Respiratory Watch

REPORTING PERIOD:
DECEMBER 8 TO DECEMBER 14, 2024
(WEEK 50)

Department of Health

New Nouveau Brunswick

The next Respiratory Watch report will be published on January 7, 2025.

SUMMARY[1,2,3]

Two-hundred and thirty-one RSV cases and two-hundred and twenty-five influenza cases have been reported so far this season. COVID-19 activity is moderate; most indicators remained stable throughout the current reporting period.

COVID-19

- There were 57 confirmed COVID-19 cases reported during week 50. Percent positivity remained stable in week 50 (6%).
- There were 14 hospitalizations with 1 ICU admission during week 50.
- Seven deaths were reported during week 50.
- A total of 3 lab-confirmed outbreaks were declared (1 in a nursing home and 2 in other facilities).

INFLUENZA

- Sixty-five influenza A cases (62 A (unsubtyped) and 3 A (H1N1 pdm09)) and 4 influenza B were reported in week 50.
- There were 10 hospitalizations and 0 ICU admission reported during week 50.
- No deaths were reported during week 50.
- The ILI consultation rate was 74.1 per 1,000 persons in week 50.
- Two lab-confirmed influenza outbreak (1 in a nursing home and 1 in other facilities) and 4 ILI school outbreaks were reported during week 50.

RSV

- Seventy-four RSV cases were reported during week 50.
- One hospitalization and 0 ICU admission were reported during week 50.
- No deaths were reported during week 50.
- No lab-confirmed outbreaks were declared during week 50.

[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, influenza and RSV.

INDICATORS

Table 1: Summary of indicators by report week, August 25 to December 14, 2024

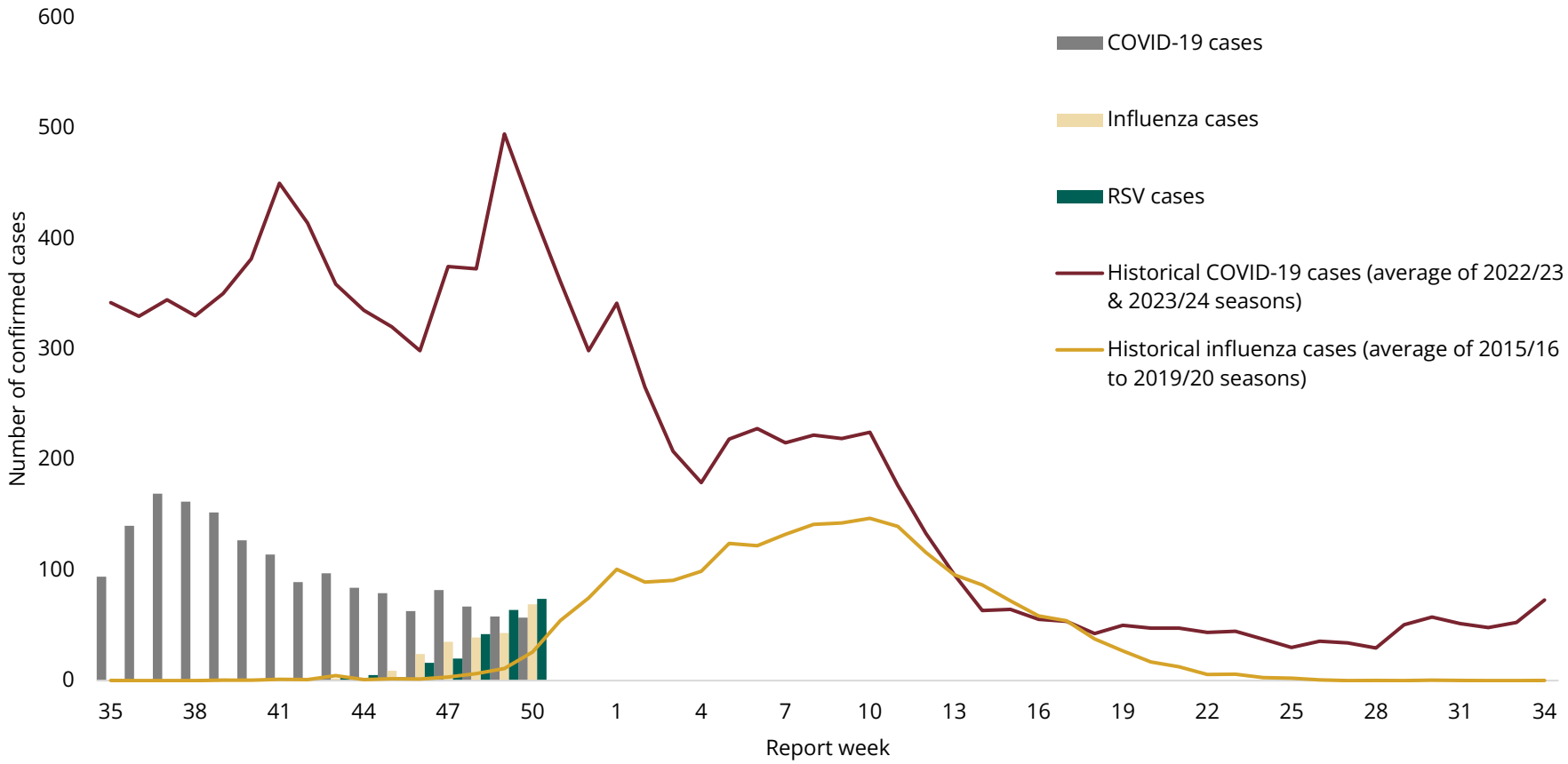
		Percent Positivity %	Hospitalizations	ICU	Deaths	Outbreaks
COVID-19	**Week 50**	6	14	1	7	3
	Respiratory season total	11	622	44	50	162
Influenza	**Week 50**	6	10	0	0	2
	Respiratory season total	2	24	1	0	2
RSV	**Week 50**	6	1	0	0	0
	Respiratory season total	2	5	0	0	0

Notes:

- 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 25 to December 14, 2024 (Source: New Brunswick Regional Hospitals)



Notes:

- Laboratory confirmed cases are reported for the week when the laboratory confirmation was received.
- Historical influenza excludes season 2020-21 and onward due to the COVID pandemic.
- Historical COVID-19 includes season 2022-23 & 2023-24 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 25 to December 14, 2024 (Source: New Brunswick Regional Hospitals)

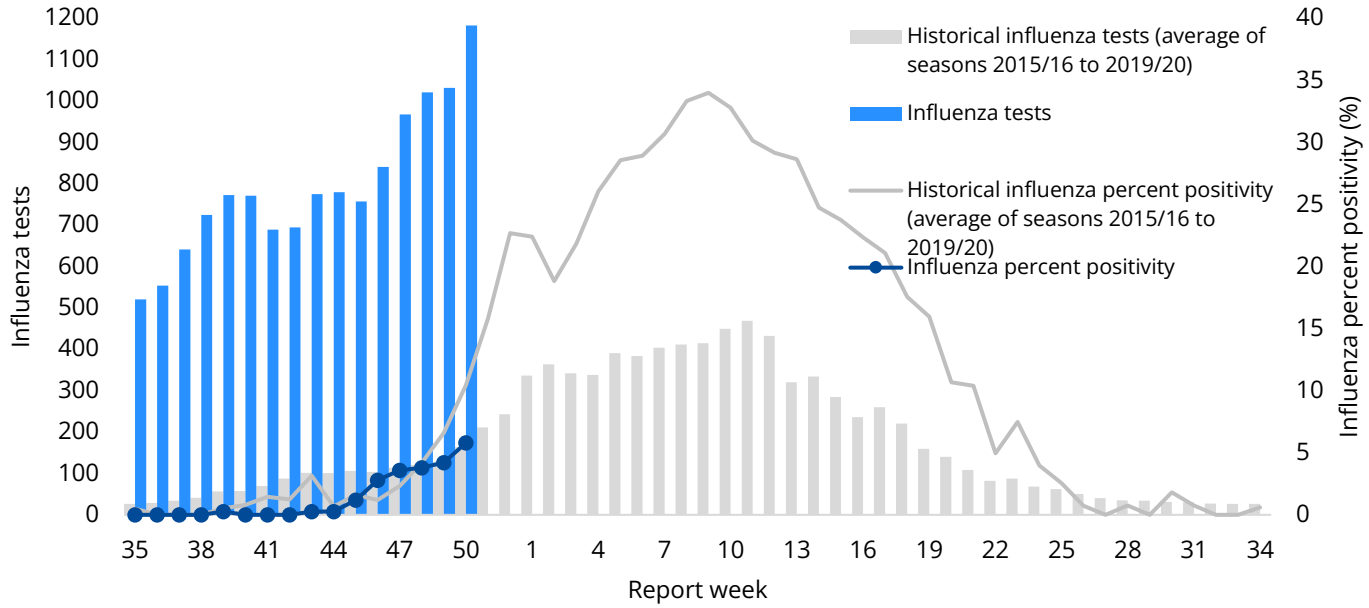
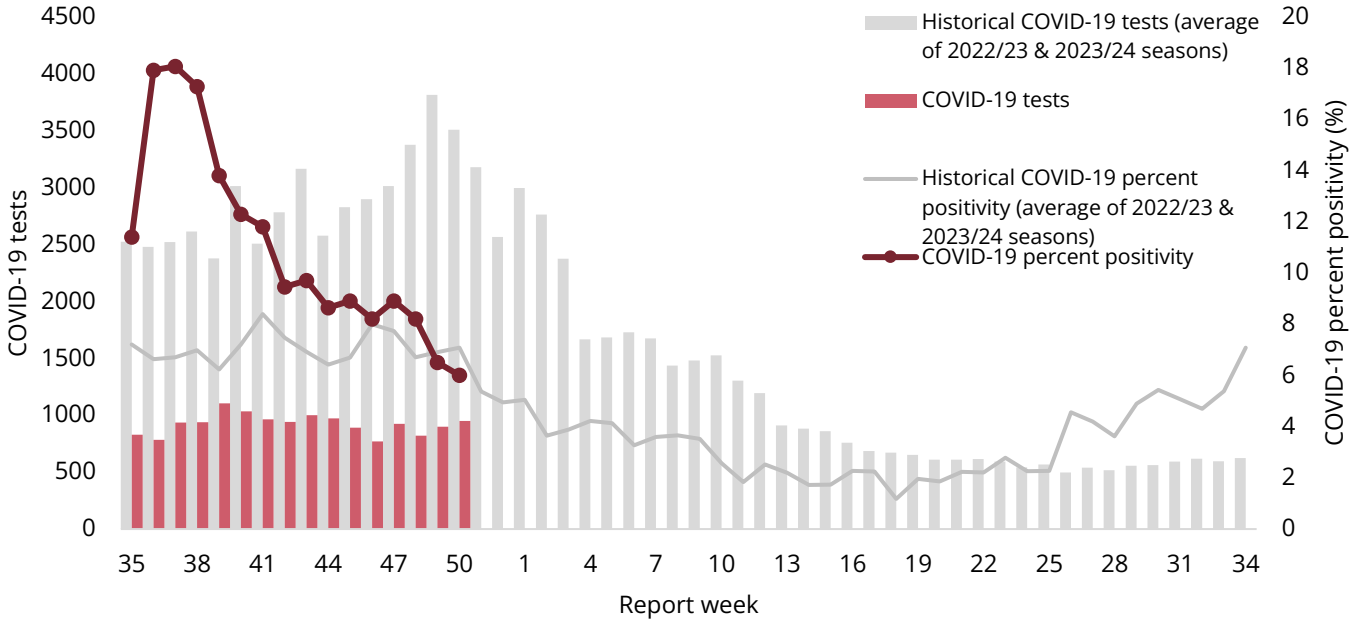


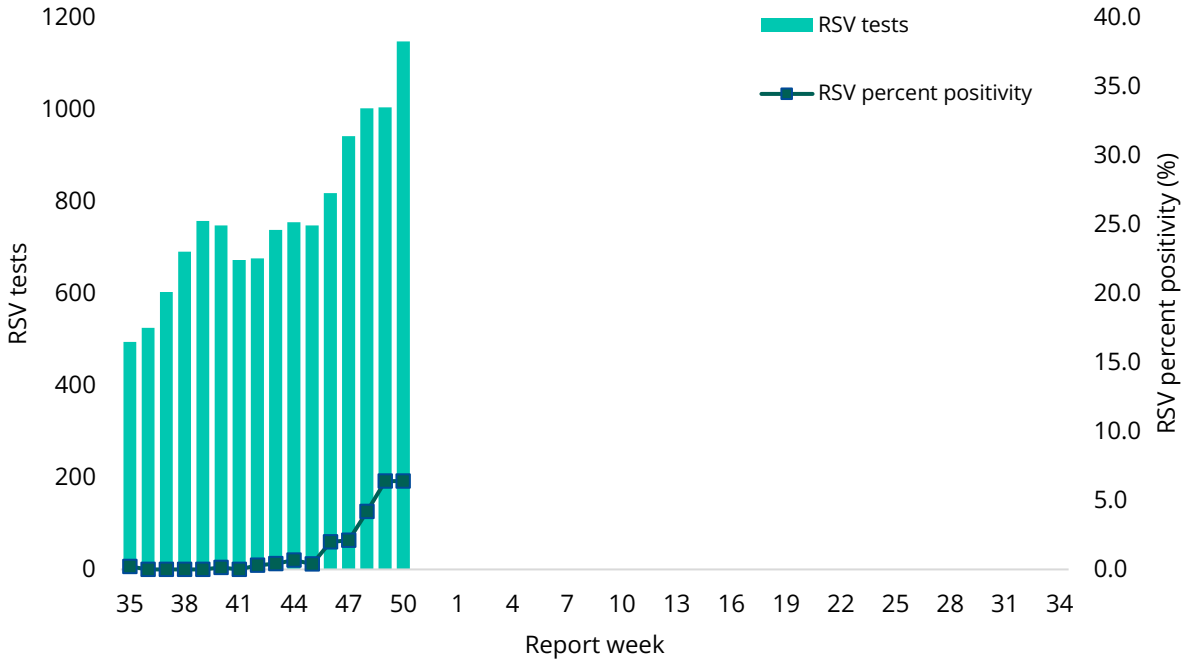
Figure 3: Number of tests conducted and percent positivity for COVID-19 by report week, August 25 to December 14, 2024 (Source: New Brunswick Regional Hospitals)



Notes:

- 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 season 2020-21 and onward due to the COVID pandemic.
- Historical COVID-19 includes season 2022-23 & 2023-24 due to the changing testing strategies that occurred in years prior.

Figure 4: Number of tests conducted and percent positivity for RSV by report week, August 25 to December 14, 2024 (Source: New Brunswick Regional Hospitals)



Notes:

- 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.

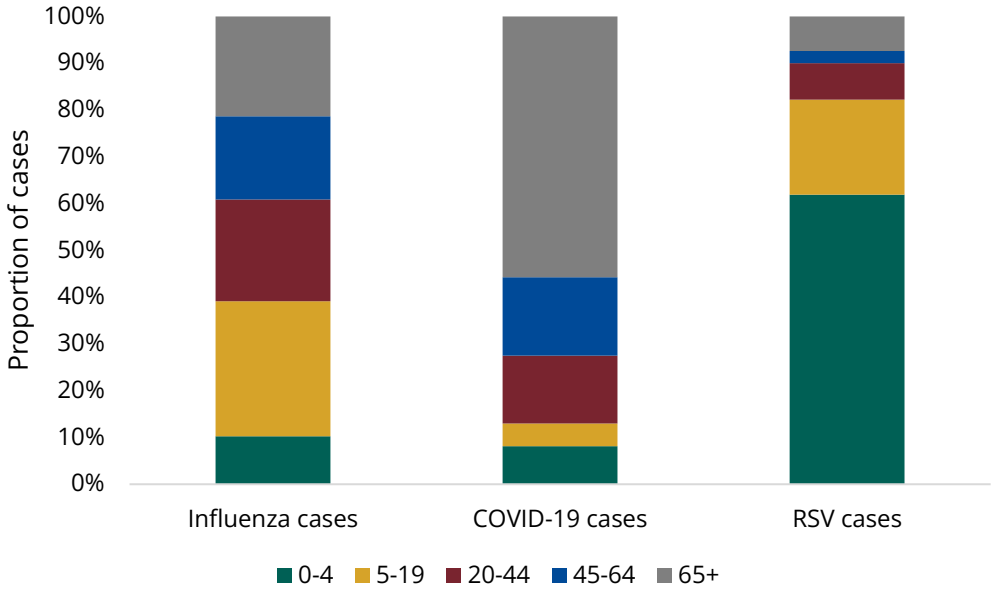
Table 2: Confirmed cases and percent positivity by region and disease, August 25 to December 14, 2024 (Source: New Brunswick Regional Hospitals)

Region	COVID-19		Influenza		RSV	
	Cases	Percent positivity %	Cases	Percent positivity %	Cases	Percent positivity %
1	608 (25)	9 (5)	158 (44)	3 (9)	213 (65)	4 (14)
2	344 (7)	13 (5)	4 (1)	<1 (1)	8 (5)	1 (3)
3	77 (3)	10 (8)	3 (2)	<1 (1)	4 (2)	<1 (1)
4	124 (5)	11 (5)	56 (20)	6(19)	1 (1)	<1 (1)
5	85 (5)	14 (16)	0 (0)	0 (0)	3 (1)	1 (3)
6	252 (10)	16 (15)	2 (0)	<1 (0)	0 (0)	0 (0)
7	144 (2)	12 (3)	2 (2)	<1 (3)	2 (0)	<1 (0)
Respiratory season total	1634 (57)	11 (6)	225 (69)	2 (6)	231 (74)	2 (6)

Notes:

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

Figure 5: Confirmed cases by age group and disease, August 25 to December 14, 2024 (Source: New Brunswick Regional Hospitals)

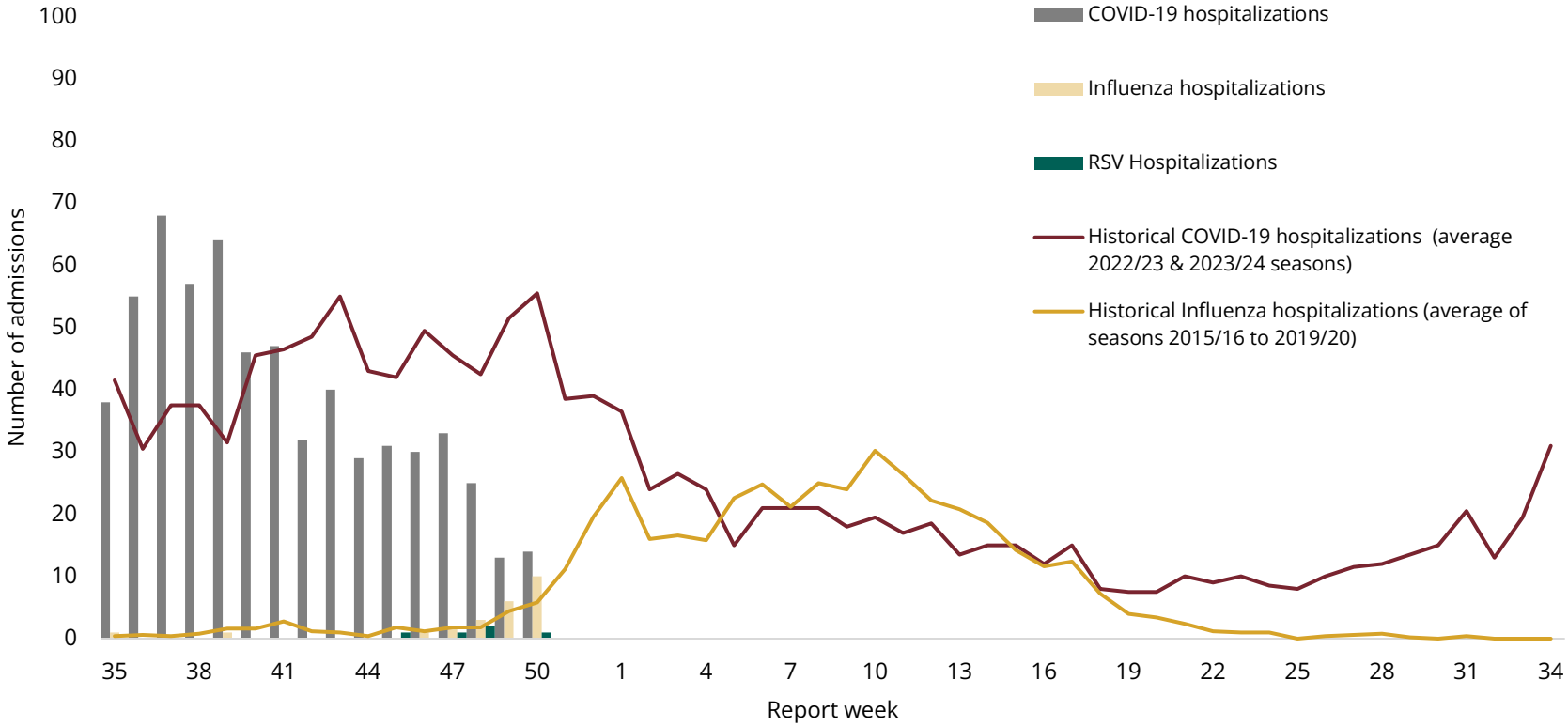


Notes:

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

HOSPITALIZATION AND DEATH DATA

Figure 6: Number of COVID-19, influenza and RSV hospitalizations by week of admission, August 25 to December 14, 2024 (Source: Horizon Health Network and Réseau de Santé Vitalité)

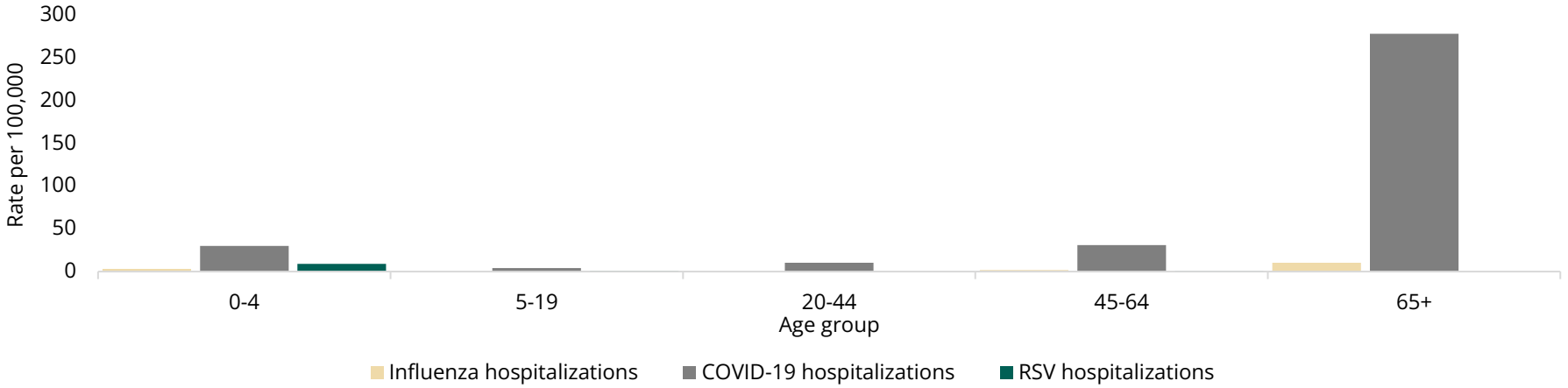


Notes

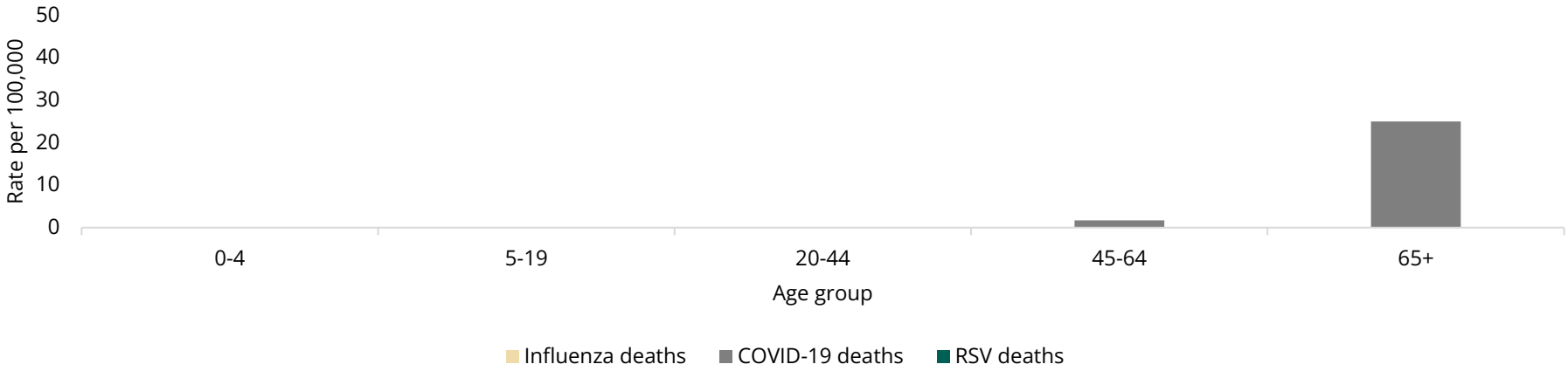
- Hospitalizations includes non-ICU and ICU admissions.
- Hospitalizations based on admission date or if patient is hospitalized prior to confirmed test result, the test result date is used.
- Historical influenza excludes season 2020-21 and onward due to the COVID pandemic.
- Historical COVID-19 includes season 2022-23 & 2023-24 due to the changing testing strategies that occurred in years prior.
- Individuals hospitalized with a co-infection are counted as one hospitalization in each of the respiratory infections.

Figure 7: Rate per 100,000 COVID-19, influenza and RSV hospitalizations and deaths by age group, August 25 to December 14, 2024 (Source: Horizon Health Network and Réseau de Santé Vitalité)

Hospitalizations



Deaths



Notes:

- 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.
- Individuals hospitalized with a co-infection are counted as one hospitalization in each of the respiratory infections.

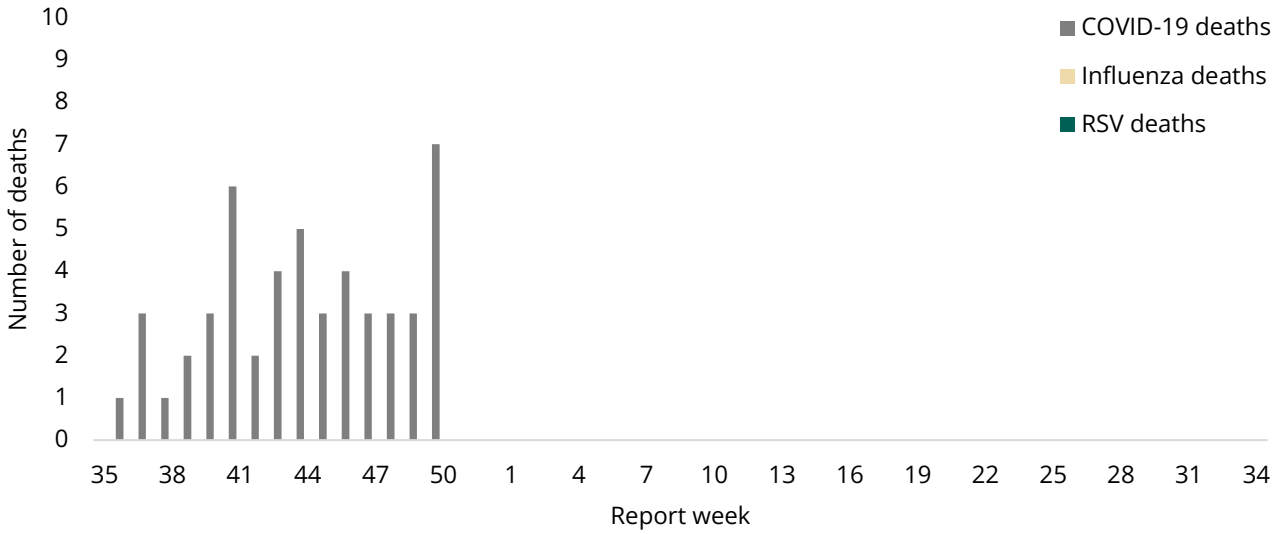
Table 3: Number of COVID-19, influenza and RSV hospitalizations, ICU admissions and deaths by age group, August 25 to December 14, 2024 (Source: Horizon Health Network and Réseau de Santé Vitalité)

Age group	COVID-19			Influenza			RSV		
	Hospitalizations	ICU	Death	Hospitalizations	ICU	Death	Hospitalizations	ICU	Death
0-4	10 (1)	0 (0)	0 (0)	1 (1)	0 (0)	0 (0)	3 (1)	0 (0)	0 (0)
5-19	5 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)
20-44	25 (0)	8 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
45-64	71 (0)	12 (0)	4 (0)	4 (1)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)
65+	511 (13)	24 (1)	46 (7)	19 (8)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Total	622 (14)	44 (1)	50 (7)	24 (10)	1 (0)	0 (0)	5 (1)	0 (0)	0 (0)

Notes:

- 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.
- Individuals hospitalized with a co-infection are counted as one hospitalization in each of the respiratory infections.

Figure 8: Number of COVID-19, influenza and RSV deaths by date of death, August 25 to December 14, 2024 (Source: Horizon Health Network and Réseau de Santé Vitalité)



Notes:

- Deaths reported based on the date of death.

OUTBREAKS

Figure 9: Number of lab-confirmed outbreaks in Nursing Homes by disease and report week (date of declaration of outbreak), August 25 to December 14, 2024 (Source: CNPHI)

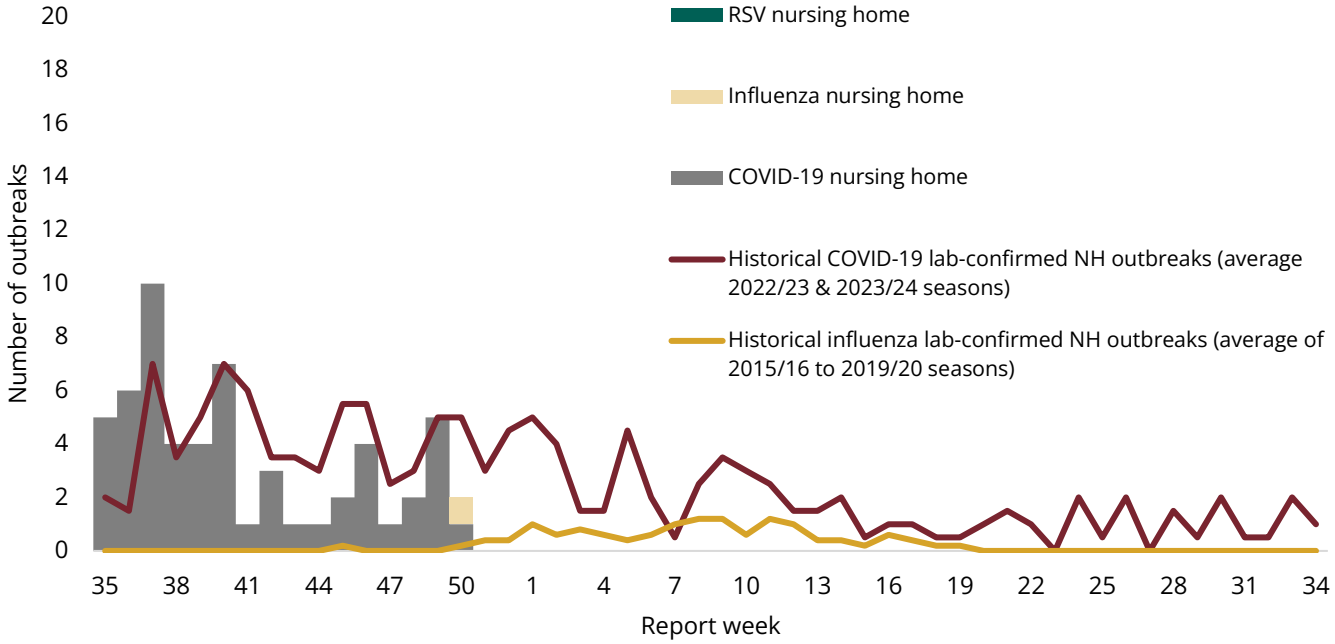
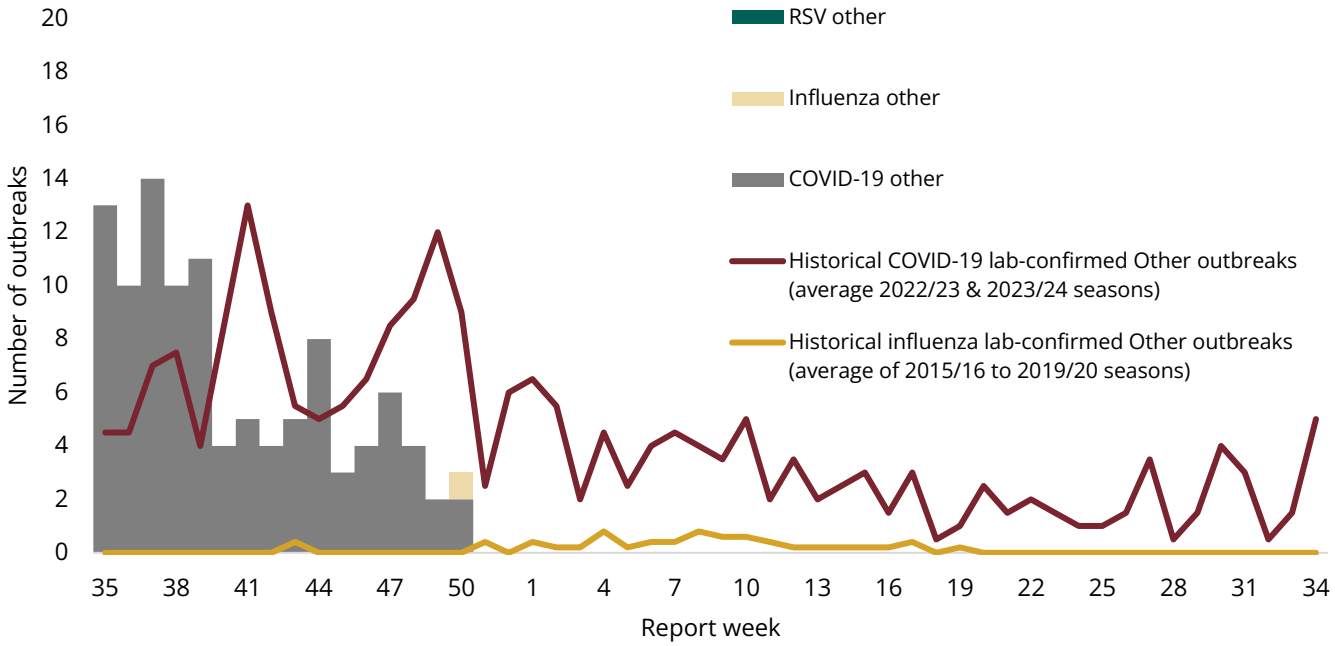


Figure 10: Number of lab-confirmed outbreaks in Other Settings* by disease and report week (date of declaration of outbreak), August 25 to December 14, 2024 (Source: CNPHI)



Notes

- Historical influenza excludes season 2020-21 and onward due to the COVID pandemic.
- Other settings include lab-confirmed outbreaks outside nursing home such as in Adult Residential Facilities, in Hospitals, in Correctional Settings, in Shelters, etc.
- The types and numbers of facilities that report lab-confirmed outbreaks may differ each season.

Figure 11: Number of lab-confirmed outbreaks by disease and report week (date of declaration of outbreak), August 25 to December 14, 2024 (Source: CNPHI)

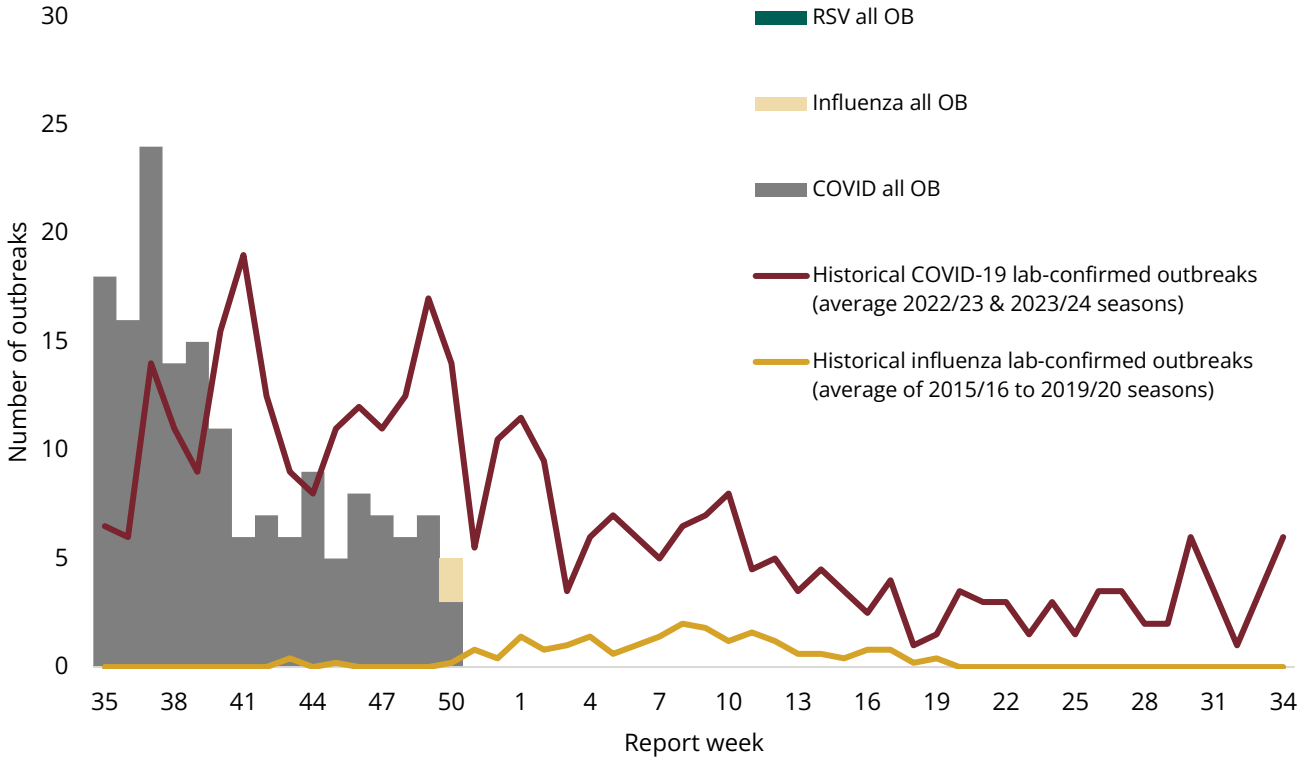
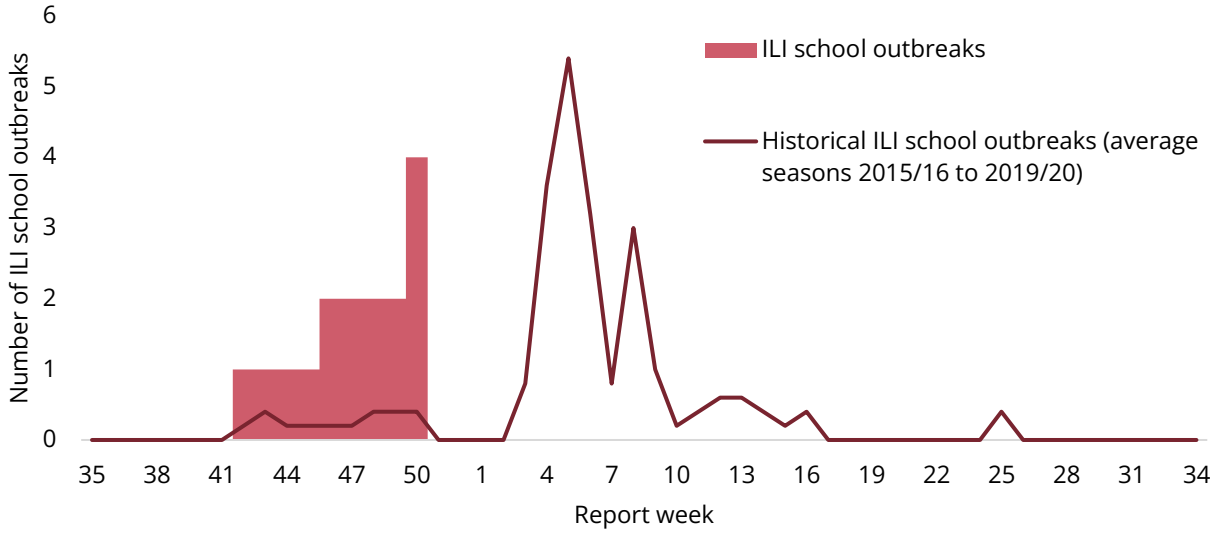


Figure 12: Number of ILI school outbreaks received, August 25 to December 14, 2024 (Source: CNPHI)

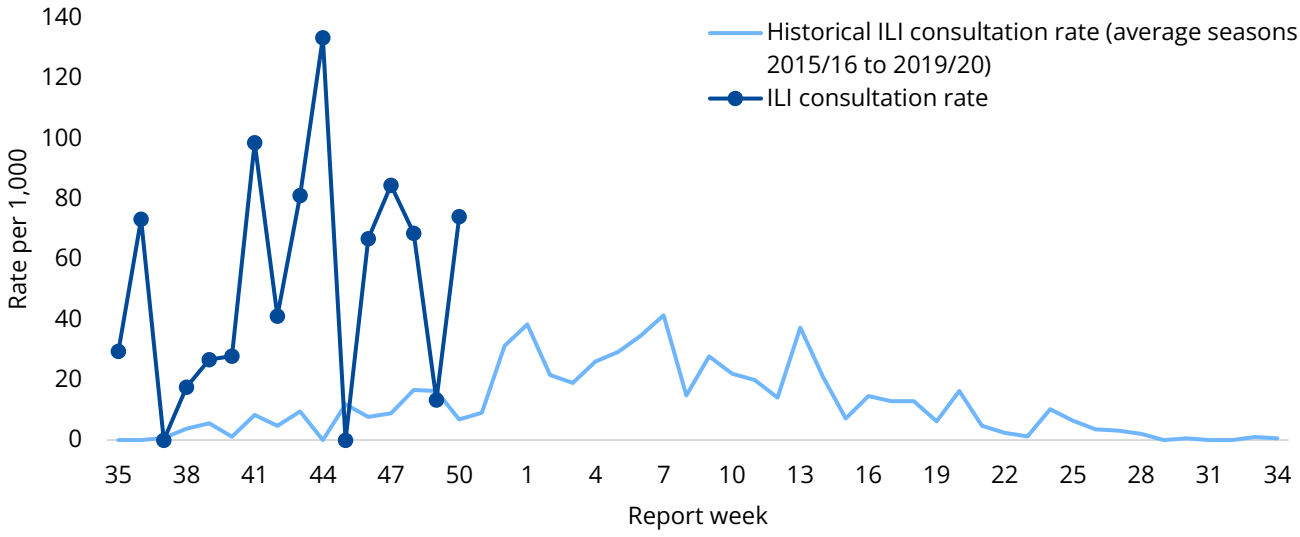


Notes

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

SENTINEL SURVEILLANCE

Figure 13: ILI consultation rates by report week, August 25 to December 14, 2024 (NB SPRN sites)



Notes:

- Sentinel sites are to report on the number of ILI patients and total patient consultations one day during a reporting week.
- Historical ILI consultation rates exclude season 2020-21 and onward due to the COVID pandemic.
- ILI consultation rates should be interpreted with caution because the low number of sentinel sites reporting can lead to major fluctuations in the consultation rates.

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-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update

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.

RSV case: Clinical illness with laboratory confirmation of infection: isolation of RSV virus from an appropriate clinical specimen (NP, throat/Nose) or demonstration of RSV antigen in an appropriate clinical specimen or significant rise (e.g. fourfold or greater) in RSV IgG titre between acute and convalescent sera or detection of RSV 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, influenza or RSV 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 infection (Influenza, RSV, COVID-19) 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 infection (Influenza, RSV, COVID-19) 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.

RSV 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.

Regional Health Authorities (Horizon and Vitalité)

- Data are extracted weekly (Hospitalizations and Outbreak data)
- 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.

Long-Term Care Facilities

- Data are extracted weekly (Outbreak data).
- 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.

Canadian Network for Public Health Intelligence (CNPHI)

- Data are extracted weekly (Outbreak data and ILI consultations)
- 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.

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

Figure 14: Influenza cases by report week and strain, August 25 to December 14, 2024

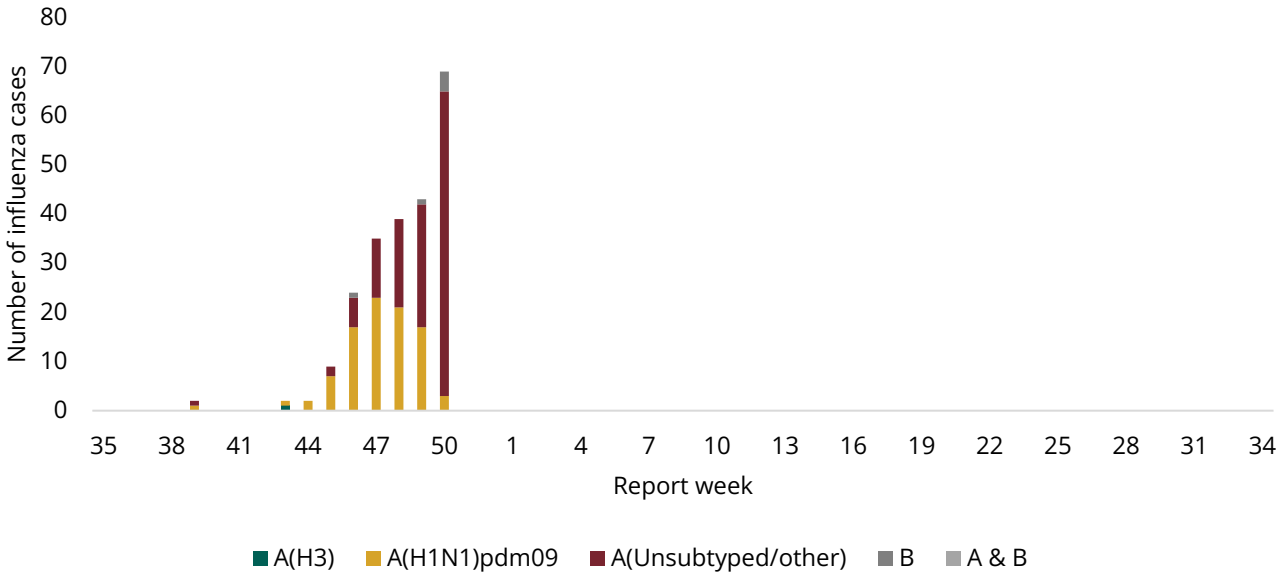


Table 4: Influenza hospitalizations by strain and age group, August 25 to December 14, 2024

Age Group	Influenza A				Influenza B
	A(H3)	A(H1N1)pdm09	Unsubtyped/other	A Total	B Total
0-4	0	1	0	1	0
5-19	0	0	0	0	0
20-64	0	0	4	4	0
65+	0	1	18	19	0
Total	0	2	22	24	0

Notes

- Individuals hospitalized with a co-infection are counted as one hospitalization in each of the respiratory infections.