

		Ontario Influenza Bulletin	Ministry of Health and Long-Term Care Public Health Branch <i>Volume 7, Issue 13, 2004</i>
			

Week #04: Week Ending January 24, 2004

Influenza Activity in Ontario

Influenza activity continued to decrease in Ontario during the week ending January 24, 2004. Three of the health units reported no activity, 10 reported sporadic activity, and only six reported widespread influenza activity (see Map). The Ontario laboratories reported 129 influenza A and no influenza B isolations to the Centre for Infectious Disease Prevention and Control (CIDPC), Health Canada. The same laboratories have reported 4251 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 as shown in Table 1. Health units reported 424 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 to January 24, 2004, show that this surveillance season peaked between weeks 48 and 51 with most cases being reported during week 50 (Chart 1). The overall rate of influenza like illness (ILI) reported by sentinel physicians in Ontario during this week was 34.6/1,000. Eighty-seven (86 influenza A, 1 influenza B) influenza-related deaths have been reported through RDIS since September 1, 2003 (Chart 3). Charts 2 and 3 show that although the majority of the influenza cases were reported among the youngest age group (0-4 years), the case fatality rates were highest among the elderly residents in Ontario. However, the majority of the deaths occurred among individuals who had underlying medical conditions. There were 30 respiratory infection outbreaks in institutions reported by the health units to the Ministry during this surveillance period and 22 (73.3%) of the reported outbreaks were due to influenza A (Table 3). The distribution of the outbreaks by type of institution is shown in Table 3.

Table 1.

Indicator	2002-03 Season Week Ending January 25, 2003 (week 4) Season to Date**	2003-04 Season Week Ending January 24, 2004 (week4) Season to Date***
CIDPC Laboratory Surveillance (Flu isolates)Total	614	4251
Influenza A	613	4251
Influenza B	1	13
Other respiratory Viruses		
RSV	590	422
PIV1	95	214
PIV2	14	138
PIV3	251	107
PIV4	2	6
Other PIVs	1	3
Adenoviruses	84	92
% of Flu tests that are positive	7.7	16.1
No. of ILI Visits to Sentinel Physicians (ILI Rate/1000 patients seen for all reasons)	40	34.6
+ Institutional <u>Influenza</u> Outbreaks	9	319
+ Institutional Respiratory Infection Outbreaks	9	459

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

+ October 27, 2003 - January 24, 2004

Season to Date; August 24, 2002 - January 25, 2003 *Season to Date; August 24, 2003 - January 24, 2004

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

Table 2. Week Ending January 24, 2004 Influenza Cases in Ontario Reported Through the Reportable Disease Information System (RDIS), 2003-2004 (September 1, 2003 to January 24, 2004)

Health Unit	Flu A Week 4 (Ending Jan. 24)	Flu A Week 3 (Ending Jan. 17)	Flu A Change (Week 04- Week 03)	Flu B (Season-to-date)
Algoma	135	133	2	
Brant	21	21	0	
Chatham-Kent	24	24	0	
Durham Region	172	168	4	
Eastern Ontario	49	34	15	
Elgin-St. Thomas	9	9	0	
Grey-Bruce	87	77	10	
Haldimand-Norfolk Region	51	43	8	1
Haliburton-Kawartha	112	110	2	1
Halton Region	183	160	23	1
Hamilton City	407	400	7	
Hastings-Prince Edward	193	92	101	
Huron	34	25	9	
Kingston-Frontenac	89	82	7	
Lambton	0	0	0	
Leeds-Grenville	12	12	0	
Middlesex-London	73	73	0	
Muskoka-Parry Sound	74	74	0	
Niagara Region	192	179	13	
North Bay	82	76	6	
Northwestern	0	0	0	
Ottawa-Carleton	219	206	3	
Oxford	38	8	30	
Peel Region	419	391	28	2
Perth	48	48	0	
Peterborough	101	101	0	
Porcupine	92	92	0	
Renfrew	10	10	0	
Simcoe County	218	215	3	1
Sudbury	171	165	6	
Thunder Bay	26	26	0	
Timiskaming	28	7	21	
Toronto City	506	427	79	1
Waterloo Region	131	131	0	
Wellington-Dufferin	97	97	0	
Windsor-Essex	1	0	1	
York Region	125	89	36	2
Province	4229	3,805	424	9
* 424 new cases of influenza A and 0 cases of influenza B were reported during Week 04				
(Based on 2001 Provincial Population Estimate)				
PROVINCIAL INFLUENZA CASES PER 100,000 (September 1-January 24, 2004) = 33.5/100,000				
PROVINCIAL INFLUENZA CASES PER 100,000 (September 1,2002-January25,2003) =4.0/100,000				

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

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 were 34.6% ILI patients seen per 1,000 patients that were seen by the sentinel physicians for all reasons, including ILI. The ILI patients rates among children continue to decrease when compared to those that were observed during earlier weeks.

Canada: Summary for Week 4

Influenza activity appears to have peaked in most parts of the country, with many regions now reporting localized activity, except for Quebec and south western Ontario where activity remains widespread. Across Canada, during the week ending January 24 (week 04), sentinel physicians reported 18 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 3,160 reports of laboratory tests for influenza, including 591 (19%) influenza A detections and 1 influenza B detection.

Strain Characterization:

The National Microbiology Laboratory (NML) has antigenically characterized 591 influenza viruses to date. Of these, 584 (99%) were influenza A viruses [including 557 (95%) A/Fujian/411/02(H3N2)-like, 25 (4.5%) A/Panama/2007/99(H3N2)-like, 1 (0.2%) A/NewCaledonia/20/99(H1N1)-like and 1 (0.2%) H1N2]. There were 7 influenza B viruses [including 1 B/Hong Kong/330/2001-like and 6 B/Sichuan/379/99-like]. Detections of other respiratory viruses are at or below the expected range for this time of year.

A total of 284 isolates have been submitted to date from Ontario and the detections reported from Ontario included: 277 A/Fujian/411/02(H3N2)-like, 1 B/Hong Kong/330/2001-like and 6 B/Sichuan/379/99-like.

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

Avian Flu and SARS: Health Canada Updated Alert

Health Canada continued to issue an Alert regarding the avian influenza (H5N1) outbreaks that have occurred in several Asian countries. This alert 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/fluwatch/index.html>

<http://www.hc-sc.gc.ca/pphb-dgspsp/h5n1/index.html>

http://www.hc-sc.gc.ca/pphb-dgspsp/tmp-pmv/pub_e.html

United States: Center for Disease Control and Prevention (CDC): Influenza Summary Update

During the week ending January 24, 2004 (CDC Week 3) all four surveillance components reflected decreases in influenza activity. The percentage of specimens testing positive for influenza decreased, and the percentage of patient visits for influenza-like illness (ILI) remained below the national baseline of 2.5%. Mortality due to pneumonia and influenza (9.7%) appears to have peaked, but remained above the epidemic threshold during week 3 (8.2%). Eighty-five (7.5%) of 1,136 specimens collected from throughout the United States and tested by the collaborating laboratories were positive for influenza. One state health department reported widespread influenza activity, 20 states and New York City reported regional activity, 19 states reported local activity, and 9 states, the District of Columbia, Guam, and Puerto Rico reported sporadic activity.

Source: CDC: <http://www.cdc.gov/flu/weekly/>

International: WHO: Influenza activity associated with A/Fujian/411/2002-like viruses continues in some parts of Europe (Austria, Croatia, Denmark, Italy, and the Russian Federation) with marked increases reported in Latvia, Poland and Slovakia. Japan is reporting significant increases of influenza A (H3N2) in the north.

Sources: WHO Influenza Update: http://www.who.int/csr/don/2004_01_13a/en/

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

Avian influenza: During Week 4, WHO reported that laboratory tests confirmed avian influenza (H5N1) infection in two children in Thailand and more cases in Vietnam. As of 30th

January 2004, 11 cases of laboratory confirmed avian influenza (H5N1) had been reported in Asian countries. In response to outbreaks of H5N1 in poultry in Asia, several countries are currently carrying out mass slaughter of millions of chickens to prevent spread to humans (see WHO H5N1 update). **At the time, WHO stated that there remains no evidence of human-to-human spread.**

SARS: All laboratory confirmed cases WHO had reported in China have recovered and no illness was seen in any of their contacts, including health care workers.

Sources: WHO SARS Update: <http://www.who.int/csr/sars/en/>

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

WHO H5N1 Update: <http://www.who.int/csr/don/en/>

Table 3. Institutional Influenza Outbreaks by Health Unit, Ontario, 2003-2004 for Week 3

Table 3. Institutional Influenza Outbreaks by Health Unit, Ontario, 2003-2004 for Week 03									
						Complications			
Health Unit	Institution Type	Organism	Total # of Residents	# Ill Residents	RAR	# Cases with Pneumonia	# Cases Hospitalized	# Deaths Cases	SAR
Algoma	NH	Flu A	146	11	7.5	3	30	0	1.3
Algoma	ACH/NH	Flu A	58	2	3.4	2	0	2	0.0
Hastings	LTCF	Flu A	110	7	6.4	0	0	0	0.8
Middlesex London	Other	Flu A	110	7	16.4	0	1	0	0.0
Middlesex London	NH	Flu A	105	8	7.6	0	0	0	0.3

Middlesex London	NH	Flu A	141	4	2.8	0	4	0	0.0
Perth	NH	Flu A	48	0	0	0	0	0	9.8
Nth Bay	HFA	Flu A	160	4	2.5	4	1	0	0
Lambton	LTCF	Flu A	123	4	3.3	0	0	0	5.7
Lambton	HFA	Flu A	43	4	9.3	4	0	0	2.3
Muskoka	CCH	Flu A	60	8	13.3	0	0	0	0.0
Toronto	HFA	Flu A	580	6	1.0	0	3	0	0.0
Toronto	HFA	Flu A	98	18	18.4	0	0	0	0.0
Toronto	HFA	Flu A	237	8	3.4	0	0	0	0.0
York	NH	Flu A	199	4	2.0	0	0	0	1.4
York	NH	Flu A	113	6	5.3	0	0	0	1.0
Leeds	NH	Flu A /RSV	231	11	4.8	1	0	0	0.0
Simcoe	LTCF	Flu A	178	9	5.1	0	3	0	1.2
Simcoe	CCH	Flu A	34	2	25.9	N/A	N/A	N/A	UK
Windsor	Other	Flu A	74	5	6.8	0	0	0	0.0
Durham	NH	Flu A	122	6	4.9	0	0	0	0.0
Wellington	Other	Flu A	48	3	6.3	0	0	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

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

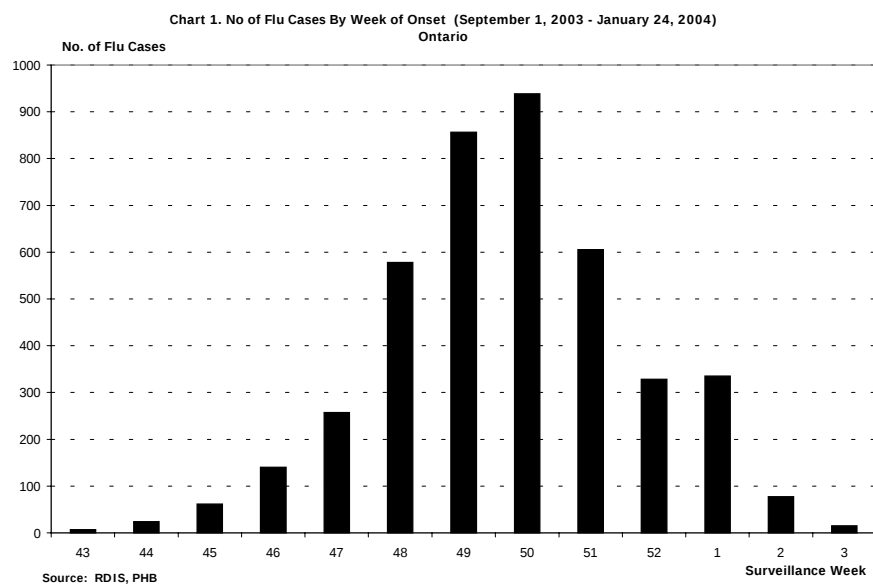


Chart 2. No. of Influenza Cases By Age Group, 2003-2004 Season

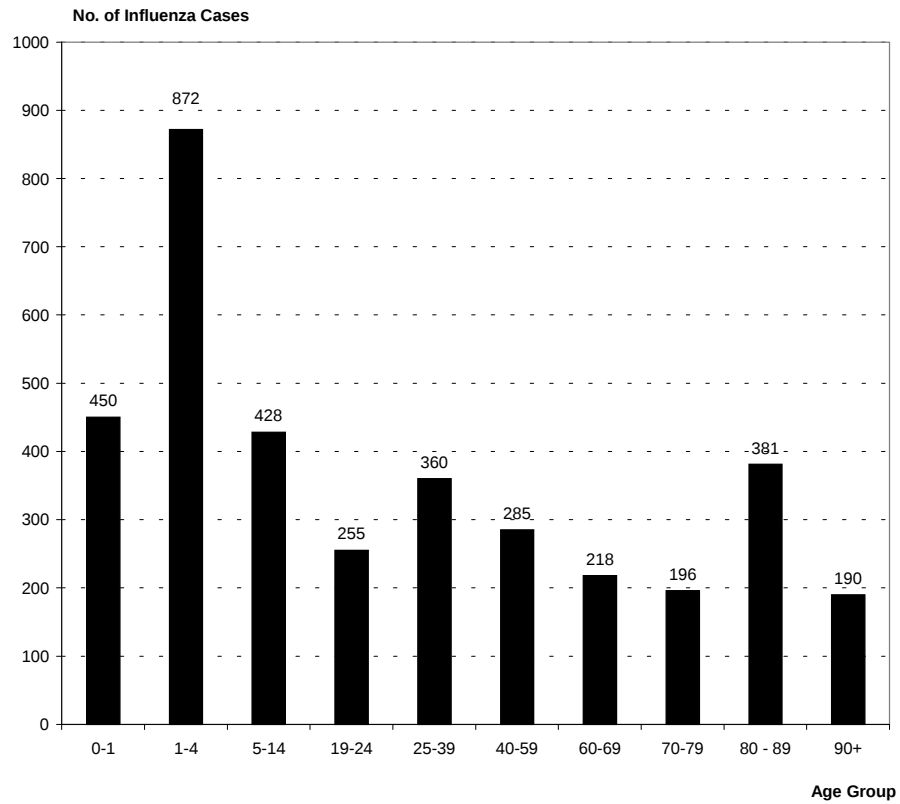
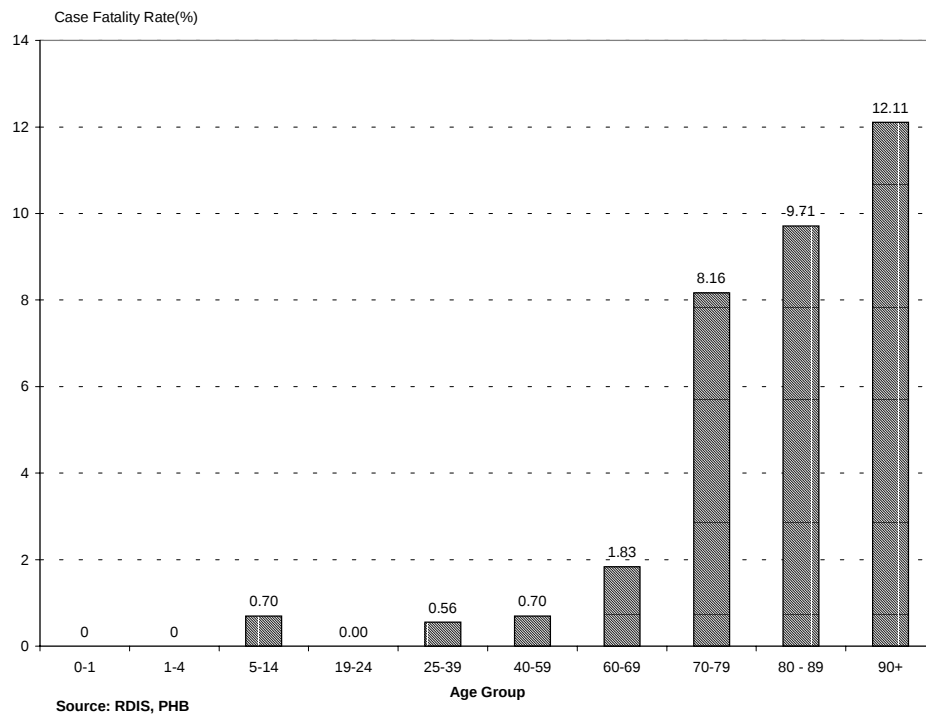


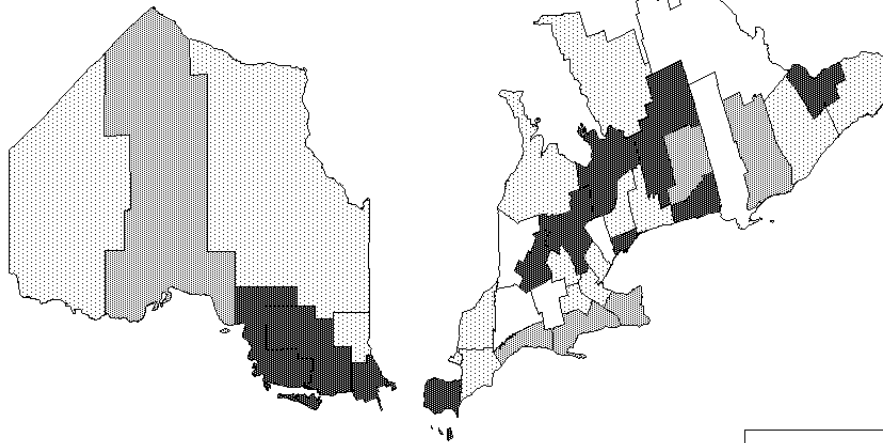
Chart 3. Case Fatality Rate by Age Group (September 1-January 24, 2004)



**Influenza Activity Level by Health Unit
Week Ending January 17, 2004**

Northern Ontario

Southern Ontario



Activity Level

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