

2013-2014 Influenza Surveillance Report Update of Current Status and Issues March 3, 2014

Current Local Activity

The level of influenza activity in Middlesex-London is similar to last week and much lower than earlier in the year. Between February 24th and March 2nd, three cases of laboratory-confirmed influenza (one influenza A and two influenza B) were reported. To compare, there were four influenza cases reported the previous week (February 17th to 23rd). Since September 1st, 2013, a total of 185 laboratory-confirmed influenza A cases and 10 influenza B cases have been reported to the Health Unit. A graph showing all 195 laboratory-confirmed cases by week is provided in Appendix B at the end of this report. Currently, 39 of 185 influenza A samples have been subtyped, and all were found to be influenza A(H1N1)pdm09. This is the same strain that circulated during the 2009 pandemic and is a component of the 2013/2014 influenza vaccine.

To date, the majority (61.5%) of laboratory-confirmed influenza cases reported in Middlesex-London have been among adults between the ages of 20 and 64. Children under the age of five years continue to be over-represented among laboratory-confirmed influenza cases, relative to their representation in the general population. Children under five years of age represent only 5.5% of the general population in Middlesex-London, but account for 16.9% of confirmed influenza cases.

Hospitalizations and Deaths

None of the three new laboratory-confirmed influenza cases identified between February 24th and March 2nd were hospitalized. Since September 1st, 2013, there have been 96 hospitalizations among the 195 people with laboratory-confirmed influenza (49.2%). Of these 96 hospitalizations, 90 people had influenza A (93.8%) and six people had influenza B (6.3%).

In the past week, no deaths were reported among local residents with laboratory-confirmed influenza. Since September 1st, seven deaths have been reported among those in London and Middlesex County who had laboratory-confirmed influenza.

Current Outbreak Activity

Between February 24th and March 2nd, no new outbreaks due to influenza were declared. To date, five influenza A outbreaks have been declared in Middlesex-London. Influenza A(H1N1)pdm09 was identified in two of the five outbreaks.

Influenza Immunization

The influenza immunization status is known for 176 of the 195 reported cases. Among those cases with known immunization status, 145 (82.4%) were not immunized with this year's seasonal influenza vaccine.

Vaccination for unvaccinated individuals six months of age and over is still recommended. Influenza vaccinations are available at the Middlesex-London Health Unit's walk-in Immunization Clinic at 50 King Street in London on Mondays and Fridays from 10:00 a.m. to 4:00 p.m. and Wednesdays from 10:00 a.m. to 7:00 p.m. Clinics also take place at the Kenwick Mall in Strathroy from 3:30 p.m. to 7:30 p.m. on the first Tuesday of each month. The next scheduled Health Unit immunization clinic in Strathroy will take place this week, on Tuesday March 4th.

Influenza vaccinations are also available at some health care providers' offices and participating pharmacies. To find a free flu shot clinic near you, visit the Ministry of Health and Long-Term Care's "Find a Flu Shot Clinic" web page at: <http://health.gov.on.ca/en/public/programs/publichealth/flu/finder.aspx>.

Current Provincial Activity

Overall influenza activity across Ontario has decreased from the previous week. Between February 16th and 22nd, 2014, 136 cases of influenza A and 87 cases of influenza B were reported from multiple regions of the province. The percent positivity for all influenza types was 9.9%, which is lower than the 13.7% positivity reported the previous week. In total, 5,543 laboratory-confirmed influenza cases have been reported across the province since September 1st. The latest *Ontario Respiratory Virus Bulletin* from Public Health Ontario can be accessed through the following link:

<http://www.publichealthontario.ca/en/ServicesAndTools/SurveillanceServices/Pages/Ontario-Respiratory-Virus-Bulletin.aspx>.

Current National Influenza Strain Typing

In Canada, 1,150 influenza virus samples (49 influenza A(H3N2), 956 influenza A(H1N1)pdm09 and 145 influenza B) have been antigenically characterized since the beginning of the current season. Of the 1,150 influenza samples, nearly all (98.9%) matched the components of the 2013/2014 influenza vaccine. The components of the 2013/2014 influenza vaccine are: A/California/7/2009 (H1N1) pdm09-like virus, A/Victoria/361/2011b (H3N2) virus, and a B/Massachusetts/2/2012-like virus. The latest *FluWatch* from Public Health Agency of Canada can be accessed through the following link: <http://www.phac-aspc.gc.ca/fluwatch/>.

The current and previous editions of the Middlesex-London Health Unit *Community Influenza Surveillance Report* are available on the Health Unit's website at <https://www.healthunit.com/influenza-surveillance>.

Appendix A
Summary of Community Influenza Surveillance Indicators for Middlesex-London
March 3, 2014

The level of influenza activity in Middlesex-London is similar to last week and lower than previous weeks.

| Indicator | Reporting Period | Current Week | Year to Date (from September 1, 2013) | Recent Trends |
|---|------------------|--|--|---|
| Laboratory Information | | | | |
| Laboratory-confirmed cases¹ | Feb. 24-Mar. 2 | Influenza A – 1 case Influenza B – 2 cases | Influenza A -185 cases Influenza B - 10 cases | Overall, the three laboratory-confirmed influenza cases reported between February 24 th and March 2 nd is similar to the four cases reported in the <i>Community Influenza Surveillance Report</i> issued February 24 th , 2014. The one laboratory-confirmed influenza A case reported between February 24 th and March 2 nd is lower than the three influenza A cases reported in the previous week. The two influenza B cases reported between February 24 th and March 2 nd is slightly higher compared to the previous week, when one case of influenza B was reported. |
| Influenza Subtypes¹ | Feb. 24-Mar. 2 | 0 | 39 of 39 cases (100%) of subtyped influenza A samples were influenza A(H1N1) pdm09 | All influenza A strains subtyped to date have been influenza A(H1N1)pdm09. |
| Hospitalizations¹ | Feb. 24-Mar. 2 | 0 | 96 | No laboratory-confirmed influenza cases were hospitalized between February 24 th and March 2 nd , which is lower than the three hospitalizations reported the previous week. In total, 49.2% of laboratory-confirmed cases of influenza have been hospitalized. |
| Deaths¹ | Feb. 24-Mar. 2 | 0 | 7 | Between February 24 th and March 2 nd , no deaths of individuals with laboratory-confirmed influenza were reported. |
| Influenza outbreaks in long-term care homes/retirement homes/acute care | Feb. 24-Mar. 2 | 0 | 5 | For the fourth consecutive week, no outbreaks due to influenza were declared in local facilities. |
| Percentage samples that are positive for influenza (Ontario)² | Feb. 16-22 | Influenza A: 5.5% positivity Influenza B: 4.5% positivity | | Influenza A: Lower than 10.7% positivity reported the previous week. Influenza B: Higher than 2.9% reported the previous week. |

| Indicator | Reporting Period | Current Week | Recent Trends |
|--|------------------|--|--|
| Other Community Surveillance Indicators | | | |
| Hospital emergency room reports regarding the percentage of patients with fever and respiratory illness | Feb. 23-Mar. 1 | <p>Between February 23rd and March 1st, an average of 11.2% of patients at London Health Sciences Centre (LHSC) Emergency Departments and the St. Joseph's Health Care (SJHC) Urgent Care Centre presented with fever and respiratory symptoms.</p> <p>The proportion was highest at the paediatric emergency department, where 30.6% of patients presented with a fever and respiratory symptoms.</p> | <p>The percentage of patients presenting to hospital emergency departments with fever and respiratory symptoms from all LHSC sites and SJHC combined was similar to the 11.9% reported the previous week.</p> <p>The percentage of patients presenting with fever and respiratory symptoms at the paediatric emergency department continues to be elevated, but was similar to the 31.1% reported the previous week.</p> |
| Absence reports from elementary schools (i.e., absenteeism > 10%) | Feb. 24-28 | Between February 24 th and 28 th , 18 elementary schools from one school board reported a five-day average absenteeism rate exceeding 10%. The level of absenteeism may be influenced by a number of causes and may not be entirely attributed to influenza-like illness. | Data not available. |
| Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases | Feb. 24-Mar. 1 | From February 24 th to March 1 st , 4.8% of chest x-rays performed were newly diagnosed bronchopneumonia cases. | The proportion of newly diagnosed bronchopneumonia cases was higher compared to the 3.4% reported the previous week. |

Notes:

1 Numbers are subject to change week by week due to the retrospective nature of reporting.

2 Public Health Ontario, Ontario Respiratory Virus Bulletin 2013-2014, retrieved from

<http://www.publichealthontario.ca/en/ServicesAndTools/SurveillanceServices/Pages/Ontario-Respiratory-Virus-Bulletin.aspx>

The Middlesex-London Health Unit gratefully acknowledges the contributions of the following community partners who provide data for this report:

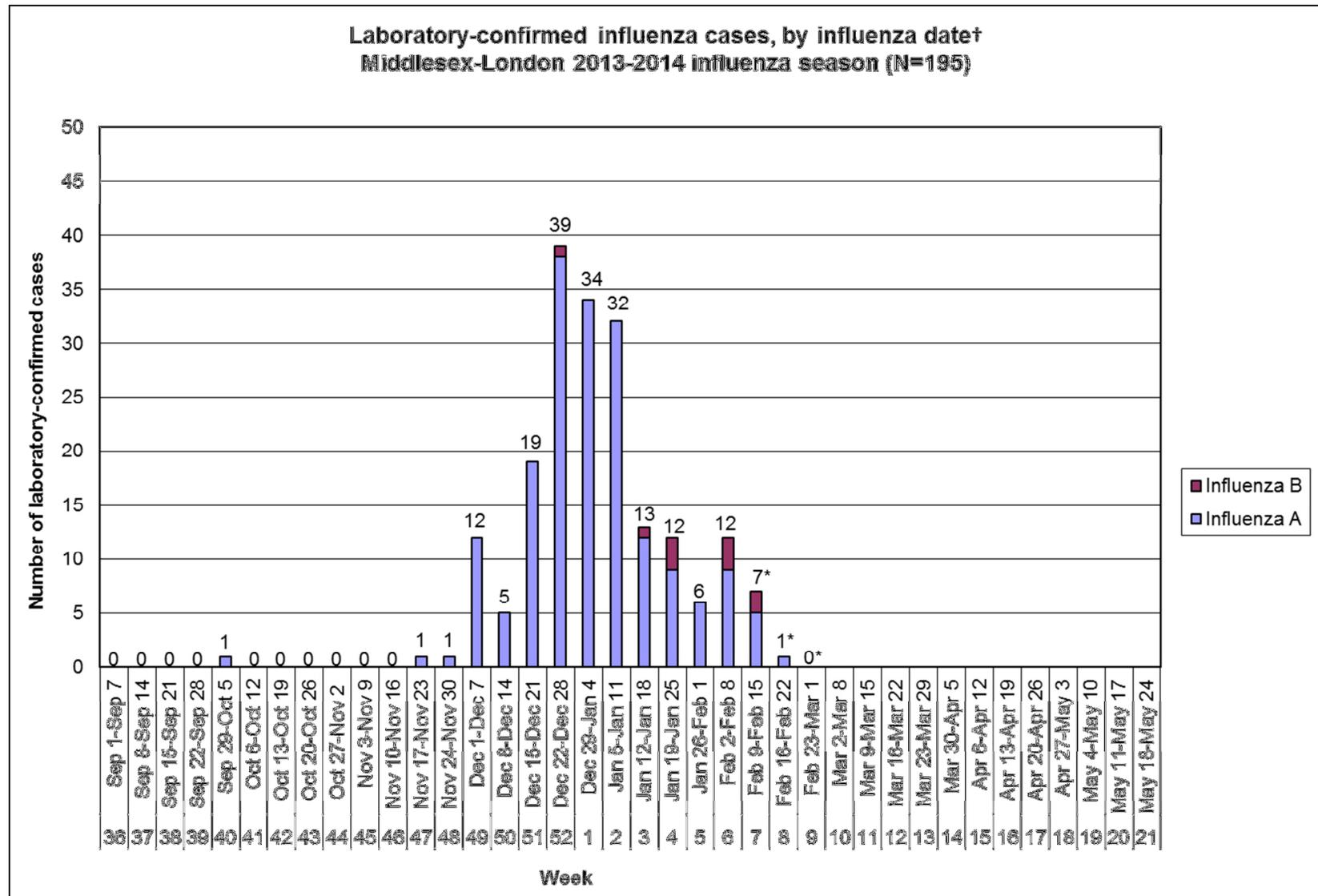
London Health Sciences Centre

London X-Ray Associates

St. Joseph's Health Care London

Thames Valley District School Board

Appendix B



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

* Counts may be incomplete and are subject to change, due to the retrospective nature of reporting.

Source: Middlesex-London Health Unit internal influenza case tracking database, extracted March 3, 2014.