

**2013-2014 Influenza Surveillance Report
Update of Current Status and Issues
April 22, 2014**

Current Local Activity

Between April 14th and 20th, the level of influenza activity in Middlesex-London was similar compared to the previous week. There were 32 new laboratory-confirmed cases of influenza reported last week, including five deaths. The total number of cases reported last week is similar to the 33 cases reported the previous week (April 7th to 13th). All of the 32 new cases reported last week were identified as having influenza B. Since September 1st, 2013, a total of 201 laboratory-confirmed influenza A cases, 137 influenza B cases, and one influenza A and B co-infection have been reported to the Health Unit. A graph showing all 339 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 (52.2%) 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 11.5% of confirmed influenza cases; similarly, people 65 years of age and older represent 14.8% of the general population, but account for 28.0% of cases.

Hospitalizations and Deaths

Of the 32 new laboratory-confirmed influenza B cases identified between April 14th and 20th, 18 were hospitalized. Since September 1st, 2013, there have been 172 hospitalizations among the 339 people with laboratory-confirmed influenza (50.7%). Of those hospitalized, 99 people had influenza A (57.6%), 72 people had influenza B (41.9%) and one person was infected with both influenza A and B (0.6%).

As noted above, five deaths were reported this past week among Middlesex-London residents with laboratory-confirmed influenza. Since September 1st, 2013, there have been 14 deaths among those in London and Middlesex County who had laboratory-confirmed influenza.

Current Outbreak Activity

Between April 14th and 20th, there were two new facility outbreaks declared, all of which had influenza B identified. In total, there have been 18 outbreaks this season; influenza A has been identified in seven outbreaks, while influenza B has been identified in 11 outbreaks. Influenza A(H1N1)pdm09 was identified in two of the seven influenza A outbreaks.

Influenza Immunization

The influenza immunization status is known for 275 of the 339 reported cases. Among those cases with known immunization status, 193 (70.2%) 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 slightly higher compared to the previous week. Between April 6th and April 12th, 39 cases of influenza A and 445 cases of influenza B were reported from multiple regions of the province. The percent positivity for all influenza types was 23.7%, which is higher than the 20.0% positivity reported the previous week. In total, 8,013 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 22, 2014

The level of influenza activity in Middlesex-London is similar 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. 14-20	Influenza A – 0 cases Influenza B – 32 cases	Influenza A – 201 cases Influenza B – 137 cases Influenza A & B – 1 case	The 32 laboratory-confirmed influenza cases reported between April 14 th and 20 th is similar than the 33 new cases reported in the previous <i>Community Influenza Surveillance Report</i> issued April 14 th , 2014.
Influenza Subtypes¹	Apr. 14-20	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. 14-20	18	172	Between April 14 th and 20 th , 18 people with laboratory-confirmed influenza were hospitalized, all of whom were identified as having influenza B.
Deaths¹	Apr. 14-20	5	14	Five deaths in individuals found to have influenza were reported to the Health Unit last week. To date, 14 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 – 2 outbreaks	Influenza A – 7 outbreaks Influenza B – 11 outbreaks	The two facility outbreaks declared between April 14 th and 20 th , where influenza B was identified, are lower than the previous week, when four influenza-related outbreaks were identified.
Percentage of samples that are positive for influenza (Ontario)²	Apr. 6-12	Influenza A: 2.0% positivity Influenza B: 21.7% positivity	N/A	Influenza A: Lower than the 2.9% reported the previous week. Influenza B: Higher than the 17.1% 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. 13-19	Between April 13 th and 19 th , an average of 10.7% 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. The proportion was highest at the paediatric emergency department, where 20.0% of patients presented with a fever and respiratory symptoms.	The percentage of patients presenting to hospital emergency departments with fever and respiratory symptoms from all LHSC sites and SJHC combined was higher compared to the 9.3% reported the previous week. The percentage of patients presenting with fever and respiratory symptoms at the paediatric emergency department continues to be elevated, but was slightly lower compared to the 20.9% reported the previous week.
Absence reports from elementary schools (i.e., absenteeism > 10%)	Apr. 14-17	Between April 14 th and 17 th , four elementary schools from one school board reported a four-day average absenteeism rate exceeding 10%.	The number of schools reporting absenteeism exceeding 10% was lower compared to the previous week, when seven schools reported a five-day average absenteeism greater than 10%.
Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases	Apr. 14-19	From April 14 th to 19 th , 3.8% of chest x-rays performed were newly diagnosed bronchopneumonia cases	The proportion of newly diagnosed bronchopneumonia cases was slightly lower compared to the 4.5% 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

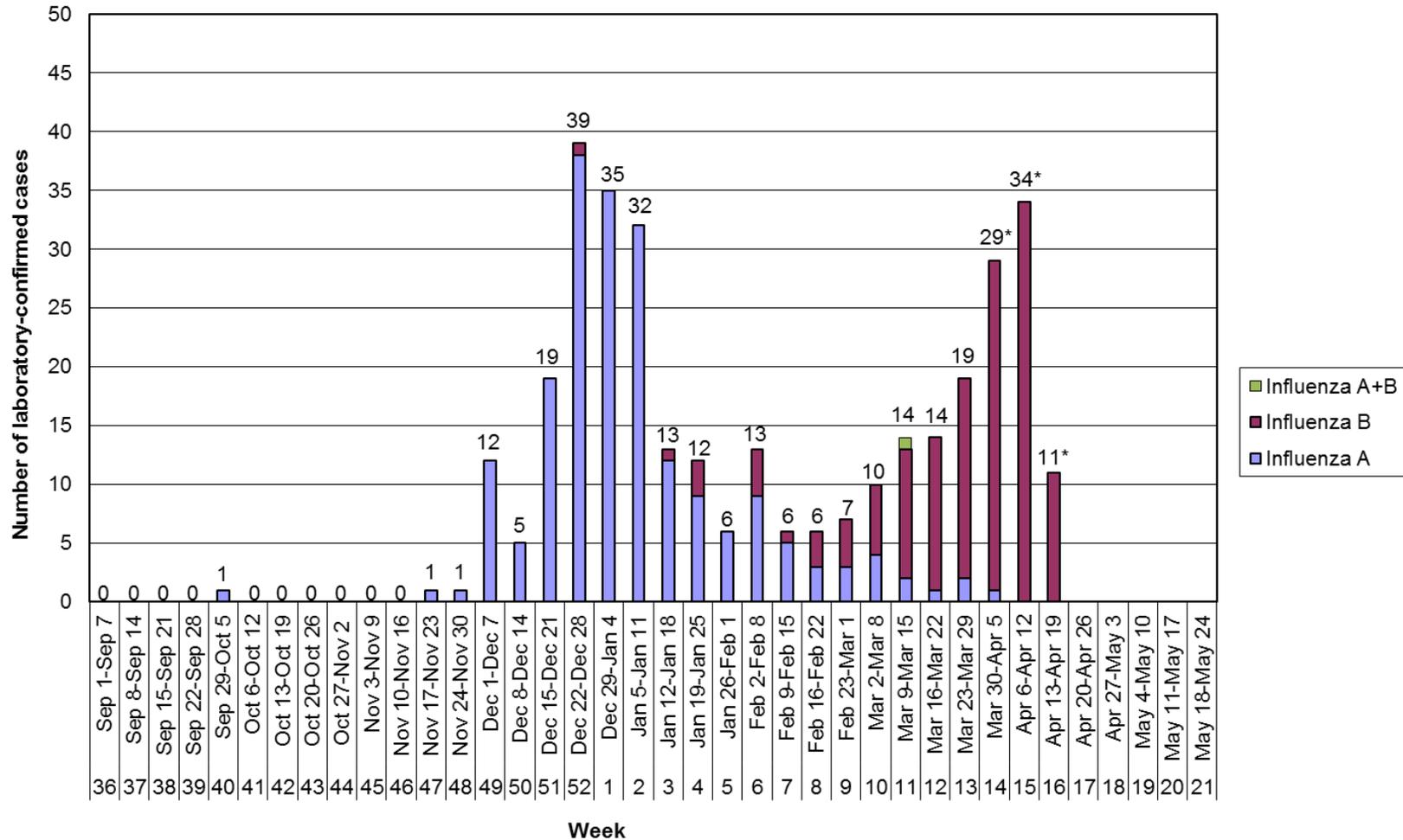
<http://www.publichealthontario.ca/en/ServicesAndTools/SurveillanceServices/Pages/Ontario-Respiratory-Virus-Bulletin.aspx>

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 22, 2014

**Laboratory-confirmed influenza cases, by influenza date†
Middlesex-London 2013-2014 influenza season (N=339)**



† '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 22, 2014.