
**2013-2014 Influenza Surveillance Report
Update of Current Status and Issues
March 17, 2014****Current Local Activity**

Between March 10th and 16th, the level of influenza activity in Middlesex-London was similar to the previous week. Between March 10 and 16, there were 13 new cases of laboratory-confirmed influenza (four influenza A and nine influenza B) reported in the region, which was the same number of influenza cases reported the previous week (March 3rd to 9th). Since September 1st, 2013, a total of 196 laboratory-confirmed influenza A cases and 25 influenza B cases have been reported to the Health Unit. A graph showing all 221 laboratory-confirmed cases by week is provided in Appendix B at the end of this report. Currently, 41 of 196 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. One sample that was recently typed was found to be influenza A(H3).

To date, the majority (60.2%) 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 continue to be 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 15.8% of confirmed influenza cases.

Hospitalizations and Deaths

Seven of the 13 new laboratory-confirmed influenza cases identified between March 10th and 16th were hospitalized. Two were identified as having influenza A and five had influenza B. Since September 1st, 2013, there have been 108 hospitalizations among the 221 people with laboratory-confirmed influenza (48.9%). Of these 108 hospitalizations, 97 people had influenza A (89.8%) and 11 people had influenza B (10.2%).

In the past week, no deaths were reported among local residents with laboratory-confirmed influenza. Since September 1st, there have been seven deaths among those in London and Middlesex County who had laboratory-confirmed influenza.

Current Outbreak Activity

Between March 10th and 16th, one case of influenza A was identified in a facility outbreak where respiratory syncytial virus (RSV) was also identified. To date, seven outbreaks where influenza A has been identified have been declared in Middlesex-London. Influenza A(H1N1)pdm09 was identified in two of the seven outbreaks.

Influenza Immunization

The influenza immunization status is known for 198 of the 221 reported cases. Among those cases with known immunization status, 158 (80.3%) were not immunized with this year's seasonal influenza vaccine.

Influenza vaccinations for unvaccinated individuals six months of age and over are still available. Influenza vaccinations are 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 from 3:30 p.m. to 7:30 p.m. on the first Tuesday of each month. The next Strathroy clinic will take place on Tuesday, April 1st.

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 March 2nd and 8th, 2014, 100 cases of influenza A and 158 cases of influenza B were reported from multiple regions of the province. The percent positivity for all influenza types was 11.9%, which is higher than 10.5% positivity reported the previous week. In total, 6,040 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 through the following link:

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

Current National Influenza Strain Typing

In Canada, 1,401 influenza virus samples [64 influenza A(H3N2), 1,131 influenza A(H1N1)pdm09 and 206 influenza B] have been antigenically characterized since the beginning of the current season. Of the 1,401 influenza samples, nearly all (99.0%) 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
March 17, 2014

The level of influenza activity in Middlesex-London is similar to last week.

Indicator	Reporting Period	Current Week	Year to Date (from September 1, 2013)	Recent Trends
Laboratory information				
Laboratory-confirmed cases¹	Mar. 10-16	Influenza A – 4 cases Influenza B – 9 cases	Influenza A -196 cases Influenza B - 25 cases	The 13 laboratory-confirmed influenza cases reported between March 10 th and 16 th is the same as the number of new cases reported in the <i>Community Influenza Surveillance Report</i> issued March 10 th , 2014. The four laboratory-confirmed influenza A cases reported between March 10 th and 16 th are lower than the seven influenza A case reported in the previous week. The nine influenza B cases reported between March 10 th and 16 th are higher compared to the previous week, when six cases of influenza B were reported.
Influenza Subtypes¹	Mar. 10-16	One Influenza A (H1N1)pdm09 One Influenza A(H3)	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)	Almost all influenza A strains subtyped to date have been influenza A(H1N1)pdm09.
Hospitalizations¹	Mar. 10-16	7	108	Between March 10 th and 16 th , seven laboratory-confirmed influenza cases were hospitalized, five of which were identified as influenza B and two of which are influenza A.
Deaths¹	Mar. 10-16	0	7	Between March 10 th and 16 th , no deaths of individuals with laboratory-confirmed influenza were reported.
Influenza outbreaks in long-term care homes/retirement homes/acute care	Mar. 10-16	1	7	Between March 10 th and 16 th , one case of influenza A was identified in a facility outbreak where RSV was also identified.
Percentage of samples that are positive for influenza (Ontario)²	Mar. 2-8	Influenza A: 4.7% positivity Influenza B: 7.3% positivity	N/A	Influenza A: Lower than the 5.5% reported the previous week. Influenza B: Higher than the 4.9% 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	Mar. 9-16	<p>Between March 9th and 16th, an average of 10.5% 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 26.9% 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 similar to the 10.9% 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 28.1% reported the previous week.</p>
Absence reports from elementary schools (i.e., absenteeism > 10%)	Mar. 10-14	Not available due to March Break.	Not available.
Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases	Mar. 10-15	From March 10 th to 15 th , 5.5% of chest x-rays performed were newly diagnosed bronchopneumonia cases.	The proportion of newly diagnosed bronchopneumonia cases was higher compared to the 3.6% 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

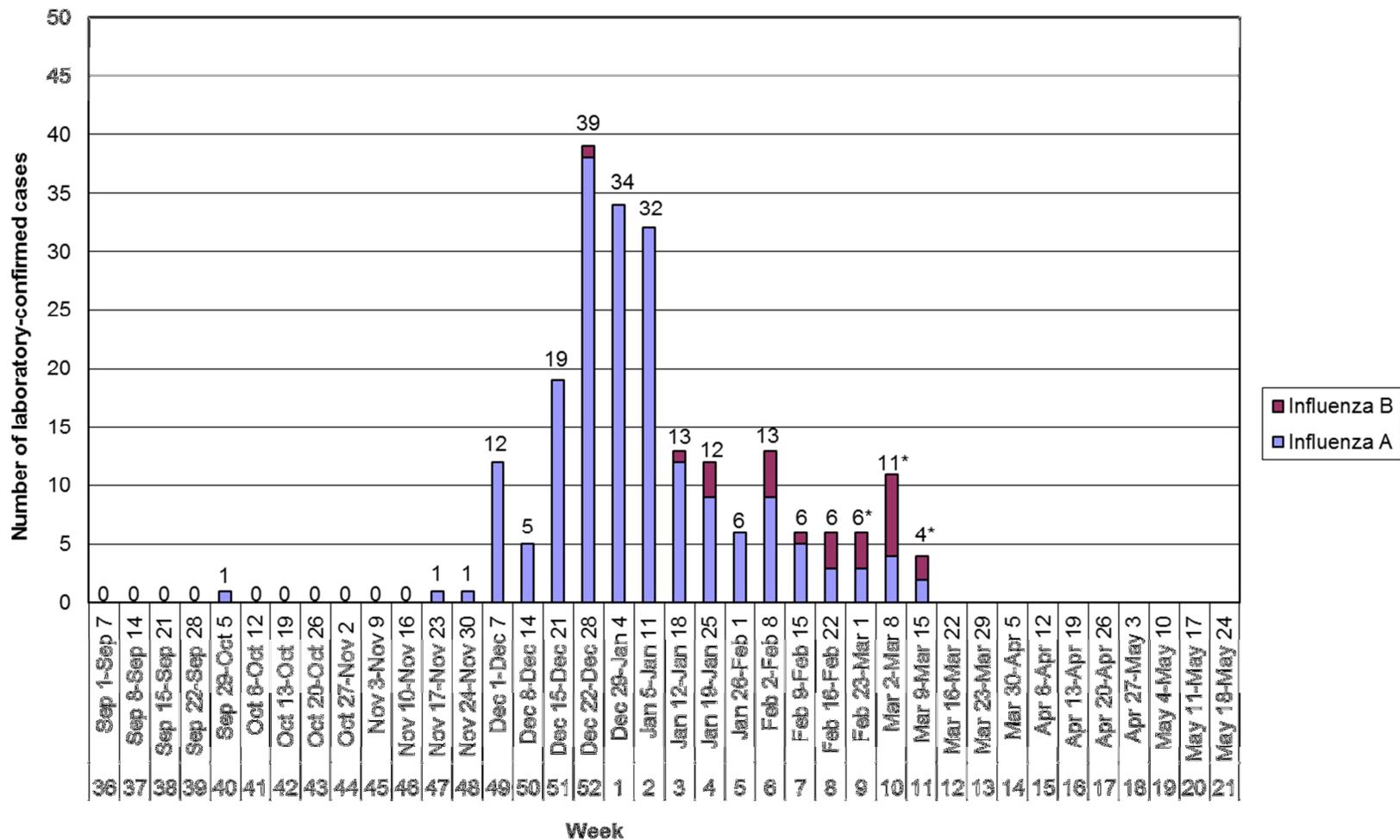
London X-Ray Associates

St. Joseph's Health Care London

Thames Valley District School Board

Appendix B
March 17, 2014

Laboratory-confirmed influenza cases, by influenza date†
Middlesex-London 2013-2014 influenza season (N=221)



† '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 March 17, 2014.