

**2013-2014 Influenza Surveillance Report
Update of Current Status and Issues
May 12, 2014**

Current Local Activity

Between May 5th and 11th, the level of influenza activity in Middlesex-London was lower compared to the previous week. There were 13 new laboratory-confirmed cases of influenza reported last week (all of which were identified with influenza B), as well as the death of an individual previously identified with influenza. The total number of cases reported last week is lower compared to the 17 cases reported the previous week (April 28th to May 4th). Since September 1st, 2013, a total of 203 laboratory-confirmed influenza A cases, 191 influenza B cases, and two influenza A and B co-infections have been reported to the Health Unit. A graph showing all 396 laboratory-confirmed cases by week is provided in Appendix B at the end of this report.

To date, the majority (51.3%) 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 10.4% of confirmed influenza cases; similarly, people 65 years of age and older represent 14.8% of the general population, but account for 30.6% of cases.

Hospitalizations and Deaths

Of the 13 new laboratory-confirmed influenza cases identified between May 5th and 11th, five were hospitalized. Since September 1st, 2013, there have been 201 hospitalizations among the 396 people with laboratory-confirmed influenza (50.8%). Of those hospitalized, 101 people had influenza A (50.2%), 98 people had influenza B (48.8%) and two people were infected with both influenza A and B (1.0%).

As noted above, one death was reported this past week in a Middlesex-London resident who had been previously identified with laboratory-confirmed influenza. Since September 1st, 2013, there have been 16 deaths among those in London and Middlesex County who had laboratory-confirmed influenza.

Current Outbreak Activity

One influenza B outbreak was declared between May 5th and 11th. In total, there have been 20 outbreaks this season; influenza A has been identified in seven outbreaks, while influenza B has been identified in 13 outbreaks. Influenza A(H1N1)pdm09 was identified in two of the seven influenza A outbreaks and influenza B/Massachusetts/02/12-like was identified in one of the 13 influenza B outbreaks.

Influenza Immunization

The influenza immunization status is known for 333 of the 396 (84.1%) reported cases; of these, 229 people were 64 years of age and under, and 104 were 65 years of age and over. Among the 229 cases who were 64 years of age and under, 33 (14.4%) received their influenza immunization this influenza season and 196 (85.6%) did not. Among the 104 individuals who were 65 years of age and older, 74 (71.2%) received their influenza immunization this influenza season and 30 (28.8%) did not. The [National Advisory Committee on Immunization](#) (NACI) states "In the elderly, vaccine effectiveness is about half of that of healthy adults and varies depending on the outcome and the study population. Systematic reviews have also demonstrated that influenza vaccine decreases the incidence of pneumonia, hospital admissions and deaths in the elderly and reduces exacerbations in persons with chronic obstructive pulmonary disease."

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 similar compared to the previous week. Between April 27th and May 3rd, 28 cases of influenza A and 294 cases of influenza B were reported from multiple regions of the province. The percent positivity for all influenza types was 17.9% which is similar to the 18.0% positivity reported the previous week. In total, 9,214 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, 1,970 influenza virus samples (106 influenza A(H3N2), 1,353 influenza A(H1N1)pdm09 and 511 influenza B) have been antigenically characterized since the beginning of the current influenza season. Of the 1,970 influenza samples, nearly all (98.7%) 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 the 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 website at <https://www.healthunit.com/influenza-surveillance>.

Appendix A
Summary of Community Influenza Surveillance Indicators for Middlesex-London
May 12, 2014

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

Indicator	Reporting Period	Current Week	Year to Date (from September 1, 2013)	Recent Trends
Laboratory information				
Laboratory-confirmed cases¹	May 5-11	Influenza A – 0 cases Influenza B – 13 cases Influenza A & B – 0 cases	Influenza A – 203 cases Influenza B – 191 cases Influenza A & B – 2 cases	The 13 laboratory-confirmed influenza cases reported between May 5 th and 11 th is lower than the 17 cases reported in the previous <i>Community Influenza Surveillance Report</i> issued May 5 th , 2014.
Influenza Subtypes¹	May 5-11	One influenza B was subtyped as B/Massachusetts/02-12-like	40 of 41 (97.6%) of subtyped influenza A samples were influenza A(H1N1) pdm09 One of 41 (2.4%) of subtyped influenza A samples were influenza A(H3) Two influenza B samples subtyped as B/Massachusetts/02/12-like	Almost all influenza A strains subtyped to date have been influenza A(H1N1)pdm09. Influenza B strains subtyped to date have been B/Massachusetts/02/12-like
Hospitalizations¹	May 5-11	5	201	Between May 5 th and May 11 th , five people with laboratory-confirmed influenza were hospitalized, all of whom had influenza B.
Deaths¹	May 5-11	1	16	One death in a previously reported individual with laboratory-confirmed influenza was reported to the Health Unit last week. To date, 16 deaths have been reported among individuals in Middlesex-London with laboratory-confirmed influenza.
Influenza outbreaks in long-term care homes/retirement homes/acute care	May 5-11	Influenza A – 0 outbreaks Influenza B – 1 outbreak	Influenza A – 7 outbreaks Influenza B – 13 outbreaks	One outbreak due to influenza B was declared between May 5 th and 11 th . The previous week there were no influenza-related outbreaks identified.
Percentage of samples that are positive for influenza (Ontario)²	Apr. 27-May 3	Influenza A: 1.4% positivity Influenza B: 16.5% positivity	N/A	Influenza A: Comparable to the 1.2% reported the previous week. Influenza B: Comparable to the 16.9% 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	May4-10	Data not available.	Data not available.
Absence reports from elementary schools (i.e., absenteeism > 10%)	May 5-9	Between May 5 th and 9 th , one elementary school from one school board reported a five-day average absenteeism rate exceeding 10%.	The number of schools reporting absenteeism exceeding 10% was unchanged from the previous week.
Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases	May 5-10	From May 5 th to 10 th , 2.6% of chest x-rays performed were newly diagnosed bronchopneumonia cases	The proportion of newly diagnosed bronchopneumonia cases was unchanged from 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

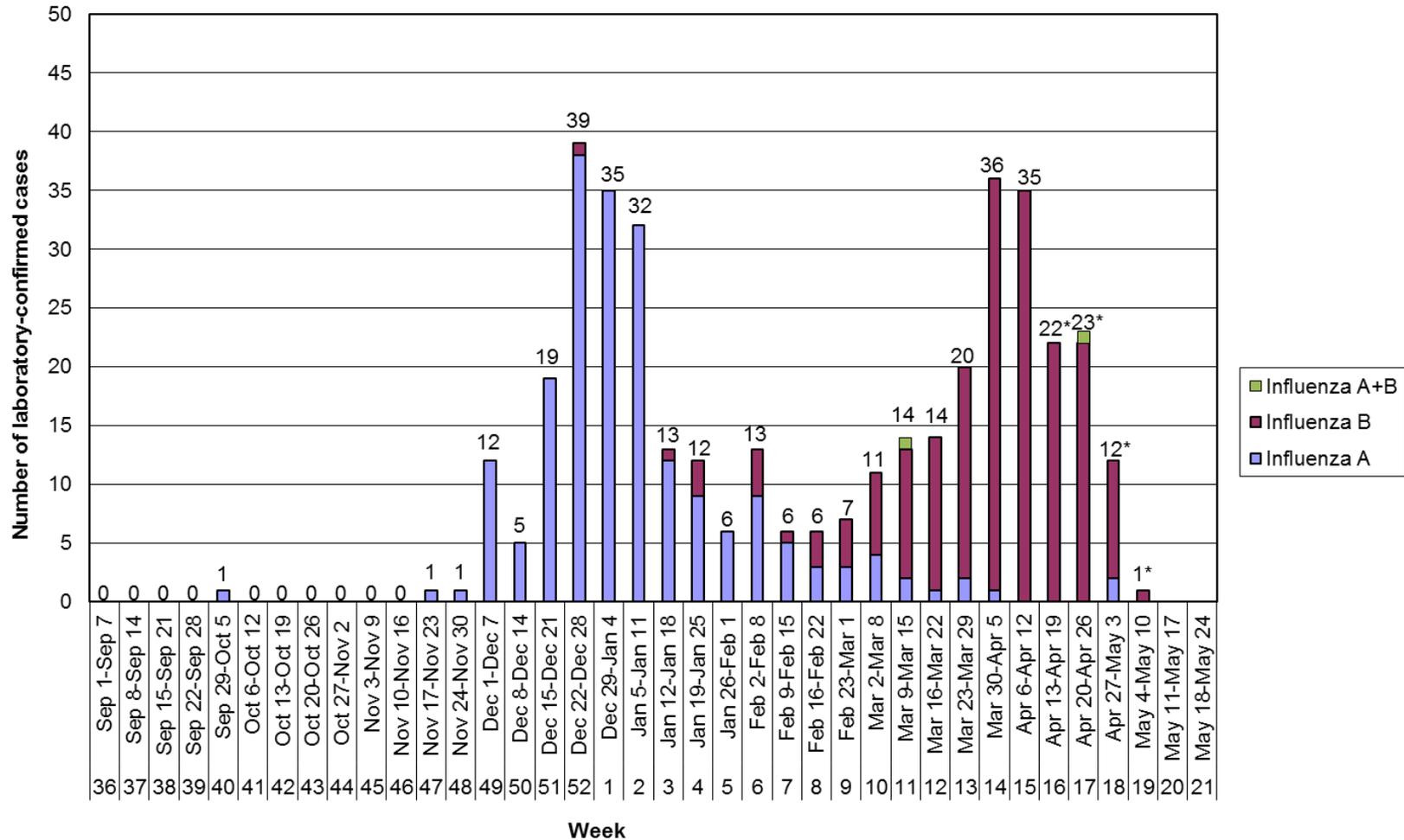
<http://www.publichealthontario.ca/en/ServicesAndTools/SurveillanceServices/Pages/Ontario-Respiratory-Virus-Bulletin.aspx>

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
May 12, 2014**

**Laboratory-confirmed influenza cases, by influenza date†
Middlesex-London 2013-2014 influenza season (N=396)**



† '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 May 12, 2014.