

FLUWATCH

November 21 to 27, 2021
(Week 47)



Weekly Highlights

- In week 47, influenza activity across Canada was low with 19% of regions reporting any influenza activity. In the past week, all influenza indicators were at low interseasonal levels.

Virologic

- In week 47, a total of 39 influenza detections (27 influenza A and 12 influenza B) were reported.
- Among the 33 detections with detailed age information, 91% were in individuals under the age of 44 years.

Syndromic

- The percentage visits for influenza-like illness (ILI) was 0.68% in week 47 and is near expected levels.
- The percentage of FluWatchers reporting fever and cough was 0.56% in week 47; it remains below expected levels and is stable.

Outbreaks

- In week 47, one ILI outbreak was reported.
- From August 29 to November 27, 2021 (weeks 35 to 47), 12 ILI outbreaks and no laboratory-confirmed influenza outbreaks have been reported.

Severe Outcomes

- From August 29 to November 27, 2021 (weeks 35 to 47), no influenza-associated hospitalizations have been reported from participating provinces and territories.

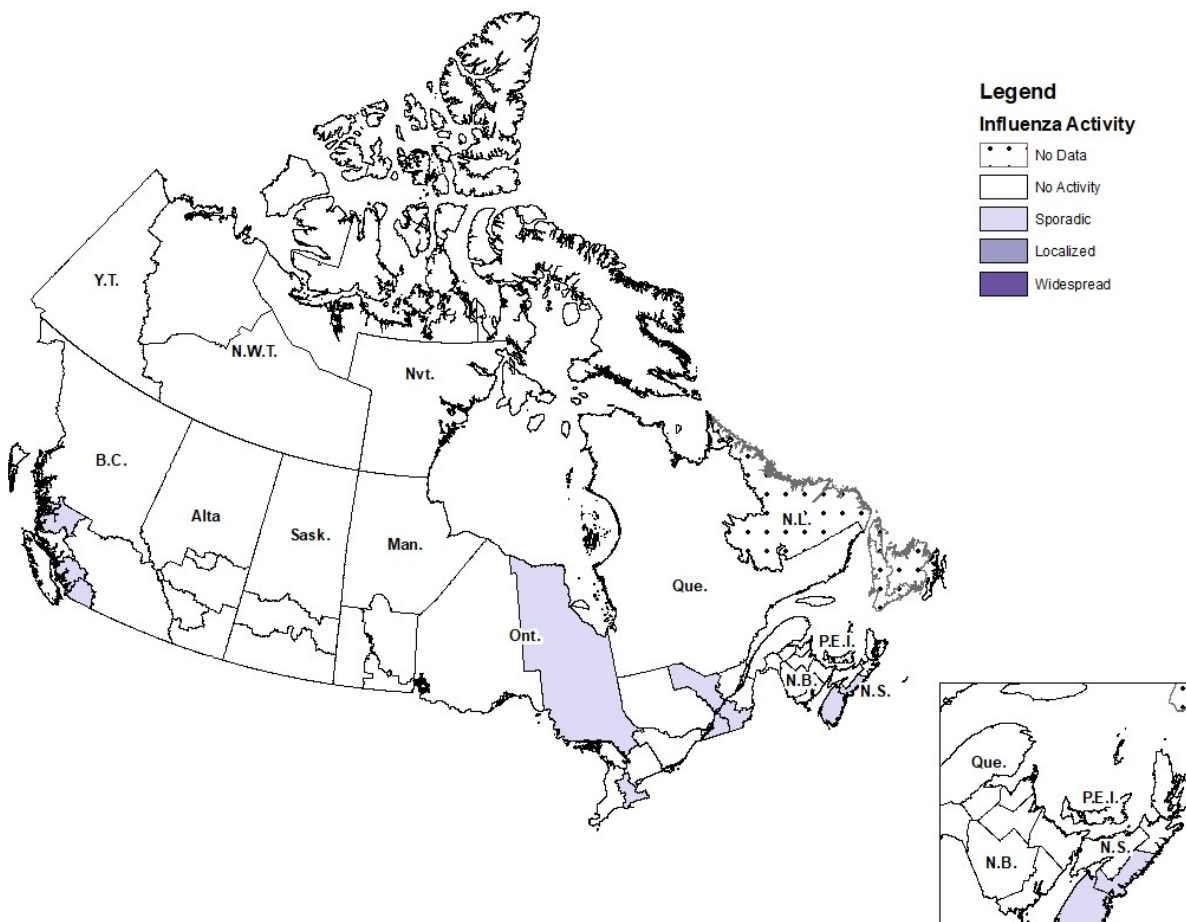


Influenza/Influenza-like Illness Activity – Geographic Spread

In week 47, ten regions in four provinces (B.C., Ont., Que., and N.S.) reported sporadic influenza/ILI activity. All other surveillance regions reported no influenza/ILI activity (Figure 1).

Figure 1 – Map of influenza/ILI activity by province and territory, Canada, week 2021-47

Number of Regions Reporting in Week 47: 49 out of 53



Laboratory-Confirmed Influenza Detections

In week 47, 39 laboratory detections of influenza were reported (27 influenza A and 12 influenza B).

Overall, the percentage of laboratory tests positive for influenza remains at exceptionally low levels, despite the elevated levels of testing. In week 47, 16,651 tests for influenza were performed at reporting laboratories and the percentage of tests positive for influenza was 0.23%. Compared to the past six pre-pandemic seasons (2014-2015 to 2019-2020), an average of 5,018 tests were performed for this time period, with an average of 7.7% of tests positive for influenza (Figure 3).

To date this season (August 28 to November 27, 2021), 151 influenza detections (94 influenza A and 57 influenza B) have been reported, which is lower than what we have seen historically in the past six pre-pandemic seasons, where an average of 1,527 influenza detections were reported at this point in the season. Among subtyped influenza A detections (33), influenza A(H3N2) accounted for 94% of detections.

Detailed information on age and type/subtype has been received for 122 laboratory-confirmed influenza detections (Figure 4). Among the 122 detections, 85 (70%) were in individuals under the age of 19.

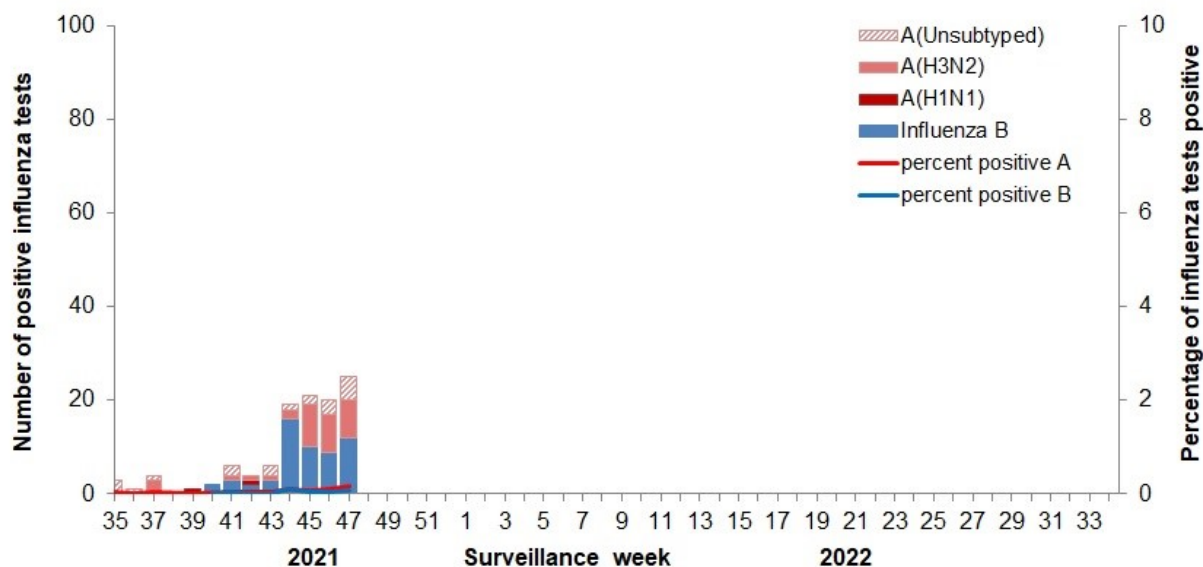
Excluded from these 151 influenza detections were 32 detections reported to be associated recent live attenuated influenza vaccine (LAIV) receipt as they do not represent community transmission of seasonal influenza viruses. Eleven co-infections of influenza A and B (22 detections) were suspected to be associated with recent LAIV receipt but were retained pending confirmation. LAIV strains are attenuated but can be recovered by nasal swab in children and adults following vaccination with that product (i.e., "shedding"). For more information, refer to the [Canadian Immunization Guide](#) Chapter on Influenza and Statement on Seasonal Influenza Vaccine for 2021–2022 (Section IV.2).

Testing for influenza and other respiratory viruses has been influenced by the current COVID-19 pandemic. Changes in laboratory testing practices may affect the comparability of data to previous weeks or previous seasons.

For more detailed weekly and cumulative influenza data, see the text descriptions for [Figures 2 and 3](#) or the [Respiratory Virus Detections in Canada Report](#).

Figure 2 – Number of positive influenza tests and percentage of tests positive, by type, subtype and report week, Canada, week 2021-47

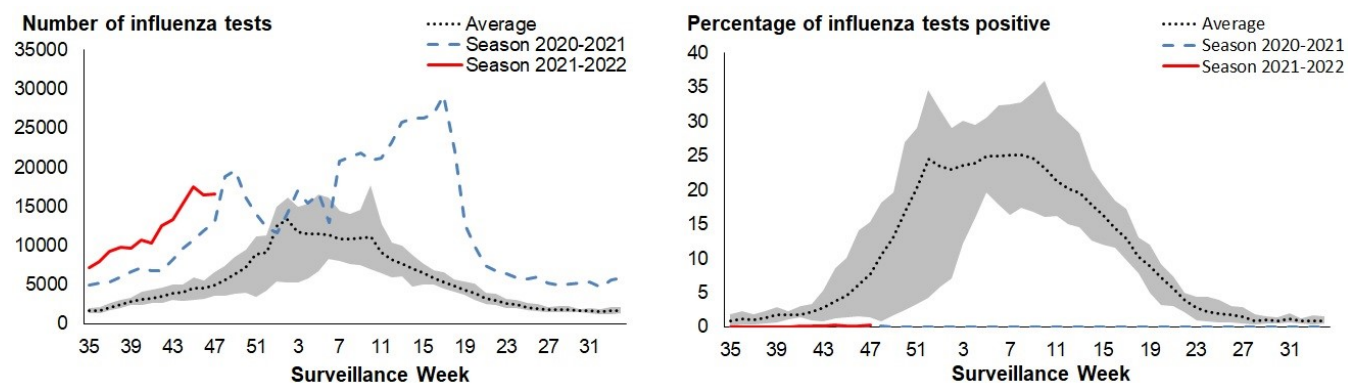
Number of Laboratories Reporting in Week 47: 32 out of 34



For one province, only data from subtyped influenza A specimens are included in the weekly number of positive influenza tests in Figure 2. The number of positive tests reported in Figure 2 may not equal the total number of positive tests in the report body text.

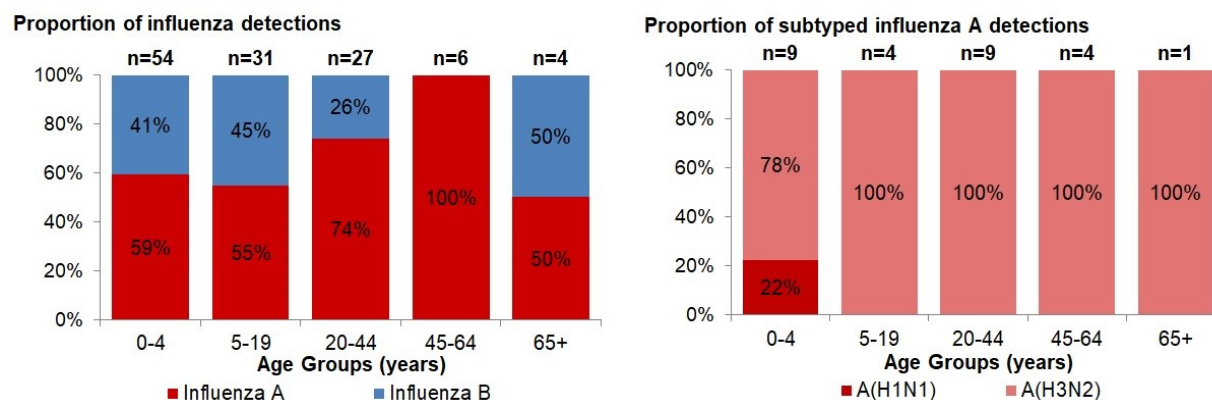
Influenza detections reported to be associated with recent LAIV receipt (N=32) are excluded from Figure 2 as they do not represent community transmission of seasonal influenza viruses.

Figure 3 – Number of influenza tests and percentage of tests positive in Canada compared to previous seasons, week 2021-47



The shaded area represents the maximum and minimum number of influenza tests or percentage of tests positive reported by week from seasons 2014-2015 to 2019-2020. Data from week 11 of the 2019-2020 season onwards are excluded from the historical comparison due to the COVID-19 pandemic.

Figure 4 – Proportion of positive influenza specimens by type or subtype and age-group reported through case-based laboratory reporting, Canada, weeks 2021-35 to 2021-47



Syndromic / Influenza-like Illness Surveillance

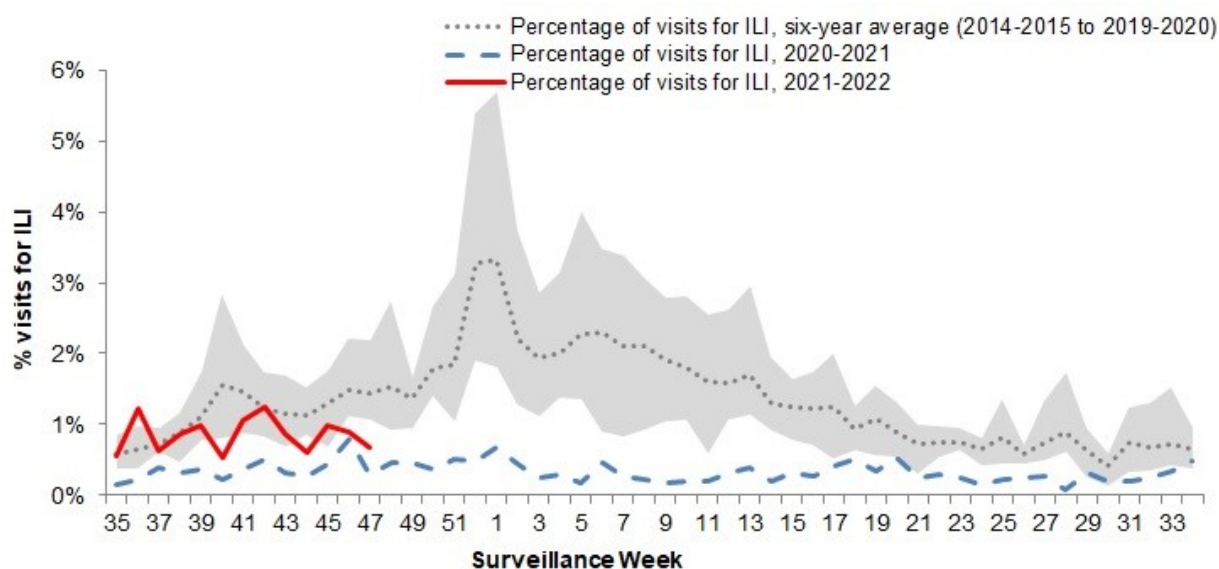
Healthcare Practitioners Sentinel Surveillance

In week 47, 0.68% of visits to healthcare professionals were due to influenza-like illness (ILI). Since the beginning of the surveillance season, the percentage of visits for ILI has been within or near expected pre-pandemic levels (Figure 5).

This indicator should be interpreted with caution as there have been changes in healthcare seeking behavior of individuals and a smaller number of sentinels reporting compared to previous seasons.

Figure 5 – Percentage of visits for ILI reported by sentinels by report week, Canada, weeks 2021-35 to 2021-47

Number of Sentinels Reporting in Week 47: 46



The shaded area represents the maximum and minimum percentage of visits for ILI reported by week from seasons 2014-2015 to 2019-2020. Data from week 11 of the 2019-2020 season onwards are excluded from the historical comparison due to the COVID-19 pandemic.

FluWatchers

In week 47, 12,590 participants reported to FluWatchers, of which 0.56% reported symptoms of cough and fever (Figure 6). The reports of cough and fever are not specific to any one respiratory pathogen and can be due to influenza, or other respiratory viruses, including respiratory syncytial virus, rhinovirus, and even SARS-CoV-2, the virus that causes COVID-19.

The percentage of participants reporting cough and fever has been stable since week 37, and remains at lower than expected levels. This may be a direct effect of individual and public health measures enacted to reduce the spread of COVID-19. FluWatchers reporting is not impacted by changes in health services or health seeking behaviours.

Among the 71 participants who reported cough and fever:

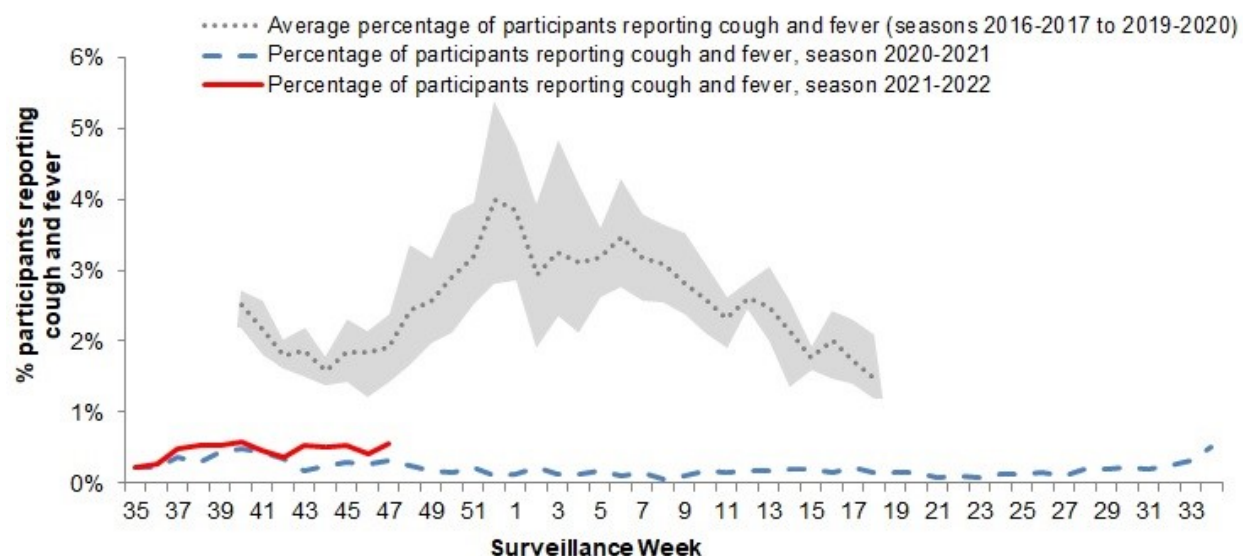
- 69% consulted a healthcare professional;
- 79% reported days missed from work or school, resulting in a combined total of 215 missed days of work or school (average of 3 days).

Nova Scotia had the highest participation rate this week (47 participants per 100,000 population) and the neighbourhood of K2J had the highest number of participants (145). See what is happening in your [neighbourhood](#)! Downloadable datasets are also available on [Open Maps](#).

If you are interested in becoming a [FluWatcher](#), [sign up today](#).

Figure 6 – Percentage of FluWatchers reporting cough and fever, Canada, week 2021-47

Number of Participants Reporting in Week 47: 12,590



The shaded area represents the maximum and minimum percentage of percentage of participants reporting cough and fever by week, from seasons 2014-2015 to 2019-2020. Data from week 11 of the 2019-2020 season onwards are excluded from the historical comparison due to the COVID-19 pandemic

Influenza Outbreak Surveillance

In week 47, one ILI outbreak in a school/daycare was reported.

To date this season (August 28 to November 27, 2021), 12 ILI outbreaks and no laboratory-confirmed influenza outbreaks have been reported. The most recent laboratory-confirmed influenza outbreak occurred in week 24 (week ending June 13, 2020) of the 2019-2020 season.

All ILI outbreaks have been reported in schools and/or daycares. The number of ILI outbreaks reported to date this season is lower than the 2020-2021 season but higher than in pre-pandemic seasons. This is not unexpected given changes to outbreak surveillance, specifically increased vigilance in schools to monitor and report absenteeism due to ILI, and the increased restrictions on attendance for children with symptoms of viral respiratory illness.

Outbreaks of ILI are not specific to any one respiratory pathogen and can be due influenza, or other respiratory viruses, including respiratory syncytial virus, rhinovirus, and even COVID-19. Many respiratory viruses in addition to the flu commonly circulate during the fall and winter, and can cause clusters of cases with respiratory illness which could be captured as ILI. For more information on the respiratory viruses currently circulating in Canada, please refer to the [Respiratory Virus Detections in Canada](#).

Number of provinces and territories¹ reporting in week 47: 12 out of 13

¹All Provinces and Territories (PTs) participate in FluWatch's outbreak surveillance system. This outbreak system monitors influenza and ILI outbreaks in long-term care facilities, acute care facilities, schools and daycares, remote and/or isolated communities, and facilities categorized as 'other'. Not all reporting PTs report outbreaks in all these settings. All PTs report laboratory confirmed outbreaks in LTCF. Four PTs (NB, NL, NS and YK) report ILI outbreaks in schools and/or daycares and other facilities.

Influenza Severe Outcomes Surveillance

Provincial/Territorial Influenza Hospitalizations and Deaths

In week 47, no influenza-associated hospitalizations were reported by participating provinces and territories².

To date this season (August 28 to November 27, 2021), no influenza-associated hospitalizations were reported by participating provinces and territories.

The last influenza-associated hospitalization reported by participating provinces and territories was reported in week 25 (week ending June 20, 2020) of the 2019-2020 season.

Number of provinces and territories reporting in week 47: 8 out of 9

²Influenza-associated hospitalizations are reported by Alberta, Manitoba, New Brunswick, Newfoundland and Labrador, Northwest Territories, Nova Scotia, Prince Edward Island and Yukon. Only hospitalizations that require intensive medical care are reported by Saskatchewan.

Pediatric Influenza Hospitalizations and Deaths

In week 47, no pediatric (≤ 16 years of age) influenza-associated hospitalizations were reported by the Immunization Monitoring Program Active (IMPACT) network.

To date this season (August 28 to November 27, 2021), no pediatric influenza-associated hospitalizations were reported by the IMPACT network.

The last pediatric influenza-associated hospitalization was reported by the IMPACT network in week 29 (week ending July 18, 2020) of the 2019-2020 season.

Adult Influenza Hospitalizations and Deaths

In week 47, no influenza-associated adult (≥ 16 years of age) hospitalizations were reported by the Canadian Immunization Research Network (CIRN) Serious Outcomes Surveillance (SOS) network.

To date this season (August 28 to November 20, 2021), less than five influenza-associated adult (≥ 16 years of age) hospitalizations have been reported by the CIRN SOS network, with the most recent influenza-associated hospitalization reported in week 46 (week ending November 20, 2021).

Influenza Strain Characterization

To date this season (August 28 to November 27, 2021), the National Microbiology Laboratory (NML) has characterized one influenza virus (1 influenza A(H1N1)) received from Canadian laboratories.

The one H1N1 virus characterized was antigenically similar to A/Wisconsin/588/2019, the influenza A(H1N1) component of the 2021-2022 Northern Hemisphere influenza vaccine.

Antiviral Resistance

The NML also tests influenza viruses received from Canadian laboratories for antiviral resistance.

Antiviral Resistance – Oseltamivir

One influenza virus (1 H1N1) was tested for resistance to oseltamivir and it was found that:

- The A(H1N1) influenza virus was sensitive to oseltamivir.

Antiviral Resistance – Zanamivir

One influenza virus (1 H1N1) was tested for resistance to zanamivir and it was found that:

- The A(H1N1) influenza virus was sensitive to zanamivir.

Influenza Vaccine Monitoring

Vaccine monitoring refers to activities related to the monitoring of influenza vaccine coverage and effectiveness.

Vaccine Coverage

Influenza vaccine coverage estimates for the 2021-2022 season are anticipated to be available in February or March 2022.

Vaccine Effectiveness

Influenza vaccine effectiveness estimates for the 2021-2022 season are anticipated to be available in February or March 2022, pending the resumption of community transmission of seasonal influenza.

Provincial and International Surveillance Links

- British Columbia – [Influenza Surveillance; Vaccine Effectiveness Monitoring](#)
- Alberta – [Respiratory Virus Surveillance](#)
- Saskatchewan – [Influenza Reports](#)
- Manitoba – [Seasonal Influenza Reports](#)
- Ontario – [Ontario Respiratory Pathogen Bulletin](#)
- Québec – [Système de surveillance de la grippe \(available in French only\)](#)
- New Brunswick – [Influenza Surveillance Reports](#)
- Prince Edward Island – [Influenza Summary](#)
- Nova Scotia – [Respiratory Watch Report](#)
- Newfoundland and Labrador – [Surveillance and Disease Reports](#)
- Yukon – [Influenza \(the Flu\)](#)
- Northwest Territories – [Influenza/ Flu Information](#)
- Nunavut – [Influenza Information](#)
- World Health Organization – [Global Influenza Programme](#)
- Pan American Health Organization – [Influenza situation report](#)
- U.S. Centers for Disease Prevention & Control (CDC) - [Weekly Influenza Summary Update](#)
- European Centre for Disease Prevention and Control – [Surveillance reports and disease data on seasonal influenza](#)
- United Kingdom – [National influenza surveillance reports](#)
- Hong Kong Centre for Health Protection - [Flu Express](#)
- Australia – [Influenza Surveillance Report and Activity Updates](#)
- New Zealand – [Influenza Dashboard](#)

Notes

The data in the FluWatch report represent surveillance data available at the time of writing. All data are preliminary and may change as updates are received.

To learn more about the FluWatch program, see the [Overview of influenza monitoring in Canada](#) page.

For more information on the flu, see our [Flu \(influenza\)](#) web page.

We would like to thank all the FluWatch surveillance partners participating in this year's influenza surveillance program.

This [report](#) is available on the Government of Canada Influenza webpage.

Ce [rapport](#) est disponible dans les deux langues officielles.