



October 8, 2006 to October 14, 2006 (Week 41)

Sporadic influenza activity reported in a few regions of the country

During week 41, sporadic activity was reported in Alberta (northern region) and Ontario (Toronto and central east regions), while the rest of the country reported no activity (see map). In week 41, 2 (0.2%) of the 1,159 specimens tested for influenza virus were positive, both for influenza A (see table). Nine (90%) of the 10 influenza detections so far this season were influenza A viruses. The ILI consultation rate remained low with a rate of 13 per 1,000 patient visits in week 41 (see ILI graph) with a sentinel response rate of 57%. ILI consultation rates were highest among children in regions reporting ILI activity in week 41. There have been no influenza outbreaks reported so far this season.

Antigenic Characterization:

The National Microbiology Laboratory (NML) has reported one influenza strain characterizations for the 2006-2007 influenza season. The strain identified was an A/Wisconsin/67/2005(H3N2)-like virus from Ontario. In addition, the isolate was found to be resistant to amantadine. 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, which are the strains included in the 2006-2007 Canadian influenza vaccine.

Influenza-associated Pediatric Hospitalizations :

During week 41, no new laboratory-confirmed influenza-associated pediatric hospitalizations were reported through the Immunization Monitoring Program Active (IMPACT) network. One case has been reported to IMPACT since the start of this influenza season.

International:

CDC: During week 40, low levels of influenza activity were reported in the United States. Three (0.4%) of the specimens tested were positive for influenza. The proportion of patient visits for ILI and the proportion of deaths due to pneumonia and influenza remained below baseline levels. Influenza strains characterized from May 21 to September 30 included: A/California/7/2004(H3N2)-like, A/Wisconsin/67/2005(H3N2)-like, A/New Caledonia/20/99(H1N1)-like, and B/Ohio/01/2005-like viruses.

<<http://www.cdc.gov/flu/weekly/fluactivity.htm>>

EISS: In week 41, low levels of influenza activity were reported in Europe and consultations rates for ILI remained at baseline levels. Over 90% of the laboratory confirmed cases since week 35/2006 (N=14) have been influenza A, but it is too early to say which virus type or sub-type will become dominant in Europe this season. <http://www.eiss.org/cgi-files/bulletin_v2.cgi>

Human Avian Influenza: Since 13 October 2006, the WHO reported 3 new cases of human infection with the H5N1 avian influenza virus in Indonesia. All three cases were fatal.

<http://www.who.int/csr/disease/avian_influenza/updates/en/index.html>



Antiviral Resistance

In January 2006, the Public Health Agency of Canada recommended that health care providers in Canada not prescribe amantadine to treat and prevent influenza during the 2005-2006 influenza season following testing showing viruses in circulation at the time in Canada and the US were resistant to the drug [www.phac-aspc.gc.ca/media/advisories_avis/2006/statment060115.html].

**Total number of influenza tests performed and number of positive tests
by province/territory of testing laboratory, Canada, 2006-2007**

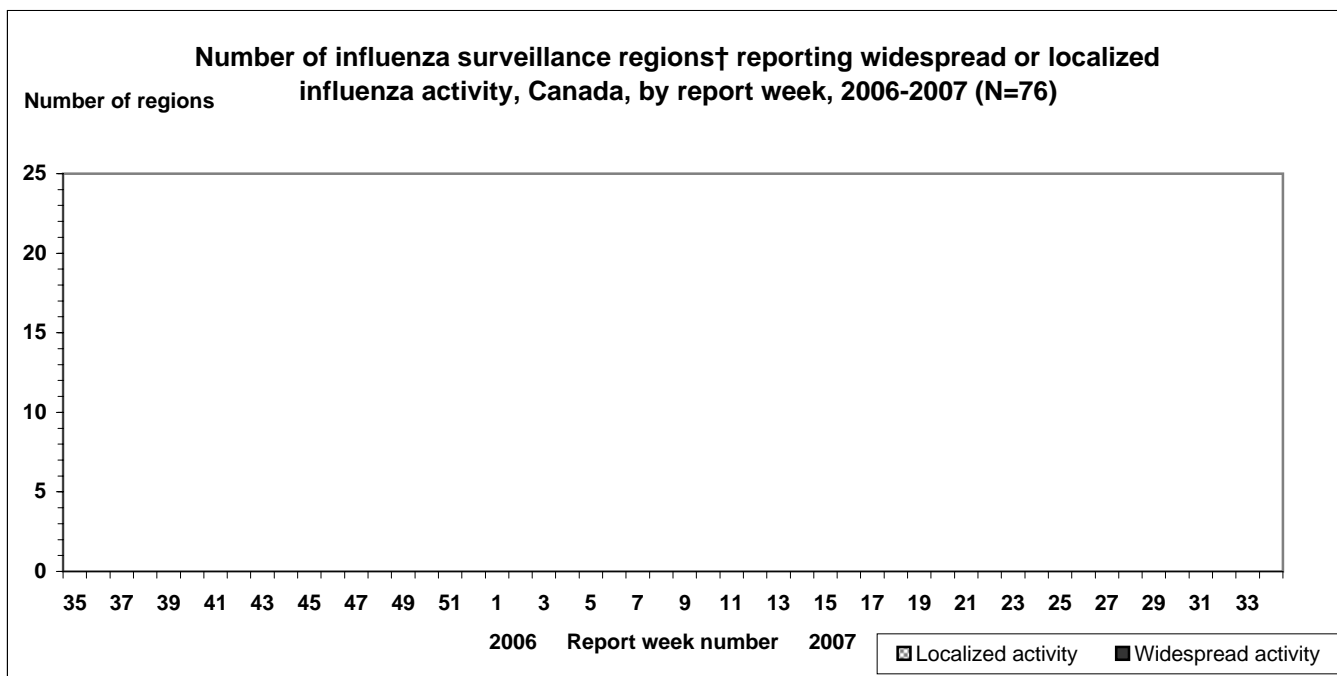
Province of reporting laboratories	Report Period: October 8, 2006 to October 14, 2006				Season to Date: August 27, 2006 to October 14, 2006			
	Total # of influenza tests	# of positive tests			Total # of influenza tests	# of positive tests		
		Influenza A	Influenza B	Total		Influenza A	Influenza B	Total
NL	2	0	0	0	16	0	0	0
PE	0	0	0	0	0	0	0	0
NS	18	0	0	0	60	0	0	0
NB	12	0	0	0	99	0	0	0
QC	242	0	0	0	1140	0	0	0
ON	376	0	0	0	1948	2	0	2
MB	22	0	0	0	197	0	0	0
SK	100	0	0	0	560	0	0	0
AB	331	2	0	2	2177	5	1	6
BC	56	0	0	0	308	2	0	2
Canada	1159	2	0	2	6505	9	1	10

Specimens from NT, YT, and NU are sent to reference laboratories in other provinces.

Note: Cumulative data includes updates to previous weeks; due to reporting delays, the sum of weekly report totals do not add up to cumulative totals.

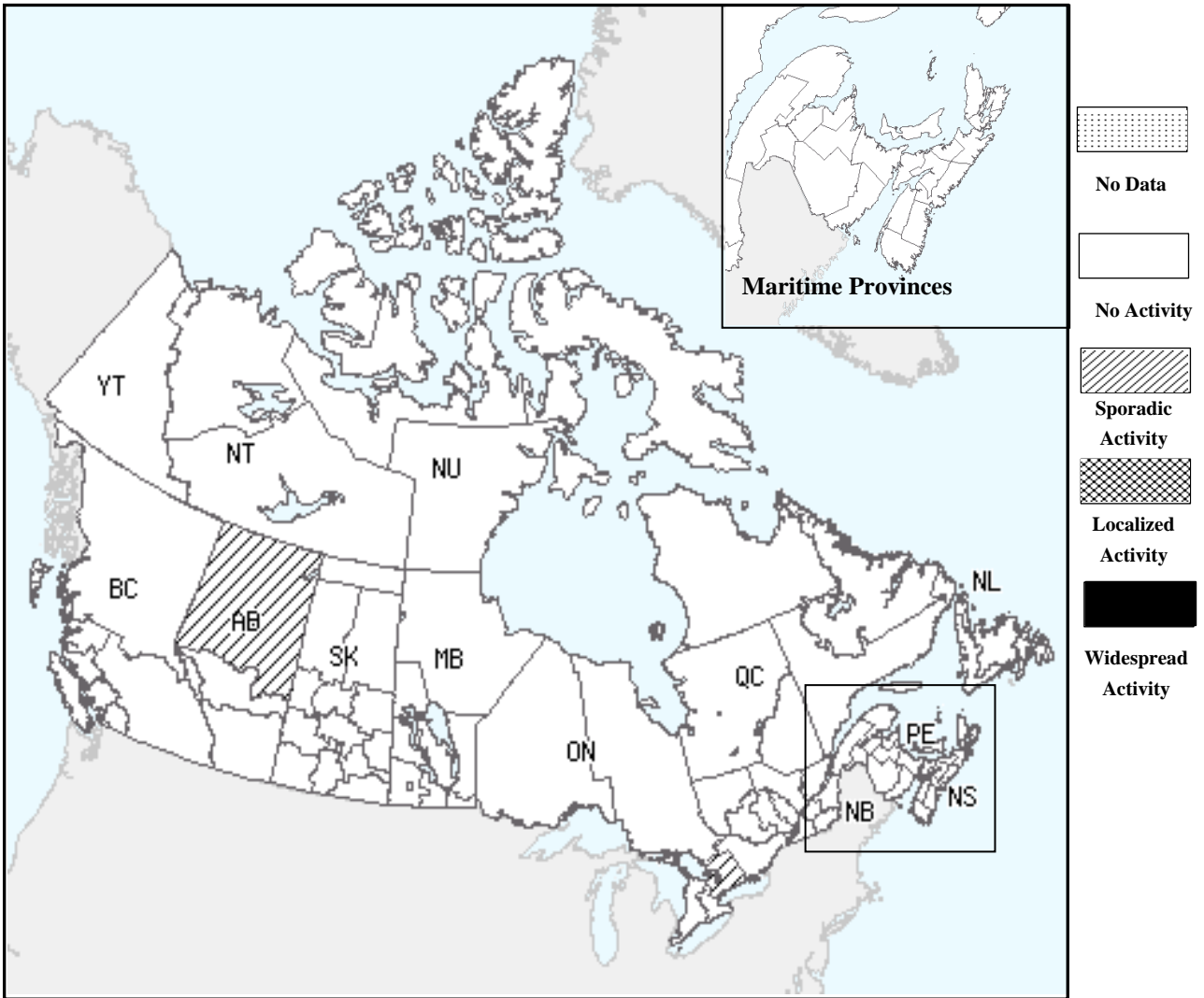
Abbreviations: Newfoundland/Labrador (NL), Prince Edward Island (PE), New Brunswick (NB), Nova Scotia (NS), Quebec (QC), Ontario (ON), Manitoba (MB), Saskatchewan (SK), Alberta (AB), British Columbia (BC), Yukon (YT), Northwest Territories (NT), Nunavut (NU)

Respiratory virus laboratory detections in Canada, by geographic regions, are available weekly on the following website:
<<http://www.phac-aspc.gc.ca/bid-bmi/dsd-dsm/rvdi-divr/index.html>>

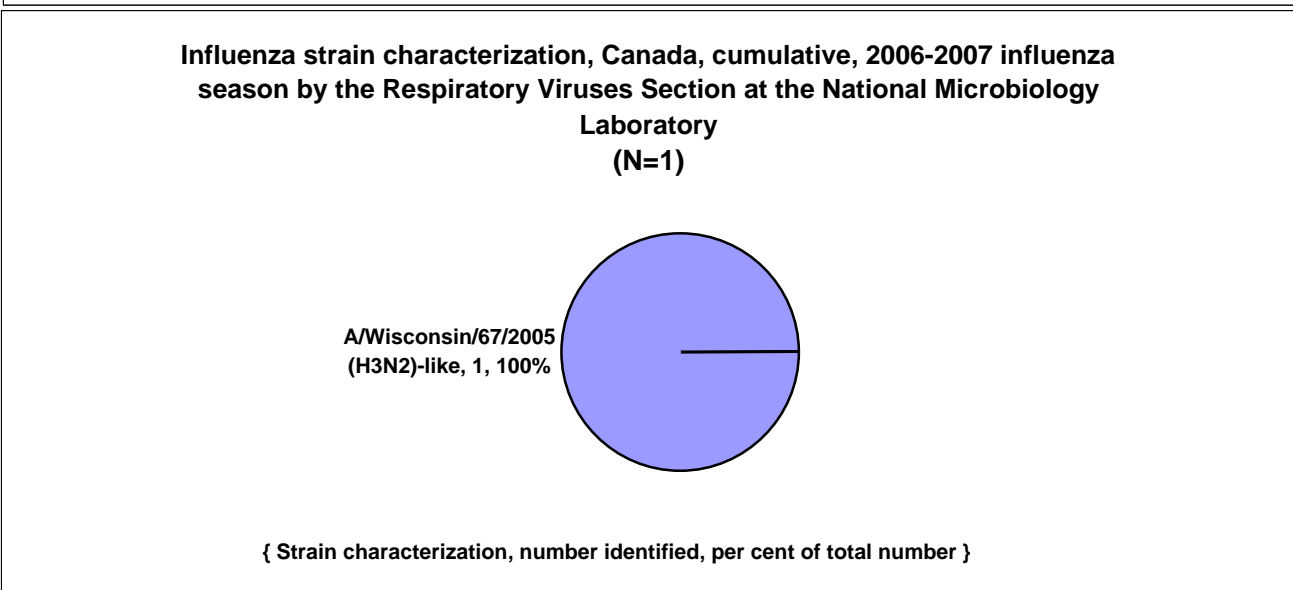
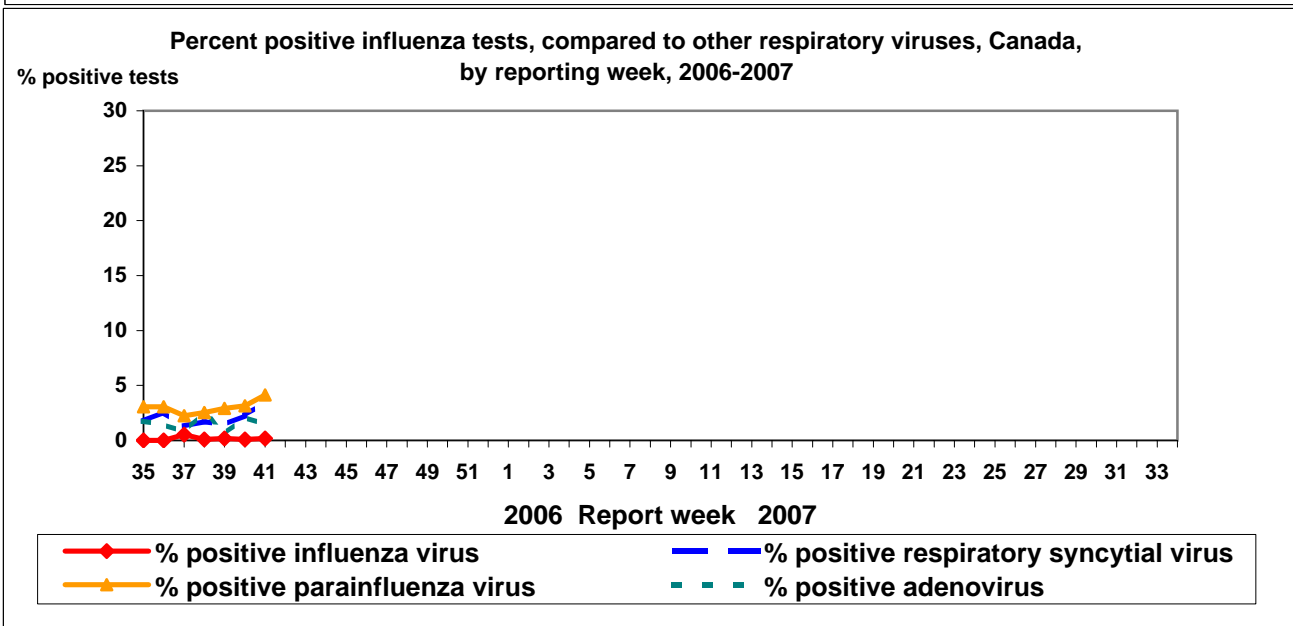
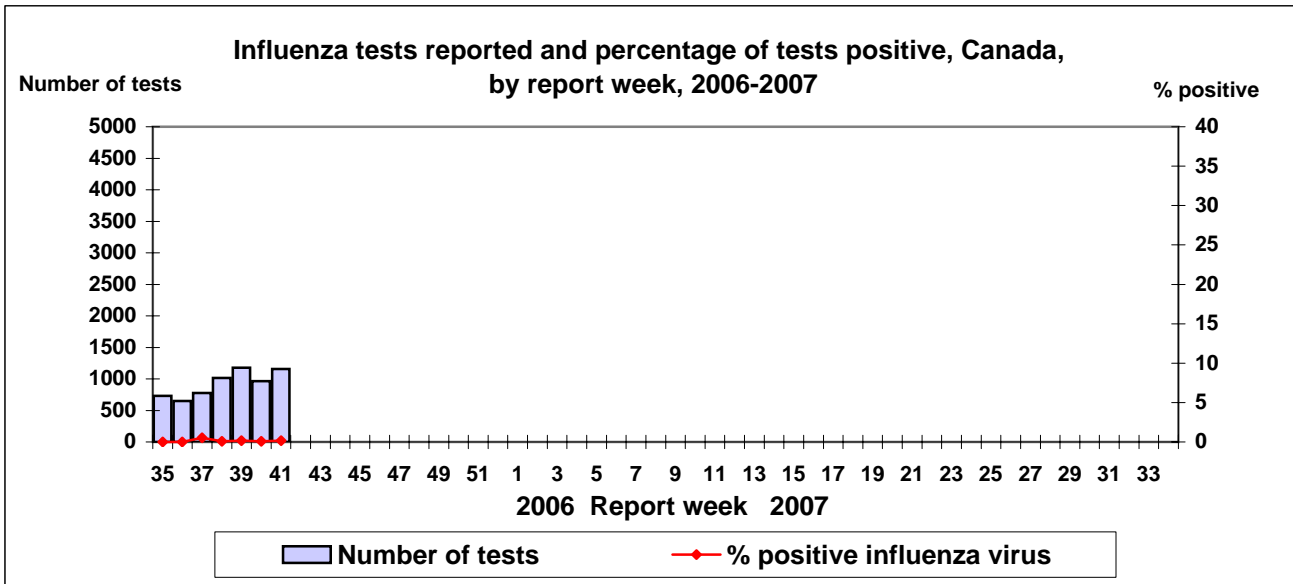


† sub-regions within the province or territory as defined by the provincial/territorial epidemiologist. Graph may change as late returns come in.

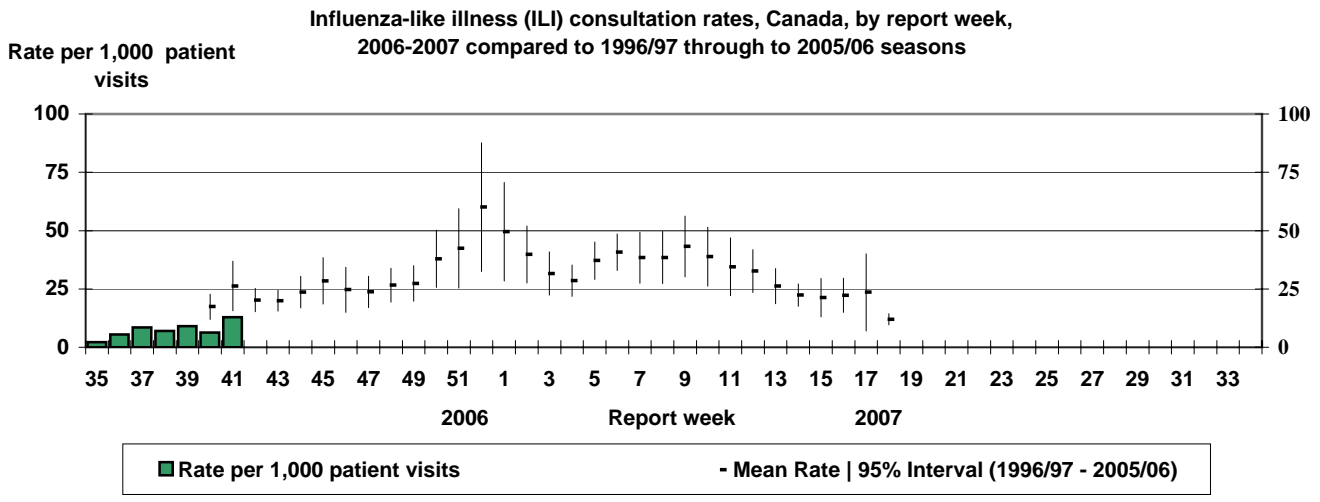
**Influenza Activity Level by Provincial and Territorial Influenza Surveillance Regions,
Canada; October 8, 2006 to October 14, 2006 (Week 41)**



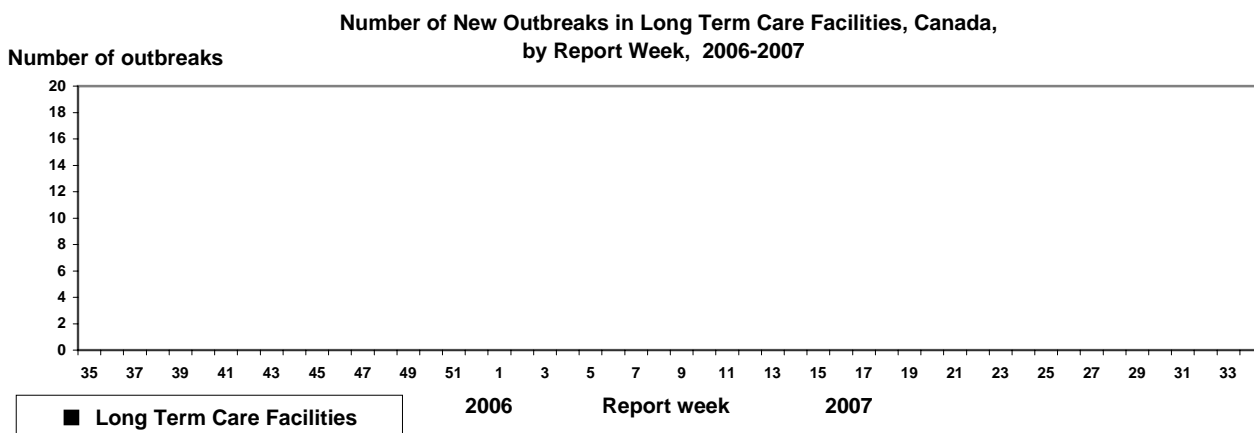
Note: Influenza activity levels, as represented on this map, are assigned and reported by Provincial and Territorial Ministries of Health, **based on laboratory confirmations, sentinel ILI rates (see graphs and tables) and outbreaks**. Please refer to detailed definitions on the last page. For areas where no data is reported, late reports from these provinces and territories will appear on the FluWatch website. Select single maps by report week to get this updated information. <<http://dsol-smed.hc-sc.gc.ca/dsol-smed/fluwatch/fluwatch.phtml?lang=e>>



NACI recommends that the trivalent vaccine for the 2006-2007 season in Canada contain A/New Caledonia/20/1999 (H1N1)-like, A/Wisconsin/67/2005 (H3N2)-like, and B/Malaysia/2506/2004-like virus antigens.



Note: No data available for mean rate in previous years for weeks 19 to 39 (1996-1997 through 2002-2003 seasons).



FluWatch reports include data and information from five main sources: laboratory reports of positive influenza tests in Canada; sentinel physician reporting of influenza-like illness (ILI); provincial/territorial assessment of influenza activity based on various indicators, including laboratory surveillance, ILI reporting, school and work site absenteeism, and outbreaks; influenza-associated pediatric hospitalizations; WHO and other international reports of influenza activity. The map shows influenza activity in the "influenza surveillance regions" † within each jurisdiction, as determined by the provincial/territorial epidemiologists.

ILI definitions for the 2006-2007 season

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.

Definitions of ILI/Influenza outbreaks for the 2006-2007 season

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.**

Institutional outbreaks should be reported within 24 hours of identification.

Influenza Activity levels are defined as:

1 = No activity: i.e. no laboratory-confirmed influenza detections during the past four weeks, however, sporadically occurring ILI may be reported

2 = Sporadic: sporadically occurring **ILI and lab confirmed influenza* with NO outbreaks** detected within the influenza surveillance region†

3 = Localized: sporadically occurring **ILI and lab 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)†

4 = Widespread: sporadically occurring **ILI and lab 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

We would like to thank all the Fluwatch surveillance partners who are participating in this year's influenza surveillance program.

This report is available on the Public Health Agency website at the following address: <http://www.phac-aspc.gc.ca/fluwatch/index.html>

Ce rapport est disponible dans les deux langues officielles. Pour en recevoir un exemplaire dans l'autre langue chaque semaine, veuillez communiquer avec Estelle Arseneault, Division de l'immunisation et des infections respiratoires au (613) 952-8484