

2018-2019 Community Influenza Surveillance Report Update of Current Status April 3rd, 2019

Overall Assessment

Influenza continues to circulate 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 24th and March 30th, there were 23 laboratory-confirmed cases of influenza A and 1 influenza B case reported to the Health Unit, among whom there were 11 hospitalizations. The Health Unit was also notified of the death of one case who was previously reported.

Since September 1, 2018, there have been 432 laboratory-confirmed influenza A cases and four cases of influenza B reported to the Health Unit. Among these cases there have been 218 hospitalizations and 18 deaths. Over this time period there have also been 30 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 436 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 higher 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, 65.7% 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 81% of subtyped specimens being the A(H1N1)pdm09 strain. However, influenza A(H3N2) cases have been increasing since January, and accounted for 72% 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 57% 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 24th to March 30th, 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}	Mar. 24-30 (week 13) ²	Influenza A – 23 cases Influenza B – 1 case	Influenza A – 432 cases Influenza B – 4 cases	Influenza A: Lower than the previous week (Mar. 17-23) when 27 cases were reported. Influenza B: Higher than the previous week (Mar. 17-23) when no cases were reported.
Influenza sub-types ¹	Mar. 24-30	Influenza A (H3) – 1 case Influenza A (H1N1)pdm09 – 1 case Influenza A not yet subtyped – 21 cases Influenza B not yet subtyped – 1 case	Influenza A (H3) – 28 cases Influenza A (H1N1)pdm09 – 54 cases Influenza A not yet subtyped – 350 cases Influenza B not yet subtyped – 4 cases	
Hospitalizations ^{1, 5}	Mar. 24-30	11	218	Lower than the previous week (Mar. 17-23) when 16 hospitalizations were reported.
Deaths ^{1, 5}	Mar. 24-30	1	18	Lower than the previous week (Mar. 17-23) when three deaths were reported.
Influenza outbreaks in long- term care homes/retirement homes/acute care	Mar. 24-30	Influenza A – 1 outbreak Influenza B – 0 outbreaks	Influenza A – 30 outbreaks Influenza B – 0 outbreaks	Influenza A: Lower than the previous week (Mar. 17-23) when two outbreaks were reported. Influenza B: Same as the previous week (Mar. 17-23) when no outbreaks were reported.
Percentage of samples that are positive for influenza (Ontario) ³	Mar. 17-23 (week 12) ²	Influenza A – 14.4% positivity Influenza B – 0.7% positivity	N/A	Influenza A: Lower than 15.0% positivity reported the previous week (Mar. 10-16). Influenza B: Same as 0.7% positivity reported the previous week (Mar. 10-16).

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-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	Number Reported:	Recent Trends
	Period	Current Reporting Period	
Hospital emergency room reports regarding the percentage of patients with	Mar. 24-30	An average of 7.3% of patients presented with fever and respiratory symptoms.	Same as 7.3% reported the previous week (Mar. 17-23).
fever and respiratory illness		The proportion was highest at the pediatric emergency department, where 20.0% of patients presented with a fever and respiratory symptoms.	Higher than 18.3% reported the previous week (Mar. 17-23).
Absence reports from elementary schools (i.e., absenteeism > 10%)	Mar. 25-29	Twenty-six elementary schools from one school board reported average absenteeism (due to all causes) exceeding 10%.	Higher than the previous week (Mar. 18-22) when 21 elementary schools reported increased absenteeism.

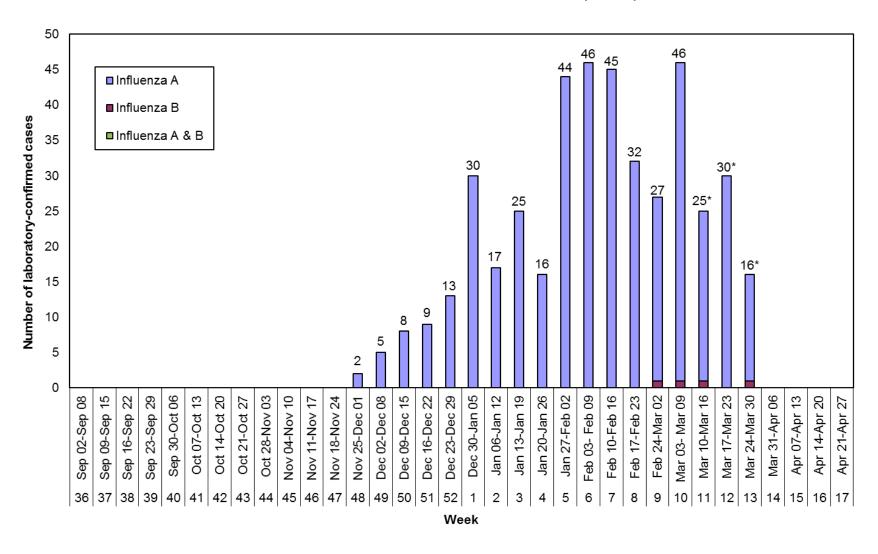
The Middlesex-London Health Unit gratefully acknowledges the contributions of the following community partners who provide data for this report:

- 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=436)



Source: Middlesex-London Health Unit internal influenza case tracking database, extracted April 2, 2019.

^{† &#}x27;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.