



November 12, 2006 to November 18, 2006 (Week 46)

Low levels of influenza activity in Canada overall

During week 46, localized influenza activity was reported in the Central Alberta and Central West region of Ontario. Sporadic influenza activity was reported in regions of British Columbia, Alberta, Saskatchewan and Ontario while the rest of the country reported no activity (see map). In week 46, 12 (0.8%) of the 1,519 specimens tested for influenza virus were positive (see table). The majority (96%) of influenza detections so far this season were influenza A viruses. The ILI consultation rate rose to a rate of 21 per 1,000 patient visits in week 46, which is within the expected range for this week (see ILI graph). The sentinel response rate was 55%. During week 46, 1 new influenza outbreak was reported in a school in Alberta.

Antigenic Characterization:

The National Microbiology Laboratory (NML) has characterized 10 influenza viruses for the 2006-2007 influenza season: 2 A/Wisconsin/67/2005(H3N2)-like viruses (from Ontario and Alberta) and 8 A/New Caledonia/20/99(H1N1)-like viruses (all from Alberta) (see pie chart). Both strains are included in the composition of the 2006-2007 Canadian influenza vaccine.

Antiviral Resistance

The NML has tested 9 influenza A isolates for amantadine resistance this season and found that 2 influenza A/H3N2 isolates tested were resistant to amantadine. The other 7 isolates were influenza A/H1N1 which remain sensitive to amantadine. (see recommendation below)

Influenza-associated Paediatric Hospitalizations :

During week 46, 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 45, a low level of influenza activity was reported in the United States and the proportion of patient visits to sentinel providers for ILI and the proportion of deaths attributed to pneumonia and influenza were below baseline levels. Of the 1,764 specimens tested for influenza virus in week 45, 82 (4.6%) were positive. Since 1 October 2006, CDC has antigenically characterized 17 influenza viruses: 1 influenza A/New Caledonia/20/1999(H1N1)-like and 16 influenza B viruses (5 belonging to the B/Victoria lineage and 11 belonging to the B/Yamagata lineage). It is too early in the influenza season to determine which viruses will predominate or how well the vaccine and circulating strains will match.

EISS: In week 46, clinical influenza activity was at baseline levels in Europe which is typical for this time of the year. Since the beginning of October, a total of 45 influenza A and 3 influenza B cases were reported. So far this season, 5 influenza viruses have been antigenically and/or genetically characterized: 1 was A/New Caledonia/20/1999(H1N1)-like; 3 were A/Wisconsin/67/2005(H3N2)-like; and 1 A/California/7/2004(H3N2)-like. <http://www.eiss.org/cgi-files/bulletin_v2.cgi>



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**

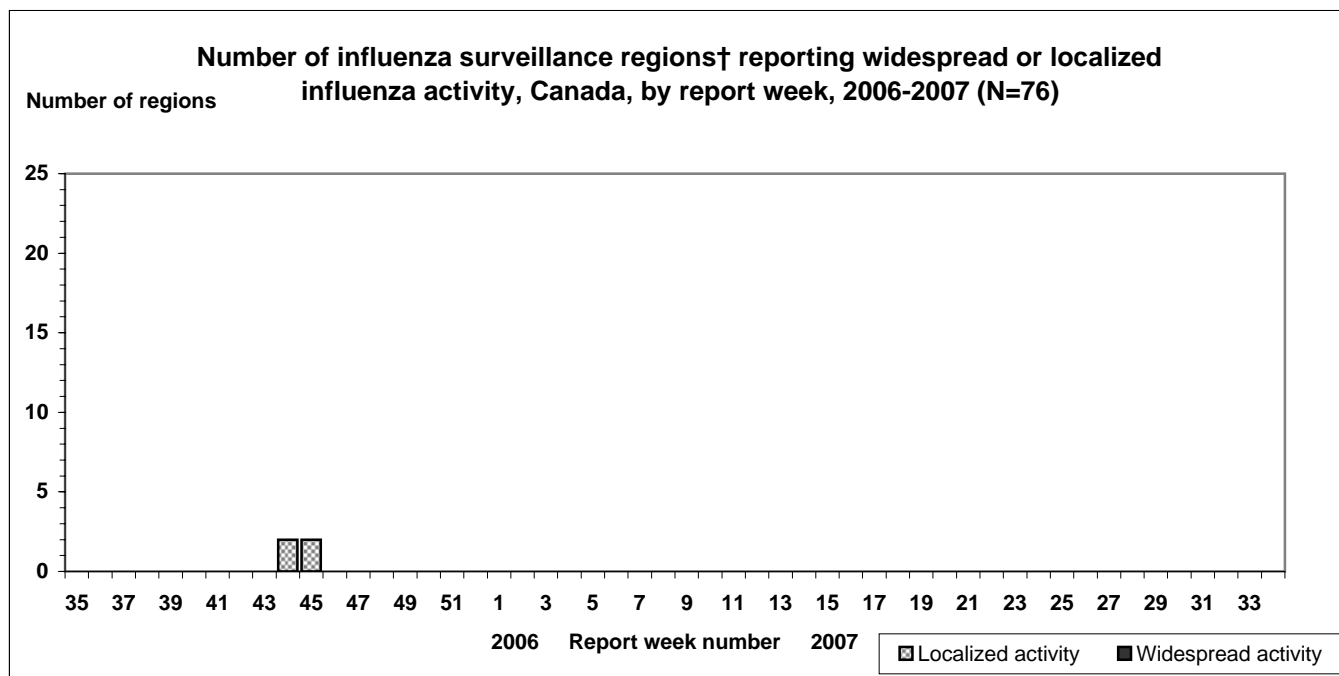
Province of reporting laboratories	Report Period: November 12, 2006 to November 18, 2006				Season to Date: August 27, 2006 to November 18, 2006			
	Total # of influenza tests	# of positive tests			Total # of influenza tests	# of positive tests		
		Influenza A	Influenza B	Total		Influenza A	Influenza B	Total
NL	10	0	0	0	48	0	0	0
PE	0	0	0	0	5	0	0	0
NS	17	0	0	0	185	0	0	0
NB	26	0	0	0	168	0	0	0
QC	368	1	0	1	2519	1	0	1
ON	467	1	1	2	4498	4	1	5
MB	46	0	0	0	411	0	0	0
SK	114	0	0	0	1190	1	0	1
AB	395	9	0	9	4181	35	1	36
BC	76	0	0	0	662	3	0	3
Canada	1519	11	1	12	13867	44	2	46

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.

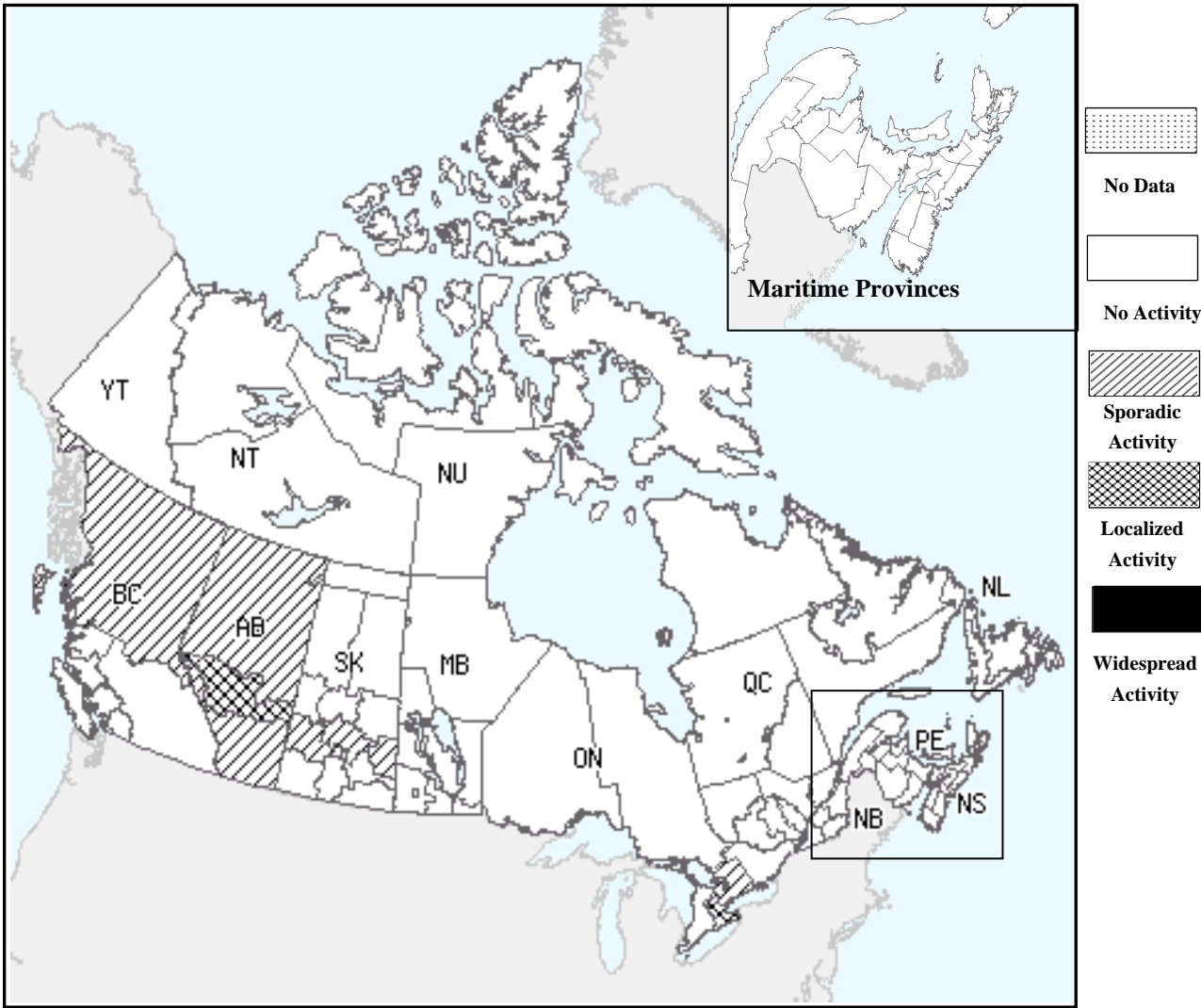
Abbreviations: Newfoundland/Labrador (NL), Prince Edward Island (PE), New Brunswick (NB), Nova Scotia (NS), Quebec (QC), Ontario (ON), Manitoba (MB), Saskatchewan (SK), Alberta (AB), British Columbia (BC), Yukon (YT), Northwest Territories (NT), Nunavut (NU)

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>>

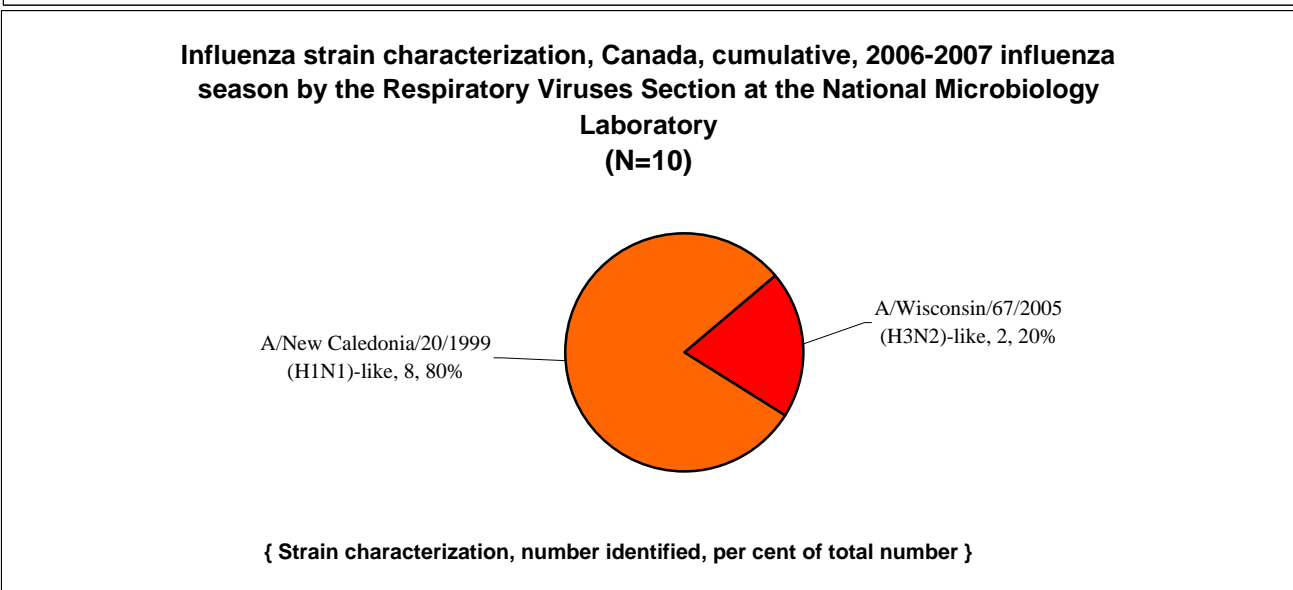
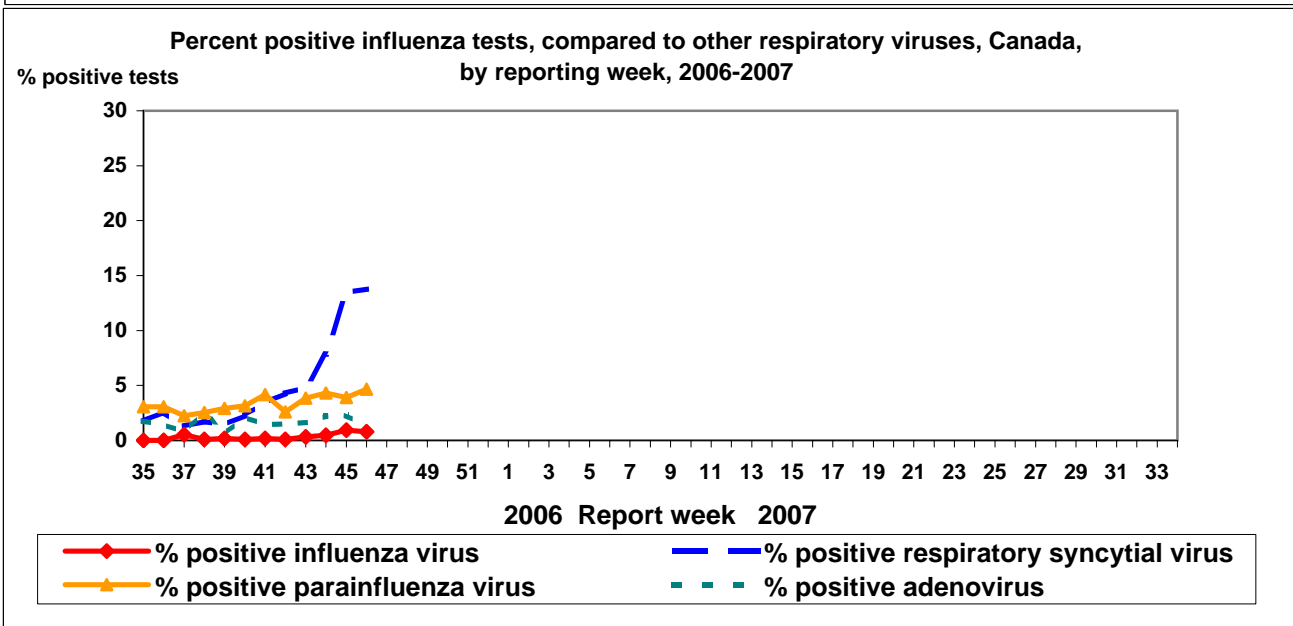
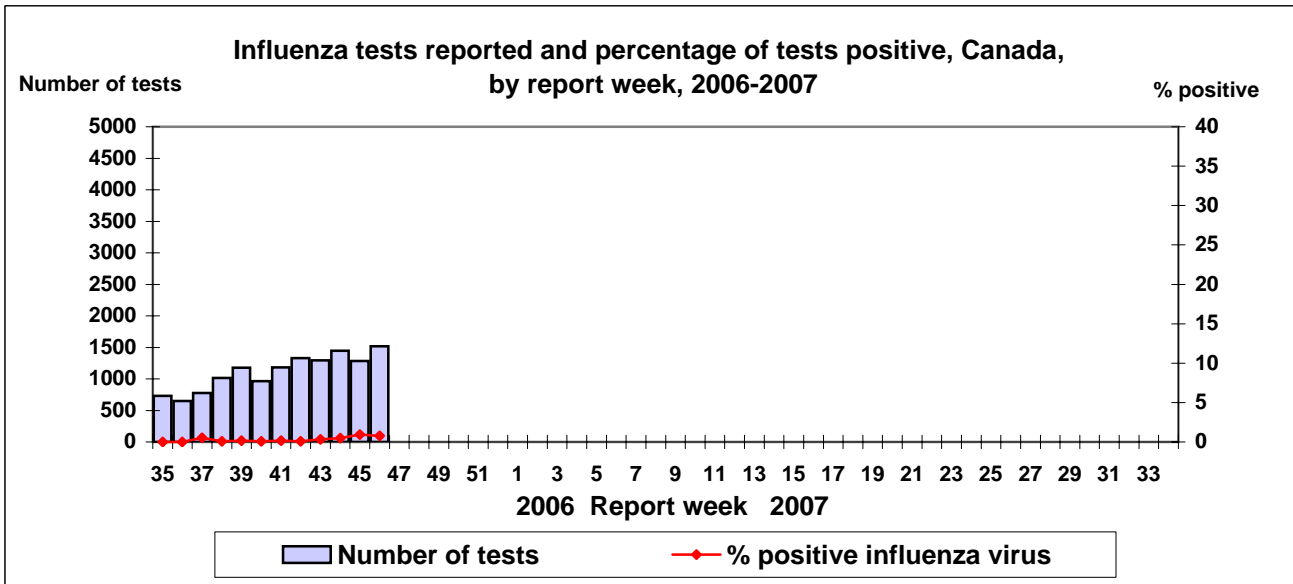


† sub-regions within the province or territory as defined by the provincial/territorial epidemiologist. Graph may change as late returns come in.

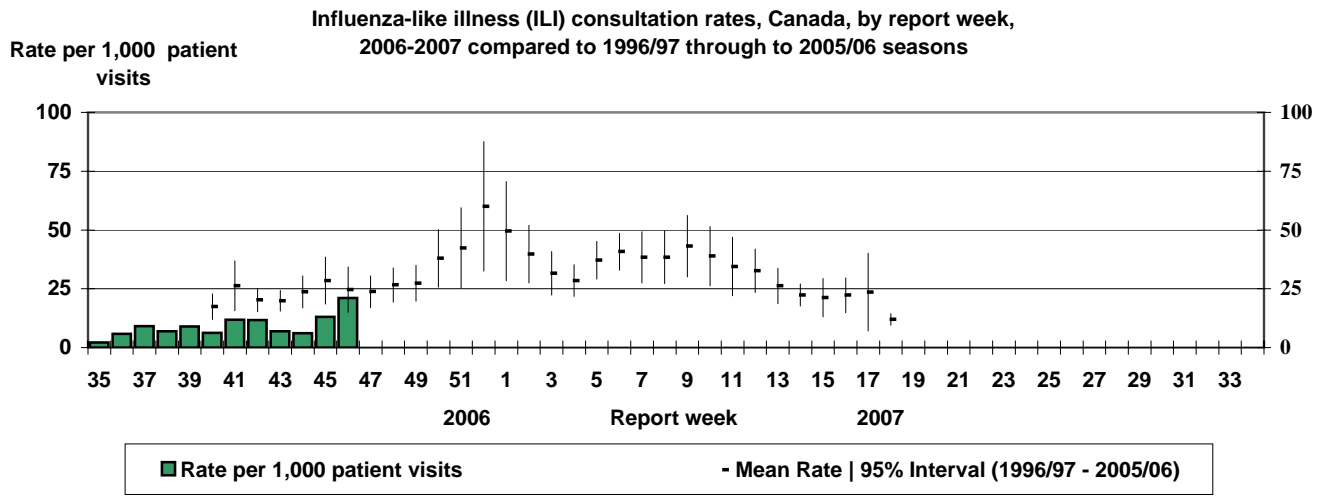
**Influenza Activity Level by Provincial and Territorial Influenza Surveillance Regions,
Canada; November 12, 2006 to November 18, 2006 (Week 46)**



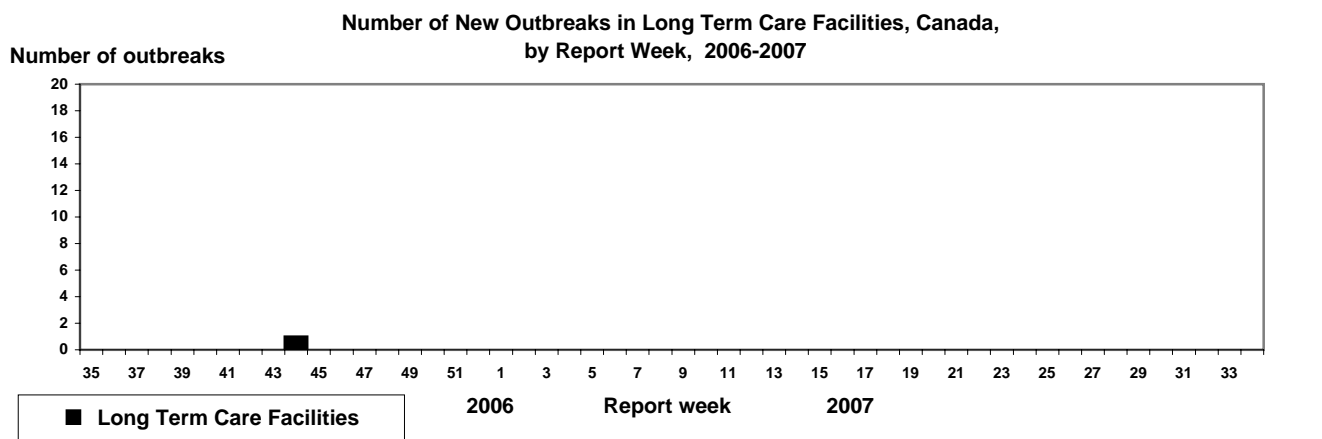
Note: Influenza activity levels, as represented on this map, are assigned and reported by Provincial and Territorial Ministries of Health, **based on laboratory confirmations, sentinel ILI rates (see graphs and tables) and outbreaks**. Please refer to detailed definitions on the last page. For areas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