# PEI RESPIRATORY ILLNESS 2024-25 SEASON SUMMARY

CHIEF PUBLIC HEALTH OFFICE

AUGUST 25, 2024 TO AUGUST 23, 2025

The surveillance period for the 2024-25 PEI Respiratory Illness Season Summary started on August 25, 2024 (epidemiological week 35-2024) and ended on August 23, 2025 (epidemiological week 34-2025). Surveillance weeks correspond to the Public Health Agency of Canada (PHAC) influenza surveillance weeks. While COVID-19 is not yet recognized as a seasonal respiratory virus, unlike influenza and RSV, data for COVID-19 are reported according to the surveillance period established for influenza.

## SUMMARY

- Overall, respiratory illness activity was highest from mid-January to mid-March 2025, but patterns of activity differed for the different viruses.
    - COVID-19 activity was highest early in the season with activity peaking in epidemiological week 42 (week ending October 19, 2024). Thereafter, COVID-19 remained active throughout most of the season, with brief increases occurring in January, February and March. Activity fell to low levels from April to the end of August. There were no COVID-19 detections from epidemiological week 26 to 30 (June 22 to July 26, 2025).
    - The influenza season began in epidemiological week 1 (week ending January 4, 2025), peaked in the middle of February, and lasted 18 weeks. A small, second wave occurred from mid-April to early May. Driven by influenza A, activity was late, high in intensity and long in duration. Influenza B was also present but only represented 2.3% of detections.
    - RSV activity steadily increased starting mid-November. Activity was highest from December to February and then gradually decreased with only sporadic detections by May.
- Hospitalizations and deaths:
    - There were more hospitalizations due to influenza (n = 107) than for COVID-19 (n = 72) and RSV (n = 48).
    - Hospitalizations due to respiratory viruses were more frequent among older and younger Islanders:
        - The rate of hospitalization due to COVID-19 among those aged 65 years and older was 168 per 100,000 population and this was more than four times the overall rate of 40 per 100,000 population.
        - The rate of hospitalization due to influenza among those aged 65 years and older was 179 per 100,000 population and this was almost three times the overall rate of 60 per 100,000 population.
        - The rate of hospitalization due to RSV among those aged 0 to 19 years was 111 per 100,000 population and this was this was more than four times the overall rate of 27 per 100,000 population. Of the 39 hospitalizations due to RSV among those aged 0 to 19 years, 72% (n = 28) were less than two years of age.
    - Of the patients that were hospitalized for COVID-19, 77.8% were not up-to date with their COVID-19 immunizations and of the patients hospitalized for influenza, 62.6% had not received the 2024-25 seasonal influenza vaccine.
    - The average and median length of a hospital stay was longest for patients hospitalized due to COVID-19 (average: 9.5 days / median: 5 days) and influenza (average: 9.6 days / median: 5 days) than for RSV (average: 4.6 days / median: 3 days).

- There were 19 deaths due to COVID-19 and 19 deaths due to influenza during the 2024-25 season. There were no deaths due to RSV. Overall, 82% of the deaths occurred among those aged 65 years and older and none occurred in the youngest age group (0 to 19 years).

- Outbreaks:
  - Outbreaks due to COVID-19 were more frequent than outbreaks due to influenza or RSV. There were more outbreaks declared in long-term care and community care settings than in the other surveillance settings. It is important to note that due to increased testing and surveillance, case detection and outbreak detection is more likely long-term care and community care settings than in other settings and therefore it is not surprising that more outbreaks were declared in these settings.

## EPIDEMIOLOGICAL CURVE AND TEST POSITIVITY

**Figure 1.** Weekly respiratory illness case count and test positivity by respiratory virus, PEI, August 25, 2024 to August 23, 2025

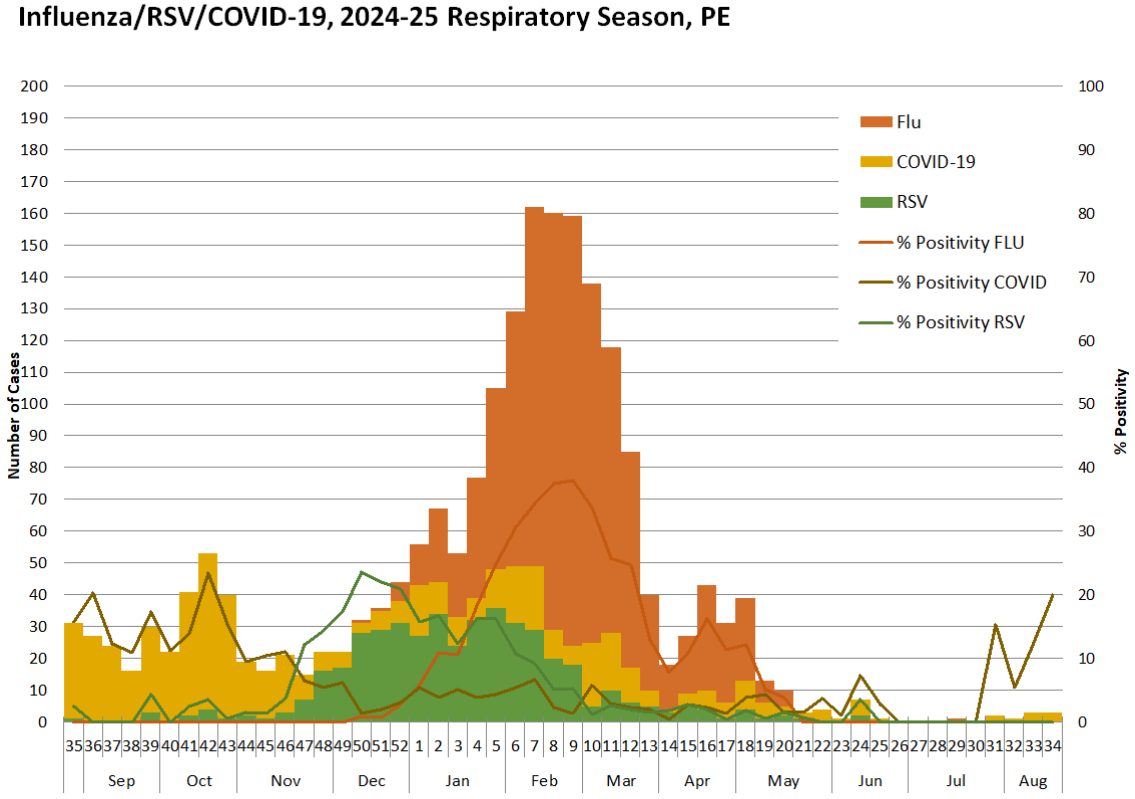


**Table 1.** Confirmed COVID-19, influenza, and RSV cases, PEI 2024-25 respiratory illness season

| | Number of cases | Median age (range) | Sex |
|---|---|---|---|
| COVID-19 | 574 | 76 years (<1 to >100 years) | 52% female / 48% male |
| Influenza - total | 1,048 | 43 years (<1 to 100 years) | 55% female / 45% male |
| Influenza A | 1,024 | 44 years (<1 to 100 years) | 55% female / 45% male |
| Influenza B | 24 | 11 years (2 to 42 years) | 67% female / 33% male |
| RSV | 445 | 3 years (<1 to 100 years) | 56% female / 44% male |

COVID-19, influenza and RSV case counts are just an indication of greater respiratory illness activity as many individuals with respiratory illness do not seek medical attention.

**Table 2.** Number of hospitalizations, intensive care unit (ICU) admissions and deaths due to COVID-19, influenza and RSV, PEI 2024-25 respiratory illness season

| | Hospitalizations | ICU admissions | Deaths |
|---|---|---|---|
| COVID-19 | 72 | 0 | 19 |
| Influenza | 107 | 3 | 19 |
| RSV | 48 | 1 | 0 |

**Table 3**. Number of hospitalizations due to COVID-19, influenza and RSV by age group, PEI 2024-25 respiratory illness season

| | 0 to 19 years | 20 to 64 years | 65 years and older |
|---|---|---|---|
| COVID-19 | 3 | 7 | 62 |
| Influenza | 10 | 31 | 66 |
| RSV | 39 | 1 | 8 |

**Figure 2.** Vaccination status of influenza and COVID-19 hospitalized cases, 2024-25 Respiratory Season, PEI

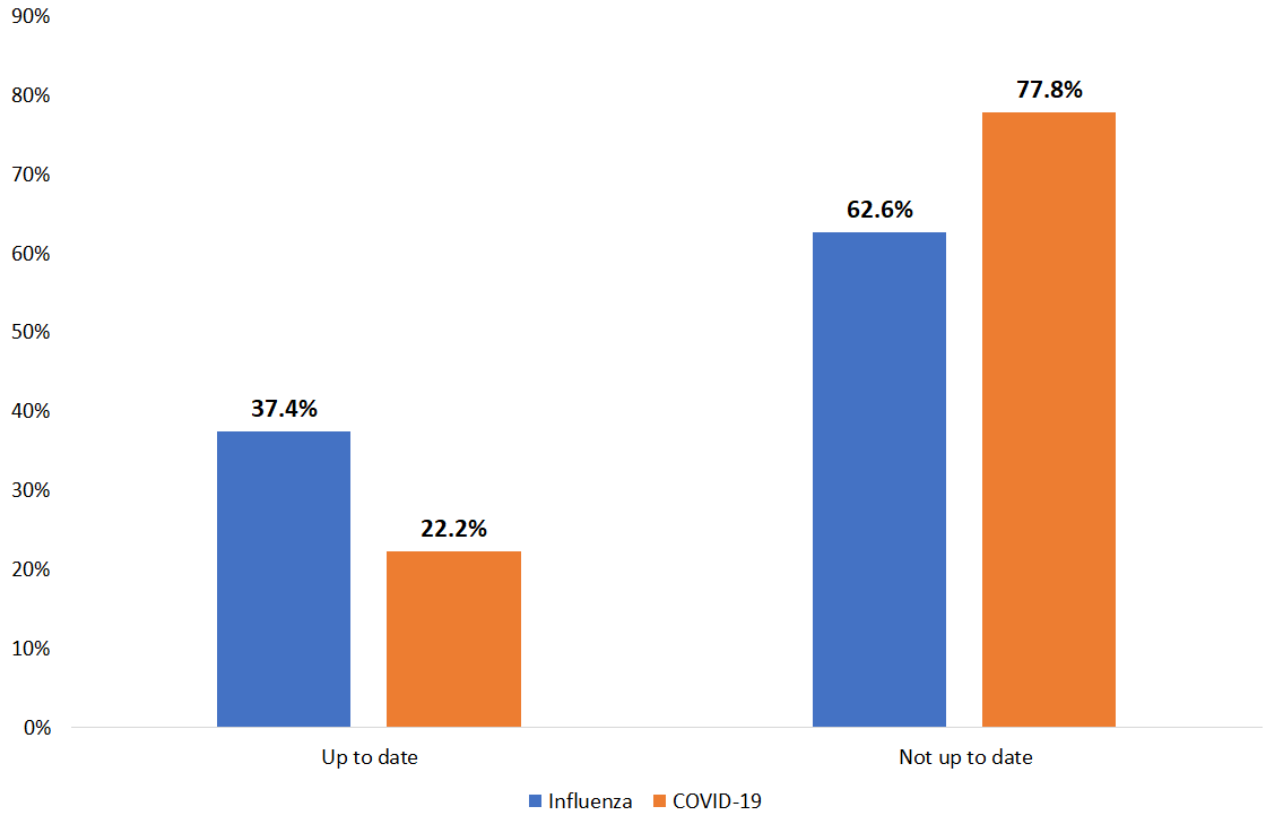


**Table 4.** Average and median length of hospital stay for patients hospitalized due to COVID-19, influenza and RSV, PEI 2024-25 respiratory illness season

| | Average length of stay | Median length of stay | % of hospitalized cases with information on length of stay |
|---|---|---|---|
| COVID-19 | 9.5 days | 5 days | 94% |
| Influenza | 9.6 days | 5 days | 94% |
| RSV | 4.6 days | 3 days | 98% |

**Table 5**. Deaths due to COVID-19, influenza and RSV by age group, PEI 2024-25 respiratory illness season

| | 0 to 19 years | 20 to 64 years | 65 years and older |
|---|---|---|---|
| COVID-19 | 0 | 0 | 19 |
| Influenza | 0 | 7 | 12 |
| RSV | 0 | 0 | 0 |

## RESPIRATORY ILLNESS OUTBREAKS, 2023-24 RESPIRATORY ILLNESS SEASON

**Table 6.** Respiratory illness outbreaks in long-term care / community care and other settings, PEI 2024-25 respiratory illness season

| | **LTC / CC[1]** | **Other[2]** |
|---|---|---|
| **COVID-19** | 29 | 5 |
| **Influenza A** | 13 | 6 |
| **Influenza B** | 0 | 0 |
| **RSV** | 4 | 3 |
| **ILI** | 6 | 10 |
| **Other** | 0 | 0 |

[1] LTC = long term care facility; CC = community care facility
[2] For example, acute care facilities and correctional facilities
ILI = influenza like illness

## SURVEILLANCE FOR COVID-19 VARIANTS

PEI contributes data to the national reporting of COVID-19 variants in Canada

## WASTEWATER SURVEILLANCE

PEI's Chief Public Health Office and the Department of Environment, Energy and Climate Action have partnered with the municipalities of Alberton, Charlottetown (including Stratford), Montague, Souris, and Summerside, and the National Microbiology Laboratory in Winnipeg to implement wastewater surveillance for COVID-19 in PEI. As a result of reductions to the wastewater surveillance program of the Public Health Agency of Canada, in late March 2025, PEI's wastewater surveillance program was reduced to one site: Charlottetown (including Stratford).

PEI wastewater testing results are included on the national COVID-19 wastewater surveillance dashboard

## HISTORICAL COVID-19 DATA

| Year | Total Cases | Hospitalized | ICU | Deaths |
|---|---|---|---|---|
| **2023-24** | 1,499 | 152 | 12 | 22 |
| **2023, to Week 34** | 1,727 | 112 | 7 | 28 |
| **2022** | 54,179 | 355 | 29 | 81 |
| **2021** | 1,413 | 5 | 1 | 0 |
| **2020** | 96 | 0 | 0 | 0 |

## HISTORICAL INFLUENZA DATA

| Influenza Season | Predominant Strain | Total Cases | Hospitalized | ICU | Deaths |
|---|---|---|---|---|---|
| **2023-24** | A | 818 | 121 | 18 | 12 |
| **2022-23** | A/H3 | 360 | 78 | 7 | 5 |
| **2021-22** | A/H3 | 66 | 12 | 1 | 0 |
| **2020-21** | - | 0 | 0 | 0 | 0 |
| **2019-20** | A | 220 | 77 | 7 | 5 |
| **2018-19** | A/pH1N1 | 280 | 123 | 12 | 9 |
| **2017-18** | B | 319 | 132 | 13 | 6 |
| **2016-17** | A/H3 | 208 | 88 | 11 | 5 |
| **2015-16** | A/pH1N1 | 71 | 39 | 2 | 1 |
| **2014-15** | A/H3 (B) | 209 | 98 | 11 | 9 |
| **2013-14** | A/pH1N1 | 119 | 62 | 13 | 2 |

## HISTORICAL RSV DATA

| Year | Total Cases | Hospitalized | ICU | Deaths |
|---|---|---|---|---|
| **2023-24** | 413 | 111 | 3 | 3 |

## TECHNICAL NOTES

COVID-19 case count includes individuals who tested positive on lab-based PCR, Abbott ID Now NAAT, and Lucira NAAT. It does not include individuals that tested positive on a rapid antigen test.

Note that clinical diagnosis of influenza takes place frequently in the community during peak season and is not confirmed with laboratory testing. In contrast to COVID-19, the prescribing of anti-viral treatment for influenza does not require a positive influenza test and can be based on a clinical diagnosis alone. Given the differences in testing approaches, the number of influenza detections and the number of COVID-19 detections in a given time period are not directly comparable.

Test positivity = $\frac{Count\ of\ positive\ tests\ per\ reporting\ period}{Count\ of\ total\ tests\ per\ reporting\ period} \times 100$

Test positivity for COVID-19 includes lab-based PCR and Abbott ID Now NAAT. For influenza and RSV, test positivity includes lab-based PCR. Cases among PEI residents diagnosed outside of the province are included in the case counts but are excluded from the percent positivity calculation.

Outbreak definitions

- Influenza
    - Laboratory-confirmed influenza outbreak: two or more cases of influenza like illness (ILI) within a seven-day period with an epidemiological link, including at least one laboratory confirmed case of influenza within a surveillance setting
    - ILI outbreak: two or more cases of ILI within a seven-day period
    - ILI outbreak in school or workplace: Greater than 10% absenteeism which is likely due to ILI
- COVID-19 outbreak: 2 or more test-confirmed cases of COVID-19 which are epidemiologically linked to a specific setting or location
- RSV: 2 or more cases of ILI within a seven-day period with an epi link, including at least one laboratory confirmed case of RSV within a surveillance setting

Hospitalization definition: a laboratory confirmed case of influenza/RSV or test-confirmed case of COVID-19 that received treatment in hospital as a result of their respiratory illness

ICU admission definition: a case of influenza, RSV or COVID-19 that meets the hospitalization definition and was admitted to the ICU

Death definition: a death resulting from a clinically compatible illness in a laboratory confirmed influenza/RSV case or test-confirmed COVID-19 case. A death due to influenza/COVID-19/RSV may be attributed when influenza/COVID-19/RSV is the cause of death or is a contributing factor.

Test-confirmed COVID-19 case: case with a positive result on lab-based PCR, Abbott ID Now NAAT, or Lucira NAAT. A case with a positive result on a rapid antigen test may be considered to be a test-confirmed case of COVID-19 upon review by a Chief Medical Officer of Health or relevant public health authority.

Hospitalization data is gathered through infection prevention and control practitioners at each Island hospital.

Vaccination status of hospitalized cases was defined as following:

- For influenza, a patient was considered up to date if they had received the 2024-25 seasonal influenza vaccine prior to their hospitalization;
- For COVID-19, a patient was considered up to date if they had received a COVID-19 vaccine when they were eligible based on PEI's criteria. If their infection occurred outside the COVID-19 vaccine program window, but they were otherwise up to date based on age and risk factors, a patient was considered up to date.