May 23 to June 19, 2021 (Weeks 21 to 24)

Overall summary

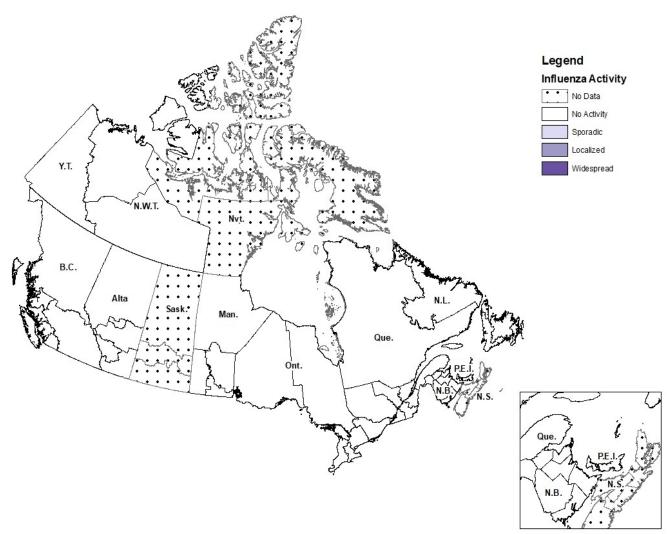
- Despite continued monitoring for influenza across Canada, there has been no evidence of community circulation of influenza during the usual period of seasonal influenza activity from mid-November to mid-April. Given the time of year, influenza is expected to remain at interseasonal levels for the remainder of the 2020-2021 seasonal influenza surveillance period.
- <u>Sign up to become a FluWatcher!</u> FluWatchers provide valuable information on influenza and COVID-19 activity across Canada.
- The next FluWatch report will be published on July 30, 2021. Weekly reporting of laboratory detections of respiratory viruses will continue via our Respiratory Virus Detections Surveillance System.

Influenza/influenza-like illness (ILI) activity (geographic spread)

During week 24, no influenza/ILI activity was reported (Figure 1).

Figure 1 - Map of influenza/ILI activity by province and territory, Canada, week 2021-24

Number of Regions Reporting in Week 24: 43 out of 53





Laboratory-confirmed influenza detections

In weeks 21 to 24, one laboratory detection of influenza was reported.

To date this season, 73 influenza detections have been reported (Figure 2), which is significantly lower than the past six seasons where an average of 51,942 influenza detections were reported for the season to date. All provinces and territories are closely monitoring indicators of influenza activity this season. Data in the FluWatch report represent surveillance data available at the time of writing, and may change as updates are received.

Thirty-one of the influenza detections reported to date this season are known to be associated with recent live attenuated influenza vaccine (LAIV) receipt and do not represent 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). Four of the influenza detections reported to date this season were sporadic detections of swine variant influenza A viruses: one influenza A(H1N1)v, two influenza A(H1N2)v and most recently in week 23, one influenza A(H3N2)v. These variant viruses differ from the influenza strains responsible for seasonal influenza epidemics. They are usually acquired through direct or indirect contact with swine and do not spread easily from person to person.

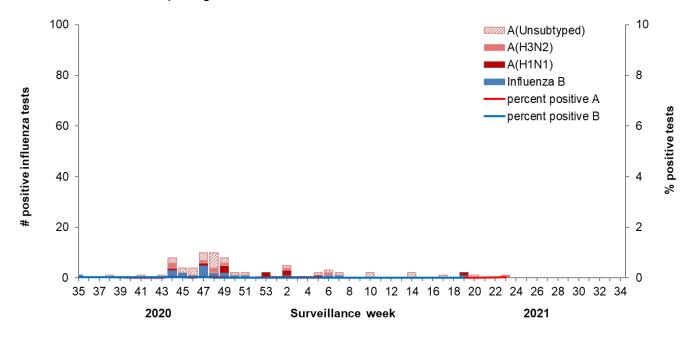
Overall, the percentage of laboratory tests positive for influenza remains at exceptionally low levels, despite the elevated levels of testing seen this month. In weeks 21 to 24, 23,798 tests for influenza were performed at reporting laboratories and the average percentage of tests positive was 0%. Compared to the past six seasons, the number of tests performed for this time period was higher than the average (11,182) and the percentage of tests positive for influenza remains well below average (4.4%) (Figure 3a and 3b).

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 2021-24

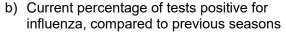
Number of laboratories reporting in week 24: 30 out of 35

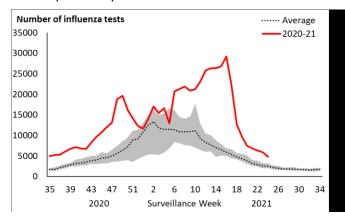


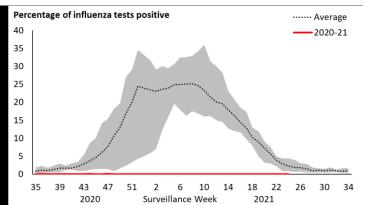
The shaded area indicates weeks where the positivity rate was at least 5% and a minimum of 15 positive tests were observed, signalling the period of seasonal influenza activity.

Figure 3 – Number of influenza tests (a) and percentage of tests positive (b) in Canada by week, weeks 2020-35 to 2021-24 as compared to previous seasons

a) Current number of influenza tests performed, compared to previous seasons







The shaded area represents the maximum and minimum number of influenza tests (a) or percentage of tests positive (b) reported by week from seasons 2014-2015 to 2019-2020.

Syndromic / influenza-like illness (ILI) surveillance

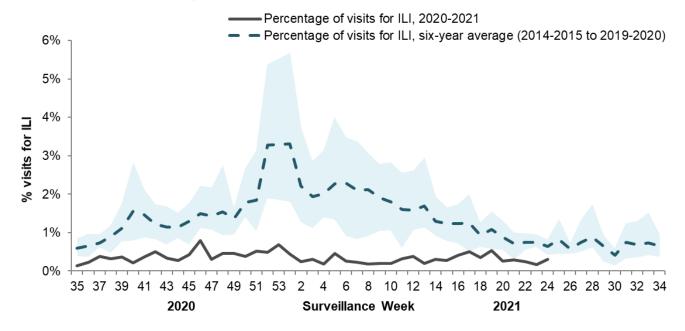
Healthcare practitioners sentinel syndromic surveillance

In weeks 21 to 24, an average of 0.3% of visits to healthcare professionals were due to influenza-like illness (ILI), which 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 compared to previous seasons.

Figure 4 – Percentage of visits for ILI reported by sentinels by report week, Canada, weeks 2020-35 to 2021-24

Number of Sentinels Reporting in Week 24: 50



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

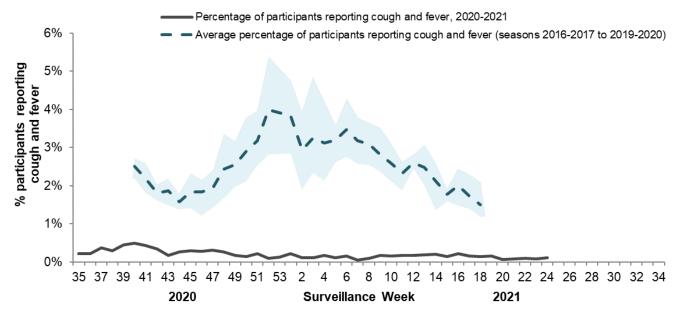
FluWatchers

In week 24, 11,987 participants reported to FluWatchers, and a total of 14 participants (0.12%) reported symptoms of cough and fever (Figure 5). The percentage of participants reporting cough and fever remains 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 <u>FluWatcher</u>, <u>sign up today</u>.

Figure 5 - Percentage of FluWatchers participants reporting cough and fever, Canada, weeks 2020-35 to 2021-24

Number of Participants Reporting in Week 24: 11,987



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 2021-24

Click on the map to access the link



Influenza outbreak surveillance

In weeks 21 to 24, seven influenza-like-illness (ILI) outbreaks in schools and/or daycares were reported.

To date this season, 137 influenza-like-illness (ILI) outbreaks in schools and/or daycares, and no other influenza or ILI outbreaks have been reported in any other settings.

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 SARS-CoV-2, the virus that causes COVID-19. For more information on the respiratory viruses currently circulating in Canada, please refer to the <u>Respiratory Virus Detections in Canada Report</u>.

Number of provinces and territories reporting in weeks 21 to 24¹: 10 out of 13

¹All Provinces and Territories (PTs) participate in the FluWatch outbreak surveillance system component. This outbreak system monitors influenza and ILI outbreaks in long-term care facilities (LTCF), 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 influenza 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 weeks 21 to 24, no influenza-associated hospitalizations were reported by participating provinces and territories², nor have any been reported this season to date.

Number of provinces and territories reporting in weeks 21 to 24: 7 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 hospitalization and deaths

In weeks 21 to 24 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 hospitalization 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 begun for the 2020-2021 season.

Influenza strain characterizations

Due to the very low influenza circulation to date this season, the National Microbiology Laboratory has not received influenza viruses collected during the 2020-2021 season for strain characterization.

Antiviral resistance

Due to the very low influenza circulation to date this season, the National Microbiology Laboratory has not received influenza viruses collected during the 2020-2021 season for antiviral resistance testing.

Vaccine monitoring

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

Vaccine coverage

The Seasonal Influenza Immunization Coverage Survey is an annual telephone survey conducted between January and February that collects information from Canadians on whether they received the annual seasonal influenza vaccine that season. Vaccine coverage is measured as the percentage of people who reported receiving the influenza vaccine in a specific influenza season.

In the 2020-21 influenza season, coverage was similar to the 2019-20 season, at:

- 32% among adults aged 18 to 64 years.
 - o 29% among adults aged 18-64 without chronic medical conditions.
 - o 41% among adults aged 18 to 64 years with chronic medical conditions.
- 70% among seniors (aged 65 years and older).

Table 1 – Influenza vaccine coverage among adults (n=3,032)* by risk group† and gender‡, Seasonal Influenza Vaccination Coverage Survey, Canada, September 2020 – February 2021

Age group (years)	All		Male		Female	
	N	Vaccine Coverage % (95% CI)	N	Vaccine Coverage % (95% CI)	N	Vaccine Coverage % (95% CI)
All adults (≥18)	3014	40.4 (38.4-42.4)	1399	35.2 (32.5-38.0)	1595	45.2 (42.4-48.1)
18-64	2152	32.4 (30.1-34.6)	1024	27.3 (24.3-30.3)	1115	37.4 (34.1-40.7)
with chronic medical conditions	646	40.5 (36.2-44.8)	286	36.9 (30.7-43.1)	354	43.5 (37.5-49.4)
without chronic medical conditions	1498	29.2 (26.6-31.8)	734	24.2 (20.8-27.6)	757	34.6 (30.6-38.5)
≥65	862	70.4 (67.1-73.8)	375	68.0 (62.8-73.2)	480	72.8 (68.4-77.1)

^{*18} people did not recall whether they had received the influenza vaccine and were excluded from coverage estimates.

Vaccine effectiveness

Influenza vaccine effectiveness (VE) estimates are typically available in February or March of each year. Given the low influenza circulation, VE estimates will not be available for the 2020-2021 season.

^{†11} people who were 18-64 years old did not disclose whether they had any chronic medical conditions (CMC) and were excluded from stratified analysis.

^{±11} people did not disclose their gender and 9 people did not identify themselves as male or female. They were excluded from stratified analysis.

Provincial/territorial 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 Global Influenza Programme, Influenza Updates
- 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.

THANK YOU to our Fluwatch surveillance partners who participate the influenza surveillance program!

> This report is available on the Government of Canada Influenza webpage. Ce rapport est disponible dans les deux langues officielles.

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