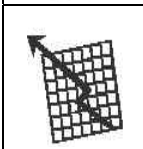
	Ontario Influenza Bulletin	Ministry of Health and Long-Term Care Public Health Branch <i>Volume 7, Issue 9, 2003</i>
			

Week #52: Week Ending December 27, 2003

Influenza Activity in Ontario

Widespread influenza activity continued in all the health regions of the province during the week ending December 27. Confirmed influenza cases and institutional influenza outbreaks were reported in all the health regions during this period. Ontario laboratories reported 958 influenza A isolations to the Center for Infectious Disease Prevention and Control (CIDPC), Health Canada. Also reported, were other respiratory isolates and detections as shown in Table 1. Health units reported 348 cases of confirmed influenza A cases and one influenza B case through the Reportable Diseases Information System (RDIS). Six influenza-related deaths have been reported through RDIS since October 27, 2003 (Table 3). There were 95 respiratory infection outbreaks in institutions reported during this surveillance period; sixty 60 (63.2%) of which, were due to influenza A (Table 4). The distribution of the outbreaks by type of institution is shown in Chart 1.

Table 1.

Indicator	2002-03 Season Week Ending, December 28, 2002 (week 52) Season to Date*	2003-04 Season Week Ending December 20, 2003 (week 51) Season to Date**	2003-04 Season Week Ending December 27, 2003 (week 52) Season to Date***
CIDPC Laboratory Surveillance (Flu isolates)Total	97	1442	2401
Influenza A	97	1434	2392
Influenza B	0	8	9
Other respiratory Viruses			
RSV			
PIV1	57	145	189
PIV2	8	138	153
PIV3	0	79	87
PIV4	10	50	62
Other PIVs	0	4	4
Adenoviruses	0	2	2
	3	44	49
% of Flu tests that are positive	16.1%	12.5%	17.5%
No. of ILI Visits to Sentinel Physicians (ILI Rate/1000 patients seen for all reasons)	N/A	119	79.3
+ Institutional Influenza Outbreaks	N/A	125	185†
+ Institutional Respiratory Infection Outbreaks	N/A	155	250

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

* August, 2002 – December 28, 2002; + October 27, 2003 - December 27, 2003 † = includes 1 combined FluA & PIV

Season to Date; August 24, 2003 - December 20, 2003 *Season to Date; August 24, 2003 - December 27, 2003

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

Table 2. Week Ending December 27, 2003 Influenza Cases in Ontario Reported Through the Reportable Disease Information System (RDIS), 2003-2004 (September 1, 2003 to December 27, 2003)

Health Unit	Influenza A		Flu B	Flu A Change (Week 52-Week 51)
	Week 51	Week 52		
Algoma	9	9		0
Brant	1	1		0
Chatham-Kent	7	7		0
Durham Region	46	46		0
Grey-Bruce	26	37		11
Eastern Ontario	10	10		0
Elgin	0	1		1
Haliburton-Kawartha	50	76		26
Halton	58	70	1	13
Haldimand-Norfolk	10	11	1	0
Hamilton-Wentworth	257	290		47
Hastings-Prince Edward	23	23		0
Huron	11	14		3
Kingston-Frontenac	49	49		0
Leeds-Grenville	6	6		0
Middlesex-London	8	50		42
Muskoka -Parry Sound	27	27		0
Niagara	42	78		36
North Bay	9	14		5
Northwestern	0	0		0
Ottawa-Carleton	30	30		0
Oxford	5	7		2
Peel	125	177		52
Peterborough	69	79		10
Perth	8	20		12
Porcupine	41	41		0
Simcoe	54	65		11
Sudbury	17	43		26
Thunder Bay	2	3		1
Toronto	126	155		29
Waterloo	9	19		10
Wellington-Dufferin	31	31		0
York Region	11	17		6
Total	1162	1511	2	
*348 new cases of influenza A and 1 case of influenza B were reported during week 52				
(Based on 2001 Provincial Population Estimate)				
PROVINCIAL INFLUENZA CASES PER 100,000 (September 1-December 27,2003) = 13.3/100,000				
PROVINCIAL INFLUENZA CASES PER 100,000 (September 1,2002-January,2003) =0.6/100,000				

Table 3

Influenza-related Deaths reported through RDIS for Sept. 1- December 27, 2003 = 6				
Health Unit	Age	Sex	Type of Flu	Prior Condition
York Region	87	M	Flu A	Related to Ship Cruise Outbreak
Peterborough	11	M	Flu A	Underlying Medical condition
Halton	8	F	Flu A	Underlying medical condition
Halton	78	F	Flu A	Underlying medical condition
Haliburton	98	F	Flu A	Institutional Outbreak-related
Algoma	87	M	Flu A	Institutional Outbreak-related

Federal FluWatch Sentinel Physician Surveillance Activity in Ontario

During week 52, the overall rate of influenza-like illness (ILI) reported through the Federal FluWatch system were 79.3 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 were still much higher than the overall rate: 230.0 ILI patients/1,000 patients seen for all reasons in the 0-4 year age group and 149.6 ILI patients/1,000 patients seen for all reasons among the 5-19 year age group. This is also reflected in the age specific incidence rates of influenza cases in the province (Chart 2) since September 01, 2003 to December 27, 2003.

Canada: December 13 to December 27, 2003 (Week 52)

Six provinces and territories did not report for week 52. Quebec reported widespread activity, however, Ontario had the highest proportion of laboratory detections (almost 50%) positive for influenza. Across Canada, during the week ending December 27 (week 52), sentinel physicians reported 79 cases of influenza-like illness (ILI) per 1000 patient visits, which is within the expected range for this time of year.

Laboratory Confirmations

Health Canada received 2,649 reports of laboratory tests for influenza, including 823 (31%) influenza A detections and no influenza B detections.

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

Strain Characterization

The National Microbiology Laboratory has antigenetically characterized 374 influenza viruses to date; 347 (93%) A/Fujian/411/02(H3N2)-like, 25 (7%) A/Panama/2007/99(H3N2)-like, 1(0.3%) A/NewCaledonia/20/99(H1N1)-like and 1(0.3%) H1N2. Detections of other respiratory viruses are at or below the expected range for this time of year. **The results reported on December 23 showed that Ontario Laboratories submitted 152 influenza viruses and all were antigenically characterized as A/Fujian/411/02(H3N2)-like.**

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

United States: Centre for Disease Control and Prevention (CDC): Summary

The number of states reporting widespread influenza activity decreased during week 53 (December 28, 2003 – January 3, 2004), the percentage of specimens testing positive for influenza also decreased, and the percentage of patient visits for influenza-like illness (ILI) decreased in all 9 surveillance regions with an overall national percentage of 6.2%. However, pneumonia and influenza (P & I) mortality (9.4%) continued to exceed the epidemic threshold for week 53 (8.0%). Six hundred forty-one (20.7%) of 3,092 specimens collected from throughout the United States were positive for influenza. Thirty-eight state health departments, the District of Columbia, and New York City reported widespread influenza activity, 9 states reported regional activity, 1 state reported local activity, 1 state reported sporadic activity, and 1 state did not report.

The CDC advises that for details of the 2003-04 influenza season in the US to date, with details on severe illness and deaths, to see: MMWR: <<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5249a1.htm>>

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

International:

WHO: Widespread influenza activity associated with influenza A(H3N2) persists in the northern hemisphere. Increasing activity is reported in parts of Europe (Czech Republic, Denmark, Finland, Italy, Norway, Russia, Switzerland, Russia Federation and Ukraine), North America (the United States) and Africa (Tunisia), whereas activity has declined in the UK, Portugal and Spain.

Avian Influenza A(H5N1): An outbreak of avian Influenza A(H5N1) in the Republic of Korea, reported to WHO resulted in 19,000 chicken deaths on a poultry farm and further spread to 9 poultry farms in 4 provinces as of 22 December. About one million chickens and ducks have been culled. The isolated strain was being examined to determine its relation to other A(H5N1) viruses, which emerged in Asia recently. So far no human A(H5N1) cases have been reported.

SARS: On 26 December, the Ministry of Health of China informed WHO of a suspected case of SARS in a hospital in Guangzhou. At the time, the case remained classified as suspected SARS. The Chinese Ministry of Health and WHO were collaborating to review laboratory test results and other technical issues, the ongoing epidemiological investigation and infection control issues. WHO was strongly assured that all appropriate steps had been taken by health authorities to ensure that any risk to the public health had been minimised.

Source: *WHO WPRO SARS press release:* http://www.wpro.who.int/sars/docs/pressreleases/pr_29122003.asp

European Influenza Surveillance Scheme (EISS) Week 52

During Week 52, the European Influenza Surveillance Scheme (EISS) has observed that the influenza H3N2 Wave had moved further across Europe. The incidence of influenza-like illness and/or acute respiratory illness is now decreasing in Belgium, France, and Luxembourg and following the pattern seen in England, Ireland, Northern Ireland, Portugal, Scotland, and Spain. Influenza activity increased in other countries in Central Europe, particularly in Lithuania, the Netherlands, Romania, and Switzerland. The predominant virus circulating is still A/Fujian/411/2002 (H3N2)-like.

Source: http://www.eiss.org/cgi-files/bulletin_v2.cgi

Table 4. Institutional Influenza Outbreaks by Health Unit in Ontario, 2003-2004 for Week 52

Health Unit	Type of Instn	Flu Type	Total Residents	Ill Residents	RAR	# of Residents with Pneumonia	# of Residents Hospitalized	# of Deaths Related to Outbreak	SAR
Algoma	RH	Flu A	46	2	4.3	0	0	0	5.9
Brant	NH	Flu A	45	1	2.2	0	0	0	0
Chatham-Kent	Other	Flu A	275	6	2.2	0	0	0	0.2
Ottawa - Carleton	HFA	Flu A	165	8	4.8	0	0	0	0
Huron	HFA	Flu A	119	6	5	0	0	0	0
Waterloo	NH	Flu A	150	4	2.7	0	0	0	0
Wellington-Dufferin	HFA	Flu A	175	6	3.4	0	0	0	0.3
North Bay	HFA	Flu A	94	3	3.2	0	3	0	0
North Bay	HFA	Flu A	160	4	2.5	N/A	N/A	N/A	0
Perth	NH	Flu A	48	0	0	0	0	0	9.8
Perth	HFA	Flu A	86	12	14	0	0	0	9.5
Perth	NH	Flu A	60	16	26.7	0	0	0	18.3
Peel	NH	Flu A	64	5	7.8	0	0	2	1
York	NH	Flu A	199	4	2	0	0	0	1.4
York	NH	Flu A	113	6	5	0	0	0	1
Haliburton, Kawartha, Pine Ridge	NH	Flu A	53	3	5.7	0	0	0	
Simcoe	LTCF	Flu A	178	9	5.1	0	0	0	1.2
Halton	ACH	Flu A	30	4	13.3	0	0	0	0
Halton	LTCF	Flu A	121	7	5.8	1	3	0	0
Hamilton-Wentworth	CCH	Flu A	238	5	2.1	1	0	1	0
Wellington-Dufferin	HFA	Flu A	175	6	3.4	1	2	0	0.3
Wellington-Dufferin	NH	Flu A	82	14	17.1	0	2	0	3.6
Sudbury	Other	Flu A	103	34	33	0	0	0	0
Sudbury	RH	Flu A	70	5	7.1	2	0	1	0
Lambton	LTCF	Flu A	123	4	3.3	0	0	0	5.7
Windsor-Essex	NH	Flu A	58	8	13.8	0	0	0	0
Durham	NH	Flu A	122	6	4.9	0	0	0	0
Peel	NH	Flu A	136	13	9.6	1	0	0	0
Toronto	NH	Flu A	580	6	1	0	0	0	0
Toronto	NH	Flu A	158	6	3.8	0	0	0	0
Toronto	HFA	Flu A	98	18	18.4	N/A	0	0	0
Muskoka - Parry Sound	CCH	Flu A	60	8	13.3	0	0	0	0
Wellington-Dufferin	RH	Flu A	48	3	6.3	0	0	0	0
Eastern Ontario	RH	Flu A	74	3	4.1	N/A	1	0	0
Ottawa - Carleton	HFA	Flu A	195	7	3.6	0	0	0	0
Ottawa - Carleton	HFA	Flu A	450	4	0.9	0	0	0	0
Ottawa - Carleton	HFA	Flu A	195	7	3.6	0	0	0	0
Renfrew	NH	Flu A	60	17	28.3	1	0	0	0
Renfrew	RH	Flu A	89	8	9	1	2	1	0
Toronto	RH	Flu A	222	6	2.7	0	0	0	1
Lambton	HFA	Flu A	43	4	9.3	0	0	0	1.9
Huron	RH	Flu A	67	3	4.5	0	0	0	0

Huron		Flu A	33	6	18.2	0	0	0	0
Peel	NH	Flu A	221	10	4.5	0	0	0	N/A
Hamilton-Wentworth Sudbury	NH	Flu A	378	3	0.8	0	0	0	0
	LTCF	Flu A & PIV	288	9	3.1	0	0	0	3.1
Middlesex-London	LTCF	Flu A	105	8	7.6	0	0	0	7
Middlesex-London	Other	Flu A	74	3	4	0	1	0	0
Middlesex-London	LTCF	Flu A	245	3	1.2	0	1	0	0
Middlesex-London	LTCF	Flu A	160	2	1.3	0	0	0	2.2
Middlesex-London	Other	Flu A	110	18	16.4	0	2	0	N/A
Middlesex-London	LTCF	Flu A	141	4	2.8	0	4	0	0
Middlesex-London	CCH	Flu A	66	5	7.6	0	0	0	N/A
Middlesex-London	CCH	Flu A	58	2	3.4	0	0	0	N/A
Middlesex-London	CCH	Flu A	29	6	20.7	0	0	0	N/A
Middlesex-London	CCH	Flu A	29	6	20.7	0	0	0	N/A
Middlesex-London	NH	Flu A	160	2	1.3	0	238	0	2.2
Middlesex-London	RH	Flu A	110	18	16.4	0	0	0	N/A
Middlesex-London	NH	Flu A	141	4	2.8	0	1	0	0
Middlesex-London	CCH	Flu A	66	5	8	N/A	1	0	N/A

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

Chart 1

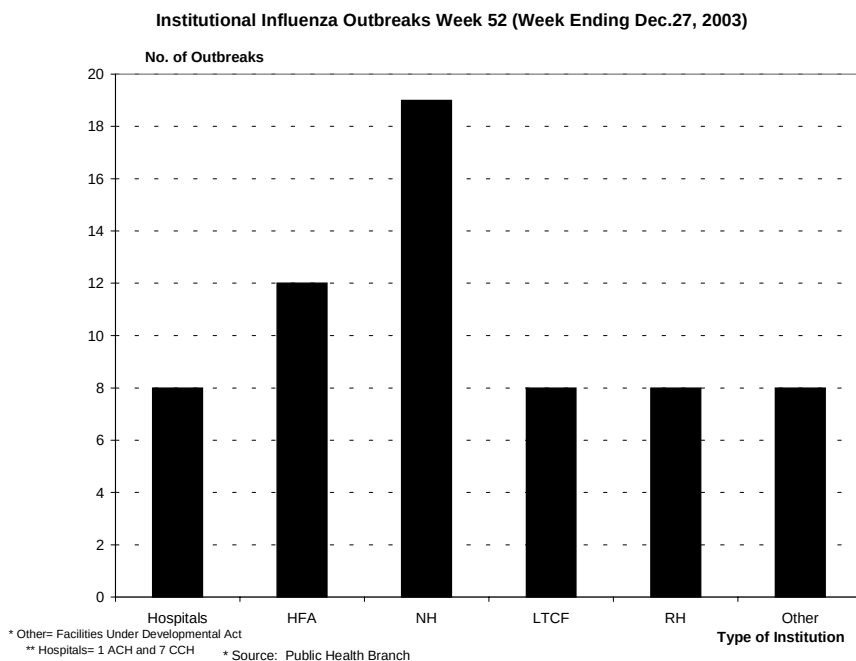
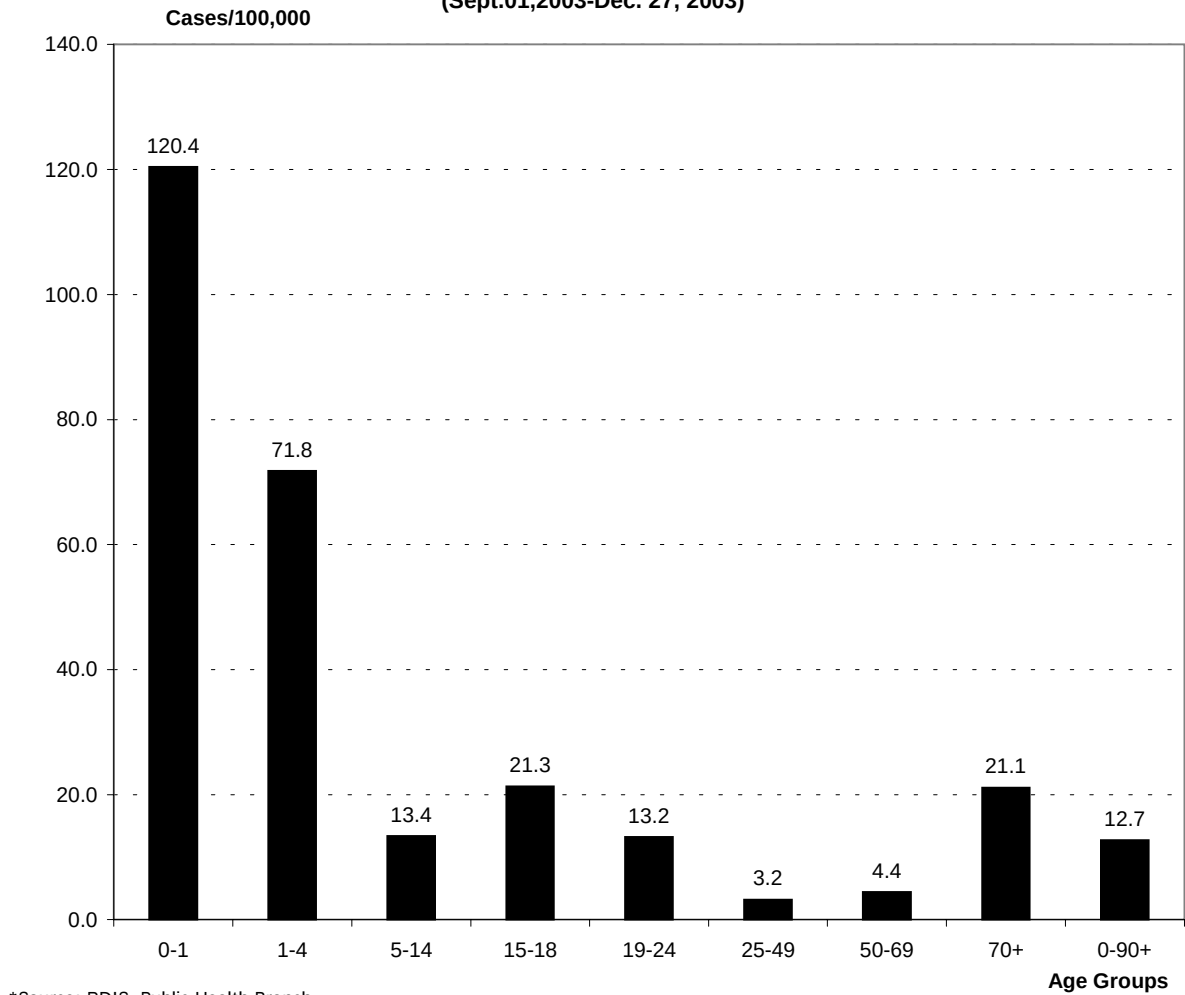


Chart 2

**Incidence of influenza A Cases in Ontario by Age Group
(Sept.01,2003-Dec. 27, 2003)**



**Influenza Activity Level by Health Unit
Week Ending December 27, 2003**

