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Number 1: Weeks 40 to 43
Sept 28 – Oct 25, 2008

Limited Influenza Activity in BC

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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>

Please remember to notify BCCDC if an outbreak of ILI occurs in your region, by emailing ilioutbreak@bccdc.ca. Please also remember to complete the outbreak report form (a copy is found at the end of this report).

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 enterovirus / 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:

<http://www.eiss.org>.

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

<http://www.who.int/wer/2008/wer8341/en/index.html>.

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:

http://www.who.int/csr/disease/avian_influenza/en/.



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.

Contact Us:

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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/>
NACI Statement on Influenza Vaccination for the 2008-09 Season: <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/08vol34/acs-3/index-eng.php>
Washington State Flu Updates:
<http://www.doh.wa.gov/ehsphi/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:
<http://www.who.int/csr/disease/influenza/mission/en/>
WHO – Weekly Epidemiological Record:
<http://www.who.int/wer/en/>
Influenza Centre (Australia):
<http://www.influenzacentre.org/>

2. Avian Influenza Web Sites

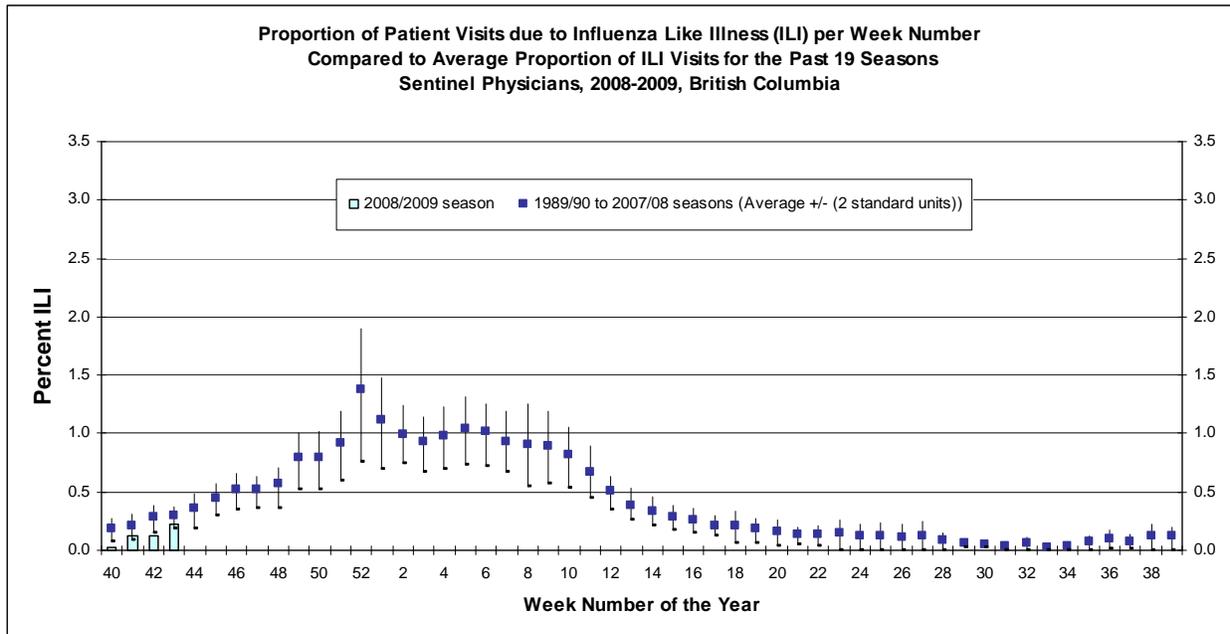
World Health Organization – Avian Influenza:
http://www.who.int/csr/disease/avian_influenza/en/
World Organization for Animal Health:
http://www.oie.int/eng/en_index.htm

3. This Report On-line

<http://www.bccdc.org/content.php?item=35>



WEEKLY ILI

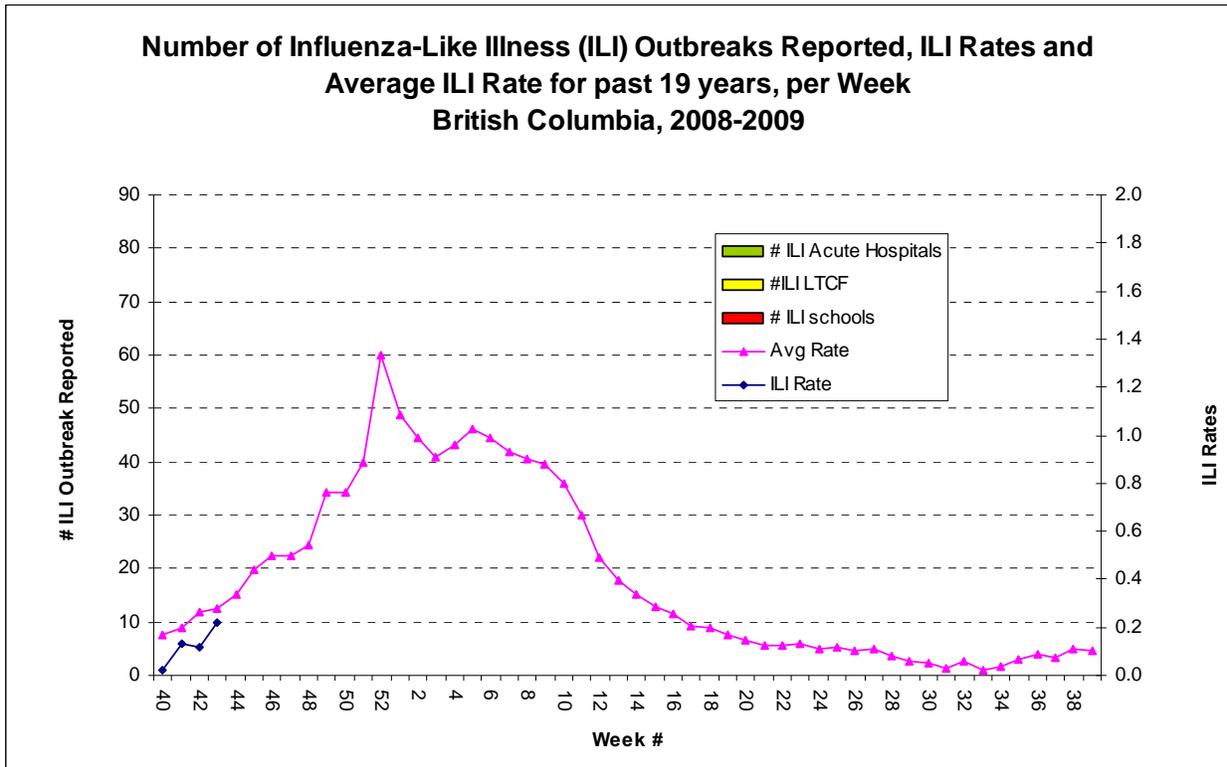


INFLUENZA-LIKE ILLNESS BY HEALTH AUTHORITY

HEALTH AUTHORITY	Week 40 Sept 28 – Oct 4			Week 41 Oct 5 – 11			Week 42 Oct 12 – Oct 18			Week 43 Oct 19 – Oct 25		
	ILI Visits	Total Visits	% ILI	ILI Visits	Total Visits	% ILI	ILI Visits	Total Visits	% ILI	ILI Visits	Total Visits	% ILI
Fraser	0	2,025	0.00%	1	2,502	0.04%	3	1,632	0.18%	6	1,661	0.36%
Interior	0	624	0.00%	1	457	0.22%	0	486	0.00%	0	513	0.00%
Northern	1	186	0.54%	2	312	0.64%	2	275	0.73%	2	321	0.62%
Vancouver Coastal	0	1,685	0.00%	2	1,707	0.12%	0	1,425	0.00%	0	1,425	0.00%
Vancouver Island	0	1,353	0.00%	2	1,334	0.15%	1	1,316	0.08%	2	647	0.31%
BC Total	1	5,873	0.02%	8	6,312	0.13%	6	5,134	0.12%	10	4,567	0.22%

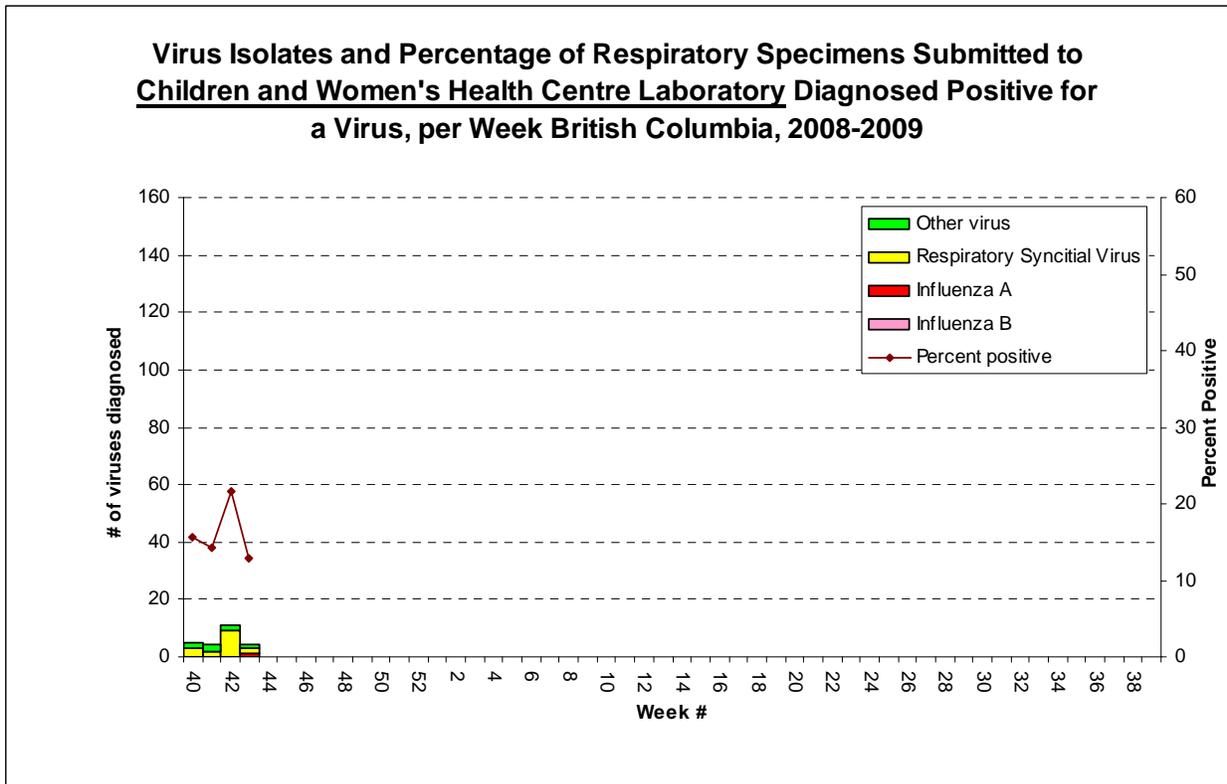
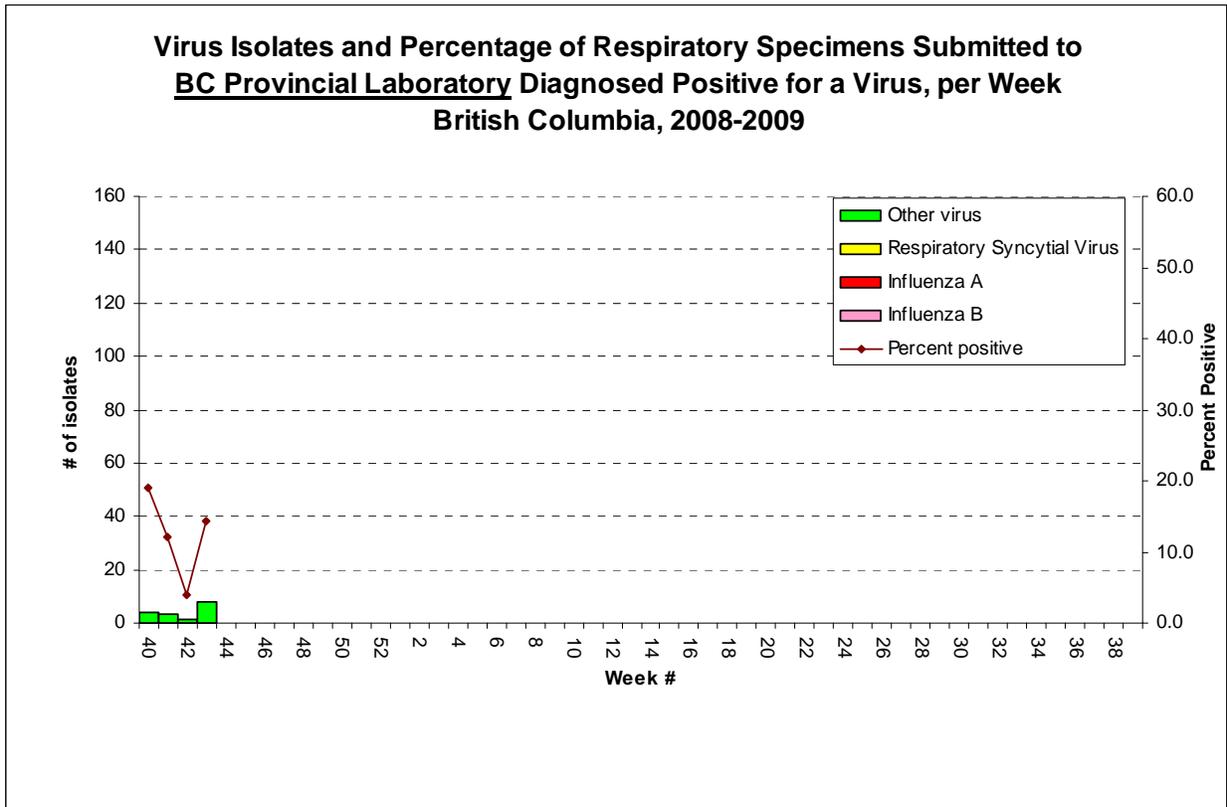


REPORTED ILI OUTBREAKS





LABORATORY SUMMARY





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): _____ / _____ / _____

Numbers to date	Residents/Students	Staff
Total		
With ILI		
Hospitalized		
Died		

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): _____ / _____ / _____

Numbers to date	Residents/Students	Staff
Total		
With ILI		
Hospitalized		
Died		

SECTION D: Laboratory Information

Specimen(s) submitted? Yes (location: _____) No Don't know
If yes, organism identified? Yes (specify: _____) No Don't know