Respiratory Watch

REPORTING PERIOD: OCTOBER 1^{ST} TO OCTOBER 7^{TH} , 2023 (WEEK 40)



SUMMARY^{1,2,3}

Four influenza cases have been reported this season; two new cases were reported in week 40, both influenza A. COVID-19 activity remains moderate; however, increases were observed for a few indicators throughout the current reporting period.

COVID-19

- There were 133 confirmed COVID-19 cases reported in week 40. Percent positivity remained stable (14%).
- There were 57 hospitalizations (increase from previous week) with 7 ICU admissions.
- Two deaths were reported in week 40.
- A total of 20 lab-confirmed outbreaks were declared, an increase from the previous week.

INFLUENZA

- Two influenza A cases were reported in week 40.
- No hospitalizations or deaths were reported in week 40.
- The ILI consultation rate was 54.1 per 1,000 persons.
- One new ILI school outbreak was reported in week 40.

¹ Numbers in this report are subject to change due to reporting delays. Missed events will be captured in subsequent reports as data become available.

² Refer to Appendix for case definitions.

³ For this report, respiratory viruses include COVID-19 and influenza.

INDICATORS

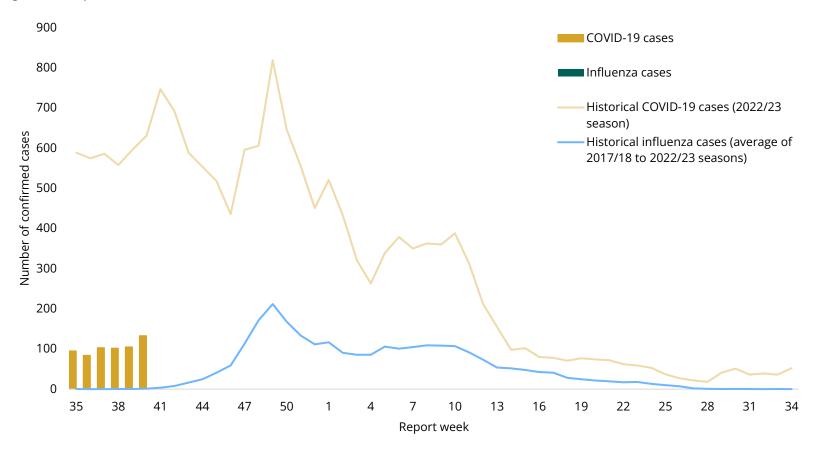
Table 1: Summary of indicators by report week, August 27 to October 7th, 2023

Report Week	COVID-19				Influenza					
	Percent Positivity %	Hospitaliz ations	ICU	Deaths	Outbreaks	Percent Positivity %	Hospitaliza tions	ICU	Deaths	Outbreaks
Week 40	14	57	7	2	20	<1	0	0	0	0
Respiratory season total	14	297	21	11	78	<1	0	0	0	0

- Hospitalizations and admissions to ICU reported based on admission date or if patient is hospitalized prior to confirmed test result, the test result date is used.
- Deaths reported based on the date of death.
- Outbreaks category includes lab-confirmed outbreaks, which are reported based on the date that the outbreak was declared.

LABORATORY DATA

Figure 1: Number of confirmed cases by disease and report week, August 27 to October 7th, 2023 (Source: New Brunswick Regional Hospitals)



- Laboratory confirmed cases are reported for the week when the laboratory confirmation was received.
- Historical influenza excludes pandemic season 2020-21.
- Historical COVID-19 only includes season 2022-23 due to the changing testing strategies that occurred in years prior.

Figure 2: Number of tests conducted and percent positivity for influenza by report week, August 27 to October 7th, 2023 (Source: New Brunswick Regional Hospitals)

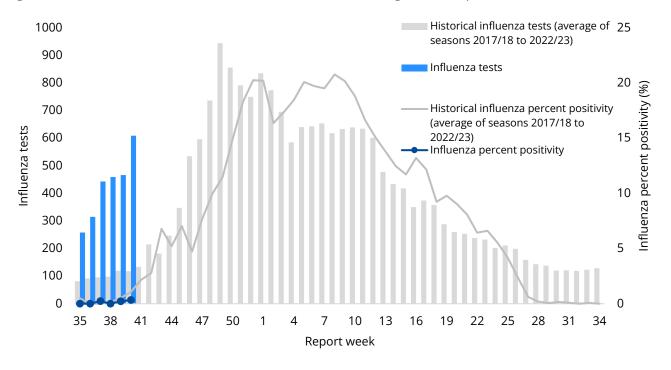
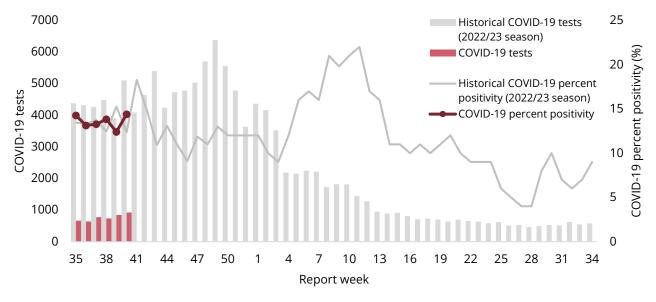


Figure 3: Number of tests conducted and percent positivity for COVID-19 by report week, August 27 to October 7th, 2023 (Source: New Brunswick Regional Hospitals)



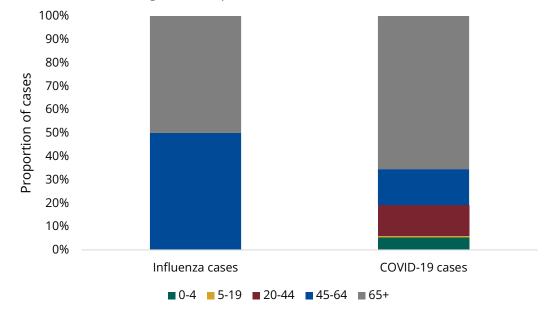
- Laboratory confirmed cases are reported for the week when the laboratory confirmation was received.
- Laboratory tests are reported for the week when the specimen was collected.
- Historical influenza excludes pandemic season 2020-21.
- Historical COVID-19 only includes season 2022-23 due to the changing testing strategies that occurred in years prior.

Table 2: Confirmed cases and percent positivity by region and disease, August 27 to October 7th, 2023 (Source: New Brunswick Regional Hospitals)

	COVI	ID-19	Influenza		
Region	Cases	Percent positivity %	Cases	Percent positivity %	
1	198 (30)	14 (11)	0 (0)	0 (0)	
2	148 (33)	18 (17)	1 (1)	<1 (<1)	
3	119 (47)	10 (17)	1 (1)	<1 (<1)	
4	35 (12)	12 (18)	0 (0)	0 (0)	
5	19 (2)	15 (8)	1 (0)	5 (0)	
6	72 (5)	17 (10)	1 (0)	4 (0)	
7	31 (4)	12 (10)	0 (0)	0 (0)	
Respiratory season total	622 (133)	14 (14)	4 (2)	<1 (<1)	

- Region assigned from laboratory data based on address of the case.
- Number in brackets refers to the count for the current reporting period.

Figure 4: Confirmed cases by age group and disease, August 27 to October 7th, 2023 (Source: New Brunswick Regional Hospitals)

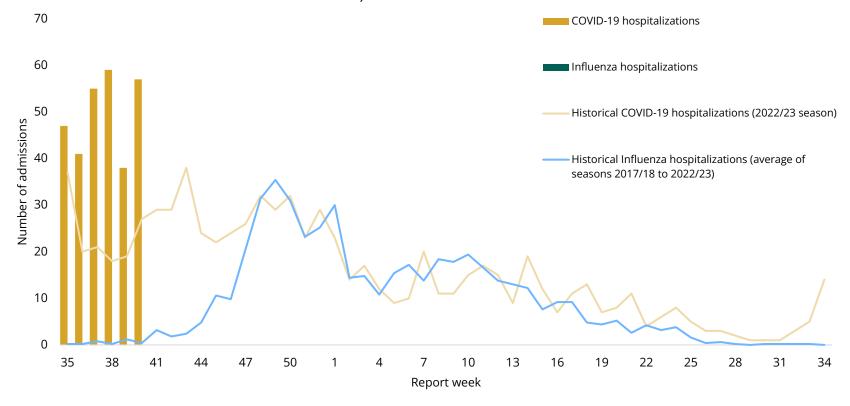


Notes:

• Age group is determined by age associated with confirmed test result.

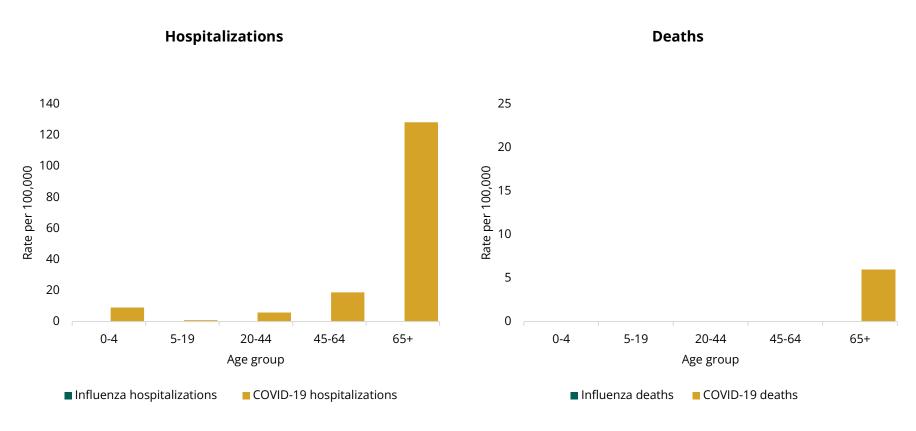
HOSPITALIZATION AND DEATH DATA

Figure 5: Number of COVID-19 and influenza hospitalizations by week of admission, August 27 to October 7th, 2023 (Source: Horizon Health Network and Réseau de Santé Vitalité)



- Hospitalizations includes non-ICU and ICU admissions.
- Hospitalizations based on admission date or if patient is hospitalized prior to confirmed test result, the test result date is used.
- Historical influenza excludes pandemic 2020-21 season.
- Historical COVID-19 only includes season 2022-23 due to the changing testing strategies that occurred in years prior.
- Historical COVID-19 only includes hospitalizations for COVID-19, as per the reason for admission.

Figure 6: Rate per 100,000 COVID-19 and influenza hospitalizations and deaths by age group, August 27 to October 7th, 2023 (Source: Horizon Health Network and Réseau de Santé Vitalité)



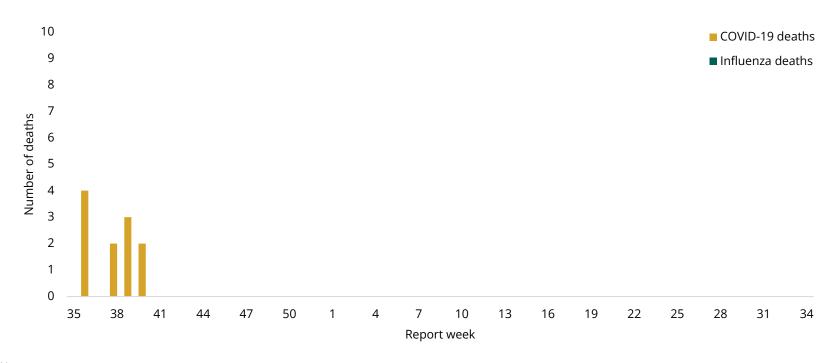
- Hospitalizations includes non-ICU and ICU admissions.
- Age group is determined by age associated with confirmed test result.
- Population estimates from Statistics Canada 2022 Census of Population.

Table 3: Number of COVID-19 and influenza hospitalizations by age group, August 27 to October 7th, 2023 (Source: Horizon Health Network and Réseau de Santé Vitalité)

Age group		COVID-19		Influenza			
	Hospitalizations	ICU	Death	Hospitalizations	ICU	Death	
0-4	3 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
5-19	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
20-44	14 (4)	2 (1)	0 (0)	0 (0)	0 (0)	0 (0)	
45-64	43 (6)	3 (1)	0 (0)	0 (0)	0 (0)	0 (0)	
65+	236 (47)	16 (5)	11 (2)	0 (0)	0 (0)	0 (0)	
Total	297 (57)	21 (7)	11 (2)	0 (0)	0 (0)	0 (0)	

- Hospitalizations includes non-ICU and ICU admissions.
- Age group is determined by age associated with confirmed test result.
- ICU status noted at time of admission.
- Number in brackets refers to the count for the current reporting period.

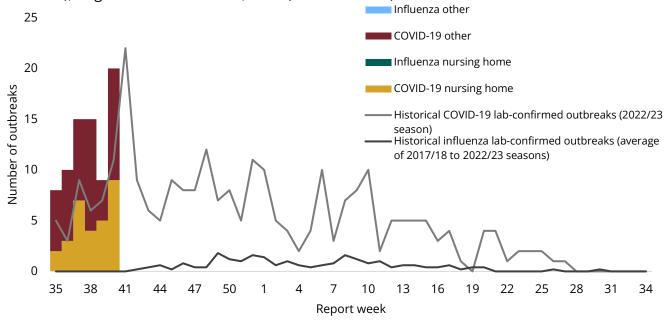
Figure 7: Number of COVID-19 and influenza deaths by date of death, August 27 to October 7th, 2023 (Source: Horizon Health Network and Réseau de Santé Vitalité)



• Deaths reported based on the date of death.

OUTBREAKS

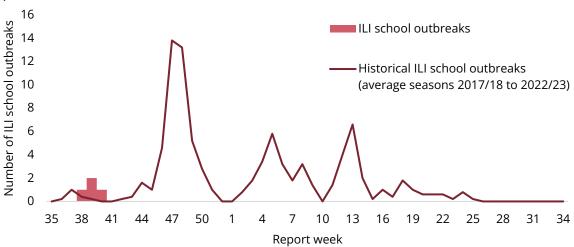
Figure 8: Number of lab-confirmed outbreaks by disease and report week (date of declaration), August 27 to October 7th, 2023 (Source: CNPHI)



Notes

- Outbreaks are reported based on their date of declaration.
- Historical influenza excludes pandemic 2020-21 season.
- Other includes lab-confirmed outbreaks outside nursing home.
- The types and numbers of facilities that report lab-confirmed outbreaks may differ each season.

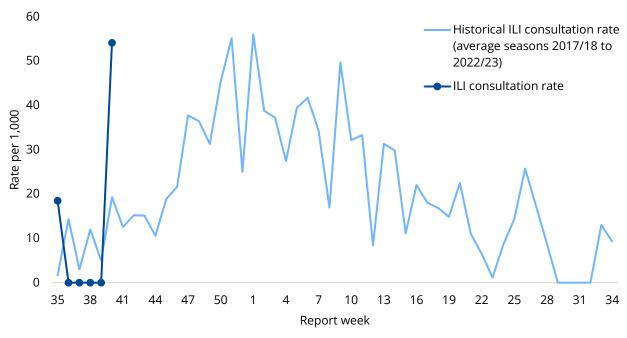
Figure 9: Number of ILI school outbreaks received, August 27 to October 7th, 2023 (Source: CNPHI)



- School outbreaks based on 10% absenteeism in school due to ILI symptoms.
- Historical ILI excludes pandemic 2020-21 season.

SENTINEL SURVEILLANCE

Figure 10 : ILI consultation rates by report week, August 27 to October 7^{th} , 2023 (NB SPRN sites)



- A total of 23 sites were registered this season to report on the number of ILI patients and total patient consultations one day during a reporting week.
- The sentinel response rate was 9% for the NB SPRN.
- Historical ILI consultation rates exclude the pandemic season 2020-21.

NATIONAL AND INTERNATIONAL ACTIVITY

For current national influenza activity, please refer to the National FluWatch Report at: http://www.phac-aspc.gc.ca/fluwatch/.

For current national COVID activity, please refer to the COVID-19 epidemiology update at: COVID-19 epidemiology update: Summary — Canada.ca.

Influenza:

WHO, Global Influenza Program: https://www.who.int/teams/global-influenza-
<a href="programme/surveillance-and-monitoring/influenza-updates/current-influenza-updates/cu

Europe, influenza update: https://www.ecdc.europa.eu/en/seasonal-influenza/surveillance-reports-and-disease-data

PAHO, influenza activity: https://www.paho.org/en/influenza-situation-report

United States, influenza update: www.cdc.gov/flu/weekly/

Australia, influenza update: https://www.health.gov.au/our-work/influenza-surveillance-program

COVID-19:

WHO, COVID-19: https://www.who.int/emergencies/diseases/novel-coronavirus-2019

Europe, COVID-19 update: https://www.ecdc.europa.eu/en/covid-19/situation-updates

PAHO, COVID activity: https://www.paho.org/en/topics/coronavirus-infections/coronavirus-disease-covid-19-pandemic

United States, COVID data tracker: https://covid.cdc.gov/covid-data-tracker/#datatracker-home

Australia, COVID update: https://www.health.gov.au/health-alerts/covid-19/case-numbers-and-statistics?language=en

Human Emerging Respiratory Pathogens:

COVID, Novel Influenza, MERS-CoV: https://www.canada.ca/en/public-health/services/surveillance/human-emerging-respiratory-pathogens-bulletin.html

MERS-CoV: WHO EMRO | MERS outbreaks | MERS-CoV | Health topics

Appendix A: Case definitions

COVID-19 case: The detection of at least on specific gene target by a validated laboratory based NAAT assay performed at a recognized laboratory OR a validated point-of-care NAAT that has been deemed acceptable to provide a final result by the Government of New Brunswick OR a four-fold or great seroconversion/diagnostic rise in viral specific antibody titre in serum or plasma using a validated laboratory-based serological-based serological assay for SARS-CoV-2.

Influenza case: Clinical illness with laboratory confirmation of infection: isolation of influenza virus from an appropriate clinical specimen (NP, throat/Nose) or demonstration of influenza virus antigen in an appropriate clinical specimen or significant rise (e.g. fourfold or greater) in influenza IgG titre between acute and convalescent sera or detection of influenza RNA.

Influenza-like illness (ILI): Acute onset of respiratory illness with fever and cough and with one or more of the following - sore throat, arthralgia, myalgia, or prostration which is likely due to influenza. In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent.

Deceased case: A confirmed case who was admitted to hospital and whose death occurred during their stay. A death due to COVID-19 or influenza does not mean that it was necessarily the primary or contributing factor to the cause of death.

Hospitalization: Admission to hospital with a laboratory confirmation of a respiratory disease within 14 days prior to or upon admission OR a laboratory confirmation of a respiratory disease during their stay.

ICU admission: Admission to ICU with a laboratory confirmation of a respiratory disease within 14 days prior to or upon admission OR a laboratory confirmation of a respiratory disease during their stay.

COVID-19 outbreak: An outbreak in a vulnerable setting may be declared by the MOH, typically when there are two or more positive cases among residents or staff with an epidemiological link within 10 days.

Influenza outbreak: An outbreak in a vulnerable setting may be declared by the MOH, typically when there are two or more positive cases among residents or staff with an epidemiological link within 7 days.

Appendix B: Data sources

Admission discharge transfer database

- Data are extracted weekly.
- Data shown in this report represent available data at the time of extraction.
- Missed events will be captured in subsequent reports as data become available.
- Data includes patients with a positive laboratory result and a health card number.

Provincial Public Health Laboratory Information System

- Data are extracted weekly.
- Data shown in this report represent available data at the time of extraction.
- Missed events will be captured in subsequent reports as data become available.

Respiratory Watch: Week 40

Appendix C: Breakdown of influenza cases by strain and age group.

Figure 11: Influenza cases by report week and strain, August 27 to October 7th, 2023

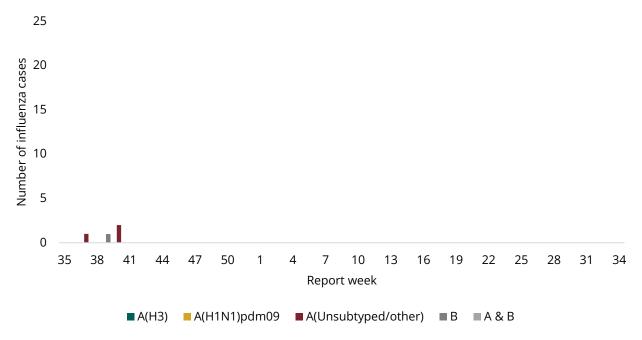


Table 4: Influenza hospitalizations by strain and age group, August 27 to October 7th, 2023

Age Group		Influe	Influenza B	Co- infection		
	A(H3)	A(H1N1)pd m09	Unsubtyped /other	A Total	B Total	A & B Total
0-4	0	0	0	0	0	0
5-19	0	0	0	0	0	0
20-64	0	0	2	0	0	0
65+	0	0	1	0	1	0
Total	0	0	3	0	1	0