

August 28 to October 1, 2022 (Weeks 35-39)

Weekly Highlights

At the national level, influenza activity is low and remains at interseasonal levels.

Virologic

- In weeks 35 to 39, a total of 254 laboratory detections (235 influenza A and 19 influenza B) were reported.
- Influenza A(H3N2) is the dominant subtype, representing 93% of sub-typed influenza A detections this season (August 28, 2022 to October 1, 2022).
- From August 28, 2022 to October 1, 2022 (weeks 35 to 39), among detections with detailed age information, 41% were in children and teenagers (ages 0 to 19 years).

Syndromic

- The percentage of visits for influenza-like illness (ILI) was 1% in week 39. The percentage visits for ILI is within levels typical of this time of year.
- The percentage of FluWatchers reporting fever and cough was 2.3% in week 39 and has been trending upwards since week 35.

Outbreaks

• From August 28, 2022 to October 1, 2022 (weeks 35 to 39), 1 laboratory-confirmed influenza outbreaks have been reported.

Severe Outcomes

• From August 28, 2022 to October 1, 2022 (weeks 35 to 39), no influenza-associated hospitalizations have been reported from participating provinces and territories.

Other Notes

- This is the first FluWatch report of the 2022-2023 surveillance season. The next scheduled report (weeks 40 and 41) will be published October 21, 2022.
- Weekly reporting of laboratory detections of influenza and other seasonal respiratory viruses will continue via our Respiratory Virus Detections Surveillance System.

 $\hbox{@}$ His Majesty the King in Right of Canada, as represented by the Minister of Health, 2022 ISSN: 2370-957X | Cat.: HP58-1E-PDF | Pub.: 210278



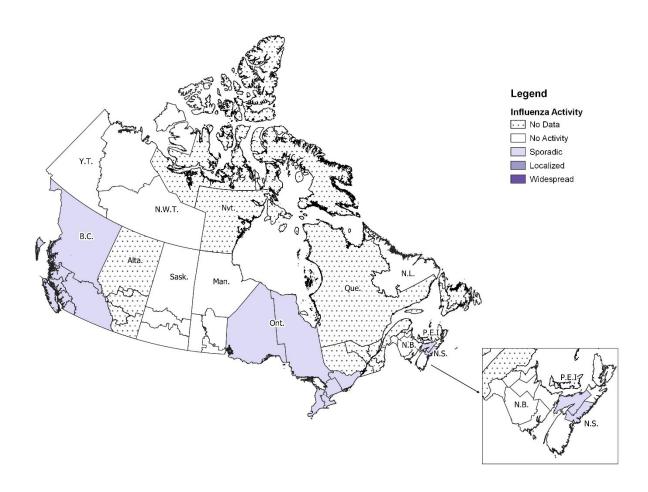


Influenza/Influenza-like Illness Activity - Geographic Spread

In week 39, 14 regions in three provinces reported sporadic influenza activity (B.C., Ont., and N.S.) (Figure 1).

Figure 1 – Map of influenza/ILI activity by province and territory, Canada, week 2022-39

Number of Regions Reporting in Week 39: 36 out of 53



Laboratory-Confirmed Influenza Detections

In week 39, a total of 102 laboratory detections (98 influenza A and 4 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 across Canada in week 39 (Figures 2 and 3):

- The weekly percentage of tests positive for influenza increased from 0.2% in week 35 to 0.7% in week 39 and is within expected pre-pandemic levels.
- Among subtyped influenza A detections, 67.3% (35) were influenza A(H3N2) and 32.7% (17) were influenza A(H1N1).

To date this season (August 28, 2022 to October 1, 2022), 254 influenza detections were reported:

- 93% (235) were influenza A.
- Among subtyped influenza A detections (136), influenza A(H3N2) accounted for 68% of detections.

Detailed information on age and type/subtype has been received for 182 laboratory-confirmed influenza detections (Figure 4). Among the 182 detections, 74 (41%) were in individuals aged 0-19 years old and 45 (25%) 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 2022-39

Number of Laboratories Reporting in Week 39: 33 out of 34

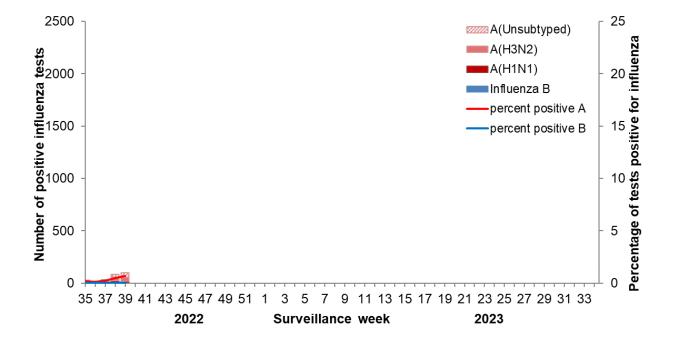
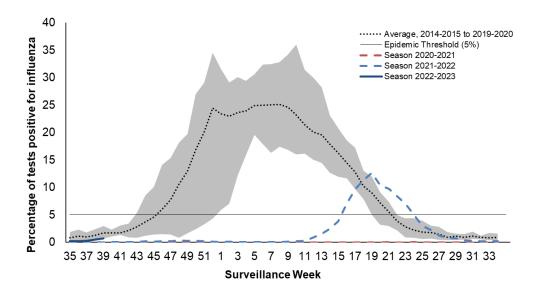


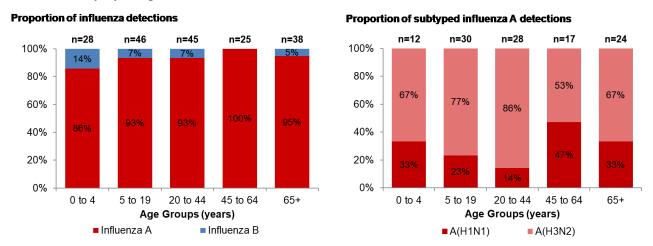
Figure 3 –Percentage of tests positive in Canada compared to previous seasons, week 2022-35 to 2022-39



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 2022-39



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, influenza A subtype detection counts may not be included in total influenza A detection counts. Some subtype detections are not available through routine testing but are subsequently reported if further subtype testing is conducted. In these instances, subtype counts do not reflect influenza A detections captured by routine surveillance, and are excluded from total detections and percent positivity.

Syndromic / Influenza-like Illness Surveillance

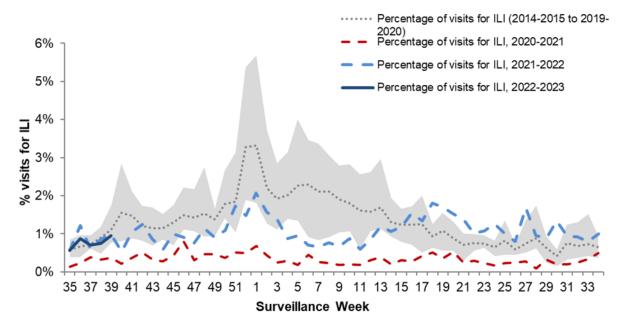
Healthcare Practitioners Sentinel Surveillance

In week 39, 1% 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 2022-39 Number of Sentinels Reporting in Week 39: 36



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 39, 10,441 participants reported to FluWatchers, of which 2.3% reported symptoms of cough and fever (Figure 6). The percentage of FluWatchers who have reported cough and fever has slightly increased since week 35.

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 242 participants who reported cough and fever:

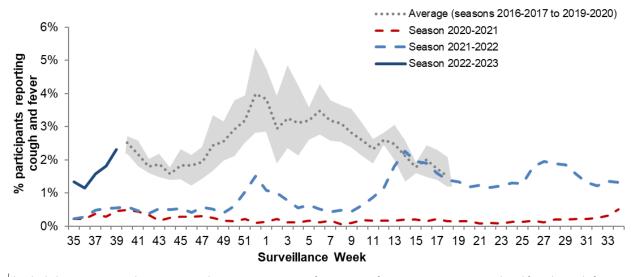
- 16% consulted a healthcare professional;
- 74% reported days missed from work or school, resulting in an average of 2.7 missed days from work or school among those 179 participants.

The Northwest Territories had the highest participation rate this week (49 participants per 100,000 population) and the neighbourhood with postal code, KOA had the highest number of participants (142). 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 2022-39

Number of Participants Reporting in Week 39: 10,441



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 39, there were no laboratory-confirmed influenza outbreaks in long-term care facilities in Canada. To date this season (August 28, 2022 to October 1, 2022):

- 1 laboratory-confirmed influenza outbreak has been reported
 - o The outbreak was due to influenza A(H3N2) and was in a long-term care facility
- 3 ILI outbreaks have been reported
 - 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 39: 8 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 39, no influenza-associated hospitalizations and no ICU admissions were reported by participating provinces and territories².

To date this season (August 28, 2022 to October 1, 2022) among participating provinces and territories, no influenza-associated hospitalizations and no ICU admissions were reported.

Number of provinces and territories reporting in week 39: 6 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 39, less than 5 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 1, 2022), less than 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 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.