Limited Influenza Activity in BC

Overview
During weeks 40 to 43 (Sept 28 – Oct 25, 2008), BC laboratories reported one positive respiratory specimen for influenza A (in week 43). No ILI outbreaks were reported, and the rate of ILI visits to physicians in weeks 40 to 43 was lower than average for this time of year.

The 2008-2009 Facility Influenza Immunization Policy and Q&A documents have now been posted on the BCCDC website. For details please see: http://www.bccdc.org/news.php?item=271

Sentinel Physicians
Based on the historic range for this time of year, the rate of ILI visits to sentinel physicians was lower than expected in all four weeks. In weeks 40 to 43, the proportion of all patient visits that was due to ILI was 0.02%, 0.13%, 0.12%, and 0.22%, respectively. (See graph and table on page 4.)

Outbreak Reports
No ILI outbreaks were reported in weeks 40 to 43. (See graph on page 5.)

Laboratory Reports
During weeks 40 to 43 (Sept 28 – Oct 25), BCCDC Laboratory Services tested 127 respiratory specimens. Sixteen specimens tested positive for entero/rhinoviruses. No other respiratory pathogens were identified.

During weeks 40 to 43 (Sept 28 – Oct 25), Children’s and Women’s Health Centre Laboratory tested 186 respiratory specimens. One travel-related case of influenza A (H3N2) was identified in Vancouver Coastal Health Authority during week 43 (Oct 19 – 25); further characterization is pending. Sixteen specimens tested positive for RSV, five for parainfluenza, and two for adenovirus. (See graphs on page 6.)

Oseltamivir Resistance
During the 2007-08 season, oseltamivir resistance was identified among circulating A/H1N1 viruses worldwide. Testing of A/H1N1 isolates in Canada indicated that 26% were resistant to oseltamivir. To date (Oct 30, 2008), there is no change to the recommended use of neuraminidase.
inhibitors in Canada, as previously specified in the July 2008 Statement on Influenza published by the National Advisory Committee on Immunization (CCDR 15 July 2008 Vol 34 ACS-3). A national expert group will continue to monitor surveillance information through the season and provide updated recommendations as appropriate.

Health care providers using oseltamivir are advised to regularly consult surveillance updates and stay informed about influenza activity and resistance patterns throughout the season.

**CANADA**

**Flu Watch**

During weeks 40 to 43 (Sept 28 – Oct 25, 2008), sporadic activity was reported in BC (1 travel-related case), Alberta, Ontario, Quebec, and Nova Scotia. No outbreaks in LTCFs have been reported in Canada since week 36 of last season (Aug 31 – Sept 6).

Since August 24, 2008 there have been 13 influenza detections, 7 influenza A and 6 influenza B. The national rate of ILI visits to sentinel physicians (10, 18, 13, and 10 cases per 1,000 visits during weeks 40, 41, 42, and 43 respectively) is within the expected range for this time of the season.

http://www.phac-aspc.gc.ca/fluwatch/

**National Microbiology Laboratory**

Between Sept 1 and Oct 23 four influenza isolates from provincial and hospital labs have been characterized at the National Microbiology Laboratory (NML): one A/Brisbane/59/07-like* (H1N1) from Nova Scotia, two B/Florida/04/06-like* (Yamagata)—one from Alberta and one from Ontario, and one B/Malaysia/2506/04-like (Victoria) from Alberta. The recommended components of the 2008-09 northern hemisphere vaccine are A/Brisbane/59/07 (H1N1), A/Brisbane/10/07 (H3N2), and B/Florida/04/06.

* indicates a strain match to the vaccine component.

**Antiviral Resistance**

Drug susceptibility testing showed that the influenza A (H1N1) isolate was sensitive to amantadine but resistant to oseltamivir, with the H274Y mutation. Two of the three influenza B viruses have been tested to-date for oseltamivir resistance; both were found to be sensitive.

http://www.phac-aspc.gc.ca/fluwatch/

**INTERNATIONAL**

A low level of Influenza activity was reported during weeks 40 to 43 (Sept 28 - Oct 25) in the United States. In week 43 (Oct 19-25) sporadic activity was reported in 13 states and Puerto Rico. The rate of ILI visits to sentinel physicians was below national baseline levels. For information about influenza surveillance indicators in the United States, please visit:

http://www.cdc.gov/flu/weekly/.

Low levels of influenza activity in Europe were reported during weeks 40-43 with 24 countries reporting no influenza activity during week 43 and only 1 (England) reporting sporadic activity. For more information, please visit:


The WHO has published a summary of the 2007-08 influenza activity around the world. The report can be accessed at:


**Avian Influenza**

Since 2003, the WHO has confirmed 387 human AI cases and 245 deaths. Indonesia has reported the highest number of AI cases since 2003 (137 cases, 112 deaths). For more information on human avian influenza cases please visit:

For further information on confirmed avian influenza outbreaks in poultry, please visit: http://www.oie.int/downld/AVIAN%20INFLUENZA/A_AI-Asia.htm.

Vaccine Composition
This year’s (2008-09) influenza vaccine contains the following virus antigens:
- A/Brisbane/59/2007 (H1N1)
- A/Brisbane/10/2007 (H3N2)
  Note: A/Uruguay/716/2007 (H3N2) is antigenically equivalent to A/Brisbane/10/2007 and may be included by vaccine producers.
- B/Florida/04/2006 (Yamagata lineage)

Activity Level Definitions
Sporadic influenza activity: sporadically occurring ILI and laboratory-confirmed influenza during previous 4 weeks, with no outbreaks.

Localized influenza activity: sporadically occurring ILI and lab-confirmed influenza within past 4 weeks together with outbreaks of ILI in schools and worksites or laboratory confirmed influenza in residential institutions occurring in less than 50% of the influenza surveillance regions during the week of reporting.

Widespread influenza activity: as for localized activity, but with outbreaks occurring in greater than or equal to 50% of the influenza surveillance regions during the week of reporting.

List of Acronyms
AI: Avian Influenza
FHA: Fraser Health Authority
HPAI: Highly Pathogenic Avian Influenza
HSDA: Health Service Delivery Area
IHA: Interior Health Authority
ILI: Influenza-Like Illness
LTCF: Long Term Care Facility
NHA: Northern Health Authority
NML: National Microbiological Laboratory
OIE: World Organization for Animal Health
RSV: Respiratory syncytial virus
VCHA: Vancouver Coastal Health Authority
VIHA: Vancouver Island Health Authority
WHO: World Health Organization

Web Sites
1. Influenza Web Sites
Canada – Flu Watch:
http://www.phac-aspc.gc.ca/fluwatch/
Washington State Flu Updates:
http://www.doh.wa.gov/ehsphl/epidemiology/CD/HTML/FluUpdate.htm
USA Weekly Surveillance reports:
http://www.cdc.gov/flu/weekly/
European Influenza Surveillance Scheme:
http://www.eiss.org/index.cgi
WHO – Global Influenza Programme:
WHO – Weekly Epidemiological Record:
http://www.who.int/wer/eng/en/
Influenza Centre (Australia):
http://www.influenzacentre.org/

2. Avian Influenza Web Sites
World Health Organization – Avian Influenza:
http://www.who.int/csr/disease/avian_influenza/en/
World Organization for Animal Health:
http://www.oie.int/eng/en_index.htm

3. This Report On-line
http://www.bccdc.org/content.php?item=35
WEEKLY ILI

Proportion of Patient Visits due to Influenza Like Illness (ILI) per Week Number Compared to Average Proportion of ILI Visits for the Past 19 Seasons Sentinel Physicians, 2008-2009, British Columbia

INFLUENZA-LIKE ILLNESS BY HEALTH AUTHORITY

<table>
<thead>
<tr>
<th>HEALTH AUTHORITY</th>
<th>Week 40</th>
<th>Week 41</th>
<th>Week 42</th>
<th>Week 43</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ILI Visits</td>
<td>Total Visits</td>
<td>% ILI</td>
<td>ILI Visits</td>
</tr>
<tr>
<td>Fraser</td>
<td>0</td>
<td>2,025</td>
<td>0.00%</td>
<td>1</td>
</tr>
<tr>
<td>Interior</td>
<td>0</td>
<td>624</td>
<td>0.00%</td>
<td>1</td>
</tr>
<tr>
<td>Northern</td>
<td>1</td>
<td>186</td>
<td>0.54%</td>
<td>2</td>
</tr>
<tr>
<td>Vancouver Coastal</td>
<td>0</td>
<td>1,685</td>
<td>0.00%</td>
<td>2</td>
</tr>
<tr>
<td>Vancouver Island</td>
<td>0</td>
<td>1,353</td>
<td>0.00%</td>
<td>2</td>
</tr>
<tr>
<td>BC Total</td>
<td>1</td>
<td>5,873</td>
<td>0.02%</td>
<td>8</td>
</tr>
</tbody>
</table>
REPORTED ILI OUTBREAKS

Number of Influenza-Like Illness (ILI) Outbreaks Reported, ILI Rates and Average ILI Rate for past 19 years, per Week
British Columbia, 2008-2009
LABORATORY SUMMARY

Virus Isolates and Percentage of Respiratory Specimens Submitted to
BC Provincial Laboratory Diagnosed Positive for a Virus, per Week
British Columbia, 2008-2009

Virus Isolates and Percentage of Respiratory Specimens Submitted to
Children and Women's Health Centre Laboratory Diagnosed Positive for
a Virus, per Week British Columbia, 2008-2009
Influenza-Like Illness (ILI) Outbreak Summary Report Form

Please complete and email to ilioutbreak@bccdc.ca or fax to (604) 660-0197

ILI: Acute onset of respiratory illness with fever and cough and with one or more of the following: sore throat, arthralgia, myalgia, or prostration which could be due to influenza virus. In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent.

Schools and work site outbreak: greater than 10% absenteeism on any day, most likely due to ILI.
Residential institutions (facilities) outbreak: two or more cases of ILI within a seven-day period.

SECTION A: Reporting Information

Person Reporting: _______________________ Title: _______________________
Contact Phone: _______________________ Email: _______________________
Health Authority: _______________________ HSDA: _______________________
Full Facility Name: _______________________________________________________

Is this report:  ☐ First Notification (complete section B below; Section D if available)  ☐ Update (complete section C below; Section D if available)  ☐ Outbreak Over (complete section C below; Section D if available)

SECTION B: First Notification

Type of facility:  ☐ LTCF  ☐ Acute Care Hospital  ☐ Senior’s Residence  
(if ward or wing, please specify name/number: _______________________
☐ Workplace  ☐ School (grades: _______ )  ☐ Other ( _________)

Date of onset of first case of ILI (dd/mm/yyyy): __________ / __________ / __________

<table>
<thead>
<tr>
<th>Numbers to date</th>
<th>Residents/Students</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With ILI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitalized</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Died</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION C: Update AND Outbreak Declared Over

Date of onset for most recent case of ILI (dd/mm/yyyy): __________ / __________ / __________
If over, date outbreak declared over (dd/mm/yyyy): __________ / __________ / __________

<table>
<thead>
<tr>
<th>Numbers to date</th>
<th>Residents/Students</th>
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<tr>
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<tr>
<td>Died</td>
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</tbody>
</table>

SECTION D: Laboratory Information

Specimen(s) submitted?  ☐ Yes (location: ____________ )  ☐ No  ☐ Don’t know
If yes, organism identified? ☐ Yes (specify: ____________ )  ☐ No  ☐ Don’t know