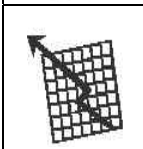


		Ontario Influenza Bulletin	Ministry of Health and Long-Term Care Public Health Branch <i>Volume 7, Issue 5, 2003</i>
			

Week #48: Week Ending November 29, 2003

Influenza Activity in Ontario

Influenza activity continued to increase in parts of the province during the week ending November 29, 2003 (week 48). Widespread influenza activity was reported in the Central East and Central West regions in the province, three health units reported "localized" activity and 15 reported "sporadic" activity. Ninety one new confirmed influenza cases (90 influenza A, 1 influenza B) were reported through the Reportable Diseases Information System (RDIS). Deaths of two children aged 11 and 8 years, who were confirmed influenza A cases, were reported to the Ministry during this surveillance period. Both children had underlying illness. Ontario laboratories reported 164 influenza A isolations to the Center for Infectious Disease Prevention and Control (CIDPC) of Health Canada. The following upper respiratory isolates and detections were also reported by the Ontario laboratories: 21 respiratory syncytial virus (RSV), 20 parainfluenza type 1 (PIV1), 10 parainfluenza type 2 (PIV2), 5 parainfluenza type 3 (PIV3), 2 parainfluenza type 4 (PIV4) and 23 adenoviruses. Eight 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	2003-04 Season
	Week Ending, November 30, 2002 (week 48)	Week Ending November 29, 2003 (week 48)
	Season to Date**	Season to Date***
*Laboratory Surveillance (Flu isolates) Total	8	164
Influenza A	8	164
Influenza B	0	0
Other respiratory Viruses		
RSV	80	53
PIV1	29	84
PIV2	7	51
PIV3	114	26
PIV4	2	4
Other PIVs	0	1
Adenoviruses	33	23
No. of ILI Visits to Sentinel Physicians (ILI Rate/1000 patients seen for all reasons)	12	47
Institutional ILI Outbreaks	2	13

*Center for Infectious Disease Prevention and Control (CIDPC), Health Canada

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

** August, 2002 – November 23, 2002

***Season to Date; August 24, 2003 - November 22, 2003

Note: 16 public health and hospital laboratories in the Province report to the CIDPC

Table 2. Season to Date Influenza Cases in Ontario Reported Through the Reportable Disease Information System (RDIS), 2003-2004 (September 1, 2003 to November 29, 2003)

Health Unit	Number of Lab-Confirmed Influenza Cases	
	Influenza A	Influenza B
DurhamRegion	6	
Grey-Bruce	1	
Haliburton-Kawartha	14	0
Halton	1	
Haldimand-Norfolk	0	1
Hamilton-Wentworth	41	0
Niagara	1	
Peel	12	
Peterborough	41	
Simcoe	2	
Toronto	13	0
Wterloo	1	
York Region	2	0
Total	135	1

*91 cases of influenza A were reported during week 48

Table 3. Season-to-date Institutional Influenza Outbreaks by Health Unit in Ontario, 2003-2004 (October 27, 2003 – November 29)

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
	LTCF	1	Flu A	9.4	0	None Reported
Hamilton City	LTCF	1	Flu A	13.4	0	2 pneumonia, 1 hospitalized
	CCH	1	Flu A	3.7	0.4	None reported
Peel	LTCF	1	Flu A	14.7	1.0	None reported
	ACH	1	Flu A	3.8	5.3	None Reported
Peterborough	RH	1	Flu A	12.2	2.2	1 hospitalized, 1 death
	LTCF	1	Flu A	1.2	0.7	None Reported
	LTCF	1	Flu A	0.8	0.0	None Reported
	RH	1	Flu A	34.0	22.7	1 Hospitalized
HKPR	NH/RH	1	Flu A	6.8	0.6	1 hospitalized

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

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

NH = nursing home, RH= retirement home, combined facility consists of 2 or more types of institutions e.g. a NH section and a retirement home (RH) section; CCH = chronic care hospital, ACH= Acute Care Hospital, LTCF = long term care facility

Federal FluWatch Sentinel Physician Surveillance Activity in Ontario

The overall rate of influenza-like illness (ILI) reported through the Federal FluWatch system were 46.5 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 (Week 48 November 22-29, 2003)

Influenza activity decreased in Alberta and Saskatchewan while it increased in other parts of the country especially in British Columbia, Ontario and Nunavut. During the week ending November 29 (week 48), sentinel physicians reported 42 cases of influenza-like illness (ILI) per 1000 patient visits, which is above the baseline rate for week 48. Health Canada reported 103 institutional outbreaks across the country: 55 in long-term care facilities, 8 in hospitals, and 42 in schools.

Laboratory Confirmations

During the one week period, November 16 to November 22, Health Canada received 2486 reports of laboratory tests for influenza, including 432 (17.38%) influenza A detections and 0 (0%) influenza B detections.

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

Influenza Activity in the United States:

Influenza activity in the United States continued to increase during week 47 (November 16 - 22, 2003). One thousand seventy-six (34.3%) of 3,138 specimens collected from throughout the United States were positive for influenza. The proportion of patient visits

to sentinel providers for influenza-like illness (ILI) overall was 3.8%, which is above the national baseline of 2.5%. The proportion of deaths attributed to pneumonia and influenza was 6.4%, which is below the epidemic threshold for the week. Ten state health departments reported widespread influenza activity, 9 states reported regional activity, 8 states reported local influenza activity, 16 states, New York City, Guam, and Puerto Rico reported sporadic influenza activity, and 4 states and the District of Columbia reported no influenza activity. Of the influenza A (H3N2) isolates characterised in the U.S.A., 82% were similar to the new drift variant A/Fujian/411/2002.

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

International Influenza Activity:

WHO: The WHO reported increased influenza activity in particularly in the Russian Federation, Finland, Norway, Spain and Switzerland. Most countries are reporting circulation of A/Fujian/411/2002(H3N2)-like virus on influenza during week 48.

The EISS reported increasing influenza activity in a number of countries in Europe especially in Belgium, France, and Norway. Although widespread activity continues in the United Kingdom, Portugal and Spain, it is slowing in these countries where activity associated with was reported first.

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

From October 1, 2003, the National Microbiology Laboratory has antigenetically characterized 40 A/Fujian/411/02(H3N2)-like, from public health and hospital laboratories in Ontario which submitted influenza A virus isolates. The NML reports that of all the influenza A virus isolates submitted across Canada, 84% were of A/Fujian/411/2002(H3N2)-like.

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>

Note: WHO advises that A/Fujian/411/2002-like strains are drift variants of the A/Panama/2007/99 vaccine virus. Therefore antibodies produced against the A/Panama/2007/99-like strain do cross-react with A/Fujian/411/2002-like strains, but at a lower level than to the vaccine strain itself.

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 29, 2003**

