

## **2011-2012 Influenza Surveillance Update of Current Status and Issues**

May 29, 2012

### **Influenza activity in Middlesex-London:**

From May 15 to 21, 2012, four new community cases (one influenza A and three influenza B) and one institutional case of laboratory-confirmed influenza B were reported to the Middlesex-London Health Unit, which is slightly higher compared to four cases of influenza B reported in the previous report. One new institutional outbreak of influenza B was declared. Two new hospitalizations and no deaths were reported during this time period.

From May 22 to 28, one laboratory-confirmed case of influenza B associated with a retirement home was reported. One new hospitalization, no deaths and no new outbreaks were declared during this time period.

To date, there have been 34 influenza A cases and 71 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 samples 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 has declined in the most recent week. The overall proportion of patients presenting to London emergency departments and urgent care with fever and respiratory symptoms was the same as the previous week, but school absenteeism was slightly increased. Based on the available information, influenza activity in Middlesex London continues to persist, although at low levels.

### **Provincial and National Influenza Activity:**

**Influenza:** Based on testing at the Public Health Ontario laboratory from May 6 to 19, 16 of 170 samples tested for influenza B were positive, for a positivity rate of 9.4% which is 6.3% lower than the previous week. For influenza A, 9 of 170 samples tested positive, for a positivity rate of 5.3% which is 4.3% higher than the previous week. According to the latest Ontario Influenza Bulletin, 57 new laboratory-confirmed cases of influenza were reported across the province between May 13 and 19, compared to 76 the previous week. In total, 3,836 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 74.7% (2,864/3,836) of cases reported to date.

Provincially, one new influenza A outbreak was reported between May 13 and 19. In total, 127 institutional influenza outbreaks have been reported across the province this season, 98 of which were influenza B, 26 influenza A (all subtypes) and three combined influenza A and B.

Nationally, influenza activity continues to decline however, localized influenza activity was still reported in regions in Ontario, Quebec and Alberta. The percent positivity for influenza A increased slightly to 3.9% compared to 3.6% the previous week, while the percent positivity for influenza B decreased to 4.7% from 6.1% the previous week.

Since the start of the season, the National Microbiology Lab has characterized 1,251 samples from across Canada with the following results: 204 Influenza A (H3N2)/Perth/16/2009-like and 20 showing reduced titers with antiserum produced against A/Perth/16/2009; 194 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 828 influenza B viruses characterized, 400 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 400 tested showed reduced titer with antiserum produced against B/Brisbane/60/2008. The other 428 (51.7%) 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 May 6 and 19, the most notable virus other than influenza was entero/rhinovirus, with a percent positivity of 15.8%.

## Appendix A

### Summary of Community Influenza Surveillance Indicators

Based on the available information, influenza activity in Middlesex London continues to persist, although at low levels.

Indicator	Recent trends / data	Comments
<b>Hospital emergency room reports regarding the percentage of patients with fever and respiratory illness</b>	Same	<p>From May 20 to 26, an average of 5.1% 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 the same as in the previous week.</p> <p>The proportion was highest at the paediatric emergency department, where 13.1% of patients presented with a fever and respiratory symptoms. This value is higher compared to 11.1% from the previous week.</p>
<b>Absence reports from schools (i.e., absenteeism &gt; 10%)</b>	Slightly higher	<p>From May 22 to 25, two elementary schools in one of the two main English language public school boards reported a 5-day average absenteeism exceeding 10%. This number is higher than the previous week, when no schools in either of the two main English language public school boards reported increased absenteeism.</p>
<b>Laboratory-confirmed cases</b>	<p>May 15-21: Slightly higher</p> <p>May 22-28: Lower</p>	<p>From May 15 to 21, 5 cases of influenza (1 influenza A and 4 influenza B) were reported to the Health Unit.</p> <p>From May 22 to 28, 1 case of influenza B was reported to the Health Unit.</p> <p>Since the beginning of the influenza surveillance season, 34 influenza A (nine influenza A H3, six influenza A pdm09, the remainder untyped) and 71 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>
<b>Hospitalizations</b>	Similar	<p>From May 15 to 21, there were two reports of individuals with laboratory-confirmed influenza being hospitalized. From May 22 to 28, there was one report.</p> <p>Since the start of the influenza surveillance season, 34 people with laboratory-confirmed influenza have been hospitalized.</p>
<b>Deaths</b>	None	<p>No deaths were reported from May 15 to 28, 2012.</p> <p>Since the start of the influenza surveillance season, five individuals with laboratory-confirmed influenza have died.</p>

<p><b>Long-term care facility outbreaks</b></p>	<p>May 15-21: Slightly higher</p> <p>May 22-28: None</p>	<p>From May 15 to 21, one new institutional outbreaks of influenza B was reported. From May 22 to 28, no new institutional outbreaks of influenza were declared.</p> <p>Since the beginning of the influenza surveillance season, seven influenza outbreaks (three A and four B) have been reported.</p>
<p><b>Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases</b></p>	<p>Slightly higher</p>	<p>Between May 22 and 26, 4.9% of chest x-rays performed by the sentinel x-ray provider were newly diagnosed bronchopneumonia cases. This proportion is higher than 3.3% from the previous week.</p>
<p><b>Calls to Telehealth Ontario related to respiratory and influenza-like illness</b></p>	<p>None reported</p>	
<p><b>Percentage of influenza tests performed by the Ontario Public Health Laboratory that are positive from across the province</b></p>	<p>Influenza A Higher</p> <p>Influenza B Lower</p>	<p>Based on provincial testing done by the Ontario Public Health Laboratory from May 6 to 19, 9 of 170 samples tested positive for influenza A for a positivity rate of 5.3% which is 4.3% higher than the previous week. For influenza B, 16 of 170 samples tested positive, for a positivity of 9.4% which was 6.3% lower than the previous week.</p>