

		Ontario Influenza Bulletin	Ministry of Health and Long-Term Care Public Health Branch <i>Volume 7, Issue 24, 2004</i>
			

Week #15: Week Ending April 10, 2004

Influenza Activity in Ontario

Influenza activity in Ontario remained at low levels during the week ending April 10, 2004 (see map). Influenza activity reported by 19 health units was ranked as follows: 14 (73.7%) - no activity, 4 (21.0%) - sporadic activity and 1 (5.3%) - localized activity. There were 3 (0.8%) positive influenza isolations, (1 Flu A and 2 Flu B) of the 389 influenza tests that Ontario laboratories reported to the Centre for Infectious Disease Prevention and Control (CIDPC), Health Canada. Between August 24, 2003 and April 10, 2004, these laboratories reported 4,471 influenza A and 36 influenza B isolates or detections (Table 1). Also reported during this season to date are other respiratory isolates and detections shown in Table 1. Health units reported 131 cases of laboratory-confirmed influenza (130 influenza A, 1 influenza B) through the Reportable Diseases Information System (RDIS) (Table 2). Influenza-like illness (ILI) reported by sentinel physicians in Ontario was 15.7/1,000 patients seen for all reasons. From September 1, 2003 to April 10, 2004, 151 (150 Flu A, 1 Flu B) influenza-related deaths were reported through RDIS. Table 3 shows data on the respiratory infection outbreaks in institutions reported to the Ministry by the health units from October 27, 2003 to April 10, 2004; 10 of the outbreaks were reported during week 15. No influenza-confirmed outbreaks were reported during week 15.

Table 1.

Indicator	2002-03 Season Week Ending April 12, 2003 (week 15) Season to Date**	2003-04 Season Week Ending April 10, 2004 (week 15) Season to Date***
CIDPC Laboratory Surveillance (Flu isolates)Total	803	4,507
Influenza A	784	4,471
Influenza B	19	36
Other respiratory Viruses		
RSV	1,948	2,166
PIV1	126	252
PIV2	19	155
PIV3	324	289
PIV4	5	6
Other PIVs	1	17
Adenoviruses	147	163
* % of Flu tests that were positive	4.0	0.8
+No. of ILI Visits to Sentinel Physicians (ILI Rate/1000 patients seen for all reasons)	N/A	15.7

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

+ October 27, 2003 – April 10, 2004. *% of positive cases based on the total specimens submitted for the surveillance week.

Season to Date: August 24, 2002 – April 12, 2003. *Season to Date: August 24, 2003 – April 10, 2004.

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

Table 2. Week Ending April 10, 2004 Influenza Cases in Ontario Reported through the Reportable Disease Information System (RDIS), 2003-2004 (September 1, 2003 to April 10, 2004)

Health Unit	Flu A Week 15 (Ending Apr. 10)	Flu A Week 14 (Ending April 3)	Flu A Change (Week 15-Week 14)	Flu B (Season-to-date)
Algoma	136	136	0	0
Brant	39	39	0	0
Chatham-Kent	34	34	0	0
Durham Region	177	177	0	1
Eastern Ontario	61	61	0	0
Elgin-St. Thomas	16	16	0	0
Grey-Bruce	93	93	0	0
Haldimand-Norfolk Region	59	59	0	1
Haliburton-Kawartha	114	116	-2	1
Halton Region	222	222	0	2
Hamilton City	416	417	-1	1
Hastings-Prince Edward	202	202	0	0
Huron	42	42	0	0
Kingston-Frontenac	95	95	0	2
Lambton	46	46	0	0
Leeds-Grenville	18	17	1	0
Middlesex-London	217	121	96	0
Muskoka-Parry Sound	85	85	0	0
Niagara Region	201	201	0	0
North Bay	110	101	9	0
Northwestern	0	0	0	0
Ottawa-Carleton	237	237	0	1
Oxford	40	40	0	0
Peel Region	547	547	0	4
Perth	65	49	16	0
Peterborough	101	101	0	0
Porcupine	94	94	0	0
Renfrew	37	37	0	0
Simcoe County	243	238	5	2
Sudbury	184	184	0	0
Thunder Bay	31	31	0	0
Timiskaming	44	44	0	0
Toronto City	590	585	5	6
Waterloo Region	157	157	0	0
Wellington-Dufferin	139	138	1	0
Windsor-Essex	23	23	0	0
York Region	319	319	0	5
	5,234	5,104	130	26
* 130 new cases of influenza A and 1 case of influenza B were reported during Week 15.				
(Based on 2001 Provincial Population Estimate)				
PROVINCIAL INFLUENZA A CASES PER 100,000 (September 1,2003-April 10, 2004) = 44.1/100,000.				
PROVINCIAL INFLUENZA A CASES PER 100,000 (September 1,2002-April 12, 2003) = 6.8/100,000				

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 – April 10, 2004

Respiratory Infection Outbreaks in Institutions	2003-04 Season Week Ending April 10, 2004 (week 15) Season to Date
Total Respiratory Infection Outbreaks in Institutions	754
Influenza A Outbreaks	380
Flu A & other organisms	7
Influenza B	1
Other organisms	69
No organism detected	254
Laboratory results pending	43
*Declared Over	643
Influenza A	361
Flu A & other organisms	7
Flu B	0
Other organisms	55
Reported as "N/A results pending" or no definitive laboratory results reported	4
No organism detected	216
Outbreaks by Onset Period	643
Onset of illness in index case October 27/03 – April 10, 2004	627
Onset of illness in index case prior to October 27/03	16
**Ongoing Outbreaks	111
Influenza A	19
Flu A & other organisms	0
Flu B	1
Other organisms	14
Results pending	39
No organism detected	38
Categories & Types of Institutions	754
LTCF 's (NH, HFA)	509
Combined (e.g. NH/HFA, NH/Hospital)	37
Unspecified	9
Hospitals (ACH, CCH, Psychiatric Hosp.)	59
Other (RHs, Children Residences, Developmentally Act Institutions/Jail)	140

*** Declared over respiratory infection outbreaks = Appendix E (Final Report) has been received by the Ministry.**

**** Ongoing respiratory infection outbreaks = Appendix E not yet received or outbreak onset is recent and is still active.**

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

Canada: Summary for Week 15

Localized activity and an outbreak of influenza in a long-term care facility is being reported in Prince Edward Island. Activity in the Fraser health region of British Columbia is sporadic. The rest of the country reports either sporadic or no activity.

Federal FluWatch Sentinel Physician Surveillance:

Across Canada, during the week ending April 10 (week 15), sentinel physicians reported 14 cases of influenza-like illness (ILI) per 1000 patient visits, which is below the expected range for this time of year.

The National Microbiology Laboratory: has antigenically characterized 779 influenza viruses to date, 759 (97.4%) were influenza A viruses, including 732 (96.4%) A/Fujian/411/02(H3N2)-like, 25 (3.3%) A/Panama/2007/99(H3N2)-like, one A/NewCaledonia/20/99(H1N1)-like and one H1N2. Twenty (2.6%) were influenza B viruses, including four B/Hong Kong/330/2001-like and 16 B/Sichuan/379/99-like. Detections of other respiratory viruses were at or below the expected range for this time of year.

Laboratory Confirmations:

Health Canada received 1,342 reports of laboratory tests for influenza, including 10 (0.75%) influenza A detections and 9 (0.67%) influenza B detections.

Source: http://www.hc-sc.gc.ca/pphb-dgspsp/fluwatch/03-04/w13_04/index.html

Avian Situation in BC: As of April 8th 2004, the Canadian Food Inspection Agency (CFIA) had confirmed avian influenza on 20 farms in the Fraser Valley region. Nineteen million birds were killed in order to stop the disease from spreading further. The number of laboratory-confirmed human infections remained at two. Vaccination, prophylaxis with antivirals and personal protective equipment were being enforced for all persons who were exposed to the poultry outbreaks. **Health Canada advises that there is no evidence of human-to-human transmission.** Surveillance and follow up continues for all exposed, and all precautionary measures are being followed. Health Canada advises checking the following CFIA website for more information.

CFIA website: <http://www.inspection.gc.ca/english/anima/heasan/disemala/avflu/avflue.shtml>

Strain Characterization:

The National Microbiology Laboratory (NML) reported on strain characterization completed on influenza isolates submitted from October 1, 2003 to April 6, 2004 (Table 4). The Ontario laboratories have submitted a total of 351 viruses, which have been characterised as shown in Table 4.

Table 4. Strain Characterization Completed on Influenza Isolates in Canada

	Influenza Virus						
Province/Territory	Type A(H1N1) *A/New Caledonia/20/ 99-like	Type A(H3N2)		Type A(H1N2)	Type B		TOTAL
		A/Panama/ 2007/99-like	A/Fujian/411/02 -like		Hong Kong /330/01- like	Sichuan /379/99 -like	
Newfoundland			9				9
Prince Edward Island			5				5
Nova Scotia			21	1			22
New Brunswick			10				10
Quebec			90		1	4	95
Manitoba			16				16
Saskatchewan		14	61				75
Alberta		6	66			1	73
British Columbia	1	5	107				113
Yukon			2				2
North West Territory			2				2
Nunavut			6				6
ONTARIO			337		3	11	351
TOTAL	1	25	732	1	4	16	779

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

United States: CDC:

Influenza activity remained low during the week ending April 10, 2004. The percentage of patient visits for influenza-like illness (ILI) remained below the national baseline of 2.5%. During this week (week 14), mortality due to pneumonia and influenza (P&I) remained below the epidemic threshold (8.0%). Four (0.6%) of 629 specimens collected from throughout the United States were positive for influenza. Ten states, New York City, Guam and Puerto Rico reported sporadic activity and 38 states reported no influenza activity.

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

International: EISS: WHO and EISS:

During weeks 14–15, influenza activity remained low in most parts of the world, except Hong Kong Special Administrative Region (SAR) of China, where high level of A(H3N2) activity continued to be reported.

Source: <http://www.who.int/csr/disease/influenza/update/en/who.int/csr/disease/influenza/update/en/>

The intensity of influenza activity in Europe was low in week 15. Most countries reported no influenza activity and there were only sporadic laboratory confirmed cases of influenza A and B. Sporadic activity in England and Norway and no influenza activity was reported in 15 networks. Most areas (networks) reported decreasing or stable levels of clinical activity. Only the Slovak Republic reported an increase in clinical activity in week 15, but the incidence of influenza-like illness remained well below the baseline level of clinical activity.

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

Avian Influenza (WHO): WHO has posted guidelines, recommendations and descriptions regarding Avian flu H5N1 at its H5N1 update website. They include:

- advice for people living in an areas affected by highly pathogenic avian influenza A(H5N1) virus,
- a report in the *Weekly Epidemiological Record* on Avian influenza A(H5N1),
- public health concerns regarding food safety issues and control of avian influenza A(H5N1),
- guidelines for the use of seasonal influenza vaccine in humans at risk of A(H5N1) infection,
- Interim Infection Control Guidelines for Health Care Facilities,
- clinical and epidemiological description of influenza A (H5N1) in affected Asian countries,
- recommended laboratory tests to identify influenza A(H5N1) virus in specimens from patients with an influenza-like illness (ILI)
- guidelines for global surveillance of influenza A(H5N1),
- guidelines for the collection of human specimens for laboratory diagnosis of influenza A(H5N1) infection,
- guidelines for the storage and transport of human and animal specimens for laboratory diagnosis of influenza A(H5N1) infection,

- interim guidelines on clinical management of humans infected by influenza A(H5N1),
- interim recommendations for the protection of persons involved in the mass slaughter of animals potentially infected with highly pathogenic influenza viruses,
- influenza diagnosis and surveillance, and,
- reference laboratories for diagnosis of influenza A(H5N1) infection.

Source: http://www.who.int/csr/disease/avian_influenza/en

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

