

Ontario Influenza Bulletin 2005-2006 Season

SURVEILLANCE WEEK 21 - 22 (May 21- June 3), 2006

This issue of the Ontario Influenza Bulletin provides information on the surveillance period from May 21 – June 3, 2006 (weeks 21 and 22). The analysis for this issue occurred on Friday June 9, 2006, therefore all data is current to that date.

During the weeks 21-22 of 2006, influenza activity in Ontario was much lower compared to that of the previous two weeks. Four sporadically occurring cases of influenza (all influenza A) were reported through iPHIS. In addition, there was 1 institutional outbreak of influenza A reported. The highest level of influenza activity in Ontario was 'localized activity' reported from Toronto, Eastern and Central East regions. North West region reported 'sporadic activity'. North East, Central West, and Southwest regions each reported 'no activity' levels.

<u>Please note</u>: When entering sporadic influenza cases into iPHIS, under the "Aetiological agent" field, four options are available in iPHIS: "Influenza A", "Influenza B", "Influenza C" and "Influenza Virus" (no type). <u>Please do not choose "Influenza Virus" from the pick list unless the type (i.e. A vs. B) is selected.</u> For surveillance purposes, entering the type of influenza is essential. Your attention to this matter is greatly appreciated.

Also please note that the GIS map for influenza activity levels by health unit has been temporarily replaced by a table. We apologize for the inconvenience.

For a definition of influenza-like illness (ILI) activity levels and links to websites providing current influenza information from other sources, please refer to the attached Appendix. If you would like to provide feedback on the Bulletin, please contact Shafiq Chowdhury (shafiq.chowdhury@moh.gov.on.ca, 416-327-7807) or Anne-Luise Winter (anne-luise.winter@moh.gov.on.ca, 416-327-7301).

Table 1: Summary of laboratory-confirmed influenza cases and institutional influenza outbreaks by health region, May 21– June 3 (Weeks 21 & 22), 2006.

Lab-confirmed	HEALTH REGION							
Influenza cases*	North West	North East	Eastern	Central East	Toronto	South West	Central West	TOTAL
Influenza A	0	0	0	1	3	0	0	4
Influenza B	0	0	0	0	0	0	0	0
Influenza A & B	0	0	0	0	0	0	0	0
Unspecified [†]	0	0	0	0	0	0	0	0
Total new cases	0	0	0	1	3	0	0	4
Institutional influenza outbreaks‡	0	0	0	0	0	0	1	1

SOURCE: MOHLTC [iPHIS, Health Unit Reports to PHD, Provincial Appendix D and Appendix E Database]

MOHTLC Public Health Division

^{*} Includes reports of sporadically occurring influenza through iPHIS, as well as cases in institutional outbreaks, with dates of onset in the surveillance period.

[†] Type of influenza, i.e. A vs B, was not specified in iPHIS (i.e. Influenza subtype dropdown menu left blank or reported as "Unspecified").

[‡] Laboratory-confirmed outbreaks in institutions during the surveillance period.

Confirmed* cases of influenza by health unit & health region, with an episode date[†] between May 21- June 3 (Weeks 21 & 22), 2006.

		Laboratory-Confirmed Influenza				
Region	Health Unit	Influenza A Influenza B Unspecified [‡] TOTA				
# # #	Northwestern	0	0	0	0	
North West	Thunder Bay District	0	0	0	0	
	TOTAL NORTH WEST	0	0	0	0	
	Algoma	0	0	0	0	
North East	North Bay Parry Sound District	0	0	0	0	
¥	Porcupine	0	0	0	0	
Š	Sudbury & District	0	0	0	0	
	Timiskaming	0	0	0	0	
	TOTAL NORTH EAST Eastern Ontario	0 0	0 0	0 0	0 0	
	Hastings & Prince Edward Counties	0	0	0	0	
E.	Kingston, Frontenac, Lennox & Addington	0	0	0	0	
Eastern	Leeds, Grenville & Lanark	0	0	0	0	
ш	Ottawa	0	0	0	0	
	Renfrew	0	0	0	0	
	TOTAL EASTERN	0	0	0	0	
	Durham Region	0	0	0	0	
la st	Haliburton, Kawartha, Pine Ridge District	0	0	0	0	
<u>18</u>	Peterborough County-City	0	0	0	0	
Central East	Simcoe Muskoka District	0	0	0	0	
ŭ	York Region Peel Region	0 1	0 0	0 0	0 1	
	TOTAL CENTRAL EAST	1	0	0	1	
	TOTAL CLIVINAL LACT	•	· ·	•	•	
Toronto	Toronto	3	0	0	3	
	TOTAL TORONTO	3	0	0	3	
	Grey-Bruce	0	0	0	0	
	Elgin-St. Thomas	0	0	0	0	
**	Huron County	0	0	0	0	
South West	Chatham-Kent	0	0	0	0	
Ę	Lambton	0	0	0	0	
Poor	Middlesex-London	0	0	0	0	
	Oxford	0	0	0	0	
	Perth District	0 0	0	0	0	
	Windsor-Essex County TOTAL SOUTHWEST	0	0 0	0 0	0 0	
	Brant	0	0	0	0	
#	Haldimand-Norfolk	0	0	0	0	
Nes	Hamilton	0	Ö	0	0	
Central West	Niagara Region	0	0	0	0	
entı	Halton Region	0	0	0	0	
ŭ	Waterloo Region	0	0	0	0	
	Wellington-Dufferin-Guelph	0	0	0	0	
	TOTAL CENTRAL WEST	0	0	0	0	
	TOTAL ONTARIO	4	0	0	4	

SOURCE: MOHLTC [iPHIS, Health Unit Reports to PHD]
* Confirmed cases of influenza can include laboratory-confirmed cases and epi-linked cases.

[†] Episode Date for a case corresponds to the earliest date on record for the case according to the iPHIS hierarchy (Symptom Date > Clinical Diagnosis Date

> Specimen Collection Date > Lab Test Date > Reported Date)

[‡] Type of influenza, i.e. A vs B, was not specified in iPHIS (i.e. Influenza subtype dropdown menu left blank or reported as unspecified)

Cumulative* confirmed[†] cases of influenza by health unit & health region, September 1, Table 3: 2005 to June 3, 2006.

		1.0	Laboratory-Confirmed Influenza				
Region	Health Unit	Influenza A Influenza B Unspecified [‡] TOTA					
	Newthrongstown						
North West	Northwestern	7	11	0	18		
ž≥	Thunder Bay District	2	2	0	4		
	TOTAL NORTH WEST	9	13	0	22		
+	Algoma	12	7	7	26		
North East	North Bay Parry Sound District	3	7	11	21		
-	Porcupine	10	28	3	41		
Þ	Sudbury & District	7	15	1	23		
	Timiskaming	0	0	0	0		
	TOTAL NORTH EAST	32	57	22	111		
	Eastern Ontario	32	5	2	39		
٤	Hastings & Prince Edward Counties	24	18	1	43		
Eastern	Kingston, Frontenac, Lennox & Addington	18	17	0	35		
Ëä	Leeds, Grenville & Lanark	3	0	24	27		
	Ottawa	91	18	0	109		
	Renfrew	5	6 64	0 27	11		
	TOTAL EASTERN	173 11	04 1	1	264 13		
st	Durham Region	37	68	1	106		
Ë	Haliburton, Kawartha, Pine Ridge District	2	5	1 5	106		
Central East	Peterborough County-City Simcoe Muskoka District	56	5 56	18	130		
ent	York Region	32	56	18	106		
ŭ	Peel Region	80	83	14	177		
	TOTAL CENTRAL EAST	218	269	57	544		
_	TOTAL GENTRAL EAGT	270	200	O,	011		
Toronto	_						
oro	Toronto	316	200	1	517		
Ĕ							
	TOTAL TORONTO	316	200	1	517		
	Grey-Bruce	32	31	2	65		
	Elgin-St. Thomas	2	0	0	2		
ts .	Huron County	10	32	1	43		
South West	Chatham-Kent	3	0	2	5		
Ę	Lambton	0	15	0	15		
Ď	Middlesex-London	29	18	4	51		
Ø	Oxford	6	16	4	26		
	Perth District	4	25	1	30		
	Windsor-Essex County	18	11	0	29		
	TOTAL SOUTHWEST	104	148	14	266		
	Brant	4	5	2	11		
Central West	Haldimand-Norfolk	14	8	0	22		
≥	Hamilton	111	92	0	203		
tra	Niagara Region	10	33	4	47		
ĕ	Halton Region	51	21	16	88		
Ö	Waterloo Region	41	53	1	95 64		
	Wellington-Dufferin-Guelph TOTAL CENTRAL WEST	9	43	9	61 537		
	IOTAL CENTRAL WEST	240	255	32	527		
				4			
	TOTAL ONTARIO	1092	1006	153	2251		

SOURCE: MOHLTC [iPHIS, Health Unit Reports to PHD]

^{*} Cumulative case counts include late reports and records that are otherwise reconciled. Therefore, cumulative counts may not equal new cases plus previous cumulative value.

[†] Confirmed cases of influenza can include laboratory-confirmed cases and epi-linked cases.

‡ Type of influenza, i.e. A vs B, was not specified in iPHIS (i.e. Influenza subtype dropdown menu left blank or reported as unspecified)

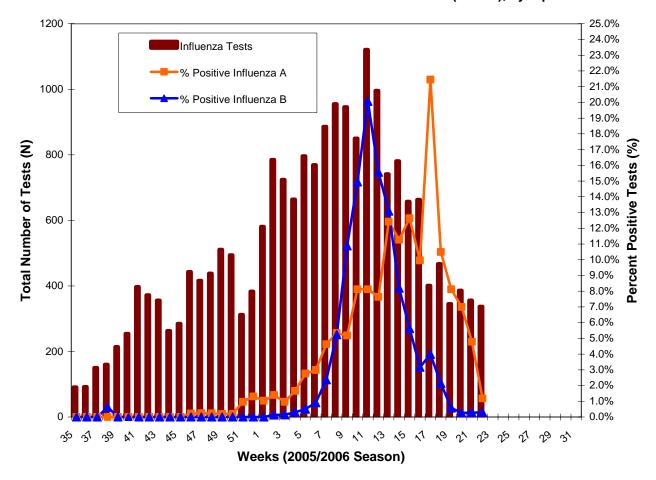
Influenza Subtype(s):

During Weeks 21 and 22, 2,384 isolates were received by the Public Health Agency of Canada, with a total of 45 and 14 testing positive for influenza A and B respectively. The majority of the influenza A isolates (21) were from Ontario (46.7%), Alberta 10 (22.2%) and Quebec 5 (11.1%). The majority of the influenza B isolates (14) were from Quebec 6 (42.9%) and New Brunswick 5 (35.7%).*

Since the start of the 2005-2006 influenza season, the National Microbiology Laboratory (NML) has antigenically characterized 951 influenza viruses. Among these, 503 (53%) are influenza A isolates, while the remaining 448(47%) are influenza B isolates. Since March 2006, all of the influenza B viruses characterized have been B/Malaysia/2506/2004-like (B/Victoria/02/1987 lineage), which is the recommended influenza B component for next season's vaccine..**

Note: The 2005-2006 season Canadian vaccine contains an A/ New Caledonia/20/1999(H1N1)-like, an A/ California/7/2004(H3N2)-like, and a B/Shanghai/361/2002-like virus strain.

Figure 1: Total number of influenza tests performed and percent of positive tests in Ontario reported to the Centre for Infectious Disease Prevention and Control (CIDPC), by report week.



Source: Public Health Agency of Canada

Note: Cumulative numbers for season to date are available through FluWatch: http://www.phac-aspc.gc.ca/fluwatch/

^{*} These data have been obtained from the Respiratory Virus Detection table of Public Health Agency of Canada for weeks 21 & 22, 2006

^{**} These data have been obtained from the FluWatch report of the Public Health Agency of Canada for week 20, 2006

^{*} Total numbers reported include late reports; therefore totals may not be equal to the sum of the weekly numbers.

Table 4: Institutional respiratory outbreaks in Ontario, September 1, 2005 to June 3, 2006

New Outbreaks*	N	% (of outbreaks)
Influenza A	1	7.7
Influenza B	0	0.0
Influenza A and B	0	0.0
Parainfluenza (All types)	1	7.7
Other organisms	1	7.7
No organism identified	10	76.9
TOTAL	13	100
Total Respiratory Infection Outbreaks, Season to Date**	N	% (of outbreaks)
Influenza A	122	17.1
Influenza B	20	2.8
Influenza A and B	6	0.8
Parainfluenza (All types)	46	6.5
Other organisms	95	13.3
No organism identified	425	59.5
TOTAL	714	100
Types of Institutions (All Outbreaks) **	N	% (of outbreaks)
Long-Term Care Homes	596	83.4
Hospitals	44	6.2
Retirement Homes	67	9.4
Other	7	1.0
TOTAL	696	100
Outbreak Related Complications (All Outbreaks) **	N	% (of cases)
Deaths		
Residents	244	2.6
Staff	0	0.0
Pneumonia (Chest x-ray confirmed)		
Residents	445	4.6
Staff	24	0.9
Hospitalizations		
Residents	486	5.3
Staff	11	0.5

SOURCE: MOHLTC [Provincial Appendix D and Appendix E Database]

^{*} New outbreaks are those in which the date of onset of the first case occurred in the current surveillance period (May 21- June 3, 2006)

^{**} Season to date includes all outbreaks in which the date of onset of the first case occurred between September 1, 2005 and June 3, 2006.

Table 5: Influenza Activity* levels in Ontario by health unit & health region for weeks 21 & 22, between May 21- June 3, 2006.

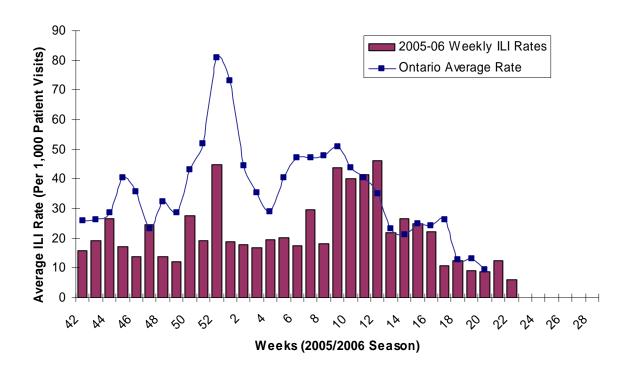
		Influenza Activity* Level					
Region	Health Unit	No Report Received	No Activity	Sporadic	Localized	Widespread	
th st	Northwestern			X			
North West	Thunder Bay District		Х				
	Algoma		Х				
North East	North Bay Parry Sound District		Х				
r: E	Porcupine	Х					
lort	Sudbury & District		Х				
	Timiskaming		Х				
	Eastern Ontario		Х				
	Hastings & Prince Edward Counties				Х		
r.	Kingston, Frontenac, Lennox & Addington	Х					
Eastern	Leeds, Grenville & Lanark	X					
ш	Ottawa			Х			
	Renfrew		Х				
				V	1		
#	Durham Region Haliburton, Kawartha, Pine Ridge District			X			
Eas				X			
la	Peterborough County-City		Х		V		
Central East	Simcoe Muskoka District			V	Х		
ŭ	•			X			
	Peel Region			Х			
Toronto	Toronto				x		
	Grey-Bruce		Х				
	Elgin-St. Thomas		X				
	Huron County		Χ				
South West	Chatham-Kent		Х				
ج ح	Lambton	Х					
out	Middlesex-London		Х				
S	Oxford	Х					
	Perth District		Χ				
	Windsor-Essex County		Χ				
	Brant		X				
	Haldimand-Norfolk		X				
Vesi	Hamilton		X				
Central West	Niagara Region		X				
ntra	Halton Region	Х	^				
Cel	Waterloo Region	^	Х				
	Wellington-Dufferin-Guelph		X				
	TOTAL ONTARIO36 Health Units	6	21	6	3	0	

SOURCE: MOHLTC [Provincial Influenza Activity Report (Appendix C) Database]

^{*} Influenza activity levels are assigned by local public health units and reported to the MOHLTC by the Tuesday following the end of the surveillance week at 4 pm. Activity levels are assigned based on laboratory confirmations, ILI reports from various sources, and laboratory-confirmed institutional outbreaks. Please refer to detailed definitions for the 2005-2006 season included in the Appendix]

Figure 3: Average influenza-like illness (ILI) consultation rate (per 1,000 patient visits) reported by sentinel physicians* in Ontario in 2005- 2006 season, by report week,

Compared to Ontario average[†] (1996/96 to 2004/05 seasons).



Source: Public Health Agency of Canada

^{*} Sentinel physician information is reported to Public Health Agency of Canada.

[†]No data available for mean rate in previous years for weeks 21 to 39 (1996-1997 through 2002-2003 seasons). During weeks 20-39, 2002-2003/2004-2005 seasons, ILI is reported once every two weeks, on even weeks only.

Table 6: Average Influenza-like illness consultation rate (per 1,000 patient visits) reported by Sentinel Physicians* in Ontario, by age group and postal code for week 21 (May 21 – 27), 2006.

Postal Code	0 – 4	5 – 19	20 – 64	65 +	Unknown
K0C1A0	0	0	0	0	0
K2P1V3	Ö	0	Ö	Ö	Ō
K1J9M2	Õ	1	ő	ő	Ö
K0H2N0	Ö	Ö	Ö	1	0
K7H2W6	0	0	Ö	0	0
K7L1E9	0	0	0	0	0
K0L1C0	0	0	0	0	0
K0K1H0	0	0	0	0	0
L1A3W4	0	0	0	0	0
K0M1A0	0	0	0	0	0
L1B1H8	0	0	0	0	0
L4J7Y3	0	0	0	0	0
M5M1B2					
	0	0	0	0	0
M4X1W4	0	0	0	0	0
M6G4A1	0	0	0	0	0
M4E1V8	0	0	0	0	0
M8Y1W3	0	0	0	0	0
M2N6H7	0	1	0	0	0
M2J2Z1	0	0	0	0	0
M3H1T1	0	0	0	0	0
M2K1E1	0	0	0	0	0
M9W6N5	0	0	0	0	0
M9W4L6	1	0	0	0	0
M8V2Z5	0	0	0	0	0
L5J2W4	0	0	0	0	0
L4Y2N8	0	0	0	0	0
L6W2A4	1	1	3	0	0
L9W1G2	0	0	0	0	0
N1H4G2	0	0	0	0	0
L9H1V1	0	1	1	0	0
L0R1H0	0	0	0	0	0
L2E1Y3	0	0	0	0	0
L0R1B0	2	1	0	1	0
N3R7K8	0	0	0	0	0
N3C2E2	0	0	0	0	0
N5H1K9	0	0	0	0	0
N0M1T0	0	0	0	0	0
N6C2R5	0	0	0	0	0
N0C1E0	0	0	0	0	0
L4R4P4	0	0	0	0	0
K0J1B0	0	0	0	0	0
P4N1C6	0	0	0	0	0
P7E1H5	0	0	0	0	0
P0T2E0	Ö	Ö	Ö	Ö	Ö
P0W1E0	0	0	0	0	0
P9N3W7	Ö	Ö	Ö	Ö	Ö
ILI Sum	4				
	4	5	4	2	0
ILI Consultation	07 -		. .	<u>.</u> .	
Rate (per 1,000	67.8	51.6	6.1	5.1	0.0
patient visits)					

Source: Public Health Agency of Canada

Note: The small numbers of sentinel physicians reporting at the local level make the ILI rates unstable. Please interpret these data correspondingly.

^{*} Sentinel physician information is reported to the Public Health Agency of Canada

Table 7: Average Influenza-like illness consultation rate (per 1,000 patient visits) reported by Sentinel Physicians* in Ontario, by age group and postal code for week 22 (May 28-June 3), 2006.

Postal Code	0 – 4	5 – 19	20 – 64	65 +	Unknown
K0C1A0	0	0	0	0	0
K2P1V3	0	1	0	0	0
K1J9M2	0	0	0	1	0
K0H2N0	0	0	0	0	0
K7H2W6	0	0	0	0	0
L1A3W4	0	0	0	0	0
K0M1A0	0	0	0	0	0
L1B1H8	0	0	0	0	0
L4J7Y3	0	0	0	0	0
M5M1B2	0	0	0	0	0
M4X1W4	0	0	0	0	0
M6G4A1	0	0	0	0	0
M4E1V8	0	0	0	0	0
M8Y1W3	0	0	0	0	0
M3H1T1	0	0	0	0	0
M9W4L6	1	0	0	0	0
M8V2Z5	0	0	0	0	0
L4Y2N8	0	0	0	0	0
L6W2A4	0	2	0	0	0
L6V4H6	0	0	1	0	0
L9W1G2	0	0	0	0	0
L7R1M6	0	0	0	0	0
L9H1V1	0	0	0	0	0
L2E1Y3	0	0	0	0	0
N5H1K9	0	0	0	0	0
N0M1T0	0	0	0	0	0
N6C2R5	0	0	0	0	0
N0G1L0	0	0	0	0	0
L4R4P4	0	0	0	0	0
P0H2H0	0	0	0	0	0
P0P1S0	0	0	0	0	0
P3E5V5	0	0	0	0	0
P4N1C6	0	0	0	0	0
P7E1H5	0	0	0	0	0
P0W1E0	0	0	0	0	0
P9N3W7	0	0	0	0	0
ILI Sum	1	3	1	1	0
ILI Consultation Rate (per 1,000 patient visits)	18.5	35.3	1.9	3.2	0.0

Source: Public Health Agency of Canada

Note: The small numbers of sentinel physicians reporting at the local level make the ILI rates unstable. Please interpret these data correspondingly.

^{*} Sentinel physician information is reported to the Public Health Agency of Canada

FURTHER INFORMATION

- Ontario Ministry of Health and Long-Term Care
 Previous issues of the Ontario Influenza Bulletin can be accessed at:
 www.health.gov.on.ca/english/providers/program/pubhealth/flu/flu_04/flubul_mn.html
- 2. Public Health Agency of Canada Issues of FluWatch can be accessed at: www.phac-aspc.gc.ca/fluwatch/
- United States Centers for Disease Control and Prevention www.cdc.gov/flu/

INFORMATION ABOUT AVIAN INFLUENZA

For latest information on the status of avian influenza worldwide please use the following link:

Public Health Agency of Canada

http://www.phac-aspc.gc.ca/h5n1/index.html

APPENDIX

Definitions for influenza activity levels:

No Data: No activity report corresponding to the surveillance week was received at the Ministry of Health and Long-Term Care Call Centre by the Tuesday (at 4 p.m.) following the end of the surveillance period. **No Activity =** No ILI and no laboratory-confirmed cases* or outbreaks occurred.

Sporadic: sporadically occurring ILI <u>AND</u> laboratory-confirmed influenza* with NO outbreaks detected within the influenza surveillance region†

Localized: sporadically occurring ILI <u>AND</u> laboratory-confirmed influenza* together with outbreaks of ILI in schools and worksites or laboratory confirmed influenza in residential institutions occurring in less than 50% of the influenza surveillance region(s)

Widespread: sporadically occurring ILI <u>AND</u> laboratory-confirmed influenza* together with outbreaks of ILI in schools and worksites or laboratory-confirmed influenza in residential institutions occurring in greater than or equal to 50% of the influenza surveillance region(s)

- * Confirmation of influenza within the surveillance region at any time within the prior four weeks
- † Sub-regions within the province or territory as defined by the provincial/territorial epidemiologist

Influenza-Like Illness (ILI) Definitions:

A) ILI in the general population:

Acute onset of respiratory illness with fever and cough and with one or more of the following - sore throat, arthralgia, myalgia, or prostration which could be due to influenza virus. In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent.

B) ILI/Influenza outbreaks:

Schools and work sites: greater than 10% absenteeism on any day most likely due to ILI.

Residential institutions: two or more cases of ILI within a seven-day period, including at least one laboratory-confirmed case.

Reporting Schedule for Influenza Activity Reports (Appendix C) for the remaining 2005-2006 Season

Week	From To	Submit to MOHLTC by
19 - 20	May 7, 2006 – May 20, 2006	Tuesday May 23, 2006
21 -22	May 21, 2006 – June 3, 2006	Tuesday June 6, 2006
23 - 24	June 4, 2006 – June 17, 2006	Tuesday June 20, 2006
25 - 26	June 18, 2006 – July 1, 2006	Tuesday July 4, 2006
27 - 28	July 2, 2006 – July 15, 2006	Tuesday July 18, 2006
29 - 30	July 16, 2006 – July 29, 2006	Tuesday August 1, 2006
31 - 32	July 30, 2006 – August 12, 2006	Tuesday August 15, 2006
33 - 34	August 13, 2006 – August 26, 2006	Tuesday August 29, 2006