# FluWatch |



Agence de santé publique du Canada

# November 26, 2006 to December 2, 2006 (Week 48)

# Increased influenza activity reported in the West and in Ontario

During week 48, localized influenza activity was reported in regions of Alberta and Ontario. Sporadic influenza activity was reported in a few regions (in the West, Ontario and Quebec), however, the majority of regions in the rest of the country reported no activity (see map). In week 48, 35 (1.8%) of the 1,956 specimens tested for influenza virus were positive and all were influenza A (see table). The majority (97%) of influenza detections to date this season were influenza A viruses. The ILI consultation rate rose from the previous week to a rate increased from 11 per 1,000 patient visit in week 47 to 30 per 1,000 patient visits in week 48, which is within the expected range for this week (see ILI graph). During weeks 47 and 48, the sentinel response rate was 73%. During week 48, 1 new outbreak of ILI was reported in a school in Alberta.

#### **Antigenic Characterization:**

The National Microbiology Laboratory (NML) has characterized 20 influenza viruses for the 2006-2007 influenza season: 7 A/Wisconsin/67/2005(H3N2)-like viruses (from Ontario) and 13 A/New Caledonia/20/99(H1N1)-like viruses (from Alberta and British Columbia) (see pie chart). Both strains are included in the composition of the 2006-2007 Canadian influenza vaccine.

#### **Antiviral Resistance**

Since the start of the season, the NML has tested 15 influenza A isolates (9 H1N1, 6 H3N2) for amantadine resistance of which 2 (13.3% - all H3N2) were resistant (see recommendation below). None of the 8 influenza A isolates (7 H1N1, 1 H3N2) tested were found to be resistant to oseltamivir.

### Influenza-associated Paediatric Hospitalizations:

One new laboratory-confirmed influenza-associated paediatric hospitalization from Ontario was reported through the Immunization Monitoring Program Active (IMPACT) network. The case was admitted in week 46 due to influenza B and is the third case that has been reported to IMPACT since the start of this influenza season.

#### International:

**CDC:** During week 47, a low level of influenza activity was reported in the United States. The proportion of patient visits to sentinel providers for influenza-like illness (ILI) and the proportion of deaths attributed to pneumonia and influenza were below baseline levels. Of the 1,823 specimens tested for influenza virus in week 47, 67 (3.7%) were positive. Since October 1, 2006 CDC has antigenically characterized 23 influenza viruses: 6 A/New Caledonia/20/99-like, 6 B/Victoria lineage, and 11 B/Yamagata lineage. It is too early in the influenza season to determine which influenza viruses will predominate or how well the vaccine and circulating strains will match. <a href="http://www.cdc.gov/flu/weekly/fluactivity.htm">http://www.cdc.gov/flu/weekly/fluactivity.htm</a>

**WHO:** During weeks 45–46, overall influenza activity worldwide remained low. < http://www.who.int/csr/disease/influenza/update/en/>

**EISS:** During week 48 clinical influenza activity remained at baseline levels in Europe. Of the 447 respiratory specimens collected by sentinel physicians 9 (2.0%) were positive for influenza virus and the consultation rates for ILI and/or ARI have been at baseline levels across the whole of Europe. The proportion of influenza A specimens among the total number of positive sentinel specimens remained high (90%). <a href="http://www.eiss.org/cgi-files/bulletin\_v2.cgi">http://www.eiss.org/cgi-files/bulletin\_v2.cgi</a>

## 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

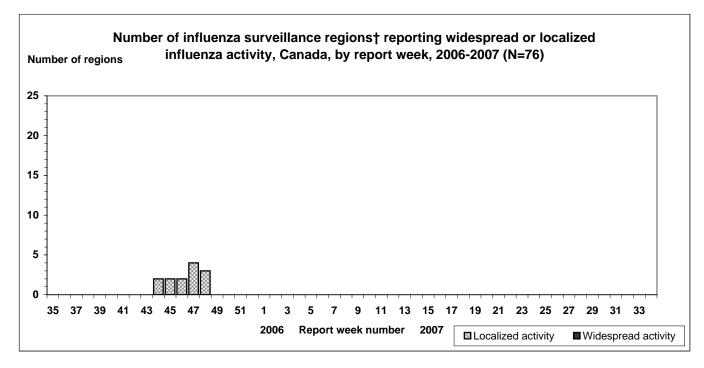
	Report Period: November 26, 2006 to December 2, 2006				Season to Date: August 27, 2006 to December 2, 2006			
Province of reporting	Total # of	# of positive tests			Total # of	# of p	positive tests	
	influenza				influenza			
laboratories	tests	Influenza A	Influenza B	Total	tests	Influenza A	Influenza B	Total
NL	11	0	0	0	71	0	0	0
PE	1	0	0	0	10	0	0	0
NS	22	0	0	0	213	0	0	0
NB	27	0	0	0	221	0	0	0
QC	422	2	0	2	3376	3	0	3
ON	633	6	0	6	5759	12	2	14
MB	49	0	0	0	511	0	0	0
SK	140	2	0	2	1488	3	0	3
AB	561	22	0	22	5269	81	1	82
BC	90	3	0	3	828	9	0	9
Canada	1956	35	0	35	17746	108	3	111

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

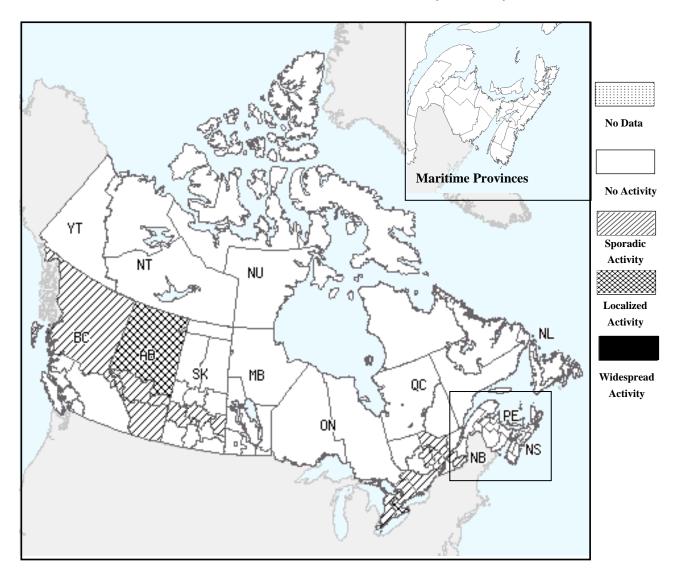
**Note:** Cumulative data includes updates to previous weeks; due to reporting delays, the sum of weekly report totals do not add up to cumulative totals.

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)

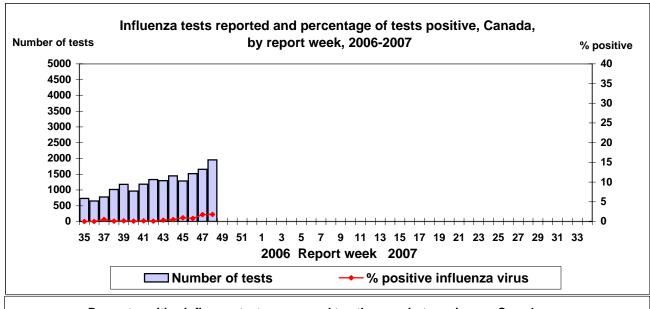
Respiratory virus laboratory detections in Canada, by geographic regions, are available weekly on the following website: <a href="http://www.phac-aspc.gc.ca/bid-bmi/dsd-dsm/rvdi-divr/index.html">http://www.phac-aspc.gc.ca/bid-bmi/dsd-dsm/rvdi-divr/index.html</a>

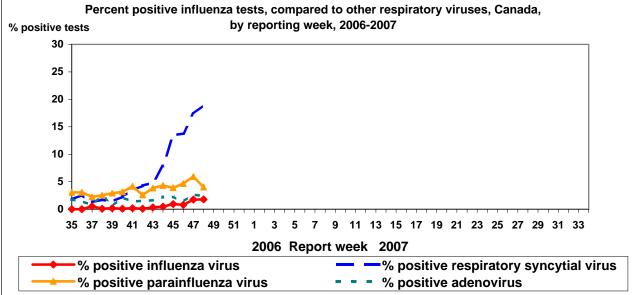


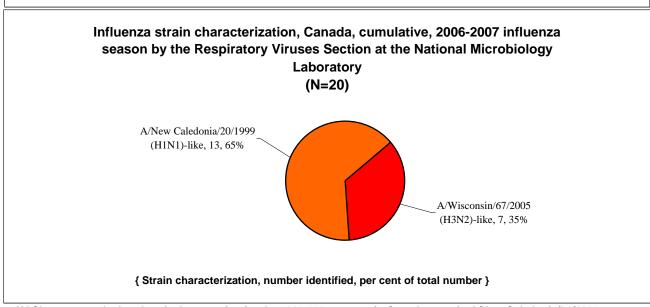
# Influenza Activity Level by Provincial and Territorial Influenza Surveillance Regions, Canada; November 26, 2006 to December 2, 2006 (Week 48)

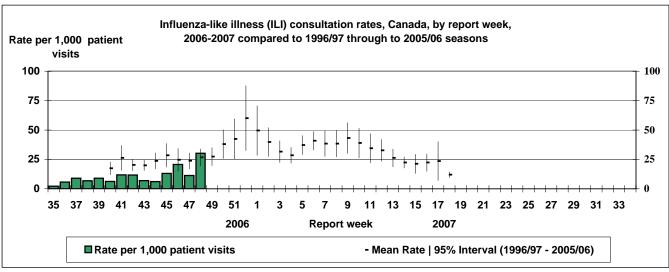


**Note:** Influenza activity levels, as represented on this map, are assigned and reported by Provincial and Territorial Ministries of Health, **based on laboratory confirmations**, **sentinel ILI rates (see graphs and tables) and outbreaks**. Please refer to detailed definitions on the last page. For 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. <a href="http://dsol-smed.hc-sc.gc.ca/dsol-smed/fluwatch/fluwatch.phtml?lang=e">http://dsol-smed.hc-sc.gc.ca/dsol-smed/fluwatch/fluwatch.phtml?lang=e</a> >

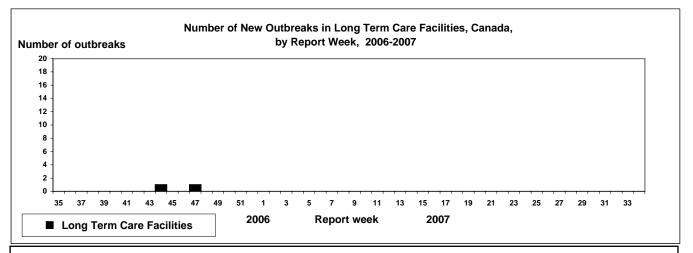








Note: No data available for mean rate in previous years for weeks 19 to 39 (1996-1997 through 2002-2003 seasons).



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