

		Ontario Influenza Bulletin	Ministry of Health and Long-Term Care Public Health Branch <i>Volume 6, Issue 7 December 13, 2002</i>
			

Week #49: Week Ending December 7, 2002

Influenza Activity in Ontario

There was influenza activity reported in the province for the week ending December 7, 2002. Four of the Ontario Public Health laboratories reported 14 influenza A cases during this surveillance period. The following upper respiratory isolates were also reported: 27 respiratory syncytial virus (RSV), 7 parainfluenza type 1 (PIV1), 16 parainfluenza type 3 (PIV3), and 4 adenovirus (Table 1).

Table 1. Comparison of Influenza Activity in Ontario for the 2001-02 and 2002-03 Influenza Surveillance Seasons

Indicator	2001-02 Season	2002-03 Season
	Week Ending December 8, 2001	Week Ending November 30, 2002
	Season to Date**	Season to Date***
*Laboratory Surveillance (isolates)Total	9	27
Influenza A	9	27
Influenza B	0	0
vNo. of Visits to Sentinel Physicians for ILI	12	19
Institutional Outbreaks	1	3
Other respiratory Viruses		
RSV	87	137
PIV1	64	45
PIV2	51	7
PIV3	3	149
PIV4	10	2
Other PIVs	2	0
Adenoviruses	26	44

*Centre for Infectious Disease Prevention and Control, Health Canada

** October 20, 2001- December 8, 2001

***Season to Date August 25, 2002 – December 7, 2002; consistency with Health Canada year round surveillance

vFluWatch Sentinel Physician Program, Rate per 1000 patients seen

Table 2. Season to Date Influenza Cases in Ontario Reported Through the Reportable Disease Information System (RDIS), 2002-2003

Health Unit	Number of Lab-Confirmed Influenza Cases	
	Type A	Type B
Ottawa	2	0
Perth District	1	0
Halton	4	0
Hamilton-Wentworth	1	0
Muskoka-Parry Sound	1	0
Toronto	1	0
York Region	4	0
Total	14	0

Note: 2 additional cases of influenza A were reported by Peel Regional prior to August 25, 2002.

Table 3. Season-to-date Institutional Influenza Outbreaks by Health Unit in Ontario, 2002-2003

Health Unit	Type of Institution	# of Outbreaks	Organism Identified	RAR (%)	SAR (%)	Complications
Peel Regional *	Long-Term Care Facility	1	Influenza A	20.9	8.3	1 death
Perth District	Long-term Care Facility	1	Influenza A	40.4	11.3	None reported to date
Oxford County	Long-term Care Facility	1	Influenza A	2.4	2.0	None reported to date

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

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

*The outbreak within Peel Regional began prior to week 35 but into week 41 and thus has been included in the 2002-2003 season.

Federal FluWatch Sentinel Physician Surveillance Activity in Ontario

The rate of influenza-like illness (ILI) reported through the Federal FluWatch system was 19 per 1,000 patients seen.

Laboratory Confirmations and Influenza Activity in the Rest of Canada

Influenza activity remains low with less than one percent of laboratory tests positive for influenza and no outbreaks. During the week ending November 30 (week 48), parts of Ontario and the Northwest Territories reported sporadic activity, while 11 provinces/territories reported no activity. Sentinel physicians reported 19 cases of influenza-like illness (ILI) per 1000 patient visits, which is within the expected rate for this time of year. Health Canada received 802 reports of laboratory tests for influenza: five (0.6%) were positive for influenza A. Detection of other respiratory viruses circulating in the Canadian population remains within expected levels for RSV (6.5% of test positive) and adenovirus (2.1% of test positive), though slightly increased for parainfluenza viruses (7.6% of test positive). To date this season, there has been one reported outbreak of laboratory-confirmed influenza in a long-term care facility (LTCF).

Source: Health Canada, FluWatch: <<http://www.hc-sc.gc.ca/pphb-dgsp/fluwatch/index.html>>

Influenza Activity in the United States

During week 47, influenza activity was reported as regional in Louisiana and Texas, and sporadic or none in 45 states (three states did not report). ILI accounted for 1.3% of patient visits to sentinel physicians, below the national baseline of 1.9%. Sentinel cities reported 7.1% of deaths attributed to pneumonia and influenza, below the epidemic threshold of 7.4% for this week. The CDC received 923 reports of influenza tests; five were positive for influenza A (unsubtyped) and 16 were positive for influenza B. Of the five positive for influenza A virus specimens, 2 were A(H1). Since September 29, a total of 10,036 specimens have been tested for influenza; 47 (0.5%) were positive (20 influenza A and 27 influenza B). All of the seven viruses that have been antigenically characterized to date (one influenza A (H1N2) virus, one A(H3N2) and five influenza B viruses) are covered by the 2002-2003 northern hemisphere vaccine.

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

Influenza Activity in the World

During weeks 48, country reports to the WHO FluNet indicate low influenza activity worldwide with only sporadic isolations of influenza viruses. However, many participating countries did not report. All virus isolations reported to date are covered by the 2002-2003 vaccine. Similarly in week 48, reports to the European Influenza Surveillance Scheme (EISS) indicate low levels of influenza activity with sporadic isolations of influenza A and B viruses reported. The WHO is presently investigating an outbreak of acute respiratory illness in the Democratic Republic of Congo, laboratory results are pending.

Source: WHO, <<http://oms2.b3e.jussieu.fr/flunet/news.html>>

And EISS (Europe): <http://www.eiss.org/cgi-files/bulletin_v2.cgi>

Vaccine and Strain Characterization

Seven more influenza A isolates in Ontario were characterized at the Health Canada Winnipeg Laboratory (Table 4). They were identified as influenza A (H1N2) virus, and the hemagglutinin proteins of the influenza A (H1N2) viruses were similar antigenically to the current vaccine strain A/NewCaledonia/20/99 (H1N1).

The National Advisory Committee on Immunization (NACI) recommended that the trivalent vaccine for the 2002-03 season contain an A/Panama/2007/99 (H3N2)-like virus, an A/New Caledonia/20/99 (H1N1)-like virus, and either B/Hong Kong/330/2001-like virus or B/Shangdong/7/97-like antigens.

Table 4. Season-to-date Strain Identification and Characterization in Canada, 2002-2003*

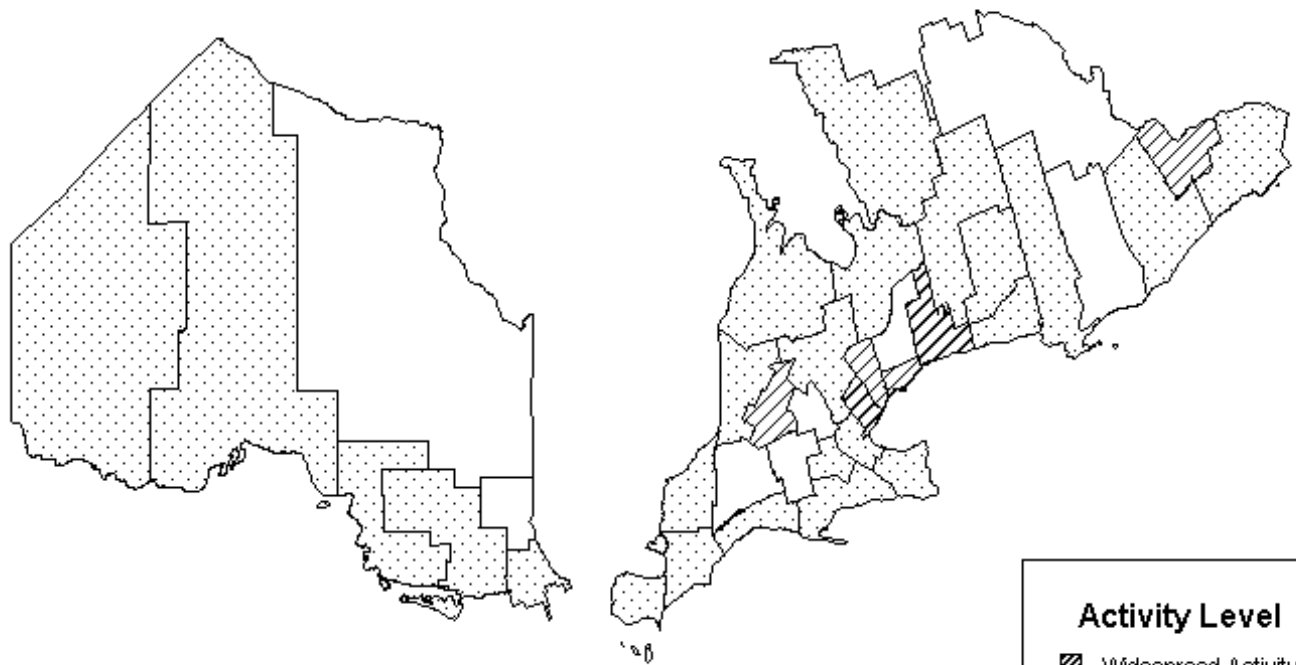
Province/Territory	Strain Characterization	# of Strains Identified-to-date
Alberta	A/PANAMA/2007/99-like	1
Ontario	A/PANAMA/2007/99-like	1
	A(H1N2)	7
Quebec	A/PANAMA/2007/99-like	3
Total		12

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Influenza Activity Level by Health Unit Week Ending December 7, 2002

Northern Ontario

Southern Ontario



Activity Level

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