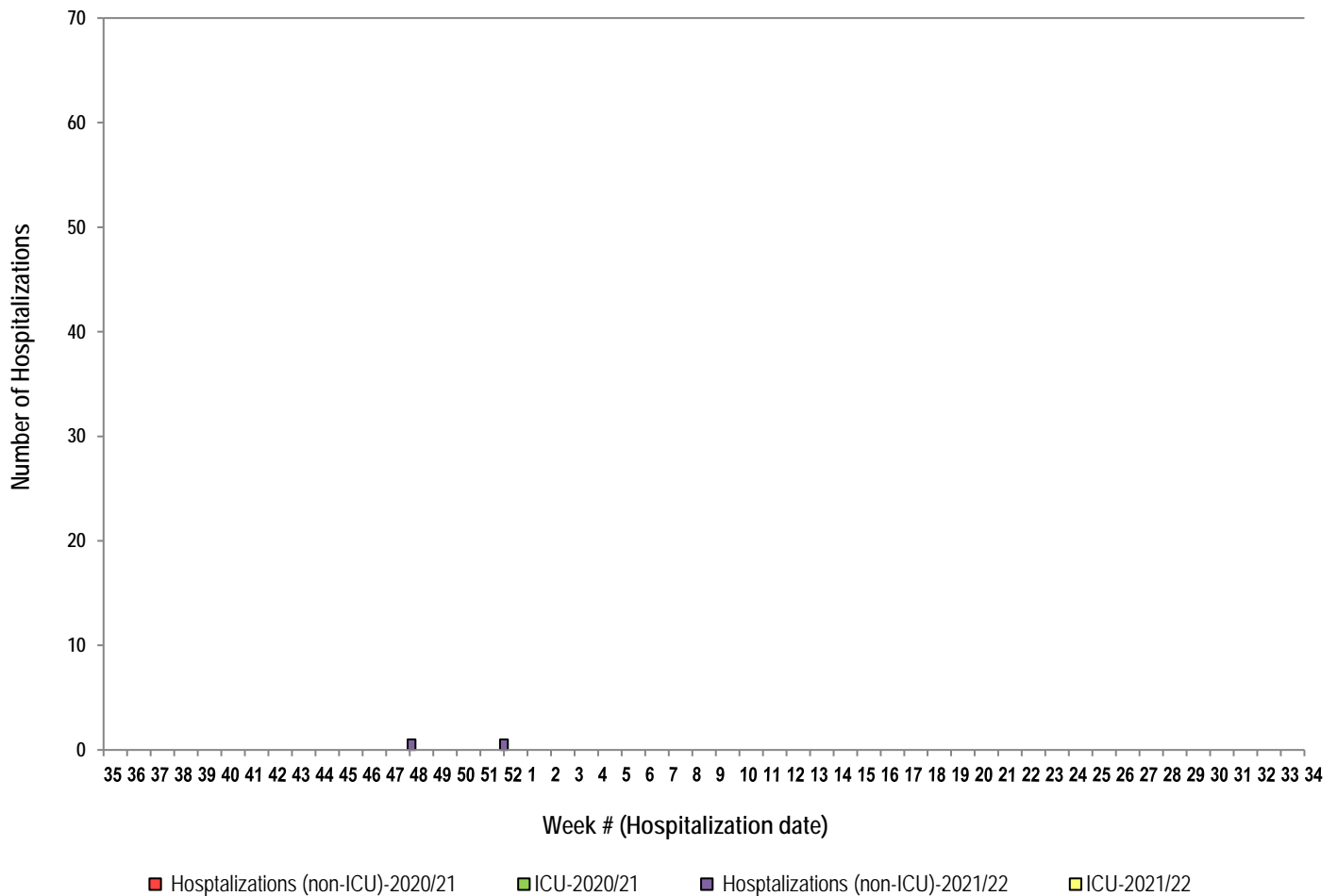


⁴ Two or more ILI cases within a seven-day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

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.*



*No deaths have been reported so far in season 2021-2022.

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.