Respiratory Virus Activity Report, 2024-2025 Season



Peel Health Surveillance

April 13, 2025 to April 19, 2025 (Week 16)

- Overall, Peel respiratory activity in week 16 remains similar to the previous week.
- **Next report:** April 30, 2025.

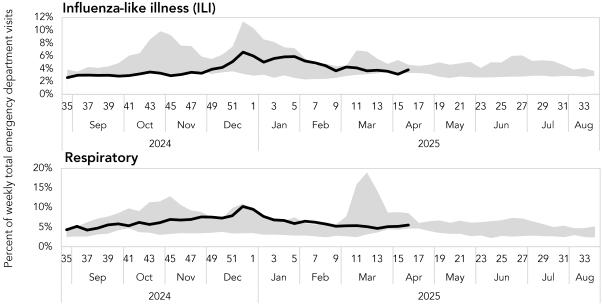
Table 1: Indicators of respiratory virus activity in Peel

Indicator	Week 16 Activity in Peel	Activity Level		Weekly Change		
Lab-Confirmed Cases ¹						
Influenza	78 new cases reported		Moderate	≈	Similar	
Percent Positivity of Lab Tests						
Influenza ²	10.2% percent positivity (week 15)		Moderate	~	Lower	
SARS-CoV-2 (COVID-19) ³	2.2% percent positivity (week 16)		Low	≈	Similar	
Other respiratory viruses ²	Adenovirus: 1.6% (week 15) Enterovirus/Rhinovirus: 11.4% (week 15) Human metapneumovirus: 5.4% (week 15) Parainfluenza virus: 2.5% (week 15) Seasonal human coronavirus: 7.0% (week 15) Respiratory syncytial virus (RSV): 0.8% (week 15)					
Emergency Department Visits	4					
Influenza-like illness (ILI)	3.8% of total ED visits		Moderate		Higher	
Respiratory symptoms	5.5% of total ED visits	-1	Moderate		Higher	
Respiratory Outbreaks in Hospitals, Long-Term Care Homes, and Retirement Homes ¹	2 new respiratory outbreaks declared Total outbreaks this season: Influenza: 40 COVID-19: 111 Other or multiple respiratory viruses: 71		Low	~	Lower	
Wastewater Surveillance ⁵						
Influenza A	Moderate activity (week 15)		Moderate	≈	Similar	
Influenza B	Moderate activity (week 15)		Moderate	≈	Similar	
SARS-CoV-2 (COVID-19)	Low activity (week 15)		Low	≈	Similar	
Respiratory syncytial virus (RSV)	Moderate activity (week 15)		Moderate	A	Higher	

Notes: Current activity level (low/moderate/high) is assigned based on comparisons to historical data, and weekly change (lower/similar/higher) is based on comparisons to the previous week. **Bold** indicates a change in activity level compared to the previous week. Sources: 1) Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Peel Public Health [22/Apr/2025]; 2) Public Health Ontario (PHO), Ontario Respiratory Virus Tool, extracted by Peel Public Health [22/Apr/2025]; 3) Ontario Ministry of Health, Ontario Laboratory Information System; 4) South East Health Unit, Acute Care Enhanced Surveillance; 5) Government of Canada, Wastewater Monitoring Dashboard, available at: https://health-infobase.canada.ca/wastewater/ as of [22/Apr/2025]. Please interpret activity level information with caution because of a lack of baseline data. Activity level includes not detected. Wastewater trend is calculated based on the past 35 days. Refer to the Wastewater Monitoring Dashboard – Technical notes for more information. In this report, current wastewater activity level and trend are reported separately; this may differ from the Wastewater Monitoring Dashboard which reports activity level and trend in a combined index.

Respiratory Infection Activity

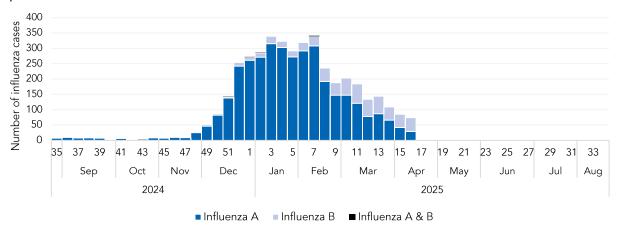
Figure 1. Weekly percent of emergency department visits due to influenza-like illness or respiratory syndromes, Peel residents: August 25, 2024 to April 19, 2025



Note: The grey shaded area represents the range between the minimum and maximum weekly percentage of ED visits due to ILI or respiratory syndromes, between 2019/20 and 2023/24.

Source: South East Health Unit, Acute Care Enhanced Surveillance, extracted by Peel Public Health [22/Apr/2025]

Figure 2. Laboratory-confirmed influenza cases in Peel by type and episode week: August 25, 2024 to April 19, 2025



Note: Episode date of cases reflect the earliest of symptom onset, test date, or date reported to public health. Illnesses occurring during the most recent weeks may not yet be reported to public health.

Source: Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Peel Public Health [22/Apr/2025]

Table 2: Laboratory-confirmed influenza cases and rates by age group, Peel: September 1, 2024 to April 19, 2025

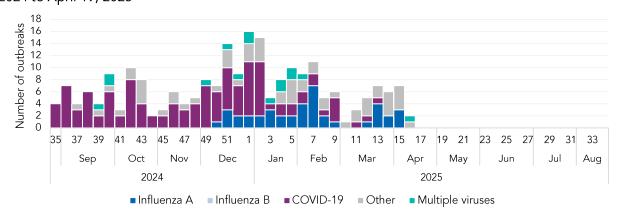
Age group	Influenza A				Influenza	Total Influenza	Influenza
(years)	A(H1N1) pdm09	A(H3N2)	A(UnS)*	A Total	B Total	cases (%)	rate per 100,000†
0-4	365	166	302	836	168	1,004 (24.0%)	1,191.6
5-17	203	127	172	504	221	725 (17.4%)	307.0
18-44	200	156	221	577	163	740 (17.7%)	92.5
45-64	215	84	249	548	45	593 (14.2%)	149.6
65+	385	178	522	1085	30	1,115 (26.7%)	448.0
Total	1,368	711	1,466	3,550	627	4,177 (100%)	236.6

^{*}UnS: unsubtyped; the specimen was typed as influenza A, but no result for subtyping was available.

Sources: Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Peel Public Health [22/Apr/2025]; Ontario Ministry of Finance, Population projections by county and PHU, 2024 [Oct/2022]

Outbreaks in Priority Settings

Figure 3. Confirmed institutional respiratory outbreaks by week declared and virus, Peel: August 25, 2024 to April 19, 2025



Notes: Institutional settings include hospitals, long-term care homes, retirement homes, and congregate living settings (i.e., shelters, correctional facilities, supported living facilities, group homes and hospices). Other virus outbreaks include: respiratory syncytial virus (n=18), seasonal human coronavirus (n=11), entero/rhinovirus (n=8), respiratory infection unspecified (n=8), parainfluenza virus (n=5), rhinovirus (n=3), human metapneumovirus (n=3), enterovirus (n=1); multiple virus outbreaks include: COVID-19 and respiratory syncytial virus (n=3), COVID-19 and seasonal human coronavirus (n=2), enterovirus and rhinovirus (n=1), entero/rhinovirus, seasonal human coronavirus, and respiratory syncytial virus (n=1), COVID-19, influenza A, seasonal human coronavirus, and respiratory syncytial virus (n=1), entero/rhinovirus and human metapneumovirus (n=1), seasonal human coronavirus, human metapneumovirus, and parainfluenza virus (n=1), COVID-19 and rhinovirus (n=1), COVID-19, influenza A, entero/rhinovirus, and rhinovirus (n=1), COVID-19, entero/rhinovirus, and rhinovirus (n=1). The outbreak declared date represents the date the outbreak first met the definition for a confirmed outbreak.

Sources: Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Peel Public Health [22/Apr/2025].

[†]Cumulative incidence rate per 100,000 population.

Table 3. Institutional respiratory outbreak summary, Peel: September 1, 2024 to April 19, 2025

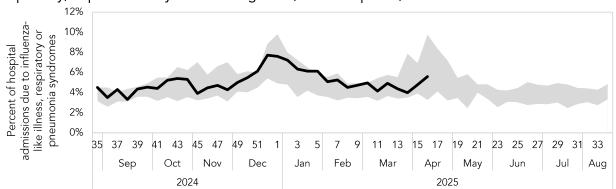
Measure	Influenza A	Influenza B	COVID-19	Other virus
Total institutional outbreaks	43	0	121	83
Acute Care	13	0	31	5
Long-Term Care Home	22	0	44	61
Retirement Home	7	0	42	16
Congregate Living Settings	1	0	4	1
Number of deaths among outbreak-associated cases	11	0	23	6

Notes: Congregate living settings include: shelters, correctional facilities, supported living facilities, group homes, and hospices. Outbreaks with multiple co-circulating viruses are counted per virus. Other virus outbreaks include: respiratory syncytial virus (n=23), seasonal human coronavirus (n=16), entero/rhinovirus (n=12), rhinovirus (n=9), respiratory infection unspecified (n=8), parainfluenza virus (n=7), human metapneumovirus (n=5), enterovirus (n=3).

Sources: Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Peel Public Health [22/Apr/2025]

Disease Severity

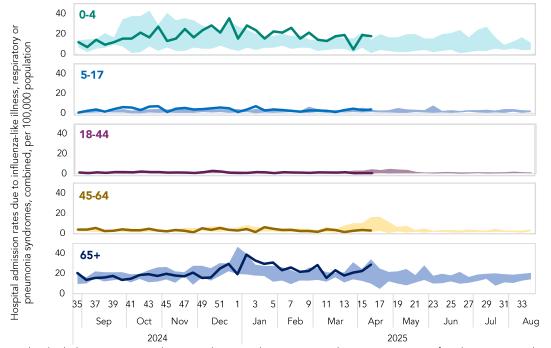
Figure 4. Weekly percent of hospital admissions among Peel residents due to influenza-like illness, respiratory, or pneumonia syndromes: August 25, 2024 to April 19, 2025



Note: The shaded area represents the range between the minimum and maximum weekly percentage of admissions due to ILI, respiratory, or pneumonia syndromes, between 2019/20 and 2023/24.

Source: South East Health Unit, Acute Care Enhanced Surveillance, extracted by Peel Public Health [22/Apr/2025]

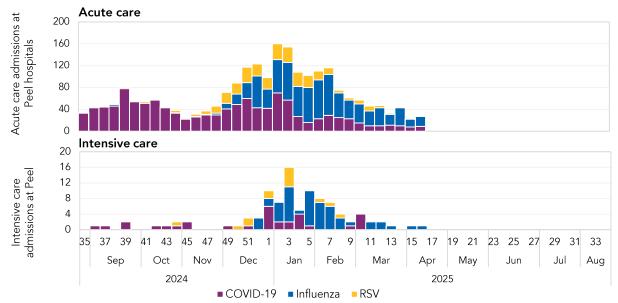
Figure 5. Weekly hospital admission rates among Peel residents due to influenza-like illness, respiratory, or pneumonia syndromes, combined, by age group: August 25, 2024 to April 19, 2025



Note: The shaded areas represent the ranges between the minimum and maximum age-specific admission rates due to ILI, respiratory, or pneumonia syndromes, between 2019/20 and 2023/24.

Sources: South East Health Unit, Acute Care Enhanced Surveillance, extracted by Peel Public Health [22/Apr/2025]; Ontario Ministry of Finance, Population projections by county and PHU, 2024 [Oct/2022]

Figure 6. Weekly acute care and intensive care admissions among COVID-19, influenza, and RSV cases, Peel hospitals, August 25, 2024 to April 19, 2025



Sources: Ontario Ministry of Health, Daily Bed Census, extracted [22/Apr/2025]; Ontario Ministry of Health, Critical Care Information System, extracted [22/Apr/2025]

Data notes

- Unless otherwise specified, this report includes the most current data available as of 8:30 am on [22/Apr/2025] from the provincial Integrated Public Health Information System (iPHIS).
- iPHIS is a dynamic reporting source for infectious disease surveillance data. Data extracted represent a snapshot of data entered up to and at the time of extraction and may differ in previous or subsequent reports.
- Laboratory-confirmed cases included in this report represent those individuals who resided in Peel region at the time of their diagnosis.
- Emergency department visit and admission data from the <u>Acute Care Enhanced Surveillance Application</u> are categorized by syndromes and do not necessarily represent health care utilization/outcomes due to respiratory virus infections. Syndromes are not clinical diagnoses.

Respiratory virus testing indications

Currently, PCR testing eligibility differs for SARS-CoV-2 compared to influenza and other respiratory viruses. Therefore, metrics such as test positivity cannot be compared between SARS-CoV-2 and other viruses, due to differing denominators. In general, non-SARS-CoV-2 tests can be requested for symptomatic patients who are hospitalized, visit the emergency department, live in institutional settings, or are involved in an institutional outbreak. SARS-CoV-2 testing eligibility is set by the Ontario Ministry of Health.

Table 5. Respiratory virus testing indications

Patient symptom status		Testing Available by Request		
	Patient setting	SARS-CoV-2	Influenza A, Influenza B, and other viruses*	
Symptomatic	Hospitalized (all inpatients)	~	~	
	Remote communities	~	~	
	Public health unit declared respiratory infection outbreak	~	~	
	Institutions (non-outbreak)	~	~	
	Emergency department adult patients who are at risk of severe disease or outcomes and whose treatment decisions may be impacted by test results, as outlined in provincial eligibility criteria for respiratory virus testing	~	~	
	Emergency Department: pediatric patients (<18 years old)	~	~	
	Ambulatory settings or not specified	~		

^{*}The multiplex respiratory virus PCR (MRVP) tests for: influenza A, influenza B, respiratory syncytial virus (RSV A/B), parainfluenza (1 – 4), adenovirus, enterovirus, seasonal human coronavirus (OC43, 229E, NL63, HKU1), rhinovirus and human metapneumovirus.

Note: As of October 1, 2024, asymptomatic patients are no longer eligible for COVID-19 PCR testing (<u>Public Health Ontario: Coronavirus Disease 2019 (COVID-19) – PCR</u>).

Adapted from: Public Health Ontario: Coronavirus Disease 2019 (COVID-19) – PCR; Public Health Ontario: Respiratory Viruses (including influenza); Public Health Ontario: Eligibility Criteria for Respiratory Virus Testing: At Risk Ambulatory/Emergency Department Patients; Ontario Ministry of Health: COVID-19 Provincial Testing Guidance Update (January 25, 2023).

Resources

Influenza surveillance

- Provincial: <u>Public Health Ontario</u>: <u>Ontario Respiratory Virus</u>
 <u>Tool</u>
- Federal: <u>Public Health Agency of Canada: FluWatch surveillance</u>
- Global: World Health Organization: Global Influenza <u>Programme</u>

COVID-19 surveillance

- Provincial: <u>Public Health Ontario: Ontario Respiratory Virus</u> Tool
- Provincial genomic surveillance: <u>Public Health Ontario</u>: <u>SARS-CoV-2 Genomic Surveillance in Ontario</u>
- Federal: <u>Public Health Agency of Canada: COVID-19</u> <u>epidemiology update</u>