

Ontario Influenza Bulletin

Late Spring Edition**Vol. 8, Issue 9 Weeks 20 - 22 (May 15 – June 4, 2005)**

Introduction

The current issue of the Ontario Influenza Bulletin summarizes influenza activity during weeks 20 - 22. It covers the time period from May 15 to June 4, 2005.

Influenza activity continued to decline in Ontario during weeks 20 - 22. All regions in Ontario reported localized activity in weeks 20 to 22, 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 to be the predominant type of influenza during weeks 20 to 22 in Ontario and resulted in 9 positive influenza B isolates in week 20, ending May 21, 2005.

Influenza Activity in Ontario

During the period of influenza surveillance between May 15 and June 4, 2005 (reporting weeks 20-22), a total of 17 laboratory-confirmed cases of influenza were reported (5 influenza A, 12 influenza B) by Ontario laboratories to the Centre for Infectious Disease Prevention and Control (CIDPC).

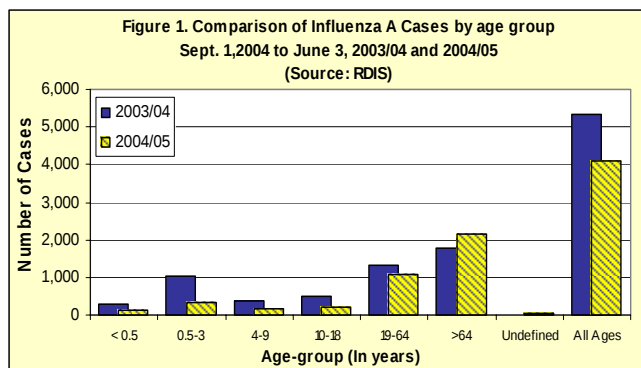
Throughout this period there were 26 cases of respiratory syncytial virus (RSV), 135 cases of parainfluenza virus (PIV) and 20 cases of adenoviruses, all of which were laboratory-confirmed (Appendix 1). Including late reports, a total of 3,831 influenza A, 1,304 influenza B, 2,836 RSV, 645 PIV and 368 adenoviruses were reported to the CIDPC between August 22, 2004 and June 4, 2005.

Integrated Public Health Information System (iPHIS)

Between May 15 and June 4, 2005, a total of 1 laboratory-confirmed sporadic cases of influenza A and 1 laboratory-confirmed sporadic cases of influenza B were reported to the Ministry of Health and Long-Term Care (MOHLTC) through iPHIS by 15 of Ontario's health units. There were 16 cases of influenza that had no type specified in iPHIS during this time period. Please note that three more health units Elgin St. Thomas, Middlesex-London, and Perth began reporting using iPHIS on May 16. The format of Appendix 2a has been changed to reflect the number of influenza cases reported by each health unit through iPHIS since their Go-live date.

Reportable Disease Information System (RDIS)

Between May 15 and June 3, 2005, a total of 18 laboratory-confirmed sporadic cases of influenza A and 37 laboratory-confirmed sporadic cases of influenza B were reported to the Ministry of Health and Long-Term Care (MOHLTC) through RDIS by 21 of Ontario's health units. The total number of lab-confirmed cases of influenza A and B reported between September 1, 2004 and June 3, 2005 were 4,099 and 1,230, respectively (Appendix 2b). The total number of influenza A is more than two thirds (77.0%) 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 May 15 to June 4, 2005, 33 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, 9 outbreaks were due to non influenza organisms such as PIV and RSV. Note that the results for 17.6% of outbreaks were pending by end of week 22. The majority (75.8%) of respiratory infection outbreaks occurred in Long-Term Care Homes (25/33).

(Source: Appendix D's-preliminary reports and E's-final reports)

Taken together, data from the CIDPC, RDIS, iPHIS and the Respiratory Infection Outbreak Database indicated comparatively lower activity in Ontario during the period from May 15 to June 4, 2005 than from May 1 to May 14, 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 20 and 22, covering May 15 to June 4, 2005 (Table 1). Localized activity was reported in Ontario and regions in Manitoba during weeks 20 and 22.

In Ontario, influenza activity continued to be reported as localized in all regions during weeks 20 to 22 (Table 2).

The number of patients with influenza-like illness (ILI) seen by sentinel physicians in Canada from May 15 to June 4, 2005 ranged from 10/1,000 office visits (week 20, ending May 21, 2005) to 13/1,000 office visits (week 22, ending June 4, 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 9/1,000 office visits (week 20 ending May 21, 2005) to 18/1,000 office visits (week 22, ending June 4, 2005).

Table 1: Influenza activity in Canada by Province, May 15 to June 4, 2005 (Weeks 20 to 22).

Province	Week 20 May 15-21, 2005	Week 21-22 May 22-June 4, 2005
Ontario	3	3
Newfoundland	1	1
Prince Edward Isl.	1	1
Nova Scotia	1	1
New Brunswick	1	1
Quebec	2	1
Manitoba	3 - 1	3 - 1
Saskatchewan	1 - 2	1
Alberta	1 - 2	1
British Columbia	2	2

Table 2: Influenza activity in Ontario by Region, May 15 to June 4, 2005 (Weeks 20 to 22).

Region	Week 20 May 15-21, 2005	Week 21-22 May 22-June 4, 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 1,085 influenza viruses were characterized by National Microbiology Lab between August 22, 2004 and June 4, 2005. Of these, 886 cases were identified as influenza A (H3N2), including 58.1% (515/886) of A/Fujian/411/02-like. Since February 17, 2005; 371 isolates were identified as A/California/7/04. For the same period of time 199 influenza B isolates, (159 were B/Shanghai/361/02-like viruses and 40 B/Hong Kong/330/01-like viruses) were also identified (table 3).

Table 3: Influenza strains identified by the NML August 22, 2004 to June 4, 2005

Strain	No. (%)
A/Fujian/411/02-like virus	515 (47.5)
A/California/7/04-like virus	371 (34.2)
B/Shanghai/361/02-like virus	159 (14.6)
B/Hong Kong/330/01-like virus	40 (3.7)

Activity in the United States

Influenza activity peaked in early February and continued to decline during week 20 (May 15 to May 21, 2005). This week is the final report of the 2004-05 surveillance season in the U.S.

The CDC antigenically characterized 920 influenza viruses collected by U.S. laboratories between October 1, 2004 and May 21, 2005: 646 influenza A (H3N2) viruses, 9 influenza A (H1) viruses and 265 influenza B viruses.

Antigenic Characterization:

From October 3, 2004 to May 21, 2005, WHO and National Respiratory and Enteric Virus Surveillance System (NREVSS) laboratories in the United States isolated 23,023 influenza viruses, 17,432 (75.7%) were influenza A viruses and 5,591 (24.3%) were influenza B viruses. Five thousand seven hundred and ninety-six (33.2%) of influenza A viruses were subtyped; 5,780

(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, for the 2005-2006 influenza season. For more information on influenza activity in Europe please visit:

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

Activity at the International Level

Influenza activity has not been reported at the international level after week 19. However in week 19, China's Hong Kong Special Administrative Region reported medium-to-high levels of influenza activity. For more information please visit the WHO's website: <http://www.who.int/wer/2005/en/>

ADDENDUM

The editors would like to add a supplementary sentence to the iPHIS report in the previous issue of the Bulletin (issue 8, page 1):

Between May 1 and May 14, 2005 a total of 6 influenza cases were reported to iPHIS as "Not-classified".

Appendix 1. Respiratory viruses isolated and reported to the CIDPC, May 15 to June 4, 2005 (2004/05 Season)

Organism	Influenza Viruses			Other Respiratory Viruses						
	A & B	A	B	RSV	PIV1	PIV2	PIV3	PIV4	Other PIVs	Adenoviruses
Total until May 14, 2005 (Week 19)	[5117]	[3825]	[1292]	[2810]	[144]	[35]	[304]	[16]	[6]	[348]
Week ending May 21, 2005 (week 20)	11 [5128]	2 [3827]	9 [1301]	5 [2815]	7 [151]	3 [38]	42 [346]	0 [16]	1 [7]	10 [358]
Week ending May 28, 2005 (week 21)	4 [5132]	2 [3829]	2 [1303]	15 [2830]	3 [154]	0 [38]	40 [386]	0 [16]	0 [7]	7 [365]
Week ending June 4, 2005 (week 22)	2 [5134]	1 [3830]	1 [1304]	6 [2836]	2 [156]	0 [38]	35 [421]	0 [16]	2 [9]	3 [368]
Number of late reports, from August 22, 2004 to June 4, 2005	[1]	[1]	[0]	[0]	[0]	[0]	[5]	[0]	[0]	[0]
Total number of isolates, August 22, 2004 to June 4, 2005*	[5135]	[3831]	[1304]	[2836]	[156]	[38]	[426]	[16]	[9]	[368]

[] Accumulative numbers from August 22, 2004

* Late reports are included

Appendix 2a. Weekly Lab-Confirmed Cases of Influenza by Health unit, week 20 - 22 (Source: iPHIS)

Health Unit	Week 20 Week, May 15-21, 2005			Weeks 21-22, May 22-June 4,2005		
	Not classified±	Influenza A	Influenza B	Not classified±	Influenza A	Influenza B
Algoma	[1]	[0]	[0]	[1]	[0]	[0]
Grey-Bruce	[2]	[10]	[2]	[2]	[10]	[2]
Simcoe - Muskoka	[0]	1 [11]	[8]	[0]	[11]	1 [9]
Thunder Bay	[0]	[0]	[0]	[0]	[0]	[0]
Sudbury	[0]	[0]	[3]	[0]	[0]	[3]
North Bay - Parry Sound	[2]	[0]	[3]	[2]	[0]	[3]
Northwestern	[0]	[0]	[0]	[0]	[0]	[0]
Wellington - Dufferin - Guelph	16 [24]	[0]	[0]	[24]	[0]	[0]
Brant	[0]	[0]	[0]	[0]	[0]	[0]
Waterloo*	[0]	[0]	[0]	[0]	[0]	[0]
Haldimand-Norfolk*	[0]	[0]	[16]	[0]	[0]	[16]
Hamilton*	[0]	[0]	[0]	[0]	[0]	[0]
Elgin – St. Thomas	[0]	[0]	[0]	[0]	[0]	[0]
Middlesex – London	[0]	[0]	[0]	[0]	[0]	[0]
Perth	[0]	[0]	[0]	[0]	[0]	[0]
Total	16 [29]	1 [21]	0 [32]	0 [29]	0 [21]	1 [33]

[] Cumulative number from Go-live date ,2005

* 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 20 - 22 (Source: RDIS)

Health Unit	Week 20, May 15-21, 2005		Weeks 21-22, May 22-June 3, 2005	
	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]	[48]	1 [91]	[48]
Halton	1 [174]	[73]	[174]	[73]
Hamilton-Wentworth#	[275]	[106]	[275]	[106]
Hasting – P.E.	1 [95]	[19]	[95]	[19]
Huron	[46]	[5]	4 [50]	[5]
Kingston & FLA	[82]	[13]	2 [84]	1 [14]
Lambton	[31]	[7]	2 [33]	3 [10]
Leeds - Grenville	[30]	[9]	[30]	1 [10]
Middlesex-London	[41]	[4]	[41]	[4]
Muskoka-Parry Sound**	[76]	[1]	[76]	[1]
Niagara	[113]	[26]	[113]	1 [27]
Northwest±	[32]	[8]	[32]	[8]
North Bay - Parry Sound+	[82]	[4]	[82]	[4]
Ottawa-Carleton	[222]	3 [48]	[220]	[48]
Oxford	[40]	[3]	[40]	1 [4]
Peel	[277]	6 [159]	5 [282]	3 [162]
Perth	[55]	[15]	[55]	[15]
Peterborough	[58]	[28]	[58]	[28]
Porcupine	[87]	[14]	2 [89]	4 [18]
Renfrew	[23]	[2]	[23]	[2]
Simcoe - Muskoka*	[165]	[38]	[165]	[38]
Sudbury+	[46]	[13]	[46]	[13]
Timiskaming	[45]	[1]	[45]	[1]
Thunder Bay*	[20]	[4]	[20]	[4]
Toronto	[632]	1 [290]	[632]	8 [298]
Waterloo#	[231]	[38]	[231]	[38]
Wellington - Dufferin - Guelph±	[98]	[19]	[98]	[19]
Windsor - Essex	[30]	[10]	[30]	[10]
York	[447]	[80]	[447]	5 [85]
Total	2 [4085]	10 [1203]	16 [4099]	27 [1230]

[] 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 15 to June 4, 2005				
Respiratory Infection Outbreaks	May 15-21, 2005 (week 20)		May 22-June 4, 2005 (weeks 21-22)	
Total Respiratory Infection Outbreaks	17	[962]*	16	[978]*
Influenza A	1		0	
Influenza A & B	0		0	
Influenza A & other organism/s	0		0	
Influenza B	0		0	
Influenza B & other organism/s	0		0	
Other organisms	6		3	
No organism isolated	7		10	
Laboratory results pending	3		3	
No specimen sent for laboratory testing	0		0	
Ongoing Outbreaks	4		5	
Influenza A	1		0	
Influenza A & B	0		0	
Influenza A & other organism/s	0		0	
Influenza B	0		0	
Influenza B & other organism/s	0		0	
Other organisms	0		0	
No organism isolated	0		2	
Laboratory results pending	3		3	
No specimen sent for laboratory testing	0		0	
Types of Institutions				
LTCHs	12		13	
Hospitals	1		0	
Other±	3		3	
Total Outbreaks from September 1, 2004	[1060]#		[1077]#	

[] The number represents the total number of Institutional Outbreaks from the beginning of this season.

*Late reports are not included and subject to change # Late reports are included as of June 28 at 4:15 pm

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