
2019-2020 Community Influenza Surveillance Report Update of Current Status February 26th, 2020

Overall Assessment

Influenza activity in the Middlesex-London region appears to be decreasing. However, the Health Unit continues to receive reports of both influenza A and B cases from across the London and Middlesex County region.

Analysis and Action

The influenza season continues in Ontario, with flu activity being reported across the province. If they haven't already done so, local residents are still encouraged to get their seasonal influenza vaccine as soon as possible, since it takes about two weeks for the vaccine to provide protection.

Regardless of the level of local influenza activity, there are some 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 to prevent many illnesses, including influenza, residents should also cover their coughs and sneezes, clean and disinfect high-touch surfaces frequently, and stay home when they feel sick and/or have a fever.

Details of Current Local Activity

Between February 16th and February 22nd, there were nine influenza A and eight influenza B cases reported to the Middlesex-London Health Unit. Among these cases, 10 people were hospitalized and no deaths were reported. As well, no influenza outbreaks were declared in local facilities during the most recent week of surveillance.

Appendix A provides more detail about laboratory-based influenza activity indicators for the most recent reporting week, as well as other local indicators of respiratory illness. A graph showing all 283 laboratory-confirmed cases by week of illness onset is provided at the end of this report in Appendix B.

Provincial and National Comparison

In the most recent *Ontario Respiratory Pathogen Bulletin* (covering February 9th to 15th), Public Health Ontario states that influenza levels are lower when compared to previous weeks; activity is moderate for influenza A and low for influenza B.

In the most recent *FluWatch* (covering February 9th to 15th), the Public Health Agency of Canada reports that influenza A and B continue to co-circulate. So far this season, 57% of cases identified have been influenza A, with 64% of subtyped specimens being the A(H1N1) strain. The greatest percentage of influenza A(H3N2) cases (46%) have been among those aged 65 and over, while influenza A(H1N1) cases have been distributed among adults 20 to 64 years old (51%) as well as seniors 65 year of age and older (30%). Influenza B has been identified in 43% of cases this season; 88% of these have been among people under the age of 45.

FluWatch also reports mid-season interim vaccine effectiveness estimates recently released by the Canadian Sentinel Practitioner Surveillance Network (SPSN). The SPSN study, published in the journal *Eurosurveillance*, found that the effectiveness of the 2019-2020 vaccine was estimated to be 58% for any type of influenza, 44% for A(H1N1), 62% for A(H3N2), and 69% for influenza B.

- The latest *Ontario Respiratory Pathogen Bulletin*, issued by Public Health Ontario (PHO), is available at <https://www.publichealthontario.ca/en/data-and-analysis/commonly-used-products/respiratory-pathogens-weekly>
- The latest *FluWatch* report, issued by the Public Health Agency of Canada (PHAC), is available at <http://www.phac-aspc.gc.ca/fluwatch/>
- Additional vaccine effectiveness estimates released by the Canadian Sentinel Practitioner Surveillance Network (SPSN) are available at <https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.7.2000103>

Appendix A
Summary of Community Influenza Surveillance Indicators for Middlesex-London
February 16th to February 22nd, 2020

Table 1: Summary of laboratory-based influenza activity indicators, Middlesex-London and Ontario, 2019-2020 influenza surveillance season

Indicator	Reporting Period	Number Reported: <i>Current Reporting Period</i>	Number Reported: <i>Year to Date</i> <i>(from September 1, 2019)</i>	Recent Trends
Laboratory-confirmed cases ^{1,4}	Feb. 16-22 (week 8) ²	Influenza A – 9 cases Influenza B – 8 cases	Influenza A – 198 cases Influenza B – 85 cases	Influenza A: Same as nine cases reported the previous week (Feb. 9-15). Influenza B: Higher than six cases reported the previous week (Feb. 9-15).
Influenza sub-types ¹	Feb. 16-22	Influenza A (H1N1)pdm09 – 0 cases Influenza A (H3) – 1 case Influenza A not yet subtyped – 8 cases Influenza B not yet subtyped – 8 cases	Influenza A (H1N1)pdm09 – 45 cases Influenza A (H3) – 5 cases Influenza A not yet subtyped – 148 cases Influenza B not yet subtyped – 85 cases	
Hospitalizations ^{1,5}	Feb. 16-22	10	137	Higher than nine hospitalizations reported the previous week (Feb. 9-15).
Deaths ^{1,5}	Feb. 16-22	0	6	Lower than two deaths reported the previous week (Feb. 9-15).
Influenza outbreaks in long-term care homes/retirement homes/acute care	Feb. 16-22	Influenza A – 0 outbreaks Influenza B – 0 outbreaks Influenza A & B – 0 outbreaks	Influenza A – 6 outbreaks Influenza B – 0 outbreaks Influenza A & B – 1 outbreak	Influenza A: Same as the previous week (Feb. 9-15) when no outbreaks were reported. Influenza B: Same as the previous week (Feb. 9-15) when no outbreaks were reported. Influenza A & B Same as the previous week (Feb. 9-15) when no outbreaks were reported.
Percentage of samples that are positive for influenza (Ontario) ³	Feb. 9-15 (week 7) ²	Influenza A – 12.0% positivity Influenza B – 7.0% positivity	N/A	Influenza A: Lower than 14.0% positivity reported the previous week (Feb. 2-8). Influenza B: Similar to 6.7% positivity reported the previous week (Feb. 2-8).

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 2019-2020

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, 2019-2020 influenza surveillance season

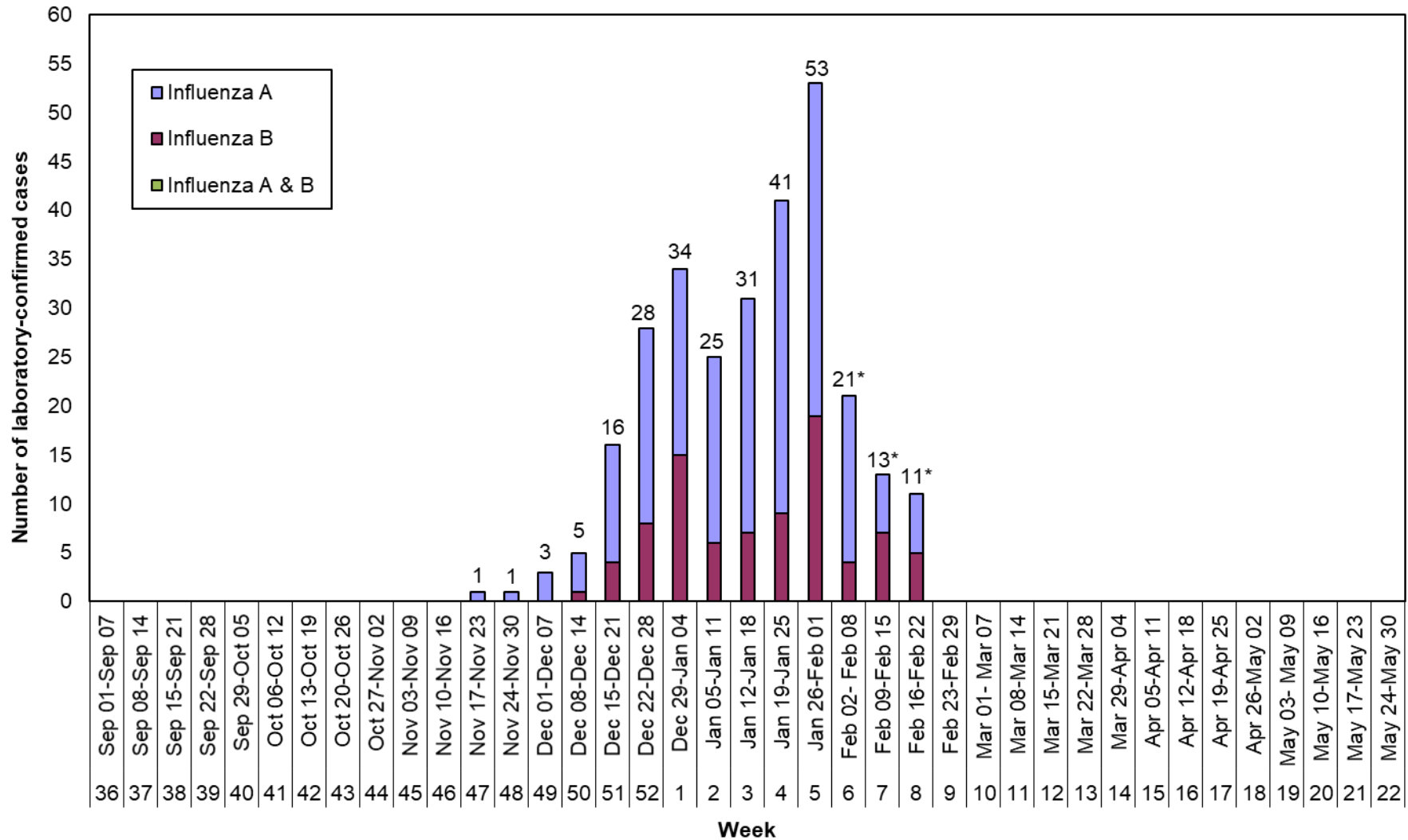
Indicator	Reporting Period	Number Reported: <i>Current Reporting Period</i>	Recent Trends
Hospital emergency room reports regarding the percentage of patients with fever and respiratory illness	Feb. 16-22	<p>An average of 9.0% of patients presented with fever and respiratory symptoms.</p> <p>The proportion was highest at the paediatric emergency department, where 25.0% of patients presented with fever and respiratory symptoms.</p>	<p>Lower than 9.7% reported the previous week (Feb. 9-15).</p> <p>Lower than 26.5% reported the previous week (Feb. 9-15).</p>
Absence reports from elementary schools (i.e., absenteeism > 10%)	Feb. 17-21	Thirty-four elementary schools from one school board reported average absenteeism (due to all causes) exceeding 10%.	Higher than the previous week (Feb. 10-14) when 26 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 2019-2020 influenza season (N=283)



Source: Middlesex-London Health Unit internal influenza tracking database, extracted February 25, 2020.

† 'Influenza date' is the earliest of: symptom onset date, specimen collection date, specimen result date, and reported date. As such, 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.