



October 22, 2006 to October 28, 2006 (Week 43)

Sporadic influenza activity continues in a few regions of the country

During week 43, sporadic influenza activity was reported in regions of Alberta (northern region) and Ontario (Toronto), while the rest of the country reported no activity (see map). In week 43, 4 (0.3%) of the 1,294 specimens tested for influenza virus were positive (see table). Fourteen (74%) of the 19 influenza detections so far this season were influenza A viruses. The ILI consultation rate remained low with a rate of 7 per 1,000 patient visits in week 43 (see ILI graph) with a sentinel response rate of 63%. There have been no influenza outbreaks reported so far this season.

Antigenic Characterization:

The National Microbiology Laboratory (NML) has characterized five influenza viruses for the 2006-2007 influenza season, one A/Wisconsin/67/2005(H3N2)-like virus (from Ontario) and four A/New Caledonia/20/99(H1N1)-like viruses (from Alberta). Both strains are included in the composition of the 2006-2007 Canadian influenza vaccine.

Antiviral Resistance

The NML has tested four influenza A isolates for amantadine resistance this season and found that the one influenza A(H3N2) isolate tested was resistant to amantadine. The other three isolates were influenza A/H1N1 which remain sensitive to amantadine. (see recommendation below)

Influenza-associated Paediatric Hospitalizations :

During week 43, no new laboratory-confirmed influenza-associated paediatric 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 42, low levels of influenza activity were reported in the United States, with 0.3% of the specimens tested were found to be positive for influenza. To date this season, 92% of the influenza A viruses have been sub-typed: 82% were influenza A(H1) and 18% were influenza A(H3) viruses. The proportion of patient visits for ILI and the proportion of deaths due to pneumonia and influenza remained below baseline levels. Since the start of the season, the CDC has antigenically characterized 1 influenza virus: 1 A/New Caledonia/20/99(H1N1)-like virus. <<http://www.cdc.gov/flu/weekly/fluactivity.htm>>

WHO: During weeks 35-40, overall influenza activity remained low in both hemispheres, with sporadic activity being reported in some countries. <<http://www.who.int/csr/disease/influenza/update/en/print.html>>

EISS: In week 43, low levels of influenza activity continued to be reported in Europe with only sporadic cases of influenza being reported. Consultation rates for ILI remained at baseline levels. <http://www.eiss.org/cgi-files/bulletin_v2.cgi>

Human Avian Influenza: Since 28 October, 2006, the WHO reported 1 additional case of human infection with the H5N1 avian influenza virus in Egypt, of which was fatal. <http://www.who.int/csr/disease/avian_influenza/updates/en/index.html>

On 2 November, 2006, the WHO released a report entitled "Influenza research at the human and animal interface - Report of a WHO working group". For further information: <http://www.who.int/csr/resources/publications/influenza/WHO_CDS_EPR_GIP_2006_3/en/index.html>



Recommendation for the Use of Amantadine for Treatment and Prevention of Influenza

The Public Health Agency of Canada does not recommend the use of amantadine for treatment or prevention of influenza for the 2006-2007 season. This recommendation will be revisited if new information becomes available. For further information: <http://www.phac-aspc.gc.ca/media/nr-rp/2006/20061101-amantadine_e.htm>

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

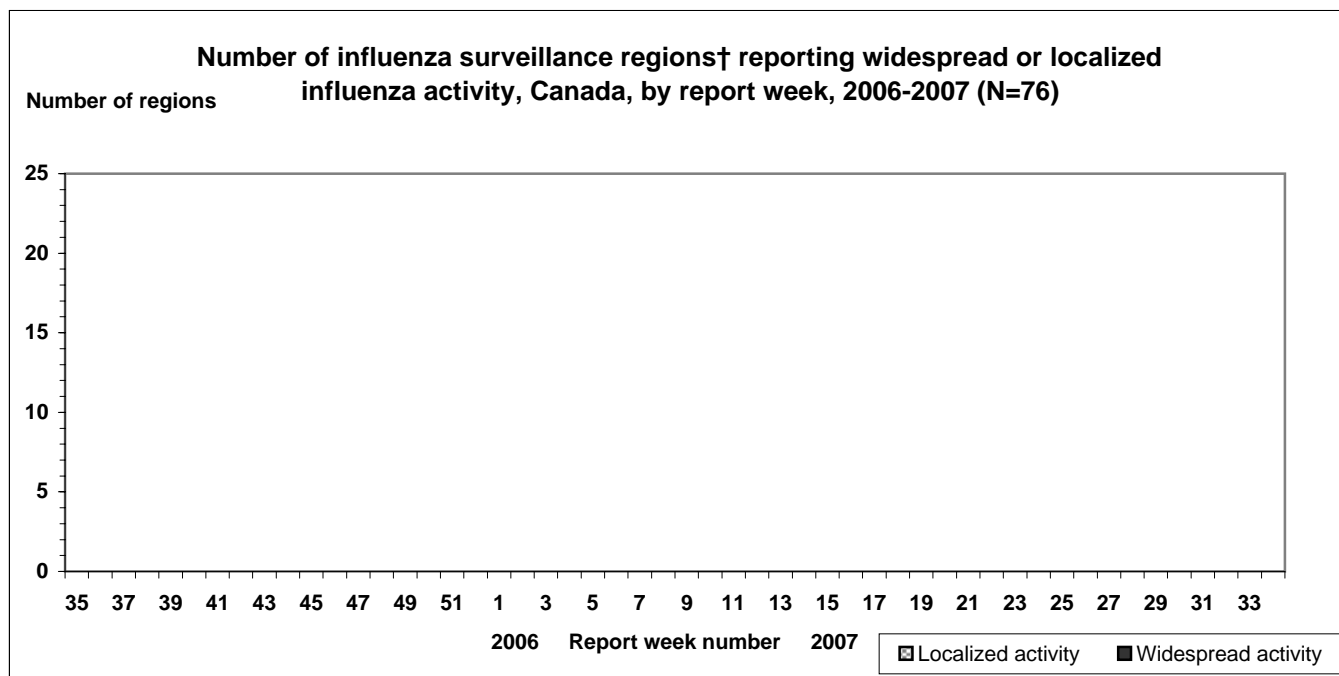
Province of reporting laboratories	Report Period: October 22, 2006 to October 28, 2006				Season to Date: August 27, 2006 to October 28, 2006			
	Total # of influenza tests	# of positive tests			Total # of influenza tests	# of positive tests		
		Influenza A	Influenza B	Total		Influenza A	Influenza B	Total
NL	8	0	0	0	28	0	0	0
PE	1	0	0	0	3	0	0	0
NS	19	0	0	0	120	0	0	0
NB	0	0	0	0	113	0	0	0
QC	197	0	0	0	1575	0	0	0
ON	417	0	0	0	2875	2	0	2
MB	56	0	0	0	295	0	0	0
SK	144	1	0	1	854	1	0	1
AB	389	3	0	3	2929	9	1	10
BC	63	0	0	0	421	2	0	2
Canada	1294	4	0	4	9213	14	1	15

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.

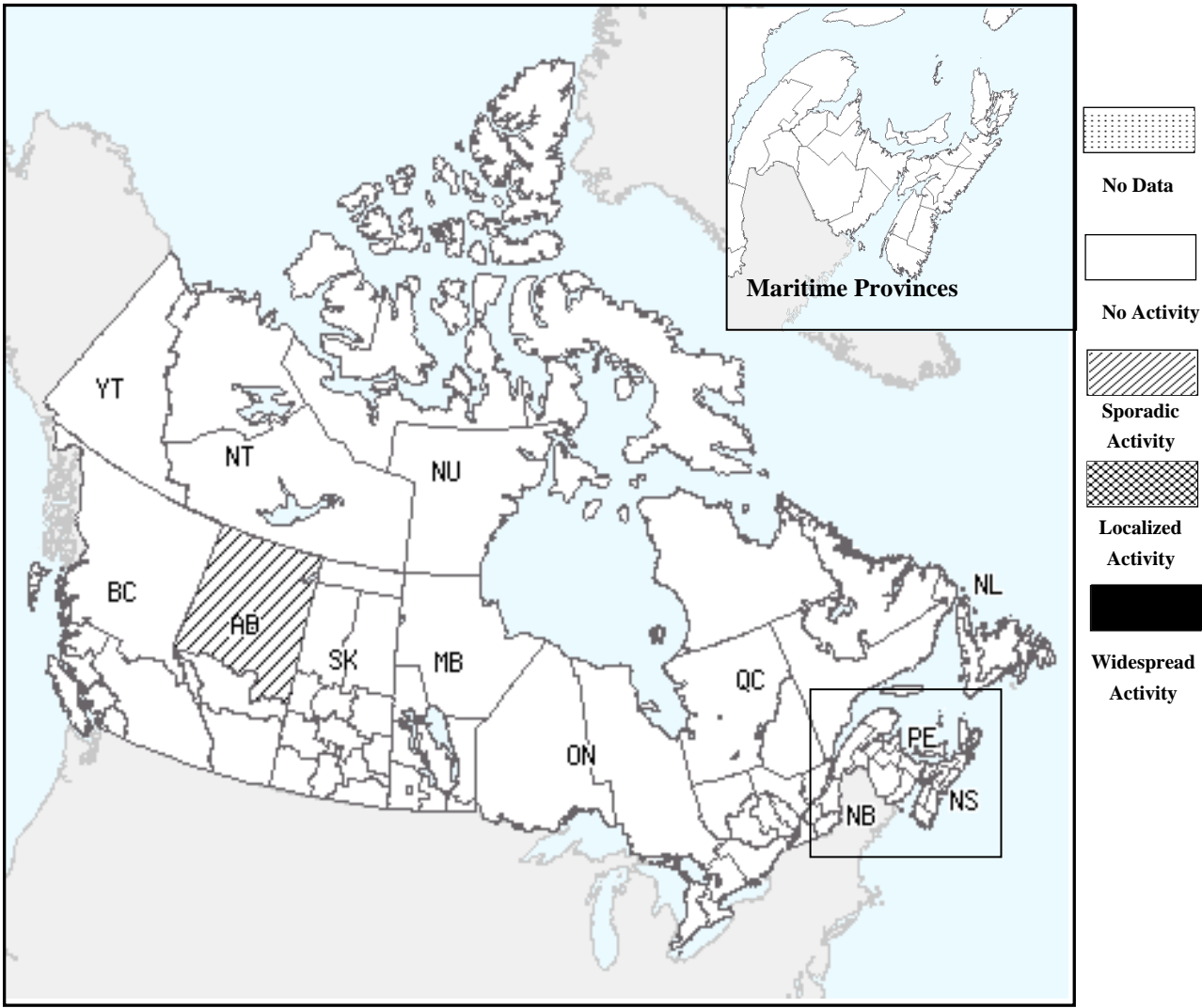
Abbreviations: Newfoundland/Labrador (NL), Prince Edward Island (PE), New Brunswick (NB), Nova Scotia (NS), Quebec (QC), Ontario (ON), Manitoba (MB), Saskatchewan (SK), Alberta (AB), British Columbia (BC), Yukon (YT), Northwest Territories (NT), Nunavut (NU)

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>>

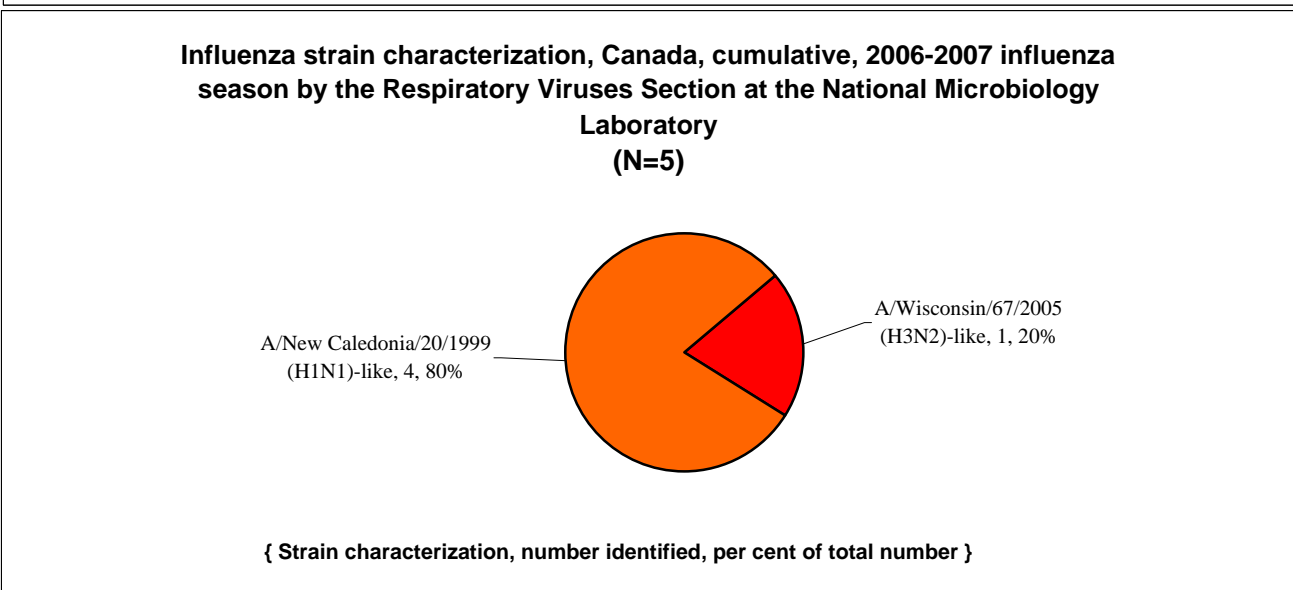
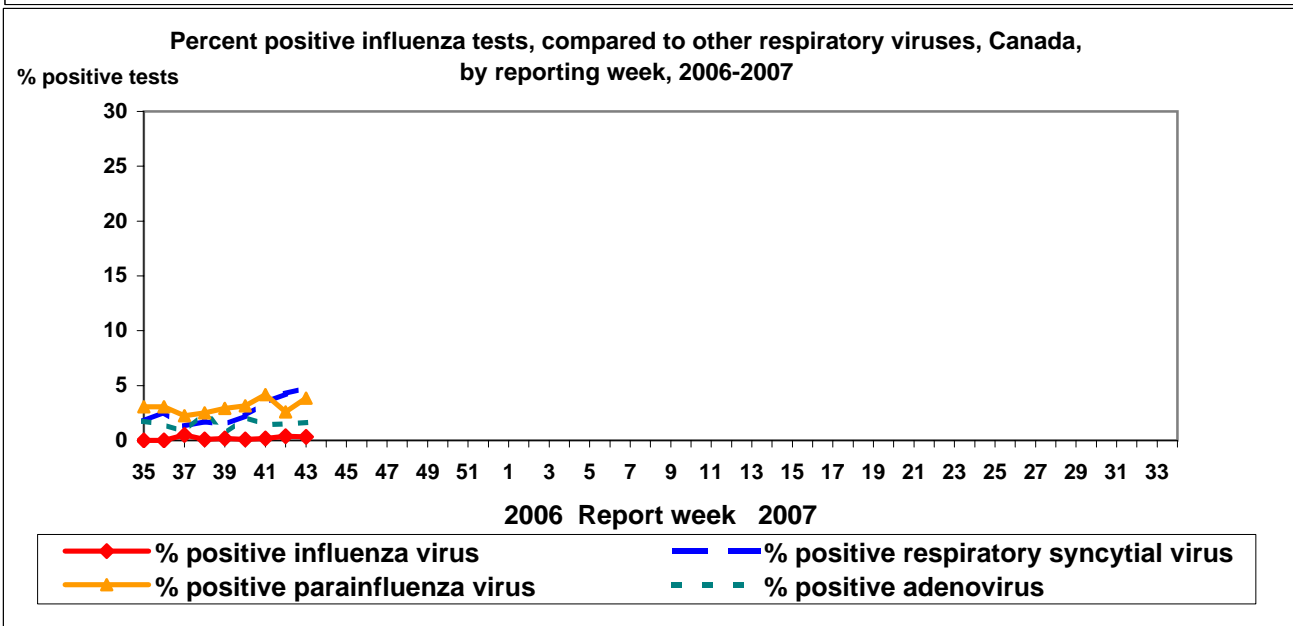
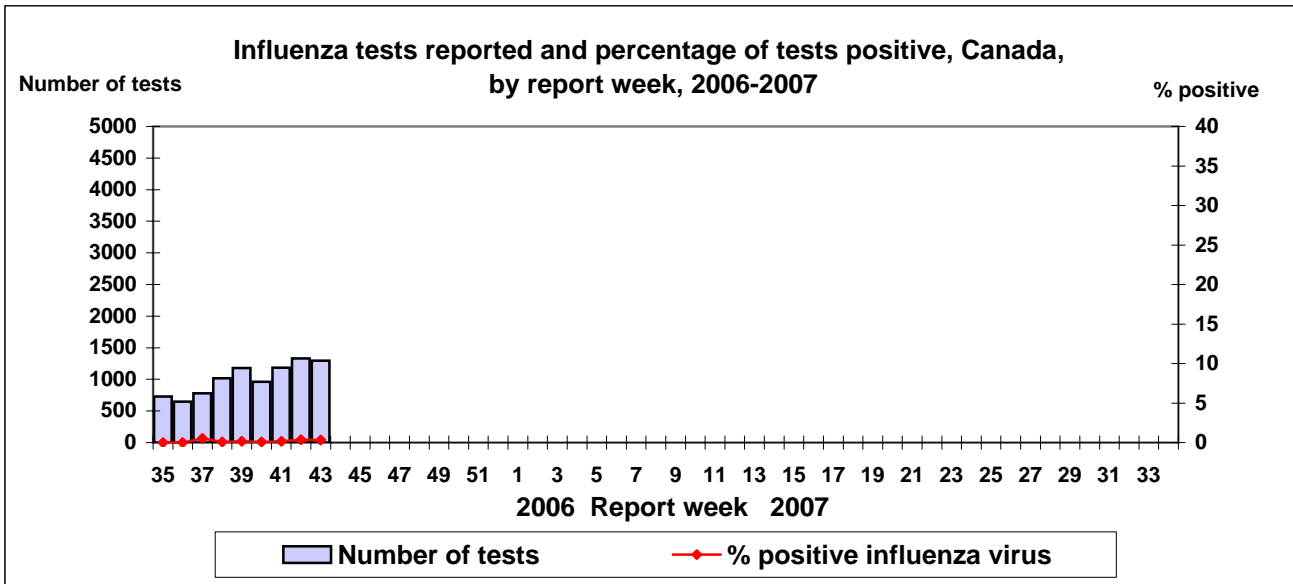


† sub-regions within the province or territory as defined by the provincial/territorial epidemiologist. Graph may change as late returns come in.

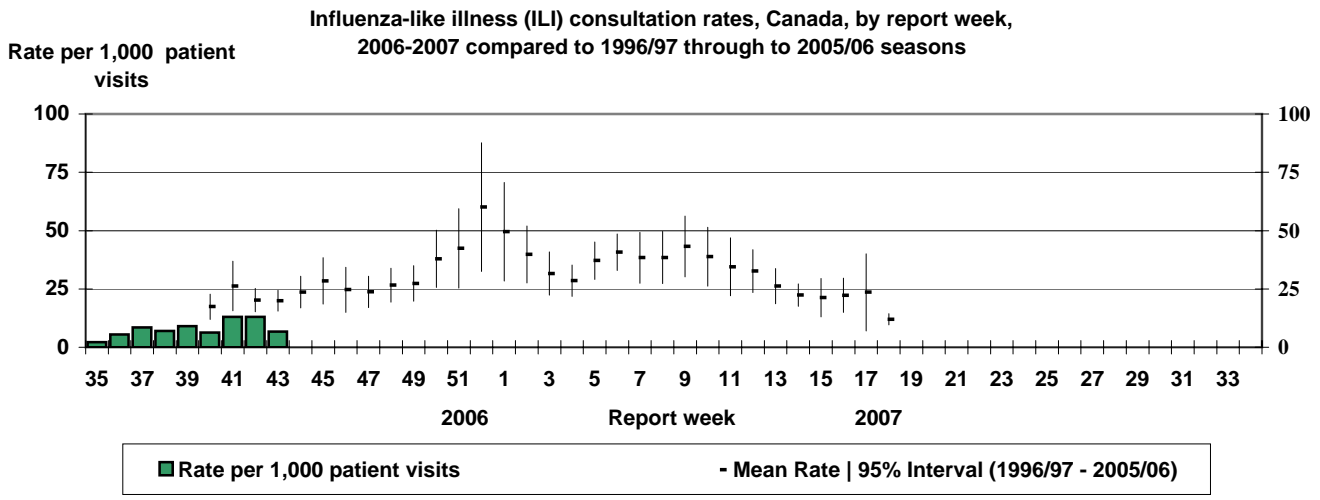
**Influenza Activity Level by Provincial and Territorial Influenza Surveillance Regions,
Canada; October 22, 2006 to October 28, 2006 (Week 43)**



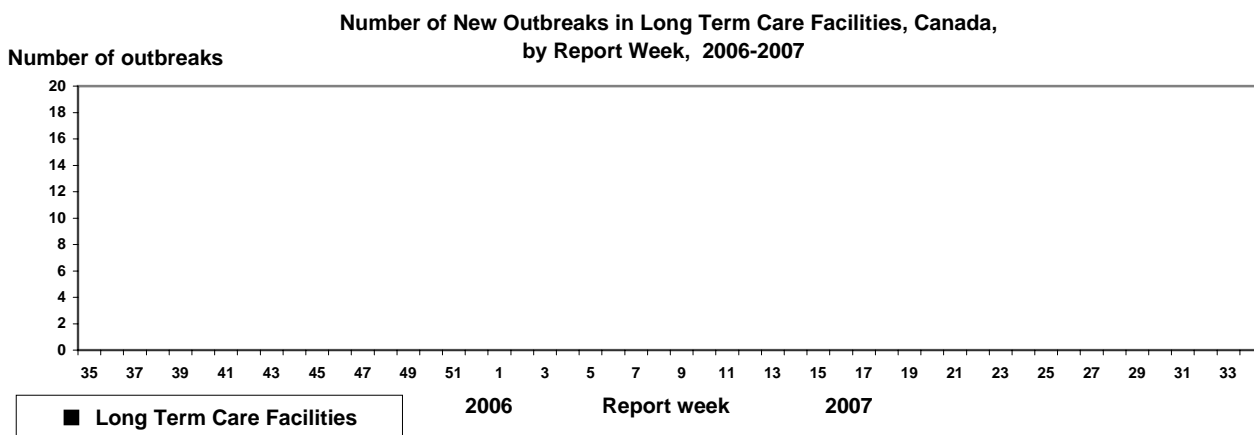
Note: Influenza activity levels, as represented on this map, are assigned and reported by Provincial and Territorial Ministries of Health, **based on laboratory confirmations, sentinel ILI rates (see graphs and tables) and outbreaks**. Please refer to detailed definitions on the last page. For areas 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