

ONTARIO RESPIRATORY PATHOGEN BULLETIN | 2019-20

Surveillance Week 11: (March 8, 2020 – March 14, 2020)

Current Highlights and Assessment of Influenza Activity
in Ontario

Measure of Activity	Assessment of Measure Compared to the Previous Week (Lower, Similar, Higher)	Reasoning Behind Assessment
Laboratory-confirmed Influenza Cases ¹	Lower	Total influenza: 387 cases Influenza A: 218 cases Influenza B: 169 cases The 387 influenza cases reported in Week 11 was lower than the number reported in Week 10 (508).
Percent Positivity for Influenza ²	Lower	Total influenza: 9.3% (372/3992) Influenza A: 5.4% (214/3992) Influenza B: 4% (158/3992) The total percent positivity means that 9.3% of tests that were performed for influenza were positive for influenza in Week 11, which was lower than the percent positivity in Week 10 (13.1%).
Institutional Influenza Outbreaks ³	Higher	Total outbreaks: 9 Influenza A: 7 outbreaks Influenza B: 2 outbreaks There were 9 new influenza outbreaks reported in Week 11, which was higher than the number of influenza outbreaks reported in Week 10 (2).
Influenza Activity Levels Reported by Public Health Units	Higher	Influenza activity levels reported by public health units (n=35) Widespread activity: 0 Localized activity: 15 Sporadic activity: 15 No activity: 1 Did not report: 4
OVERALL ASSESSMENT	Similar	Influenza activity in Ontario for Week 11 was similar when compared to Week 10.

Notes:

¹ Based on the date the case was reported to the public health unit.² Positivity among viral respiratory specimens tested by Ontario laboratories that submit results to the Centre for Immunization and Respiratory Infectious Diseases (CIRID). Due to rounding, percentages presented here may not add up to the overall influenza percent positivity.³ The number of new outbreaks reported for the current week is based on the date the outbreak was reported to the public health unit; when reported date is unavailable, the date the outbreak was created in iPHIS is used.

Influenza Strain Characterization and Antiviral Resistance/Sensitivity Information

Influenza strain characterization and antiviral resistance/sensitivity information for Ontario can be found in the [Laboratory Respiratory Pathogen Surveillance Reports](#).

Outbreak Supplement

Measures of influenza outbreak activity and severity in Ontario

261 influenza A outbreaks and 20 influenza B outbreaks were reported as occurring by the end of week 11 of the 2019-20 season.

Cases and severity:

To the end of week 11 during the 2019-20 season, there were 2129 cases in the 261 reported influenza A outbreaks, of which 102 had pneumonia, 209 were hospitalized and 59 died. There were 175 cases associated with the 20 reported influenza B outbreaks, of which 14 had pneumonia, 20 were hospitalized and six died.

Data Sources for this Report

Data for assessment of influenza activity:

- **Integrated Public Health Information System (iPHIS):** provides information on laboratory-confirmed cases of influenza reported to local public health units, and institutional outbreaks of influenza and other respiratory pathogens reported to local public health units. iPHIS is administered by the Ontario Ministry of Health; data for this issue was extracted by Public Health Ontario on March 18, 2020.

Cases of influenza A and B are included in the report based on the 'Reported Date', which was the date the public health unit was notified of the case. Cases are assigned to a particular surveillance week based on the episode date entered in iPHIS to better reflect influenza activity. Episode date for a case corresponds to the earliest date on record for the case according to the iPHIS hierarchy (Symptom Onset Date > Specimen Collection Date > Lab Test Date > Reported Date). Cases are excluded from these counts if the episode date is based on reported date, and the reported date occurs after the latest surveillance week.

- **Centre for Immunization and Respiratory Infectious Diseases (CIRID) of the Public Health Agency of Canada (PHAC):** provides information on the number of influenza tests and number that are positive based on submissions from 16 participating laboratories in Ontario including 11 Public Health Ontario Laboratories (PHOLs) and five hospital-based laboratories. The results are assigned to a particular surveillance week based on when test results are reported to PHAC; these data are not updated when results are submitted late for previous surveillance weeks. These data represent the number of specimens tested, which may not necessarily correspond with the number of patients as more than one specimen may have been submitted per patient. Cumulative numbers for the season to date are also available through FluWatch.
- **Public Health Ontario from public health units:** Public health units provide Public Health Ontario with weekly reports of influenza activity levels in their areas [Provincial Influenza Activity Report (Appendix C) Database]. Influenza activity levels are assigned by local public health units and reported to Public Health Ontario by 4:00 pm on the Tuesday following the end of each surveillance week. Activity levels are assigned based on laboratory confirmations, ILI reports from various sources, and laboratory-confirmed institutional respiratory infection outbreaks. Please refer to the detailed definitions for the 2019-2020 season for more information.
- Any outbreak where influenza was identified is reported under the appropriate influenza category ("Influenza A" or "Influenza B") regardless of whether any non-influenza viruses were also identified in the outbreak.
 - Combined influenza A and B outbreaks have been included with influenza A outbreaks in all counts and calculations.
- The date of onset of illness for the first case is used to determine which week to attribute an outbreak to.
- The data for outbreaks and cases includes both open and closed records in iPHIS. Outbreak records that are open in iPHIS may not have complete summary case and severity information entered. Case data on open outbreaks is subject to change.
 - Public health units have 15 business days from when an outbreak is declared over to complete their data entry for that outbreak in iPHIS.

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