
2017-2018 Community Influenza Surveillance Report Update of Current Status January 31, 2018

Overall assessment

Influenza activity, particularly influenza B, continues to be high in the Middlesex-London region.

Analysis and Action

The influenza season is well underway in the Middlesex-London region and across Canada. To date, there have been numerous laboratory-confirmed cases, hospitalizations, and institutional outbreaks reported. The number and proportion of influenza B cases is higher than expected, with influenza B identified in two-thirds of reported cases and institutional outbreaks. In a typical year, widespread influenza activity lasts for two to four weeks and there are some indications that we may be nearing a peak in local influenza activity for this season. Of note, the US Centers for Disease Control and Prevention (CDC) has reported that influenza activity in the US this year is as widespread as during the 2009 H1N1 pandemic year, and the number of hospitalizations and deaths is approaching that seen during the severe 2014-2015 season.

Quadrivalent inactivated influenza vaccine (QIV) is now recommended for all unimmunized individuals in the Middlesex-London region, rather than trivalent inactivated influenza vaccine (TIV). All unimmunized staff in hospitals, long-term care homes and retirement homes in the Middlesex-London region are a high priority for immunization. Local residents who have not yet received their influenza immunization are also encouraged to receive QIV. There is no evidence to support the need to re-vaccinate individuals who have already received TIV.

In addition to getting immunized, local residents can take a number of other steps to prevent becoming sick. Handwashing is an effective way to prevent many illnesses, including influenza. Local residents should stay home when feeling sick, cover coughs and sneezes, and clean and disinfect high-touch surfaces frequently.

Details of Current Local Activity

Between January 21st and 27th, 19 laboratory confirmed cases of influenza A and 40 cases of influenza B were reported to the Health Unit. There were 29 hospitalizations and five deaths reported; as well, five new influenza outbreaks were declared last week.

Since September 1st, 2017, there have been 144 laboratory-confirmed influenza A cases, 286 cases of influenza B, and two cases infected with both influenza A and B reported to the Health Unit. Among these cases there have been 214 hospitalizations and 19 deaths. As well, since September 1st, there have been 12 influenza A outbreaks, 23 influenza B outbreaks, and four outbreaks with both influenza A and B declared in hospitals, long-term care homes, and retirement homes.

Appendix A provides more detail about laboratory-based influenza activity indicators, as well as other local indicators of respiratory illness. A graph showing all 432 laboratory-confirmed cases by week of illness onset is provided at the end of this report in Appendix B.

Useful Websites

- 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/>.
- To find a free flu shot clinic near you, visit the Ministry of Health and Long-Term Care's "Get the flu shot" web page at <http://www.ontario.ca/page/get-flu-shot/>.

Appendix A

Summary of Community Influenza Surveillance Indicators for Middlesex-London January 21st to 27th, 2018

Table 1: Summary of laboratory-based influenza activity indicators, Middlesex-London and Ontario, 2017-2018 influenza surveillance season

Indicator	Reporting Period	Number Reported: <i>Current Reporting Period</i>	Number Reported: <i>Year to Date (from September 1, 2017)</i>	Recent Trends
Laboratory-confirmed cases^{1, 4}	Jan. 21-27 (week 4) ²	Influenza A – 19 cases Influenza B – 40 cases	Influenza A – 144 cases Influenza B – 286 cases Influenza A & B – 2 cases	Influenza A: Lower than the previous week (Jan. 14-20) when 22 cases were reported. Influenza B: Lower than the previous week (Jan. 14-20) when 55 cases were reported.
Influenza sub-types¹	Jan. 21-27	Influenza A(H3) – 3 cases Influenza A not subtyped – 16 cases Influenza B not subtyped – 40 cases	Influenza A – (H3) – 31 cases (H1N1)pdm09 – 1 case Not subtyped – 112 cases Influenza B – Phuket/3073/13-like – 1 case Not subtyped – 285 cases	
Hospitalizations^{1, 4}	Jan. 21-27	29	214	Higher than the previous week (Jan. 14-20) when 26 hospitalizations were reported.
Deaths^{1, 5}	Jan. 21-27	5	19	Lower than the previous week (Jan. 14-20) when six deaths were reported.
Influenza outbreaks in long-term care homes/retirement homes/acute care	Jan. 21-27	Influenza A – 1 outbreak Influenza B – 3 outbreaks Influenza A&B – 1 outbreak	Influenza A – 12 outbreaks Influenza B – 23 outbreaks Influenza A&B – 4 outbreaks	Influenza A: Same as the previous week (Jan. 14-20) when one outbreak was reported. Influenza B: Lower than the previous week (Jan. 14-20) when four outbreaks were reported.
Percentage of samples that are positive for influenza (Ontario)³	Jan. 14-20 (week 3) ²	Influenza A – 14.6% positivity Influenza B – 12.7% positivity	N/A	Influenza A: Higher than 13.6% positivity reported in the previous reporting period (Jan. 7-13). Influenza B: Higher than 11.9% positivity reported in the previous reporting period (Jan. 7-13).

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 2017-2018

4 The week case/hospitalization is reported may not be the same as week of onset of illness.

5 The week death is reported may not be the same as the week of onset of illness or the week in which the death occurred.

Table 2: Summary of community-based respiratory illness indicators, Middlesex-London, 2017-2018 influenza surveillance season

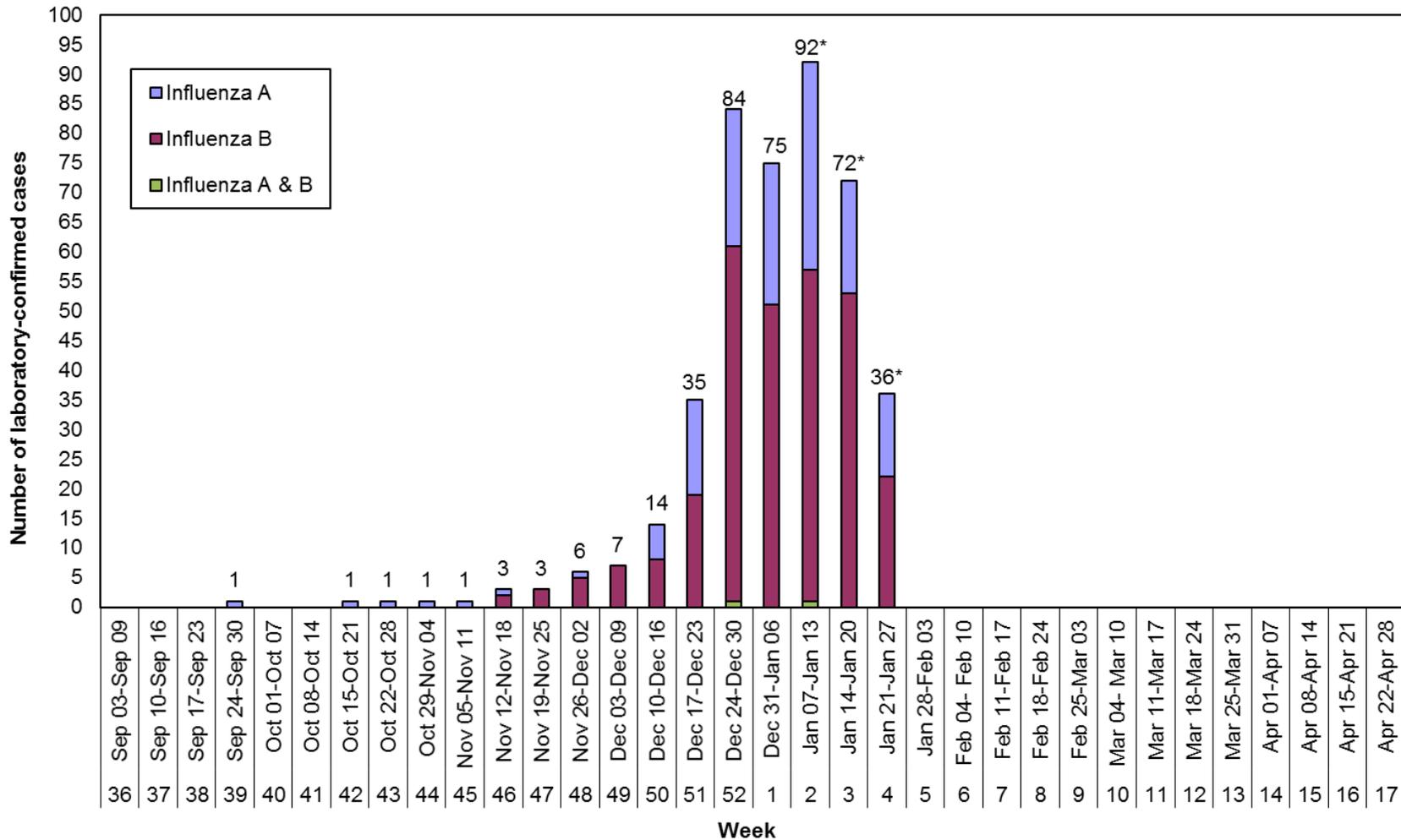
Indicator	Reporting Period	Number Reported: <i>Current Reporting Period</i>	Recent Trends
Hospital emergency room reports regarding the percentage of patients with fever and respiratory illness	Jan. 21-27	An average of 11.2% of patients presented with fever and respiratory symptoms. The proportion was highest at the pediatric emergency department, where 29.3% of patients presented with a fever and respiratory symptoms.	Similar to 11.1% reported the previous week (Jan. 14-20). Higher than 24.4% reported the previous week (Jan. 14-20).
Absence reports from elementary schools (i.e., absenteeism > 10%)	Jan. 22-26	Thirty-two elementary schools from one school board reported average absenteeism (due to all causes) exceeding 10%.	Higher than the previous week (Jan. 15-19), when 25 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 2017-2018 influenza season (N=432)



Data source: Middlesex-London Health Unit internal influenza tracking database, extracted January 30, 2018.

† '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.