
2018-2019 Community Influenza Surveillance Report Update of Current Status January 9th, 2019

First report of 2019

This is the first *Community Influenza Surveillance Report* of 2019 and covers the three-week period that includes December 16th to 22nd, December 23rd to 29th, and December 30th, 2018 to January 5th, 2019.

Overall Assessment

Influenza activity in the Middlesex-London region is increasing, with cases reported from across the London and Middlesex region.

Analysis and Action

Ontario's influenza season is under way, with activity increasing across the province. The Health Unit encourages local residents who have not yet received their seasonal influenza vaccine to do so as soon as possible. It is important to get the flu shot before the arrival of peak influenza activity, as it takes about two weeks for the vaccine to provide optimal protection against the flu.

Regardless of the level of local influenza activity, residents can take a number of steps 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

As this report covers three weeks of influenza surveillance, the details of local activity for each week are as follows:

- Between December 16th and 22nd, there were nine laboratory-confirmed influenza A cases reported to the Health Unit, six of whom were hospitalized. No influenza outbreaks were reported.
- Between December 23rd and 29th, there were 11 influenza A cases reported, eight of whom were hospitalized. No influenza outbreaks were reported.
- Between December 30th and January 5th, there were 24 influenza A cases reported, 17 of whom were hospitalized. One influenza A outbreak was declared.

Appendix A provides more detail about laboratory-based influenza activity indicators for the last three reporting weeks, as well as other local indicators of respiratory illness. A graph showing all 54 laboratory-confirmed cases by week of illness onset is provided at the end of this report in Appendix B.

Provincial and National Comparison

According to Public Health Ontario in this week's *Ontario Respiratory Pathogen Bulletin*, influenza activity across the province is increasing. Influenza A activity across Ontario is moderate, while influenza B activity remains low. Both influenza A and influenza B have been detected in Ontario, although the majority of positive specimens have been influenza A. Among the influenza A specimens that have been subtyped this season, 76.5% have been the A(H1N1)pdm09 strain.

The Public Health Agency of Canada's *FluWatch* reports that influenza activity continues to increase across the country. The most common influenza virus identified is influenza A, with the majority of subtyped specimens being the A(H1N1)pdm09 strain. To date this season, two-thirds (67.7%) of influenza A(H1N1)pdm09 cases have been among those under the age of 45 years, while 62.8% 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
December 16th, 2018 to January 5th, 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</i> <i>(from September 1, 2018)</i>	Recent Trends
Laboratory-confirmed cases^{1,4}	Dec. 16-22 (week 51) ²	Influenza A – 9 cases Influenza B – 0 cases	Influenza A – 54 cases Influenza B – 0 cases	Influenza A: Higher in the most recent week compared to the previous week (Dec. 23-29) when 11 cases were reported. Influenza B: Same in the most recent week compared to the previous week (Dec. 23-29) when no cases were reported.
	Dec. 23-29 (week 52) ²	Influenza A – 11 cases Influenza B – 0 cases		
	Dec. 30-Jan. 5 (week 1) ²	Influenza A – 24 cases Influenza B – 0 cases		
Influenza sub-types¹	Dec. 16-22	Influenza A (H1N1)pdm09 – 1 case Influenza A not yet subtyped – 8 cases	Influenza A (H3) – 2 cases Influenza A (H1N1)pdm09 – 9 cases Influenza A not yet subtyped – 43 cases	
	Dec. 23-29	Influenza A (H1N1)pdm09 – 2 cases Influenza A not yet subtyped – 9 cases		
	Dec. 30-Jan. 5	Influenza A not yet subtyped – 24 cases		
Hospitalizations^{1,5}	Dec. 16-22	6	36	Higher in the most recent week compared to the previous week (Dec. 23-29) when eight hospitalizations were reported.
	Dec. 23-29	8		
	Dec. 30-Jan. 5	17		
Deaths^{1,5}	Dec. 16-22	0	0	Same in the most recent week compared to the previous week (Dec. 23-29) when no deaths were reported.
	Dec. 23-29	0		
	Dec. 30-Jan. 5	0		

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

Influenza outbreaks in long-term care homes/retirement homes/acute care	Dec. 16-22	Influenza A – 0 outbreaks Influenza B – 0 outbreaks	Influenza A – 1 outbreak Influenza B – 0 outbreaks	Influenza A: Higher in the most recent week compared to the previous week (Dec. 23-29) when no outbreaks were reported. Influenza B: Same in the most recent week compared to the previous week (Dec. 23-29) when no outbreaks were reported.
	Dec. 23-29	Influenza A – 0 outbreaks Influenza B – 0 outbreaks		
	Dec. 30-Jan. 5	Influenza A – 1 outbreak Influenza B – 0 outbreaks		
Percentage of samples that are positive for influenza (Ontario)³	Dec. 9-15 (week 50) ²	Influenza A – 8.2% positivity Influenza B – 0.3% positivity	N/A	Influenza A: Higher in the most recent week compared to 12.8% positivity reported the previous week (Dec. 16-22). Influenza B: Lower in the most recent week compared to 0.3% positivity reported the previous week (Dec. 16-22).
	Dec. 16-22 (week 51) ²	Influenza A – 12.8% positivity Influenza B – 0.3% positivity		
	Dec. 23-29 (week 52) ²	Influenza A – 16.2% positivity Influenza B – 0.1% positivity		

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

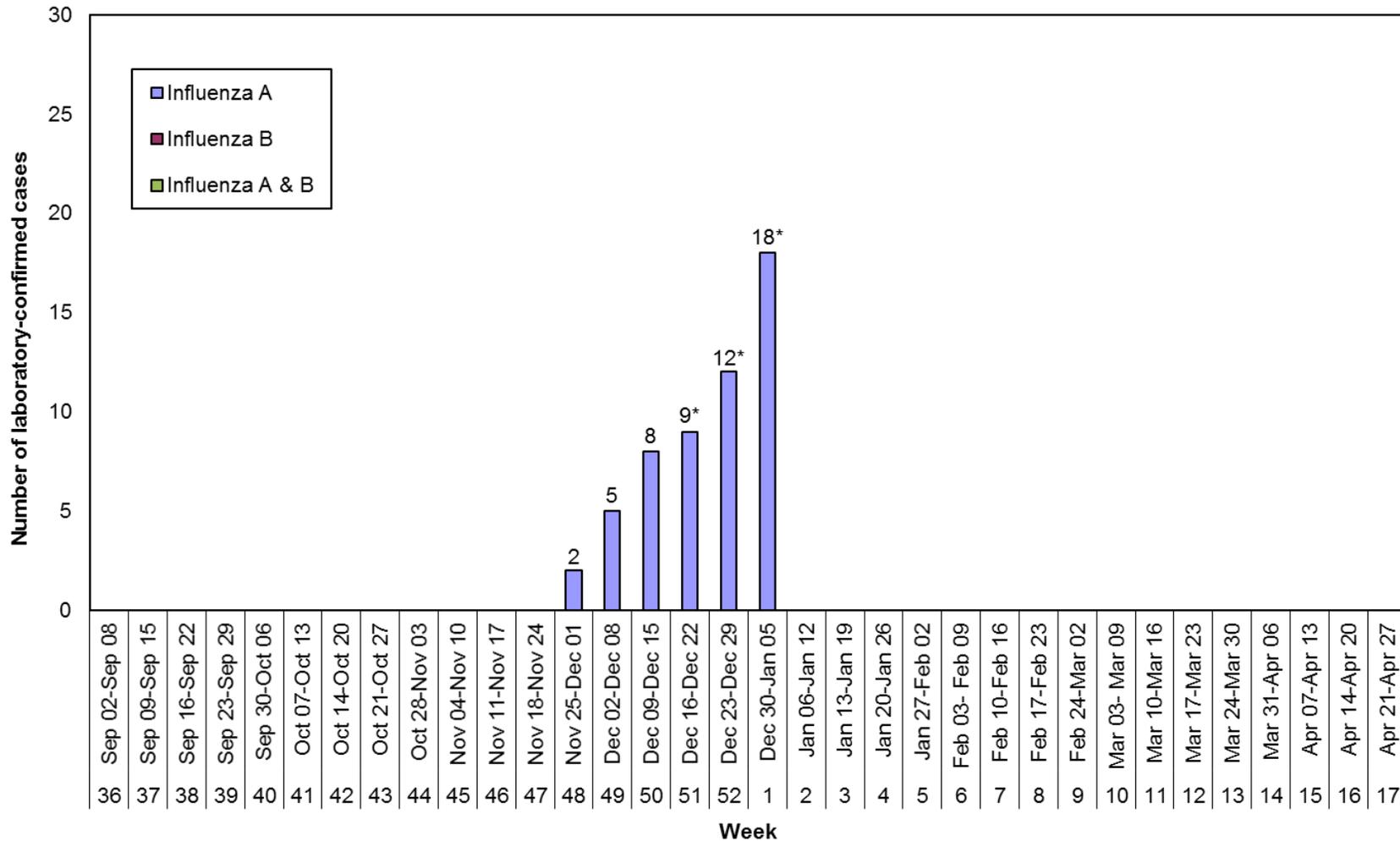
Indicator	Reporting Period	Number Reported: <i>Current Reporting Period</i>	Recent Trends
Hospital emergency room reports regarding the percentage of patients with fever and respiratory illness	Dec. 16-22	All sites – An average of 10.7% of patients presented with fever and respiratory symptoms. Paediatric ED – An average of 32.0% of patients presented with fever and respiratory symptoms.	All sites: Lower in the most recent week compared to 13.7% reported the previous week (Dec. 23-29). Paediatric ED: Higher in the most recent week compared to 38.6% reported the previous week (Dec. 23-29).
	Dec. 23-29	All sites – An average of 13.7% of patients presented with fever and respiratory symptoms. Paediatric ED – An average of 38.6% of patients presented with fever and respiratory symptoms.	
	Dec. 30-Jan. 5	All sites – An average of 13.0% of patients presented with fever and respiratory symptoms. Paediatric ED – An average of 39.6% of patients presented with fever and respiratory symptoms.	
Absence reports from elementary schools (i.e., absenteeism > 10%)	Dec. 17-21	Thirty elementary schools from one school board reported average absenteeism (due to all causes) exceeding 10%.	Schools were closed from Dec. 24, 2018 to Jan. 4, 2019, therefore recent absenteeism results are not yet available.

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=54)



Source: Middlesex-London Health Unit internal influenza tracking database, extracted January 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.