

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: March 13 to March 26, 2022 (weeks 11 & 12)

Summary

In New Brunswick, influenza activity remains low in weeks 11 & 12

New Brunswick:

- There have been 2 positive influenza cases in weeks 11 & 12. Since the beginning of the season, 20 cases have been reported, 19 influenza A (unsubtyped) and 1 influenza B.
- There has been no influenza associated hospitalizations during weeks 11 & 12. Since the beginning of the season, 2 hospitalizations have been reported and no deaths.
- The ILI consultation rate was 10.4 and 0.0 per 1,000 patients visits for weeks 11 & 12, respectively. The ILI rate was lower than the expected levels for this time of year.
- 17 new ILI outbreaks were reported in schools in weeks 11 & 12. So far this season, no influenza outbreaks have been reported.

Canada:

- No new updates were available on the national influenza activity at the time of this report.

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 increased or remained stable with detections of mainly influenza A(H3N2) viruses and B/Victoria lineage viruses reported. In North America, influenza activity increased in recent weeks but remained lower than preCOVID-19 pandemic levels at this time of the year and was predominantly due to influenza A viruses, with A(H3N2) predominant among the subtyped viruses. Respiratory syncytial virus (RSV) activity further decreased in the United States of America (USA) and Canada. In Europe, overall influenza activity appeared to increase again with influenza A(H3N2) predominant. Very little RSV activity was observed. In East Asia, influenza activity with mainly influenza B/Victoria lineage detections increased in China. Elsewhere, influenza illness indicators and activity remained low. Increased RSV activity was reported in Mongolia and the Republic of Korea. In Northern Africa, influenza detections of influenza A(H3N2) continued to be reported. In Western Asia, influenza activity was low across reporting countries. In the Caribbean and Central American countries, influenza detections were predominantly influenza A(H3N2) and activity remained low. In tropical South America, low influenza activity was reported with influenza A(H3N2) predominant. In tropical Africa, influenza activity was reported from Eastern Africa with influenza A(H3N2) predominating followed by influenza B/Victoria lineage viruses. In Southern Asia, influenza virus detections were at low levels with influenza A(H1N1)pdm09, A(H3N2) and B viruses detected. In South-East Asia, influenza detections were at low levels with influenza A(H3N2) predominant. In the temperate zones of the southern hemisphere, influenza activity remained low overall, although detections of influenza A(H3N2) continued to be 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 April 4, 2022, 3,510,335 cases of COVID-19 infection in Canada have been identified with 37,721 deaths. Fifty-one thousand eight hundred and fifty-four cases have been identified in New Brunswick with 358 deaths. As of April 4, the WHO reported globally 489 779 062 confirmed cases and 6 152 095 deaths.

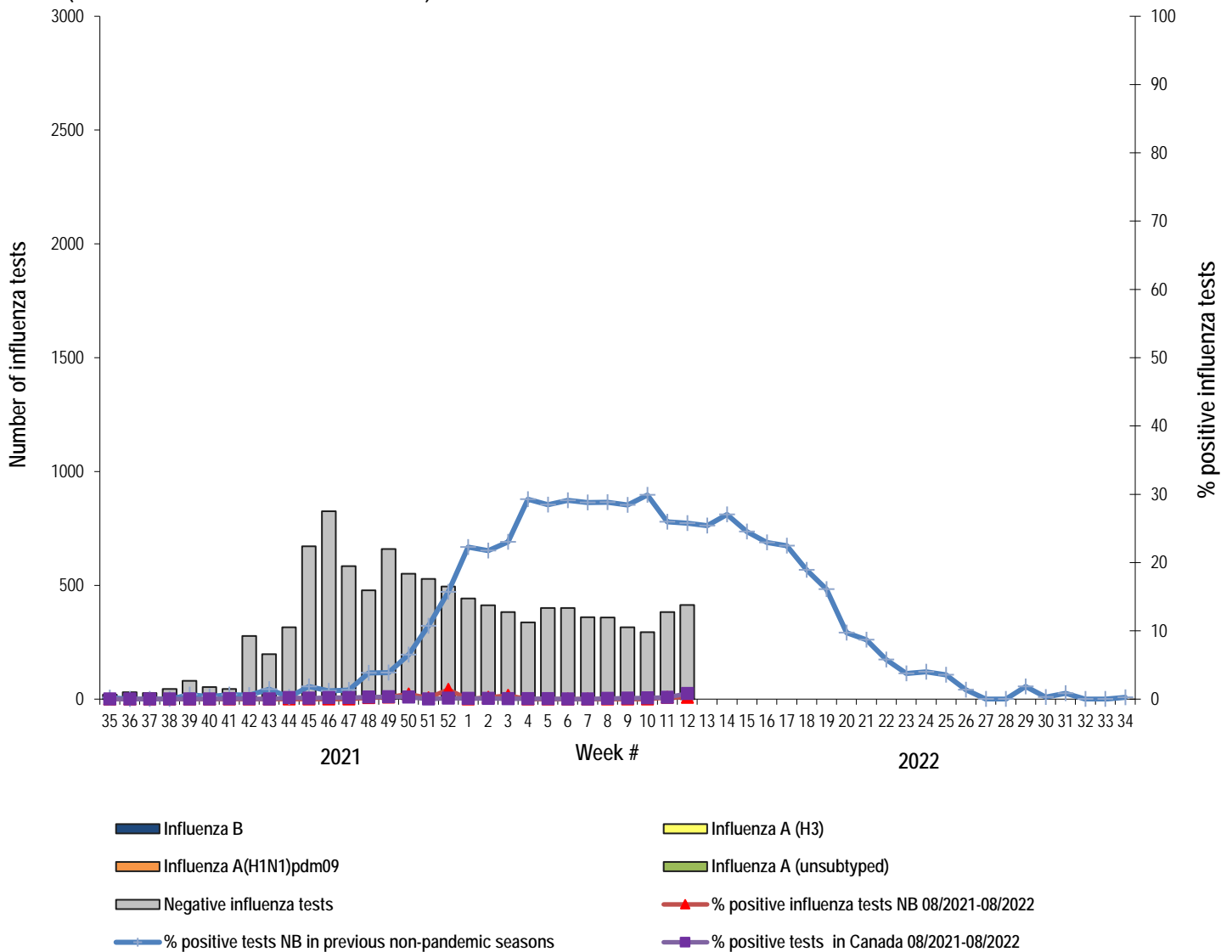
For more timely updates, please visit the following websites:

- 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

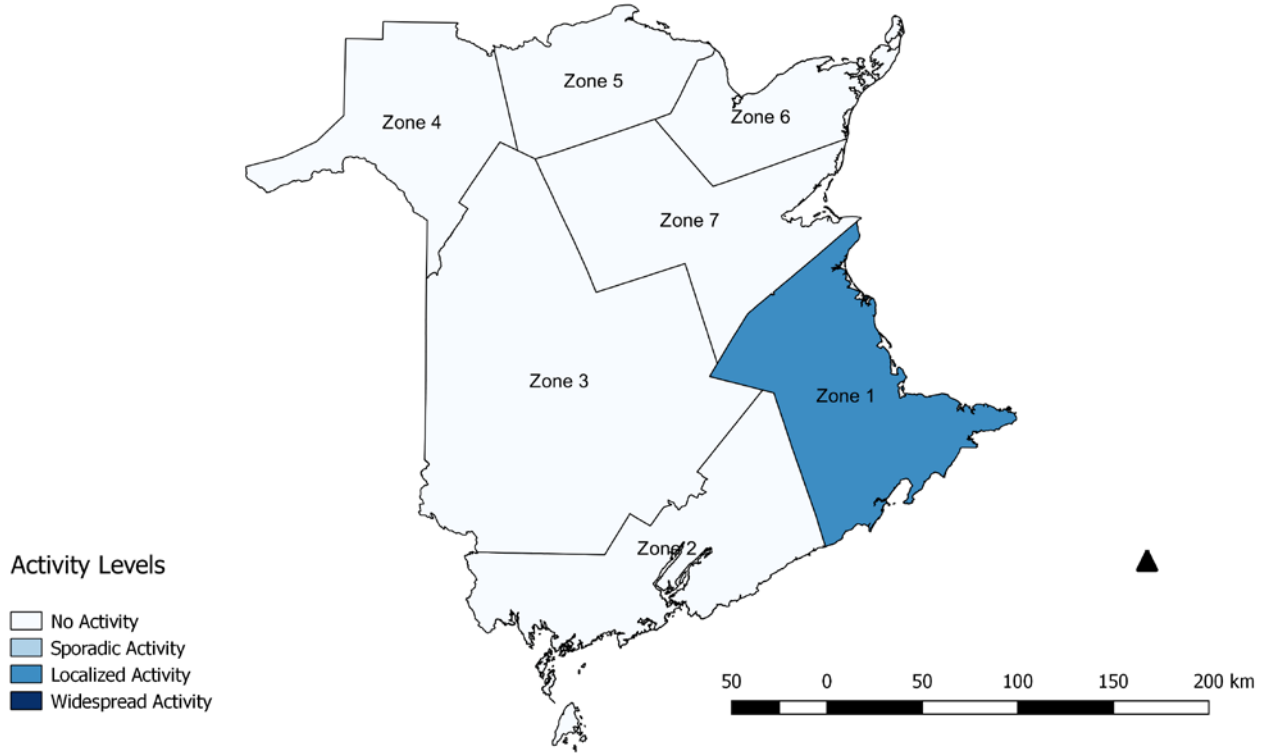
- Influenza activity remains low in weeks 11 & 12.
- Two influenza cases were reported during weeks 11 & 12.
- Since the beginning of the season, 20 cases have been reported, 19 influenza A (unsubtyped) viruses and 1 influenza B virus.

Graph 1: Number and percent of positive influenza specimens in New Brunswick by week, up to March 26, 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 12, 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 March 26, 2022)

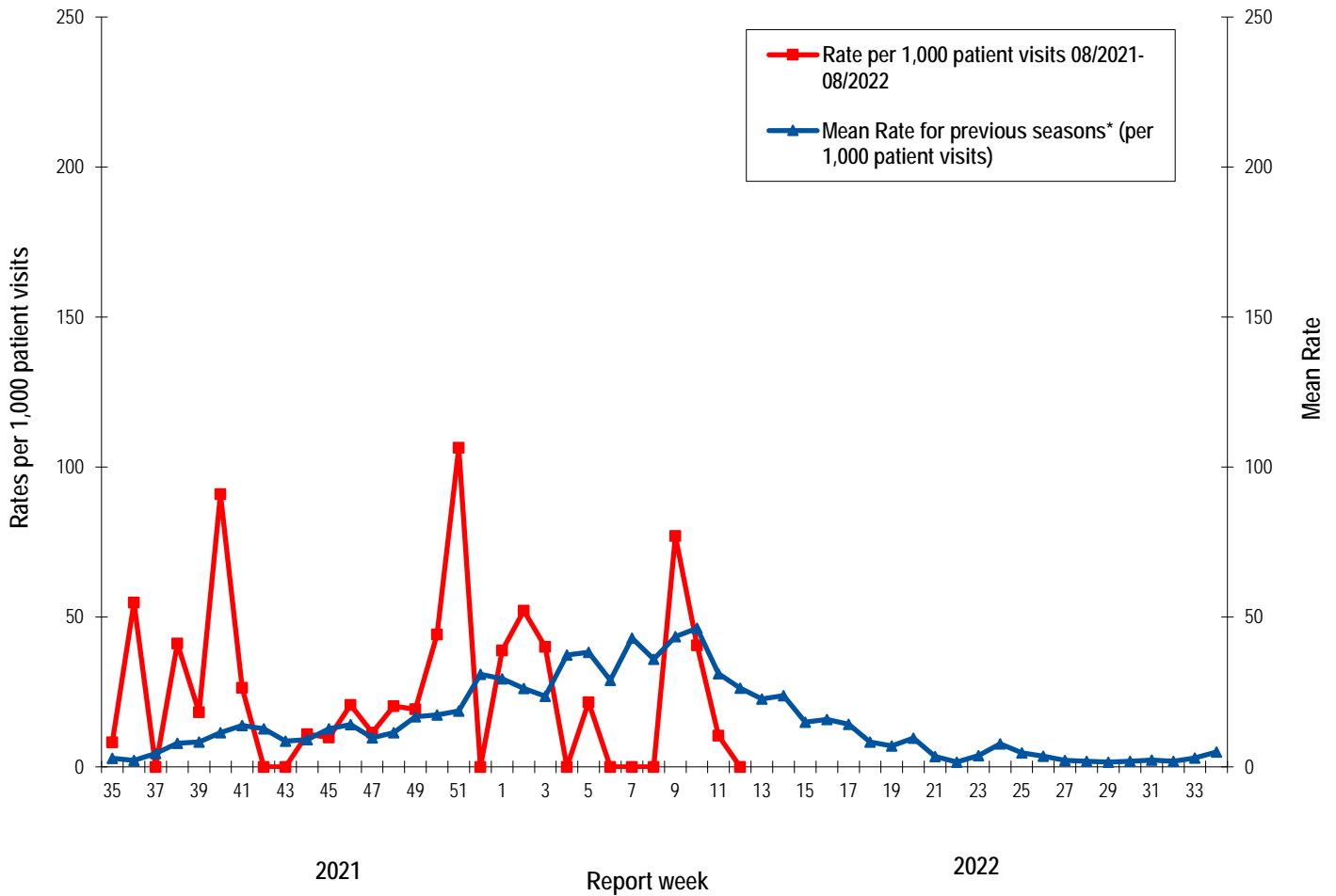
Zone	Reporting period: March/13/2022–March/26/2022						Cumulative: (2021/2022 season) Aug./29/2021 –March/26/2022						Cumulative: (2020/2021 season) Aug./23/2020 –Aug./28/2021									
	A					B	A & B co- infection					A					B	A & B co- infection				
	A(H3)	(H1N1) pdm09	Unsubty ped/ Other	A Total	Total	Total	A(H3)	(H1N1) pdm09	Unsubty ped/ Other	A Total	Total	Total	Total	(H3)	(H1N1) pdm09	Unsubty ped/ Other	A Total	Total	Total			
Zone 1	0	0	2	2	0	0	0	0	6	6	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	2	2	0	0	0	0	19	19	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 10.4 and 0.0 per 1,000 patients visits for weeks 11 & 12, respectively. The ILI rate was below the expected levels for this time of year.
- During weeks 11 & 12, the sentinel response rate was between 19% 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 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 27 practitioner sites (16 FluWatch sentinel physicians and 11 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

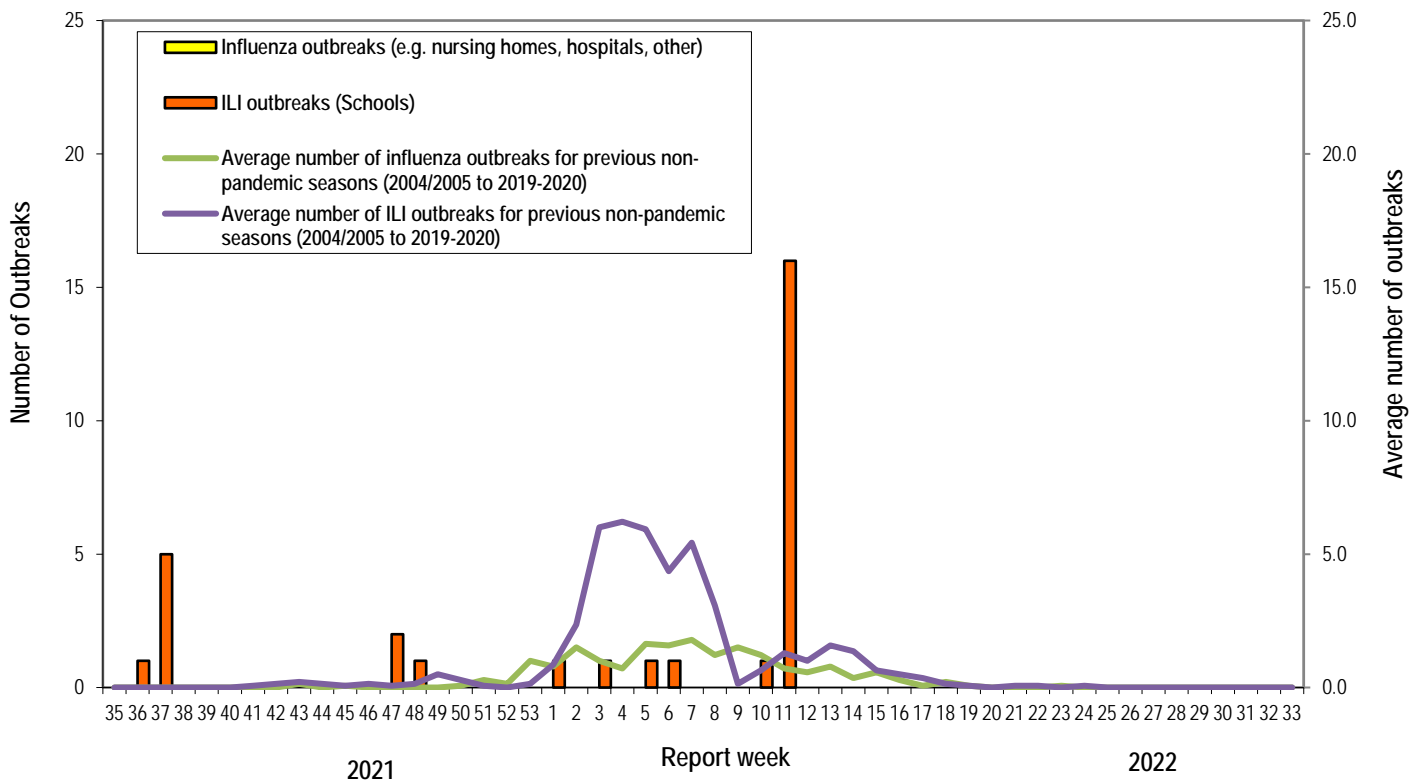
3) ILI and Laboratory-Confirmed Outbreak Data

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

	Reporting period: March/13/2022 to March/26/2022			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	8 out of 74	0	17
Zone 2	0 out of 16	4 out of 81	0	5
Zone 3	0 out of 16	1 out of 95	0	1
Zone 4	0 out of 5	2 out of 22	0	2
Zone 5	0 out of 2	0 out of 18	0	0
Zone 6	0 out of 9	2 out of 35	0	2
Zone 7	0 out of 5	0 out of 27	0	0
Total NB	0 out of 68	17 out of 352	0	27*

*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 influenza-like-illness or COVID-like illness. 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.

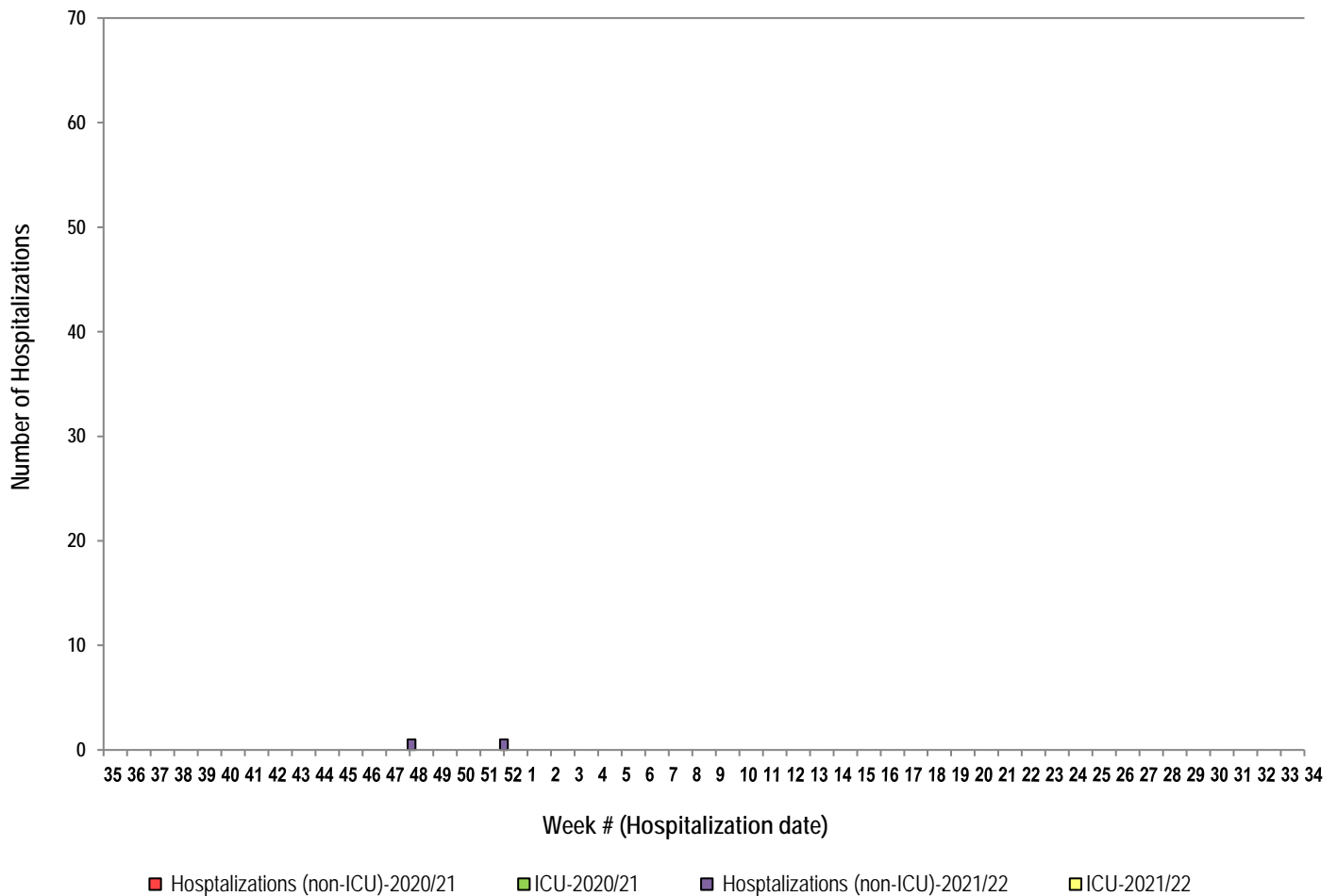


⁴ Two or more ILI cases within a seven-day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

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.