

Ontario Influenza Bulletin

Mid-Spring Edition**Vol. 8, Issue 8 Weeks 18 - 19 (May 1 - 14, 2005)****Introduction**

The current issue of the Ontario Influenza Bulletin summarizes influenza activity during weeks 18-19. It covers the time period of May 1 to May 14, 2005.

Influenza activity continued to decline in Ontario during weeks 18 and 19. All regions in Ontario reported localized activity in weeks 18 and 19, while the rest of the country experienced either sporadic or no activity.

The proportion of influenza type B detected (as opposed to influenza A) continued as the predominant type of influenza during weeks 18 and 19 in Ontario and resulted in 14 positive influenza B isolates in week 19, ending May 14, 2005.

Influenza Activity in Ontario

During the period of influenza surveillance between May 1 and May 14, 2005 (reporting weeks 18-19), a total of 33 laboratory-confirmed cases of influenza were reported (9 influenza A, 24 influenza B) by Ontario laboratories to the Centre for Infectious Disease Prevention and Control (CIDPC).

Throughout this period there were 36 cases of respiratory syncytial virus (RSV), 92 cases of para-influenza virus (PIV) and 9 cases of adenoviruses, all of which were laboratory-confirmed (Appendix 1).

Including late reports, a total of 3,825 influenza A, 1,292 influenza B, 2,810 RSV, 505 PIV and 348 adenoviruses were reported to the CIDPC between August 22, 2004 and May 14, 2005.

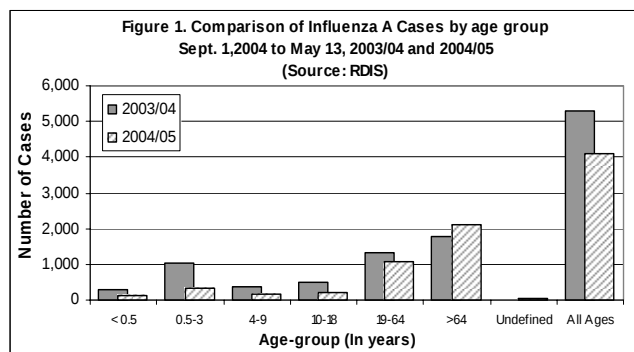
Integrated Public Health Information System (iPHIS)

Between May 1 and May 14, 2005, a total of 30 laboratory-confirmed sporadic cases of influenza A and 15 laboratory-confirmed sporadic cases of influenza B were reported to the Ministry of Health and Long-Term Care (MOHLTC) through iPHIS by Ontario's health units. Please note that three more health units (Waterloo, Haldimand-Norfolk and Hamilton) reported through iPHIS as of May 9, 2005. Two other health units including Sudbury and North Bay reported as of April 18, 2005 and three others (Northwestern, Wellington – Dufferin – Guelph and Brant) as of April 25, 2005. These eight health units (total of 12) have been reporting to iPHIS as of the date above (Appendix 2a).

Reportable Disease Information System (RDIS)

Between May 1 and May 14, 2005, a total of 65 laboratory-confirmed sporadic cases of influenza A and 43 laboratory-confirmed sporadic cases of influenza B were reported to the Ministry of Health and Long-Term Care (MOHLTC) through RDIS by Ontario's health units. The total number of lab-confirmed cases of influenza A and B reported between September 1, 2004 and May 13, 2005 were 4,083 and 1,193, respectively (Appendix 2b). The total number of influenza A is more than two thirds (76.8%) of the total

number of cases for all age groups in same period of time for last season (Figure 1).



Institutional Respiratory Infection Outbreaks

From April 30 to May 13, 2005, 30 respiratory infection outbreaks were reported by Ontario's health units to the MOHLTC (Appendix 3). Of these, only one outbreak was due to influenza A. Additionally, two outbreaks were due to influenza B. Note that the results for 50% of outbreaks were pending by end of week 19. The majority (90%) of respiratory infection outbreaks occurred in Long-Term Care Homes (27/30). (Source: Appendix D's-preliminary reports and E's-final reports)

Taken together, data from the CIDPC, RDIS, iPHIS and Respiratory Infection Outbreak Database indicated comparatively lower activity in Ontario during the period from May 1 to May 14, 2005 than from April 17 to April 30, 2005.

Influenza Activity in Canada

A summary of influenza activity in Canada as reported in FluWatch is provided below.

Influenza activity continued to decrease across the country during weeks 18 and 19, covering May 1 to May 14, 2005 (Table 1). Localized activity was reported in Ontario and regions in Manitoba during weeks 18 and 19.

In Ontario, influenza activity continued to be reported as localized in all regions during weeks 18 and 19 (Table 2).

The number of patients with influenza-like illness (ILI) seen by sentinel physicians in Canada from May 1 to May 14, 2005 ranged from 13/1,000 office visits (week 19, ending May 14, 2005) to 14/1,000 office visits (week 18, ending May 7, 2005). Additional information on influenza activity in Canada can be found at:

<http://www.phac-aspc.gc.ca/fluwatch/>

In Ontario, the number of patients with ILI seen by sentinel physicians ranged from 18/1,000 office visits (week 19 ending May 14, 2005) to 25/1,000 office visits (week 18, ending May 7, 2005).

Table 1: Influenza activity in Canada by Province, May 1 to May 14, 2005 (Weeks 18 to 19).

Province	Week ending May 7, 2005	Week ending May 14, 2005
Ontario	3	3
Newfoundland	1	1
Prince Edward Isl.	1	1
Nova Scotia	1	1
New Brunswick	1-2	1-2
Quebec	2	2
Manitoba	3	1-3
Saskatchewan	1-2	1
Alberta	2	2-3
British Columbia	1-2	2

Table 2: Influenza activity in Ontario by Region, May 1 to May 14, 2005 (Weeks 18 to 19).

Region	Week ending May 7, 2005	Week ending May 14, 2005
Ontario	3	3
East	3	3
Central East	3	3
Central West	3	3
South West	3	3
North	3	3

Strain Characterization

A total of 1,064 influenza viruses were characterized by National Microbiology Lab between August 22, 2004 and May 14, 2005. Of these, 870 cases were identified as influenza A (H3N2), including 59.2% (515/870) of A/Fujian/411/02-like. Since February 17, 2005 355 isolates were identified as A/California/7/04. For the same period of time 194 influenza B isolates, (158 were B/Shanghai/361/02-like viruses and 36 B/Hong Kong/330/01-like viruses) were also identified (table 3).

Table 3: Influenza strains identified by the NML August 22, 2004 to May 14, 2005

Strain	No. (%)
A/Fujian/411/02-like virus	515 (48.4)
A/California/7/04-like virus	355 (33.4)
B/Shanghai/361/02-like virus	158 (14.8)
B/Hong Kong/330/01-like virus	36 (3.4)

Activity in the United States

Influenza activity peaked in early February and continued to decline during weeks 18 and 19 (May 1 to May 14, 2005).

The CDC antigenically characterized 812 influenza viruses collected by U.S. laboratories between October 1, 2004 and May 14, 2005: 541 influenza A (H3N2) viruses, 6 influenza A (H1) viruses and 265 influenza B viruses.

Antigenic Characterization:

From October 3, 2004 to May 14, 2005, WHO and National Respiratory and Enteric Virus Surveillance System (NREVSS) laboratories in the United States isolated 22,670 influenza viruses, 17,265 (76.2%) were influenza A viruses and 5,405 (23.8%) were influenza B viruses. Five thousand six hundred and twenty-four (32.6%) of influenza A viruses were subtyped; 5,463 (99.7%) were influenza A (H3N2) and 16 (0.3%) were influenza A (H1N1) subtype.

For information on activity in the United States please visit: <http://www.cdc.gov/flu/weekly/>

Activity in Europe

European surveillance networks are no longer actively monitoring influenza activity as their traditional surveillance season is over. The European Influenza Surveillance Scheme (EISS) weekly reporting will resume in October 2005, at the 2005-2006 influenza season. For more information in influenza activity in Europe please visit:

http://www.eiss.org/cgi-fiels/bulletin_v2.cgi

Activity at the International Level

Influenza activity continued to decline during weeks 18 and 19 in most parts of the world.

For more information please visit the WHO's website: <http://www.who.int/wer/2005/en/>

Appendix 1. Respiratory viruses isolated and reported to the CIDPC, May 1 to May 14, 2005 (2004/05 Season)

Organism	Influenza Viruses			Other Respiratory Viruses						
	A & B	A	B	RSV	PIV1	PIV2	PIV3	PIV4	Other PIVs	Adenoviruses
Total until April 30, 2005 (Week 17)	[5045]	[3806]	[1239]	[2747]	[132]	[29]	[198]	[16]	[4]	[333]
Week ending May 7, 2005 (week 18)	18 [5063]	8 [3814]	10 [1249]	22 [2769]	2 [134]	1 [30]	24 [222]	0 [16]	0 [4]	6 [339]
Week ending May 14, 2005 (week 19)	15 [5078]	1 [3815]	14 [1263]	14 [2783]	4 [138]	4 [34]	55 [277]	0 [16]	2 [6]	3 [342]
Number of late reports, from August 22, 2004 to May, 2005	[39]	[10]	[29]	[27]	[6]	[1]	[27]	[0]	[0]	[6]
Total number of isolates, August 22, 2004 to April 30, 2005*	[5117]	[3825]	[1292]	[2810]	[144]	[35]	[304]	[16]	[6]	[348]

[] Accumulative numbers from August 22, 2004

* Late reports are included

Appendix 2a. Weekly Lab-Confirmed Cases of Influenza by Health unit, week 18 - 19 (Source: iPHIS)

Health Unit	Week ending May 7, 2005 (week 18)			Week ending May 14, 2005 (week 19)		
	Not classified±	Influenza A	Influenza B	Not classified±	Influenza A	Influenza B
Algoma		0 [53]	0 [3]		0 [53]	0 [3]
Grey-Bruce		4 [52]	0[12]		0 [52]	0 [12]
Simcoe - Muskoka		6 [173]	1[40]		0 [173]	1 [41]
Thunder Bay		0 [20]	0 [4]		0 [20]	0 [4]
Sudbury		0 [46]	0[15]		0 [46]	0 [15]
North Bay - Parry Sound		0 [82]	1 [5]		0 [82]	0 [5]
Northwestern		0 [32]	0 [8]		0 [32]	0 [8]
Wellington - Dufferin - Guelph	1 [1]	0 [98]	0 [19]	4 [5]	0 [98]	0 [19]
Brant		0 [58]	0 [11]		0 [58]	0 [11]
Waterloo*		0 [231]	0 [38]		0 [231]	0 [38]
Haldimand-Norfolk*		0 [32]	12 [22]		19 [51]	0 [22]
Hamilton*	1 [1]	1 [276]	0 [106]	0 [1]	0 [276]	0 [106]
Total	2 [2]	11 [1153]	14 [283]	4 [6]	19 [1172]	1 [284]

[] Cumulative number from September 1,2004

* Reporting to iPHIS from May 9, 2005

± Type of influenza (ie A vs B) not reported

Please note that these data are preliminary and subject to change

Appendix 2b. Weekly Lab-Confirmed Cases of Influenza by Health unit, week 18 - 19 (Source: RDIS)

Health Unit	Week ending May 7, 2005 (week 18)		Week ending May 14, 2005 (week 19)	
	Influenza A	Influenza B	Influenza A	Influenza B
Algoma*	[53]	[3]	[53]	[3]
Brant±	[58]	[11]	[58]	[11]
Chatham - Kent	[48]	[3]	[48]	[3]
Durham	[112]	[54]	[112]	[54]
Eastern Ontario	[89]	[26]	[89]	[26]
Elgin - St. Thomas	[5]		[5]	
Grey-Bruce*	[45]	[11]	[45]	[11]
Haldimand-Norfolk#	[32]	[10]	[32]	[10]
Haliburton KPR	[90]	2 [48]	[90]	[48]
Halton	1 [171]	1 [73]	2 [173]	[73]
Hamilton-Wentworth#	[275]	[106]	[275]	[106]
Hasting – P.E.	[94]	[19]	[94]	[19]
Huron	[46]	[5]	[46]	[5]
Kingston & FLA	[82]	[13]	[82]	[13]
Lambton	[31]	[7]	[31]	[7]
Leeds - Grenville	1 [30]	[9]	[30]	[9]
Middlesex-London	22 [41]	2 [4]	[41]	[4]
Muskoka-Parry Sound**	[76]	[1]	[76]	[1]
Niagara	[113]	1 [26]	[113]	[26]
Northwest±	[32]	[8]	[32]	[8]
North Bay - Parry Sound+	[82]	[4]	[82]	[4]
Ottawa-Carleton	[222]	1 [45]	[222]	[45]
Oxford	[40]	[3]	[40]	[3]
Peel	2 [275]	5 [146]	2 [277]	7 [153]
Perth	[55]	[13]	[55]	2 [15]
Peterborough	[58]	[28]	[58]	[28]
Porcupine	3 [87]	7 [13]	[87]	1 [14]
Renfrew	[23]	[2]	[23]	[2]
Simcoe - Muskoka*	[165]	[38]	[165]	[38]
Sudbury+	[46]	[13]	[46]	[13]
Timiskaming	[45]	[4]	[45]	[4]
Thunder Bay*	[20]	[4]	[20]	[4]
Toronto	2 [631]	11 [288]	1 [632]	1 [289]
Waterloo#	[231]	[38]	[231]	[38]
Wellington - Dufferin - Guelph±	[98]	[19]	[98]	[19]
Windsor - Essex	[30]	[10]	[30]	[10]
York	1 [419]	2 [80]	28 [447]	[80]
Total	32 [4050]	32 [1185]	33 [4083]	11 [1196]

[] Cumulative number from September 1, 2004 * Reporting to iPHIS from April 1, 2005 +Reporting to iPHIS from April 18, 2005

** No longer exists as of April 1, 2005 ±Reporting to iPHIS from April 25, 2005 # Reporting to iPHIS from May 9, 2005

Appendix 3. Respiratory infection outbreaks in Institutions from May 1 to 14, 2005

Respiratory Infection Outbreaks in Institutions	Week ending May 1, 2005 (week 18)		Week ending May 14, 2005 (week 19)	
Total Respiratory Infection Outbreaks in Institutions	18	[933]	12	[945]
Influenza A	1		0	
Influenza A & B	0		0	
Influenza A & other organism/s	0		0	
Influenza B	2		0	
Influenza B & other organism/s	0		0	
Other organisms	1		1	
No organism isolated	7		3	
Laboratory results pending	7		8	
No specimen sent for laboratory testing	0		0	
Ongoing Outbreaks	12		10	
Influenza A	1		0	
Influenza A & B	0		0	
Influenza A & other organism/s	0		0	
Influenza B	1		0	
Influenza B & other organism/s	0		0	
Other organisms	0		1	
No organism isolated	3		1	
Laboratory results pending	7		8	
No specimen sent for laboratory testing	0		0	
Types of Institutions				
LTCHs	15		12	
Hospitals	1		0	
Other*	2		0	

[] The number represents the total number of Institutional Outbreaks from the beginning of this season, September 1, 2004 to date indicated.

* Retirement Homes > 10 beds, children's residences, facilities operated under the *Developmental Services Act* etc.