

BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

2010-11: Number 23, Weeks 35-39

August 28th to October 1st, 2011



BC Centre for Disease Control

An agency of the Provincial Health Services Authority

Prepared by BCCDC Influenza &
Emerging Respiratory Pathogens Team

Sporadic Detections of Influenza in BC

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Summary

During weeks 35-39 (August 28th – October 1st, 2011), all influenza surveillance indicators suggest low level influenza activity in BC. The sentinel physician ILI rate was low and within the expected range for this time of year. MSP influenza visits were also stable at low levels. No ILI outbreaks were reported. Influenza was detected in a small proportion of submitted specimens (4 out of 189, or 2.1%), including three A/H3N2 from Vancouver Coastal and Vancouver Island Health Authorities and one influenza B from Vancouver Island. Of 189 specimens tested for other respiratory viruses, 63 (33.3%) were positive for rhino/enterovirus, and 10 (5.3%) for human metapneumovirus. Other respiratory viruses were also sporadically detected.

Report disseminated October 07, 2011

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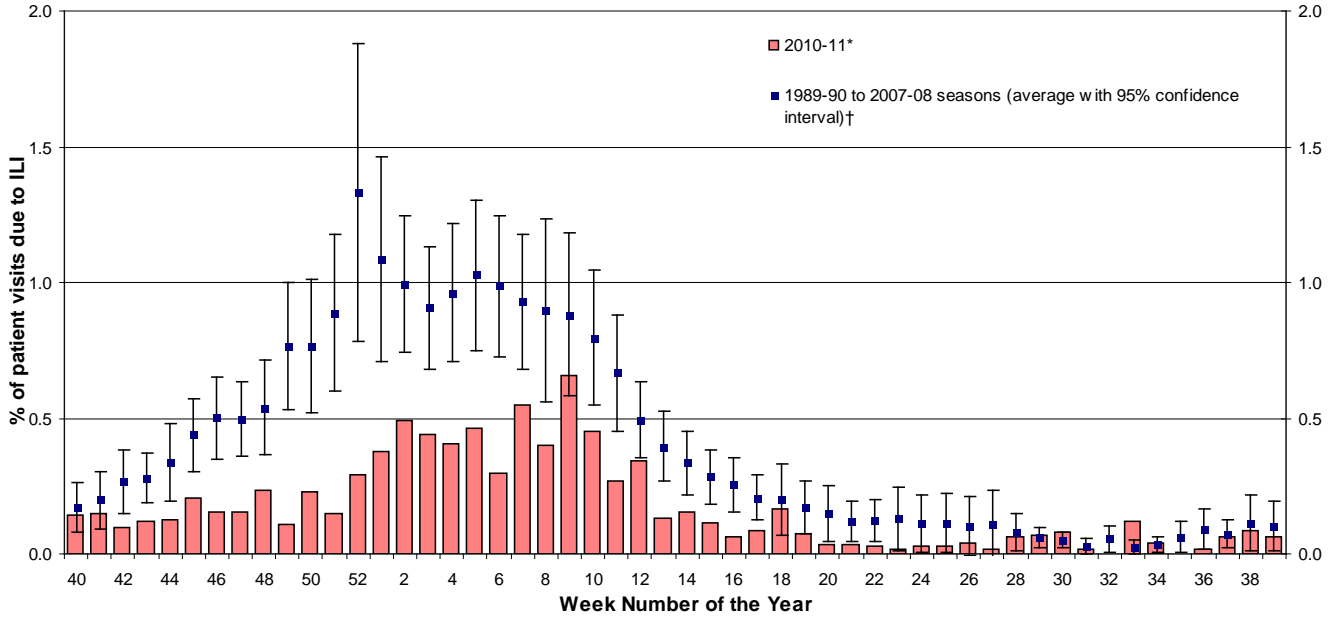
August 28th to October 1st, 2011

British Columbia

Sentinel Physicians

During weeks 35-39, the proportion of patients with ILI among those presenting to sentinel physicians was low, ranging from 0% to 0.09% and within the expected range for this time of year. The proportion of sentinel physician sites reporting to-date for weeks 35-39 ranged from 81% (week 36) to 54% (week 39).

Percentage of Patient Visits due to Influenza Like Illness (ILI) per Week Compared to Average Percentage of ILI Visits for the Past 19 Seasons Sentinel Physicians, British Columbia, 2010-2011

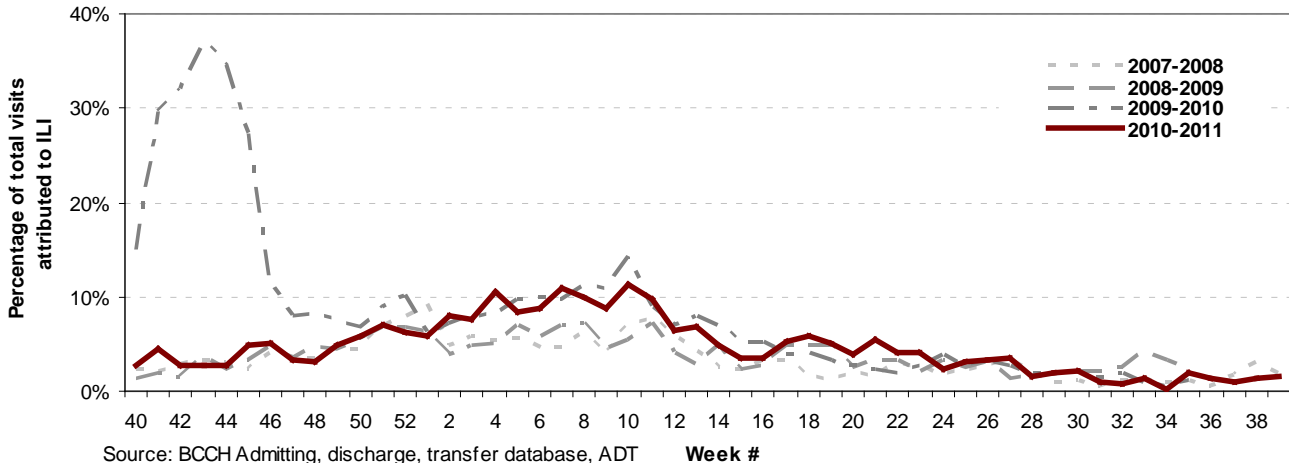


*Data subject to change as reporting becomes increasingly complete
 †Historical values exclude 2008-09/2009-10 seasons due to atypical seasonality.

BC Children's Hospital Emergency Room

The percentage of BC Children's Hospital Emergency Room visits attributed to "fever and cough" or flu-like illness during weeks 35-39 remained low, ranging from 1.0% (week 36) to 1.9% (week 35), consistent with expected levels for this time of year.

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



Source: BCCH Admitting, discharge, transfer database, ADT

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

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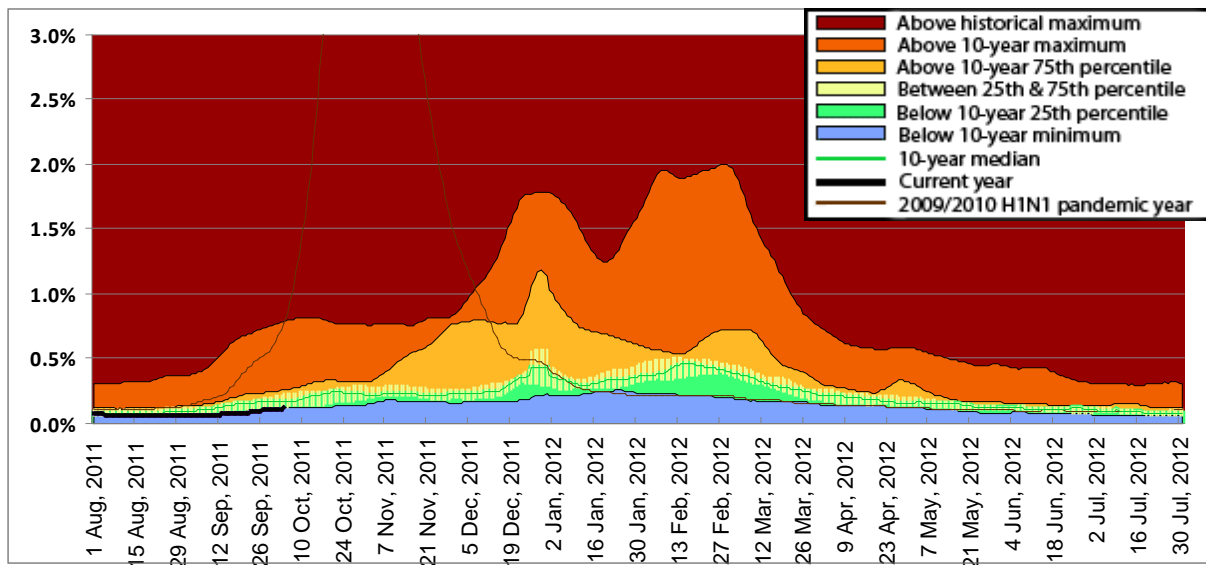
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Medical Services Plan

Influenza illness as a proportion of all submitted BC Medical Services Plan (MSP) claims was generally stable at low levels during the past five weeks.

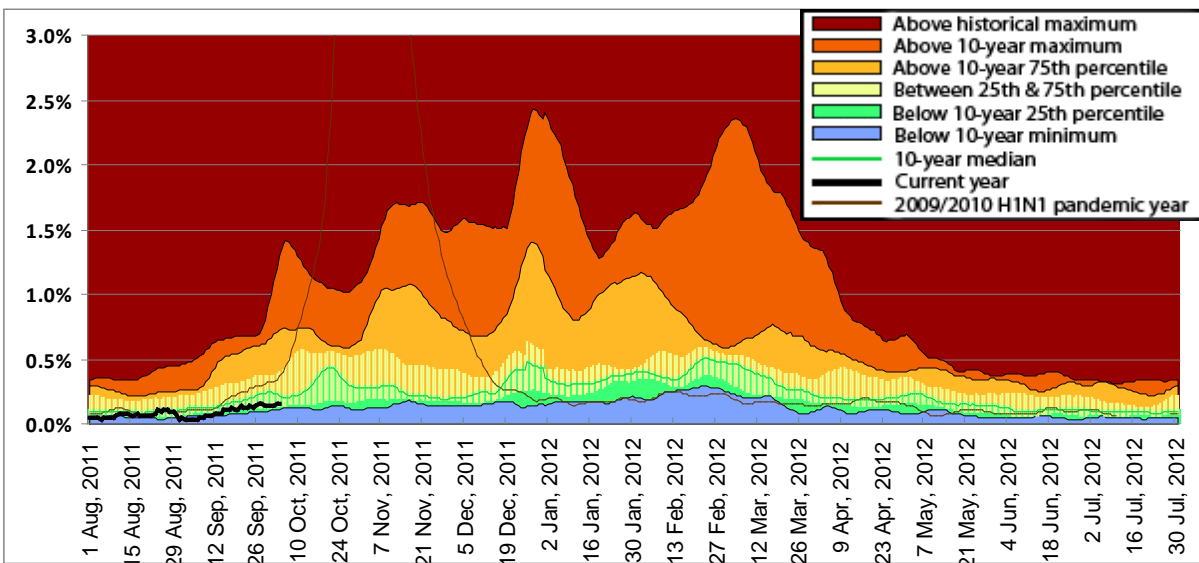
Influenza Illness Claims* British Columbia



* 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 October 5th, 2011

Northern

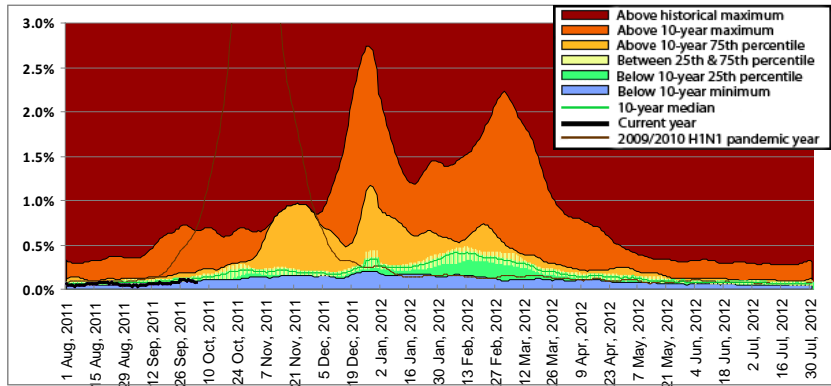


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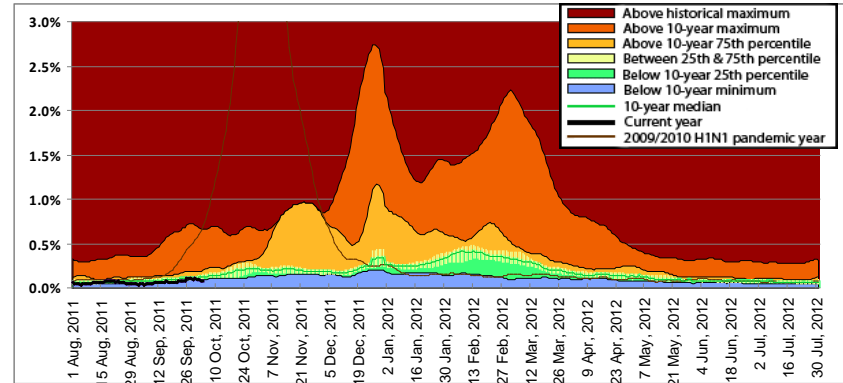
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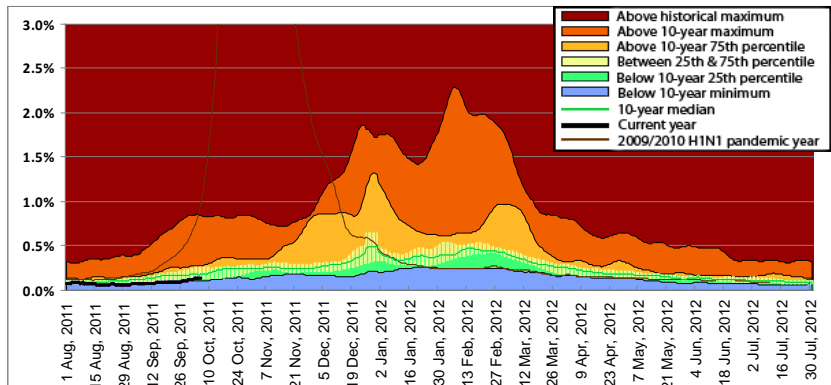
Interior



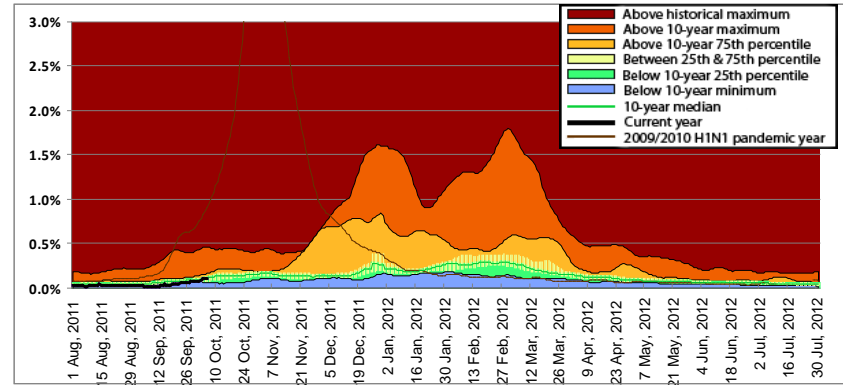
Vancouver Coastal



Fraser



Vancouver Island



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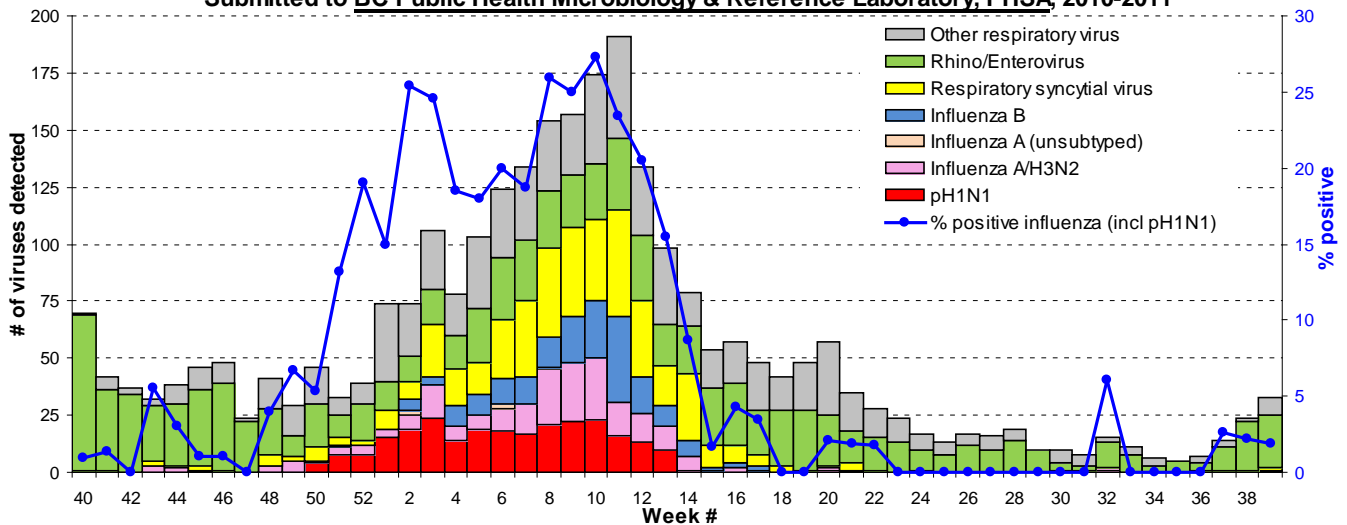
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Laboratory Reports

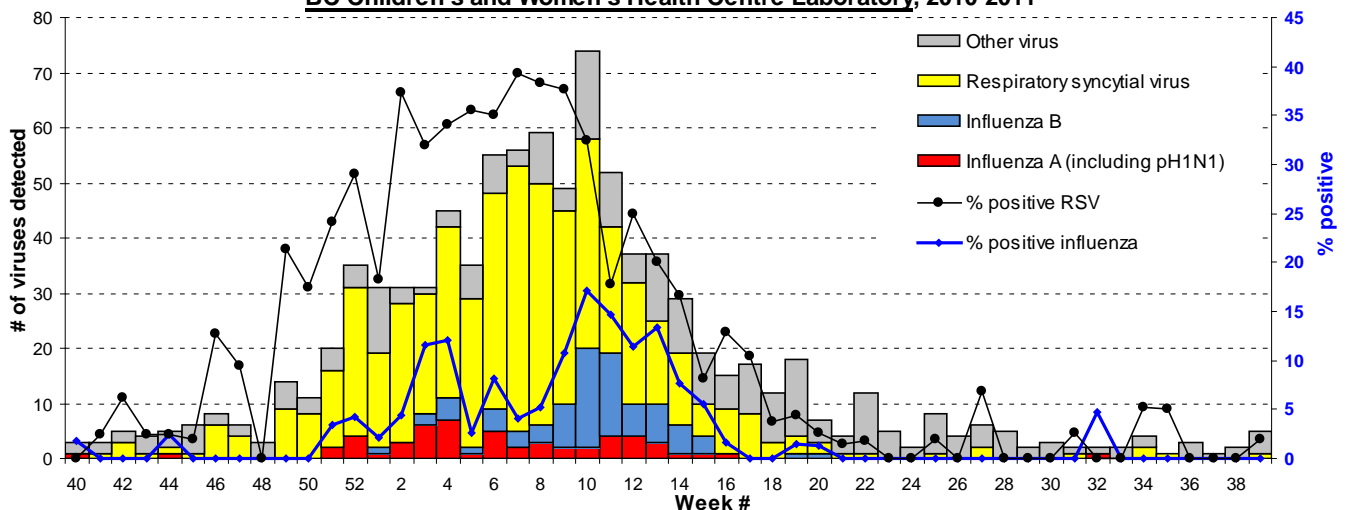
One hundred and eighty-nine respiratory specimens were tested at the BC Public Health Microbiology & Reference Laboratory, PHSA, during weeks 35-39. Influenza was detected in 4 (2.1%) submitted specimens: three were A/H3N2 from Vancouver Coastal HA and Vancouver Island HA, one influenza type B from Vancouver Island HA. During weeks 35-39, of 189 specimens tested for other respiratory viruses, 63 (33.3%) were positive for rhino/enterovirus, 10 (5.3%) for human metapneumovirus. Other respiratory viruses were also sporadically detected.

Influenza and Other Virus Detections Among Respiratory Specimens Submitted to BC Public Health Microbiology & Reference Laboratory, PHSA, 2010-2011



During weeks 35-39, BC Children's and Women's Health Centre Laboratory tested 172 respiratory specimens. No influenza virus was detected; 8 specimens (4.7%) were positive for parainfluenza; low levels of adenovirus and RSV were also detected.

Influenza and Other Virus Detections Among Respiratory Specimens Submitted to BC Children's and Women's Health Centre Laboratory, 2010-2011



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

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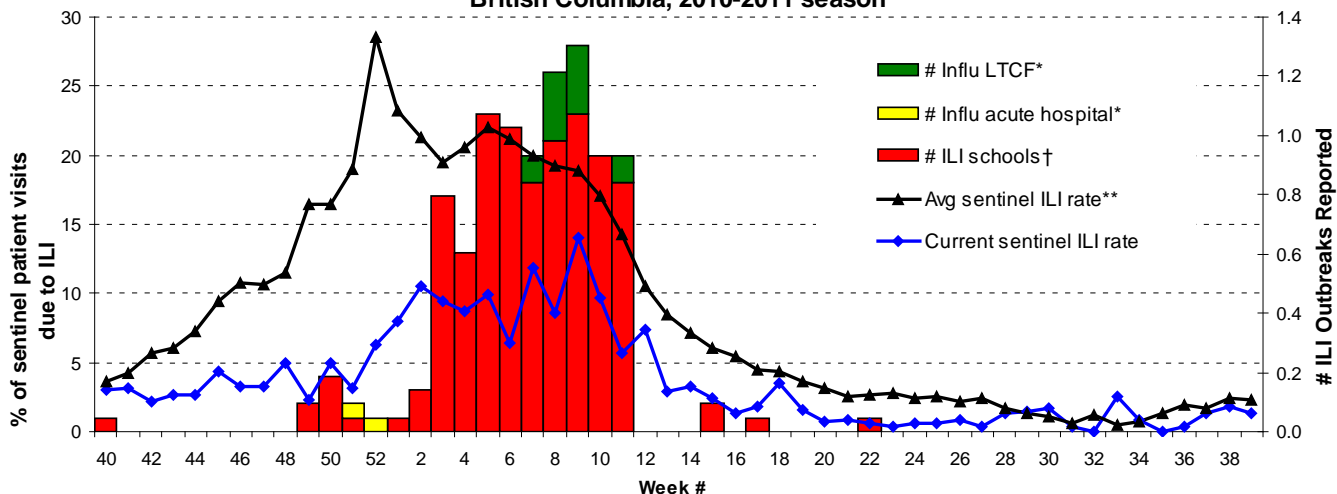
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ILI Outbreaks

No influenza outbreaks were reported during weeks 35-39.

Number of Influenza and Influenza-Like Illness (ILI) Outbreaks Reported, Compared to Current Sentinel ILI Rate and Average Sentinel ILI Rate for past 19 years, per Week, British Columbia, 2010-2011 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 2008-09/2009-10 seasons due to atypical seasonality.

CANADA

FluWatch

From week 35 to week 38 (ending September 24th, 2011), all indicators of influenza activity were at inter-seasonal levels with very few laboratory detections. Detection of other respiratory viruses continues, and an increase of rhinovirus in weeks 37 and 38 was observed (www.phac-aspc.gc.ca/fluwatch/).

National Microbiology Laboratory (NML): Strain Characterization

Between September 1, 2010 and July 13, 2011, one thousand and twenty-one influenza isolates were collected from provincial and hospital labs and characterized at the NML as follows:

284 A/Perth/16/2009 (H3N2)-like[¶] from NFLD, NS, NB, QC, ON, MB, SK, ALTA, BC, NT & NU;

151 A/California/07/2009 (H1N1)-like* from NS, NB, QC, ON, SASK, ALTA & BC;

557 B/Brisbane/60/2008 (Victoria lineage)-like[†] from NFLD, NS, NB, QC, ON, MB, SK, ALTA, BC, NT & NU;

29 B/Wisconsin/01/2010-like (Yamagata lineage)-like from NFLD, NS, NB, QC, ON & BC

[¶] indicates a strain match to the recommended H3N2 component of the 2010-11 and 2011-12 northern hemisphere trivalent influenza vaccine

* indicates a strain match to the recommended H1N1 component of the 2010-11 and 2011-12 northern hemisphere trivalent influenza vaccine

[†] indicates a strain match to the recommended influenza B component of the 2010-11 and 2011-12 northern hemisphere trivalent influenza vaccine

NML: Antiviral Resistance

Drug susceptibility testing at the NML between September 1, 2010 and July 13, 2011 indicated that all but one A/H3N2 and all pH1N1 isolates were resistant to amantadine. All the isolates of A/H3N2, pH1N1, and all but one influenza B tested for zanamivir sensitivity showed susceptibility. Oseltamivir resistance testing found that all but one pH1N1, all but one A/H3N2, and all but one B isolates were susceptible.

INTERNATIONAL

Northern Hemisphere: During weeks 35-39 ending October 1, 2011, influenza activity remained low in the United States www.cdc.gov/flu/weekly/. Few specimens (less than 2%) tested positive for influenza. The proportion of outpatient visits for ILI rose to just over 1%, still below the national baseline of 2.5%. The CDC further reported that the proportion of deaths attributed to pneumonia and influenza from week 35 to week 39 was below or at the epidemic threshold, dropping to 6.0% in week 39 (threshold 6.5%). **Other Areas:** According to the WHO, as of Sept 23rd, 2011, countries in the tropical zone mostly reported low influenza activity but with some transmission reported in countries of the Americas, western Africa, and southern Asia. Transmission in South Africa has declined to low

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levels. In Australia, the number of laboratory confirmed influenza notifications was reported to be declining in Queensland, New South Wales and other states with the exception of the Northern Territory. Oseltamivir-resistant (but sensitive to zanamivir) influenza A(H1N1)2009 was identified in a cluster of cases in the Newcastle region of New South Wales. ILI activity in New Zealand continues around national baseline levels and the majority of viruses detected have been influenza B.

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

Avian Influenza: From August 25th to September 12th, 2011, although sporadic outbreaks of A/H5N1 in poultry were reported, no new confirmed human cases of influenza A/H5N1 were reported. The most recent WHO updates can be found at: http://www.who.int/csr/disease/avian_influenza/en/index.html

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

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Contact Us:

Epidemiology Services : BC Centre for Disease Control (BCCDC)

655 W. 12th Ave, Vancouver BC V5Z 4R4. Tel: (604) 707-2510 / Fax: (604) 707-2516. InfluenzaFieldEpi@bccdc.ca

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.eiss.org

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.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/ozflucurrent.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 or fax to (604) 707-2516

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