

BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

2012-13: Number 5, Week 48
November 25 to December 1, 2012



BC Centre for Disease Control
An agency of the Provincial Health Services Authority

Prepared by BCCDC Influenza &
Emerging Respiratory Pathogens Team

Influenza activity continues to increase 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 48 (November 25 to December 1, 2012), most indicators suggested that influenza activity in BC continued to increase. The proportion of patients with influenza-like illness among those presenting to sentinel physicians was 0.35%, higher than the previous week. The MSP influenza illness proportion was above the 10-year median for this time of year throughout the province. Four ILI outbreaks were reported in week 48 including two from long-term care facilities in FHA (one A/H3N2, the other rhino/enterovirus) and two from schools in IHA (unknown pathogen). So far in the beginning of week 49, two school ILI outbreaks have been reported from NHA (one A/H3N2, the other of unknown pathogen). During week 48, out of 138 specimens tested at the BC Public Health Microbiology & Reference Laboratory, PHSA, 15 (10.9%) were positive for influenza, including 13 A/H3N2 and 2 influenza B. Among other respiratory viruses, rhino/enterovirus (32/138, 23.2%) continued to be the most common detection. Compared to the previous week, more influenza viruses (4/73, 5.5%) were detected by BC Children's and Women's Health Centre Laboratory in week 48. The ILI consultation rate in BC Children's Hospital ER continued to increase (11.2%).

Report disseminated December 6, 2012

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

BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

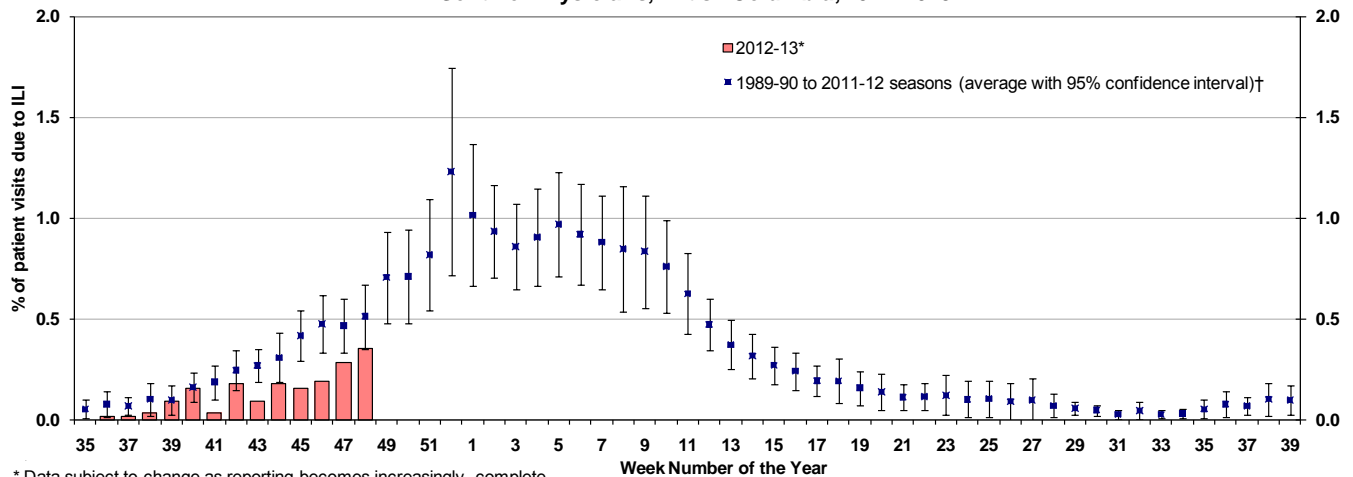
2012-13: Number 5, Week 48
November 25 to December 1, 2012

British Columbia

Sentinel Physicians

In week 48, the proportion of patients with ILI among those presenting to sentinel physicians was 0.35%, higher than previous weeks but within the expected range for this time of year. To date, 63% of sentinel physician sites have reported for week 48.

Percentage of Patient Visits due to Influenza Like Illness (ILI) per Week Compared to Average Percentage of ILI Visits for the Past 20 Seasons Sentinel Physicians, British Columbia, 2012-2013



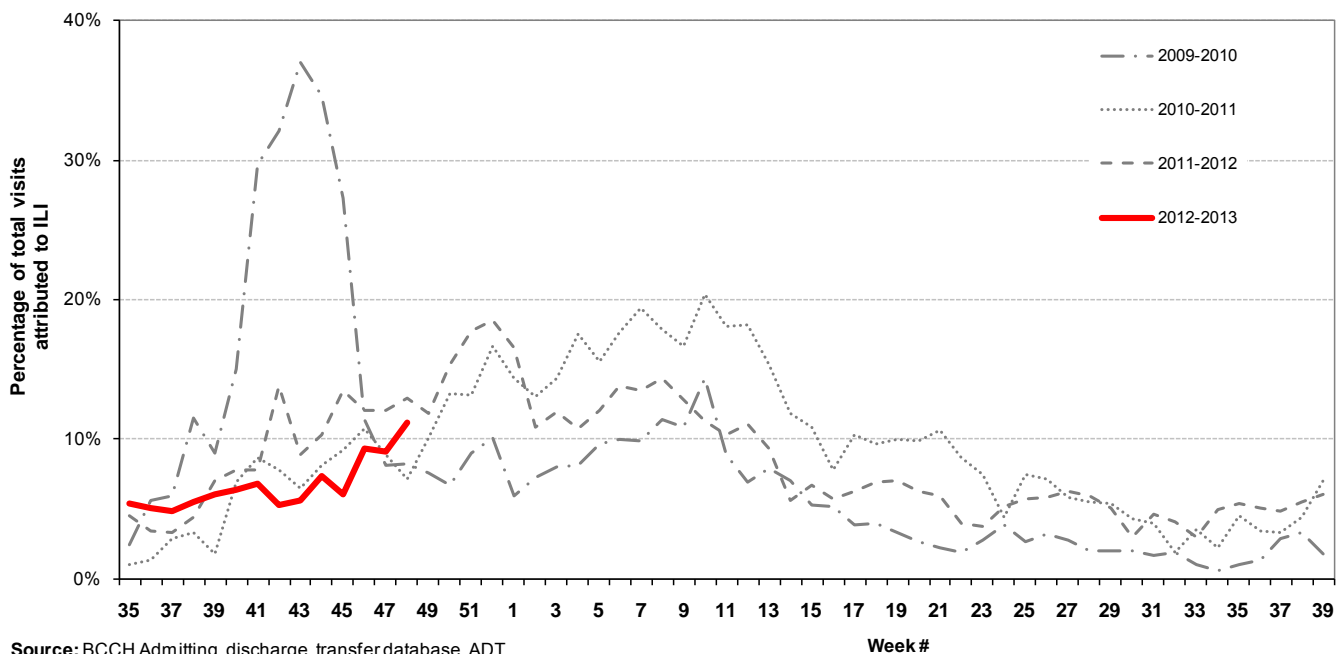
* Data subject to change as reporting becomes increasingly complete.

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

BC Children's Hospital Emergency Room

In week 48, the percentage of BC Children's Hospital ER visits attributed to "fever and cough" or flu-like illness continued to increase (11.2%), still consistent with the preceding two seasons.

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

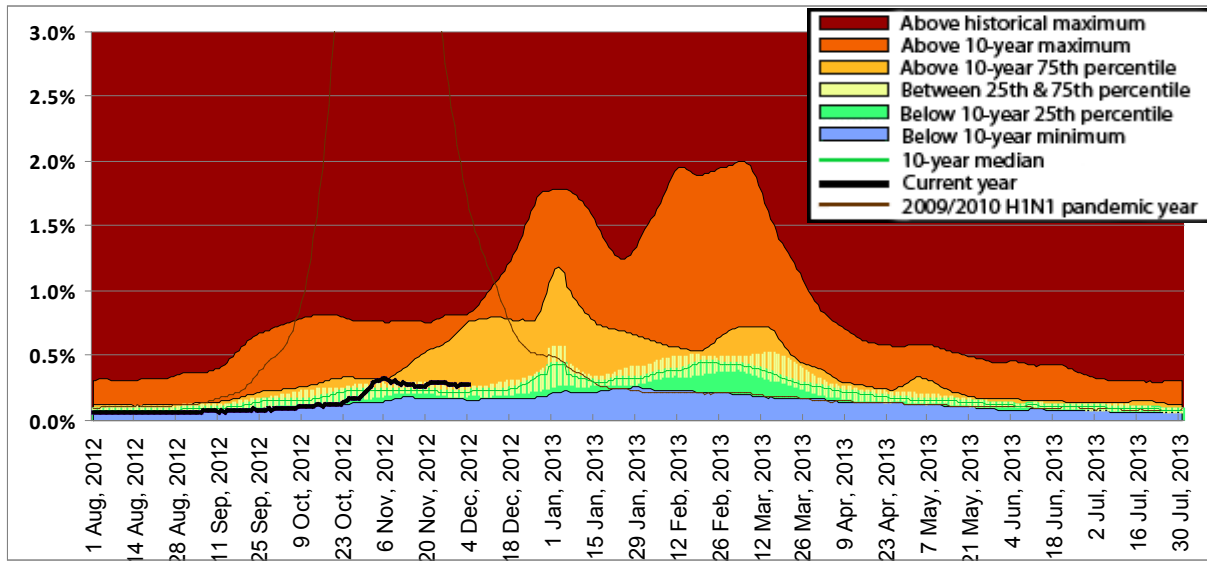
2012-13: Number 5, Week 48

November 25 to December 1, 2012

Medical Services Plan

During week 48, influenza illness as a proportion of all submitted BC Medical Services Plan (MSP) claims remained above the 10-year median in each Health Authority and provincially.

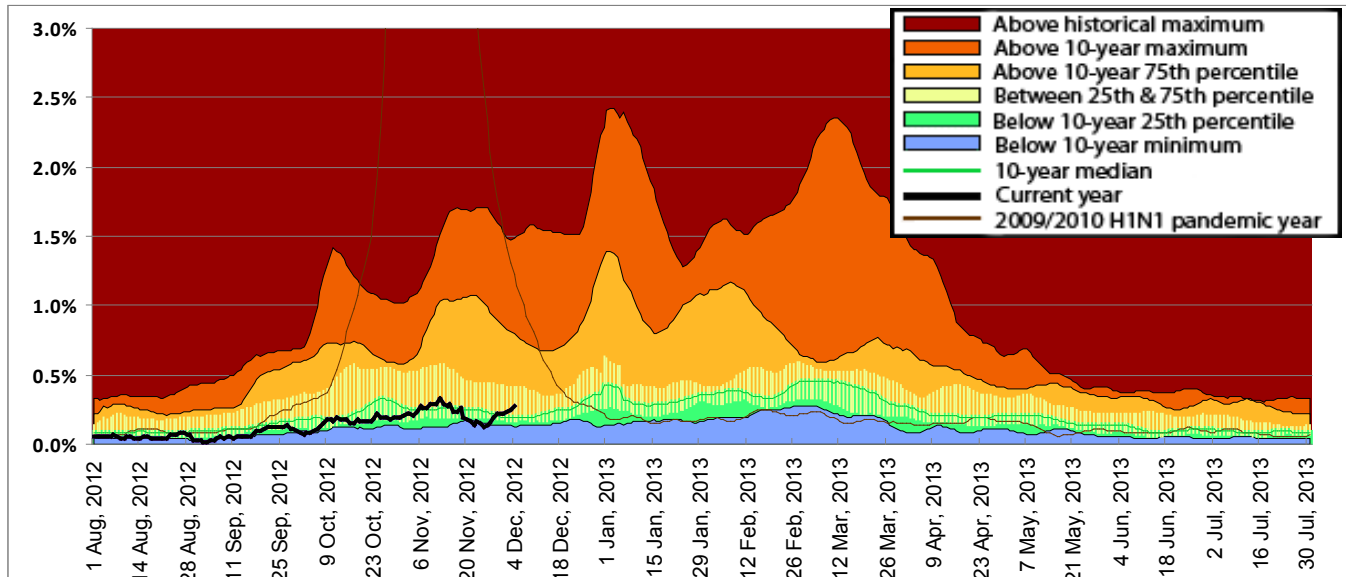
Influenza Illness Claims* British Columbia



* 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 5 December 2012

Northern

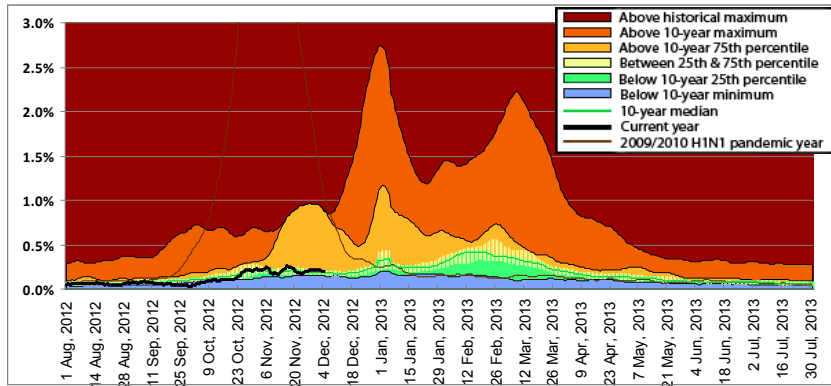


BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

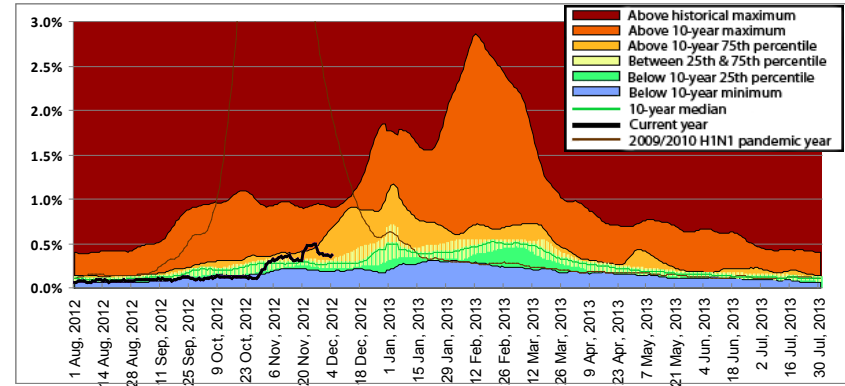
2012-13: Number 5, Week 48

November 25 to December 1, 2012

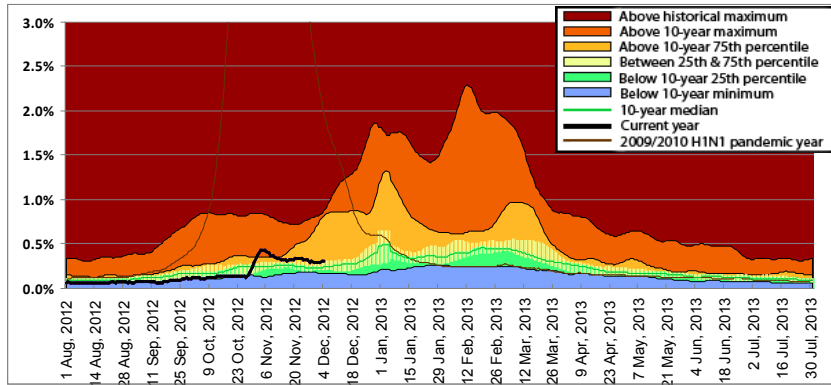
Interior



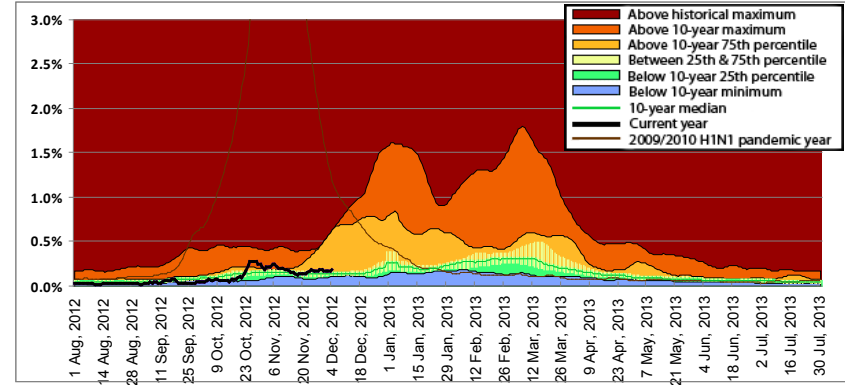
Vancouver Coastal



Fraser



Vancouver Island



BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

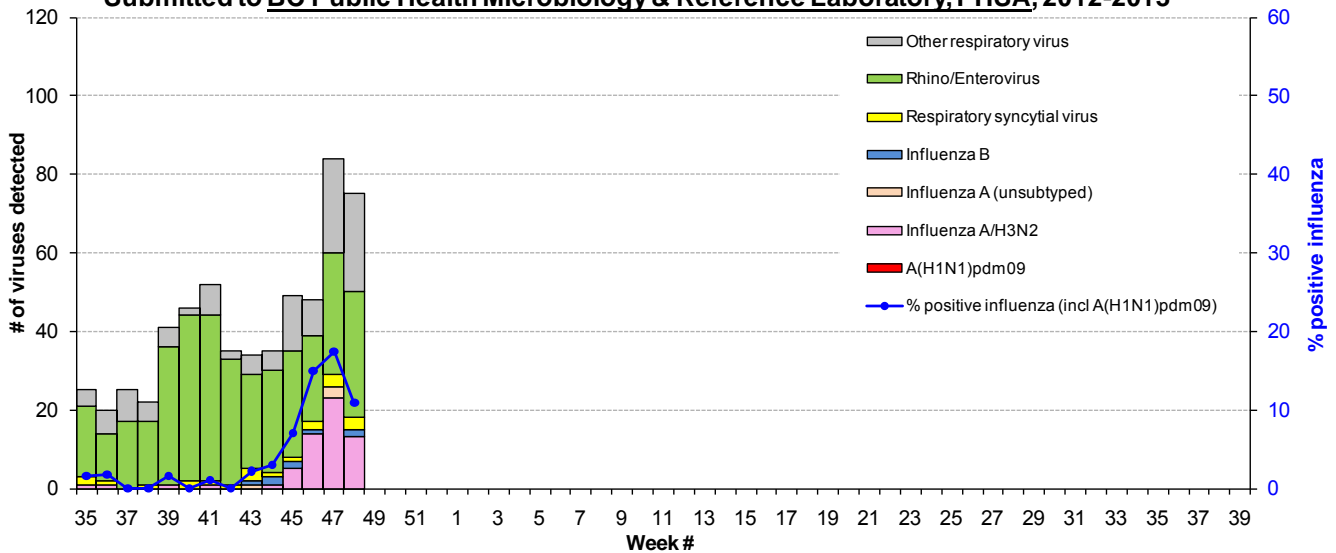
2012-13: Number 5, Week 48

November 25 to December 1, 2012

Laboratory Reports

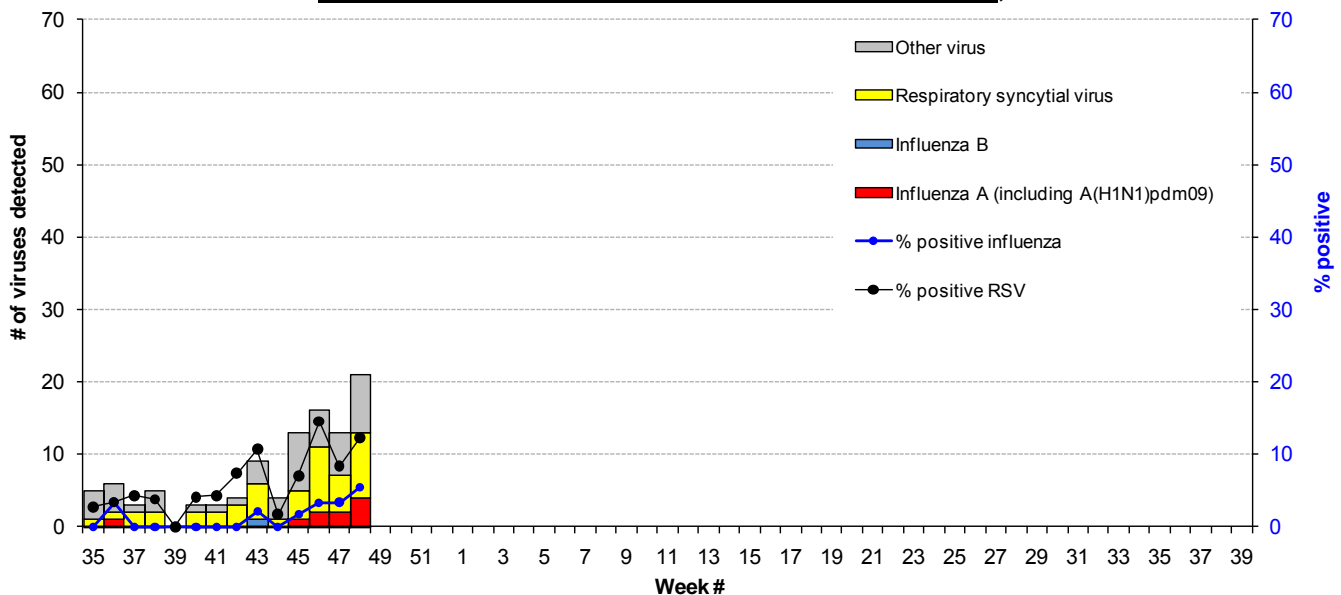
In week 48, one hundred and thirty-eight specimens were tested for influenza viruses at the BC Public Health Microbiology & Reference Laboratory, PHSA, of which 15 (10.9%) were positive for influenza viruses including 13 influenza A/H3N2 from all Health Authorities but Northern (IHA: 1 child \leq 19 years; FHA: 2 adults 20-64 years, 5 elderly 65+; VCHA: 3 adults 20-64 years, 1 elderly 65+; VIHA: 1 adult 20-64 years), and 2 influenza B from 2 adults aged 20-64 years in VCHA. Among other respiratory viruses tested, rhino/enterovirus (32/138, 23.2%) and parainfluenza (13/138, 9.4%) were the most common detections. 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 48, BC Children's and Women's Health Centre Laboratory tested 73 respiratory specimens, of which 4 (5.5%) were positive for influenza A (un-subtyped), an increase over the previous week. RSV (9/73, 12.3%) was 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

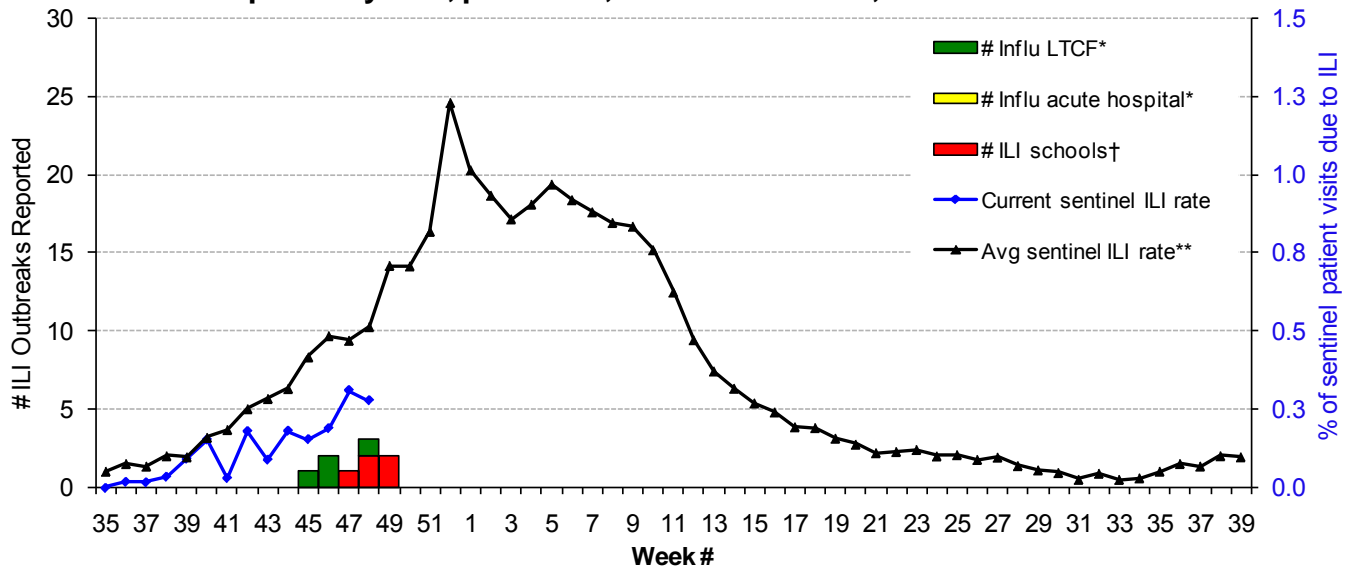
BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

2012-13: Number 5, Week 48
November 25 to December 1, 2012

ILI Outbreaks

Four ILI outbreaks were reported in week 48, including two from long-term care facilities in FHA (one lab-confirmed A/H3N2, the other rhino/enterovirus) and two from schools in IHA (pathogen unknown). So far in the beginning of week 49, two ILI outbreaks have been reported from schools in NHA (one lab-confirmed A/H3N2, the other pathogen unknown). The subtype of the previously-reported FHA LTCF (week 46) was confirmed by lab testing to be A/H3N2.

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

According to the most current report (dated 30 Nov. 2012), an increase in all influenza indicators was observed in Canada during week 47. More regions reported sporadic or localized activity compared to the previous week. A total of 278 laboratory detections of influenza virus were reported, of which 97.8% were for influenza A viruses, predominantly A/H3N2. www.phac-aspc.gc.ca/fluwatch/

National Microbiology Laboratory (NML): Strain Characterization

From September 1 to December 6, 2012, 49 isolates were collected from provincial and hospital labs and characterized at the NML as follows:

- 33 A/Victoria/361/2011-like (H3N2)[†] from PEI, QUE, ONT, MAN, SASK, and BC;
- 6 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 5, Week 48

November 25 to December 1, 2012

NML: Antiviral Resistance

From September 1 to December 6, 2012, drug susceptibility testing was performed at the NML for influenza A/H3N2 (oseltamivir: 28; zanamivir: 27; amantadine: 72), A(H1N1)pdm09 (oseltamivir: 7; zanamivir: 7; amantadine: 6), 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.

INTERNATIONAL

USA: during week 47 (November 18 -24, 2012), influenza activity increased. 812 (15.2%) influenza viruses were detected, including 70.3% influenza A viruses [34.9% A/H3N2, 0.2% A(H1N1)pdm09, and 65.0% un-subtyped A], and 29.7% 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 2.2% which is at the national baseline. www.cdc.gov/flu/weekly **WHO:** no updates have been posted since 23 November 2012.

www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html

Human Swine Influenza:

One human infection with a novel influenza A/H3N2 variant (H3N2v) virus was reported during week 47 from Iowa, USA, the first since 28 September 2012. The infection was detected in a child during routine surveillance. No contact with swine or other livestock in the week preceding illness was reported, but investigation into potential additional sources of infection is ongoing. Between July 2012 and November 28, 2012, a total of 311 infections with variant influenza viruses (307 H3N2v viruses, 3 H1N2v viruses, and 1 H1N1v virus) have been reported from 11 states in the USA. Further details available from:

www.cdc.gov/flu/swineflu/h3n2v-case-count.htm

Avian Influenza:

The WHO has issued no new reports since 10 August 2012.

www.who.int/influenza/human_animal_interface/en/

Novel Coronavirus:

On 30 November 2012, Jordan informed the WHO of two new fatal cases of human infection of novel coronavirus. This brings the total number of laboratory-confirmed cases to nine, including five cases from Saudi Arabia (three fatal), and two cases from Qatar. www.who.int/csr/don/2012_11_30/en/index.html Based on additional information reported since the original surveillance recommendations, the WHO has updated its guidance, available from:

www.who.int/csr/disease/coronavirus_infections/InterimRevisedSurveillanceRecommendations_nCoV_infection_20121128.pdf

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 5, Week 48

November 25 to December 1, 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