

		Ontario Influenza Bulletin	Ministry of Health and Long-Term Care Public Health Branch <i>Volume 7, Issue 14, 2004</i>
			

Week #05: Week Ending January 31, 2004

Influenza Activity in Ontario

Low-level influenza activity was reported in Ontario during the week ending January 31, 2004. Of the 29 health units that reported on influenza activity during this week, 16 (55.2%) reported sporadic activity, seven (24.1%) reported no activity, and only two (6.9%) reported widespread influenza activity (see Map). The Ontario laboratories reported 43 influenza A and no influenza B isolations to the Center for Infectious Disease Prevention and Control (CIDPC), Health Canada. The same laboratories have reported 4327 influenza A, and 13 influenza B isolates during this season (Table 1). Also reported during this season-to-date, are other respiratory isolates and detections shown in Table 1. Ontario has contributed (303/630) 48.1% of all the influenza viruses that have been characterized by the National Microbiological Laboratory (NML), Health Canada (Table 5). Of the 303 viruses, 296 (97.7%) have been A/Fujian/411/02-like. The season has had impact on all the health regions in the Province through the distribution of the cases by health region per 100,000 population (Chart 1). Health units reported 312 cases of confirmed influenza A cases and no influenza B cases through the Reportable Diseases Information System (RDIS) during this surveillance week (Table 2). The influenza cases reported through RDIS from September 1, 2003, to January 31, 2004, show that this surveillance season peaked between weeks 48 and 51 with most cases being reported during week 50 (Chart 2). The overall rate of influenza like illness (ILI) reported by sentinel physicians in Ontario during this week was 27.3/1,000 (Table 1). The influenza-related deaths reported through RDIS since September 1, 2003 to date are 106 (105 influenza A and 1 influenza B) (Chart 3). However, the data show that although most of the cases occurred among the young children (Chart 4), the deaths occurred among the more vulnerable elderly population (Chart 3). Health units reported only 17 respiratory infection outbreaks in institutions which met the surveillance case definition during this surveillance period. Five (29.4%) of the reported outbreaks were due to influenza A (Table 4).

Table 1.

Indicator	2002-03 Season Week Ending February 1, 2003 (week 5) Season to Date**	2003-04 Season Week Ending January 31, 2004 (week 5) Season to Date***
CIDPC Laboratory Surveillance (Flu isolates) Total	641	4340
Influenza A	640	4327
Influenza B	1	13
Other respiratory Viruses		
RSV	701	517
PIV1	99	222
PIV2	14	141
PIV3	257	113
PIV4	2	6
Other PIVs	1	3
Adenoviruses	88	99
* % of Flu tests that are positive	8.1	4.9
No. of ILI Visits to Sentinel Physicians (ILI Rate/1000 patients seen for all reasons)	15	27.3

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

+ October 27, 2003 – January 31, 2004 *% of positive cases based on the total specimens submitted for the surveillance week.

Season to Date; August 24, 2002 – February 1, 2003 *Season to Date; August 24, 2003 – January 31, 2004

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

Table 2. Week Ending January 31, 2004 Influenza Cases in Ontario Reported Through the Reportable Disease Information System (RDIS), 2003-2004 (September 1, 2003 to January 31, 2004)

Health Unit	Flu A Week 5 (Ending Jan. 31)	Flu A Week 4 (Ending Jan. 24)	Flu A Change (Week 05- Week 04)	Flu B (Season-to-date)
Algoma	136	135	1	
Brant	35	21	14	
Chatham-Kent	25	24	1	
Durham Region	173	172	1	
Eastern Ontario	50	49	1	
Elgin-St. Thomas	12	9	3	
Grey-Bruce	89	87	2	
Haldimand-Norfolk Region	52	51	1	1
Haliburton-Kawartha	112	112	0	1
Halton Region	187	183	4	1
Hamilton City	413	407	6	
Hastings-Prince Edward	201	193	8	
Huron	42	34	8	
Kingston-Frontenac	91	89	2	
Lambton	29	0	29	
Leeds-Grenville	14	12	2	
Middlesex-London	73	73	0	
Muskoka-Parry Sound	78	74	4	
Niagara Region	196	192	4	
North Bay	82	82	0	
Northwestern	0	0	0	
Ottawa-Carleton	219	219	0	
Oxford	38	38	0	
Peel Region	451	419	32	2
Perth	49	48	1	
Peterborough	102	101	1	
Porcupine	92	92	0	
Renfrew	12	10	2	
Simcoe County	221	218	3	1
Sudbury	184	171	13	
Thunder Bay	27	26	1	
Timiskaming	28	28	0	
Toronto City	525	506	19	1
Waterloo Region	148	131	17	
Wellington-Dufferin	119	97	22	
Windsor-Essex	21	1	20	
York Region	215	125	90	2
Province	4,541	4229	312*	9
* 312 new cases of influenza A and 0 cases of influenza B were reported during Week 05				
(Based on 2001 Provincial Population Estimate)				
PROVINCIAL INFLUENZA CASES PER 100,000 (September 1, 2003 -January 31, 2004) = 40.0/100,000				
PROVINCIAL INFLUENZA CASES PER 100,000 (September 1,2002-February 1,2003) =4.5/100,000				

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 –January 31, 2004

Indicator	2003-04 Season Week Ending January 31, 2004 (week5) Season to Date
Respiratory Infection Outbreaks in Institutions	
Total	571
Influenza A	368
Other Organisms	26
Influenza B	0
No organism detected	131
Laboratory results pending	46
Declared Over	465
Onset of illness in index case on & after October 27/03	442
Onset of illness in index case prior to October 27/03	14
Outbreaks not meeting Case definition	9
Ongoing Outbreaks	106
Influenza A	60
Other organisms	0
Laboratory results pending	46
Categories & Types of Institutions	
LTCF 's	393
NH	203
HFA	33
NH/HFA	28
NH/RH	11
Combined LTCFs	13
Unspecified LTCFs	118
Hospitals	45
ACH	23
CCH& Psychiatric	22
Other	120
Retirement Homes	111
Children's Residences/Development Act Institutions	9
Unspecified Institutions	13

Table 4. Institutional Influenza Outbreaks by Health Unit, Ontario, 2003-2004 for Week 05

Health Unit	Institution Type	Organism	Total # of Residents	# Ill Residents	RAR	Complications			SAR
						# Cases with Pneumonia	# Cases Hospitalized	# Deaths Cases	
Halton	NH	Flu A	121	5	4.1	0	0	0	0
Hamilton	RH	Flu A	52	22	42.3	1	4	0	11.8
Kingston	RH	Flu A	68	8	11.8	0	0	0	2.4
Ottawa	ACH	Flu A	25	2	8	1	N/A	0	0
Toronto	RH	Flu A	38	12	31.6	4	0	0	14.3

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

The institutional respiratory infection and influenza outbreaks reported in the Bulletin are those that are reported to the Ministry and whose onset dates might fall within the surveillance week.

Federal FluWatch Sentinel Physician Surveillance Activity in Ontario

During Week 04 the overall rate of influenza-like illness (ILI) reported through the Federal FluWatch system was 27.3% ILI patients seen per 1,000 patients that were seen by the sentinel physicians for all reasons, including ILI. The ILI patient rates among all age groups continue to decrease when compared to the rates that were observed during the earlier weeks of this season.

Canada: Summary for Week 5

Widespread influenza activity is now limited to Quebec, with the rest of the country reporting either sporadic or no activity. Across Canada, during the week ending January 31 (week 05), sentinel physicians reported 27 cases of influenza-like illness (ILI) per 1000 patient visits, which is below the expected range for this time of year. Health Canada received 3,182 reports of laboratory tests for influenza, including

465 (14.61%) influenza A detections and 0 influenza B detections. On December 2003, Health Canada issued a statement on the 2003-2004 influenza season explaining the situation of this surveillance season and the impact on the population, especially the young children. The statement is found at: www.hc-sc.gc.ca/english/media/releases/2003/flu_statement.htm

Laboratory Confirmations:

Health Canada received 3,182 reports of laboratory tests for influenza, including 465 (14.61%) influenza A detections and 0 influenza B detections. Detections of other respiratory viruses are at or below the expected range for this time of year.

Source: <http://www.hc-sc.gc.ca/pphb-dgspsp/fluwatch/index.html>

Strain Characterization: Ending February 1, 2003, (week 5)

Season

The National Microbiology Laboratory (NML) has antigenically characterized 630 influenza viruses to date (February 03, 2004). The distribution is shown in Table...

Table 5: Strain Characterization Completed on Influenza Isolates in Canada

Province/Territory	Influenza Virus					
	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			
Prince Edward Island			5			
Nova Scotia			21	1		
New Brunswick			5			
Quebec			27			
Manitoba			15			
Saskatchewan		14	44			
Alberta		6	58			
British Columbia	1	5	106			
Yukon			2			
North West Territory			2			
Nunavut			6			
ONTARIO			296		1	6
Total	1	25	596	1	1	6

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

Avian Flu and SARS: Health Canada Updated Alert

Health Canada continues to issue information regarding the Avian influenza (H5N1) outbreaks that have occurred in several Asian countries. This information is updated regularly and is intended for information and national recommendation purposes, please consult the following websites if you require more information on the various aspects of this issue.

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

United States: Centre for Disease Control and Prevention (CDC): Influenza Summary Update Update Week ending January 31, 2004 (Week 4)

Influenza activity remained low during the week of January 25-31, 2004. The percentage of patient visits for influenza-like illness (ILI) remained below the national baseline of 2.5% for the third consecutive week. Mortality due to pneumonia and influenza (9.3%) continued to decline, but remained above the epidemic threshold during week 4 (8.2%). Seventy-six (6.3%) of 1,213 specimens collected from throughout the United States and tested by collaborating laboratories were positive for influenza. There were no reports of widespread influenza activity from state and territorial epidemiologists during week 4. Eleven states reported regional activity, 20 states and New York City reported local activity, 18 states and the District of Columbia reported sporadic activity, and one state reported no activity. Reports of influenza-associated deaths in children continue to be collected from state health departments.

The CDC issued precautions for travel to countries that are reporting outbreaks of avian influenza A (H5N1) in humans and animals. The purpose of these precautions is to provide information for travelers on the status of avian influenza A (H5N1) outbreaks, including where outbreaks are occurring, measures to take before travel, precautions to follow while abroad, and what to do if illness occurs during or after travel. Currently, CDC does not recommend that the general public avoid travel to any of the countries affected by avian influenza A (H5N1).

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

International: WHO: Avian influenza A(H5N1)

The WHO is regularly updating the situation (human) in the Asian countries that have had laboratory confirmed human cases of H5N1. WHO still maintains that there remains no evidence of human-to-human spread.

The WHO overview of the global situation:

The WHO has indicated its public health concerns because of: the large scale of the distribution of outbreaks of H5N1 avian influenza in poultry in the Asian countries, the endemicity of the virus in the poultry industry in the affected region and the potential for the virus to spread to distant regions. There is a great risk that the H5N1 strain has become endemic in poultry populations of this geographical area and an anticipation that human cases will also be detected in other countries where outbreaks in poultry are spreading. Infection in birds could spread to distant regions and WHO indicates that influenza viruses are genetically unstable and their behavior cannot be predicted and that the present situation could change very quickly. The Organization recommends that measures aimed at eliminating the disease in poultry also reduce opportunities for human exposures and infections. These measures must be carried out urgently, giving highest priority to the protection of human health.

Sources: WHO Influenza Update: http://www.who.int/csr/disease/avian_influenza/en/

SARS: Information on SARS can be seen at **WHO SARS Update:** <http://www.who.int/csr/sars/en/>

Chart 1. Influenza Cases per 100,000 population (Sept. 1, 2003-Jan.31, 2004, Ontario)

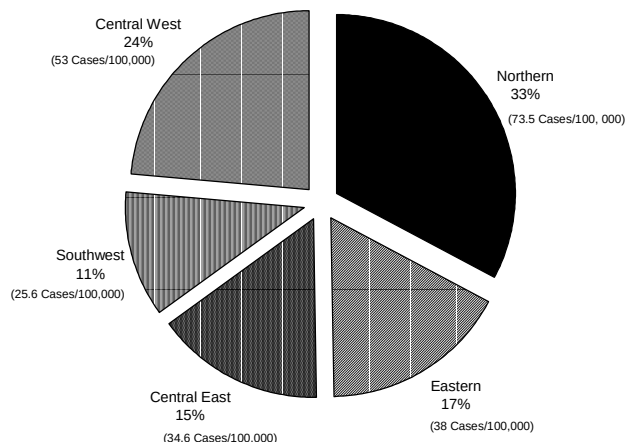


Chart 2. No of Flu Cases By Week of Onset (September 1, 2003 - January 24, 2004) Ontario

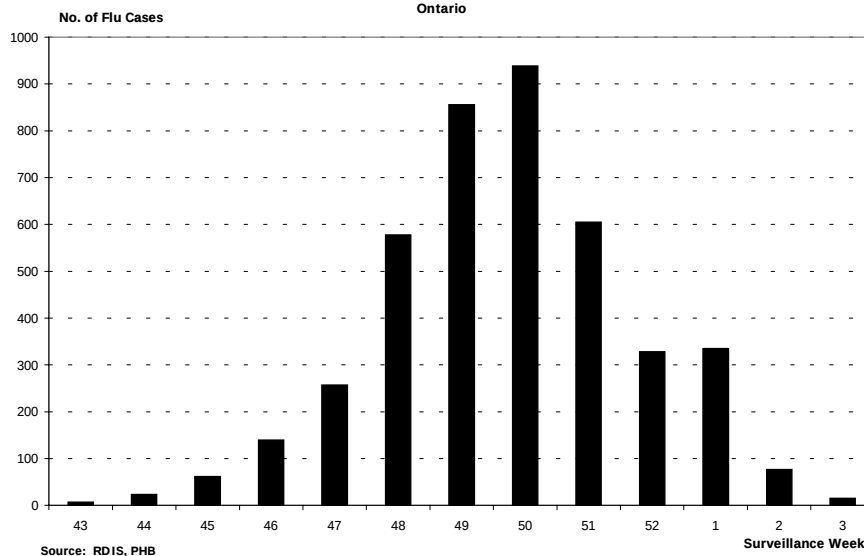
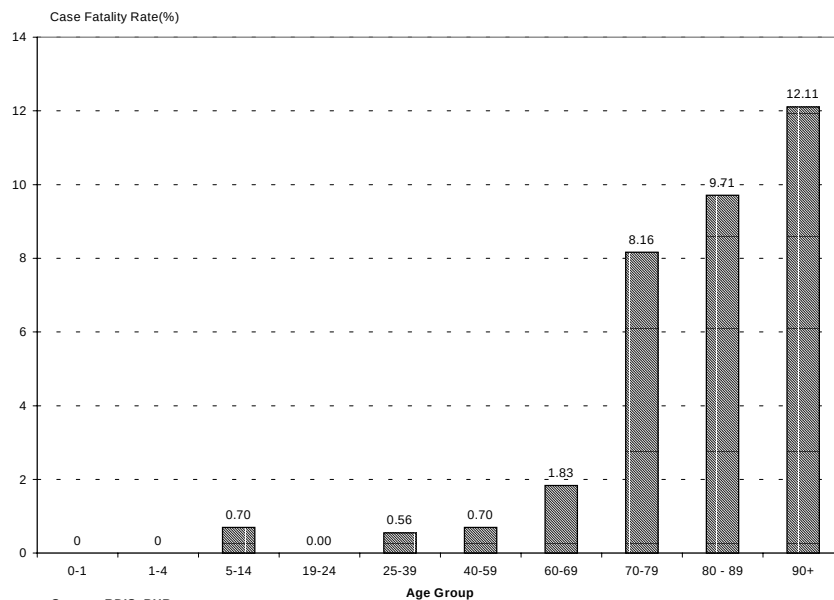
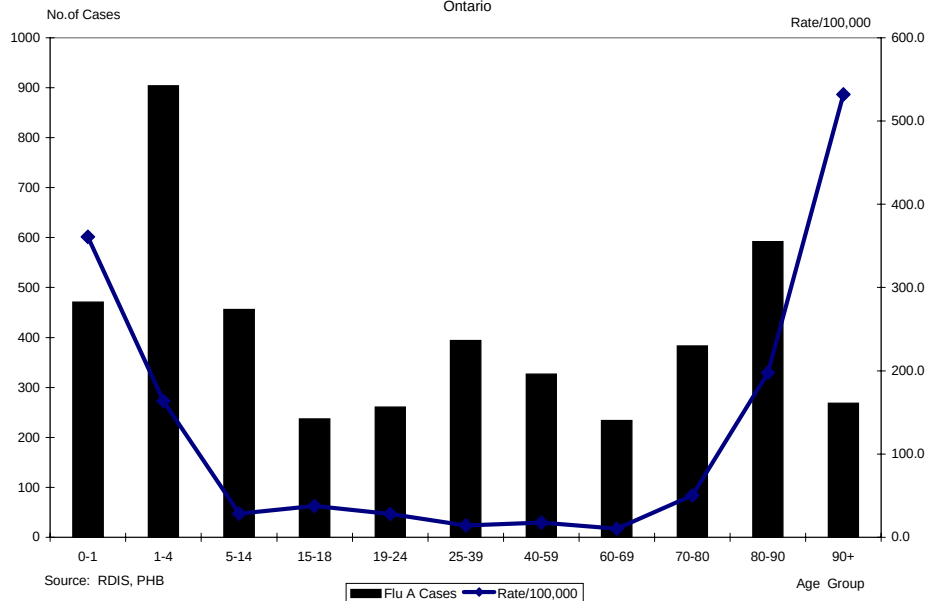


Chart 3. Case Fatality Rate by Age Group(September 1-January 24, 2004)



Source: RDIS, PHB

Chart 4. Incidence of Influenza A by Age Group (Sept.1, 2003-January 31, 2004)
Ontario

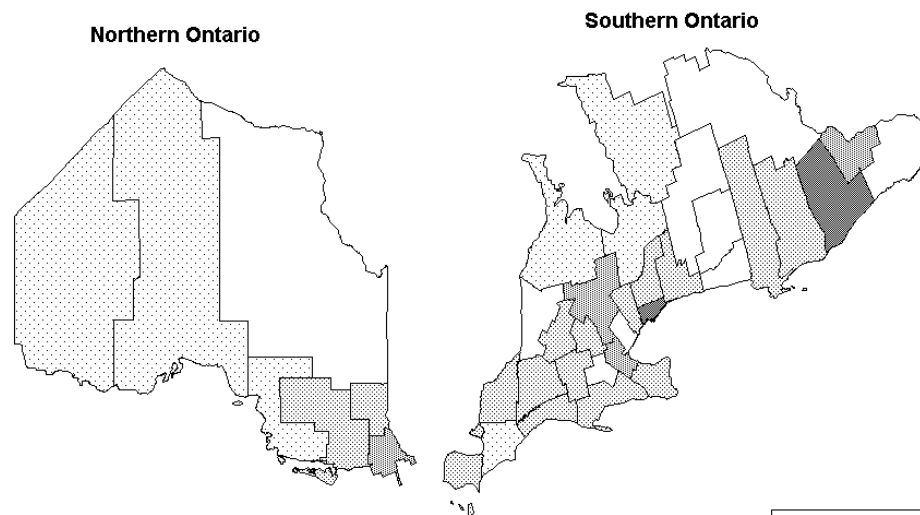


Source: RDIS, PHB

■ Flu A Cases ◆ Rate/100,000

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 January 30, 2004**



Activity Level

- ☐ No Data
- ☐ No Activity
- ☐ Sporadic Activity
- ☐ Localized Activity
- ☐ Widespread Activity