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

Current Local Activity

Influenza activity remains present in Middlesex-London but continues to decline. Between January 27th and February 2nd, eight cases of laboratory-confirmed influenza A and one case of influenza B were reported. This is lower than the 14 cases reported to the Health Unit between January 20th and 26th. Since September 1st, 2013, a total of 163 laboratory-confirmed influenza A cases and three cases of influenza B have been reported. A graph showing all 166 laboratory-confirmed cases by week is provided at the end of this report in Appendix B. Currently, 34 out of 163 influenza A samples were subtyped, and all were 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 (60.2%) 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 18.1% of cases.

Hospitalizations and Deaths

Of the nine influenza cases identified between January 27th and February 2nd, five (55.6%) were hospitalized. Since September 1st, 2013, there have been 81 hospitalizations among the 166 people with laboratory-confirmed influenza (48.8%).

No deaths were reported this past week among Middlesex-London residents with laboratory-confirmed influenza. Since September 1st, six deaths have been reported among London and Middlesex County residents with laboratory-confirmed influenza.

Current Outbreak Activity

Between January 27th and February 2nd, one new outbreak due to influenza A was 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 151 of the 166 reported cases. Among those cases with known immunization status, 123 (81.5%) 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 continued to decline across Ontario. Between January 19th and 25th, 2014, 632 cases of influenza A and 22 cases of influenza B were reported from multiple regions of the province. The percent positivity for all influenza types was 19.3%, which is lower than the 26.7% positivity reported the previous week. In total, 4,113 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, 556 influenza virus samples (35 influenza A(H3N2), 473 influenza A(H1N1)pdm09 and 48 influenza B) have been antigenically characterized since the beginning of the current season. Of the 556 influenza virus samples, nearly all (99%) 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 3, 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. 27-Feb. 2	Influenza A - 8 cases Influenza B - 1 case	Influenza A -163 cases Influenza B - 3 cases	The nine laboratory-confirmed influenza cases reported between January 27 th and February 2 nd are lower, compared to the 14 cases reported in the previous <i>Community Influenza Surveillance Report</i> issued January 27, 2014.
Influenza Subtypes¹	Jan. 27-Feb. 2	2 cases subtyped as influenza A(H1N1)pdm09	34 of 34 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	Jan. 27-Feb 2	5	81	Five laboratory-confirmed influenza cases were hospitalized between January 27 th and February 2 nd . The previous reporting week there were six hospitalizations reported. In total, 48.8% of laboratory-confirmed cases of influenza have been hospitalized.
Deaths¹	Jan. 27-Feb 2	0	6	Between January 27 th and February 2 nd , no 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. 27-Feb 2	1	5	One influenza A outbreak was declared in a long term care home this reporting week. The previous reporting week there were no outbreaks due to influenza reported.
Percentage samples that are positive for influenza (Ontario)²	Jan. 19-25	Influenza A: 18.8% positivity Influenza B: 0.4% positivity		Influenza A: Lower than the 26.1% positivity reported from the previous week. Influenza B: Similar to 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. 26-Feb. 1	<p>Between January 26th and February 1st, an average of 10.2% 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 21.4% 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 slightly higher than the 9.6% 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 lower than the 24.1% reported the previous week.</p>
Absence reports from elementary schools (i.e., absenteeism > 10%)	Jan. 27-31	Data not reported due to weather-related bus cancelations, school closures, and absences.	Data not available.
Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases	Jan. 27-Feb. 1	From January 27 th to February 1 st , 4.7% of chest x-rays performed were newly diagnosed bronchopneumonia cases.	The proportion of newly diagnosed bronchopneumonia cases is comparable to the 4.3% reported the previous week.

Sources:

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

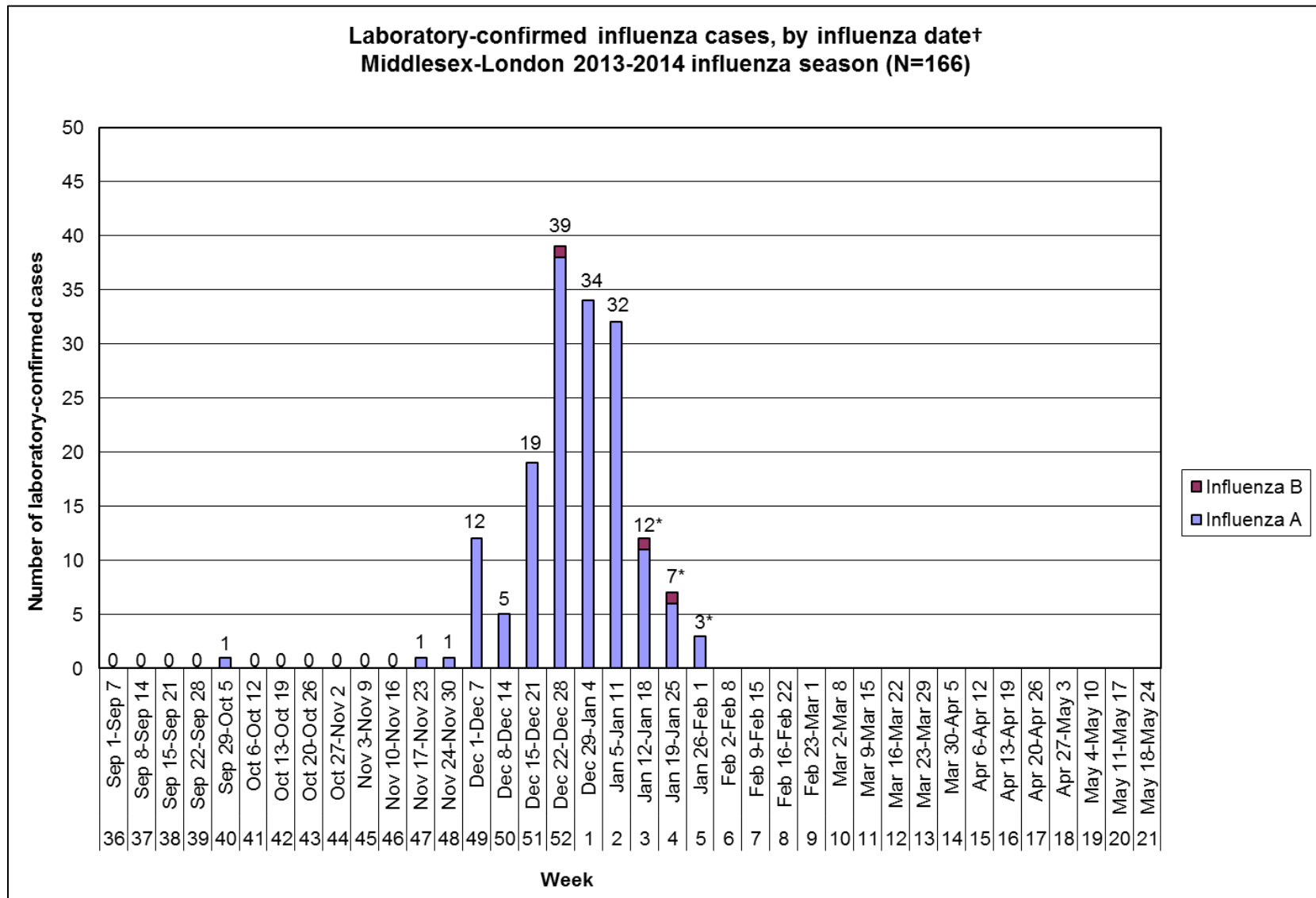
2 Public Health Ontario, Ontario Respiratory Virus Bulletin 2013-2014, retrieved from

<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 3, 2014.