
**2013-2014 Influenza Surveillance Report
Update of Current Status and Issues
April 14, 2014****Current Local Activity**

Between April 7th and 13th, the level of influenza activity in Middlesex-London was higher compared to the previous week. There were 33 new laboratory-confirmed cases of influenza reported last week, which is greater than the 23 cases reported the previous week (March 31st to April 6th). Of the new cases reported last week, one was identified as having influenza A and 32 had influenza B. Since September 1st, 2013, a total of 201 laboratory-confirmed influenza A cases, 106 influenza B cases, and one influenza A and B co-infection have been reported to the Health Unit. A graph showing all 308 laboratory-confirmed cases by week is provided in Appendix B at the end of this report. Currently, 41 of 201 influenza A samples have been subtyped, and 40 were found to be influenza A(H1N1)pdm09. This is the same strain that circulated during the 2009 pandemic and which is also a component of the 2013/2014 influenza vaccine. Only one sample of influenza B has been typed so far, and found to be B/Massachusetts/02/12-like, which is also a component of the 2013/2014 influenza vaccine.

To date, the majority (54.2%) 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 and seniors 65 years of age and older are 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 11.7% of confirmed influenza cases; similarly, people 65 years of age and older represent 14.8% of the general population, but account for 26.0% of cases.

Hospitalizations and Deaths

Of the 33 new laboratory-confirmed influenza cases identified between April 7th and 13th, 16 were hospitalized; one was identified as having influenza A while the remainder were identified as having influenza B. Since September 1st, 2013, there have been 154 hospitalizations among the 308 people with laboratory-confirmed influenza (50.0%). Of those hospitalized, 100 people had influenza A (64.9%), 53 people had influenza B (34.4%) and one person was infected with both influenza A and B (0.6%).

No deaths were reported this past week among Middlesex-London residents with laboratory-confirmed influenza. Since September 1st, 2013, there have been nine deaths among those in London and Middlesex County who had laboratory-confirmed influenza.

Current Outbreak Activity

Between April 7th and 13th, there were four new facility outbreaks declared, all of which had influenza B identified. In total, there have been 16 outbreaks this season; influenza A has been identified in seven outbreaks, while influenza B has been identified in nine outbreaks. Influenza A(H1N1)pdm09 was identified in two of the seven influenza A outbreaks.

Influenza Immunization

The influenza immunization status is known for 247 of the 308 reported cases. Among those cases with known immunization status, 184 (74.5%) were not immunized with this year's seasonal influenza vaccine.

Influenza vaccinations for unvaccinated individuals six months of age and over are still 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 on the first Tuesday of each month, from 3:30 p.m. to 7:30 p.m.. The next Strathroy clinic will take place on Tuesday May 6th.

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 was higher compared to the previous week. Between March 30th and April 5th, 41 cases of influenza A and 444 cases of influenza B were reported from multiple regions of the province. The percent positivity for all influenza types was 20.0%, which is slightly higher than the 19.2% positivity reported the previous week. In total, 7,513 laboratory-confirmed influenza cases have been reported across the province since September 1st, 2013. The latest *Ontario Respiratory Virus Bulletin* from Public Health Ontario can be accessed at:

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

Current National Influenza Strain Typing

In Canada, 1,740 influenza virus samples (86 influenza A(H3N2), 1,301 influenza A(H1N1)pdm09 and 353 influenza B) have been antigenically characterized since the beginning of the current influenza season. Of the 1,740 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
April 14, 2014

The level of influenza activity in Middlesex-London is higher compared to the previous week.

Indicator	Reporting Period	Current Week	Year to Date (from September 1, 2013)	Recent Trends
Laboratory information				
Laboratory-confirmed cases¹	Apr. 7-13	Influenza A – 1 case Influenza B – 32 cases	Influenza A – 201 cases Influenza B – 106 cases Influenza A & B – 1 case	The 33 laboratory-confirmed influenza cases reported between April 7 th and 13 th is higher than the 23 new cases reported in the previous <i>Community Influenza Surveillance Report</i> issued April 7 th , 2014. One laboratory-confirmed case of influenza A was reported between April 7 th and 13 th , which is the same as the previous week. The 32 influenza B cases reported between April 7 th and 13 th is higher compared to the previous week, when 22 cases of influenza B were reported.
Influenza Subtypes¹	Apr. 7-13	No new subtyping results received.	40 of 41 cases (97.6%) of subtyped influenza A samples were influenza A(H1N1) pdm09 One of 41 cases (2.4%) of subtyped influenza A samples were influenza A(H3) One influenza B subtyped was B/Massachusetts/02/12-like	Almost all influenza A strains subtyped to date have been influenza A(H1N1)pdm09.
Hospitalizations¹	Apr. 7-13	16	154	Between April 7 th and 13 th , 16 people with laboratory-confirmed influenza were hospitalized, one of whom was identified as having influenza A and the remaining 15 identified as having influenza B.
Deaths¹	Apr. 7-13	0	9	To date, nine deaths have been reported among individuals with laboratory-confirmed influenza.
Influenza outbreaks in long-term care homes/retirement homes/acute care	Apr. 7-13	Influenza A – 0 outbreaks Influenza B – 4 outbreaks	Influenza A – 7 outbreaks Influenza B – 9 outbreaks	The four facility outbreaks declared between April 7 th and 13 th where influenza B was identified is higher than the previous week, when one influenza-related outbreak was identified.
Percentage of samples that are positive for influenza (Ontario)²	Mar. 30-April 5	Influenza A: 2.9% positivity Influenza B: 17.1% positivity	N/A	Influenza A: Similar to the 2.6% reported the previous week. Influenza B: Slightly higher than the 16.6% positivity 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	Apr. 6-12	<p>Between April 6th and 12th, an average of 9.3% 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 20.9% 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 lower compared to the 10.5% 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 compared to the 23.5% reported the previous week.</p>
Absence reports from elementary schools (i.e., absenteeism > 10%)	Apr. 7-11	Between April 7 th and 11 th , seven elementary schools from one school board reported a five-day average absenteeism rate exceeding 10%.	The number of schools reporting absenteeism exceeding 10% was slightly higher compared to the previous week, when five schools reported a five-day average absenteeism greater than 10%.
Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases	Apr. 7-12	From April 7 th to 12 th , 4.5% of chest x-rays performed were newly diagnosed bronchopneumonia cases	The proportion of newly diagnosed bronchopneumonia cases was lower compared to the 5.5% 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

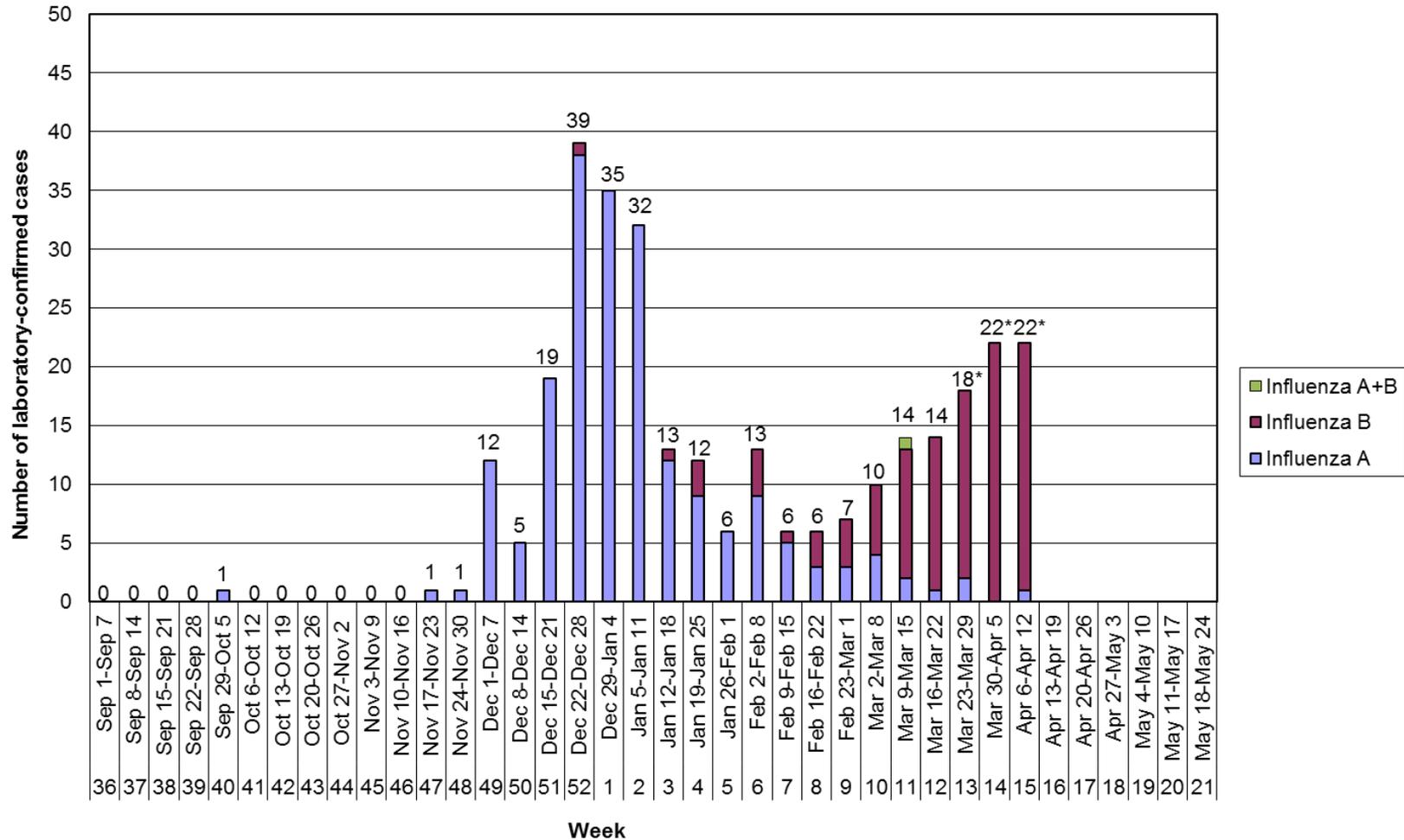
<http://www.publichealthontario.ca/en/ServicesAndTools/SurveillanceServices/Pages/Ontario-Respiratory-Virus-Bulletin.aspx>

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 April 14, 2014

**Laboratory-confirmed influenza cases, by influenza date†
Middlesex-London 2013-2014 influenza season (N=308)**



† '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 April 14, 2014.