BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

2011-12: Number 2, Weeks 44-45

October 30 to November 12, 2011

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

Prepared by BCCDC Influenza & Emerging Respiratory Pathogens Team

Influenza activity in BC remains low; sporadic detection of A/H3N2

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Summary

During weeks 44-45 (October 30 – November 12, 2011), influenza activity remained low. The influenza-like illness (ILI) rate was 0.34% and within the expected range for this time of year. The MSP influenza illness proportion was below the 10 year median at the provincial and most Health Authority (HA) levels. No lab-confirmed influenza outbreaks were reported. Among 187 specimens tested, 5 (2.7%) submitted specimens were positive for influenza A(H3N2). Rhino/enteroviruses continued to be the predominant viruses detected (55/187; 29%). Other respiratory viruses were also sporadically detected.

Report disseminated November 17, 2011

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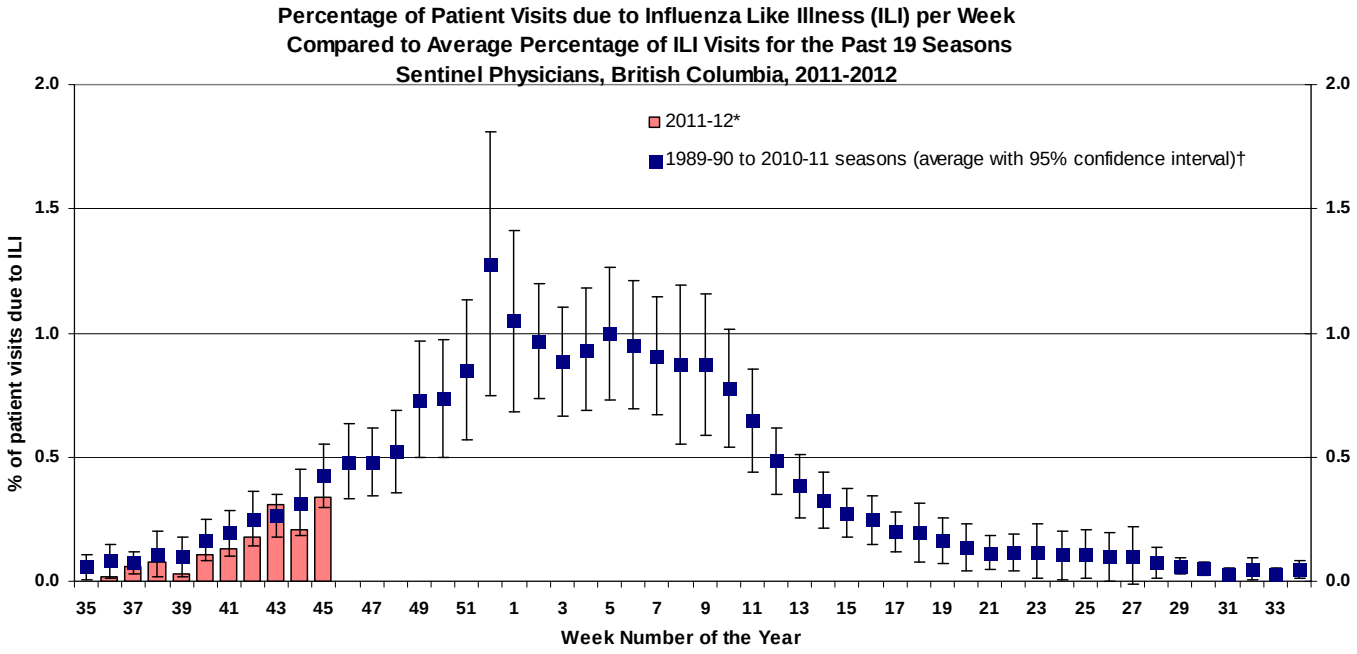
British Columbia

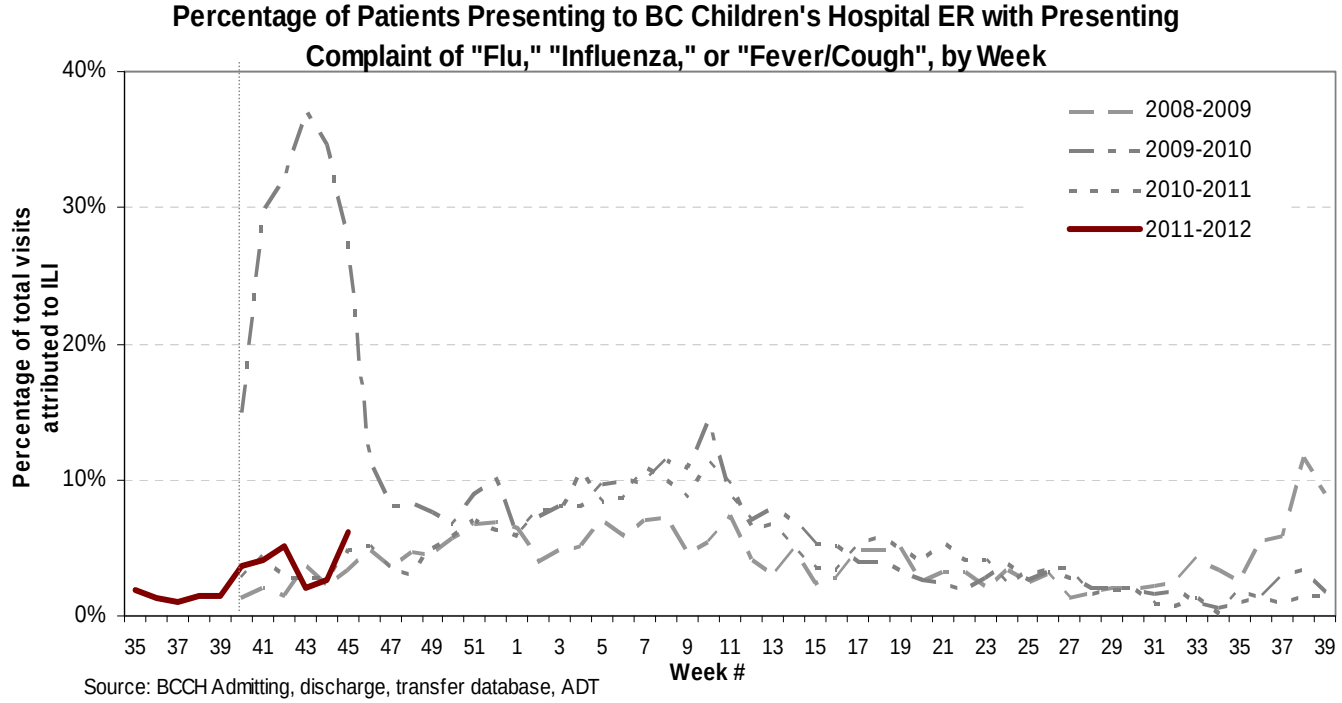
Sentinel Physicians

In weeks 44-45, the proportion of patients with ILI among those presenting to sentinel physicians was 0.34% which is within the expected range for this time of year. The proportion of sentinel physician sites reporting to-date for week 44 and week 45 was 71% and 51%, respectively.



BC Children's Hospital Emergency Room

The percentage of BC Children's Hospital ER visits attributed to "fever and cough" or flu-like illness increased from 2.1% in week 43 and 2.7% in week 44 to 6.2% in week 45, slightly higher than this time last year.



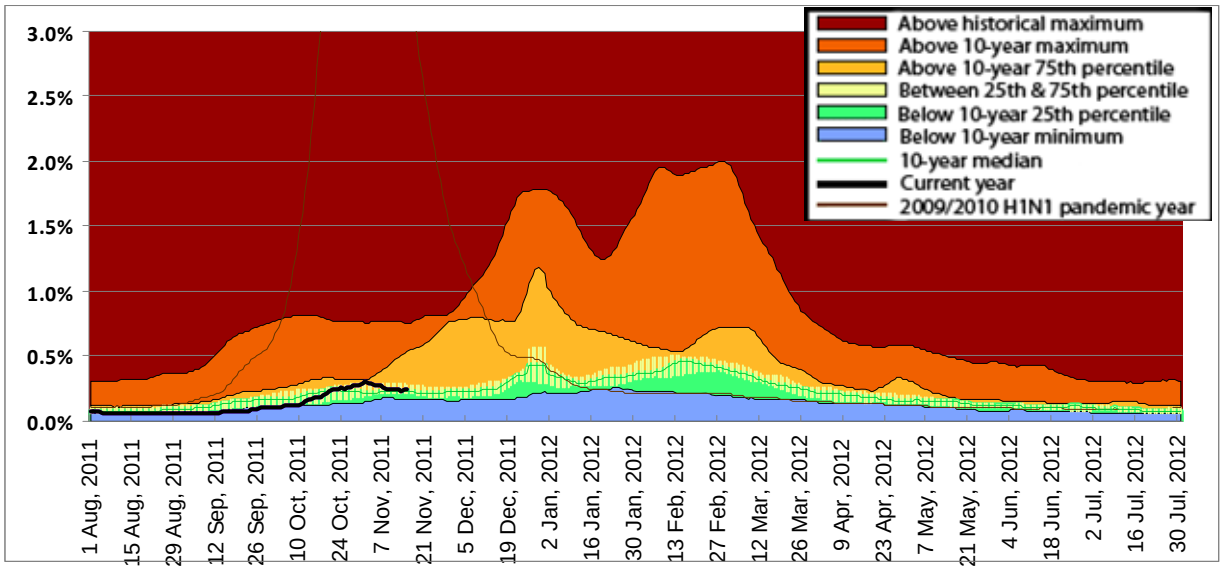
Source: BCCH Admitting, discharge, transfer database, ADT

Data provided by Decision Support Services at Children's & Women's Health Centre of BC

Medical Services Plan

During weeks 44-45, influenza illness as a proportion of all submitted BC Medical Services Plan (MSP) claims remained below the 10-year median for this time of year at the provincial level and in most HAs but slightly above the 10-year median in Fraser and Vancouver Island HAs.

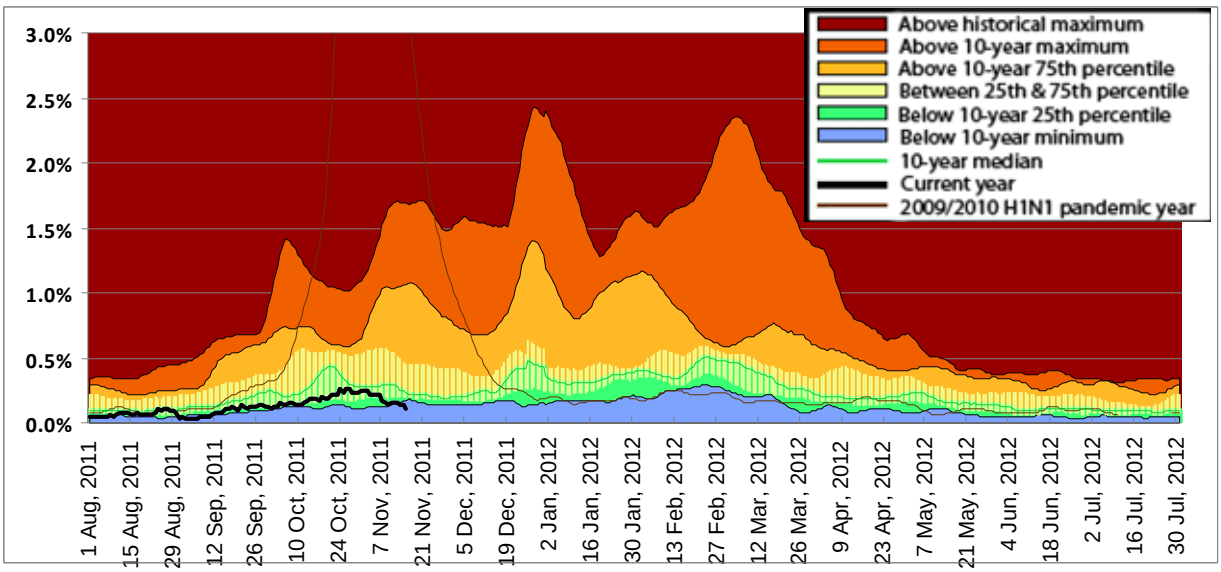
Influenza Illness Claims* British Columbia



* 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 29 August 2010 corresponds to sentinel ILI week 35
Data current to 14 November 2011

Northern



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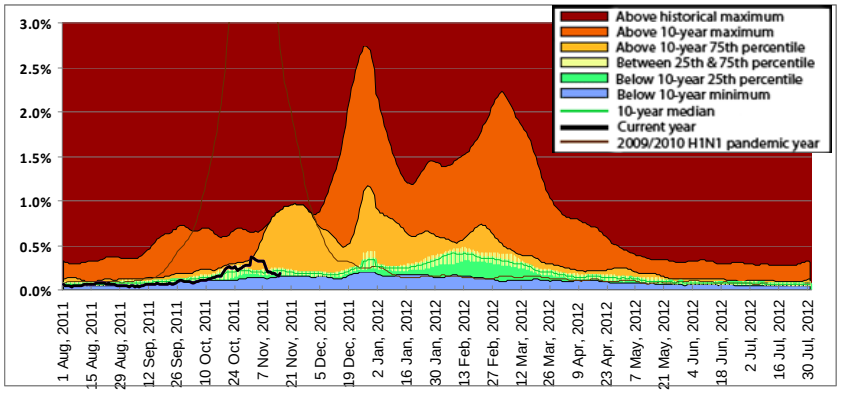
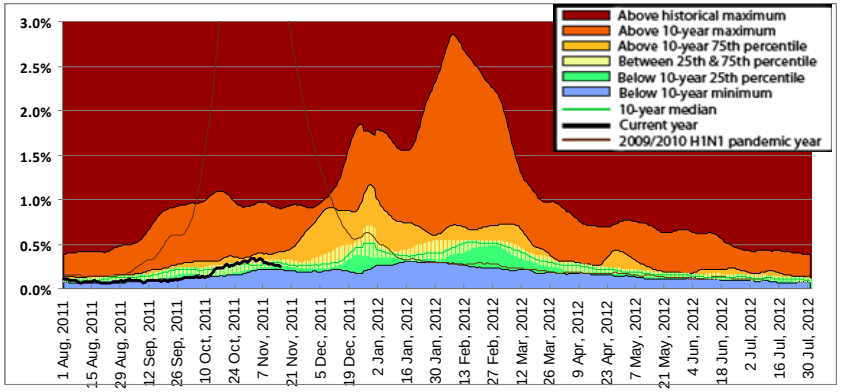
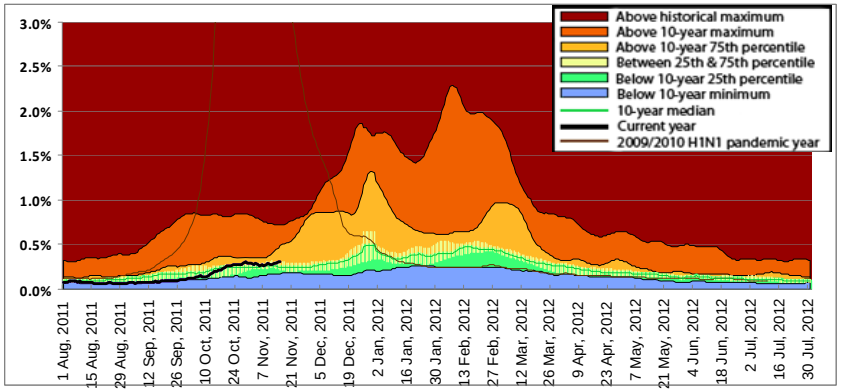
Interior



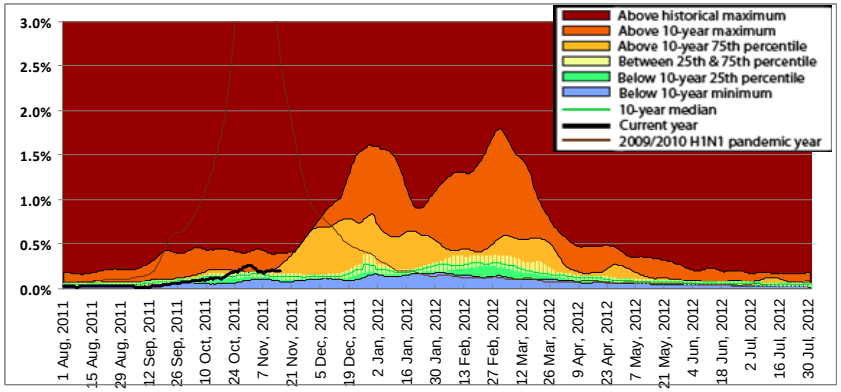
Vancouver Coastal



Fraser

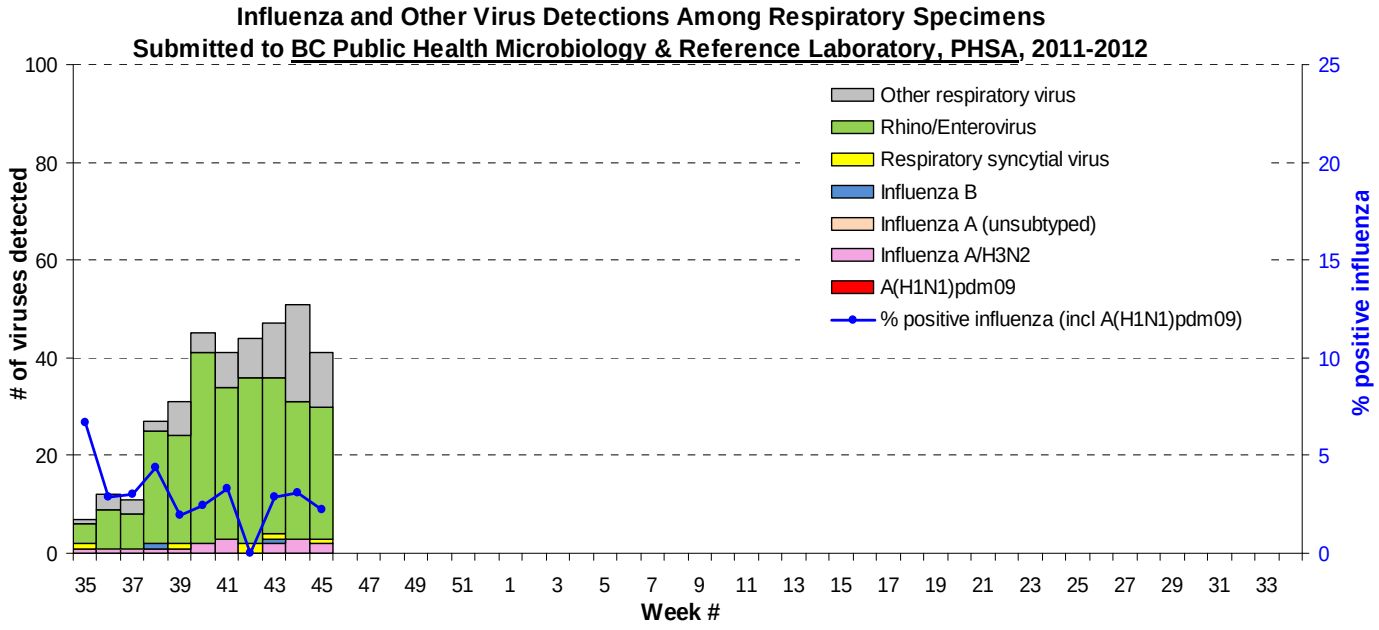


Vancouver Island

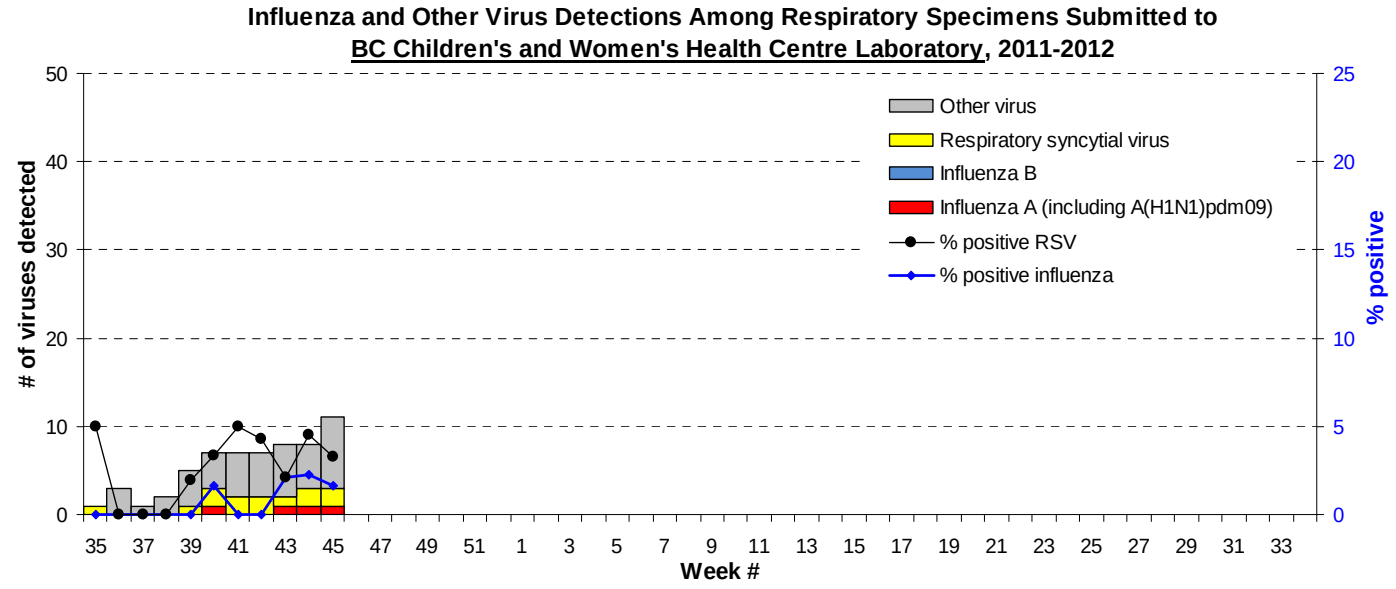


Laboratory Reports

During weeks 44-45, one hundred and eighty-seven respiratory specimens were tested at the BC Public Health Microbiology & Reference Laboratory, PHSA. Influenza was detected in 5 (2.7%) submitted specimens: three A(H3N2) from Fraser HA and two A(H3N2) from Vancouver Coastal HA, which brought the total accumulated influenza positive cases since September 1, 2011 to seventeen, including 15 A(H3/N2) (3 under 20 years of age and 12 over 20 years old) and 2 influenza B. During weeks 44-45, of 187 specimens tested for other respiratory viruses, 55 (29%) were positive for rhino/enteroviruses, and 19 (10%) were positive for parainfluenza viruses. Other respiratory viruses were also sporadically detected.



During weeks 44-45, BC Children's and Women's Health Centre Laboratory tested 105 respiratory specimens. Two influenza A viruses were detected. Twelve specimens (11.4%) were positive for parainfluenza viruses. RSV and adenovirus were also detected at low levels.

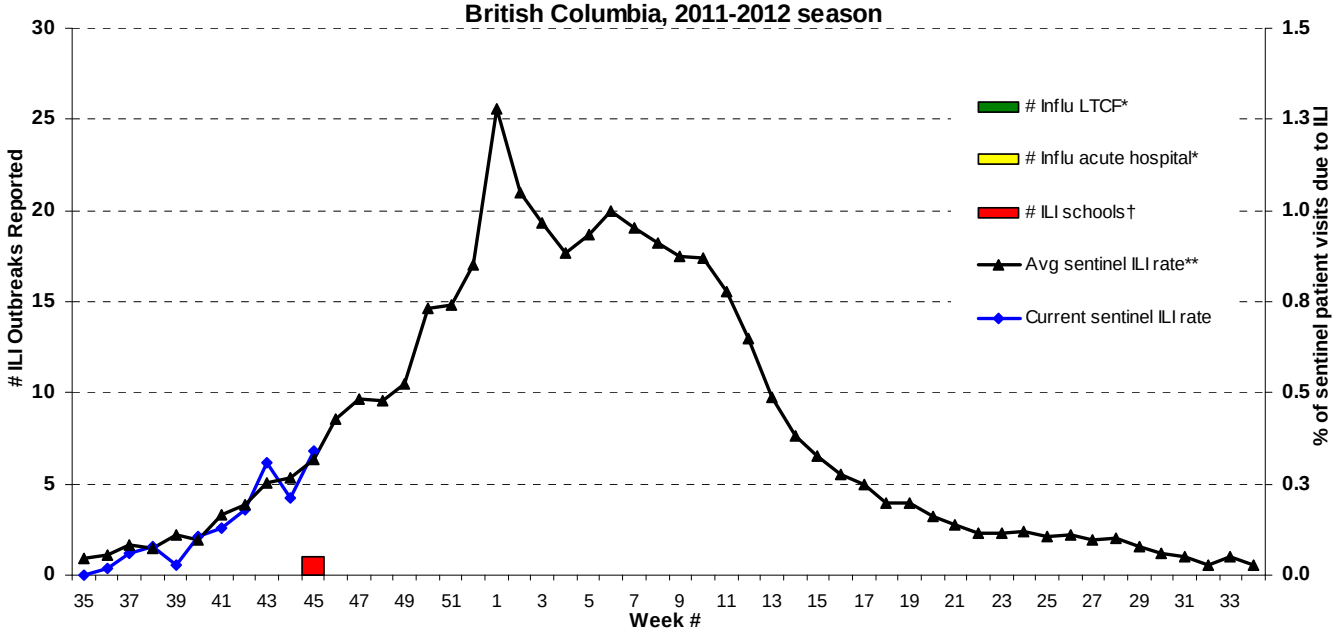


Data provided by Virology Department at Children's & Women's Health Centre of BC

ILI Outbreaks

During weeks 44-45, one ILI outbreak report was received from a school in Interior HA.

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.

CANADA

FluWatch

In week 44 (ending November 5, 2011), influenza activity increased slightly in AB, BC and QC and remained low in the rest of the country. Detection of influenza A(H3N2) and influenza B viruses continued. The ILI consultation rate was within the expected levels for this time of year. The first laboratory-confirmed influenza (A/H3N2) outbreak of the season was reported in a long-term care facility in Alberta. Rhinovirus and parainfluenza viruses continued to predominate among other respiratory viruses detected. (www.phac-aspc.gc.ca/fluwatch/).

National Microbiology Laboratory (NML): Strain Characterization

Between September 1 and November 17, 2011, six influenza isolates were collected from provincial and hospital labs and characterized at the NML as follows:

4 A/Perth/16/2009 (H3N2)-like[¶] from BC;
2 B/Wisconsin/01/2010-like (recent B Yamagata lineage) from BC;
1 B/Brisbane/60/2008-like (B/Victoria/02/87 lineage)* from Alberta

[¶] indicates a strain match to the recommended H3N2 component of the 2011-12 northern hemisphere influenza vaccine
* indicates a strain match to the recommended influenza B component for the 2011-2012 northern hemisphere influenza vaccine

NML: Antiviral Resistance

From September 1 to November 17, 2011, drug susceptibility testing at the NML was performed for three Influenza A(H3N2) isolates and three influenza B isolates. The result indicated that the A(H3N2) and influenza B isolates were sensitive to Oseltamivir and Zanamivir. Five A(H3N2) isolates were also tested for susceptibility to Amantadine and all were found to be resistant.

INTERNATIONAL

Northern Hemisphere: In week 44 ending November 5, 2011, influenza activity remained low in the United States www.cdc.gov/flu/weekly/. Few specimens (0.6%) tested were positive for influenza; and the predominant virus was A (subtyping was not performed). The proportion of outpatient visits for ILI was 1.3% and was below the national baseline of 2.4%. **Other Areas**: Influenza activity in the temperate regions of the northern hemisphere remained low or undetectable. Low level influenza activity was reported in the tropical zone in a few countries of the Americas, central Africa, and Southern and Southeast Asia. Transmission in South Africa and South America remains low. Influenza activity continued to decrease in the temperate zone of the southern hemisphere. In Australia and New Zealand, the pattern of influenza activity suggested their season is over, although there were regional variations in timing and subtypes were irregularly distributed.
www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html

Avian Influenza: On 15 November 2011, the Ministry of Health of Indonesia announced one new confirmed case of human infection with avian influenza A(H5N1) virus. The fatal case was the 29-year old mother of the 2 cases reported earlier. The accumulated deaths in 2011 have reached 29 (54%) out of the total of 54 cases reported.

WHO Recommendations for 2011-12 Northern Hemisphere Influenza Vaccine

On February 17, 2011 the WHO announced the recommended strain components for the 2011-12 northern hemisphere trivalent influenza vaccine (TIV):

A/California/7/2009 (H1N1)-like virus
A/Perth/16/2009 (H3N2)-like virus
B/Brisbane/60/2008 (Victoria lineage)-like virus

All three recommended components are the same as for northern hemisphere seasonal TIV vaccines produced and administered in 2010-11. For further details, see:
http://www.who.int/influenza/vaccines/virus/2011_12north/en/index.html

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: http://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: 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

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

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