
2013-2014 Influenza Surveillance Report Update of Current Status and Issues February 10, 2014

Current Local Activity

The level of influenza activity in Middlesex-London is similar to what was reported last week. This week, however, influenza B accounted for over one-third of newly reported cases. Between February 3rd and 9th, seven cases of laboratory-confirmed influenza A and four cases of influenza B were reported. The previous reporting week (January 27th to February 2nd) eight influenza A and one influenza B cases were reported. Since September 1st, 2013, a total of 170 laboratory-confirmed influenza A cases and seven influenza B cases have been reported. A graph showing all 177 laboratory-confirmed cases by week is provided at the end of this report in Appendix B. Currently, 35 of 170 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 in the 2013/2014 influenza vaccine.

To date, the majority (61.0%) 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 18.1% of cases.

Hospitalizations and Deaths

Of the 11 new laboratory-confirmed influenza cases identified between February 3rd and 9th, two people with influenza A and three people with influenza B were hospitalized. Since September 1st, 2013, there have been 86 hospitalizations among the 177 people with laboratory-confirmed influenza (48.6%). Of these 86 hospitalizations, 81 people had influenza A (94.2%) and five people had influenza B (5.8%).

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 who had laboratory-confirmed influenza.

Current Outbreak Activity

Between February 3rd and February 9th, 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 159 of the 177 reported cases. Among those cases with known immunization status, 130 (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 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 continues to decline across Ontario. Between January 26th and February 1st, 2014, 472 cases of influenza A and 29 cases of influenza B were reported from multiple regions of the province. The percent positivity for all influenza types was 17.7%, which is lower than the 19.3% positivity reported the previous week. In total, 4,642 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, 750 influenza virus samples (43 influenza A(H3N2), 635 influenza A(H1N1)pdm09 and 72 influenza B) have been antigenically characterized since the beginning of the current season. Of the 750 influenza 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>.

Due to the Family Day holiday on February 17th, the next issue of the Middlesex-London Community Influenza Surveillance Report will be issued on February 18th, 2014.

Appendix A
Summary of Community Influenza Surveillance Indicators for Middlesex-London
February 10, 2014

The level of influenza activity in Middlesex-London is similar 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. 3-9	Influenza A - 7 cases Influenza B - 4 cases	Influenza A -170 cases Influenza B - 7 cases	The seven laboratory-confirmed influenza A cases reported between February 3 rd and 9 th are lower compared to the eight cases reported in the <i>Community Influenza Surveillance Report</i> issued January 27, 2014. The four laboratory-confirmed influenza B cases reported between February 3 rd and 9 th are higher compared to the one case reported in the previous reporting week.
Influenza Subtypes¹	Feb. 3-9	1 case subtyped as influenza A(H1N1)pdm09	35 of 35 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. 3-9	5	86	Five laboratory-confirmed influenza cases were hospitalized between February 3 rd and 9 th , which is the same number compared to the previous reporting week. In total, 48.6% of laboratory-confirmed cases of influenza have been hospitalized.
Deaths¹	Feb. 3-9	0	6	Between February 3 rd and 9 th , no deaths were reported among Middlesex-London residents with laboratory-confirmed influenza.
Influenza outbreaks in long-term care homes/retirement homes/acute care	Feb. 3-9	0	5	No outbreaks due to influenza were declared in facilities this reporting week. There was one outbreak due to influenza reported during the previous week.
Percentage samples that are positive for influenza (Ontario)²	Jan. 26-Feb. 1	Influenza A: 16.8% positivity Influenza B: 0.9% positivity		Influenza A: Lower than the 18.8% positivity reported from the previous week. Influenza B: Slightly higher than the 0.4% 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	Feb. 2-8	<p>Between February 2nd and 8th, an average of 10.0% 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 25.6% 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 10.2% 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 21.4% reported the previous week.</p>
Absence reports from elementary schools (i.e., absenteeism > 10%)	Feb. 3-7	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	Feb. 3-8	From February 3 rd to 8 th , 3.3% of chest x-rays performed were newly diagnosed bronchopneumonia cases.	The proportion of newly diagnosed bronchopneumonia cases was lower compared to the 4.7% 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

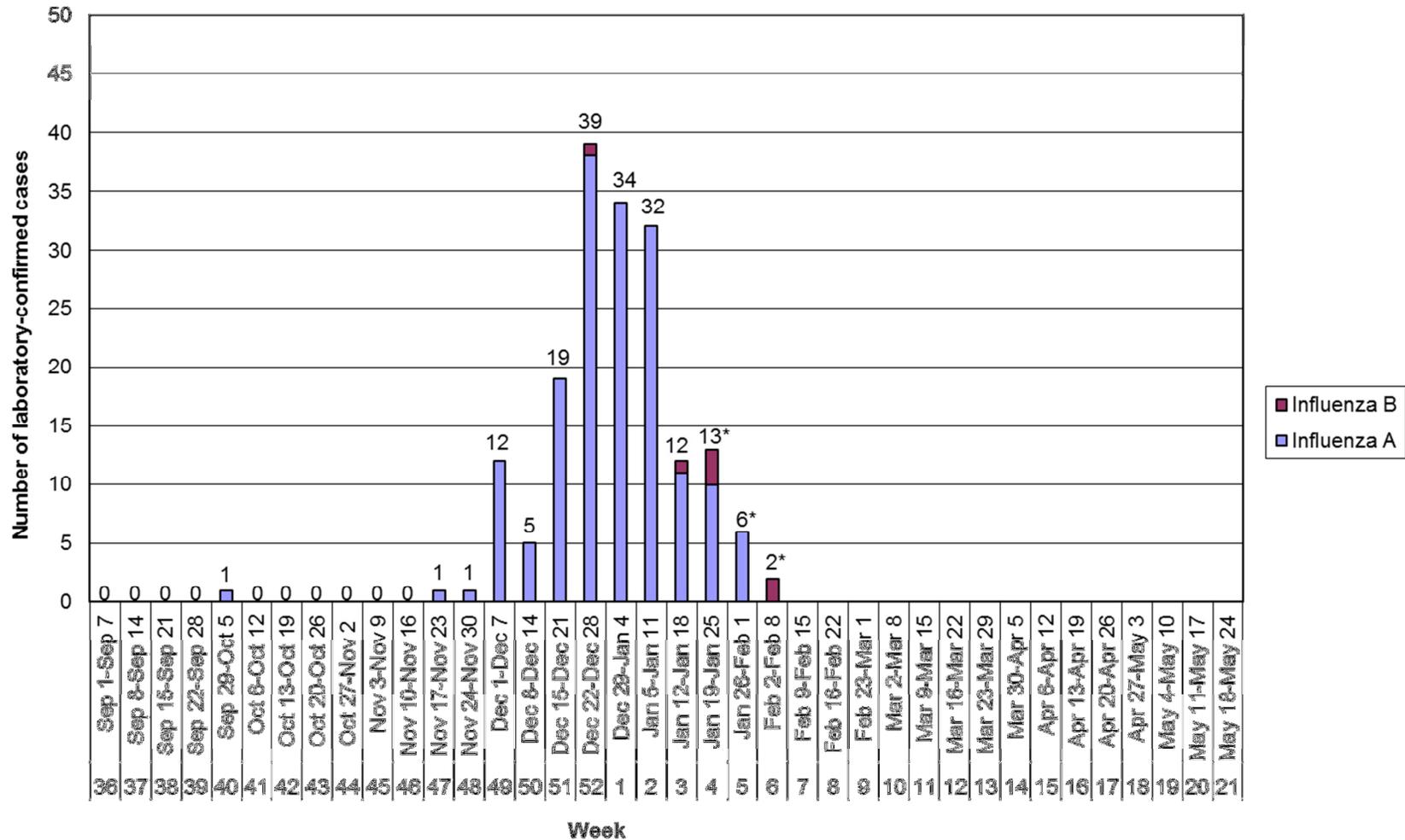
London X-Ray Associates

St. Joseph's Health Care London

Thames Valley District School Board

Appendix B

Laboratory-confirmed influenza cases, by influenza date†
Middlesex-London 2013-2014 influenza season (N=177)



† '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 10, 2014.