Ontario Influenza Bulletin 2005-2006 Season

SURVEILLANCE WEEK 33-34 (August 13 - 26), 2006

This issue of the Ontario Influenza Bulletin provides information on the surveillance period from August 13- 26, 2006 (weeks 33 and 34). The analysis for this issue occurred on Thursday August 31, 2006, therefore all data is current to that date.

During weeks 33 and 34 of 2006, influenza activity in Ontario was similar compared to that of the previous two weeks. No sporadically occurring case of influenza was reported through iPHIS and no institutional outbreak of influenza was reported from health units. All the health regions reported 'no activity' levels.

<u>Please note</u>: Starting from the 2006-2007 influenza surveillance season (i.e. September 1 2006), influenza activity report will be collected every week throughout the year, owing to the increasing threat of avian and pandemic influenza. Please make sure that the influenza activity report (Appendix C) reaches the Ontario Public Health Division Call Centre [Fax: (416) 326-0694] on each Tuesday by 4:00 P.m. EST. Your attention to this matter is greatly appreciated.

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, August 13 - 26 (weeks 33 & 34), 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	0	0	0	0	0
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	0	0	0	0	0
Institutional influenza outbreaks‡	0	0	0	0	0	0	0	0

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

^{*} 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 through verbal communication with health unit

Table 2: Confirmed* cases of influenza by health unit & health region, with an episode date[†] between August 13 - 26 (weeks 31 & 32), 2006.

Region	Health Unit		boratory-Confi		
		Influenza A	Influenza B	Unspecified [‡]	TOTAL
St #	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
iasi Iasi	North Bay Parry Sound District	0	0	0	0
£	Porcupine	0	0	0	0
North East	Sudbury & District	0	0	0	0
	Timiskaming	0	0	0	0
	TOTAL NORTH EAST	0	0	0	0
	Eastern Ontario	0	0	0	0
٤	Hastings & Prince Edward Counties	0	0	0	0
Eastern	Kingston, Frontenac, Lennox & Addington	0	0	0	0
В	Leeds, Grenville & Lanark Ottawa	0	0	0 0	0
	Renfrew	0 0	0 0	0	0 0
	TOTAL EASTERN	0	0	0	0
	Durham Region	0	0	0	0
st	Haliburton, Kawartha, Pine Ridge District	0	0	0	0
<u>n</u>	Peterborough County-City	0	0	0	0
tra	Simcoe Muskoka District	0	0	0	0
Central East	York Region	0	0	0	0
J	Peel Region	0	0	0	0
	TOTAL CENTRAL EAST	0	0	0	0
of .	-		•	•	
Toronto	Toronto	0	0	0	0
	TOTAL TORONTO	0	0	0	0
	Grey-Bruce	0	0	0	0
	Elgin-St. Thomas	0	0	0	0
st	Huron County	0	0	0	0
South West	Chatham-Kent	0	0	0	0
ŧ	Lambton	0	0	0	0
Sou	Middlesex-London	0	0	0	0
	Oxford Porth District	0 0	0 0	0 0	0 0
	Perth District Windsor-Essex County	0	0	0	0
	TOTAL SOUTHWEST	0	0	0	0
	Brant	0	0	0	0
#	Haldimand-Norfolk	0	0	0	0
Central West	Hamilton	0	0	Ö	0
<u>a</u> V	Niagara Region	0	0	0	0
entr	Halton Region	0	0	0	0
ŏ	Waterloo Region	0	0	0	0
	Wellington-Dufferin-Guelph	0	0	0	0
	TOTAL CENTRAL WEST	0	0	0	0

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 influenza (no type)]

Table 3: Cumulative* confirmed[†] cases of influenza by health unit & health region, September 1, 2005 to August 26, 2006.

		Laboratory-Confirmed Influenza			
Region	Health Unit	Influenza A	Influenza B	Unspecified [‡]	TOTAL
North West	Northwestern	7	11	0	18
žš	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
<u>o</u>	Sudbury & District	7	15	1	23
Z	Timiskaming	0	0	0	0
	TOTAL NORTH EAST	32	57	22	111
	Eastern Ontario	34	4	2	40
_	Hastings & Prince Edward Counties	24	18	1	43
Eastern	Kingston, Frontenac, Lennox & Addington	28	25	0	53
as	Leeds, Grenville & Lanark	3	0	24	27
ш	Ottawa	93	18	0	111
	Renfrew	5	6	0	11
	TOTAL EASTERN	187	71	27	285
	Durham Region	11	1	2	14
as	Haliburton, Kawartha, Pine Ridge District	37	68	1	106
<u> </u>	Peterborough County-City	2	6	5	13
Central East	Simcoe Muskoka District	70	57	18	145
<u>.</u>	York Region	39	58	18	115
	Peel Region	95	85	14	194
	TOTAL CENTRAL EAST	254	275	58	587
Toronto	Toronto	316	201	1	518
۲					
	TOTAL TORONTO	316	201	1	518
	Grey-Bruce	35	31	2	68
	Elgin-St. Thomas	2	0	0	2
st	Huron County	10	32	1	43
South West	Chatham-Kent	6	0	3	9
£	Lambton	7	19	0	26
, Sou	Middlesex-London	29	18	4	51
0,	Oxford	6	16	4	26
	Perth District	4	25	1	30
	Windsor-Essex County	18	11	0	29
	TOTAL SOUTHWEST	117	152	15	284
	Brant Haldimand-Norfolk	4 14	5 11	2 0	11 25
les	Hamilton	111	92	0	203
>	Niagara Region	10	33	4	203 47
Central West	Halton Region	58	21	4 17	96
Sen	Waterloo Region	41	53	17	96 95
J	Wellington-Dufferin-Guelph	10	43	9	62
	TOTAL CENTRAL WEST	248	258	33	539
	TOTAL VENTIAL WEUT	270	200	- 33	000
	TOTAL ONTARIO	1163	1027	156	2346

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)

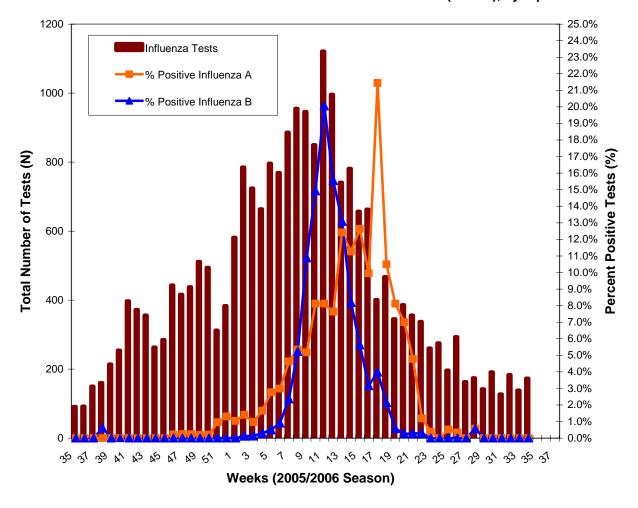
Influenza Subtype(s):

During weeks 33 and 34, 1319 isolates were received by the Public Health Agency of Canada. One isolate from Alberta tested positive for influenza A, while none tested positive for influenza B.*

Since the start of the 2005-2006 influenza season, the National Microbiology Laboratory (NML) has antigenically characterized 1018 influenza viruses. Among these 54% was influenza type A and the remaining 46% was influenza type B.** During the weeks 27 and 28, A/Wisconsin/67/2005-like viruses were antigenically characterized for the first time this season in Canada. It is the recommended A/H3N2 component for the 2006-2007 vaccine. 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. However, a B/Shanghai/361/2002-like virus, which is the B component for this season's vaccine, was detected in early June in Prince Edward Island.

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 tables of Public Health Agency of Canada for weeks 33 & 34, 2006.

^{**} These data have been obtained from the FluWatch report of the Public Health Agency of Canada for weeks 31 & 32, 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 August 26, 2006

New Outbreaks*	N	% (of outbreaks)	
Influenza A	0	0.0	
Influenza B	0	0.0	
Influenza A and B	0	0.0	
Parainfluenza (All types)	1	11.1	
Other organisms	0	0.0	
No organism identified	6	88.9	
TOTAL	9	100	
Total Respiratory Infection Outbreaks, Season to Date**	N	% (of outbreaks)	
Influenza A	126	16.2	
Influenza B	21	2.7	
Influenza A and B	5	0.7	
Parainfluenza (All types)	45	5.8	
Other organisms	103	13.3	
No organism identified	476	61.3	
TOTAL	776	100	
Types of Institutions (All Outbreaks) **	N	% (of outbreaks)	
Long-Term Care Homes	650	83.8	
Hospitals	47	6.1	
Retirement Homes	73	9.4	
Other	6	0.7	
TOTAL	776	100	
Outbreak Related Complications (All Outbreaks) **	N	% (of cases)	
Deaths			
Residents	293	3.0	
Staff	1	0.0	
Pneumonia (Chest x-ray confirmed)			
Residents	523	5.3	
Staff	23	0.8	
Hospitalizations			
Residents	553	5.6	
Staff			

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 (August 13 - 26, 2006)

^{**} Season to date includes all outbreaks in which the date of onset of the first case occurred between September 1, 2005 and August 26, 2006.

Ontario Ontario Influenza Activity, by Health Unit August 13 to August 26, 2006 (Week 33-34) THB NWR Legend Influenza Status No Data No Activity REN EOH OTT HKP SMD LGL HPE **KFL** PTC **GBO** SMD HKP DUR WDG PEE Health Unit HUR Code Code Name Algoma District NPS North Bay Parry Sound District PDH WAT BRN Brant County NWR Northwestern City of Ottawa CHK Chatham-Kent OTT HAM DUR Durham Regional OXF Oxford County BRN Elgin-St. Thomas Perth District OXF MSL FOH Eastern Ontario PEE Peel Regional GBO Grev Bruce POP Porcupine HDN LAM Halton Regional Peterborough County-City **ELG** HAMCity of Hamilton HDN Haldimand-Norfolk SMD Simcoe Muskoka District HKP Haliburton-Kawartha-Pine Ridge District SUD Sudbury and District HPE Hastings and Prince Edward Counties THB Thunder Bay District HUR City of Toronto Kingston-Frontenac and Lennox and Addington KFL TSK Timiskaming WEC LAM Lambton WAT Waterloo LGL Leeds-Grenville and Lanark District WDG Wellington-Dufferin-Guelph Middlesex-London WEC Niagara Regional Area YRK York Regional

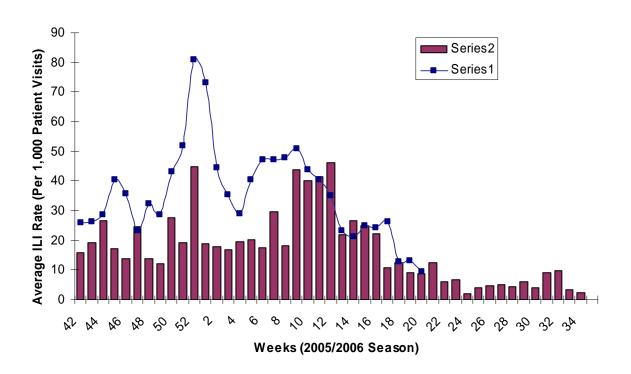
Figure 2: Influenza Activity* levels in Ontario by health unit & health region for weeks 33 & 34, between August 13 - 26, 2006.

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 33 (Aug. 13 - 19), 2006.

Postal Code	0 – 4	5 – 19	20 – 64	65 +	Unknown
K2P1V3	0	0	0	0	0
K1J9M2	0	0	0	0	0
K0H2N0	0	0	0	0	0
K7H2W6	0	0	0	0	0
L1A3W4	0	0	0	0	0
K0L1H0	0	0	0	0	0
K0M1A0	0	0	0	0	0
L1B1H8	0	0	0	0	0
L4L4Y7	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	1	0	0	0
M3H1T1	0	0	0	0	0
M9W6N5	0	0	0	0	0
M9W4L6	0	0	1	0	0
M8V2Z5	0	0	0	0	0
L4Y2N8	0	0	0	0	0
L6W2A4	0	1	0	0	0
L9H2G2	0	0	0	0	0
L2E1Y3	0	0	0	0	0
N3C2E2	0	0	0	0	0
N5H1K9	0	0	0	0	0
N0R1G0	0	0	0	0	0
NOM1TO	0	0	0	0	0
N6A5R9	0	0	0	0	0
N6C2R5	0	0	0	0	0
N0C1E0	0	0	0	0	0
L4R4P4	0	0	0	0	0
P0P1S0	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	0	2	1	0	0
ILI Consultation Rate (per 1,000 patient visits)	0.00	32.26	1.97	0.00	0.00

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

Source: Public Health Agency of Canada * 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 34 (August 20- 26), 2006.

Postal Code	0 – 4	5 – 19	20 – 64	65 +	Unknown
K2P1V3	0	0	0	0	0
K1J9M2	0	0	0	0	0
K0H2N0	0	0	0	0	0
K7H2W6	0	0	0	0	0
L1A3W4	0	0	0	0	0
K0L1H0	0	0	0	0	0
K0M1A0	0	0	0	0	0
L1B1H8	0	0	0	0	0
L4J7Y3	0	0	0	0	0
L4L4Y7	0	0	0	0	0
M5M1B2	0	0	0	0	0
M4X1W4	0	0	0	0	0
M6G4A1	0	0	1	0	0
M4E1V8	0	0	0	0	0
M8Y1W3	1	0	0	0	0
M3H1T1	0	0	0	0	0
M9W6N5	0	0	0	0	0
M8V2Z5	0	0	0	0	0
L4Y2N8	0	0	0	0	0
L9W1G2	0	0	0	0	0
L7R1M6	0	0	0	0	0
L9H2G2	0	0	0	0	0
L2E1Y3	0	0	0	0	0
N3C2E2	0	0	0	0	0
N5C1G5	0	0	0	0	0
N5H1K9	0	0	0	0	0
N0R1G0	0	0	0	0	0
N0M1T0	0	0	0	0	0
N6C2R5	0	0	0	0	0
N0C1E0	0	0	0	0	0
P0P1S0	0	0	0	0	0
P4N1C6	0	0	0	0	0
P7E1H5	0	0	0	0	0
P0W1E0	0	0	0	0	0
ILI Sum	1	0	1	0	0
ILI Consultation	•	Ŭ	•	•	Ŭ
Rate (per 1,000 patient visits)	19.23	0.00	2.28	0.00	0.00

Source: Public Health Agency of Canada

* Sentinel physician information is reported to the 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.

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.