

2012-2013 Influenza Surveillance Update of Current Status and Issues April 4, 2013

This report provides an update to the previous report issued on March 28, 2013. Between March 26 and the end of day on April 1, two new laboratory-confirmed influenza B cases and no new laboratory-confirmed influenza A cases were reported to the Middlesex-London Health Unit. The total number of reported cases is less than the previous week (March 19-25, 2013), when five laboratory-confirmed cases of influenza were reported to the Health Unit. Two hospitalizations and no deaths were reported among the newly reported cases. There were no influenza outbreaks declared in long-term care facilities between March 26 and April 1.

As of Monday April 1, 2013, a total of 445 laboratory-confirmed influenza A cases and 13 influenza B cases have been reported in Middlesex-London for the current surveillance season. This influenza season, there have been 284 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 370 of the 458 reported cases. Of these 370, 173 people were 64 years of age and under, and 197 were 65 years of age and over. Of the 173 cases who were 64 years of age and under, 30 (17%) received their influenza immunization this influenza season and 143 (83%) did not. Of the 197 cases who were 65 years of age and over, 138 (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 was lower than the previous week, and continues to decline. From March 17 to March 23, 2013, influenza activity was driven by both influenza A and influenza B. This week, influenza B surpassed influenza A in percent positivity. Influenza A decreased slightly to 3.54% positivity, compared to 5.37% the previous week, and influenza B increased slightly to 4.92% positivity compared to 3.95% 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 14.58%. This is a slight decrease in RSV percent positivity from 14.88% the previous week.

In Canada, since the beginning of September 2012 until March 16, 2013, 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.

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

Appendix A
Summary of Community Influenza Surveillance Indicators
April 4, 2013

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

Indicator	Recent trends / data	Comments for most recent week
Hospital emergency room reports regarding the percentage of patients with fever and respiratory illness	Similar to previous week overall; increase at paediatric emergency department	<p>From March 24-30, an average of 7.5% 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 7.3% from the previous week.</p> <p>The proportion was highest at the paediatric emergency department, where 19.2% of patients presented with a fever and respiratory symptoms. This is higher compared to 17.2% from the previous week.</p>
Absence reports from elementary schools (i.e., absenteeism > 10%)	Increased	From March 25-28, six elementary schools in the two main English public school boards reported a 4-day average absenteeism exceeding 10%. This number is higher than the previous week, when four elementary schools reported a 5-day average absenteeism exceeding 10%.
Laboratory-confirmed cases	Decreased compared to previous week	<p>From March 26-April 1, two laboratory-confirmed cases of influenza (zero influenza A and two influenza B) were reported. This is less than the previous week, when one laboratory-confirmed influenza A case and four laboratory-confirmed influenza B cases were reported.</p> <p>Since the beginning of the surveillance season on September 2, 2012, a total of 458 laboratory-confirmed influenza cases (445 Influenza A and 13 influenza B) have been reported to the Health Unit.</p>
Hospitalizations	Similar to previous week	<p>From March 26- April 1, two people with laboratory-confirmed influenza were reported to be hospitalized. This is similar compared to the previous week, when three hospitalizations were reported.</p> <p>To date, 284 people with laboratory-confirmed influenza have been hospitalized.</p>
Deaths	Similar to previous week	<p>From March 26- April 1, no deaths were reported among newly reported laboratory-confirmed influenza cases. This is comparable to the previous week, when no deaths were reported.</p> <p>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.</p>

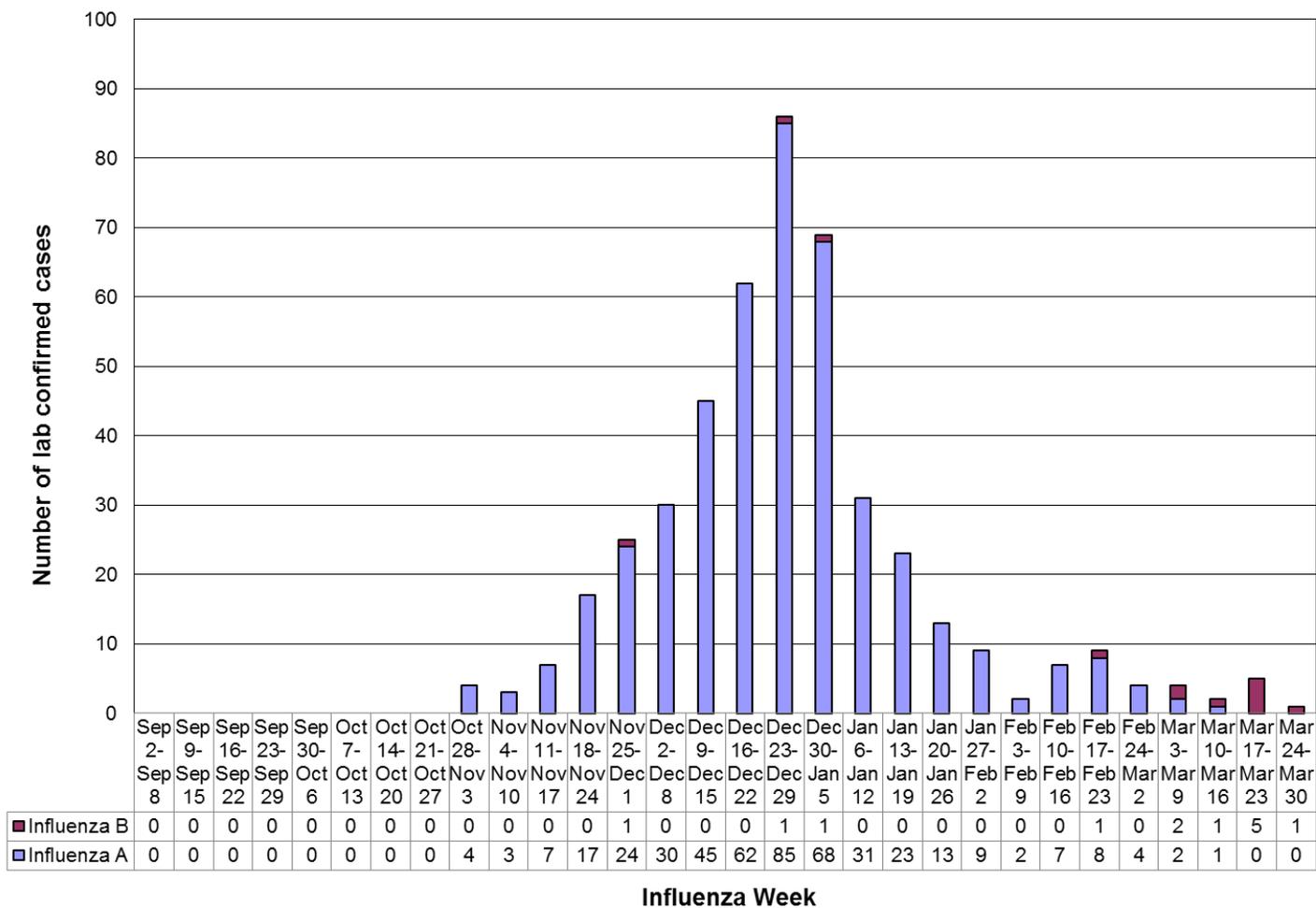
Indicator	Recent trends / data	Comments for most recent week
Influenza outbreaks in long-term care homes/retirement homes/acute care	Similar to previous week	<p>From March 26- April 1, no influenza outbreaks were declared in long term care facilities. This is similar to the previous week, when one outbreak of influenza B was declared in a long term care facility.</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>
Sentinel X-ray provider reports regarding newly identified bronchopneumonia cases	Slight increase compared to previous week	From March 25-30, 3.2% of chest x-rays performed by the sentinel x-ray provider were newly diagnosed bronchopneumonia cases. This is slightly higher than 2.9% the previous week.
Percentage of Ontario laboratory samples that are positive for influenza	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 17-23, in Ontario, 51 of 1,442 tests were positive for influenza A (3.54% positivity) and 71 of 1,442 tests were positive for influenza B (4.92% 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 5.37%. The percent positivity for influenza B is slightly higher than the 3.95% positivity reported the previous week.</p> <p>This week, Respiratory Syncytial Virus (RSV) had the highest percent positivity among all circulating respiratory viruses (14.58% positivity), followed by human metapneumovirus (6.16% positivity) and then influenza B (as above).</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 and influenza type, Middlesex-London, September 2, 2012 – March 30, 2013(n=458)



Source: Infectious Disease Control (IDC) Database (MLHU internal tracking database), extracted April 3&4, 2013.

Notes: Influenza episode date source varies. In 430 cases, episode date is the date that the case’s symptoms began. In 27 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.