
2013-2014 Influenza Surveillance Report Update of Current Status and Issues January 27, 2014

Current Local Activity

Influenza activity remains present in Middlesex-London but is showing signs of decline. Between January 20th and 26th, 13 cases of laboratory-confirmed influenza A and one case of influenza B were reported, including two deaths. The number of new cases reported last week is lower than the 27 cases reported to the Health Unit between January 13th and 19th. Since September 1st, 2013, a total of 155 laboratory-confirmed influenza A cases and two cases of influenza B have been reported. A graph showing all 157 laboratory-confirmed cases by week is provided at the end of this report in Appendix B. Currently, 32 out of 155 influenza A samples have been subtyped, and all have been found to be influenza A(H1N1)pdm09. This is the same strain that circulated during the 2009 pandemic and is a component in the 2013/2014 influenza vaccine.

To date, the majority (59.9%) 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 represent only 5.5% of the general population in Middlesex-London, but account for 19.1% of cases.

Hospitalizations and Deaths

Of the 14 influenza cases identified between January 20th and 26th, six (42.9%) were hospitalized. Since September 1st, 2013, there have been 76 hospitalizations among the 157 people with laboratory-confirmed influenza (48.4%).

As noted above, there were two deaths reported in the past week among Middlesex-London residents with laboratory-confirmed influenza. Since September 1st, six deaths have been reported among people with laboratory-confirmed influenza.

Current Outbreak Activity

Between January 20th and January 26th, no new outbreaks due to influenza were declared. To date, four influenza A outbreaks have been declared in Middlesex-London. Influenza A(H1N1)pdm09 was identified in two of the four outbreaks.

Influenza Immunization

The influenza immunization status is known for 143 of the 157 reported cases. Among those cases with known immunization status, 117 (81.8%) 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 February 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 has started to decline across Ontario. Between January 12th and 18th, 2014, 809 cases of influenza A and 16 cases of influenza B were reported from multiple regions of the province. The percent positivity for all influenza types was 26.7%, which is lower than the 28.4% positivity reported the previous week. In total, 3,428 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, 428 influenza virus samples (29 influenza A(H3N2), 356 influenza A(H1N1)pdm09 and 43 influenza B) have been antigenically characterized since the beginning of the current season. Of the 428 influenza virus samples, nearly all (98.8%) 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
January 27, 2014

Influenza activity remains present in Middlesex-London but is showing signs of decline.

Indicator	Reporting Period	Current Week	Year to Date (from September 1, 2013)	Recent Trends
Laboratory Information				
Laboratory-confirmed cases¹	Jan. 20-26	Influenza A - 13 cases Influenza B - 1 case	Influenza A - 155 cases Influenza B - 2 cases	The number of laboratory-confirmed influenza cases reported between January 20 th and 26 th , is lower compared to the 27 cases reported in the previous <i>Community Influenza Surveillance Report</i> issued January 20, 2014.
Influenza Subtypes¹	Jan. 20-26	5 cases subtyped as influenza A(H1N1)pdm09	32 of 32 cases (100%) of influenza A samples that have been subtyped were influenza A(H1N1)pdm09	All influenza A strains subtyped to date have been influenza A(H1N1)pdm09.
Hospitalizations¹	Jan. 20-26	6	76	The number of laboratory-confirmed influenza cases hospitalized between January 20 th and 26 th , is lower compared to the 8 hospitalizations reported the previous week. In total, 48.4% of laboratory-confirmed cases of influenza have been hospitalized to date.
Deaths¹	Jan. 20-26	2	6	Between January 20 th and 26 th , two deaths were reported among Middlesex-London residents with laboratory-confirmed influenza. To date, there have been six deaths reported among Middlesex-London residents with laboratory-confirmed influenza.
Influenza outbreaks in long-term care homes/retirement homes/acute care	Jan. 20-26	0	4	There were no influenza outbreaks declared in facilities during this past reporting period.
Percentage samples that are positive for influenza (Ontario)²	Jan. 12-18	Influenza A: 26.1% positivity Influenza B: 0.6% positivity		Influenza A: Lower than the 27.8% positivity reported from the previous week. Influenza B: Remains unchanged from 0.6% reported from 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	Jan. 19-25	<p>Between January 19th and 25th, an average of 9.6% 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. From January 19th to 25th, 24.1% 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 is comparable to the 9.1% 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 is higher than the 21.1% reported the previous week.</p>
Absence reports from elementary schools (i.e., absenteeism > 10%)	Jan. 20-24	Data not available.	Data not available.
Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases	Jan. 20-25	From January 20 th to 25 th , 4.3% of chest x-rays performed were newly diagnosed bronchopneumonia cases.	The proportion of newly diagnosed bronchopneumonia cases is comparable to the 4.2% reported the previous week.

Sources:

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

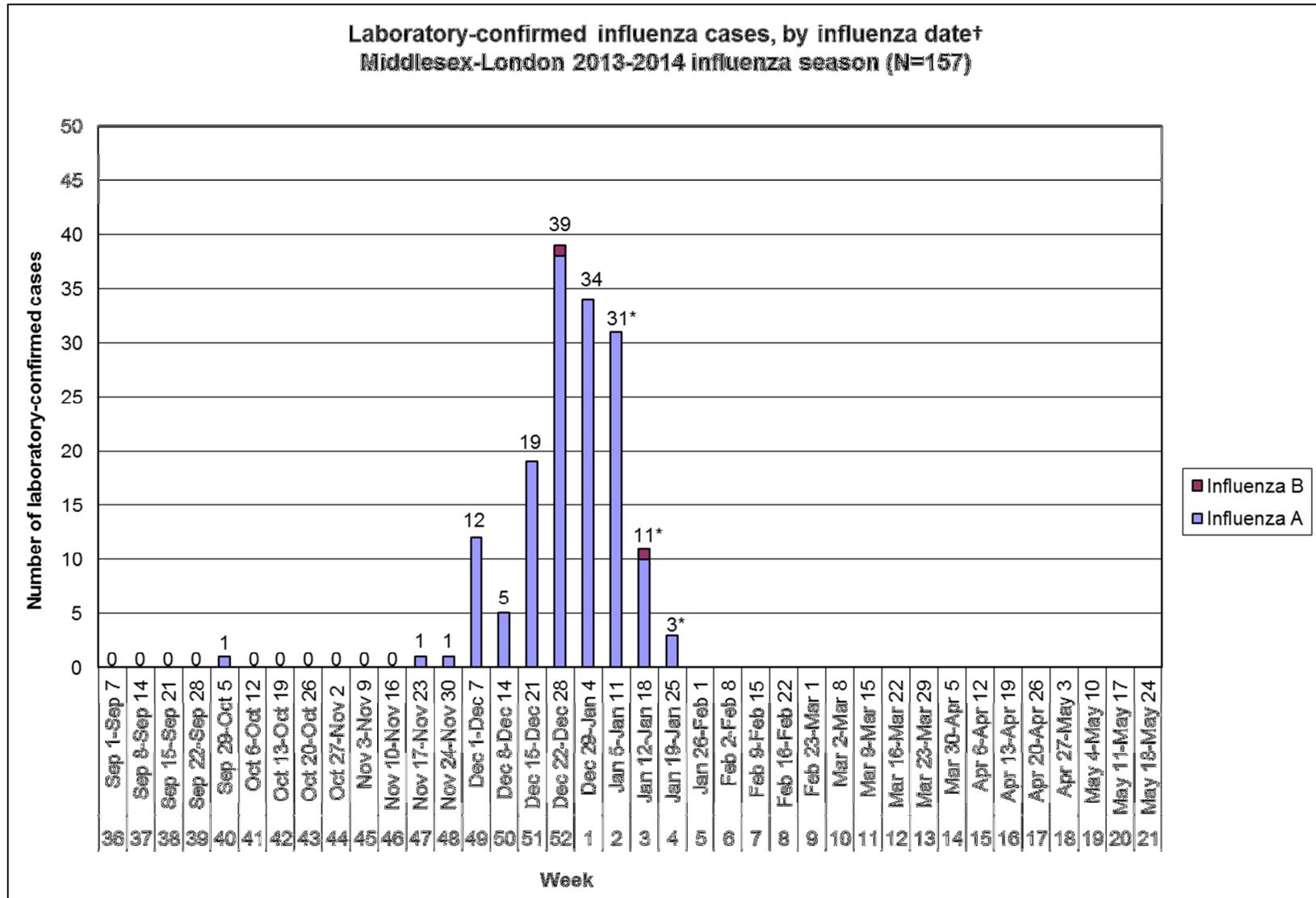
2 Public Health Ontario, Ontario Respiratory Virus Bulletin 2013-2014, retrieved from

<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 January 27, 2014.