

Ontario Influenza Bulletin 2005-2006 Season

SURVEILLANCE WEEK 11 (March 12 - 18, 2006)

This issue of the Ontario Influenza Bulletin provides information on the surveillance period from March 12 – 18, 2006. The analysis for this issue occurred on Wednesday March 22, 2006, therefore all data is current to that date.

During week 11 of 2006, influenza activity in Ontario was lower compared to that of the previous week. Eighty five sporadically occurring cases of influenza (46 influenza A and 39 influenza B) were reported through iPHIS. In addition, there were 8 institutional outbreaks (all influenza A) reported. The highest level of influenza activity in Ontario was ‘widespread activity’ reported from Toronto, although four individual health units from other regions also reported ‘widespread activity’. Overall ‘localized activity’ were reported from Eastern, Central East, Central West and Southwest regions. North East and North West regions reported ‘sporadic activity’.

When entering laboratory confirmed influenza cases in iPHIS, please enter the “type” (i.e. A vs. B) of influenza reported. Your attention to this matter is most 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, March 12 - 18, 2006.

Lab-confirmed Influenza cases*	HEALTH REGION							TOTAL
	North West	North East	Eastern	Central East	Toronto	South West	Central West	
Influenza A	0	2	22	4	11	2	5	46
Influenza B	0	2	3	14	7	1	12	39
Influenza A & B	0	0	0	0	0	0	0	0
Unspecified †	0	0	0	0	0	0	0	0
Total new cases	0	4	25	18	18	3	17	85
Institutional influenza outbreaks‡	0	0	3	1	2	2	0	8

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 March 12 - 18, 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	1	1	0	2
	North Bay Parry Sound District	0	0	0	0
	Porcupine	1	1	0	2
	Sudbury & District	0	0	0	0
	Timiskaming	0	0	0	0
	TOTAL NORTH EAST	2	2	0	4
Eastern	Eastern Ontario	0	0	0	0
	Hastings & Prince Edward Counties	0	1	0	1
	Kingston, Frontenac, Lennox & Addington	0	0	0	0
	Leeds, Grenville & Lanark	0	0	0	0
	Ottawa	21	2	0	23
	Renfrew	1	0	0	1
	TOTAL EASTERN	22	3	0	25
Central East	Durham Region	0	0	0	0
	Haliburton, Kawartha, Pine Ridge District	0	7	0	7
	Peterborough County-City	0	1	0	1
	Simcoe Muskoka District	1	2	0	3
	York Region	0	0	0	0
	Peel Region	3	4	0	7
	TOTAL CENTRAL EAST	4	14	0	18
Toronto	Toronto	11	7	0	18
	TOTAL TORONTO	11	7	0	18
South West	Grey-Bruce	1	0	0	1
	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	1	1	0	2
	Oxford	0	0	0	0
	Perth District	0	0	0	0
	Windsor-Essex County	0	0	0	0
	TOTAL SOUTHWEST	2	1	0	3
Central West	Brant	0	0	0	0
	Haldimand-Norfolk	0	1	0	1
	Hamilton	5	10	0	15
	Niagara Region	0	0	0	0
	Halton Region	0	0	0	0
	Waterloo Region	0	1	0	1
	Wellington-Dufferin-Guelph	0	0	0	0
	TOTAL CENTRAL WEST	5	12	0	17
	TOTAL ONTARIO	46	39	0	85

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)

Table 3: Cumulative* confirmed† cases of influenza by health unit & health region, September 1, 2005 to March 18, 2006.

Region	Health Unit	Laboratory-Confirmed Influenza			TOTAL
		Influenza A	Influenza B	Unspecified‡	
North West	Northwestern	0	1	0	1
	Thunder Bay District	0	0	0	0
	TOTAL NORTH WEST	0	1	0	1
North East	Algoma	2	2	0	4
	North Bay Parry Sound District	0	1	7	8
	Porcupine	4	3	0	7
	Sudbury & District	2	8	0	10
	Timiskaming	0	0	0	0
	TOTAL NORTH EAST	8	14	7	29
Eastern	Eastern Ontario	1	0	0	1
	Hastings & Prince Edward Counties	10	9	0	19
	Kingston, Frontenac, Lennox & Addington	6	0	0	6
	Leeds, Grenville & Lanark	1	0	0	1
	Ottawa	28	2	0	30
	Renfrew	5	1	0	6
	TOTAL EASTERN	51	12	0	63
Central East	Durham Region	4	0	1	5
	Haliburton, Kawartha, Pine Ridge District	11	27	0	38
	Peterborough County-City	1	2	0	3
	Simcoe Muskoka District	20	24	0	44
	York Region	14	36	0	50
	Peel Region	22	32	0	54
	TOTAL CENTRAL EAST	72	121	1	194
Toronto	Toronto	80	113	0	193
	TOTAL TORONTO	80	113	0	193
South West	Grey-Bruce	5	19	0	24
	Elgin-St. Thomas	1	0	0	1
	Huron County	3	12	0	15
	Chatham-Kent	0	0	1	1
	Lambton	0	0	0	0
	Middlesex-London	12	15	1	28
	Oxford	3	2	0	5
	Perth District	1	4	0	5
	TOTAL SOUTHWEST	36	53	2	91
Central West	Brant	0	0	0	0
	Haldimand-Norfolk	0	3	0	3
	Hamilton	44	63	0	107
	Niagara Region	3	13	2	18
	Halton Region	16	12	0	28
	Waterloo Region	16	24	0	40
	Wellington-Dufferin-Guelph	1	21	0	22
	TOTAL CENTRAL WEST	80	136	2	218
	TOTAL ONTARIO	327	450	12	789

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 Week 11, 3,182 isolates were received by the Public Health Agency of Canada, with a total of 323 and 321 testing positive for influenza A and B respectively. The majority of the influenza A isolates (104) were from Quebec (32.2%), Ontario 91 (28.2%), and Alberta 69 (21.4%). The majority of the influenza B isolates (225) were from Ontario (70.1%), Alberta 24 (7.4%) and Saskatchewan 24 (7.4%).*

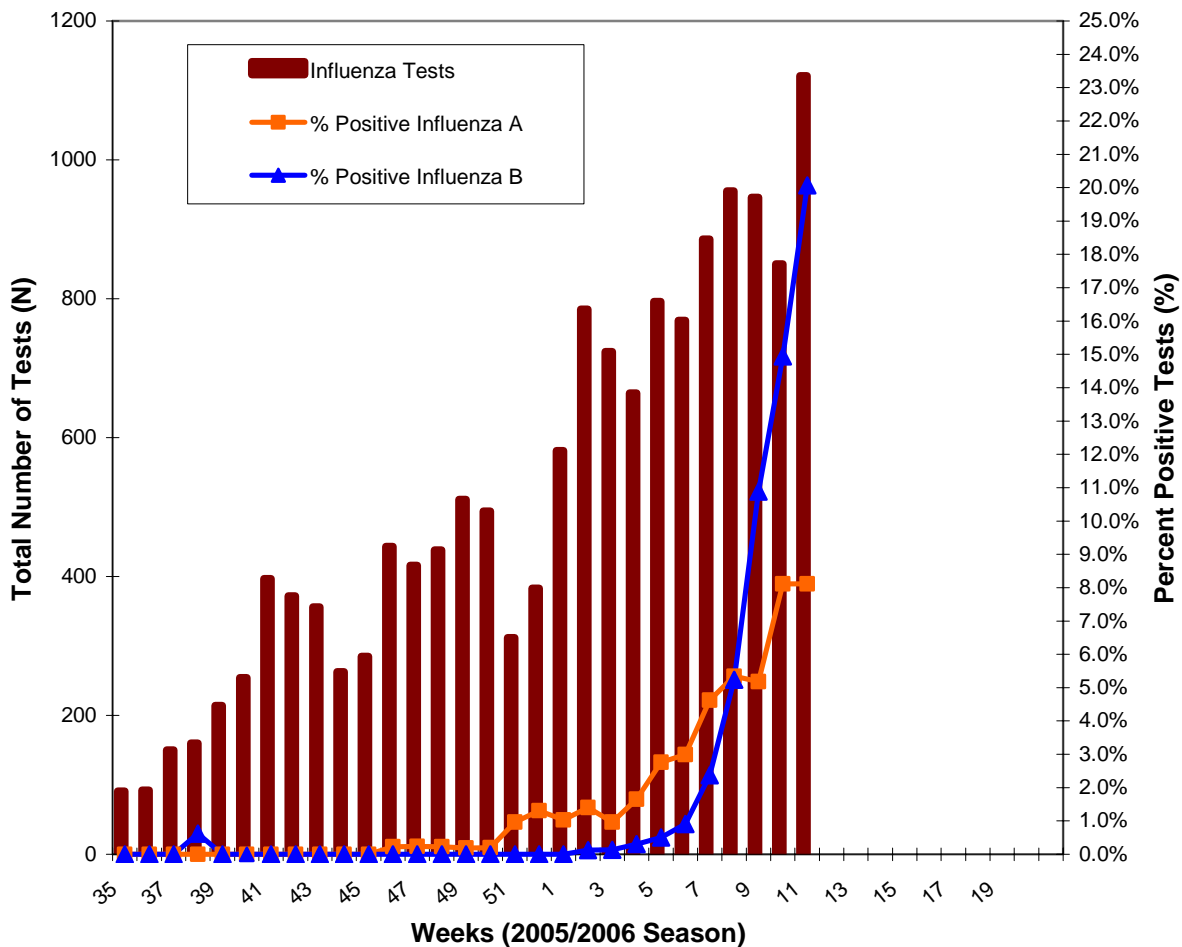
Since the start of the 2005-2006 influenza season, the National Microbiology Laboratory (NML) has antigenically characterized 495 influenza viruses: 242 A/California/07/2004(H3N2)-like viruses; 18 A/New Caledonia/20/1999(H1N1)-like viruses; 136 B/Hong Kong/330/2001-like and 94 B/Malaysia/2506/2004-like viruses both belonging to the B/Victoria/2/1987 lineage; and 5 B/Shanghai/361/2002-like viruses belonging to the B/Yamagata/16/1988 lineage. The B/Malaysia/2506/2004-like strain is the WHO-recommended influenza B component for the Northern Hemisphere 2006-2007 influenza 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.

* These data have been obtained from the Respiratory Virus Detection table of Public Health Agency of Canada for week 11, 2006

** These data have been obtained from the FluWatch report of the Public Health Agency of Canada for week 10 (March 5 - 11) 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, September 1, 2005 to March 18, 2006

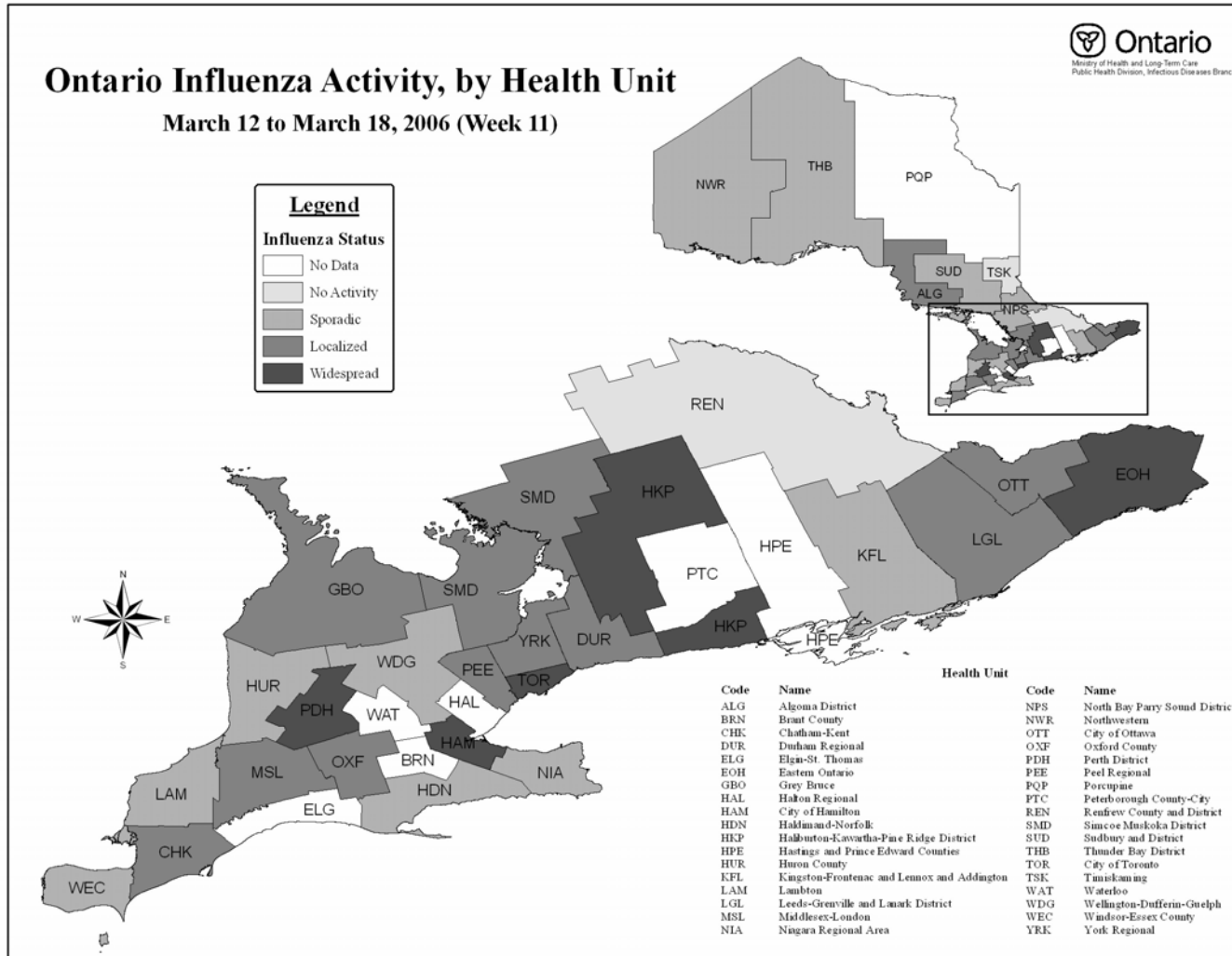
Institutional Respiratory Infection Outbreaks		
New Outbreaks*	N	% (of outbreaks)
Influenza A	8	30.9
Influenza B	0	0.0
Influenza A and B	0	0.0
Parainfluenza (All types)	1	3.8
Other organisms	1	3.8
No organism identified	16	61.5
TOTAL	26	100
Total Respiratory Infection Outbreaks, Season to Date**	N	% (of outbreaks)
Influenza A	49	9.6
Influenza B	10	2.0
Influenza A and B	1	0.2
Parainfluenza (All types)	39	7.6
Other organisms	72	14.1
No organism identified	340	66.5
TOTAL	511	100
Types of Institutions (All Outbreaks)	N	% (of outbreaks)
Long-Term Care Homes	424	83.1
Hospitals	29	5.5
Retirement Homes	54	10.6
Other	4	0.8
TOTAL	511	100
Outbreak Related Complications (All Outbreaks)	N	% (of cases)
Deaths		
Residents	150	2.6
Staff	0	0.0
Pneumonia (Chest x-ray confirmed)		
Residents	270	4.6
Staff	19	1.0
Hospitalizations		
Residents	308	5.3
Staff	10	0.5

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

** Season to date includes all outbreaks in which the date of onset of the first case occurred between September 1, 2005 and March 18, 2006.

* New outbreaks are those in which the date of onset of the first case occurred in the current surveillance period (March 12 - 18, 2006)

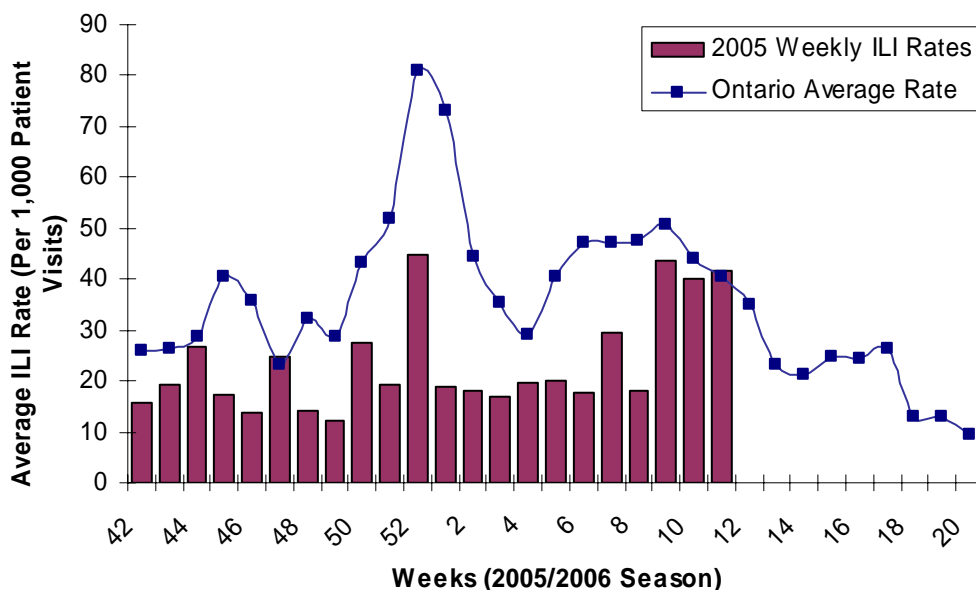
Figure 2: Influenza activity* in Ontario by health unit, Week 11 (March 12 - 18) 2006.



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

* Influenza activity levels, as represented on this map, 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 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 5: 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 11 (March 12-18), 2006.

Postal Code	0 – 4	5 – 19	20 – 64	65 +	Unknown
K2P1V3	0	0	1	0	0
K1J9M2	0	0	0	0	0
K2P1V3	0	0	0	0	0
K0H2N0	0	0	0	0	0
K7H2W6	0	0	0	0	0
K7L1E9	0	0	0	0	0
K0L1C0	0	0	0	0	0
K0K1H0	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	1	1	0	0
M4X1W4	0	0	0	0	0
M4E1V8	0	0	1	0	0
M8Y1W3	0	3	0	0	0
M2J2Z1	0	0	0	0	0
M3H1T1	1	0	0	0	0
M2K1E1	0	0	0	0	0
M9W6N5	0	0	0	0	0
M9W4L6	0	0	0	0	0
M8V2Z5	0	0	0	0	0
L6W2A4	0	3	0	0	0
L7R1M6	0	0	0	0	0
L9H1V1	0	0	1	0	0
L9H2G2	0	1	0	0	0
L2E1Y3	0	0	0	0	0
L0R1B0	0	1	4	0	0
N3C2E2	0	1	4	1	0
N2G1P2	0	0	0	0	0
N5C1G5	4	6	9	1	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
N0M1L0	0	0	0	0	0
N0G1L0	1	1	0	0	0
N0C1E0	0	1	0	0	0
L4R4P4	0	0	0	0	0
P0A1C0	0	0	0	0	0
P0P1S0	0	0	0	0	0
P3E5V5	0	0	0	0	0
P7E1H5	0	0	0	0	0
P8N2Z6	0	0	0	0	0
ILI Sum	6	18	21	2	0
ILI Consultation Rate (per 1,000 patient visits)	67.4	171.4	35.0	5.9	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:
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/
3. United States Centers for Disease Control and Prevention
www.cdc.gov/flu/
4. Public Health Agency of Canada
For latest information on avian influenza worldwide:
<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 **AND** laboratory-confirmed influenza* with NO outbreaks detected within the influenza surveillance region†

Localized: sporadically occurring ILI **AND** 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 **AND** 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.