

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: December 12, 2021 to January 1, 2022 (weeks 50-52)

Summary

In New Brunswick, influenza activity remains low in weeks 50 to 52

New Brunswick:

- There have been 12 positive influenza cases in weeks 50-52, all influenza A viruses. Since the beginning of the season, 15 cases have been reported, 14 influenza A (unsubtyped) and 1 influenza B.
- There has been 1 influenza associated hospitalization during weeks 50-52. Since the beginning of the season, 2 hospitalizations have been reported and no deaths.
- The ILI consultation rate was 44.1, 106.4 and 0.0 per 1,000 patients visits for weeks 50-52, respectively. The ILI rate was higher than the expected levels for this time of year in weeks 50 and 51 and was lower than the expected rate for week 52.
- No influenza outbreaks were reported in weeks 50-52. So far this season, no influenza outbreaks have been reported.

Canada:

- For weeks 50 to 52, influenza activity across Canada remains low for this time of year. There continues to be sporadic detections of influenza being reported; however, there remains no evidence of community circulation of influenza.
- Nationally, 158 laboratory detections (146 A & 12 B) of influenza were reported in weeks 50 to 52.
- In week 52, 12,772 participants reported to FluWatchers with 1.5% 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 remain low but continued to increase especially in the temperate zones of the northern hemisphere. In the temperate zones of the northern hemisphere, influenza activity although still low starts to increase. Both influenza A and B were detected. In North America, influenza detections (predominately A(H3N2) among the subtyped) increased but overall remained low. RSV activity decreased in the USA and Canada. In Europe, influenza activity continued to increase. Influenza A(H3N2) predominated. In East Asia, influenza activity continued on an increasing trend, but overall, influenza illness indicators and activity remained low. Influenza B (Victoria) predominated. In the Caribbean and Central American countries, sporadic influenza A and B virus detections as well as elevated RSV activity were reported in some countries. In tropical South America, influenza A(H3N2) detections were reported from Brazil. Elevated RSV activity and SARI levels were reported in some countries. In tropical Africa, influenza activity continued on a decreasing trend after increased activity since September, with both influenza A and B detected. In Southern Asia, the number of influenza virus detections reported continued on a decreasing trend, with influenza A(H3N2) predominating. In South East Asia, after several weeks of no detections, one influenza A (H3N2) detection was reported in the Philippines. In the temperate zones of the southern hemisphere, influenza activity remained low compared to previous seasons. Elevated RSV activity and SARI levels were reported in some countries.

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 January 10, 2022, 2,595,960 cases of COVID-19 infection in Canada have been identified with 30,667 deaths. Twenty thousand eight hundred and ninety cases have been identified in New Brunswick with 175 deaths. As of January 10, the WHO reported globally 305 914 601 confirmed cases and 5 486 304 deaths.

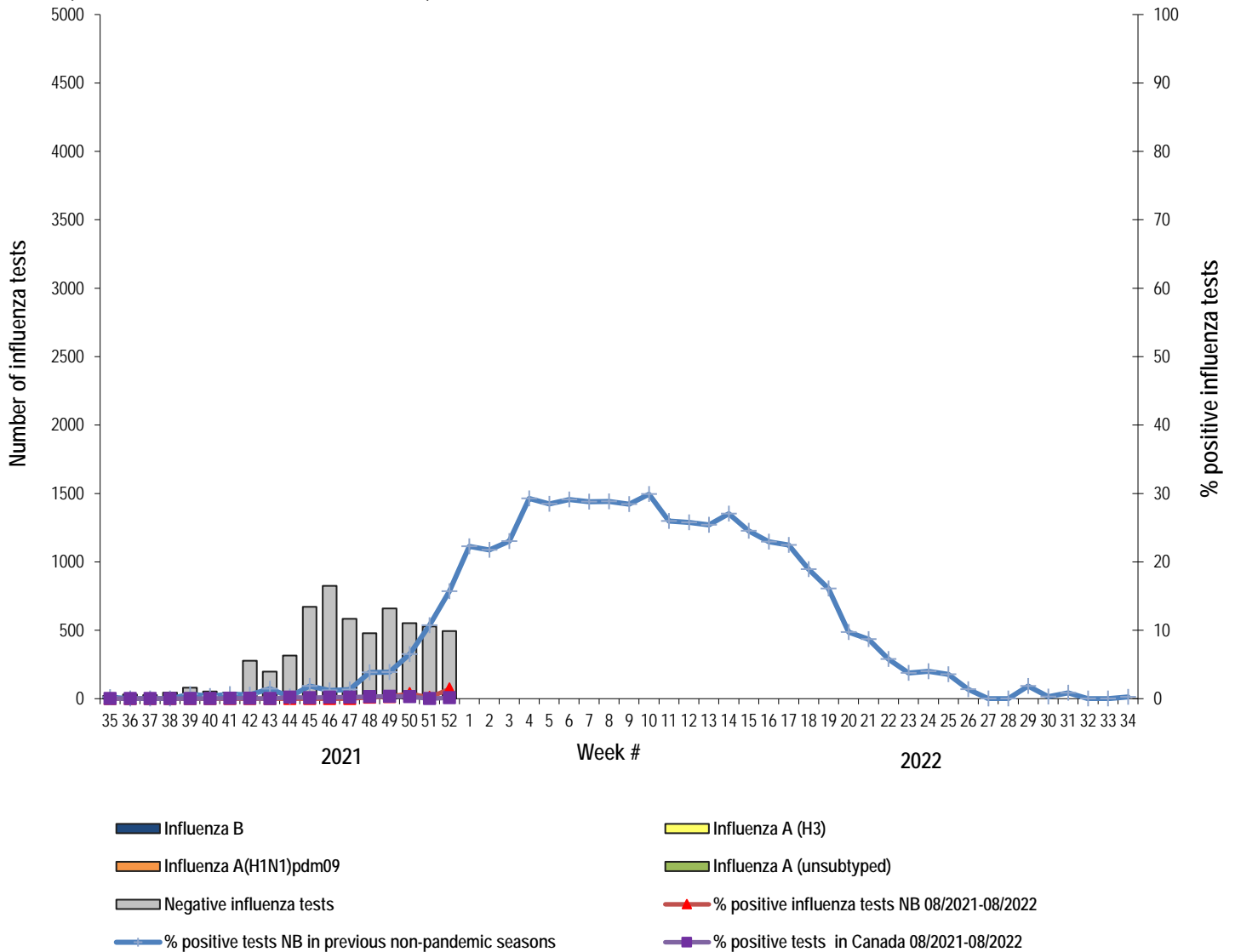
For more timely updates, please visit the following websites:

- 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

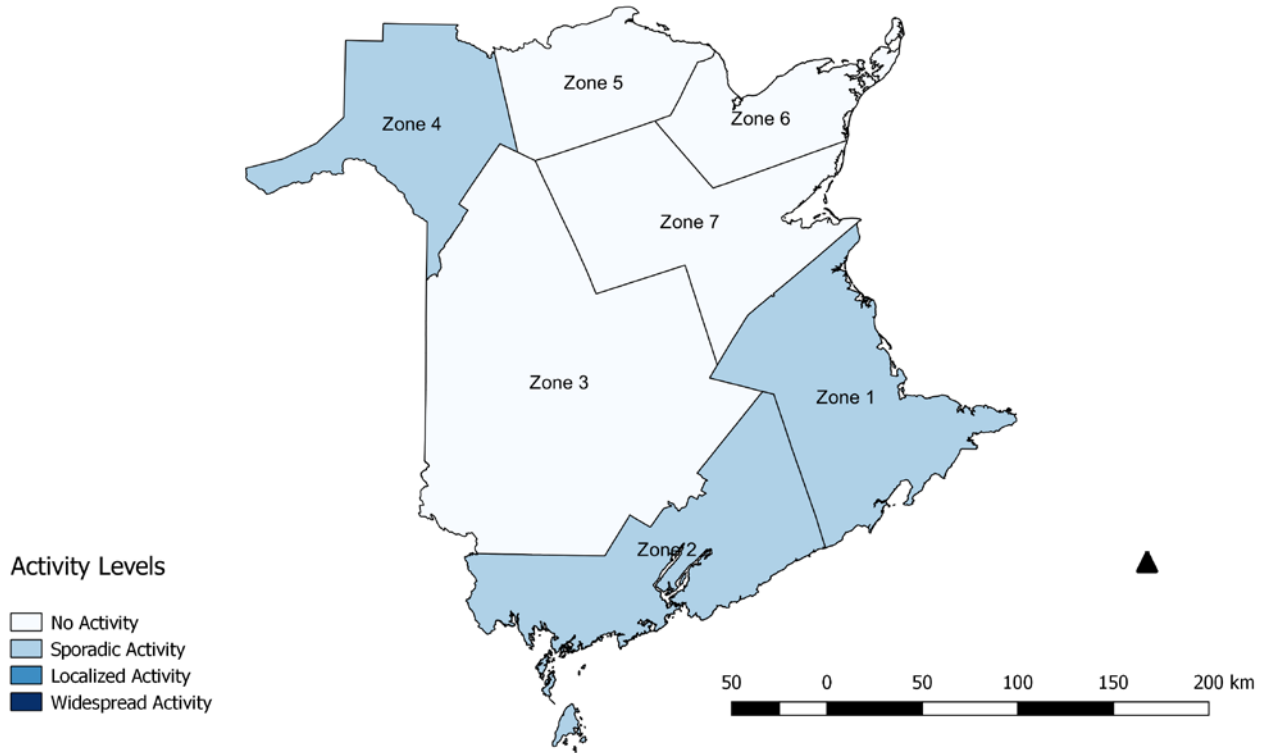
- Influenza activity remains low in weeks 50 to 52.
- Twelve influenza cases were reported during weeks 50 to 52, all influenza A viruses.
- Since the beginning of the season, 15 cases have been reported, 14 influenza A (unsubtyped) and 1 influenza B.

Graph 1: Number and percent of positive influenza specimens in New Brunswick by week, up to January 1, 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 52, 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 1, 2022)

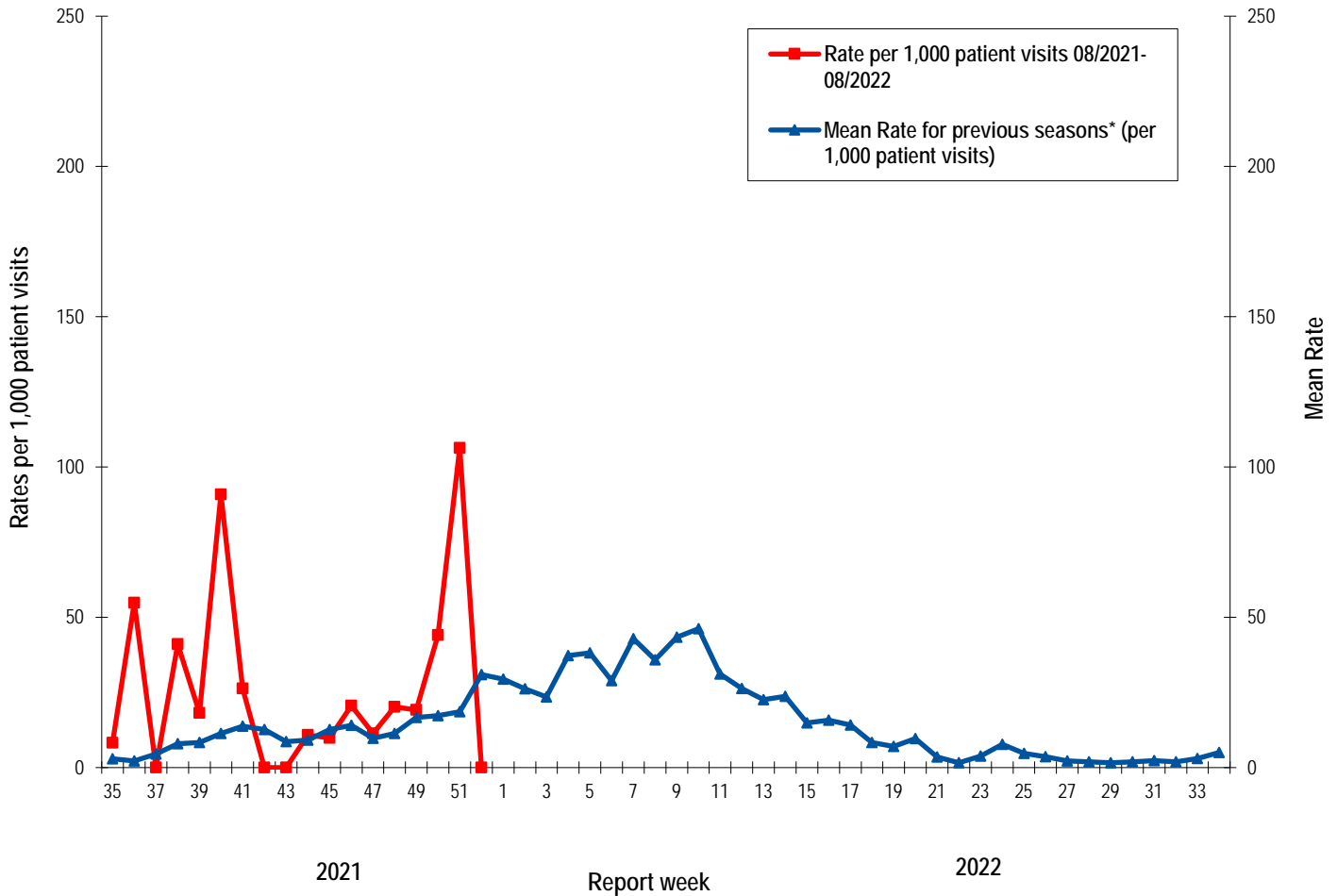
Zone	Reporting period: December/12/2021–January/01/2022						Cumulative: (2021/2022 season) Aug./29/2021 –January/01/2022						Cumulative: (2020/2021 season) Aug./23/2020 –Aug./28/2021						
	A					B	A					B	A					B	A & B co- infectio n
	A(H3)	(H1N1) pdm09	Unsubty ped/ Other	A Total	Total	Total	A(H3)	(H1N1) pdm09	Unsubty ped/ Other	A Total	Total	Total	(H3)	(H1N1) pdm09	Unsubty ped/ Other	A Total	Total	Total	
Zone 1	0	0	3	3	0	0	0	3	3	0	0	0	0	0	0	0	0	1*	0
Zone 2	0	0	3	3	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
Zone 3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Zone 4	0	0	6	6	0	0	0	6	6	0	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	12	12	0	0	0	14	14	1	0	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 44.1, 106.4 and 0.0 per 1,000 patients visits for weeks 50-52, respectively. The ILI rate was higher than the expected levels for this time of year in weeks 50 and 51 and was lower than the expected rate for week 52.
- During weeks 50 to 52, the sentinel response rate was between 0% and 11% 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.

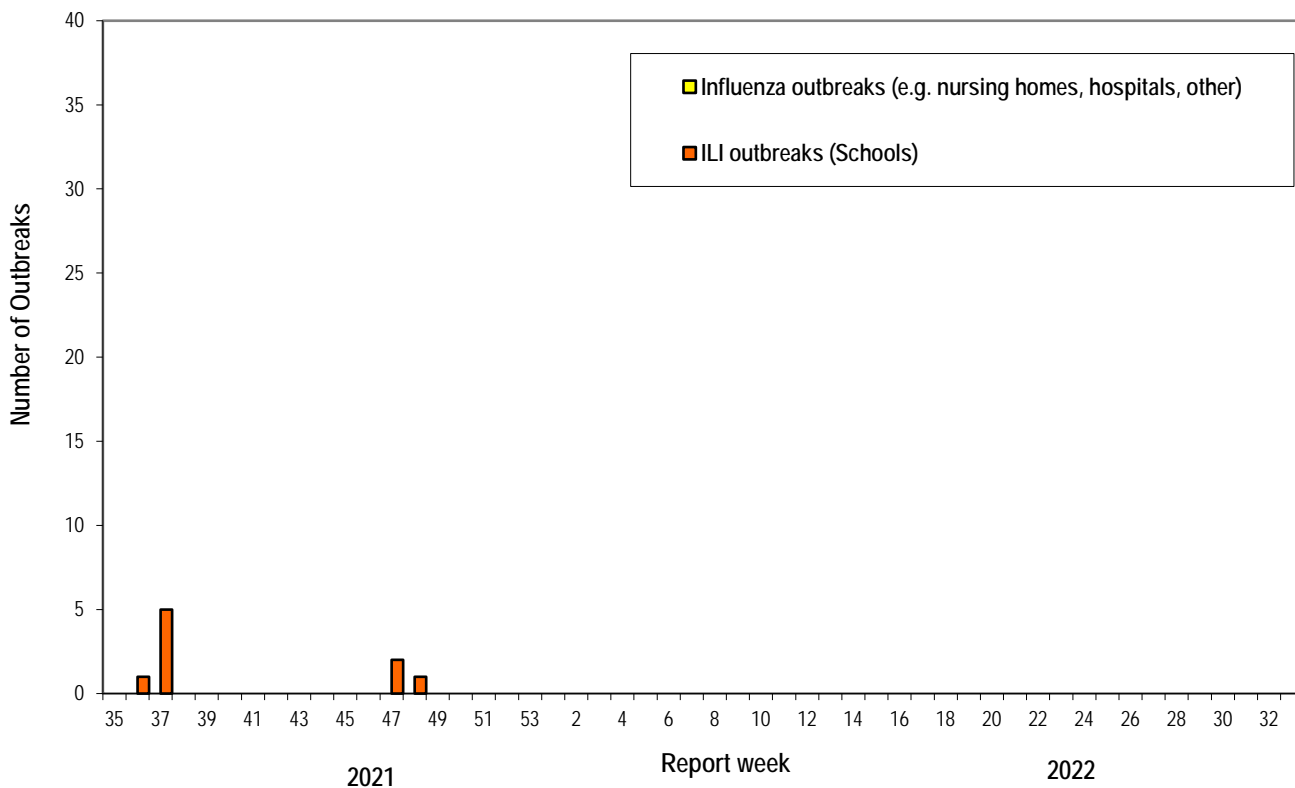
3) ILI and Laboratory-Confirmed Outbreak Data

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

	Reporting period: December/12/2021 to January/01/2022			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	0 out of 74	0	5
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	0 out of 352	0	6*

*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.

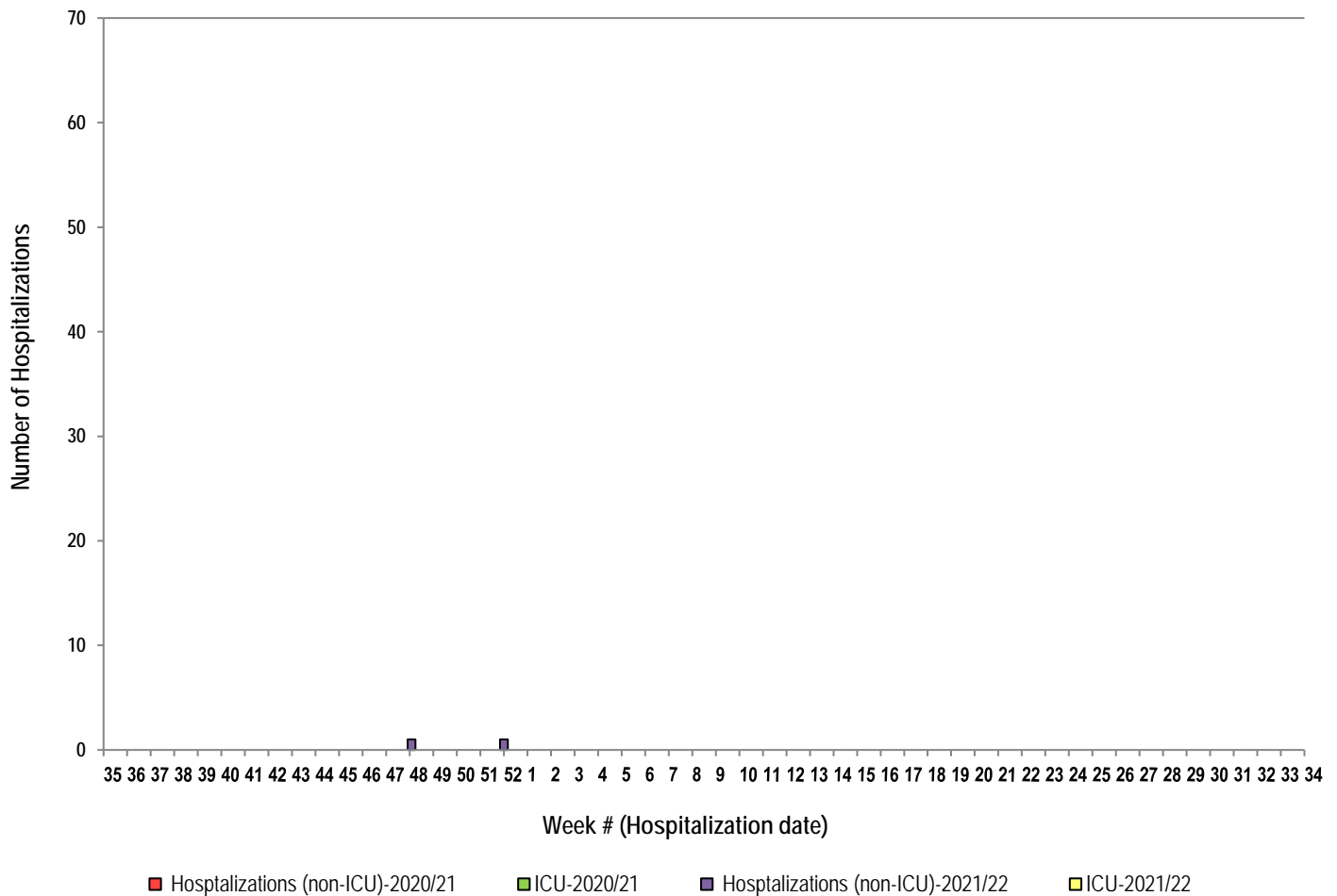


⁴ Two or more ILI cases within a seven-day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

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.