

# BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

2011-12: Number 14, Week 14

April 1 to 7, 2012



BC Centre for Disease Control

An agency of the Provincial Health Services Authority

Prepared by BCCDC Influenza &  
Emerging Respiratory Pathogens Team

## Continued low-level influenza activity in BC

### Contents:

#### British Columbia:

Sentinel Physicians	<a href="#">Page 2</a>
Children's Hospital ER	<a href="#">Page 2</a>
Medical Services Plan	<a href="#">Page 3</a>
Laboratory Surveillance	<a href="#">Page 5</a>
ILI Outbreaks	<a href="#">Page 6</a>

#### Canada:

FluWatch Activity levels	<a href="#">Page 6</a>
NML Strain Characterization	<a href="#">Page 6</a>
NML Antiviral Resistance	<a href="#">Page 7</a>

#### International:

[Page 7](#)

#### Other:

List of Acronyms	<a href="#">Page 8</a>
Web Sites	<a href="#">Page 8</a>
Outbreak Report Form	<a href="#">Page 9</a>

### Summary

In week 14 (April 1-7, 2012), most influenza surveillance indicators suggested that influenza activity continues at low levels in BC. Compared to previous weeks, a slight increase was observed in some indicators such as Sentinel ILI and MSP II rates, though it was less remarkable when compared to rates expected for this time of year. In week 14, one lab-confirmed influenza outbreak was reported from a long term care facility in Vancouver Island HA, associated with influenza B. Of ninety-four specimens tested at the BC Public Health Microbiology & Reference Laboratory, PHSA, during this period, twenty-two (23.4%) were positive for influenza, including 7 (7.4%) influenza A/H3N2, 4 (4.3%) influenza A (subtype pending), and 11 (11.7%) influenza B. Other significant respiratory virus detections included rhino/enterovirus (21/94, 22.3%) and respiratory syncytial virus (8/94, 8.5%). Other respiratory viruses were also sporadically detected. RSV continued to dominate among the respiratory viruses detected at BC Children's Hospital.

*Report disseminated April 12, 2012*

Contributors: Lisan Kwindt, Naveed Janjua, Danuta Skowronski

# BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

2011-12: Number 14, Week 14

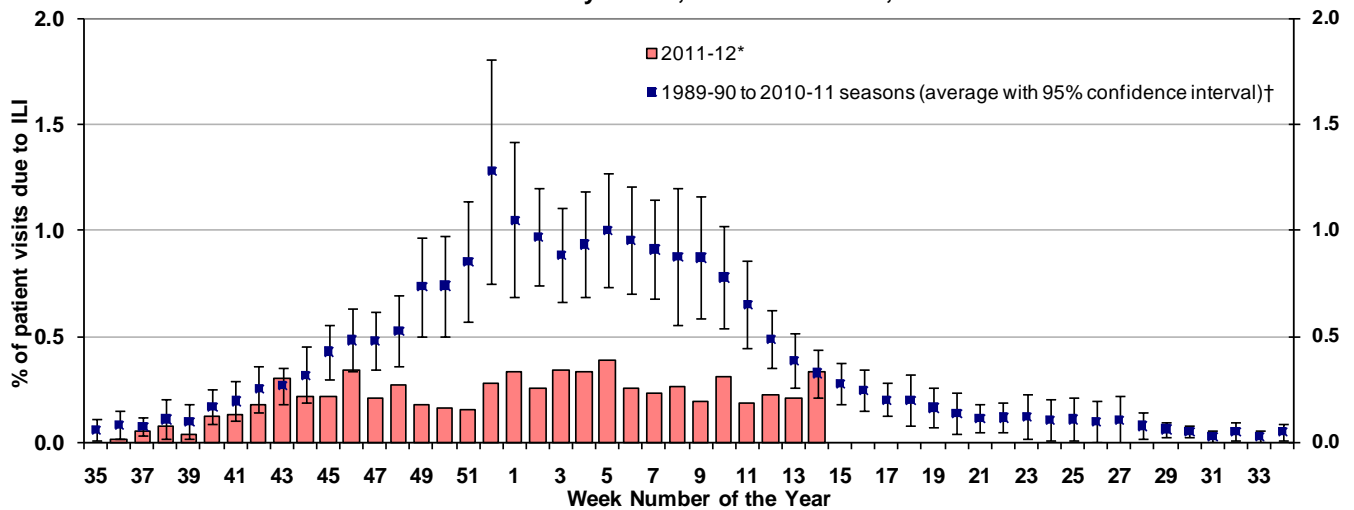
April 1 to 7, 2012

## British Columbia

### Sentinel Physicians

In week 14, the proportion of patients with ILI among those presenting to sentinel physicians increased to 0.34%, within the expected range for this time of year. To date, 43% of sentinel physician sites have reported for week 14.

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, 2011-2012



\* 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

The percentage of BC Children's Hospital ER visits attributed to "fever and cough" or flu-like illness is currently unavailable.

# BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

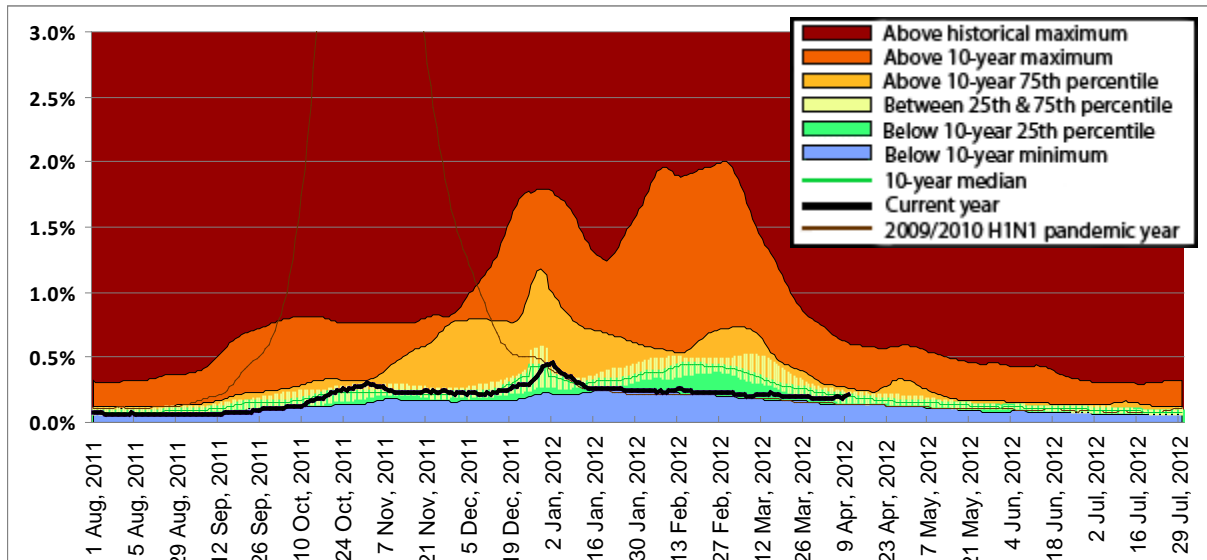
2011-12: Number 14, Week 14

April 1 to 7, 2012

## Medical Services Plan

In week 14, influenza illness as a proportion of all submitted BC Medical Services Plan (MSP) claims increased slightly overall, but remained within expected levels, except in Interior and Vancouver Island Health Authorities where it rose to above the 10-year maximum for this time of year.

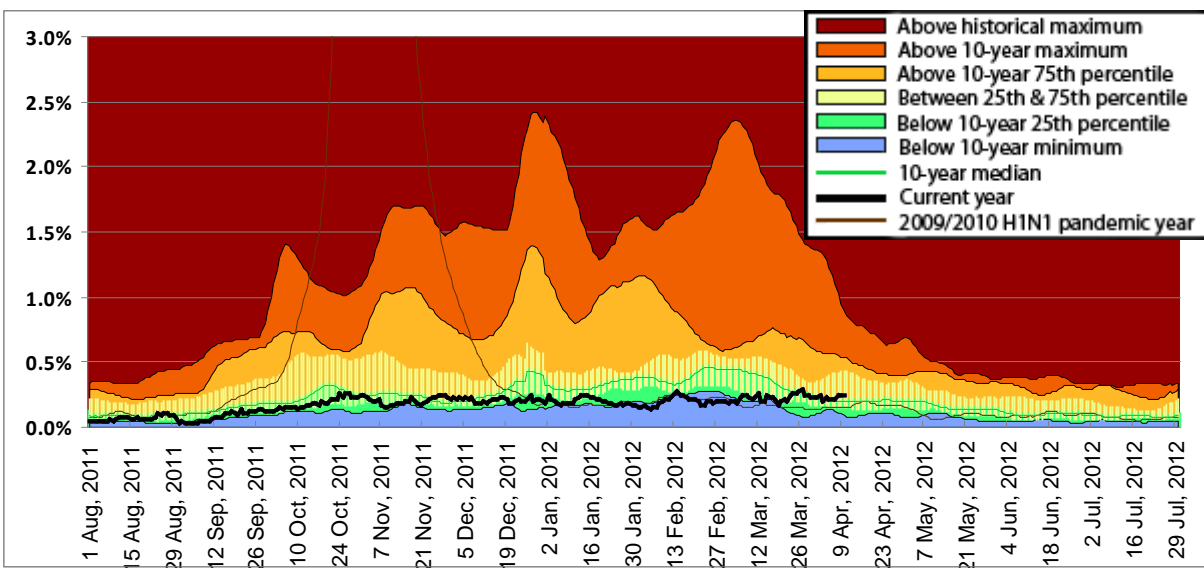
### Influenza Illness Claims\* British Columbia



\* 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

**Note:** MSP week beginning 28 August 2011 corresponds to sentinel ILI week 35; Data current to 10 April 2012

### Northern

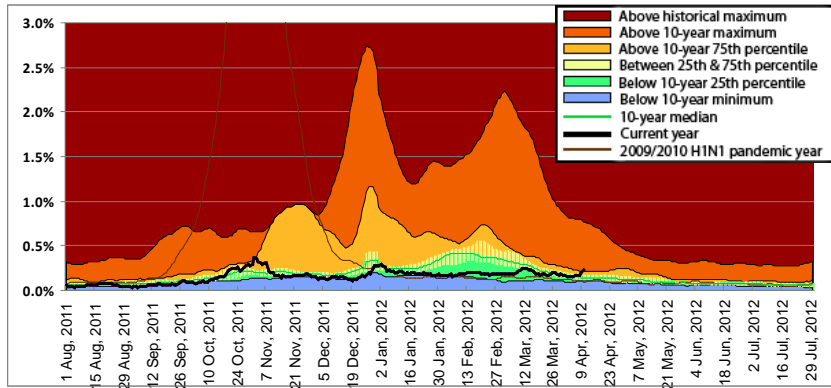


# BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

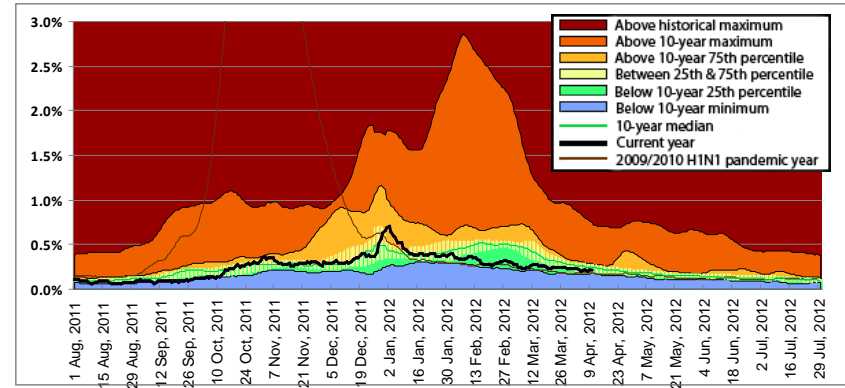
2011-12: Number 14, Week 14

April 1 to 7, 2012

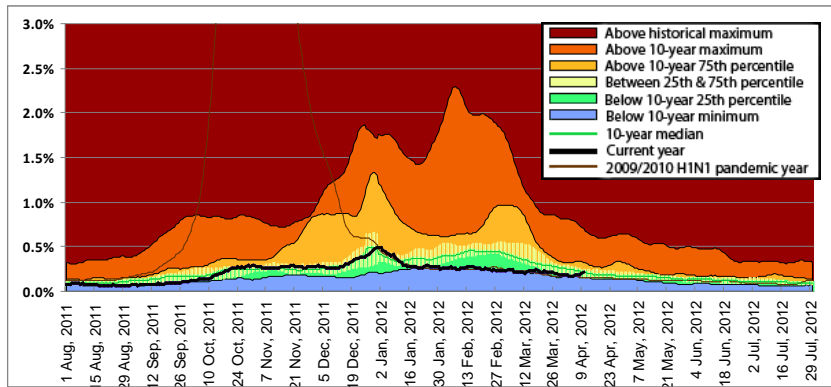
**Interior**



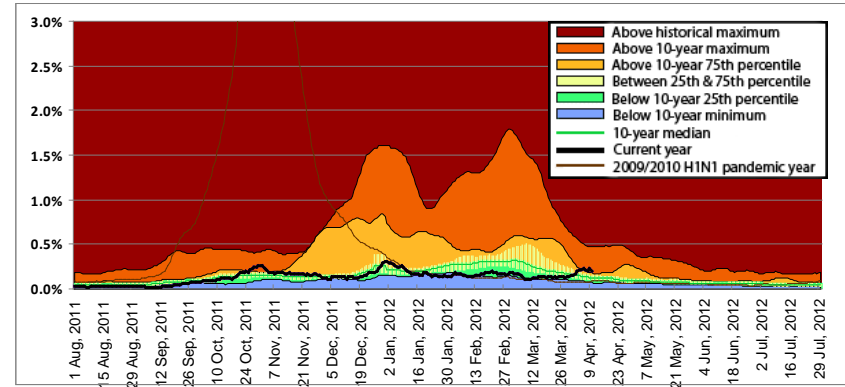
**Vancouver Coastal**



**Fraser**



**Vancouver Island**



# BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

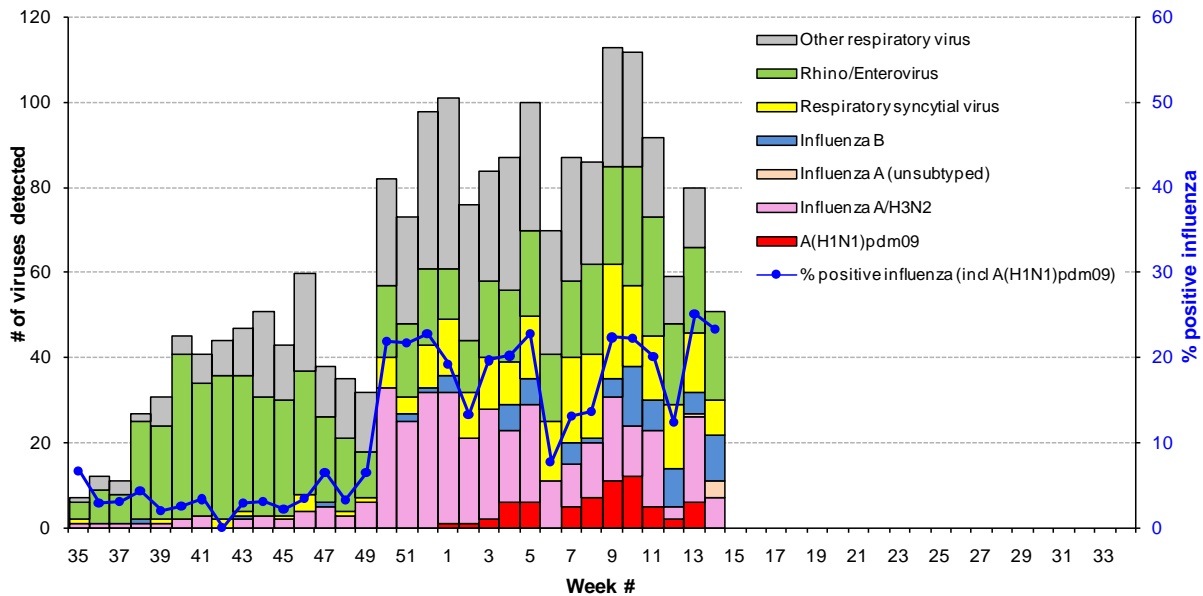
2011-12: Number 14, Week 14

April 1 to 7, 2012

## Laboratory Reports

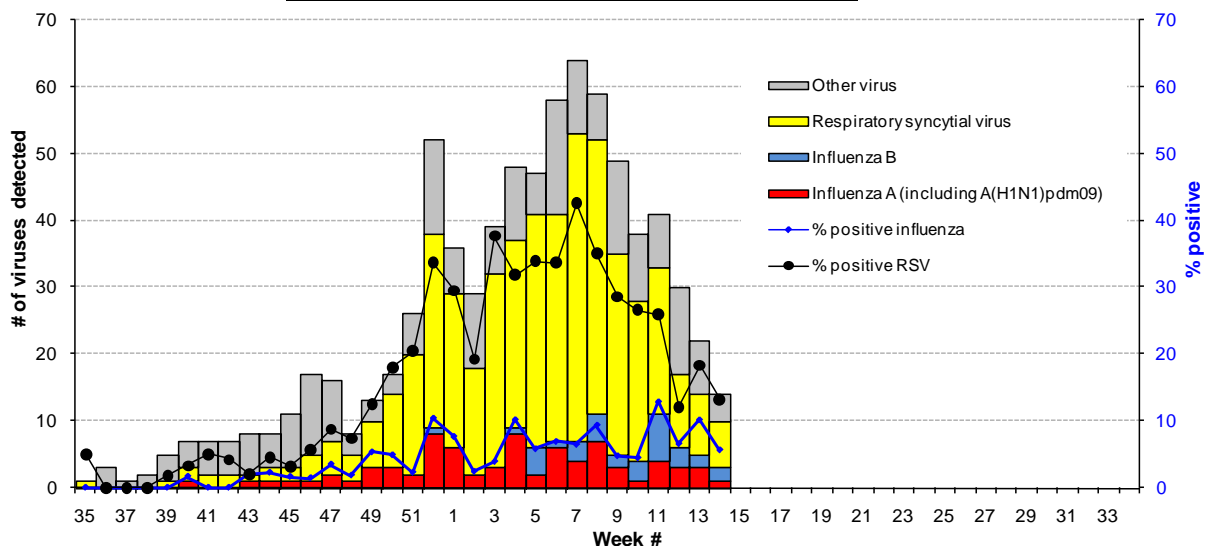
In week 14, ninety-four specimens were tested for influenza viruses at the BC Public Health Microbiology & Reference Laboratory, PHSA. Among them, twenty-two (23.4%) were positive for influenza viruses, slightly lower than the previous week, including 7 (7.4%) influenza A/H3N2 from VIHA (4), VCHA (2), and IHA (1); 4 (4.3%) influenza A (subtype pending); and 11 (11.7%) influenza B from VIHA (6), VCHA (4), and FHA (1). Of 94 specimens tested for other respiratory viruses, significant detections included rhino/enterovirus (21/94, 22.3%) and respiratory syncytial virus (8/94, 8.5%). Other respiratory viruses were also sporadically detected.

**Influenza and Other Virus Detections Among Respiratory Specimens Submitted to BC Public Health Microbiology & Reference Laboratory, PHSA, 2011-2012**



In week 14, BC Children's and Women's Health Centre Laboratory tested 53 respiratory specimens: 3 (5.7%) were positive for influenza virus, lower than the preceding week, including 1 influenza A and 2 influenza B. RSV continued to predominate among the other respiratory viruses detected (7/53, 13.2%). Other respiratory viruses were also detected at low levels.

**Influenza and Other Virus Detections Among Respiratory Specimens Submitted to BC Children's and Women's Health Centre Laboratory, 2011-2012**



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

# BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

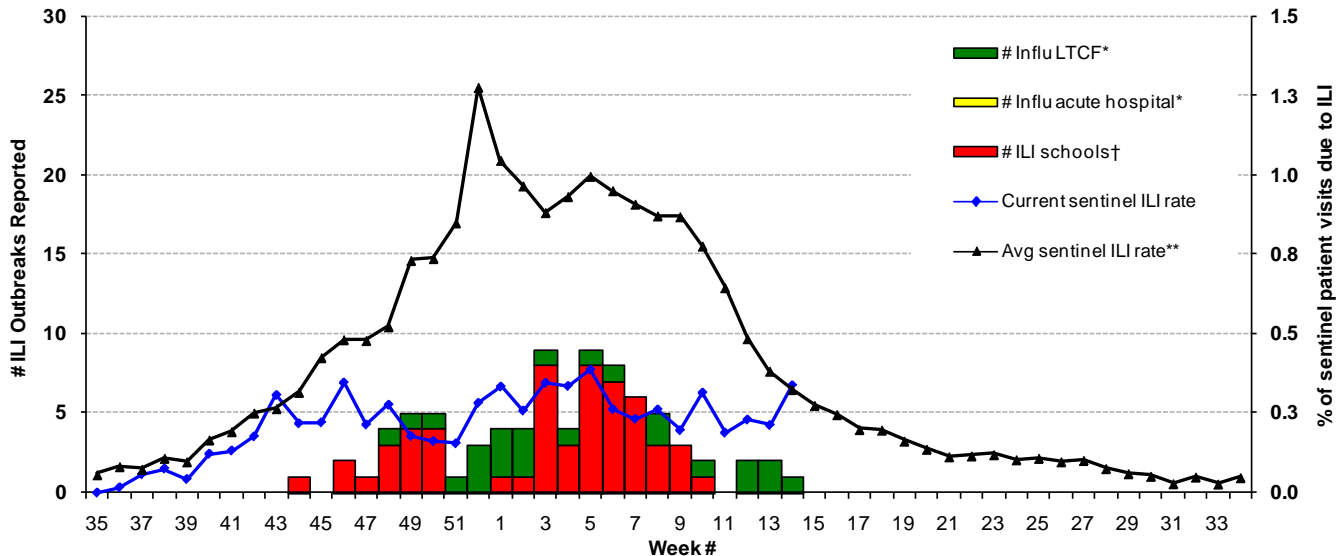
2011-12: Number 14, Week 14

April 1 to 7, 2012

## ILI Outbreaks

In week 14, one lab-confirmed influenza B outbreak was reported from a long-term care facility in Vancouver Island Health Authority.

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, 2011-2012 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

In week 13 (March 25 to 31, 2012), influenza activity in Canada started to decline compared to the previous weeks; however, activity remained elevated in some parts of the country (the Atlantic Region, Ontario, and Alberta). In total 998 laboratory detections of influenza were reported in week 13: 14.4% A/H3N2, 8.3% A(H1N1)pdm09, 20.5% untyped influenza A, and 56.7% influenza B. The ILI consultation rate in week 13 declined compared to the previous week but remained within the expected levels for this time of year. PHAC further reported 126 laboratory-confirmed influenza-associated hospitalizations including 43 paediatric (67% were due to influenza B, and 33% due to influenza A) and 83 adults (39% were due to influenza B, and 61% due to influenza A). [www.phac-aspc.gc.ca/fluwatch/](http://www.phac-aspc.gc.ca/fluwatch/)

### National Microbiology Laboratory (NML): Strain Characterization

Between September 1, 2011 and April 4, 2012, 820 isolates were collected from provincial and hospital labs and characterized at the NML as follows:

166 A/Perth/16/2009-like (H3N2)<sup>‡</sup> from QUE, ONT, MAN, SASK, ALTA, BC, and NT;

143 A/California/07/09-like (H1N1)<sup>\*</sup> from NB, QUE, ONT, SASK, ALTA, and BC;

267 B/Brisbane/60/2008-like (B/Victoria/02/87 lineage)<sup>†</sup> from NFLD, NS, NB, QUE, ONT, MAN, SASK, ALTA, and BC;

244 B/Wisconsin/01/2010-like (recent B Yamagata lineage) from NS, NB, QUE, ONT, MAN, ALTA, BC, and NU;

<sup>‡</sup> indicates a strain match to the recommended H3N2 component of the 2011-12 northern hemisphere influenza vaccine

<sup>\*</sup> indicates a strain match to the recommended H1N1 component for the 2011-2012 northern hemisphere influenza vaccine

<sup>†</sup> indicates a strain match to the recommended influenza B component for the 2011-2012 influenza vaccine

# BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

2011-12: Number 14, Week 14

April 1 to 7, 2012

## **NML: Antiviral Resistance**

From September 1, 2011 to April 5, 2012, drug susceptibility testing was performed at the NML for influenza A/H3N2 (oseltamivir 155; zanamivir: 155; amantadine: 255), influenza A(H1N1)pdm09 (oseltamivir: 145; zanamivir: 145; amantadine: 192), and influenza B isolates (oseltamivir: 431; zanamivir: 431). The results indicated that all isolates were sensitive to oseltamivir and zanamivir, while all influenza A/H3N2 isolates but one, and all A(H1N1)pdm09 isolates, were resistant to amantadine.

## **INTERNATIONAL**

**USA:** In week 13, ending 31 March 2012, influenza activity in the United States was elevated in some areas, but declined nationally and in most regions. Nine hundred thirty-two (20.5%) specimens tested were positive for influenza, including 800 influenza A [377 A/H3N2, 182 A(H1N1)pdm09, and 241 un-subtyped A] and 132 influenza B. The proportion of outpatient visits for ILI was 1.7% which was below the national baseline of 2.4%. The proportion of all deaths due to pneumonia and influenza illness was 7.2%, below the epidemic threshold of 7.8% for this time of the year. One influenza-associated paediatric death was reported to CDC during week 13, associated with an influenza A virus for which the subtype was not determined. [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/).

### **Swine Influenza:**

Today, 12 April 2012, US CDC reported the first human infection with an influenza A/H3N2 variant (H3N2v) virus in 2012 detected from a child in late March in Utah, USA. The case received treatment with antiviral medication and recovered at home. This child was reported to have had contact with swine; public health investigation is being conducted. Like most (13/21, or 62%) of the H3N2v viruses detected in the USA since July 2009, this virus was found to contain the M gene from the 2009 A(H1N1)pdm09 virus. [www.cdc.gov/flu/spotlights/h3n2v-variant-utah.htm](http://www.cdc.gov/flu/spotlights/h3n2v-variant-utah.htm)

**WHO news:** (last updated on 30 March 2012). In the temperate regions of the northern hemisphere, this influenza season started late, but seemed to be reaching the peak or was decreasing in most countries. Severe acute respiratory infections were mainly observed in the age group above 65 years. The most commonly detected virus type or subtype throughout most of the temperate areas of the northern hemisphere temperate zone was influenza A/H3N2, although the proportion of influenza B detection was increasing. In Mexico, influenza A(H1N1)pdm09 was the predominant subtype circulating, while China and the surrounding countries were still reporting a predominance of influenza type B virus. Increasing genetic and antigenic diversity was noted in H3N2 viruses in the later part of the influenza season. No significant change in antiviral resistance has been reported so far this season.

[www.who.int/influenza/surveillance\\_monitoring/updates/latest\\_update\\_GIP\\_surveillance/en/index.html](http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html)

### **Avian Influenza:**

One new confirmed case of human infection with avian influenza A/H5N1 was reported by WHO on 5 April 2012. According to the Cambodian Ministry of Health, a child developed symptoms on 22 March 2012, was admitted to hospital on 28 March and died two days later. The case was reported to have had contact with sick or dead poultry. To date, 24 confirmed human cases of avian influenza have been reported to WHO in 2012, of which 15 (62.5%) have been fatal.

[www.who.int/influenza/human\\_animal\\_interface/avian\\_influenza/en/](http://www.who.int/influenza/human_animal_interface/avian_influenza/en/)

### **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](http://www.who.int/influenza/vaccines/virus/recommendations/2012_13_north/en/index.html)

# BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

2011-12: Number 14, Week 14

April 1 to 7, 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/](http://www.phac-aspc.gc.ca/fluwatch/)

Washington State Flu Updates: [www.doh.wa.gov/FLUNews/](http://www.doh.wa.gov/FLUNews/)

USA Weekly Surveillance reports: [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/)

European Influenza Surveillance Scheme: [www.ecdc.europa.eu](http://www.ecdc.europa.eu)

WHO – Global Influenza Programme: [www.who.int/csr/disease/influenza/mission/](http://www.who.int/csr/disease/influenza/mission/)

WHO – Weekly Epidemiological Record: [www.who.int/wer/en/](http://www.who.int/wer/en/)

Influenza Centre (Australia): [www.influenzacentre.org/](http://www.influenzacentre.org/)

Australian Influenza Report: [www.health.gov.au/internet/main/publishing.nsf/content/cda-surveil-ozflu-flucurr.htm](http://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](http://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/](http://www.who.int/csr/disease/avian_influenza/en/)

World Organization for Animal Health: [www.oie.int/eng/en\\_index.htm](http://www.oie.int/eng/en_index.htm)

#### 3. This Report On-line: [www.bccdc.ca/dis-cond/DiseaseStatsReports/influSurveillanceReports.htm](http://www.bccdc.ca/dis-cond/DiseaseStatsReports/influSurveillanceReports.htm)



# Influenza-Like Illness (ILI) Outbreak Summary Report Form

Please complete and email to [ilioutbreak@bccdc.ca](mailto: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.

<b>A</b>	<b>Reporting Information</b>	Health unit/medical health officer notified? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Person Reporting: _____	Title: _____
	Contact Phone: _____	Email: _____
	Health Authority: _____	HSDA: _____
	Full Facility Name: _____	
	Is this report:	<input type="checkbox"/> First Notification ( <i>complete section B below; Section D if available</i> ) <input type="checkbox"/> Update ( <i>complete section C below; Section D if available</i> ) <input type="checkbox"/> Outbreak Over ( <i>complete section C below; Section D if available</i> )

<b>B</b>	<b>First Notification</b>
	Type of facility: <input type="checkbox"/> LTCF <input type="checkbox"/> Acute Care Hospital <input type="checkbox"/> Senior's Residence (if ward or wing, please specify name/number: _____)
	<input type="checkbox"/> Workplace <input type="checkbox"/> School (grades: _____) <input type="checkbox"/> Other (_____)
	Date of onset of first case of ILI (dd/mm/yyyy): <u>DD</u> / <u>MMM</u> / <u>YYYY</u>

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

<b>C</b>	<b>Update AND Outbreak Declared Over</b>
	Date of onset for most recent case of ILI (dd/mm/yyyy): <u>DD</u> / <u>MMM</u> / <u>YYYY</u>
	If over, date outbreak declared over (dd/mm/yyyy): <u>DD</u> / <u>MMM</u> / <u>YYYY</u>

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

<b>D</b>	<b>Laboratory Information</b>
	Specimen(s) submitted? <input type="checkbox"/> Yes (location: _____) <input type="checkbox"/> No <input type="checkbox"/> Don't know If yes, organism identified? <input type="checkbox"/> Yes (specify: _____) <input type="checkbox"/> No <input type="checkbox"/> Don't know