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**2013-2014 Influenza Surveillance Report  
Update of Current Status and Issues  
May 20, 2014**

### **Current Local Activity**

Between May 12<sup>th</sup> and 18<sup>th</sup>, the level of influenza activity in Middlesex-London was lower compared to the previous week. There were seven new laboratory-confirmed cases of influenza reported last week, all of which were identified as being influenza B. This is lower than the 13 cases reported the previous week (May 5<sup>th</sup> to May 11<sup>th</sup>). Since September 1<sup>st</sup>, 2013, a total of 203 laboratory-confirmed influenza A cases, 198 influenza B cases, and two influenza A and B co-infections have been reported to the Health Unit. A graph showing all 403 laboratory-confirmed cases by week is provided in Appendix B at the end of this report.

To date, the majority (51.4%) 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 30.5% of cases.

### **Hospitalizations and Deaths**

Of the seven new laboratory-confirmed influenza cases identified between May 12<sup>th</sup> and 18<sup>th</sup>, one was hospitalized. Since September 1<sup>st</sup>, 2013, there have been 202 hospitalizations among the 403 people with laboratory-confirmed influenza (50.1%). Of those hospitalized, 101 people had influenza A (50.0%), 99 people had influenza B (49.0%) and two people were infected with both influenza A and B (1.0%).

No deaths were reported in Middlesex-London residents who were identified with laboratory-confirmed influenza this past week. Since September 1<sup>st</sup>, 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 12<sup>th</sup> and 18<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 346 of the 403 (85.9%) reported cases; of these, 239 people were 64 years of age and under, and 107 were 65 years of age and over. Among the 239 cases who were 64 years of age and under, 35 (14.6%) received their influenza immunization this influenza season and 204 (85.4%) did not. Among the 107 individuals who were 65 years of age and older, 76 (71.0%) received their influenza immunization this influenza season and 31 (29.0%) 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 slightly lower compared to the previous week. Between May 4<sup>th</sup> and May 10<sup>th</sup>, nine cases of influenza A and 278 cases of influenza B were reported from multiple regions of the province. The percent positivity for all influenza types was 15.5% which is lower compared to the 17.9% positivity reported the previous week. In total, 9,523 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, 2,039 influenza virus samples (112 influenza A(H3N2), 1,366 influenza A(H1N1)pdm09 and 561 influenza B) have been antigenically characterized since the beginning of the current influenza season. Of the 2,039 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's website at <https://www.healthunit.com/influenza-surveillance>.

**Appendix A**  
**Summary of Community Influenza Surveillance Indicators for Middlesex-London**  
**May 20, 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   |
|--|------------------|---|--|---|
| <b>Laboratory information</b>  |                  |   |  |   |
| <b>Laboratory-confirmed cases<sup>1</sup></b>                                      | May 12-18        | Influenza A – 0 cases<br>Influenza B – 7 cases<br>Influenza A & B – 0 cases | Influenza A – 203 cases<br>Influenza B – 198 cases<br>Influenza A & B – 2 cases  | The seven laboratory-confirmed influenza cases reported between May 12 <sup>th</sup> and 18 <sup>th</sup> are fewer than the 13 cases reported in the previous <i>Community Influenza Surveillance Report</i> issued May 12 <sup>th</sup> , 2014. |
| <b>Influenza Subtypes<sup>1</sup></b>  | May 12-18        | No new subtyping results received.  | 40 of 41 (97.6%) of subtyped influenza A samples were influenza A(H1N1) pdm09<br><br>One of 41 (2.4%) of subtyped influenza A samples was influenza A(H3)<br><br>Two 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.<br><br>Influenza B strains subtyped to date have been B/Massachusetts/02/12-like  |
| <b>Hospitalizations<sup>1</sup></b>  | May 12-18        | 1   | 202  | Between May 12 <sup>th</sup> and May 18 <sup>th</sup> , one person with laboratory-confirmed influenza B was hospitalized.  |
| <b>Deaths<sup>1</sup></b>  | May 12-18        | 0   | 16   | No deaths of individuals with laboratory-confirmed influenza were reported to the Health Unit last week.<br><br>To date, 16 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>     | May 12-18        | Influenza A – 0 outbreaks<br>Influenza B – 1 outbreak                       | Influenza A – 7 outbreaks<br>Influenza B – 14 outbreaks  | One outbreak due to influenza B was declared between May 12 <sup>th</sup> and 18 <sup>th</sup> . This is similar to the previous week when one influenza-related outbreak was declared.   |
| <b>Percentage of samples that are positive for influenza (Ontario)<sup>2</sup></b> | May 4-May 10     | Influenza A: 0.8% positivity<br>Influenza B: 14.8% positivity               | N/A  | Influenza A: Lower compared to the 1.4% reported the previous week.<br>Influenza B: Lower compared to the 16.5% 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> | May 11-17        | Data not available.   | Data not available.  |
| <b>Absence reports from elementary schools (i.e., absenteeism &gt; 10%)</b>                                    | May 12-16        | Between May 12 <sup>th</sup> and 16 <sup>th</sup> , 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.            |
| <b>Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases</b>                       | May 12-17        | From May 12 <sup>th</sup> to 17 <sup>th</sup> , 2.0% of chest x-rays performed were newly diagnosed bronchopneumonia cases.                                 | The proportion of newly diagnosed bronchopneumonia cases was slightly lower compared to 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

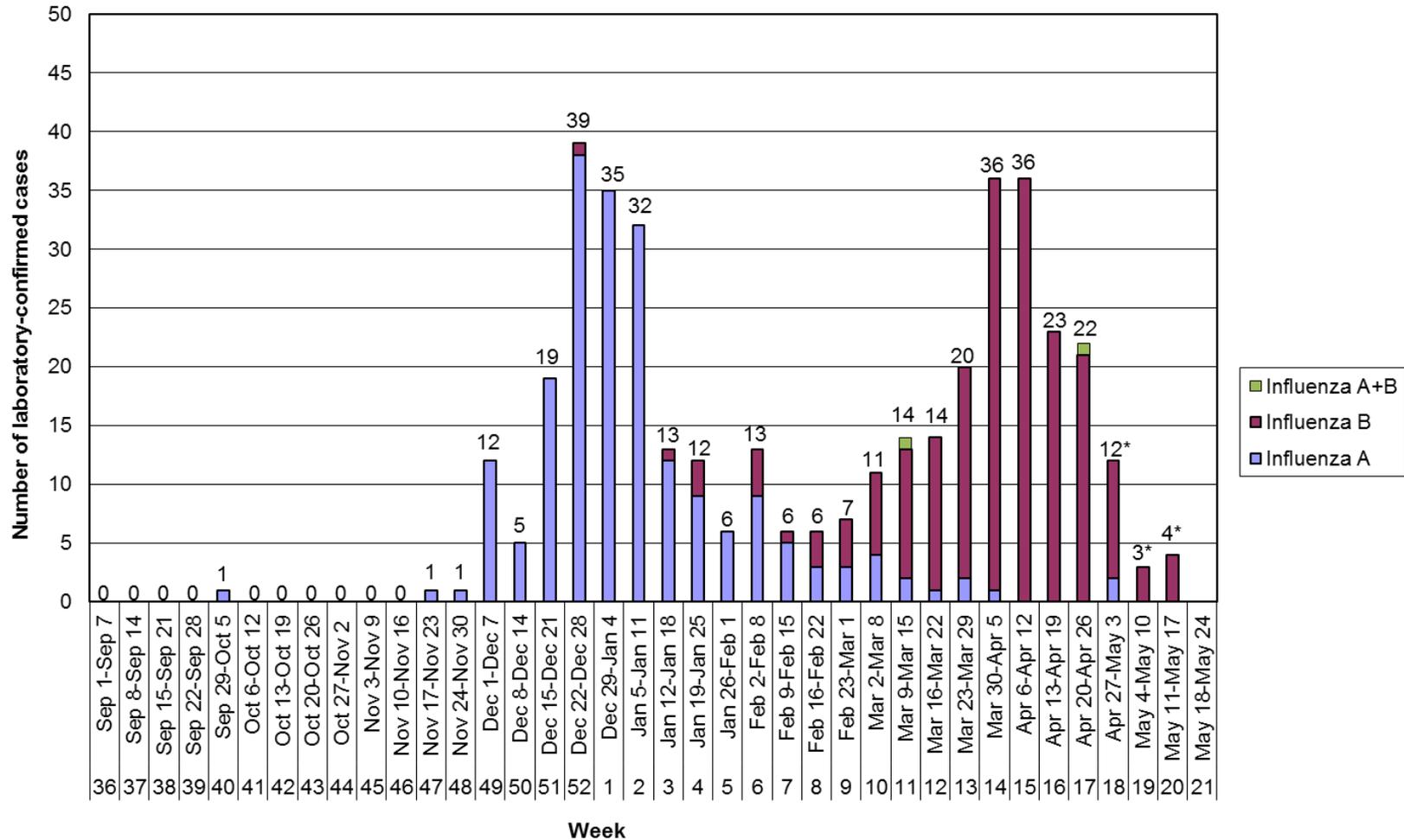
<http://www.publichealthontario.ca/en/ServicesAndTools/SurveillanceServices/Pages/Ontario-Respiratory-Virus-Bulletin.aspx>

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 20, 2014

**Laboratory-confirmed influenza cases, by influenza date†  
Middlesex-London 2013-2014 influenza season (N=403)**



† '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 20, 2014.