

		Ontario Influenza Bulletin	Ministry of Health and Long-Term Care Public Health Branch <i>Volume 5, Issue 15</i> <i>February 8, 2002</i>
			

Week #5: Week Ending February 2, 2002

Influenza Activity in Ontario

For the week ending February 2, 2002, due to a reporting delay at Health Canada, the data for the respiratory virus isolations was unavailable. This data will be updated in the next bulletin. In Table 1, only the data for the institutional outbreaks has been updated. We apologize for any inconvenience this may have caused.

Seven more influenza A outbreaks were reported in the province. The following health units reported these outbreaks: *Eastern Ontario*: one hospital setting, involving 2 patients, *Ottawa*: one hospital setting, involving 4 patients, *Toronto*: two homes for the aged, involving 2 residents at each facility, and one hospital reported two outbreaks on two different floors, involving 3, and 2 residents respectively. *Wellington*: one outbreak in a nursing home, involving 2 residents. The total number of outbreaks to-date in Ontario is 11, and all of these cases were detected by rapid testing (Tables 1, 2, and 3).

Table 1. Comparison of Influenza Activity for the 2000-01 and 2001-02 Influenza Surveillance Seasons

Indicator	2000-01 Season	2001-02 Season
	Week Ending February 3, 2001	Week Ending February 2, 2002
	Season-to-date	Season-to-date
*Laboratory Surveillance (isolates) Total	101	58
Influenza A	63	29
Influenza B	38	29
Institutional Outbreaks	0	11
Other Respiratory Viruses		
RSV	1023	823
PIV1	20	100
PIV2	5	87
PIV3	118	9
PIV4	17	13
Other PIVs	0	2
Adenoviruses	45	62

*Centre for Infectious Disease Prevention and Control, Health Canada; Reportable Disease Information System

Table 2. Season-to-date Influenza Cases by Health Unit as Reported Through RDIS*, 2001-02

Health Unit	Number of Lab-Confirmed Influenza Cases**	
	Type A	Type B
Brant County	1	0
Durham	3	3
Eastern Ontario	1	0
Halton	1	0
Hamilton-Wentworth	10	2
Kingston	7	1
Leeds, Grenville, Lanark	6	0
Niagara	1	0
North Bay & District	2	0
Ottawa	9	3
Peel	3	6
Peterborough	1	0
Simcoe	2	1
Toronto	7	15
Wellington, Dufferin, Guelph	2	0
Waterloo	1	1
York	0	1
Total	57	33

*Reportable Disease Information System,

**Public Health Units

Table 3. Season-to-date Institutional Influenza Outbreaks by Health Unit in Ontario, 2001-02

Health Unit	Type of Institution	# of Outbreaks	Organism Identified	RAR%	SAR %	Complications
Brant County	Nursing Home	1	Influenza A	5.2	2.9	None reported to-date; *(note: antiviral use was initiated)
Eastern Ontario	Hospital	1	Influenza A	4.2	1.1	None reported to-date; *(note: one resident was immunized, and the other was not; antiviral use was initiated)
Leeds, Grenville, Lanark	Long-Term Care Facility	1	Influenza A	21.6	10.8	2 resident deaths have occurred to-date; *(note: they were not immunized)
North Bay & District	Home for the Aged	1	Influenza A	1.8	3.3	2 resident deaths have occurred to-date; *(note: residents were immunized; antiviral use was initiated)
Ottawa	Hospital	1	Influenza A	6.2	0	None reported to-date; *(note: antiviral use was initiated)
Toronto	Day-Care Centre	1	Influenza A	58	0.1	None reported to-date; *(note: immunization data unknown)
Toronto	Hospital	2	Influenza A	8.2 1.3	5.9 0	None reported to-date; *(note: the patients were not immunized; antiviral use was initiated)
Toronto	Home for the Aged	1	Influenza A	3.9	4.4	None reported to-date *(note: resident was immunized)
Toronto	Home for the aged	1	Influenza A	9.5	0	None reported to-date *(note: residents were immunized; antiviral use was initiated)
Wellington, Dufferin, Guelph	Nursing home	1	Influenza A	43	0	None reported to-date *(note: residents were immunized; antiviral use was initiated)

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

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

Vaccine and Strain Characterization

(Up to February 1, 2002) In Ontario, of the influenza samples sent for sub-typing to the National Microbiology Laboratory at Health Canada, 16 were A/Panama/2007/99(H3N2)-like isolates, 16 were B/Hong Kong/22/01-like isolates, and 1 was B/Sichuan/379/99-like (Table 4).

The B/Hong Kong/22/2001-like viruses circulating in Canada, belong to the B/Victoria/02/87 lineage, which last circulated in Canada in the 1988-1989 season and have not been circulating in North America in the past 12 years. Children under 12 years of age or younger are not immune to the B/Hong Kong/22/2001-like viruses, and the current year's vaccine will not provide any protection for this population. Individuals older than 12 years of age will have limited protection from this year's vaccine.

The A/Panama/2007/99(H3N2)-like strain and B/Sichuan/379/99-like strain, is included in this year's vaccine, and the B/Hong Kong/22/01-like strain belongs the B/Victoria/504/2002 lineage, which is not included in this year's vaccine. This year's influenza vaccine B component provides protection mainly against B/Yamagata/16/88-like viruses, but as several studies have shown, this strain also provides some protection against the B/Victoria/504/2002-like viruses. The identified type A strains are included in the current season's vaccine.

Table 4. Season-to-date Strain Identification and Characterization In Canada*, 2001-02

Province/Territory	Strain Characterization	# of Strains Identified-to-date
Newfoundland		
Prince Edward Island		
Nova Scotia	A/Panama/2007/99(H3N2)-like B/Hong Kong/22/01-like	2 1
New Brunswick	A/Panama/2007/99(H3N2)-like	1
Quebec	A/Panama/2007/99(H3N2)-like B/Sichuan/379/99-like	19 1
Ontario	A/Panama/2007/99(H3N2)-like B/Sichuan/379/99-like B/Hong Kong/22/01-like	16 1 16
Manitoba		
Saskatchewan	A/Panama/2007/99(H3N2)-like	4
Alberta	A/Panama/2007/99(H3N2)-like A/New Caledonia/20/99 (H1N1)-like B/Hong Kong/22/01-like	8 2 1
British Columbia	A/Panama/2007/99(H3N2)-like	7
Yukon	A/Panama/2007/99(H3N2)-like	2
NorthWest Territories		
Nunavut		
		Total
	A/Panama/2007/99(H3N2)-like	59
	A/New Caledonia/20/99 (H1N1)-like	2
	B/Sichuan/379/99-like	2
	B/Hong Kong/22/01-like	18

*Respiratory Viruses Section, National Microbiology Laboratory (NML), PPHB, Health Canada

Federal FluWatch Sentinel Physician Surveillance Activity in Ontario

The rate of influenza-like illness (ILI) reported through the Federal FluWatch system was 18 per 1,000 patients seen.

Laboratory Confirmations and Influenza Activity in the Rest of Canada

Influenza activity is at the level of localised activity in Quebec, and one region in BC, with outbreaks reported in both provinces. In Quebec, 25% of tests were positive for influenza A. Sentinel physicians reported 29 cases of influenza-like illness (ILI) per 1000 patient visits, which remains below the expected rate for this time of year. Health Canada received 1999 reports of laboratory tests for influenza: 298 (15%) were positive for influenza A and 16 (0.8%) were positive for influenza B. Of the 64 influenza isolates referred to the National Microbiology Laboratory, the majority (81%) were identified as A/Panama/2007/99 (H3N2)-like; 2 (3%) were identified as A/New Caledonia/20/99 (H1N1)-like. All influenza A viruses identified to date have been similar to the strains included in this season's northern hemisphere vaccine. There has been 10 influenza B strains identified to date. Of these, the B/Sichuan/379/99-like strain is similar to the current vaccine strain. However, the B/Hong Kong/22/01-like viruses belong to another lineage of influenza B viruses, the B/Victoria/02/87 lineage, which last circulated in Canada in the 1988-1989 season. The B/Hong Kong/22/01-like viruses are antigenically different from the vaccine strain and the current vaccine is expected to provide limited cross-protection against this antigenic variant of influenza B viruses.

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

Influenza Activity in the United States

During week 4 (January 20-26, 2002), 392 (17.6%) of 2,224 respiratory specimens tested by WHO and NRVES laboratories were positive for influenza. The overall proportion of patient visits to sentinel physicians for influenza-like illness (ILI) was 3.2%, which is above the national baseline of 1.9%. The proportion of deaths attributed to pneumonia and influenza was 7.8%, which is below the epidemic threshold of 8.2% for week 4. Eight state and territorial health departments reported widespread influenza activity, 15 reported regional activity, and 25 reported sporadic activity.

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

Influenza Activity in the World

No new information reported since the last Bulletin.

Source: WHO, Communicable Disease Surveillance and Response: <<http://www.who.int/emc/diseases/flu/country.html>>

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.gov.on.ca/MOH/english/program/pubhealth/flu_bul/flubul_mn.html>

Influenza Activity Level By Health Unit Week Ending February 2, 2002

Northern Ontario

Southern Ontario

