Public Health Agency of Canada | Agence de la santé publique du Canada

FluWatch

November 2, 2008 to November 8, 2008 (Week 45)

Low levels of influenza activity continue to be reported in Canada; slight increases in lab detections and ILI consultation rates reported this week

During week 45, influenza activity in Canada remained low with the majority of the influenza surveillance regions reporting no activity and only six regions (in BC, AB, ON & QC) reported sporadic influenza activity (see map). Seven specimens tested positive for influenza in Canada this week (percentage positive = 0.5%; 7/1,512) (see table). In week 45, the ILI consultation rate increased to 11 ILI consultations per 1,000 patient visits (see ILI graph), and is below the expected range for this week. The sentinel response rate remained low at 42%; however, sentinel participation is expected to increase as the influenza season progresses. Fluctuations in ILI consultation rates are expected during periods of low influenza activity and low sentinel participation. No new influenza outbreaks were reported in week 45.

Antigenic Characterization:
Since 1 September 2008, National Microbiology Laboratory (NML) has antigenically characterized five influenza viruses: one influenza A/Brisbane/10/2007(H3N2)-like (from BC), one influenza A/Brisbane/59/2007(H1N1)-like (from NS), two influenza B/Florida/4/2006-like (from ON and AB) and one B/Malaysia/2506/2004-like (from AB). A/Brisbane/10/2007(H3N2), A/Brisbane/59/2007(H1N1) and B/Florida/4/2006 are the influenza A and influenza B components recommended for the 2008-09 influenza vaccine. B/Malaysia/2506/2004 was the influenza B component for the 2007-2008 season vaccine. *(see pie chart)*

Antiviral Resistance:
Since the start of the season, the NML has tested 2 influenza A isolates (1 H1N1 and 1 H3N2) for amantadine resistance and found that the H3N2 isolate was resistant to amantadine and the H1N1 isolate was susceptible; resulting in 50% (1/2) resistance among all influenza A isolates tested.
The NML has also tested 5 influenza isolates (1 A/H1N1, 1 A/H3N2 & 3 B) for oseltamivir (Tamiflu) resistance and found that the H1N1 isolate tested was resistant to oseltamivir due to the H274Y mutation whereas the H3N2 and B isolates were susceptible; resulting in 20% (1/5) resistance among all influenza isolates tested.

Influenza-associated Paediatric Hospitalizations:
No laboratory-confirmed influenza-associated paediatric hospitalizations have been reported through the Immunization Monitoring Program Active (IMPACT) network for the 2008-09 season.

International:
CDC: During week 44, a low level of influenza activity was reported in the United States with the majority of the states reporting no activity and several more states reporting sporadic activity compared to the previous week. Of the 1,780 specimens tested this week for influenza viruses, 11 (0.6%) were positive. Since 1 October 2008, the CDC has antigenically characterized one influenza virus: B/Florida/04/2006-like.
<http://www.cdc.gov/flu/weekly/>
EISS: Levels of influenza activity were low in all European countries, however an increasing number of countries reported sporadic influenza virus detections compared to previous weeks. The majority (89%) of virus detections have been influenza A and 72% of those subtyped were shown to be A/H3. Limited data are available on antiviral resistance: 83% (5/6) of the influenza A(H1N1) viruses analysed to date are resistant to oseltamivir. Note that reports of RSV detections are increasing in several countries in Europe; however the increase in those countries is normal at this time of the year. *<http://www.eiss.org/cgi-files/bulletin_v2.cgi>*
Human Avian Influenza: No new cases of human H5N1 avian influenza infection have been reported by the WHO since 10 September 2008. *<http://www.who.int/csr/disease/avian_influenza/en/index.html>*