

October 2 to October 15, 2022 (Weeks 40-41)

Weekly Highlights

At the national level, influenza activity is increasing but remains at interseasonal levels.

Virologic

- In weeks 40 to 41, a total of 394 laboratory detections (380 influenza A and 14 influenza B) were reported.
- Influenza A(H3N2) is the dominant subtype, representing 77% of sub-typed influenza A detections this season (August 28, 2022 to October 15, 2022).
- Among detections with detailed age information to date (August 28, 2022 to October 15, 2022), 45% were in children and teenagers (ages 0 to 19 years).

Syndromic

- The percentage of visits for influenza-like illness (ILI) was 1.7% in week 41. The percentage visits for ILI is within levels typical of this time of year.
- The percentage of FluWatchers reporting fever and cough was 2% in week 41. The percentage of FluWatchers reporting cough and fever is within levels typical of this time of year.

Outbreaks

• From August 28, 2022 to October 15, 2022 (weeks 35 to 41), 5 laboratory-confirmed influenza outbreaks have been reported.

Severe Outcomes

• From August 28, 2022 to October 15, 2022 (weeks 35 to 41), 18 influenza-associated hospitalizations have been reported from participating provinces and territories.

Other Notes

- The next scheduled FluWatch report (weeks 42 and 43) will be published November 14, 2022.
- Weekly reporting of laboratory detections of influenza and other seasonal respiratory viruses will continue via our Respiratory Virus Detections Surveillance System.

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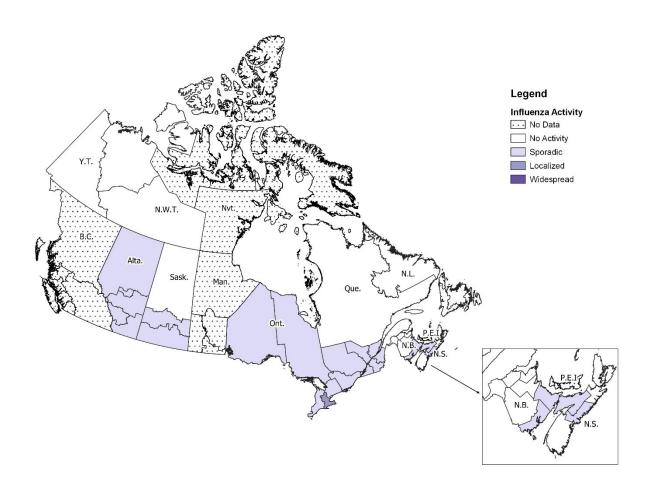


Influenza/Influenza-like Illness Activity - Geographic Spread

In week 41, one region in Ontario reported localized activity and 22 regions in six provinces reported sporadic influenza activity (N.S., N.B., Que., Ont., Sask. and Alta.) (Figure 1).

Figure 1 – Map of influenza/ILI activity by province and territory, Canada, week 2022-41

Number of Regions Reporting in Week 41:39 out of 53



Laboratory-Confirmed Influenza Detections

In week 41, a total of 246 laboratory detections (238 influenza A and 8 influenza B) were reported. Influenza activity remains within the interseasonal levels typically seen at this time of year.

The following results were reported from sentinel laboratories a cross Canada in week 41 (Figures 2 and 3):

- The weekly percentage of tests positive for influenza increased from 0.7% in week 39 to 1.6% in week 41 and is within expected pre-pandemic levels.
- Among subtyped influenza A detections, 86% (87) were influenza A(H3N2) and 14% (14) were influenza A(H1N1).

To date this season (August 28, 2022 to October 15, 2022), 652 influenza detections were reported:

- 95% (619) were influenza A.
- Among subtyped influenza A detections (342), influenza A(H3N2) accounted for 77% of detections.

Detailed information on age and type/subtype has been received for 396 laboratory-confirmed influenza detections (Figure 4). Among the 396 detections, 177 (45%) were in individuals aged 0-19 years old and 91 (23%) were in individuals 20-44 years old.

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 2022-35 to 2022-41

Number of Laboratories Reporting in Week 41: 32 out of 34

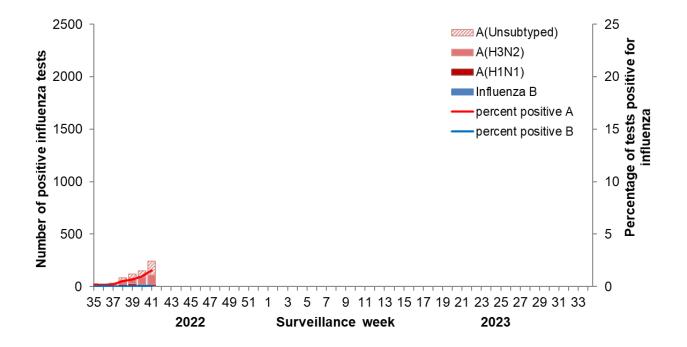
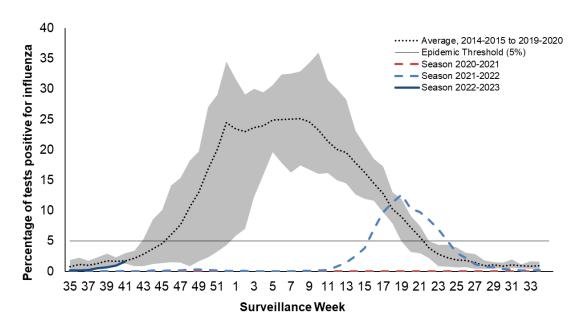


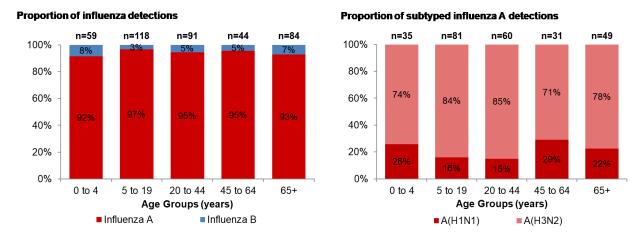
Figure 3 – Percentage of tests positive in Canada compared to previous seasons, week 2022-35 to 2022-41



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.

The epidemic threshold is 5% tests positive for influenza. When it is exceeded, and a minimum of 15 weekly influenza detections are reported, a seasonal influenza epidemic is declared.

Figure 4 – Proportion of positive influenza specimens by type or subtype and age-group reported through case-based laboratory reporting, Canada, week 2022-35 to 2022-41



Laboratory data notes:

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 seasons.

Due to different testing protocols of laboratories across Canada, some influenza A subtype detection counts may not be included in total influenza A detection counts and percent positivity calculations.

Syndromic / Influenza-like Illness Surveillance

Healthcare Practitioners Sentinel Surveillance

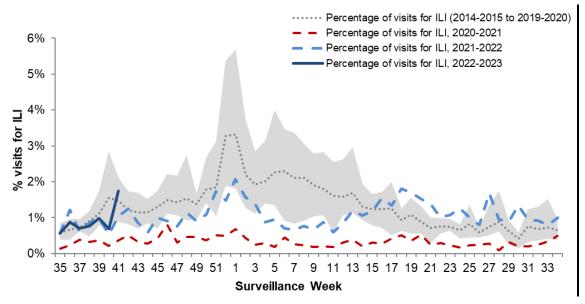
In week 41, 1.7% of visits to healthcare professionals were due to influenza-like illness (ILI). The percentage of visits for ILI is within levels typical of this time of year.

Since the beginning of the surveillance season, the percentage of visits for ILI has been within or near expected pre-pandemic levels (Figure 5). ILI symptoms are not specific to any one respiratory pathogen and can be due to influenza, or other respiratory viruses, including respiratory syncytial virus and even SARS-CoV-2, the virus that causes COVID-19.

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 2022-35 to 2022-41

Number of Sentinels Reporting in Week 41:37



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 41, 10,554 participants reported to FluWatchers, of which 2% reported symptoms of cough and fever (Figure 6). The percentage of FluWatchers who have reported cough and fever has slightly decreased since week 40 and remains within levels typically seen at this time of year.

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. FluWatchers reporting is not impacted by changes in health services or health seeking behaviours.

Among the 215 participants who reported cough and fever:

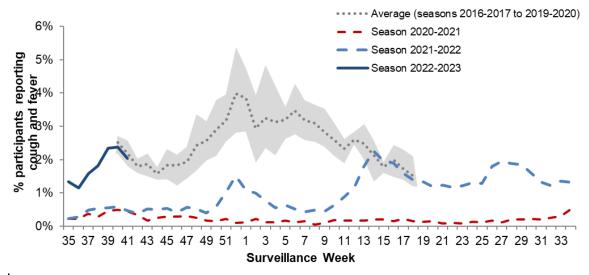
- 19% consulted a healthcare professional;
- 76% reported days missed from work or school, resulting in an average of 2.7 missed days from work or school among those 164 participants.

The Northwest Territories had the highest participation rate this week (47 participants per 100,000 population) and the neighbourhood with postal code, KOA had the highest number of participants (156). 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 2022-35 to 2022-41

Number of Participants Reporting in Week 41: 10,554



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 41, there were no laboratory-confirmed influenza outbreaks in long-term care facilities in Canada. To date this season (August 28, 2022 to October 15, 2022):

- 5 laboratory-confirmed influenza outbreak have been reported
 - o 4 were in long-term care facilities and 1 was in a facility categorized as 'other'
 - o All but one outbreak were due to influenza A, of which 2 were due to influenza A(H3N2) and the remaining were due to influenza A unsubtyped.
- 3 ILI outbreaks have been reported
 - o All ILI outbreaks have been reported in schools and/or daycares.

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.

Number of provinces and territories¹ reporting in week 41:9 out of 13

¹All Provinces and Territories (PTs) participate in the FluWatch outbreak surveillance system. 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 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 41, less than 5 influenza-associated hospitalizations and no ICU admissions were reported by participating provinces and territories².

To date this season (August 28, 2022 to October 15, 2022) among participating provinces and territories, 18 influenza-associated hospitalizations and less than 5 ICU admissions were reported.

Number of provinces and territories reporting in week 41:7 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 are reported by Saskatchewan.

Pediatric Influenza Hospitalizations and Deaths

In week 41, less than five influenza-associated pediatric (≤16 years of age) hospitalizations were reported by the Immunization Monitoring Program Active (IMPACT) network.

To date this season (August 28, 2022 to October 15, 2022), 5 pediatric influenza-associated hospitalizations have been reported.

Influenza Strain Characterization

The National Microbiology Laboratory has not yet reported influenza strain characterization results for influenza viruses collected during the 2022-2023 season.

Antiviral Resistance

The National Microbiology Laboratory has not yet reported antiviral resistance results for influenza viruses collected during the 2022-2023 season..

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 2022-2023 season are anticipated to be available in February or March 2023.

Vaccine Effectiveness

Influenza vaccine effectiveness estimates for the 2022-2023 season are anticipated to be available in February or March 2023.

Provincial and International Surveillance Links

- British Columbia Influenza Surveillance;
 Vaccine Effectiveness Monitoring
- Alberta Respiratory Virus Surveillance
- Saskatchewan Influenza Reports
- Manitoba Seas onal 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 represents urveillance 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.