

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: August 23 to September 19 2020 (weeks 35-38)

Summary

In New Brunswick, influenza activity remained at inter-seasonal levels in weeks 35 to 38

New Brunswick:

- There have been no positive influenza cases in weeks 35-38. Since the beginning of the new season, no cases have been reported.
- There has been no new influenza associated hospitalizations during weeks 35-38.
- The ILI consultation rate was 0.0 per 1,000 patients visits for weeks 35 to 37 and 11.5 per 1,000 patients visits for week 38. The ILI rate was within the expected levels for this time of year.
- No new influenza/ILI outbreaks were reported in weeks 35-38. So far this season, no ILI/influenza outbreaks have been reported.

Canada:

- In weeks 35 to 38, exceptionally low levels of influenza activity were reported across Canada.
- During weeks 35 to 38, the percentage of tests positive for influenza (0.05%) remained well below average compared to the past six seasons. The proportion of primary care visits for ILI continued to be lower than average; no outbreaks and no influenza-related hospitalizations were reported.
- Many influenza surveillance indicators may be influenced by the COVID-19 pandemic, including changes in healthcare-seeking behaviour, impacts of public health measures (e.g. social distancing) and testing capacity. Current data should be interpreted with consideration for this context.

International:

Seasonal influenza:

The current influenza surveillance data should be interpreted with caution as the ongoing COVID-19 pandemic might 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 might also have played a role in mitigating influenza virus transmission. Globally, influenza activity was reported at lower levels than expected for this time of the year. In the temperate zones of the southern hemisphere, the influenza season has not commenced. Despite continued or even increased testing for influenza in some countries in the southern hemisphere, very few influenza detections were reported. In the temperate zone of the northern hemisphere, influenza activity remained below inter-seasonal levels. In the Caribbean and Central American countries, no influenza detections were reported. Severe acute respiratory infection (SARI) activity, likely due to COVID-19, appeared to decrease in some reporting countries. In tropical South America, tropical Africa and Southern Asia there were sporadic or no influenza detections across reporting countries. In South East Asia, influenza A(H3N2) virus detections were reported in Cambodia. Worldwide, of the very low numbers of detections reported, seasonal influenza A viruses accounted for the majority of detections.

Emerging Respiratory Viruses:

- COVID-19: On December 31, 2019, a cluster of cases of pneumonia was reported in Wuhan, China, and the cause has been confirmed as a new coronavirus that has not previously been identified in humans (COVID-19). As of September 27, 2020, 153,125 cases of COVID-19 infection in Canada have been identified with 9,268 deaths. Two hundred cases have been identified in New Brunswick with 2 deaths. As of September 28, the WHO reported globally 32,968,853 confirmed cases and 995,836 deaths in 201 countries/territories/areas.

For more timely updates, please visit the following websites:

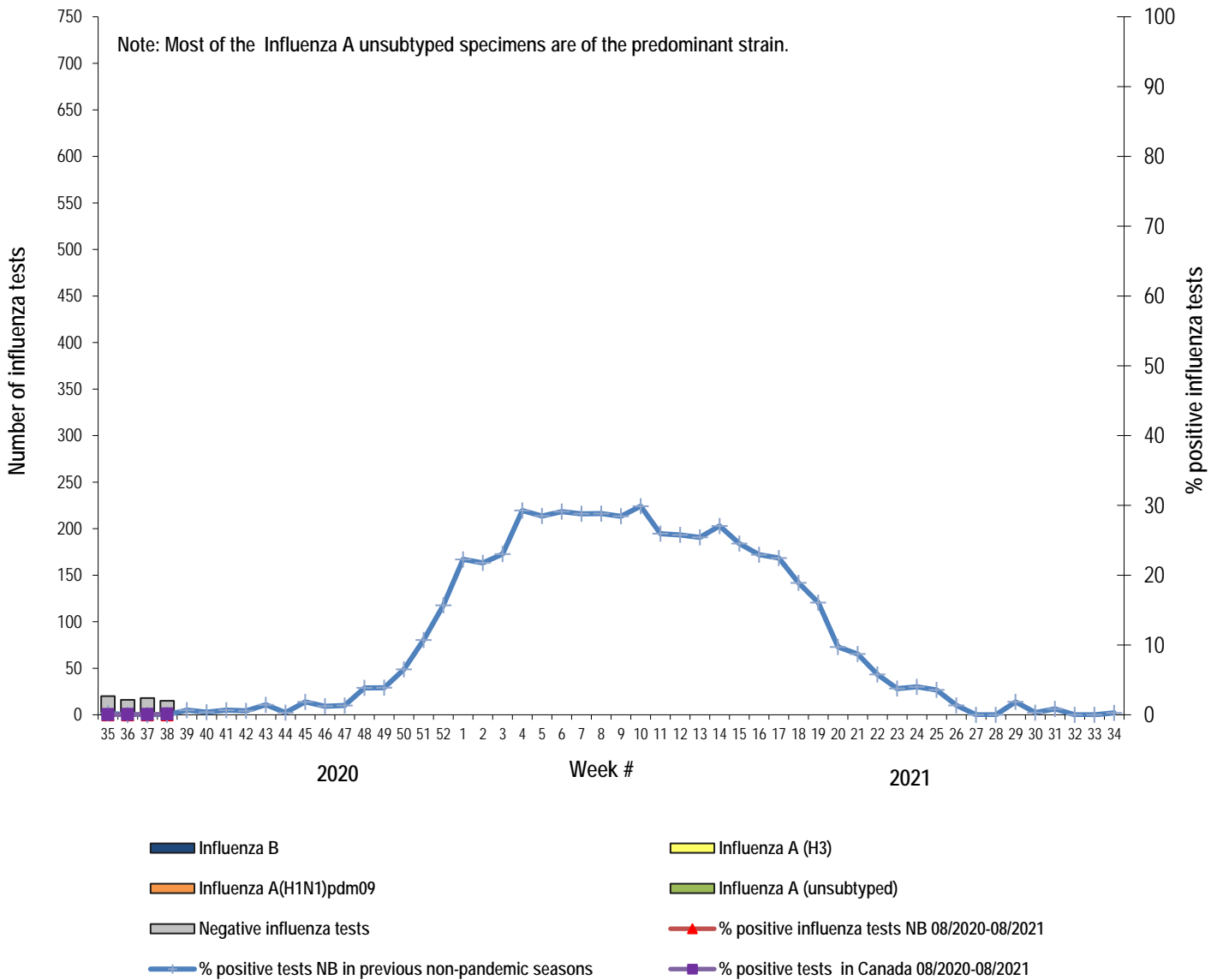
- WHO: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- PHAC: <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html>
- NB : https://www2.gnb.ca/content/gnb/en/departments/ocmoh/cdc/content/respiratory_diseases/coronavirus.html
- MERS CoV:
 - 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

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.

- Influenza activity remained at inter-seasonal levels in weeks 35 to 38.
- No influenza cases were reported during weeks 35-38.
- Since the beginning of the season, no influenza cases have been reported.

Graph 1: Number and percent of positive influenza specimens² in New Brunswick by week, up to September 19, 2020 (data source: G. Dumont Lab results)



² Total number of positive influenza tests is higher than number of cases since some individuals had co-infection of A & B simultaneously.

Figure 2: Influenza/ILI activity levels³ by Health Zones, in New Brunswick, for week 38, season 2020/2021.



³ 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.

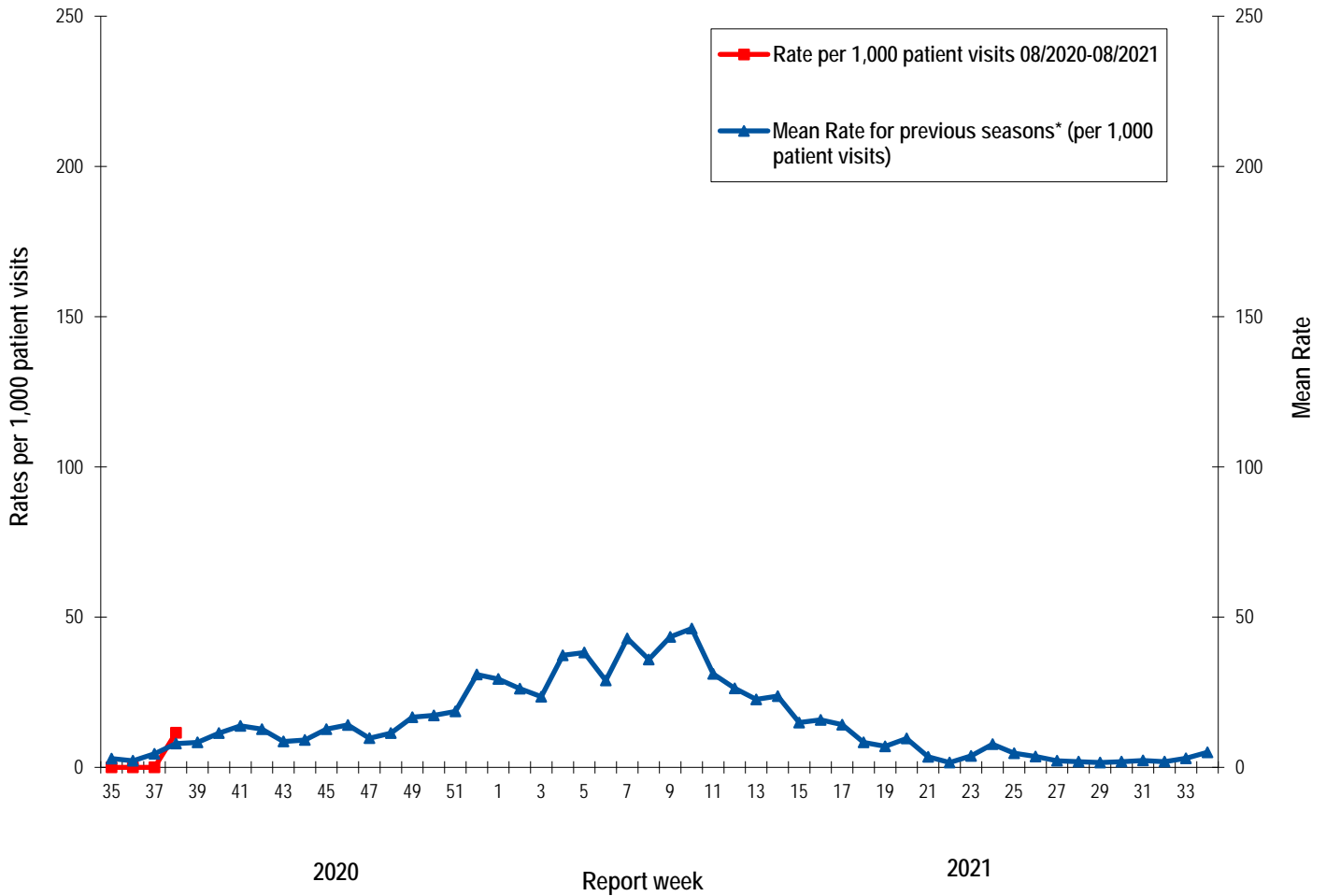
Table 1: Positive influenza cases by Health Region, in New Brunswick for reporting week, cumulative current and previous seasons.
 (data source: G. Dumont lab results up to September 19, 2020)

Zone	Reporting period: August/23/2020–September/19/2020						Cumulative: (2020/2021 season) Aug./23/2020 –September/19/2020						Cumulative: (2019/2020 season) Aug./25/2019 –Aug./22/2020								
	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	0	0	0	0	0	0	0	0	0	0	0	0	9	28	324	361	665	3			
Zone 2	0	0	0	0	0	0	0	0	0	0	0	0	3	11	121	135	96	2			
Zone 3	0	0	0	0	0	0	0	0	0	0	0	0	1	8	102	111	188	5			
Zone 4	0	0	0	0	0	0	0	0	0	0	0	0	1	7	43	51	212	1			
Zone 5	0	0	0	0	0	0	0	0	0	0	0	0	10	5	85	100	17	1			
Zone 6	0	0	0	0	0	0	0	0	0	0	0	0	6	7	120	133	98	1			
Zone 7	0	0	0	0	0	0	0	0	0	0	0	0	0	3	65	68	103	0			
Total NB	0	0	0	0	0	0	0	0	0	0	0	0	30	69	860	959	1379	13			

2) ILI Consultation Rates⁴

- For weeks 35-37, the ILI consultation rate was 0.0 consultations per 1,000 patients visits and was 11.5 consultations per 1,000 patient visits for week 38. The ILI rate was within the expected levels for this time of year.
- During weeks 35-38, the sentinel response rate ranged between 21% and 32% for both the FluWatch sentinel physicians and the NB SPIN practitioners.

Graph 2: ILI Consultation Rates in New Brunswick, by report week, season 2020/21 compared to previous seasons*



* The mean rate was based on data from the 1996/97 to 2019/2020 seasons and excludes the Pandemic season (2009/10).

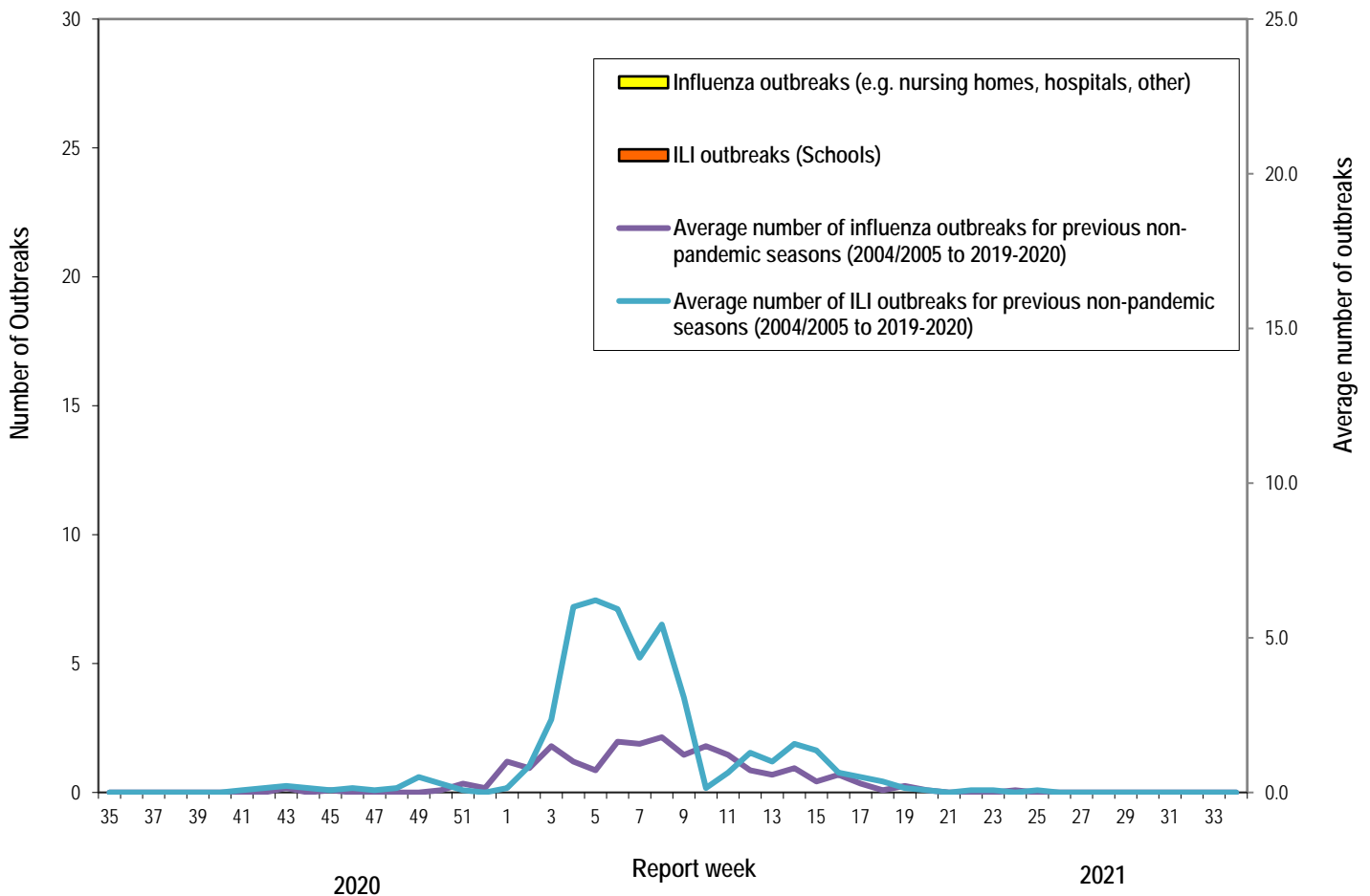
⁴ A total of 28 practitioner sites (16 FluWatch sentinel physicians and 12 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

3) ILI and Laboratory-Confirmed Outbreak Data

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

	Reporting period: August/23/2020 to September/19/2020			Cumulative # of outbreaks season 2020-2021	Cumulative # of outbreaks season 2019-2020
	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	0	13
Zone 2	0 out of 16	0 out of 81	0	0	15
Zone 3	0 out of 16	0 out of 95	0	0	27
Zone 4	0 out of 5	0 out of 22	0	0	10
Zone 5	0 out of 2	0 out of 18	0	0	3
Zone 6	0 out of 9	0 out of 35	0	0	8
Zone 7	0 out of 5	0 out of 27	0	0	12
Total NB	0 out of 68	0 out of 352	0	0	88

Graph 3: Number of Influenza Outbreaks (nursing homes, hospitals, other) and ILI Outbreaks (schools) reported to Public Health in New Brunswick, by report week, season 2020/21.

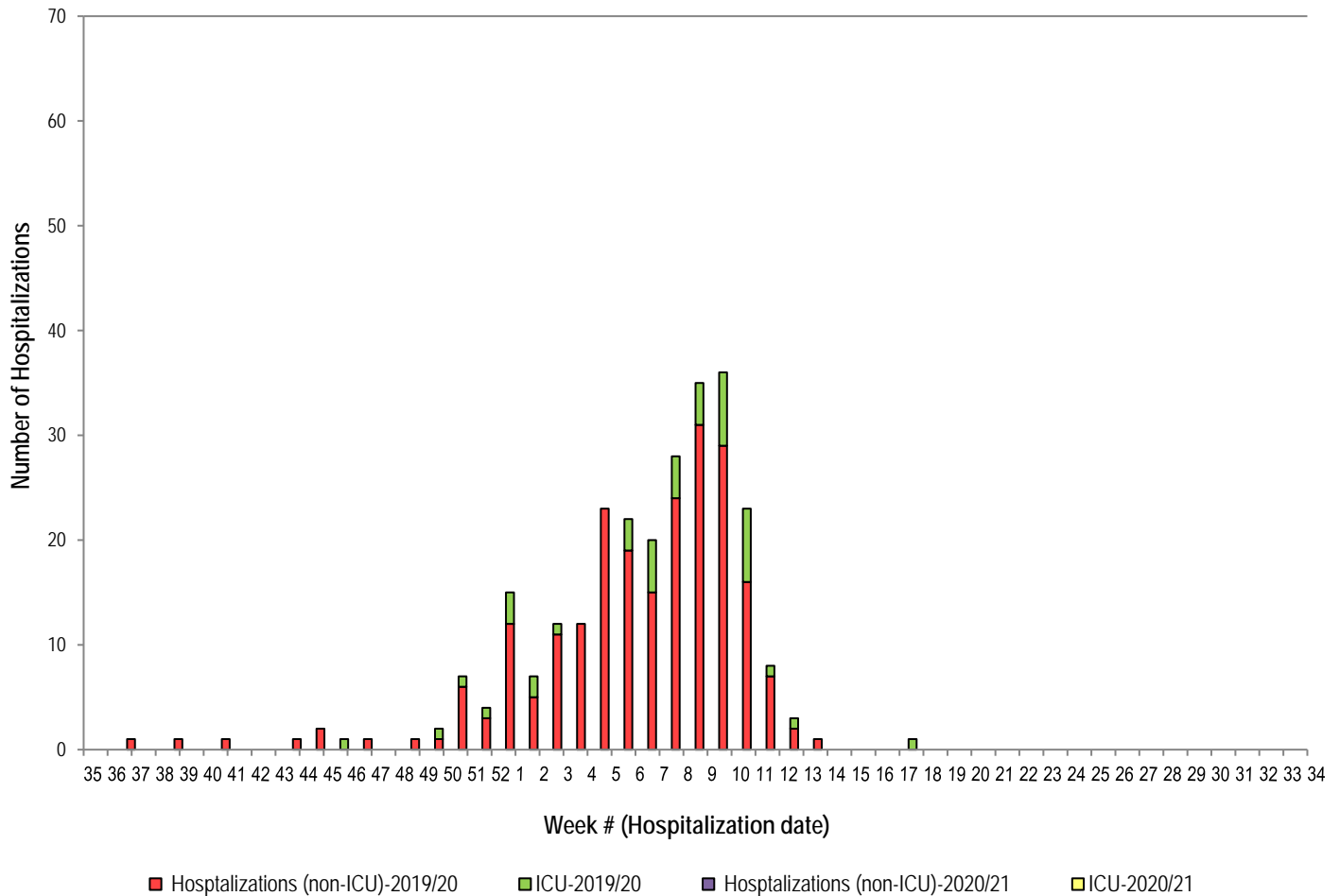


⁵ Two or more ILI cases within a seven day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

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.*



*Those who had been hospitalized 15 days or more prior to laboratory confirmation date were excluded from the graph

**No deaths have been reported so far in season 2020-2021.

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: http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html

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.