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**2013-2014 Influenza Surveillance Report  
Update of Current Status and Issues  
June 9, 2014**

### **Current Local Activity**

For the second consecutive week, between June 2<sup>nd</sup> and June 8<sup>th</sup>, no new laboratory-confirmed cases of influenza, or deaths or hospitalizations related to influenza, were reported to the Middlesex-London Health Unit. Since September 1<sup>st</sup>, 2013, a total of 204 laboratory-confirmed influenza A cases, 201 influenza B cases, and two influenza A and B co-infections have been reported to the Health Unit. A graph showing all 407 laboratory-confirmed cases by week is provided in Appendix B at the end of this report. Strain typing was reported this week for three previously identified influenza B cases. All three were typed as influenza B/Massachusetts/02-12-like which is a component of the 2013-2014 influenza vaccine.

To date, the majority (51.1%) 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 10.3% of confirmed influenza cases; similarly, people 65 years of age and older represent 14.8% of the general population, but account for 30.7% of cases.

### **Hospitalizations and Deaths**

No hospitalizations or deaths of people with laboratory-confirmed influenza were reported this past week. Since September 1<sup>st</sup>, 2013, there have been 207 hospitalizations among the 407 people with laboratory-confirmed influenza (50.9%). Of those hospitalized, 101 people had influenza A (48.8%), 104 people had influenza B (50.2%) and two people were infected with both influenza A and B (1.0%).

Since September 1<sup>st</sup>, 2013, there have been 17 deaths among those in London and Middlesex County who had laboratory-confirmed influenza.

### **Current Outbreak Activity**

No outbreaks due to influenza were declared between June 2<sup>nd</sup> and June 8<sup>th</sup>. In total, there have been 21 outbreaks this season; influenza A has been identified in seven outbreaks, while influenza B has been identified in 14 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 14 influenza B outbreaks.

### **Influenza Immunization**

The influenza immunization status is known for 364 of the 407 (89.4%) reported cases; of these, 249 people were 64 years of age and under, and 115 were 65 years of age and over. Among those who were 64 years of age and under, 39 (15.7%) received their influenza immunization this influenza season and 210 (84.3%) did not. Among those who were 65 years of age and older, 82 (71.3%) received their influenza immunization this influenza season and 33 (28.7%) 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."

### **Current Provincial Activity**

Overall influenza activity across Ontario was lower compared to the previous week. Between May 25<sup>th</sup> and 31<sup>st</sup>, 16 cases of influenza A and 39 cases of influenza B were reported from multiple regions of the province. The percent positivity for all influenza types was 4.6% which is lower compared to the 8.9% positivity reported the previous week. In total, 9,851 laboratory-confirmed influenza cases have been reported across the province since September 1<sup>st</sup>, 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, 2,210 influenza virus samples (136 influenza A(H3N2), 1,389 influenza A(H1N1)pdm09 and 685 influenza B) have been antigenically characterized since the beginning of the current influenza season. Of the 2,210 influenza samples, nearly all (98.8%) 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/>.

### **Final Report of the Season**

Since there have been no new laboratory-confirmed influenza cases, hospitalizations, deaths, or outbreaks reported in Middlesex-London for the past two reporting periods, and because the provincial percent positivity for influenza A and influenza B laboratory testing are both below 5.0%, this will be the last Community Influenza Surveillance Report for the 2013-2014 influenza season. Reporting will resume when influenza surveillance activities begin again in the fall of 2014.

The Health Unit thanks all those who provided data to this report, which provided a comprehensive overview of the influenza picture each week. Your contributions are greatly appreciated. As well, we wish readers a happy and safe summer.

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**  
**June 9, 2014**

The level of influenza activity in Middlesex-London is low.

Indicator	Reporting Period	Current Week	Year to Date (from September 1, 2013)	Recent Trends
<b>Laboratory information</b>				
<b>Laboratory-confirmed cases<sup>1</sup></b>	June 2-8	Influenza A – 0 cases Influenza B – 0 cases Influenza A & B – 0 cases	Influenza A – 204 cases Influenza B – 201 cases Influenza A & B – 2 cases	This is the second consecutive week that no laboratory-confirmed influenza cases were reported to the Middlesex-London Health Unit.
<b>Influenza Subtypes<sup>1</sup></b>	June 2-8	3 -Influenza B/Massachusetts/02/12-like	41 of 42 (97.6%) of subtyped influenza A samples were influenza A(H1N1) pdm09  One of 41 (2.4%) of subtyped influenza A samples was influenza A(H3)  Five influenza B samples were subtyped as B/Massachusetts/02/12-like	Almost all influenza A strains subtyped to date have been influenza A(H1N1)pdm09.  All influenza B strains subtyped to date have been B/Massachusetts/02/12-like
<b>Hospitalizations<sup>1</sup></b>	June 2-8	0	207	No hospitalizations in people with laboratory-confirmed influenza were reported between June 2 <sup>nd</sup> and June 8 <sup>th</sup> .
<b>Deaths<sup>1</sup></b>	June 2-8	0	17	To date, 17 deaths have been reported among individuals in Middlesex-London with laboratory-confirmed influenza.
<b>Influenza outbreaks in long-term care homes/retirement homes/acute care</b>	June 2-8	Influenza A – 0 outbreaks Influenza B – 0 outbreaks	Influenza A – 7 outbreaks Influenza B – 14 outbreaks	There were no influenza outbreaks declared in facilities during this past reporting period.
<b>Percentage of samples that are positive for influenza (Ontario)<sup>2</sup></b>	May 25-31	Influenza A: 1.5% positivity Influenza B: 3.1% positivity	N/A	Influenza A: Lower compared to the 2.7% positivity reported the previous week. Influenza B: Lower compared to the 6.3% positivity reported the previous week.

Indicator	Reporting Period	Current Week	Recent Trends
<b>Other Community Surveillance Indicators</b>			
<b>Hospital emergency room reports regarding the percentage of patients with fever and respiratory illness</b>	June 1-7	Data not available.	Data not available.
<b>Absence reports from elementary schools (i.e., absenteeism &gt; 10%)</b>	June 2-6	Between June 2 <sup>nd</sup> and 6 <sup>th</sup> , two elementary schools from one school board reported a five-day average absenteeism rate exceeding 10%.	The number of schools reporting absenteeism exceeding 10% was similar to the previous week, when one elementary school reported increased absenteeism.
<b>Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases</b>	June 2-7	From June 2 <sup>nd</sup> to 7 <sup>th</sup> , 2.8% of chest x-rays performed were newly diagnosed bronchopneumonia cases.	The proportion of newly diagnosed bronchopneumonia cases was lower than the 4.4% 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

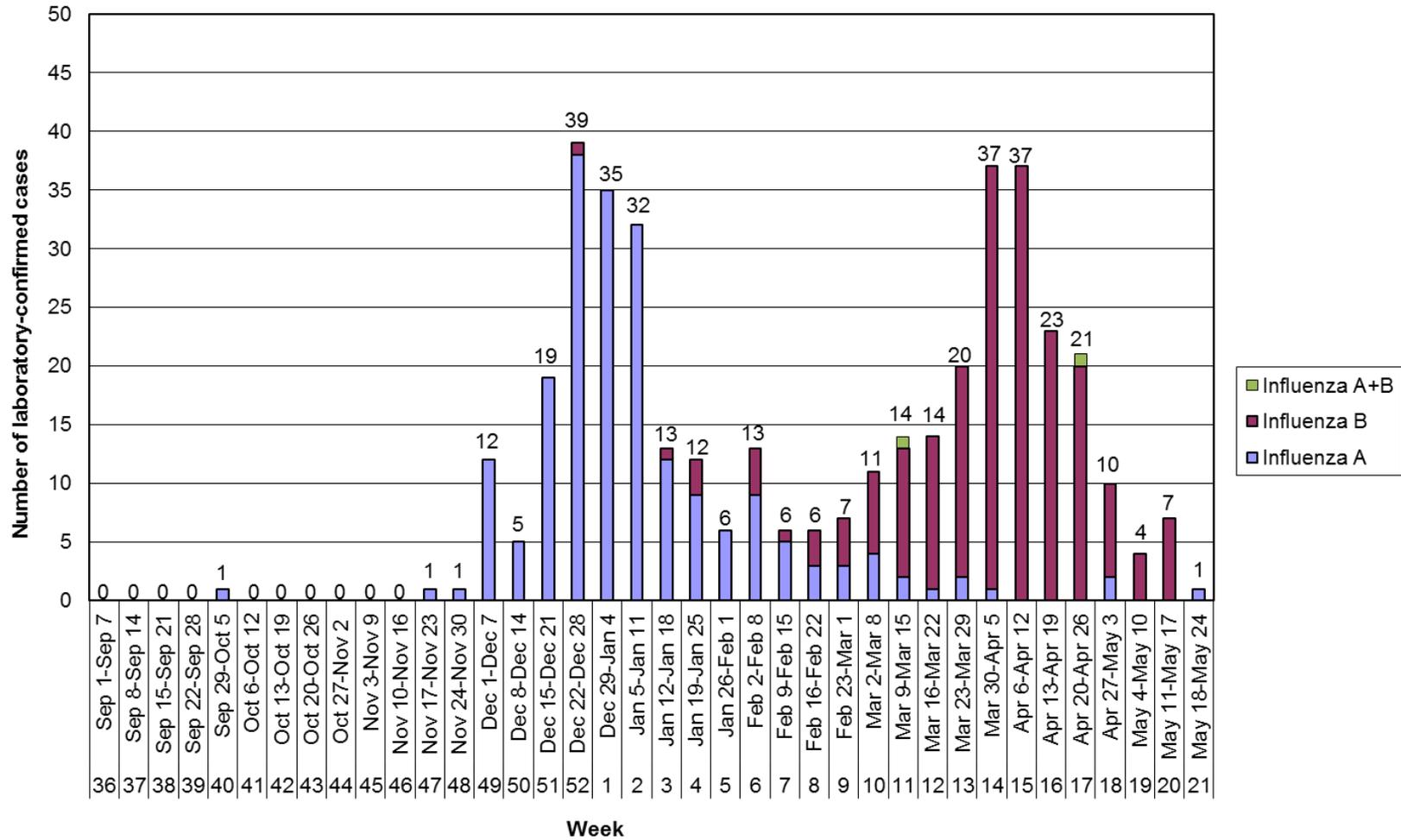
<http://www.publichealthontario.ca/en/ServicesAndTools/SurveillanceServices/Pages/Ontario-Respiratory-Virus-Bulletin.aspx>

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  
June 9, 2014**

**Laboratory-confirmed influenza cases, by influenza date†  
Middlesex-London 2013-2014 influenza season (N=407)**



† 'Influenza date' is the earliest of: symptom onset date, specimen collection date, and reported date.

Source: Middlesex-London Health Unit internal influenza case tracking database, extracted June 9, 2014.