

November 1 to 7, 2020 (week 45)

Overall Summary

- Influenza testing continues at elevated levels; however, influenza activity remains below average for this time of year.
- Four laboratory detections of influenza were reported in week 45; two of these detections were associated with recent live attenuated influenza vaccine (LAIV) receipt and likely represent vaccine-type virus rather than community circulation of seasonal influenza viruses.
- Four influenza-like-illness (ILI) outbreaks were reported in schools and daycares.
- 12,258 participants reported to FluWatchers and 35 (0.29%) participants reported cough and fever. Provide valuable information to track the flu and COVID-19 across Canada: [Sign up to become a FluWatcher!](#)
- Influenza surveillance indicators may be influenced by the COVID-19 pandemic, including changes in healthcare-seeking behaviour, impacts of public health measures and influenza testing capacity. Current data should be interpreted with consideration to this context. See the [COVID-19 Epidemiology update](#) for information on COVID-19 cases in Canada.

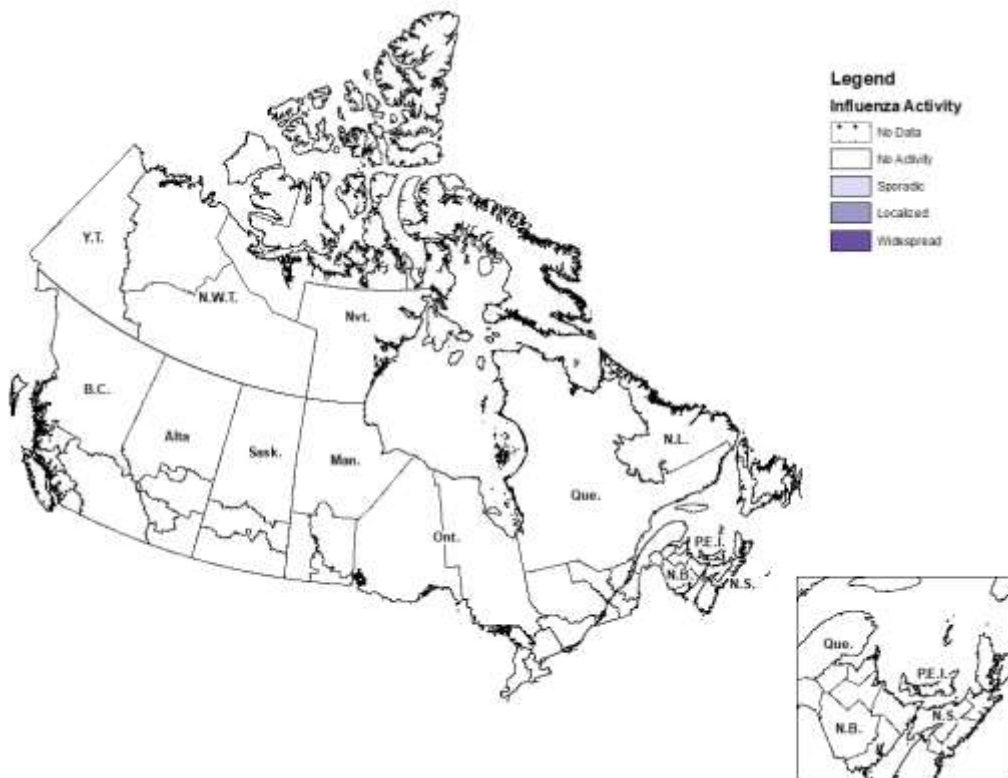
Influenza/Influenza-like Illness (ILI) Activity (geographic spread)

During week 45, no influenza/ILI activity was reported in Canada (Figure 1).

Influenza/ILI activity is lower at this point in the season compared to the previous four seasons; historically, between 22-30 regions reported activity in week 45.

Figure 1 – Map of influenza/ILI activity by province and territory, Canada, week 2020-45

Number of Regions Reporting in Week 45: 53 out of 53



Laboratory-Confirmed Influenza Detections

In week 45, four laboratory detections of influenza were reported (Figure 2). Two of these influenza detections were known to be associated with recent live attenuated influenza vaccine (LAIV) receipt in two individuals and likely represent vaccine-type virus rather than community circulation of seasonal influenza viruses.

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, please refer to the [Canadian Immunization Guide Chapter on Influenza and Statement on Seasonal Influenza Vaccine for 2020–2021 \(Section IV.2\)](#).

The percentage of laboratory tests positive for influenza has remained at exceptionally low levels throughout the period of March to October, despite elevated levels of testing. In week 45, 9,985 tests for influenza were performed at reporting laboratories, which is 2.2 times the average for this week over the past six seasons. The percentage of tests positive for influenza in week 45 was 0.04%, compared to 4.6% during the past six seasons.

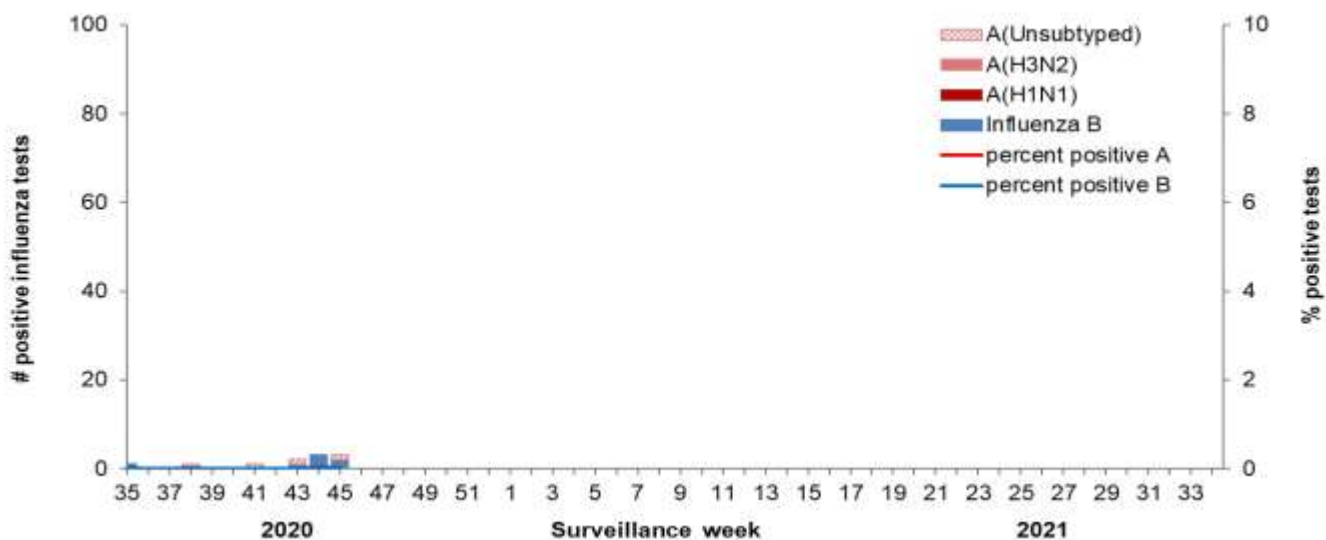
To date this season, 17 influenza detections have been reported, which is significantly lower than the past six seasons where an average of 818 influenza detections were reported between weeks 35-45.

The 2019-20 influenza season in Canada ended abruptly in mid-March, concurrent with the implementation of public health measures to reduce the spread of COVID-19. 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 [Figure 2](#) 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, weeks 2020-35 to 2020-45

Number of laboratories reporting in week 45: 33 out of 35



The shaded area indicates weeks where the positivity rate was at least 5% and a minimum of 15 positive tests were observed, signalling the period of [seasonal influenza activity](#). Note some of the laboratory detections reported in weeks 44 and 45 were associated with recent live attenuated influenza vaccine receipt and likely represent vaccine-type virus rather than community circulation of seasonal influenza.

Figure 3 – Distribution of positive influenza specimens by type/subtype and province/territory*, Canada, weeks 2020-35 to 2020-45

There is insufficient data for weeks 35-45 to present influenza detections by type/subtype and province/territory

* Specimens from NWT, YT, and Nvt are sent to reference laboratories in other provinces.

Syndromic / Influenza-like Illness Surveillance

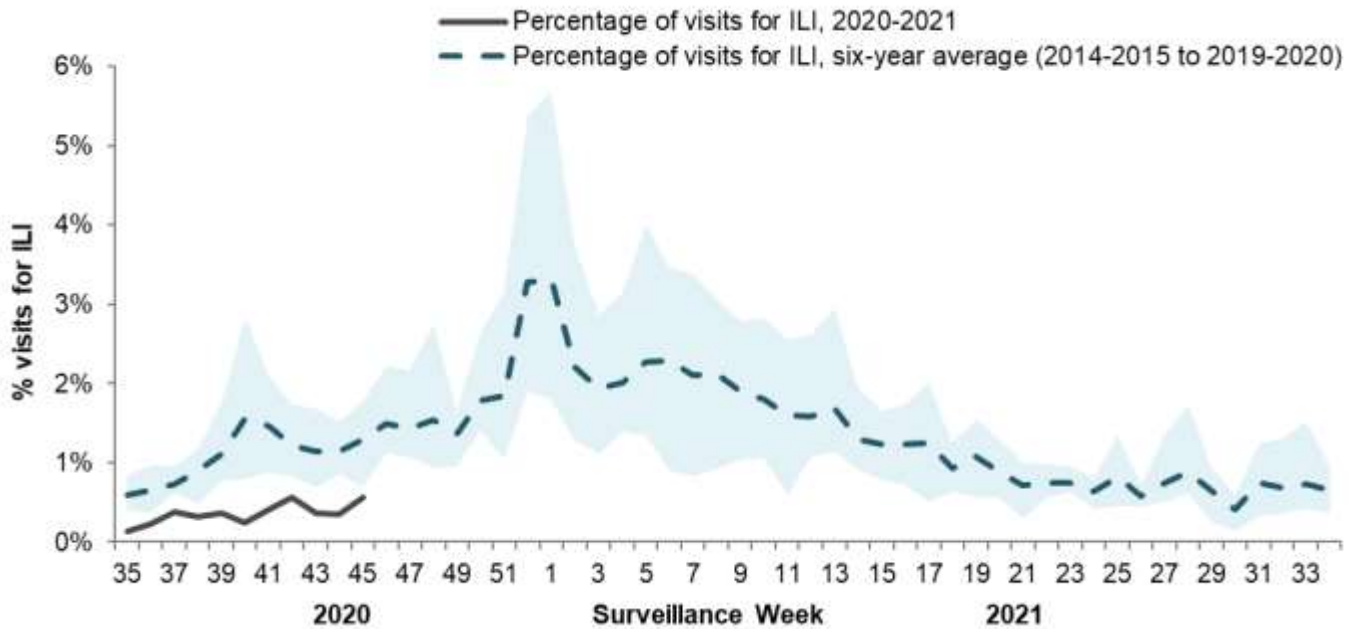
Healthcare Practitioners Sentinel Syndromic Surveillance

In week 45, 0.6% of visits to healthcare professionals were due to influenza-like illness (ILI) which is similar to previous weeks, and remains lower than average compared to recent seasons (Figure 4).

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

Figure 4 – Percentage of visits for ILI reported by sentinels by report week, Canada, weeks 2020-35 to 2020-45

Number of Sentinels Reporting in Week 45: 63



The shaded area represents the maximum and minimum percentage of visits for ILI reported by week from seasons 2014-2015 to 2019-2020.

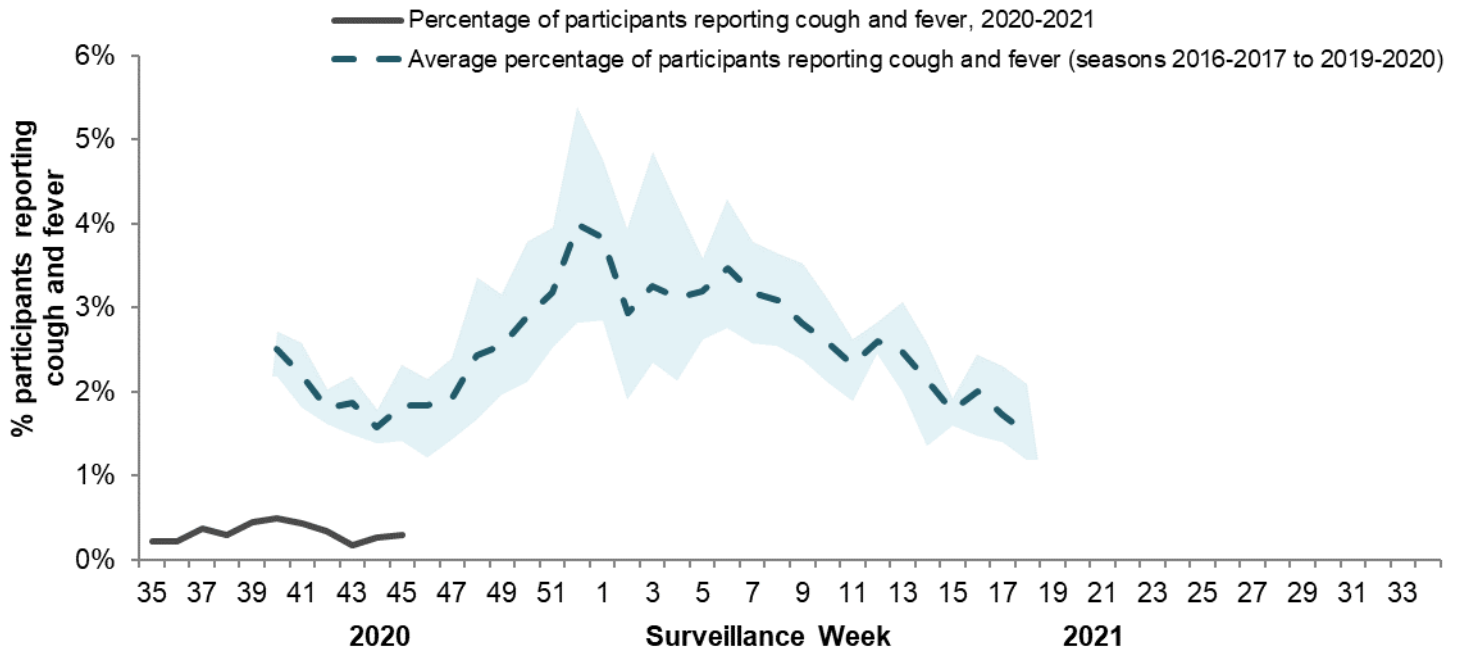
FluWatchers

In week 45, 12,258 participants reported to FluWatchers. A total of 35 participants (0.29%) reported symptoms of cough and fever (Figure 5). The percentage of participants reporting cough and fever is at very low levels and 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.

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

Figure 5 – Percentage of FluWatchers participants reporting cough and fever, Canada, weeks 2020-35 to 2020-45

Number of Participants Reporting in Week 45: 12,258



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

Online Figure – Geographic distribution of FluWatchers participants reporting cough and fever, Canada, week 2020-45

Click on the map to access the link



Influenza Outbreak Surveillance

In week 45, four influenza-like-illness (ILI) outbreaks were reported in schools and/or daycares. No other influenza or ILI outbreaks were reported in any other settings.

To date this season, 77 influenza-like-illness (ILI) outbreaks in schools and/or daycares, and one laboratory-confirmed influenza outbreak in a LTCF, have been reported.

Outbreaks of ILI in schools and daycares are identified when greater than 10% absenteeism due to ILI are reported in these settings. The number of ILI outbreaks in schools and daycares reported is higher compared to the same time period in the previous two 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 rhinovirus and even COVID-19. Rhinovirus commonly circulates during the fall, and can cause clusters of cases with respiratory illness that 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 Report](#).

Number of provinces and territories reporting in week 45¹: 13 out of 13

¹ All 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.

Severe Outcomes Influenza Surveillance

Provincial/Territorial Influenza Hospitalizations and Deaths

In week 45, no influenza-associated hospitalizations were reported by participating provinces and territories¹. To date this season no influenza-associated hospitalizations were reported by participating provinces and territories.

Number of provinces and territories reporting in week 45: 9 out of 9

¹Influenza-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 45, no influenza-associated hospitalizations were reported. To date this season, less than five pediatric (≤ 16 years of age) hospitalizations with influenza have been reported by the Immunization Monitoring Program Active (IMPACT) network.

Adult Influenza Hospitalizations and Deaths

Surveillance of laboratory-confirmed influenza-associated adult (≥ 16 years of age) hospitalizations by the Canadian Immunization Research Network (CIRN) Serious Outcomes Surveillance (SOS) network has not yet begun for the 2020-21 season.

Influenza Strain Characterizations

Due to the very low influenza circulation to date this season, the National Microbiology Laboratory has not yet received influenza viruses collected during the 2020-21 season for strain characterization.

Antiviral Resistance

Due to the very low influenza circulation to date this season, the National Microbiology Laboratory has not yet received influenza viruses collected during the 2020-21 season for antiviral resistance testing.

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 2020-21 season are anticipated to be available in February or March 2021.

Vaccine Effectiveness

Influenza vaccine effectiveness estimates are typically available in February or March of each year; this may be delayed for the 2020-21 season if low influenza circulation continues.

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 – [Information on Pandemic, Influenza, Seasonal Flu, Avian Flu and H1N1](#)
- Northwest Territories – [Influenza/ Flu Information](#)
- Nunavut – [Influenza Information](#)
- World Health Organization – [FluNet \(Global Influenza Surveillance Network\)](#)
- Pan American Health Organization – [Influenza situation report](#)
- U.S. Centers for Disease Prevention & Control (CDC) - [Weekly Influenza Summary Update](#)
- ECDC – [Surveillance reports and disease data on seasonal influenza](#)
- United Kingdom – [Weekly Influenza Activity Reports](#)
- Hong Kong Centre for Health Protection - [Flu Express](#)
- Australia – [Influenza Surveillance Report and Activity Updates](#)
- New Zealand – [Influenza Weekly Update](#)

Notes

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