

Ontario Influenza Bulletin 2006-2007 Season

SURVEILLANCE WEEK 39- 40 (September 24 – October 7), 2006

This issue of the Ontario Influenza Bulletin provides information on the surveillance period from September 24 to October 7, 2006 (weeks 39 and 40). The analysis for this issue occurred on Thursday October 12, 2006, therefore all data is current to that date.

During weeks 39 and 40 of 2006, influenza activity in Ontario was similar compared to that of the previous two weeks. One sporadically occurring case of influenza A was reported through iPHIS from Toronto, but no institutional outbreak of influenza was reported from health units. Toronto and Central East health regions recorded 'sporadic' influenza activity, while all other regions reported 'no activity' levels.

Please note: Starting from the 2006-2007 influenza surveillance season (i.e. September 1, 2006), influenza activity reports will be collected every week throughout the year. Please make sure that influenza activity reports (Appendix C) reach the Public Health Division Call Centre [Fax: (416) 326-0694] each Tuesday by 4:00 P.M. EST. Your attention to this matter is greatly appreciated.

In this issue, we are providing a revised version of the 2006-2007 Influenza surveillance weeks' calendar, including the weekly final dates for submission of Appendix C.

Please disregard earlier versions contained in previous Influenza Bulletins for this season.

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- I. 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, September 24 - October 7 (weeks 39 & 40), 2006.

Lab-confirmed Influenza cases*	HEALTH REGION							TOTAL
	North West	North East	Eastern	Central East	Toronto	South West	Central West	
Influenza A	0	0	0	0	1	0	0	1
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	1	0	0	1
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.

Table 2: Confirmed* cases of influenza by health unit & health region, with an episode date† between September 24 – October 7 (weeks 39 & 40), 2006.

Region	Health Unit	Laboratory-Confirmed Influenza			TOTAL
		Influenza A	Influenza B	Unspecified‡	
North West	Northwestern	0	0	0	0
	Thunder Bay District	0	0	0	0
	TOTAL NORTH WEST	0	0	0	0
North East	Algoma	0	0	0	0
	North Bay Parry Sound District	0	0	0	0
	Porcupine	0	0	0	0
	Sudbury & District	0	0	0	0
	Timiskaming	0	0	0	0
	TOTAL NORTH EAST	0	0	0	0
Eastern	Eastern Ontario	0	0	0	0
	Hastings & Prince Edward Counties	0	0	0	0
	Kingston, Frontenac, Lennox & Addington	0	0	0	0
	Leeds, Grenville & Lanark	0	0	0	0
	Ottawa	0	0	0	0
	Renfrew	0	0	0	0
	TOTAL EASTERN	0	0	0	0
Central East	Durham Region	0	0	0	0
	Haliburton, Kawartha, Pine Ridge District	0	0	0	0
	Peterborough County-City	0	0	0	0
	Simcoe Muskoka District	0	0	0	0
	York Region	0	0	0	0
	Peel Region	0	0	0	0
	TOTAL CENTRAL EAST	0	0	0	0
Toronto	Toronto	1	0	0	1
	TOTAL TORONTO	1	0	0	1
South West	Grey-Bruce	0	0	0	0
	Elgin-St. Thomas	0	0	0	0
	Huron County	0	0	0	0
	Chatham-Kent	0	0	0	0
	Lambton	0	0	0	0
	Middlesex-London	0	0	0	0
	Oxford	0	0	0	0
	Perth District	0	0	0	0
	Windsor-Essex County	0	0	0	0
	TOTAL SOUTHWEST	0	0	0	0
Central West	Brant	0	0	0	0
	Haldimand-Norfolk	0	0	0	0
	Hamilton	0	0	0	0
	Niagara Region	0	0	0	0
	Halton Region	0	0	0	0
	Waterloo Region	0	0	0	0
	Wellington-Dufferin-Guelph	0	0	0	0
	TOTAL CENTRAL WEST	0	0	0	0
	TOTAL ONTARIO	1	0	0	1

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 – October 7, 2006

Region	Health Unit	Laboratory-Confirmed Influenza			TOTAL
		Influenza A	Influenza B	Unspecified‡	
North West	Northwestern	0	0	0	0
	Thunder Bay District	0	0	0	0
	TOTAL NORTH WEST	0	0	0	0
North East	Algoma	0	0	0	0
	North Bay Parry Sound District	0	0	0	0
	Porcupine	0	0	0	0
	Sudbury & District	0	0	0	0
	Timiskaming	0	0	0	0
	TOTAL NORTH EAST	0	0	0	0
Eastern	Eastern Ontario	0	0	0	0
	Hastings & Prince Edward Counties	0	0	0	0
	Kingston, Frontenac, Lennox & Addington	0	0	0	0
	Leeds, Grenville & Lanark	0	0	0	0
	Ottawa	0	0	0	0
	Renfrew	0	0	0	0
	TOTAL EASTERN	0	0	0	0
Central East	Durham Region	0	0	0	0
	Haliburton, Kawartha, Pine Ridge District	0	0	0	0
	Peterborough County-City	0	0	0	0
	Simcoe Muskoka District	0	0	0	0
	York Region	0	0	0	0
	Peel Region	1	0	0	1
	TOTAL CENTRAL EAST	1	0	0	1
Toronto	Toronto	1	0	0	1
	TOTAL TORONTO	1	0	0	1
South West	Grey-Bruce	0	0	0	0
	Elgin-St. Thomas	0	0	0	0
	Huron County	0	0	0	0
	Chatham-Kent	0	0	0	0
	Lambton	0	0	0	0
	Middlesex-London	0	0	0	0
	Oxford	0	0	0	0
	Perth District	0	0	0	0
	Windsor-Essex County	0	0	0	0
	TOTAL SOUTHWEST	0	0	0	0
Central West	Brant	0	0	0	0
	Haldimand-Norfolk	0	0	0	0
	Hamilton	0	0	0	0
	Niagara Region	0	0	0	0
	Halton Region	0	0	0	0
	Waterloo Region	0	0	0	0
	Wellington-Dufferin-Guelph	0	0	0	0
	TOTAL CENTRAL WEST	0	0	0	0
	TOTAL ONTARIO	2	0	0	2

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 39 and 40, 2143 isolates were received by the Public Health Agency of Canada, with a total of 2 testing positive for influenza A and one for influenza B. One influenza A isolate was from Ontario (50.0%) and the other from Alberta (50.0%). The only influenza B isolate was from Alberta.*

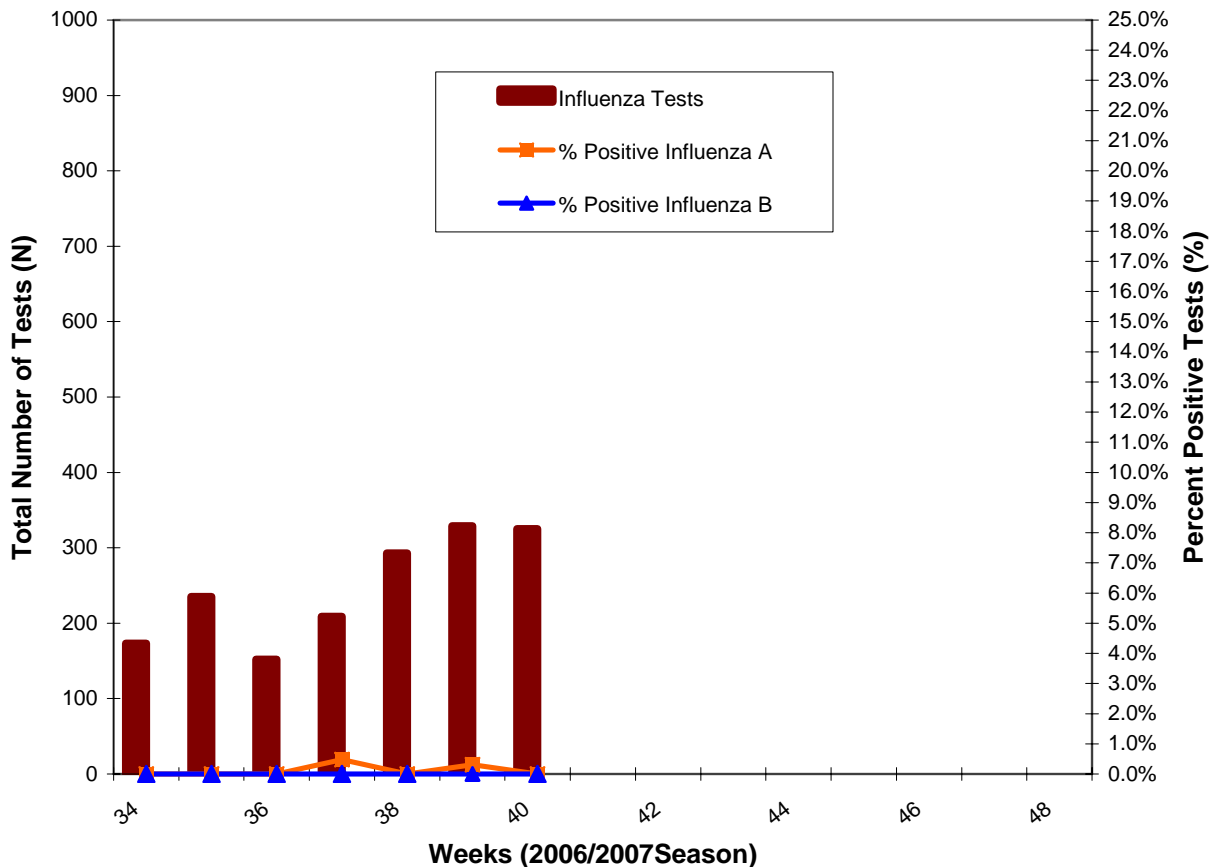
The National Microbiology Laboratory (NML) has not reported any influenza strain characterizations for the 2006-2007 influenza season. Strain characterization of the early season influenza isolates are pending. However, late 2005-2006 influenza isolates included A/Wisconsin/67/2005 (H3N2)-like, A/New Caledonia/20/1999 (H1N1)-like, and B/Malaysia/2506/2004-like strains.**

Note: Based on the World Health Organization recommendations, Canada's National Advisory Committee on Immunization (NACI) recommended the **2006-2007** influenza vaccine contain an **A/New Caledonia-like**, an **A/Wisconsin-like** and a **B/Malaysia-like** virus strain.

* These data have been obtained from the Respiratory Virus Detection tables of Public Health Agency of Canada for weeks 39 & 40, 2006.

** These data have been obtained from the FluWatch report of the Public Health Agency of Canada for weeks 37 & 38, 2006.

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

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

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

Table 4: Institutional respiratory outbreaks in Ontario: New Outbreaks from September 24- October 7 (Weeks 39 & 40) 2006, and Total Outbreaks from September 1 - October 7, 2006

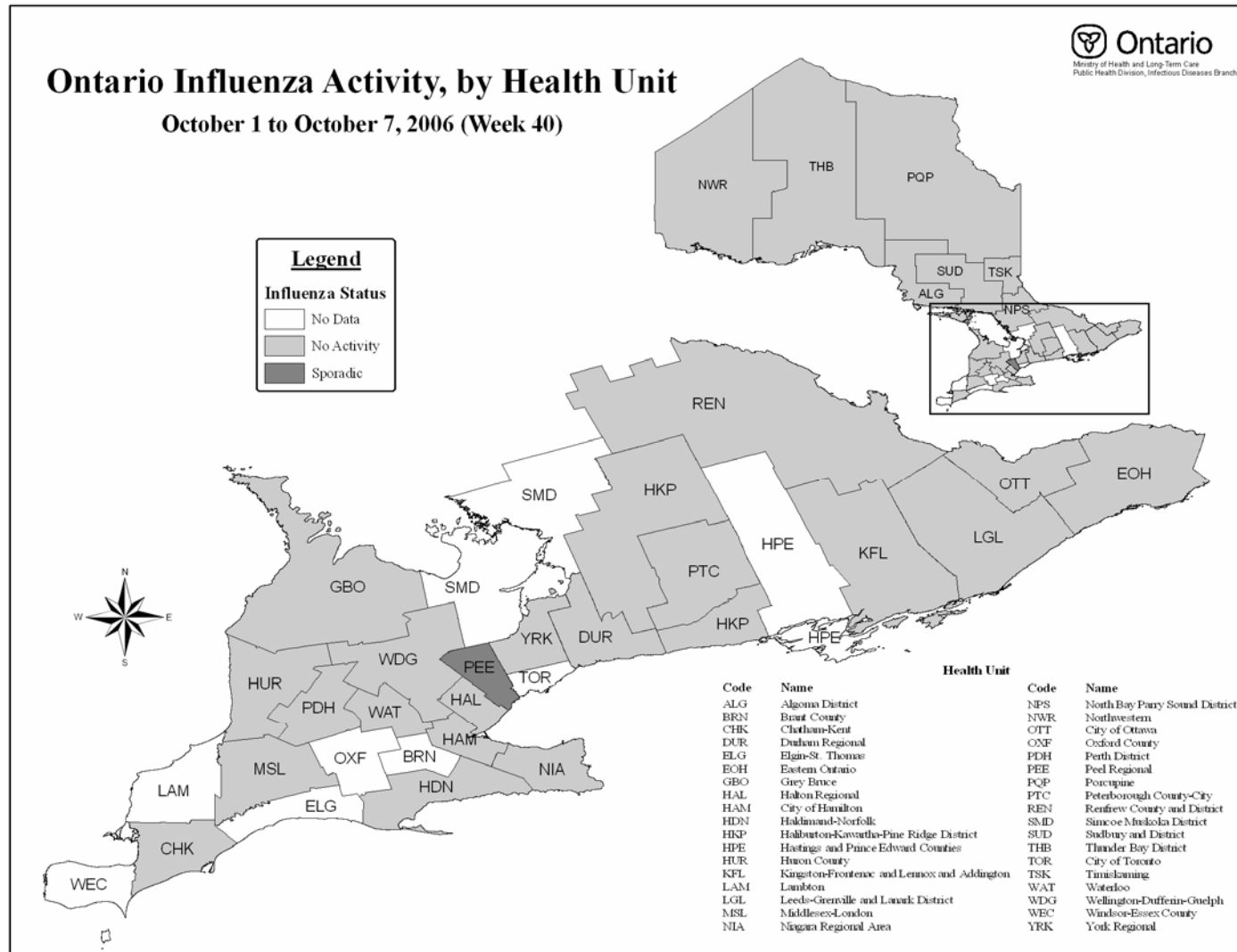
Institutional Respiratory Infection Outbreaks		
New Outbreaks* (Sept. 23 – Oct. 7, 2006)	N	% (of outbreaks)
Influenza A	0	0.0
Influenza B	0	0.0
Influenza A and B	0	0.0
Parainfluenza (All types)	0	0.0
Other organisms	1	3.8
No organism identified	25	96.2
TOTAL	26	100
Total Respiratory Infection Outbreaks of the Season to date** (September 1 – Oct 7, 2006)	N	% (of outbreaks)
Influenza A	0	0.0
Influenza B	0	0.0
Influenza A and B	0	0.0
Parainfluenza (All types)	1	1.5
Other organisms	1	1.5
No organism identified	63	97.0
TOTAL	65	100
Types of Institutions (All Outbreaks) **	N	% (of outbreaks)
Long-Term Care Homes	55	84.6
Hospitals	5	7.7
Retirement Homes	5	7.7
Other	0	0.0
TOTAL	65	100
Outbreak Related Complications (All Outbreaks) **	N	% (of cases)
Deaths		
Residents	3	0.8
Staff	0	0.0
Pneumonia (Chest x-ray confirmed)		
Residents	20	5.1
Staff	0	0.0
Hospitalizations		
Residents	8	2.1
Staff	1	1.2

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 i.e. September 24 - October 7, 2006

** Season to date includes all outbreaks in which the date of onset of the first case occurred between September 1- October 7, 2006

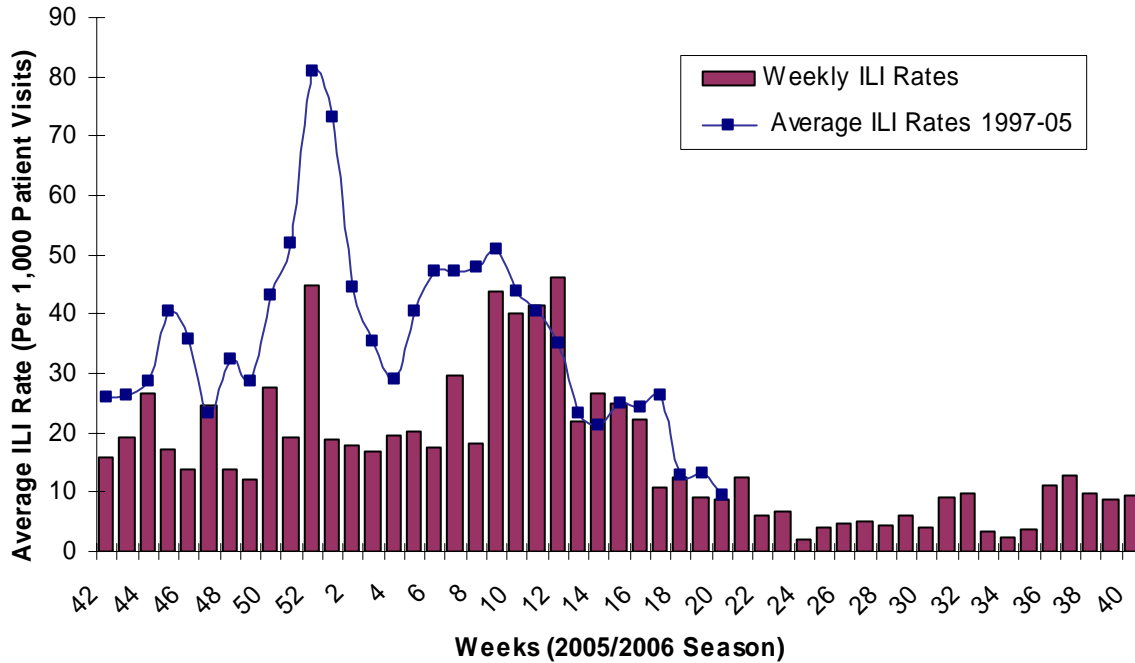
Figure 2: Influenza Activity* levels in Ontario by health unit & health region for week 40 (October 1- 7), 2006.



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 † (1996/97 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 39 (September 24-30), 2006.

Postal Code	0 – 4	5 – 19	20 – 64	65 +	Unknown
K1J9M2	0	0	0	0	0
K1J9M2	0	0	0	0	0
K0H2N0	1	0	0	0	0
K7H2W6	0	0	0	0	0
L4J7Y3	0	0	0	0	0
L1A3W4	0	0	0	0	0
K0L1H0	1	0	0	0	0
K0M1A0	0	0	0	0	0
L1B1H8	0	0	0	0	0
L4L4Y7	0	0	0	0	0
M5M1B2	0	0	0	0	0
M4X1W4	0	0	0	0	0
M4E1V8	0	0	0	0	0
M3H1T1	2	0	0	0	0
M9W6N5	0	0	0	0	0
M9W4L6	0	0	1	0	0
L4Y2N8	0	0	0	0	0
L6W2A4	1	1	0	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
N2M3B5	0	0	0	0	0
N5C1G5	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	1	0	0	0
N0C1E0	0	0	0	0	0
L4R4P4	0	0	0	0	0
P4N1C6	0	0	0	0	0
P6B1Y5	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	5	2	1	0	0
ILI Consultation Rate (per 1,000 patient visits)	71.4	26.3	2.1	0.0	0.0

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.

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 40 (October 1- 7), 2006.

Postal Code	0 – 4	5 – 19	20 – 64	65 +	Unknown
K0C1A0	0	0	0	0	0
K2P1V3	0	0	0	0	0
K0H2N0	1	0	0	0	0
K7H2W6	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	1	1	0
M6G4A1	0	0	0	0	0
M4E1V8	0	0	0	0	0
M8Y1W3	0	0	0	0	0
M3H1T1	1	0	1	0	0
M9W6N5	0	0	1	0	0
M9W4L6	0	1	0	0	0
M8V2Z5	0	0	0	0	0
L4Y2N8	0	0	0	0	0
L6V4H6	0	0	1	0	0
L9W1G2	0	0	0	0	0
L9H1V1	0	0	0	0	0
L2E1Y3	0	0	0	0	0
L2E1Y3	0	0	0	0	0
N3C2E2	0	0	1	0	0
N2M3B5	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
L4R4P4	0	0	0	0	0
P7E1H5	0	0	0	0	0
P0W1E0	0	0	0	0	0
P8N2Z6	0	0	0	0	0
ILI Sum	2	1	5	1	0
ILI Consultation Rate (per 1,000 patient visits)	60.6	13.7	9.2	3.3	0.0

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

1. Ontario Ministry of Health and Long-Term Care
Previous issues of the *Ontario Influenza Bulletin* can be accessed at:
http://www.health.gov.on.ca/english/providers/program/pubhealth/flu/flu_05/flubul_mn.html
2. Public Health Agency of Canada
Issues of FluWatch can be accessed at:
www.phac-aspc.gc.ca/fluwatch/
3. 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 - I

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 laboratory confirmed* influenza cases(s) or outbreak detected during the past four weeks** within the influenza surveillance region, however, sporadically occurring ILI may be reported†

Sporadic: Sporadically occurring **ILI and laboratory confirmed influenza* case(s) with NO outbreaks** detected within the influenza surveillance region†

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

Widespread: sporadically occurring **ILI and laboratory confirmed influenza* case(s) together with outbreaks of ILI** in schools and/or 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.

Influenza Surveillance Weeks 2006-2007 and date of submission of Appendix C

WEEKS	START	END	Appendix C Submission to MOHLTC
37	10-Sep-06	16-Sep-06	19-Sep-06
38	17-Sep-06	23-Sep-06	26-Sep-06
39	24-Sep-06	30-Sep-06	3-Oct-06
40	1-Oct-06	7-Oct-06	10-Oct-06
41	8-Oct-06	14-Oct-06	17-Oct-06
42	15-Oct-06	21-Oct-06	24-Oct-06
43	22-Oct-06	28-Oct-06	31-Oct-06
44	29-Oct-06	4-Nov-06	7-Nov-06
45	5-Nov-06	11-Nov-06	14-Nov-06
46	12-Nov-06	18-Nov-06	21-Nov-06
47	19-Nov-06	25-Nov-06	28-Nov-06
48	26-Nov-06	2-Dec-06	5-Dec-06
49	3-Dec-06	9-Dec-06	12-Dec-06
50	10-Dec-06	16-Dec-06	19-Dec-06
51	17-Dec-06	23-Dec-06	26-Dec-06
52	24-Dec-06	30-Dec-06	2-Jan-07
1	31-Dec-06	6-Jan-07	9-Jan-07
2	7-Jan-07	13-Jan-07	16-Jan-07
3	14-Jan-07	20-Jan-07	23-Jan-07
4	21-Jan-07	27-Jan-07	30-Jan-07
5	28-Jan-07	3-Feb-07	6-Feb-07
6	4-Feb-07	10-Feb-07	13-Feb-07
7	11-Feb-07	17-Feb-07	20-Feb-07
8	18-Feb-07	24-Feb-07	27-Feb-07
9	25-Feb-07	3-Mar-07	6-Mar-07
10	4-Mar-07	10-Mar-07	13-Mar-07
11	11-Mar-07	17-Mar-07	20-Mar-07
12	18-Mar-07	24-Mar-07	27-Mar-07
13	25-Mar-07	31-Mar-07	3-Apr-07
14	1-Apr-07	7-Apr-07	10-Apr-07
15	8-Apr-07	14-Apr-07	17-Apr-07
16	15-Apr-07	21-Apr-07	24-Apr-07
17	22-Apr-07	28-Apr-07	1-May-07
18	29-Apr-07	5-May-07	8-May-07
19	6-May-07	12-May-07	15-May-07
20	13-May-07	19-May-07	22-May-07

WEEKS	START	END	Appendix C Submission to MOHLTC
21	20-May-07	26-May-07	29-Jun-07
22	27-May-07	2-Jun-07	5-Jun-07
23	3-Jun-07	9-Jun-07	12-Jun-07
24	10-Jun-07	16-Jun-07	19-Jun-07
25	17-Jun-07	23-Jun-07	26-Jun-07
26	24-Jun-07	30-Jun-07	3-Jul-07
27	1-Jul-07	7-Jul-07	10-Jul-07
28	8-Jul-07	14-Jul-07	17-Jul-07
29	15-Jul-07	21-Jul-07	24-Jul-07
30	22-Jul-07	28-Jul-07	31-Aug-07
31	29-Jul-07	4-Aug-07	7-Aug-07
32	5-Aug-07	11-Aug-07	14-Aug-07
33	12-Aug-07	18-Aug-07	21-Aug-07
34	19-Aug-07	25-Aug-07	28-Sep-07
35	26-Aug-07	1-Sep-07	4-Sep-07
36	2-Sep-07	8-Sep-07	11-Sep-07
37	9-Sep-07	15-Sep-07	18-Sep-07
38	16-Sep-07	22-Sep-07	25-Sep-07
39	23-Sep-07	29-Sep-07	2-Oct-07
40	30-Sep-07	6-Oct-07	9-Oct-07
41	7-Oct-07	13-Oct-07	16-Oct-08
42	14-Oct-07	1-Oct-07	23-Oct-07
43	21-Oct-07	27-Oct-07	30-Oct-07
44	28-Oct-07	3-Nov-07	6-Nov-07
45	4-Nov-07	10-Nov-07	13-Nov-07
46	11-Nov-07	17-Nov-07	20-Nov-07
47	18-Nov-07	24-Nov-07	27-Nov-07
48	25-Nov-07	1-Dec-07	4-Dec-07
49	2-Dec-07	8-Dec-07	11-Dec-07
50	9-Dec-07	15-Dec-07	18-Dec-07
51	16-Dec-07	22-Dec-07	25-Dec-07
52	23-Dec-07	29-Dec-07	1-Jan-08
	30-Dec-07	5-Jan-08	8-Jan-08