

BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

2012-13: Number 7, Week 50

December 9 to 15, 2012



BC Centre for Disease Control

An agency of the Provincial Health Services Authority

Prepared by BCCDC Influenza &
Emerging Respiratory Pathogens Team

Influenza activity ongoing in BC

Contents:

British Columbia:

Sentinel Physicians	Page 2
Children's Hospital ER	Page 2
Medical Services Plan	Page 3
Laboratory Surveillance	Page 5
ILI Outbreaks	Page 6

International:

[Page 7](#)

Other:

List of Acronyms	Page 8
Web Sites	Page 8
Outbreak Report Form	Page 9

Canada:

FluWatch Activity levels	Page 6
NML Strain Characterization	Page 6
NML Antiviral Resistance	Page 7

Summary

During week 50 (December 9 to 15, 2012), most indicators suggested an increasing level of influenza activity in BC compared to previous weeks. The proportion of patients with influenza-like illness among those presenting to sentinel physicians was 0.45%, markedly higher than the previous week but within the expected level for this time of year. At the provincial level, the MSP influenza illness proportion remained slightly above the 10-year median for this time of year. Three ILI outbreaks were reported in week 50, including two from long-term care facilities in FHA (one lab-confirmed influenza A, one lab-confirmed RSV) and one from a school in IHA (pathogen unknown). So far in the beginning of week 51, two school ILI outbreaks have been reported: one from NHA and one from IHA (unknown pathogen). During week 50, out of 162 specimens tested at the BC Public Health Microbiology & Reference Laboratory, PHSA, 35 (21.6%) were positive for influenza viruses including 1 A(H1N1)pdm09 and 34 A/H3N2. Other respiratory viruses were also detected sporadically. Compared to the previous week, more influenza viruses (7/68, 10.3%) were detected by BC Children's and Women's Health Centre Laboratory in week 50. The ILI consultation rate in BC Children's Hospital ER continued to increase (14.9%).

For your information, updated [antiviral guidance](#) of the Association of Medical Microbiology and Infectious Disease Canada (AMMI Canada) entitled "**The use of antiviral drugs for influenza: Guidance for practitioners 2012/2013**" is now available from www.ammi.ca/guidelines and includes updated dosing guidance of which clinicians should be aware for their patients with reduced creatinine clearance.

Report disseminated December 20, 2012

Contributors: Helen Guiyun Li, Lisan Kwindt, Naveed Janjua, Danuta Skowronski

BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

2012-13: Number 7, Week 50

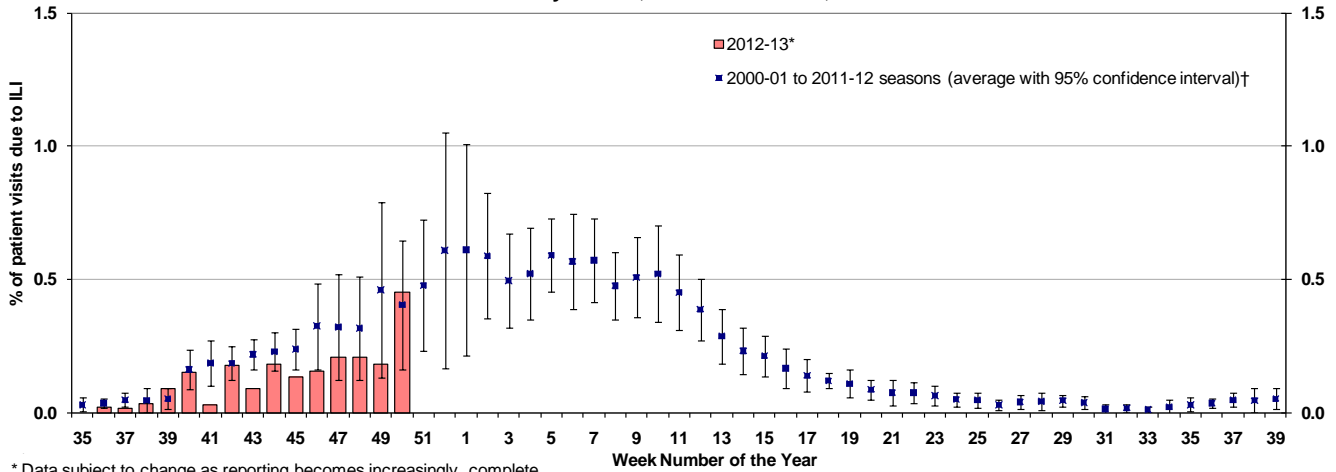
December 9 to 15, 2012

British Columbia

Sentinel Physicians

In week 50, the proportion of patients with ILI among those presenting to sentinel physicians rose to 0.45%, still within the expected range for this time of year. To date, 66% of sentinel physician sites have reported for week 50.

Percentage of Patient Visits due to Influenza Like Illness (ILI) per Week Compared to Average Percentage of ILI Visits for the Past 10 Seasons Sentinel Physicians, British Columbia, 2012-2013

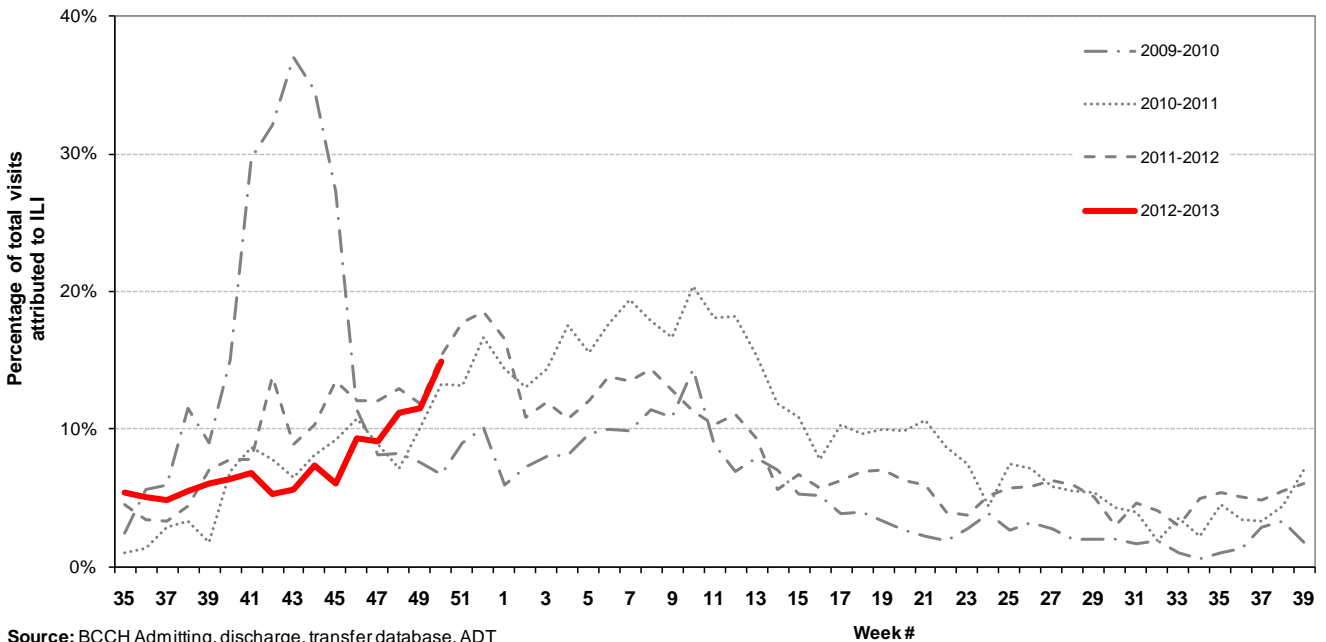


* Data subject to change as reporting becomes increasingly complete.
 † Historical values exclude 2008-09 and 2009-10 seasons due to atypical seasonality.

BC Children's Hospital Emergency Room

In week 50, the percentage of BC Children's Hospital ER visits attributed to "fever and cough" or flu-like illness continued to increase (14.9%), still consistent within the expected level for this time of year.

Percentage of Patients Presenting to BC Children's Hospital ER with Presenting Complaint (Triage Chief Complaint) of "Flu," "Influenza," or "Fever/Cough", by Week



Source: BCCH Admitting, discharge, transfer database, ADT
 Note: Data from 2010-11 and 2011-12 is based on new system (Triage Chief Complaint) not directly comparable to data for 2009-10. In bulletins before week 9 of 2011-12 season, data is based on old system.

BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

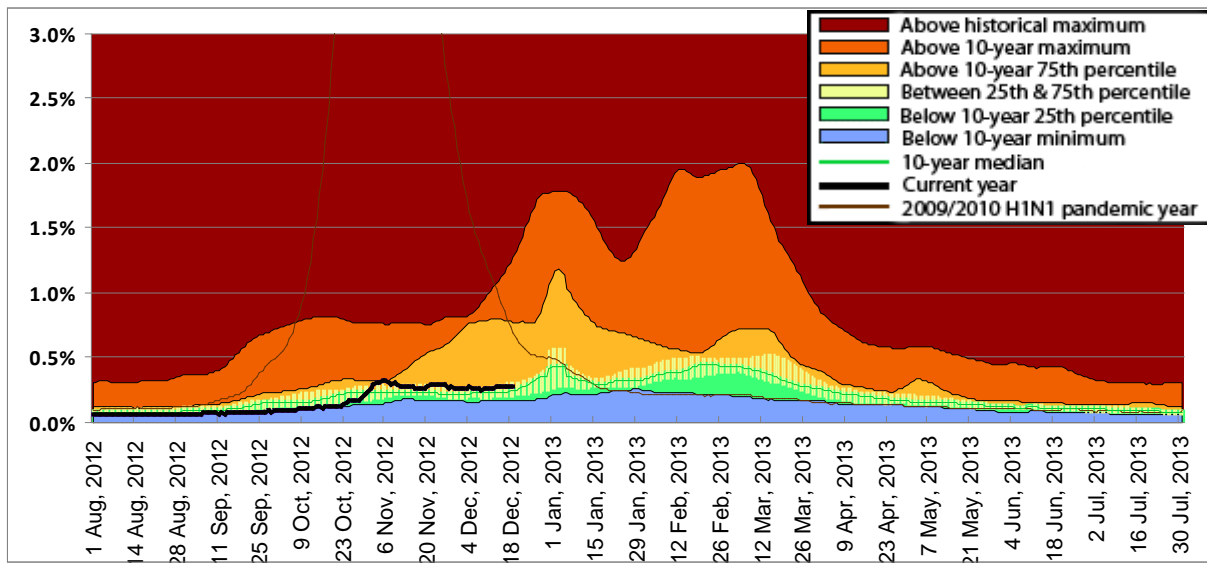
2012-13: Number 7, Week 50

December 9 to 15, 2012

Medical Services Plan

During week 50, influenza illness as a proportion of all submitted BC Medical Services Plan (MSP) claims remained above the 10-year median at the provincial level with variation across Health Authorities.

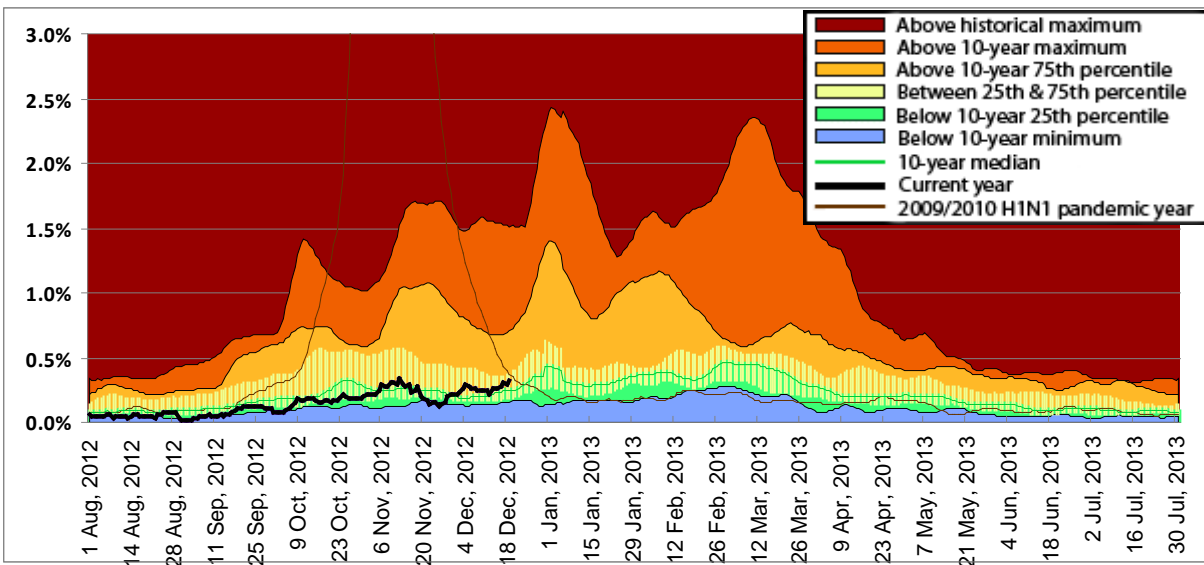
Influenza Illness Claims* British Columbia



* Influenza illness is tracked as the percentage of all submitted MSP general practitioner claims with ICD-9 code 487 (influenza). Data provided by Population Health Surveillance and Epidemiology, BC Ministry of Health Services

Notes: MSP week beginning 1 August 2012 corresponds to sentinel ILI week 31; Data current to 19 December 2012

Northern

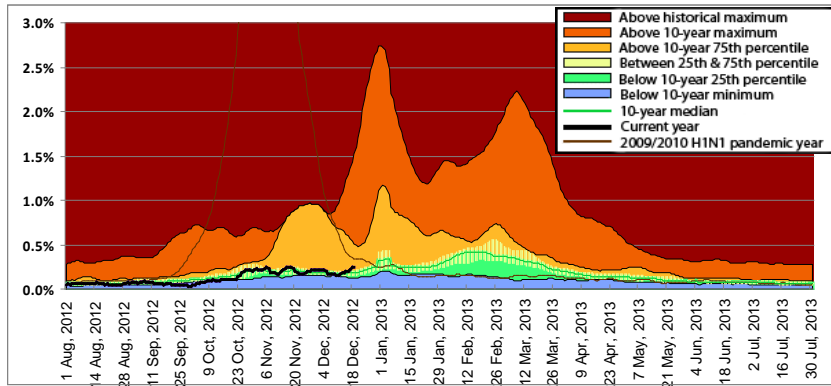


BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

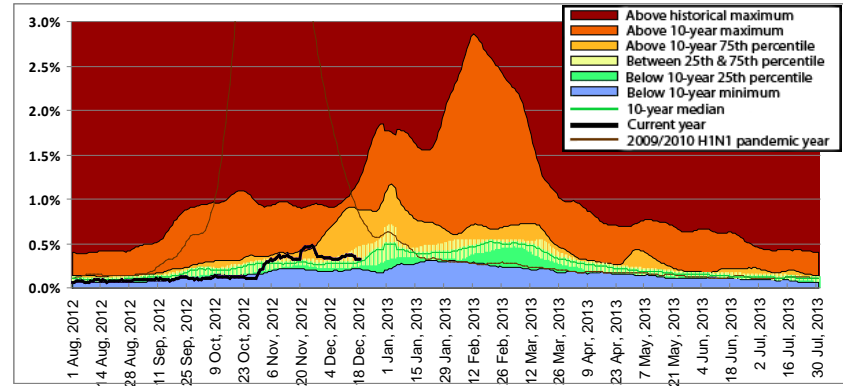
2012-13: Number 7, Week 50

December 9 to 15, 2012

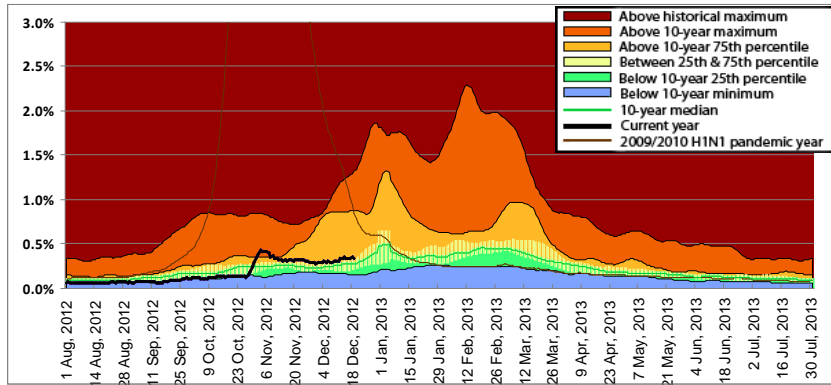
Interior



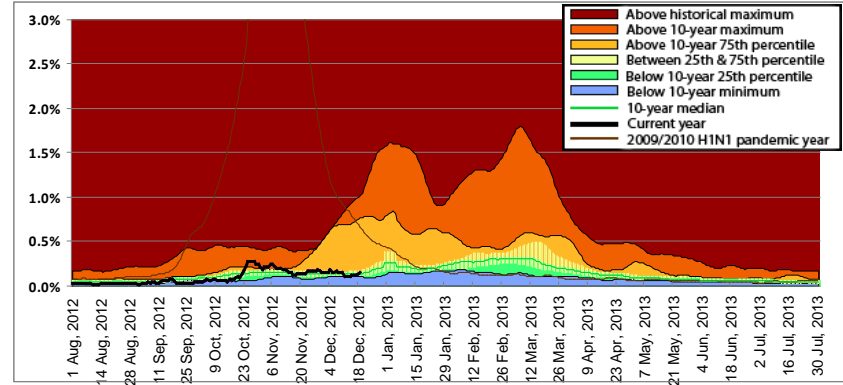
Vancouver Coastal



Fraser



Vancouver Island



BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

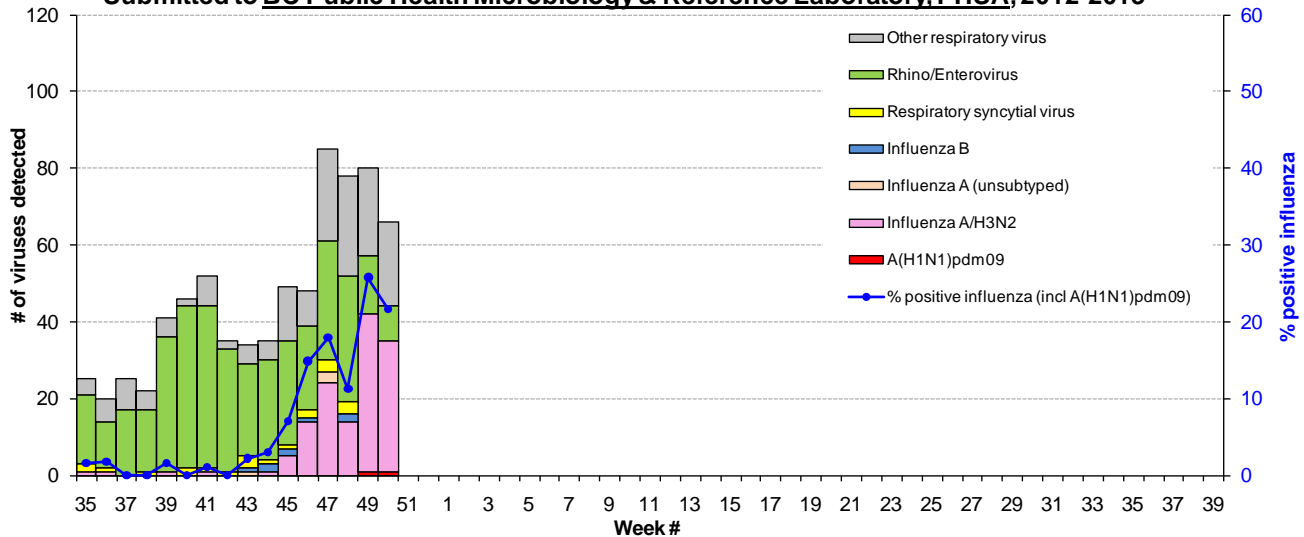
2012-13: Number 7, Week 50

December 9 to 15, 2012

Laboratory Reports

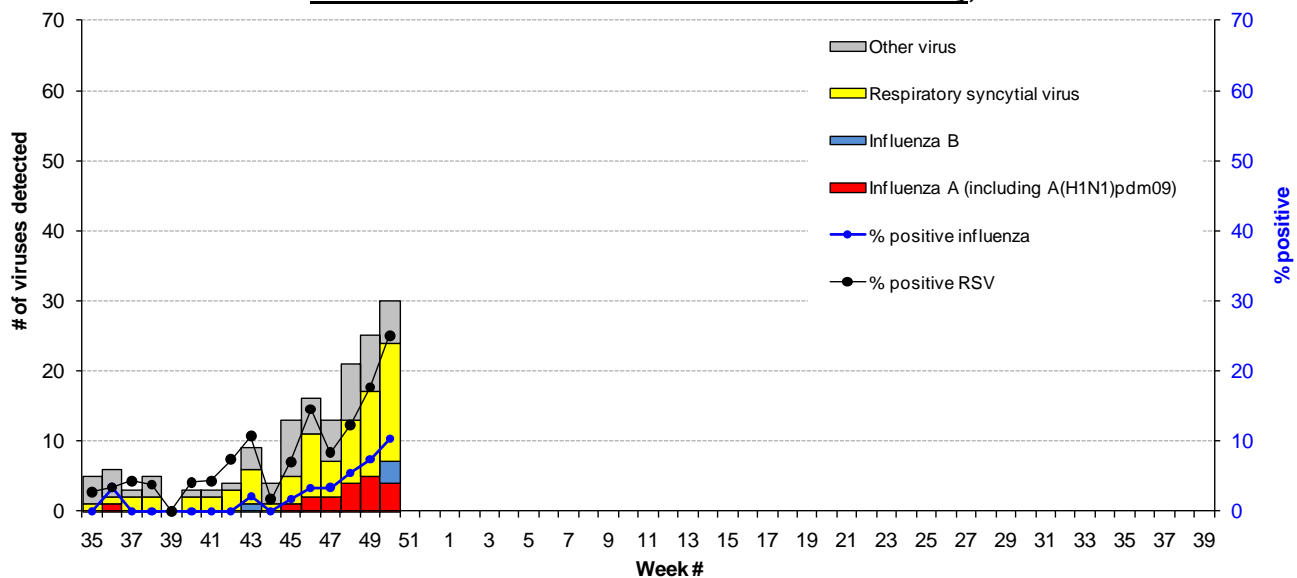
In week 50, one hundred and sixty-two specimens were tested for influenza viruses at the BC Public Health Microbiology & Reference Laboratory, PHSA, of which 35 (21.6%) were positive for influenza viruses, including 1 A(H1N1)pdm09 in IHA, and 34 A/H3N2 (3 from IHA, 14 from FHA, 10 from VCHA, 3 from VIHA, 3 from NHA, and 1 with HA not indicated). Other significant detections included coronavirus (10/162, 6.2%), parainfluenza (10/162, 6.2%), and rhino/enterovirus (9/162, 5.6%). Other respiratory viruses were also sporadically detected.

Influenza and Other Virus Detections Among Respiratory Specimens Submitted to BC Public Health Microbiology & Reference Laboratory, PHSA, 2012-2013



In week 50, BC Children's and Women's Health Centre Laboratory tested 68 respiratory specimens, of which 7 (10.3%) were positive for influenza viruses, an increase over the previous week, including 4 A (un-subtyped) and 3 B. RSV (17/68, 25%) continued to be the most common detection among the other respiratory viruses tested. Parainfluenza and adenovirus were also sporadically detected.

Influenza and Other Virus Detections Among Respiratory Specimens Submitted to BC Children's and Women's Health Centre Laboratory, 2012-2013



Data provided by Virology Department at Children's & Women's Health Centre of BC

BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

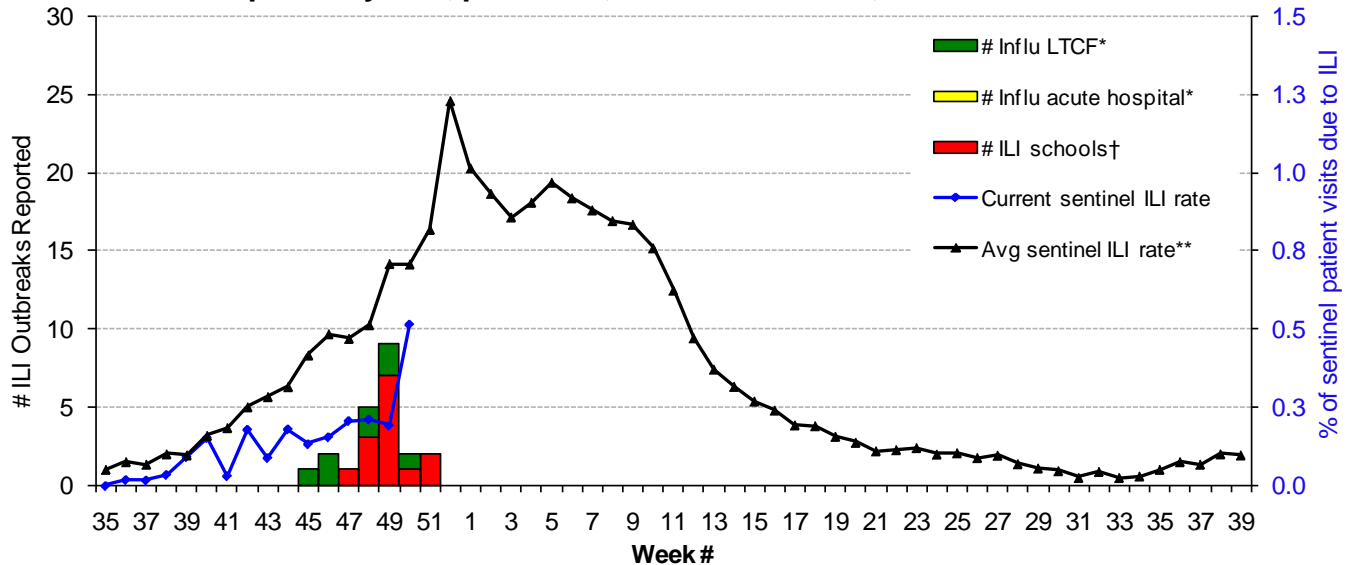
2012-13: Number 7, Week 50

December 9 to 15, 2012

ILI Outbreaks

In week 50, three ILI outbreaks were reported including two from long-term care facilities in FHA (one lab-confirmed influenza A, the other RSV) and one from a school in IHA (unknown pathogen). To date this season (since week 40), 8 lab-confirmed influenza outbreaks have been reported from long-term care facilities in BC. So far in the beginning of week 51, two ILI school outbreaks (pathogen unknown) have been reported: one from NHA and one from IHA.

Number of Influenza and Influenza-Like Illness (ILI) Outbreaks Reported, Compared to Current Sentinel ILI Rate and Average Sentinel ILI Rate for past 20 years, per Week, British Columbia, 2012-2013 season



* Facility influenza outbreak defined as 2 or more ILI cases within 7-day period, with at least one case laboratory-confirmed as influenza.

† School ILI outbreak defined as >10% absenteeism on any day, most likely due to ILI.

** Historical values exclude 2008-09 and 2009-10 seasons due to atypical seasonality.

CANADA

FluWatch

Influenza activity in Canada continued to increase in week 49. A total of 816 laboratory detections of influenza were reported, of which 96.4% were for influenza A viruses, predominantly A/H3N2. An increase in detection of influenza (mainly A/H3N2) has been reported from Ontario and Quebec during recent weeks. www.phac-aspc.gc.ca/fluwatch/

National Microbiology Laboratory (NML): Strain Characterization

From September 1 to December 13, 2012, 71 isolates were collected from provincial and hospital labs and characterized at the NML as follows:

51 A/Victoria/361/2011-like (H3N2)[†] from PEI, QUE, ONT, MAN, SASK, ALTA and BC;

10 A/California/07/2009-like* from ONT;

3 B/Brisbane/60/2008-like** from ONT and MAN;

7 B/Wisconsin/01/2010-like[†] from QUE, ONT and BC;

[†] indicates a strain match to the recommended H3N2 component for the 2012-2013 northern hemisphere influenza vaccine

[†] belongs to the B Yamagata lineage, and is the recommended influenza B component for the 2012-2013 northern hemisphere influenza vaccine.

* indicates a strain match to the recommended H1N1 component for the 2012-2013 northern hemisphere influenza vaccine.

** belongs to the B Victoria lineage, which was the recommended influenza B component for the 2011-2012 northern hemisphere influenza vaccine.

BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

2012-13: Number 7, Week 50

December 9 to 15, 2012

NML: Antiviral Resistance

From September 1 to December 13, 2012, drug susceptibility testing was performed at the NML for influenza A/H3N2 (oseltamivir: 49; zanamivir: 48; amantadine: 95), A(H1N1)pdm09 (oseltamivir: 11; zanamivir: 11; amantadine: 7), and influenza B isolates (oseltamivir: 10; zanamivir: 10). The results indicated that all isolates were sensitive to oseltamivir and zanamivir, while all influenza A isolates were resistant to amantadine.

Updated Antiviral Guidance

For your information, updated antiviral guidance of the Association of Medical Microbiology and Infectious Disease Canada (AMMI Canada) entitled "The use of antiviral drugs for influenza: Guidance for practitioners 2012/2013" is now available from the following websites, and includes updated dosing guidance of which clinicians should be aware for their patients with reduced creatinine clearance: www.ammi.ca/guidelines This document is also available via the Public Health Agency of Canada's FightFlu website at www.fightflu.ca/info-pro-eng.php

INTERNATIONAL

USA: during week 49 (December 2-8, 2012), influenza activity increased. 2172 (28.3%) influenza viruses were detected, including 76.2% influenza A viruses [47.8% A/H3N2, 0.8% A(H1N1)pdm09, and 51.4% un-subtyped A], and 23.8% influenza B. The proportion of deaths attributed to pneumonia and influenza was below the epidemic threshold. The proportion of outpatient visits for influenza-like illness was 2.8% which is above the national baseline of 2.2%. One influenza B-associated paediatric death was reported.

One human infection with a novel influenza A/H3N2 variant virus (A/H3N2v) was reported from Minnesota during week 49. Investigations revealed close contact between the case patient and swine in the week preceding reporting of the illness. The patient has fully recovered and no further cases have been identified in contacts of the case patient. A total of 312 infections with variant influenza viruses (308 A/H3N2v viruses, 3 A/H1N2v viruses, and 1 A/H1N1v virus) have been reported from 11 states since July 2012. More information about A/H3N2v infections can be found at www.cdc.gov/flu/swineflu/h3n2v-outbreak.htm. The US CDC's weekly influenza surveillance report is available at: www.cdc.gov/flu/weekly

Other countries: No new reports have been issued by the WHO since 7 December 2012. www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html

WHO Recommendations for 2012-13 Northern Hemisphere Influenza Vaccine

On 23 February 2012, the WHO announced the recommended strain components for the 2012-13 northern hemisphere vaccine:

- A/California/7/2009 (H1N1)pdm09 virus
- A/Victoria/361/2011 (H3N2)-like virus*
- B/Wisconsin/1/2010 (Yamagata lineage)-like virus*

* these two of the three recommended components are different from the northern hemisphere seasonal TIV vaccines produced and administered in 2010-11 and 2011-2012. For further details, see:

www.who.int/influenza/vaccines/virus/recommendations/2012_13_north/en/index.html

BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

2012-13: Number 7, Week 50

December 9 to 15, 2012

Contact Us:

**Communicable Disease Prevention and Control (CDPACS):
BC Centre for Disease Control (BCCDC)**

List of Acronyms

ACF: Acute Care Facility

AI: Avian influenza

FHA: Fraser Health Authority

HBoV: Human bocavirus

HMPV: Human metapneumovirus

HSDA: Health Service Delivery Area

IHA: Interior Health Authority

ILI: Influenza-Like Illness

LTCF: Long Term Care Facility

MSP: BC Medical Services Plan

NHA: Northern Health Authority

NML: National Microbiological Laboratory

pH1N1: Pandemic H1N1 influenza

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

Washington State Flu Updates: www.doh.wa.gov/FLUNews/

USA Weekly Surveillance reports: www.cdc.gov/flu/weekly/

European Influenza Surveillance Scheme: www.ecdc.europa.eu

WHO – Global Influenza Programme: www.who.int/csr/disease/influenza/mission/

WHO – Weekly Epidemiological Record: www.who.int/wer/en/

Influenza Centre (Australia): www.influenzacentre.org/

Australian Influenza Report: www.health.gov.au/internet/main/publishing.nsf/content/cda-surveil-ozflu-flucurr.htm

New Zealand Influenza Surveillance Reports: www.surv.esr.cri.nz/virology/influenza_weekly_update.php

2. Avian Influenza Web Sites

World Health Organization – Avian Influenza: www.who.int/csr/disease/avian_influenza/en/

World Organization for Animal Health: www.oie.int/eng/en_index.htm

3. This Report On-line: www.bccdc.ca/dis-cond/DiseaseStatsReports/influSurveillanceReports.htm

Influenza-Like Illness (ILI) Outbreak Summary Report Form

Please complete and email to ilioutbreak@bccdc.ca

**Note: This form is for provincial surveillance purposes.
Please notify your local health unit per local guidelines/requirements.**

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.

A

Reporting Information

Health unit/medical health officer notified? Yes No

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*)

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): DD / MMM / YYYY

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

C

Update AND Outbreak Declared Over

Date of onset for most recent case of ILI (dd/mm/yyyy): DD / MMM / YYYY

If over, date outbreak declared over (dd/mm/yyyy): DD / MMM / YYYY

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

D

Laboratory Information

Specimen(s) submitted? Yes (location: _____) No Don't know

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