

2011-2012 Influenza Surveillance Update of Current Status and Issues

May 1, 2012

Influenza activity in Middlesex-London:

From April 24 to 30, 2012, two new community cases of laboratory confirmed influenza B were reported to the Middlesex-London Health Unit, which is lower compared to thirteen influenza A and B cases reported in the previous report. No new institutional cases of influenza were reported. One new hospitalization and no deaths were reported during this time period.

To date, there have been 33 influenza A cases and 53 influenza B cases identified in Middlesex-London for the 2011-2012 influenza surveillance season. Nine of the influenza A samples have been typed as human influenza A (H3) and six as influenza A (H1N1) pdm09. One of the H3 samples has been strain typed as A/Perth/16/2009-like (H3N2) which is the H3N2 component for this year's influenza vaccine. One influenza B sample was strain typed as B/Wisconsin/01/2010-like which belongs to a different lineage than the influenza B strain that is in this year's vaccine.

Since the previous report, no new institutional outbreaks of influenza have been reported to the Middlesex-London Health Unit. The overall proportion of patients presenting to London emergency departments and urgent care with fever and respiratory symptoms was lower than the previous week, but school absenteeism was slightly increased. Based on the available information, influenza activity in Middlesex London is lower than the previous report.

Provincial and National Influenza Activity:

Influenza: Based on testing at the Public Health Ontario laboratory from April 15 to 21, 75 of 346 samples tested for influenza B were positive, for a positivity rate of 21.7%, which is similar to the previous week. For influenza A, 10 of 346 samples tested positive, for a positivity rate of 2.9% which is 3.1% lower than the previous week. According to the latest Ontario Influenza Bulletin, 185 new laboratory-confirmed cases of influenza were reported across the province between April 15 and 21, compared to 266 the previous week. In total, 3,438 influenza cases have been reported in the province for the 2011-2012 surveillance season. The majority of the cases reported were influenza B, which accounts for 73.7% (2,533/3,438) of cases reported to date.

Provincially, five new influenza outbreaks were reported between April 15 and 21 (one influenza A and four influenza B). In total, 102 institutional influenza outbreaks have been reported across the province this season, 76 of which were influenza B, 23 influenza A (all subtypes) and three combined influenza A and B.

Nationally, influenza activity continued to decline however, activity remains elevated in Ontario, the Atlantic Region, Quebec, and the Prairies. The percent positivity for influenza A decreased to 6.4% compared to 6.9% the previous week while the percent positivity for influenza B decreased to 11.0% from 12% the previous week. Influenza B continues to be the predominant respiratory virus type circulating in provinces east of Saskatchewan.

Since the start of the season, the National Microbiology Lab has characterized 969 samples from across Canada with the following results: 170 Influenza A (H3N2)/Perth/16/2009-like and 19 showing reduced titers with antiserum produced against A/Perth/16/2009; 173 Influenza A/California/07/2009-like and five showing reduced titer with antiserum produced against A/California/07/2009. Both influenza A (H3N2)/Perth/16/2009 and A/California/07/2009 are components of the 2011-2012 influenza vaccine. Of the 602 influenza B viruses characterized, 306 influenza B strains were antigenically related to the B/Brisbane/60/2008 strain, which also is a component of the 2011-2012 influenza vaccine. The other 296 (49.2%) influenza B viruses were antigenically related to B/Wisconsin/01/2010-like, which belongs to a different lineage than the influenza B strain that is in this year's vaccine.

Other Respiratory Pathogens: Based on testing at the Public Health Ontario laboratory between April 15 and 21, the most notable virus other than influenza was human metapneumovirus, with a percent positivity of 22.4% which is 2.7% higher than the previous week.

Appendix A

Summary of Community Influenza Surveillance Indicators

Based on the available information, influenza activity in Middlesex London is lower than the previous report.

Indicator	Recent trends / data	Comments
Hospital emergency room reports regarding the percentage of patients with fever and respiratory illness	Lower	<p>From April 22 to 28, an average of 5.0% of patients at London Health Sciences Centre (LHSC) emergency departments and the St. Joseph's Health Care (SJHC) urgent care centre presented with a fever and respiratory symptoms. This value is lower than 6.4% from the previous week.</p> <p>The proportion was highest at the paediatric emergency department, where 12.3% of patients presented with a fever and respiratory symptoms. This value is lower compared to 16.3% from the previous week.</p>
Absence reports from schools (i.e., absenteeism > 10%)	Higher	<p>From April 23 to 27, two elementary schools in one of the two main English language public school boards reported a 5-day average absenteeism exceeding 10%. This is slightly higher than the previous week, when no schools reported absenteeism exceeding 10%.</p>
Laboratory-confirmed cases	Lower	<p>From April 24 to 30, two community cases of influenza B were reported to the Health Unit.</p> <p>Since the beginning of the influenza surveillance season, 33 influenza A (nine influenza A H3, six influenza A pdm09, the remainder untyped) and 53 influenza B cases have been reported in Middlesex-London. One influenza A has been strain typed as A/Perth/16/2009-like (H3N2) and one influenza B sample was strain typed as B/Wisconsin/01/2010-like</p>
Hospitalizations	Lower	<p>From April 24 to 30, one individual with laboratory-confirmed influenza was reported to the Health Unit as being hospitalized.</p> <p>Since the start of the influenza surveillance season, 27 people with laboratory-confirmed influenza have been hospitalized.</p>
Deaths	Lower	<p>No deaths were reported from April 24 to 30, 2012.</p> <p>Since the start of the influenza surveillance season, five individuals with laboratory-confirmed influenza have died.</p>

Long-term care facility outbreaks	None	From April 24 to 30, no new institutional outbreaks of influenza were reported. Since the beginning of the influenza surveillance season, five influenza outbreaks (three A and two B) have been reported.
Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases	Not available	
Calls to Telehealth Ontario related to respiratory and influenza-like illness	None reported	
Percentage of influenza tests performed by the Ontario Public Health Laboratory that are positive from across the province	Influenza A Lower Influenza B similar	Based on provincial testing done by the Ontario Public Health Laboratory from April 15 to 21, 10 of 346 samples tested positive for influenza A for a positivity rate of 2.9% which was 3.1% lower than the previous week. For influenza B, 75 of 346 samples tested positive, for a positivity rate of 21.7% which was similar to 21.5% positivity from the previous week.