
**2013-2014 Influenza Surveillance Report
Update of Current Status and Issues
April 7, 2014****Current Local Activity**

Between March 31st and April 7th, the level of influenza activity in Middlesex-London was similar to the previous week. There were 23 new laboratory-confirmed cases of influenza reported last week, which is the same number reported the previous week (March 24th to 30th). Of the new cases reported last week, one was identified as having influenza A and 22 had influenza B. Since September 1st, 2013, a total of 200 laboratory-confirmed influenza A cases, 74 influenza B cases, and one influenza A and B co-infection have been reported to the Health Unit. A graph showing all 275 laboratory-confirmed cases by week is provided in Appendix B at the end of this report. Currently, 41 of 200 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 of influenza B was typed, and found to be B/Massachusetts/02/12-like, which is also a component of the 2013/2014 influenza vaccine.

To date, the majority (56.0%) 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 13.5% of confirmed influenza cases. Similarly, people 65 year of age and older represent 14.8% of the general population, but account for 22.5% of cases.

Hospitalizations and Deaths

Of the 23 new laboratory-confirmed influenza cases identified between March 31st and April 7th, nine were hospitalized; all of whom were identified as having influenza B. Since September 1st, 2013, there have been 138 hospitalizations among the 275 people with laboratory-confirmed influenza (50.2%). Of those hospitalized, 99 people had influenza A (71.7%), 38 people had influenza B (27.5%) and one person was infected with both influenza A and B (0.7%).

No deaths were reported this past week among Middlesex-London residents with laboratory-confirmed influenza. Since September 1st, there have been nine deaths among those in London and Middlesex County who had laboratory-confirmed influenza.

Current Outbreak Activity

Between March 31st and April 6th, there was one new facility outbreak declared where influenza B was identified, for a total of 11 outbreaks this season. Influenza A has been identified in seven outbreaks, while influenza B was identified in four outbreaks. Influenza A(H1N1)pdm09 was identified in two of the seven influenza A outbreaks.

Influenza Immunization

The influenza immunization status is known for 242 of the 275 reported cases. Among those cases with known immunization status, 184 (76.0%) 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 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 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 similar compared to the previous week. Between March 23rd and 29th, 46 cases of influenza A and 291 cases of influenza B were reported from multiple regions of the province. The percent positivity for all influenza types was 19.2%, which is higher than the 15.6% positivity reported the previous week. In total, 7,020 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, 1,689 influenza virus samples (82 influenza A(H3N2), 1,273 influenza A(H1N1)pdm09 and 334 influenza B) have been antigenically characterized since the beginning of the current influenza season. Of the 1,689 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 7, 2014

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

Indicator	Reporting Period	Current Week	Year to Date (from September 1, 2013)	Recent Trends
Laboratory information				
Laboratory-confirmed cases¹	Mar. 31-Apr. 6	Influenza A – 1 case Influenza B – 22 cases	Influenza A – 200 cases Influenza B – 74 cases Influenza A & B – 1 case	<p>The 23 laboratory-confirmed influenza cases reported between March 31st and April 6th is the same as the 23 new cases reported in the previous <i>Community Influenza Surveillance Report</i> issued March 31st, 2014.</p> <p>One laboratory-confirmed influenza A case was reported between March 31st and April 6th, which is similar compared to the previous week when three influenza A cases were reported.</p> <p>The 22 influenza B cases reported between March 31st and April 6th is similar compared to the previous week, when 20 cases of influenza B were reported.</p>
Influenza Subtypes¹	Mar. 31-Apr. 6		<p>40 of 41 cases (97.6%) of subtyped influenza A samples were influenza A(H1N1) pdm09</p> <p>One of 41 cases (2.4%) of subtyped influenza A samples were influenza A(H3)</p> <p>One influenza B subtyped was B/Massachusetts/02/12-like</p>	Almost all influenza A strains subtyped to date have been influenza A(H1N1)pdm09.
Hospitalizations¹	Mar. 31-Apr. 6	9	138	Between March 31 st and April 6 th , nine people with laboratory-confirmed influenza were hospitalized; all of whom were identified as having influenza B.
Deaths¹	Mar. 31-Apr. 6	0	9	To date, nine deaths have been reported among individuals with laboratory-confirmed influenza.
Influenza outbreaks in long-term care homes/retirement homes/acute care	Mar. 31-Apr. 6	1	11	The one facility outbreak declared between March 31 st and April 6 th where influenza B was identified is lower than the previous week, when three influenza-related outbreaks were identified.
Percentage of samples that are positive for influenza (Ontario)²	Mar. 23-29	Influenza A: 2.6% positivity Influenza B: 16.6% positivity	N/A	Influenza A: Lower than the 3.4% reported the previous week. Influenza B: Higher than the 12.2% 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. 30-Apr. 5	<p>Between March 30th and April 5th, 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 23.5% 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 higher compared to the 9.4% 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 comparable to the 23.2% reported the previous week.</p>
Absence reports from elementary schools (i.e., absenteeism > 10%)	Mar. 31-Apr. 4	Between March 31 st and April 4 th , five elementary schools from one school board reported a five-day average absenteeism rate exceeding 10%.	The number of schools reporting absenteeism exceeding 10% was higher compared to the week of March 24 th to 28 th , when two schools reported a five-day average absenteeism greater than 10%.
Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases	Mar. 31-Apr. 5	From March 31 st to April 5 th , 5.5% of chest x-rays performed were newly diagnosed bronchopneumonia cases	The proportion of newly diagnosed bronchopneumonia cases was lower compared to the 8.3% 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

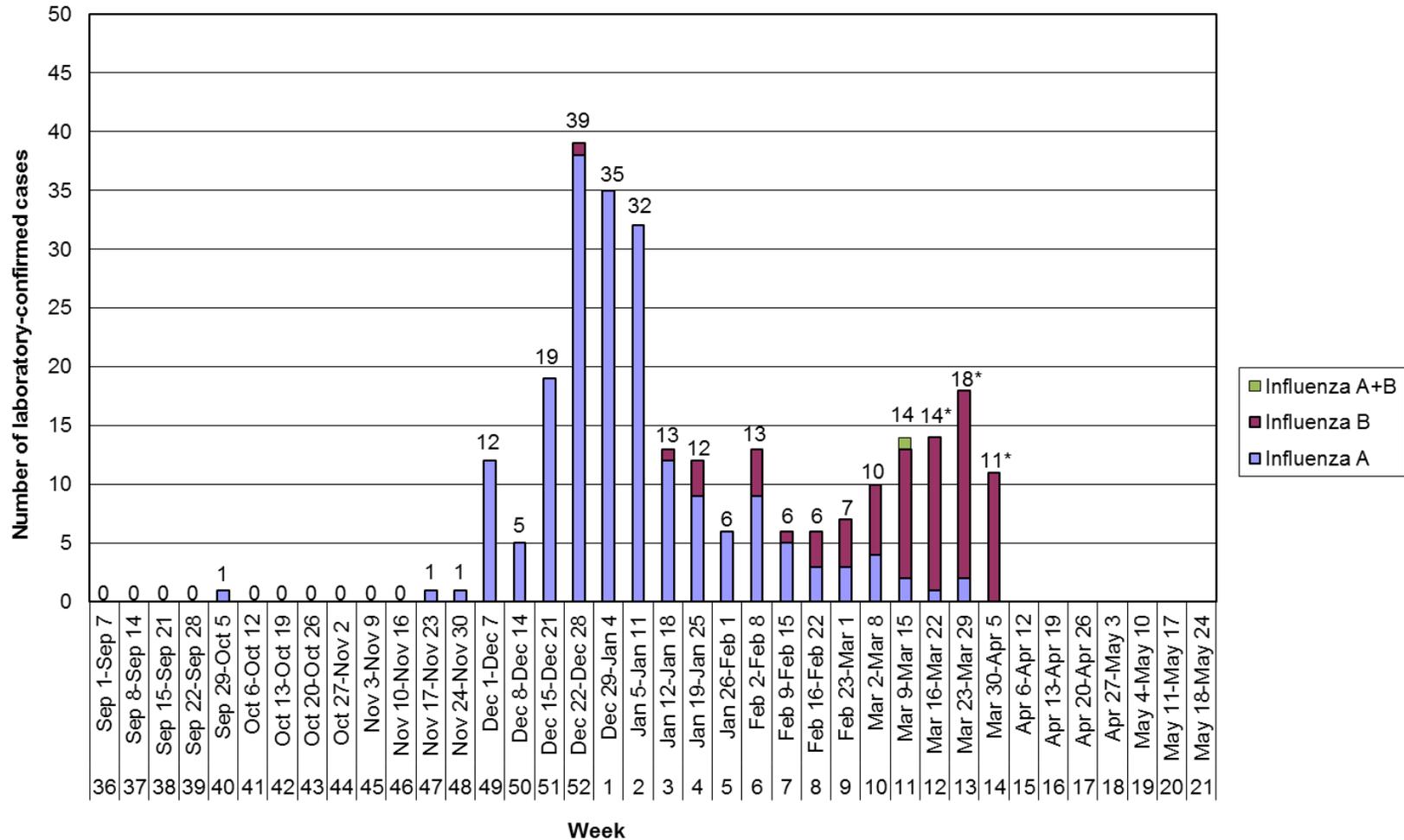
London X-Ray Associates

St. Joseph's Health Care London

Thames Valley District School Board

**Appendix B
April 7, 2014**

**Laboratory-confirmed influenza cases, by influenza date†
Middlesex-London 2013-2014 influenza season (N=275)**



† '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 7, 2014.