

## 2012-2013 Influenza Surveillance Update of Current Status and Issues

March 28, 2013

This report provides an update to the previous report issued on March 22, 2013. Between March 19 and the end of day on March 25, one new laboratory-confirmed influenza A case and four new laboratory-confirmed influenza B cases were reported to the Middlesex-London Health Unit. The total number of reported cases is similar to the previous week (March 12-18, 2013), when four laboratory-confirmed cases of influenza were reported to the Health Unit. Three hospitalizations and no deaths were reported among the newly reported cases. One influenza B outbreak was declared in a long-term care facility between March 19 and March 25; this is the first influenza B outbreak declared this season.

As of Monday March 25, 2013, a total of 445 laboratory-confirmed influenza A cases and 11 influenza B cases have been reported in Middlesex-London for the current surveillance season. This influenza season, there have been 282 hospitalizations and 25 deaths reported among these laboratory-confirmed cases. Seventy-four of the reported influenza A cases have been subtyped as human influenza A(H3) and four have been subtyped as influenza A(H1N1)pdm09. To date, a total of 37 influenza A outbreaks, and one influenza B outbreak have been reported, 33 in long-term care/retirement homes/assisted living facilities and five in acute care hospitals.

Appendix B shows the number of laboratory-confirmed influenza cases by week of illness. Influenza illness peaked in December and early January, with the highest number of reported influenza cases occurring the week of December 23 to 29, 2012. The number of new influenza cases has continued to decline since that time.

Influenza immunization status is known for 368 of the 456 reported cases. Of these 368, 172 people were 64 years of age and under, and 196 were 65 years of age and over. Of the 172 cases who were 64 years of age and under, 30 (17%) received their influenza immunization this influenza season and 142 (83%) did not. Of the 196 cases who were 65 years of age and over, 137 (70%) received their influenza immunization this season, 57 (29%) did not, and 2 (1%) were not sure. The [National Advisory Committee on Immunization](#) (NACI) states that "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..."

Public Health Ontario reports that influenza activity is similar to the previous week, but continues to decline in Ontario. From March 10 to March 16, 2013, influenza activity was driven by both influenza A and influenza B. Influenza A decreased slightly, with 5.37% positivity, compared to 6.75% the previous week, and influenza B increased slightly, with 3.95% positivity compared to 2.72% positivity the previous week. However, both influenza strains continue to be less common than Respiratory Syncytial Virus (RSV), which had the highest proportion of respiratory samples testing positive at 14.88%. This is a decrease in RSV percent positivity from 18.71% the previous week.

In Canada, since the beginning of September, 798 influenza viruses have been antigenically characterized. A total of 470 influenza A(H3N2) viruses were similar to A/Victoria/361/2011 and 128 A(H1N1)pdm09 viruses were similar to A/California/07/09. One hundred and sixty (160) influenza B viruses were similar to B/Wisconsin/01/2010 and 40 were similar to B/Brisbane/60/2008. The components of the 2012/2013 influenza vaccine are A/Victoria/361/2011 (H3N2)-like virus, A/California/7/2009-like virus (an H1N1pdm09)-like virus, and B/Wisconsin/1/2010-like virus.

This week, Public Health Ontario published staff seasonal influenza immunization coverage rates in hospitals and long term care facilities (LTCFs) for the 2012-2013 influenza season. Mandatory reporting to local Medical Officers of health within each jurisdiction is required as per the *Influenza Prevention and Surveillance Protocol for Long Term Care Facilities* (1999) and the *Influenza Surveillance Protocol for Ontario Hospitals* (2012). As of December 15, 2012, the median percentage of staff vaccinated in LTCFs was 74.2%. This means that across Ontario, half of LTCFs had vaccination rates higher than 74.2%, and half had vaccination rates lower than 74.2%. Similarly, in hospitals, the median percentage of staff vaccinated was just 50.6%. In Middlesex London Health Unit, LTCFs achieved a median vaccination rate of 75.5%, while hospitals achieved a median staff vaccination rate of 56.6%, both of which are slightly better than the province as a whole (see [Report No. 042-13](#) for additional details). However, it should be noted that some facilities provided updated data current to mid-January, which may elevate the MLHU rates slightly.

Precautions to prevent the spread of influenza are provided on page 5 of this report.

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**Appendix A**  
**Summary of Community Influenza Surveillance Indicators**  
**March 28, 2013**

Since the beginning of the year, influenza activity in Middlesex-London **has declined**. Influenza-like activity this week was **similar** to the previous week.

<b>Indicator</b>	<b>Recent trends / data</b>	<b>Comments for most recent week</b>
<b>Hospital emergency room reports regarding the percentage of patients with fever and respiratory illness</b>	Similar to previous week overall; decreased in paediatric emergency department	From March 17-23, an average of 7.3% patients at London Health Sciences Centre (LHSC) emergency departments and the St. Joseph's Health Care (SJHC) urgent care centre presented with a fever and respiratory symptoms. This is similar to 7.8% from the previous week.  The proportion was highest at the paediatric emergency department, where 17.7% of patients presented with a fever and respiratory symptoms. This is less than 23.3% from the previous week.
<b>Absence reports from elementary schools (i.e., absenteeism &gt; 10%)</b>	Decreased	From March 18–22, four elementary schools in one of the two main English public school boards reported a 5-day average absenteeism exceeding 10%. This number is lower than the week of March 4–8, when 13 elementary schools reported a 5-day average absenteeism exceeding 10%. Data from March 11–15 are not available due to March Break.
<b>Laboratory-confirmed cases</b>	Similar to previous week	From March 19-25, five laboratory-confirmed cases of influenza (one influenza A and four influenza B) were reported. This is similar to the previous week, when two laboratory-confirmed influenza A cases and two influenza B cases were reported.  Since the beginning of the surveillance season on September 2, 2012, a total of 456 laboratory-confirmed influenza cases (445 Influenza A and 11 influenza B) have been reported to the Health Unit.
<b>Hospitalizations</b>	Similar to previous week	From March 19-25, three people with laboratory-confirmed influenza were reported to be hospitalized. This is similar compared to the previous week, when three hospitalizations were reported.  To date, 282 people with laboratory-confirmed influenza have been hospitalized.
<b>Deaths</b>	Similar to previous week	From March 19-25, no deaths were reported among newly reported laboratory-confirmed influenza cases. This is comparable to the previous week, when one death was reported.  To date, 25 deaths have been reported among cases with laboratory-confirmed influenza. However, it should be noted that the reporting of deaths may be incomplete.

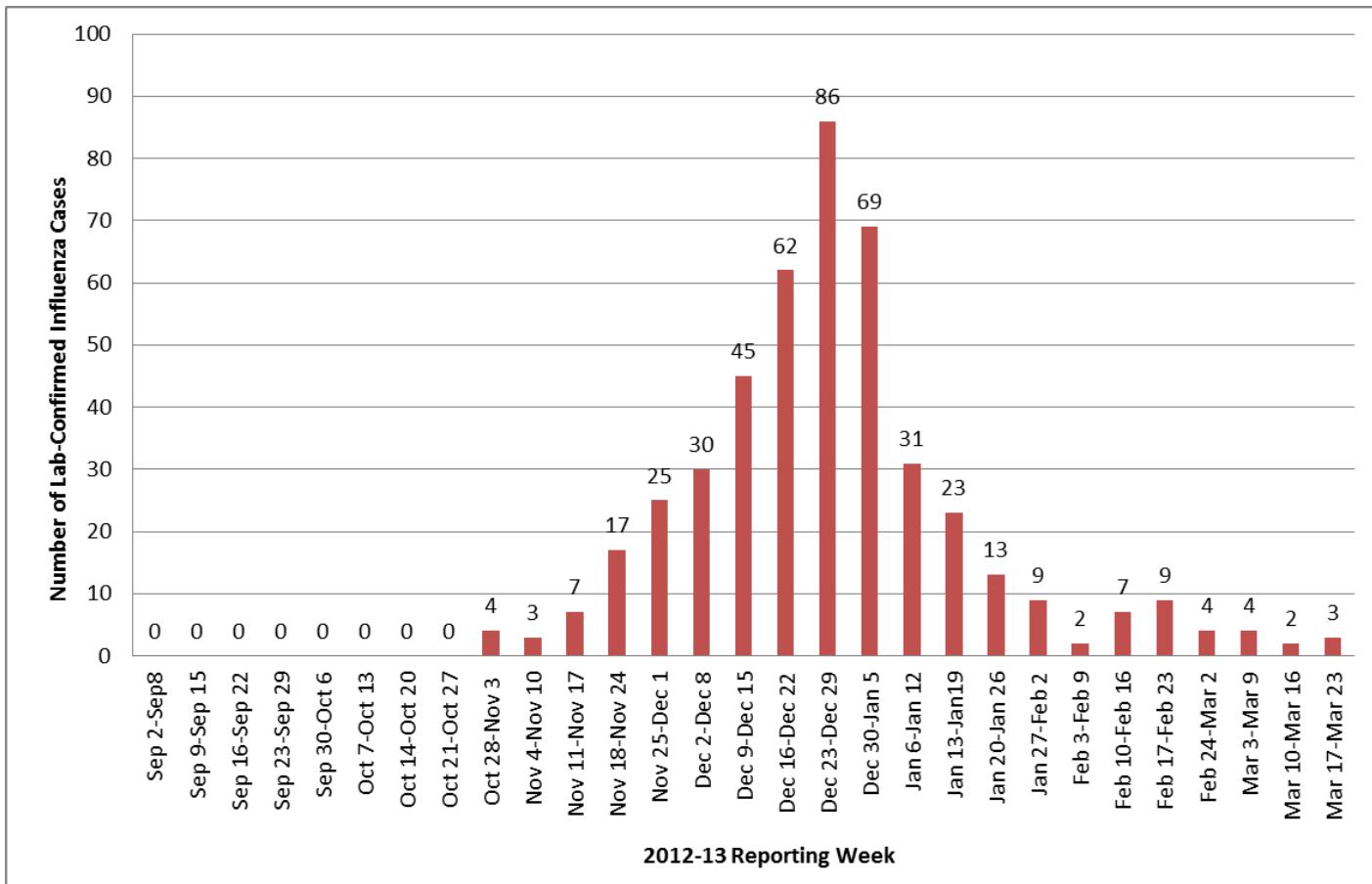
<b>Indicator</b>	<b>Recent trends / data</b>	<b>Comments for most recent week</b>
<b>Influenza outbreaks in long-term care homes/retirement homes/acute care</b>	Similar to previous week	<p>From March 19-25, one influenza B outbreak was declared in a long term care facility, the only influenza B outbreak this season. This is similar to the previous week, when no outbreaks were declared.</p> <p>To date, 37 influenza A outbreaks and one influenza B outbreak have been reported, 33 in long-term care/retirement homes/assisted living facilities and five in acute care hospitals.</p>
<b>Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases</b>	Slight decrease compared to previous week	<p>From March 18-23, 2.9% of chest x-rays performed by the sentinel x-ray provider were newly diagnosed bronchopneumonia cases. This is slightly less than 4.4% the previous week.</p>
<b>Percentage of Ontario laboratory samples that are positive for influenza</b>	Slight decrease for influenza A; Slight increase for influenza B compared to previous week.	<p>According to the Ontario Respiratory Virus Bulletin issued for the week of March 11-16, in Ontario, 68 of 1,267 tests were positive for influenza A (5.37% positivity) and 50 of 1,227 tests were positive for influenza B (3.95% positivity).</p> <p>The percent positivity for influenza A is slightly lower compared to the previous week, when the percent positivity for influenza A was 6.75%. The percent positivity for influenza B is slightly higher than the 2.72% positivity reported the previous week.</p> <p>This week, Respiratory Syncytial Virus (RSV) had the highest percent positivity among all circulating respiratory viruses (14.88% positivity), followed by human metapneumovirus (7.03% positivity) and then coronavirus (6.01%).</p>

The Middlesex-London Health Unit gratefully acknowledges the contributions of the following community partners who provide data for this report:

London District Catholic School Board  
 London Health Sciences Centre  
 London X-Ray Associates  
 St. Joseph's Health Care London  
 Thames Valley District School Board

## Appendix B

### Laboratory-confirmed influenza cases, by influenza episode date, Middlesex-London, September 2, 2012 – March 22, 2013



**Source:** Infectious Disease Control (IDC) Database (MLHU internal tracking database), extracted March 26, 2013.

**Notes:** Influenza episode date source varies. In 393 cases, episode date is the date that the case's symptoms began. In 61 cases, episode date is date the specimen was collected for laboratory testing. In one case, episode date is the date that the case was report to the Health Unit. Numbers are subject to change week by week given the retrospective nature of reporting.

## **Measures to Prevent the Spread of Influenza and other Seasonal Viruses, Including Norovirus**

- Stay home if you are sick. Individuals who work as food handlers, health care providers or child care workers who have diarrhea and/or vomiting should stay at home until at least 48 hours have passed from their last episode of diarrhea or vomiting.
- Clean hands frequently using soap and water or alcohol-based hand sanitizers. Alcohol-based hand sanitizers should contain 70-90% alcohol. Hands should be cleaned after using the washroom, after changing diapers, after shaking hands and before preparing and eating food.
- If you have diarrhea or vomiting, do not prepare food for others for at least 48 hours after the last episode.
- Clean frequently-touched surfaces often. When cleaning up vomit or diarrhea, thoroughly clean the area with detergent and water, removing all debris, then disinfect with a 1:50 bleach solution if the object being cleaned will tolerate it. Discard or wash all clean-up materials then wash hands thoroughly.