	Ontario Influenza Bulletin	Ministry of Health and Long-Term Care Public Health Branch <i>Volume 7, Issue 2, 2003</i>
			

Week #45: Week Ending November 8, 2003

Influenza Activity in Ontario

There was some limited increase in influenza activity reported in the province for the week ending November 8, 2003 (week 45). Toronto Public Health unit and Hamilton City health unit each reported 'localized' activity while Waterloo reported 'sporadic' influenza activity. The Central Public Health Laboratory reported three influenza cases during this surveillance period. The following upper respiratory isolates and detections were also reported by the Ontario laboratories: 2 respiratory syncytial virus (RSV), 7 parainfluenza type 1 (PIV1), 7 parainfluenza type 2 (PIV2), 3 parainfluenza type 3 (PIV3), and 4 adenovirus (Table 1). Seven respiratory infection outbreaks were reported during this surveillance period.

Table 1. Comparison of Influenza Activity in Ontario for the 2002-03 and 2003-04 Influenza Surveillance Seasons

Indicator	2002-03 Season Week Ending, November 3, 2002 (week 44) Season to Date**	2003-04 Season Week Ending November 8, 2003 (week 45) Season to Date***
*Laboratory Surveillance (Flu isolates)Total	3	3
Influenza A	3	7
Influenza B	0	0
Other respiratory Viruses		
RSV	35	13
PIV1	15	43
PIV2	5	30
PIV3	76	13
PIV4	2	2
Other PIVs	0	1
Adenoviruses	29	14
No. of ILI Visits to Sentinel Physicians (ILI Rate/1000 patients seen for all reasons)	21	27
Institutional Outbreaks	2	7

*Center for Infectious Disease Prevention and Control, Health Canada

Consistent with Health Canada year round surveillance periods (only for Laboratory Surveillance Data)

** August, 2002 – November 3, 2002

***Season to Date; August 24, 2003 - November 8, 2003

Table 2. Season to Date Influenza Cases in Ontario Reported Through the Reportable Disease Information System (RDIS), 2003-2004 (September 1, 2003 to November 7, 2003)

Health Unit	Number of Lab-Confirmed Influenza Cases	
	Influenza A	Influenza B
Hamilton-Wentworth	4	0
Toronto	0	1
York Region	1	0
Total	5	1

Notes: 1) York Region reported 1 case of influenza A prior to October 27, 2003.

2) 4 cases of influenza A and 1 case of influenza B were reported during week 45

**Table 3. Season-to-date Institutional Influenza Outbreaks by Health Unit in Ontario, 2003-2004
(October 27, 2003 – November 8)**

Health Unit	Type of Institution	# of Outbreaks	Organism Identified	RAR (%)	SAR (%)	Complications
Toronto	CCH	1	Flu A	6.8	1.8	1 patient death
	*NH/CCH	1	Flu A	4.2	1%	None reported
Hamilton City	CCH	1	Flu A	3.7	0.4	None reported

RAR: Resident Attack Rate (# of residents ill/total number of residents)*100

SAR: Staff Attack Rate (# of staff ill/total number of staff)*100

* Outbreak reported in the nursing home (NH) section of a combined facility consisting of a NH section and a chronic care hospital (CCH) section;

Federal FluWatch Sentinel Physician Surveillance Activity in Ontario

The overall rate of influenza-like illness (ILI) reported through the Federal FluWatch system were 27.3 ILI patients seen per 1,000 patients that were seen by the sentinel physicians for all reasons, including ILI.

Canada:

Influenza Activity in the Rest of Canada

Widespread influenza activity was reported in all regions in the Northwest Territories, localized influenza activity was reported in all parts of Alberta and Saskatchewan while sporadic influenza activity was reported in four regions in British Columbia in week 44. During the week ending November 1 (week 44), sentinel physicians reported 31 cases of influenza-like illness (ILI) per 1000 patient visits, which is within baseline rates for week 44. During week 44, influenza outbreaks were reported in three schools in the Northwest Territories and two schools in Alberta, and four LTC facilities (Alberta, Saskatchewan and Northwest Territories).

Laboratory Confirmations

During the one-week period, October 26 to November 1, Health Canada received 1597 reports of laboratory tests for influenza, including 238 (14.90%) influenza A detections (in Saskatchewan and Alberta) and one (0.06%) influenza B detection in British Columbia

Source: http://www.hc-sc.gc.ca/pphb-dgspsp/fluwatch/03-04/w44_03/index.html#top

Influenza Activity in the United States:

During week 44 (October 25 – November 1, 2003), 45 specimens tested positive for influenza. The proportion of patient visits to sentinel providers for influenza-like illness (ILI) overall was 2.2%, which is less than the national baseline of 2.5%. The proportion of deaths attributed to pneumonia and influenza was 6.3%. One state health department reported regional influenza activity, 3 states reported local influenza activity, 19 states, New York City, and Puerto Rico reported sporadic influenza activity, and 24 states and the District of Columbia reported no influenza activity.

Source: Centers for Disease Control and Prevention (CDC): <<http://www.cdc.gov/ncidod/diseases/flu/weekly.htm>>

International Influenza Activity:

WHO: Denmark and the United Kingdom reported low levels of ILI. France reported their first detection of Influenza A in hospitalized patients and circulation of H2N3. Norway and Switzerland are reporting strains of A/Fujian/411/02. Poland reported ILI, with the highest incidence occurring in children aged 0-14 years. Hong Kong continues to report detections of influenza A (H3N2). Chile, Israel and Spain are reporting influenza A.

European Influenza Surveillance Scheme (EISS)

During week 44, local activity was reported in Scotland and sporadic but increasing activity reported in England, Ireland and Spain. Influenza A (H3N2) was the predominant virus circulating in France, Portugal and Spain. **Australia:** Observations from their season include: H3N2 predominated, relatively 'severe' season mostly affecting young age groups with very few cases in elderly. The severe cases included deaths, encephalitis and secondary pneumonias.

Note: Globally, approximately 60 % of strains are well inhibited by A/Panama antisera.

Sources: WHO: <http://rhone.b3e.jussieu.fr/flunet/www/index.html>

EISS: <http://www.eiss.org>

Vaccine and Strain Characterization

The National Microbiology Laboratory has antigenetically characterized 14 influenza viruses to date; all were found to be A/Panama/2007/99-like, which is included in the 2003-04 vaccine.

Source: National Microbiology Laboratory (NML), Population and Public Health Branch (PPHB)

Influenza Vaccine Components and Protection for the 2003/04 Season

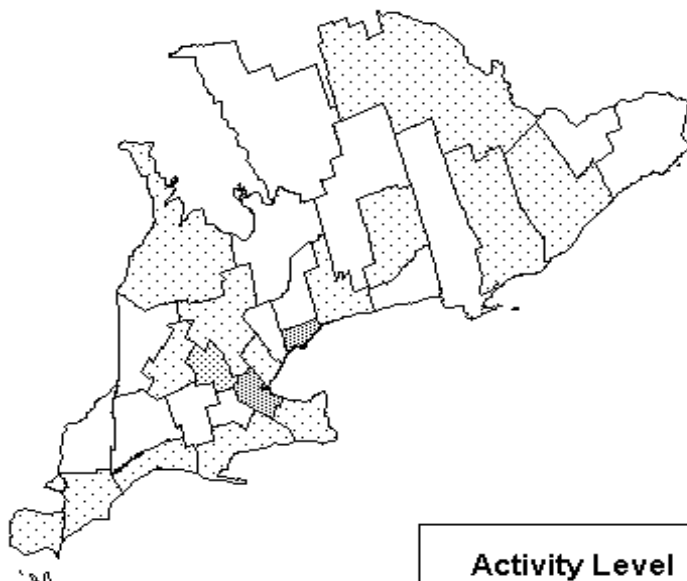
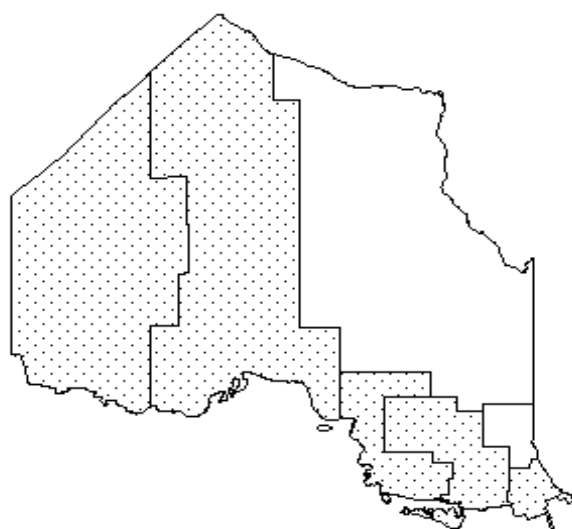
The National Advisory Committee on Immunization (NACI) updated the antigenic components of the influenza vaccine for the 2003-2004 season. NACI recommended that the trivalent vaccine for the 2003-04 season in Canada contain an A/Panama/2007/99 (H3N2)-like, an A/New Caledonia/20/99 (H1N1)-like, and either B/Hong Kong/330/2001-like virus or B/Shangdong/7/97-like antigens. **Source:** <http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/ccdr-rmtc/03vol29/index.html#acs>

Visit the Ministry of Health and Long-Term Care website weekly for the current issue, or back issues, of the Ontario Influenza Bulletin: http://www.health.gov.on.ca/english/providers/program/pubhealth/flu/flu_03/flubul_mn.html

Influenza Activity Level by Health Unit Week Ending November 7, 2003

Northern Ontario

Southern Ontario



Activity Level

- No Data
- No Activity
- Sporadic Activity
- Localized Activity