
2018-2019 Community Influenza Surveillance Report Update of Current Status March 20th, 2019

Overall Assessment

Influenza continues to circulate widely in the Middlesex-London region, with cases being reported across the City of London and Middlesex County.

Analysis and Action

The influenza season continues in the Middlesex-London region and elsewhere in Ontario. 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 March 10th and March 16th, there were 40 laboratory-confirmed cases of influenza A and two influenza B cases reported to the Health Unit. Among the 42 cases reported last week, 18 were hospitalized. The Health Unit was also notified of the death of a case who was previously reported.

Since September 1, 2018, there have been 383 laboratory-confirmed influenza A cases and three cases of influenza B reported to the Health Unit. Among these cases there have been 191 hospitalizations and 14 deaths. Over this time period there have also been 27 influenza A outbreaks 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 386 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 similar when compared to what had been reported the previous week. Influenza A activity across Ontario is moderate, while influenza B activity remains low. Among the influenza A specimens that have been subtyped this season, 69.5% have been the A(H1N1)pdm09 strain.

In this week's *FluWatch*, the Public Health Agency of Canada reports that to date this season, the most common influenza virus identified is influenza A, with 85% of subtyped specimens being the A(H1N1)pdm09 strain. However, influenza A(H3N2) cases have been increasing since January, and accounted for more than one-half (56%) of influenza A samples reported in the most recent week. The majority (84%) of influenza A(H1N1)pdm09 cases have been among those under the age of 65 years, while 60% 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 March 10th to March 16th, 2019

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

Indicator	Reporting Period	Number Reported: <i>Current Reporting Period</i>	Number Reported: <i>Year to Date (from September 1, 2018)</i>	Recent Trends
Laboratory-confirmed cases^{1,4}	Mar. 10-16 (week 11) ²	Influenza A – 40 cases Influenza B – 2 cases	Influenza A – 383 cases Influenza B – 3 cases	Influenza A: Higher than the previous week (Mar. 3-9) when 34 cases were reported. Influenza B: Higher than the previous week (Mar. 3-9) when no cases were reported.
Influenza sub-types¹	Mar. 10-16	Influenza A (H3) – 7 cases Influenza A (H1N1)pdm09 – 2 cases Influenza A not yet subtyped – 31 cases Influenza B not yet subtyped – 2 cases	Influenza A (H3) – 21 cases Influenza A (H1N1)pdm09 – 53 cases Influenza A not yet subtyped – 309 cases Influenza B not yet subtyped – 3 cases	
Hospitalizations^{1,5}	Mar. 10-16	18	191	Lower than the previous week (Mar. 3-9) when 21 hospitalizations were reported.
Deaths^{1,5}	Mar. 10-16	1	14	Lower than the previous week (Mar. 3-9) when two deaths were reported.
Influenza outbreaks in long-term care homes/retirement homes/acute care	Mar. 10-16	Influenza A – 6 outbreaks Influenza B – 0 outbreaks	Influenza A – 27 outbreaks Influenza B – 0 outbreaks	Influenza A: Higher than the previous week (Mar. 3-9) when five outbreaks were reported. Influenza B: Same as the previous week (Mar. 3-9) when no outbreaks were reported.
Percentage of samples that are positive for influenza (Ontario)³	Mar. 3-9 (week 10) ²	Influenza A – 15.3% positivity Influenza B – 0.6% positivity	N/A	Influenza A: Similar to 15.4% positivity reported the previous week (Feb. 24-Mar. 2). Influenza B: Same as 0.6% positivity reported the previous week (Feb. 24-Mar. 2).

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

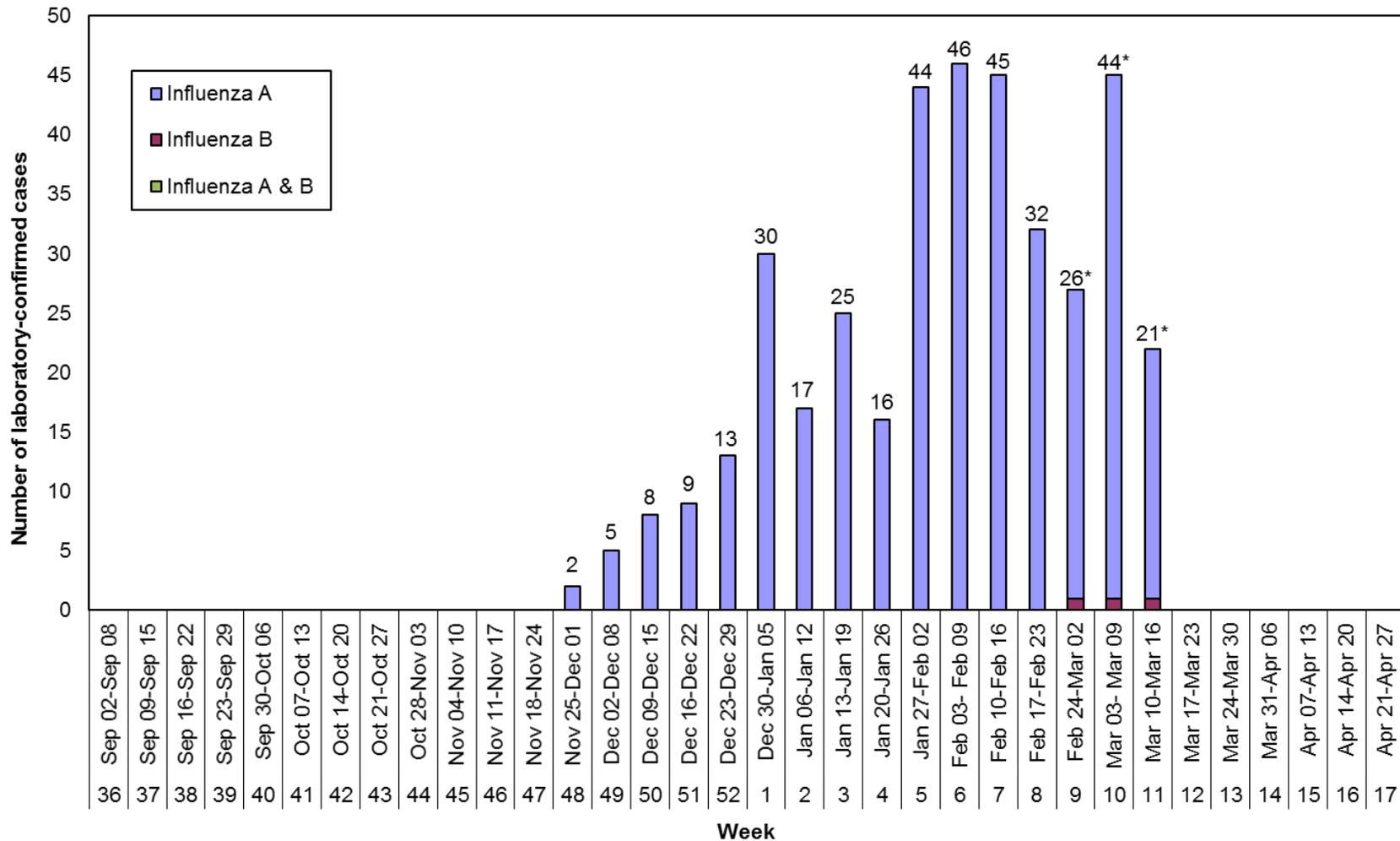
Indicator	Reporting Period	Number Reported: <i>Current Reporting Period</i>	Recent Trends
Hospital emergency room reports regarding the percentage of patients with fever and respiratory illness	Mar. 10-16	An average of 8.2% of patients presented with fever and respiratory symptoms. The proportion was highest at the pediatric emergency department, where 24.9% of patients presented with a fever and respiratory symptoms.	Same as 8.2% reported the previous week (Mar. 3-9). Higher than 24.1% reported the previous week (Mar. 3-9).
Absence reports from elementary schools (i.e., absenteeism > 10%)	Mar. 11-15	Data not available due to March Break.	

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=386)



Source: Middlesex-London Health Unit internal influenza case tracking database, extracted March 19, 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.