

2011-2012 Influenza Surveillance Update of Current Status and Issues

May 15, 2012

Influenza activity in Middlesex-London:

From May 8 to 14, 2012, three new community cases and one institutional case of laboratory-confirmed influenza B were reported to the Middlesex-London Health Unit, which is lower compared to nine cases of influenza B reported in the previous report. No new institutional outbreaks of influenza were declared this week. One new hospitalization and no deaths were reported during this time period.

To date, there have been 33 influenza A cases and 66 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. Two influenza B sample have been 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.

The number of newly identified laboratory-confirmed influenza cases was lower than the number in the previous report. The overall proportion of patients presenting to London emergency departments and urgent care with fever and respiratory symptoms was also lower than the previous week, as was school absenteeism. 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 29 to May 5, 64 of 266 samples tested for influenza B were positive, for a positivity rate of 24.1% which is 11.5% higher than the previous week. For influenza A, 10 of 267 samples tested positive, for a positivity rate of 3.7% which is 2.9% higher than the previous week. According to the latest Ontario Influenza Bulletin, 134 new laboratory-confirmed cases of influenza were reported across the province between April 29 and May 5, compared to 113 the previous week. In total, 3,692 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 74.3% (2,745/3,692) of cases reported to date.

Provincially, one new influenza A outbreak was reported between April 29 and May 5. In total, 119 institutional influenza outbreaks have been reported across the province this season, 91 of which were influenza B, 25 influenza A (all subtypes) and three combined influenza A and B.

Nationally, influenza activity continues to decline. The percent positivity for influenza A decreased to 4.7% compared to 5.0% the previous week, while the percent positivity for influenza B decreased to 8.8% from 10.2% the previous week.

Since the start of the season, the National Microbiology Lab has characterized 1,122 samples from across Canada with the following results: 182 Influenza A (H3N2)/Perth/16/2009-like and 19 showing reduced titers with antiserum produced against A/Perth/16/2009; 184 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 732 influenza B viruses characterized, 348 influenza B strains were antigenically related to the B/Brisbane/60/2008 strain, which also is a component of the 2011-2012 influenza vaccine. However 1 out of the 348 tested showed reduced titer with antiserum produced against B/Brisbane/60/2008. The other 384 (52.5%) 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 29 and May 5, the most notable virus other than influenza was human metapneumovirus, with a percent positivity of 25.6% which was 11.5% 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 May 6 to 12, an average of 4.8% 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 5.8% from the previous week.</p> <p>The proportion was highest at the paediatric emergency department, where 12.2% of patients presented with a fever and respiratory symptoms. This value is lower compared to 14.5% from the previous week.</p> |
| Absence reports from schools (i.e., absenteeism > 10%) | Lower | <p>From May 7 to 11, no elementary schools in one of the two main English language public school boards reported a 5-day average absenteeism exceeding 10%. This number is lower than the previous week.</p> |
| Laboratory-confirmed cases | Lower | <p>From May 8 to 15, 4 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 66 influenza B cases have been reported in Middlesex-London. One influenza A has been strain typed as A/Perth/16/2009-like (H3N2) and two influenza B sample was strain typed as B/Wisconsin/01/2010-like</p> |
| Hospitalizations | Lower | <p>From May 8 to 15, there was one report of an individual with laboratory-confirmed influenza being hospitalized.</p> <p>Since the start of the influenza surveillance season, 31 people with laboratory-confirmed influenza have been hospitalized.</p> |
| Deaths | None | <p>No deaths were reported from May 8 to 15, 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 | Lower | <p>From May 8 to 14, no new institutional outbreaks of influenza were reported.</p> <p>Since the beginning of the influenza surveillance season, six influenza outbreaks (three A and three B) have been reported.</p> |
| Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases | Lower | <p>Between May 7 and 12, 3.3% of chest x-rays performed by the sentinel x-ray provider were newly diagnosed bronchopneumonia cases. This proportion is lower than 5.1% from the previous week.</p> |
| 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 | Higher | <p>Based on provincial testing done by the Ontario Public Health Laboratory from April 29 to May 5, 10 of 267 samples tested positive for influenza A for a positivity rate of 3.7% which is 2.9% higher than the previous week. For influenza B, 64 of 266 samples tested positive, for a positivity rate of 24.1% which was 11.5% higher than the previous week.</p> |