
2018-2019 Community Influenza Surveillance Report

Update of Current Status

May 8th, 2019

Final Report of the 2018-19 Season

This is the final *Community Influenza Surveillance Report* of the 2018-19 influenza season. Although influenza continues to circulate at low levels in both the City of London and Middlesex County, the level of activity has substantially decreased compared to earlier in the season. Influenza reporting will resume with local surveillance in the fall of 2019.

The Middlesex-London Health Unit thanks all those who provided data for this report throughout the influenza season, which provided a comprehensive local picture of influenza activity each week.

Analysis and Action

Public Health epidemiologists, communicable disease teams, and physicians will continue to collect data, engage with provincial, national and international partners, and prepare for the next influenza season. As the 2018-19 influenza season comes to a close, the Health Unit encourages individual practitioners and organizations to consider lessons learned and how practices can be improved for next year.

Regardless of the level of local influenza activity, there are a number of easy-to-follow steps that residents can take to avoid becoming sick throughout the year. While washing your hands with soap and warm water, or using an alcohol-based hand sanitizer, remain effective ways of preventing many illnesses, including influenza, local residents should also cover their coughs and sneezes, clean and disinfect high-touch surfaces frequently, and stay home when they feel sick.

Details of Current Local Activity

Between April 28th and May 4th, there were four laboratory-confirmed cases of influenza A and two influenza B cases reported to the Health Unit, two of whom were hospitalized.

Since September 1, 2018, there have been 492 laboratory-confirmed influenza A cases and nine cases of influenza B reported to the Health Unit. Among these cases there have been 252 hospitalizations and 20 deaths. Over this time period there have also been 37 influenza A outbreaks and one influenza B outbreak declared in hospitals, long-term care facilities, and retirement homes.

Appendix A provides additional details about laboratory-based influenza activity indicators for the current reporting week, as well as other local indicators of respiratory illness. A graph showing all 501 laboratory-confirmed cases by week of illness onset is provided at the end of this report in Appendix B.

Provincial and National Comparison

In this week's *Ontario Respiratory Pathogen Bulletin*, Public Health Ontario states that influenza activity across the province was lower when compared to what had been reported the previous week, and that both influenza A and influenza B activity were low. Among the influenza A specimens that have been subtyped this season, 57.1% have been the A(H1N1)pdm09 strain. However, influenza A (H3) cases accounted for 90.8% of influenza A samples subtyped in the most recent week.

In this week's *FluWatch*, the Public Health Agency of Canada reports that influenza activity across Canada is decreasing. The most common influenza virus identified to date this season is influenza A, with 72% of subtyped specimens being the A(H1N1)pdm09 strain. The majority (83%) of influenza A(H1N1)pdm09 cases have been among those under the age of 65 years, while 58% of all influenza A(H3N2) cases have been among those 65 years of age and over.

- The latest *Ontario Respiratory Pathogen Bulletin*, issued by Public Health Ontario (PHO), is available at <http://www.publichealthontario.ca/en/ServicesAndTools/SurveillanceServices/Pages/Ontario-Respiratory-Virus-Bulletin.aspx>
- The latest *FluWatch* report, issued by the Public Health Agency of Canada (PHAC), is available at <http://www.phac-aspc.gc.ca/fluwatch/>

Appendix A

Summary of Community Influenza Surveillance Indicators for Middlesex-London April 28th to May 4th, 2019

Table 1: Summary of laboratory-based influenza activity indicators, Middlesex-London and Ontario, 2018-2019 influenza surveillance season

Indicator	Reporting Period	Number Reported: Current Reporting Period	Number Reported: Year to Date (from September 1, 2018)	Recent Trends
Laboratory-confirmed cases ^{1,4}	Apr. 28-May 4 (week 18) ²	Influenza A – 4 cases Influenza B – 2 cases	Influenza A – 492 cases Influenza B – 9 cases	Influenza A: Lower than the previous week (Apr. 21-27) when 11 cases were reported. Influenza B: Same as the previous week (Apr. 21-27) when two cases were reported.
Influenza sub-types ¹	Apr. 28-May 4	Influenza A (H3) – 1 case Influenza A (H1N1)pdm09 – 0 cases Influenza A not yet subtyped – 3 cases Influenza B not yet subtyped – 2 cases	Influenza A (H3) – 33 cases Influenza A (H1N1)pdm09 – 55 cases Influenza A not yet subtyped – 404 cases Influenza B not yet subtyped – 9 cases	
Hospitalizations ^{1,5}	Apr. 28-May 4	2	252	Lower than the previous week (Apr. 21-27) when eight hospitalizations were reported.
Deaths ^{1,5}	Apr. 28-May 4	0	20	Same as the previous week (Apr. 21-27) when no deaths were reported.
Influenza outbreaks in long-term care homes/retirement homes/acute care	Apr. 28-May 4	Influenza A – 2 outbreaks Influenza B – 0 outbreaks	Influenza A – 37 outbreaks Influenza B – 1 outbreak	Influenza A: Higher than the previous week (Apr. 21-27) when no outbreaks were reported. Influenza B: Same as the previous week (Apr. 21-27) when no outbreaks were reported.
Percentage of samples that are positive for influenza (Ontario) ³	Apr. 21-27 (week 17) ²	Influenza A – 9.3% positivity Influenza B – 1.7% positivity	N/A	Influenza A: Lower than 11.6% positivity reported the previous week (Apr. 14-20). Influenza B: Similar to 1.3% positivity reported the previous week (Apr. 14-20).

Notes:

1 Numbers are subject to change week by week due to the retrospective nature of reporting.

2 Weekly influenza monitoring often uses numbered weeks from 1 to 52 weeks per year. A reference week calendar can be found at <https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/fluwatch-weeks-calendar.html>

3 Public Health Ontario, Ontario Respiratory Pathogen Bulletin 2018-2019

4 The week cases are reported to the Health Unit may not be the same as week of illness onset.

5 The week hospitalizations and deaths are reported to the Health Unit may not be the same as the week in which they occurred, or the same as the week of illness onset.

Table 2: Summary of community-based respiratory illness indicators, Middlesex-London, 2018-2019 influenza surveillance season

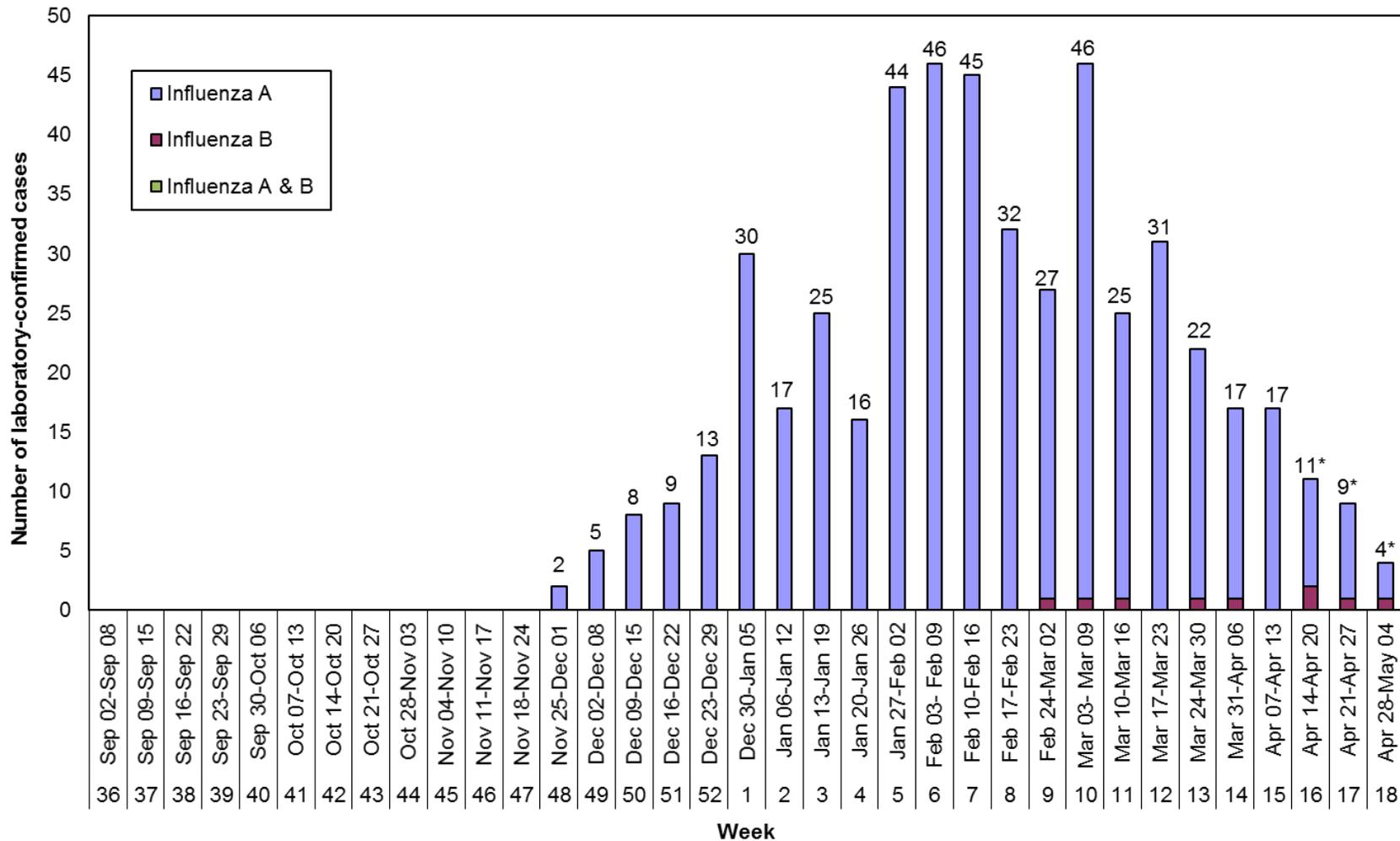
Indicator	Reporting Period	Number Reported: <i>Current Reporting Period</i>	Recent Trends
Hospital emergency room reports regarding the percentage of patients with fever and respiratory illness	Apr. 28-May 4	An average of 7.2% of patients presented with fever and respiratory symptoms. The proportion was highest at the pediatric emergency department, where 18.2% of patients presented with a fever and respiratory symptoms.	Same as 7.2% reported the previous week (Apr. 21-27). Similar to 18.0% reported the previous week (Apr. 21-27).
Absence reports from elementary schools (i.e., absenteeism > 10%)	Apr. 29-May 3	Twenty-nine elementary schools from one school board reported average absenteeism (due to all causes) exceeding 10%.	Higher than the previous week (Apr. 22-26) when 21 elementary schools reported increased absenteeism.

The Middlesex-London Health Unit gratefully acknowledges the contributions of the following community partners who provide data for this report:

- London Health Sciences Centre
- St. Joseph's Health Care London
- Thames Valley District School Board

Appendix B

Laboratory-confirmed influenza cases, by influenza date† Middlesex-London 2018-2019 influenza season (N=501)



Source: Middlesex-London Health Unit internal influenza case tracking database, extracted May 7, 2019.

† 'Influenza date' is the earliest of: symptom onset date, specimen collection date, and reported date. As a result, the weekly counts shown in this section differ from those provided in other sections of this report.

* Counts may be incomplete and are subject to change due to the retrospective nature of reporting.