

2013-2014 Influenza Surveillance Report Update of Current Status and Issues February 24, 2014

Current Local Activity

The level of influenza activity in Middlesex-London has decreased compared to the previous reporting week. Between February 17th and 23rd, four cases of laboratory-confirmed influenza (three influenza A and one influenza B) were reported; as well, there was the death of an individual who was previously reported to have laboratory-confirmed influenza. To compare, there were 11 influenza cases reported the previous week (February 10th to 16th). Since September 1st, 2013, a total of 184 laboratory-confirmed influenza A cases and eight influenza B cases have been reported to the Health Unit. A graph showing all 192 laboratory-confirmed cases by week is provided in Appendix B at the end of this report. Currently, 39 of 184 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 (62.0%) 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 17.2% of confirmed influenza cases.

Hospitalizations and Deaths

Of the four new laboratory-confirmed influenza cases identified between February 17th and 23rd, three were hospitalized. Since September 1st, 2013, there have been 96 hospitalizations among the 192 people with laboratory-confirmed influenza (50.0%). Of these 96 hospitalizations, 90 people had influenza A (93.8%) and six people had influenza B (6.3%).

As noted above, the death of one Middlesex-London resident, previously identified with laboratory-confirmed influenza, was reported last week. Since September 1st, seven deaths have been reported among London and Middlesex County residents who had laboratory-confirmed influenza.

Current Outbreak Activity

Between February 17th and February 23rd, 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 171 of the 192 reported cases. Among those cases with known immunization status, 140 (81.9%) 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 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

Influenza activity across Ontario has decreased from the previous week. Between February 9th and 15th, 2014, 201 cases of influenza A and 61 cases of influenza B were reported from multiple regions of the province. The percent positivity for all influenza types was 13.7%, which is lower than the 16.5% positivity reported the previous week. In total, 5,304 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, 984 influenza virus samples (49 influenza A(H3N2), 833 influenza A(H1N1)pdm09 and 102 influenza B) have been antigenically characterized since the beginning of the current season. Of the 984 influenza samples, nearly all (99.0%) 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
February 24, 2014

The level of influenza activity in Middlesex-London has decreased compared to the previous reporting week.

Indicator	Reporting Period	Current Week	Year to Date (from September 1, 2013)	Recent Trends
Laboratory Information				
Laboratory-confirmed cases¹	Feb. 17-23	Influenza A – 3 cases Influenza B – 1 case	Influenza A -184 cases Influenza B - 8 cases	Overall, the four laboratory-confirmed influenza cases reported between February 17 th and 23 rd is lower compared to the 11 cases reported in the <i>Community Influenza Surveillance Report</i> issued February 18 th , 2014. The total of three laboratory-confirmed influenza A cases reported between February 17 th and 23 rd is lower than the 11 influenza A cases reported in the previous week. The one influenza B case reported between February 17 th and 23 rd is slightly higher compared to the previous week when no cases of influenza B were reported.
Influenza Subtypes¹	Feb. 17-23	2	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. 17-23	3	96	Three laboratory-confirmed influenza cases were hospitalized between February 17 th and 23 rd , which is lower than the seven hospitalizations reported the previous week. In total, 50.0% of laboratory-confirmed cases of influenza have been hospitalized.
Deaths¹	Feb. 17-23	1	7	Between February 17 th and 23 rd , the death of one individual with a previously reported case of laboratory-confirmed influenza was reported.
Influenza outbreaks in long-term care homes/retirement homes/acute care	Feb. 17-23	0	5	For the third consecutive week, no outbreaks due to influenza were declared in local facilities.
Percentage samples that are positive for influenza (Ontario)²	Feb. 9-15	Influenza A: 10.7% positivity Influenza B: 2.9% positivity		Influenza A: Lower than the 14.1% positivity reported the previous week. Influenza B: Comparable to 2.4% 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. 16-22	<p>Between February 16th and 22nd, an average of 11.9% 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 31.1% 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 higher than the 9.4% 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, and was higher than the 25.0% reported the previous week.</p>
Absence reports from elementary schools (i.e., absenteeism > 10%)	Feb. 18-21	Data not reported.	Data not available.
Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases	Feb. 18-22	From February 18 th to 22 nd , 3.4% of chest x-rays performed were newly diagnosed bronchopneumonia cases.	The proportion of newly diagnosed bronchopneumonia cases was lower compared to the 5.6% reported the previous week.

Sources:

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:

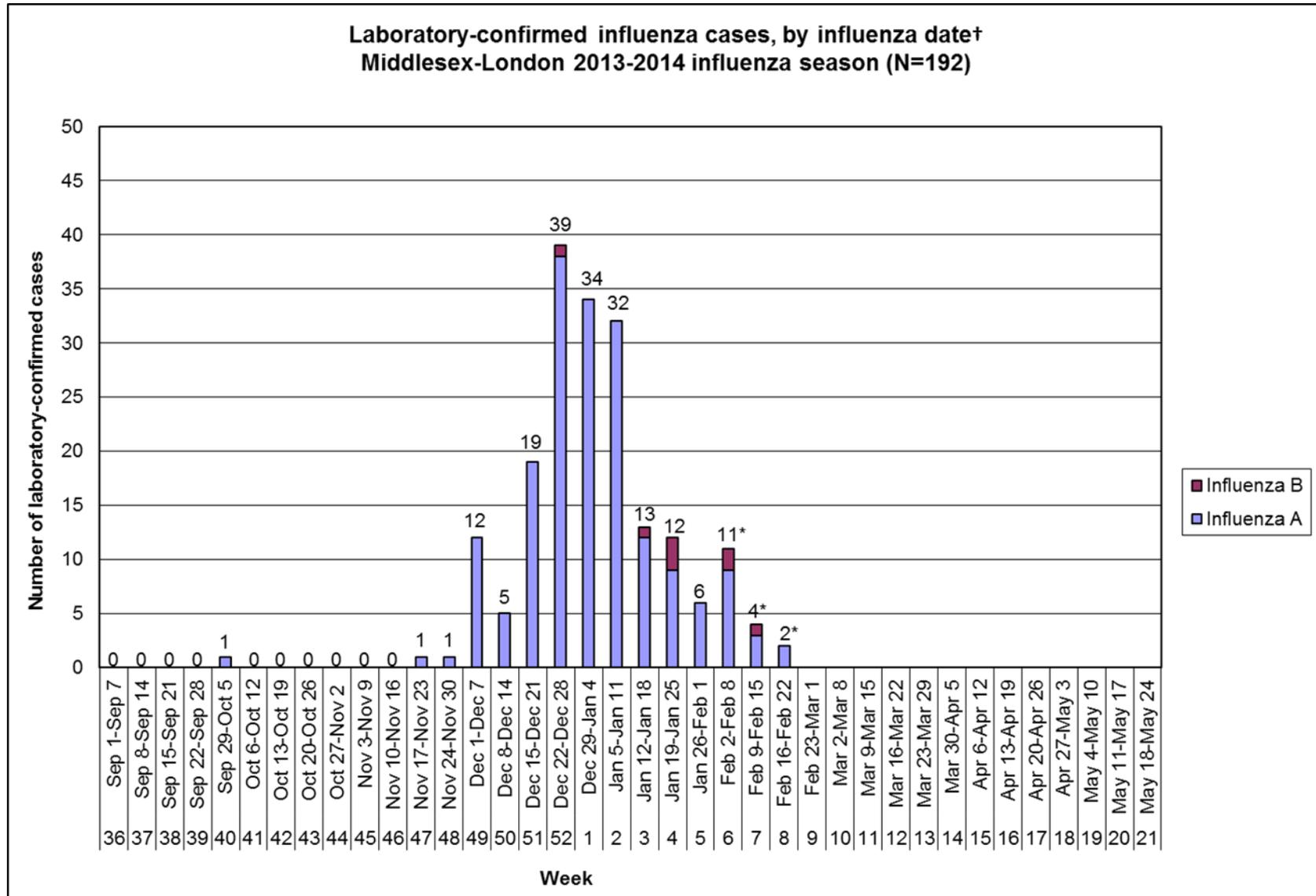
London Health Sciences Centre

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 February 24, 2014.