



Week #08: Week Ending February 21, 2004

Influenza Activity in Ontario

Influenza activity in Ontario continued to decrease during the week ending February 21, 2004 (see map). The influenza activity levels in the 26 health units that reported were as follows: no activity - 14 (53.8%), sporadic activity - 8 (30.8%), localized activity - 3 (11.5%) and only one health unit (3.8%) reported widespread influenza activity. There were 17 (1.8%) positive influenza isolations, (16 Flu A and 1 Flu B) of the 920 influenza tests that the Ontario laboratories reported to the Centre for Infectious Disease Prevention and Control (CIDPC), Health Canada. Between August 24, 2003 and February 21, 2004, these laboratories reported 4,427 influenza A and 16 influenza B isolates or detections (Table 1). Also reported during this season to date are other respiratory isolates and detections shown in Table 1. Health units reported 43 cases of laboratory-confirmed influenza A cases and no influenza B case through the Reportable Diseases Information System (RDIS) during this surveillance week (Table 2). The overall rate of influenza-like illness (ILI) reported by sentinel physicians in Ontario was 24.6/1,000. Since September 1, 2003 to date, 123 (122 Flu A, 1 Flu B) influenza-related deaths have been reported in the province through RDIS. Table 3 shows data on the respiratory infection outbreaks in institutions that have been reported to the Ministry by the health units from October 27, 2003 to February 21, 2004. These include 14 respiratory infection outbreaks in institutions that met the provincial surveillance case definition and were reported during this surveillance period. One outbreak was positive for influenza A (Table 4). Of the 318 influenza isolates submitted by the Ontario laboratories to the National Microbiological Laboratory (NML) from October 1, 2003 to February 9, 2004, for strain characterization this season, 310 (97.5%) have been A/Fujian/411/02-like while the rest were type B (2 B/Hong Kong/330/01-like and 6 B/Sichuan/379/99-like) (Table 5).

Table 1.

Indicator	2002-03 Season Week Ending February 22, 2003 (week 8) Season to Date**	2003-04 Season Week Ending February 21, 2004 (week8) Season to Date***
CIDPC Laboratory Surveillance (Flu isolates)Total	715	4443
Influenza A	711	4427
Influenza B	4	16
Other respiratory Viruses		
RSV	1194	1008
PIV1	106	229
PIV2	17	144
PIV3	273	143
PIV4	3	6
Other PIVs	1	5
Adenoviruses	103	119
*% of Flu tests that were positive	2.6	1.8
+No. of ILI Visits to Sentinel Physicians (ILI Rate/1000 patients seen for all reasons)	27	24

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

+ October 27, 2003 – February 21, 2004. *% of positive cases based on the total specimens submitted for the surveillance week.

Season to Date: August 24, 2002 – February 22, 2003. *Season to Date: August 24, 2003 – February 21, 2004.

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

Table 2. Week Ending February 21, 2004 Influenza Cases in Ontario Reported Through the Reportable Disease Information System (RDIS), 2003-2004 (September 1, 2003 to February 21, 2004)

Health Unit	Flu A Week 8 (Ending Feb. 21)	Flu A Week 7 (Ending Feb. 14)	Flu A Change (Week 08-Week 07)	Flu B (Season-to-date)
Algoma	136	136	0	
Brant	38	38	0	
Chatham-Kent	34	32	2	
Durham Region	176	176	0	1
Eastern Ontario	52	52	0	
Elgin-St. Thomas	16	16	0	
Grey-Bruce	89	89	0	
Haldimand-Norfolk Region	54	54	0	1
Haliburton-Kawartha	114	114	0	1
Halton Region	218	215	3	1
Hamilton City	415	414	1	
Hastings-Prince Edward	201	201	0	
Huron	42	42	0	
Kingston-Frontenac	95	94	1	
Lambton	33	33	0	
Leeds-Grenville	14	14	0	
Middlesex-London	79	79	0	
Muskoka-Parry Sound	85	85	0	
Niagara Region	200	199	1	
North Bay	83	83	0	
Northwestern	0	0	0	
Ottawa-Carleton	235	235	0	
Oxford	39	38	1	
Peel Region	511	484	27	2
Perth	49	49	0	
Peterborough	101	101	0	
Porcupine	94	94	0	
Renfrew	36	36	0	
Simcoe County	226	226	0	1
Sudbury	184	184	0	
Thunder Bay	29	28	1	
Timiskaming	28	28	0	
Toronto City	551	549	2	1
Waterloo Region	150	150	0	
Wellington-Dufferin	122	119	3	
Windsor-Essex	22	21	1	
York Region	283	283	0	2
Province	4,834	4,791	43	10

*43 new cases of influenza A and 0 case of influenza B were reported during Week 08.

(Based on 2001 Provincial Population Estimate)

PROVINCIAL INFLUENZA CASES PER 100,000 (September 1,2003 -February 21, 2004) = 42.5/100,000.

PROVINCIAL INFLUENZA CASES PER 100,000 (September 1,2002-February 22,2003) =5.4/100,000.

NOTE: RDIS Reporting is usually incomplete for the reporting week. Hence, numbers may change as more reports are received.

Table 3: Respiratory Infection Outbreaks in Institutions October 27, 2003 –February 21, 2004

Indicator	2003-04 Season Week Ending February 21, 2004 (week 8) Season to Date
Respiratory Infection Outbreaks in Institutions	
Total Respiratory Infection Outbreaks in Institutions	605
No. of Outbreaks meeting Provincial Surveillance Case Definition	595
No. of Outbreaks not meeting Provincial Surveillance Case Definition	10
Influenza A Outbreaks	372
Flu A & other organisms	7
Other Organisms	32
Influenza B	0
No organism detected	157
Laboratory Results pending ("N/A" or "NA")	27
*Declared Over	496
Influenza A	321
Flu A & other Organisms	7
Other Organisms	32
Laboratory Results pending ("N/A" or "NA")	6
No organism detected	130
Onset of illness in index case October 27/03 – Feb. 14, 2004	482
Onset of illness in index case prior to October 27/03	14
**Ongoing Outbreaks	99
Influenza A	51
Other organisms	0
Laboratory Results pending ("N/A" or "NA")	21
No Organism detected	27
Categories & Types of Institutions	
LTCS NH/HFA	392
Combined (e.g. NH/HFA, NH/Hospital)	19
Unspecified) "Separate"/"Combined"LTCS (Type Unavailable)	14
Hospitals (ACH, CCH, Psychiatric)	49
Other (Retirement Homes, Children's Residences/Development Act Institutions, Jail)	121

* Declared over respiratory infection outbreaks = Appendix E (Final Report) has been received by the Ministry.

** Ongoing respiratory infection outbreak = Appendix E not yet received or outbreak onset is recent and is still active.

Table 4. Institutional Influenza Outbreaks by Health Unit, Ontario, 2003-2004 for Week 8

Health Unit	Institution Type	Organism	Total # of Residents	# Ill Residents	RAR	Complications			SAR
						# Cases with Pneumonia	# Cases Hospitalized	# Deaths Cases	
Toronto	NH	Flu A	169	7	4.1	1	1	0	0

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

During Week 08 the overall rate of influenza-like illness (ILI) reported for Ontario through the Federal FluWatch system was 24.6 ILI patients seen per 1,000 patients that were seen by the sentinel physicians for all reasons, including ILI.

Canada: Summary for Week 8

Influenza activity is decreasing, with most provinces in the country reporting either sporadic or no activity. Across Canada, during the week ending February 21 (week 08), sentinel physicians reported 22 cases of influenza-like illness (ILI) per 1000 patient visits, which is below the expected range for this time of year.

Laboratory Confirmations:

Health Canada received 2,699 reports of laboratory tests for influenza, including 273 (10.11%) influenza A detections and 1 influenza B detection.

Source: www.hc-sc.gc.ca/english/media/releases/2003/flu_statement.htm

Strain Characterization:

The National Microbiology Laboratory (NML) reported on strain characterization completed on influenza isolates submitted from October 1, 2003 to February 9, 2004 (Table 5). The Ontario laboratories have submitted a total of 318 influenza viruses' isolates which were antigenically characterized as shown in Table 5.

Table 5. Strain Characterization Completed on Influenza Isolates in Canada

Province/Territory	Influenza Virus						TOTAL
	Type A(H1N1) A/New Caledonia/20/ 99-like	Type A(H3N2)		Type A(H1N2)	Type B		
		A/Panama/ 2007/99-like	A/Fujian/411/02 -like		Hong Kong /330/01- like	Sichuan /379/99 -like	
Newfoundland			9				9
Prince Edward Island			5				5
Nova Scotia			21	1			22
New Brunswick			5				5
Quebec			33				33
Manitoba			15				15
Saskatchewan		14	44				58
Alberta		6	58				64
British Columbia	1	5	106				112
Yukon			2				2
North West Territory			2				2
Nunavut			6				6
ONTARIO			310		2	6	318
Total	1	25	616	1	2	6	651

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

Avian Flu and SARS: Health Canada Updated Information on SARS/Avian Flu (H5N1)

On its Respiratory Infections website, Health Canada continues to provide updated reports on SARS- and Avian Flu (H5N1)- affected areas. Links are provided on: Travel Health Advisories, the latest official WHO update information on Avian Influenza, WHO avian influenza fact sheet and Q&A's and SARS information for health professionals. This information is updated regularly and is intended for information and national recommendations.

Source: <http://www.hc-sc.gc.ca/pphb-dqspsp/fluwatch/index.html>
<http://www.hc-sc.gc.ca/pphb-dqspsp/h5n1/index.html>
http://www.hc-sc.gc.ca/pphb-dqspsp/tmp-pmv/pub_e.html
<http://www.hc-sc.gc.ca/english/diseases/flu/avian.html>

United States:

During the week ending February 21, 2004, influenza activity remained low. The percentage of patient visits for influenza-like illness (ILI) remained below the national baseline (2.5%). During week 8, mortality due to pneumonia and influenza (P&I) declined below the epidemic threshold for the first time in 10 weeks. Twenty-three (2.2%) of 1,040 specimens collected from throughout the United States were positive for influenza. There were no reports of widespread influenza activity from state and territorial epidemiologists during week 7. One state reported regional activity, and 9 states reported local activity. Thirty-one states, New York City, Guam, and Puerto Rico reported sporadic activity, and 9 states and the District of Columbia reported no influenza activity.

Sources: CDC: <http://www.cdc.gov/flu/weekly/> and www.cdc.gov/flu/protect/preventing.htm

International:

WHO and EISS: Influenza A activity remains low in Europe with no reports of widespread activity. Hong Kong continues to report increased influenza activity. WHO recommends vaccines to be used in the 2004-2005 season (northern hemisphere winter) contain an A/New Caledonia/20/99(H1N1)-like virus, A/Fujian/411/2002(H3N2)-like virus and a B/Shanghai/361/2002-like virus.

WHO: Avian influenza A(H5N1)

The WHO regularly updates the situation (human) in the Asian countries that have had laboratory confirmed human cases of H5N1. WHO Guidelines for Global Surveillance of Influenza A/H5 appear at the following website.

http://www.who.int/csr/disease/avian_influenza/guidelines/globalsurveillance/en/

Further information, including progress reports and technical guidelines, on all these issues is available at the WHO avian influenza web site: http://www.who.int/csr/disease/avian_influenza/en/

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

