



September 24, 2006 to October 7, 2006 (Weeks 39 & 40)

Sporadic influenza activity reported in some regions of the country

During weeks 39 and 40, sporadic activity was reported in British Columbia, Alberta and Ontario, while the rest of the country reported no activity (see map). From weeks 39 to 40, 3 (0.1%) of the 2,143 specimens tested for influenza virus were positive for influenza virus (see table). The first influenza B virus detection for the season was detected in Alberta in week 40. The ILI consultation rates remained low: 9 per 1,000 patient visits in week 39 and 7 per 1,000 patient visits in week 40 (see ILI graph). ILI consultation rates for weeks 39 and 40 were highest among children in regions reporting ILI activity. There have been no influenza outbreaks reported so far this season.

Note: Subsequent findings confirmed that the school outbreak previously reported in week 37 was not due to influenza. In addition, since the start of the season no positive influenza laboratory detections have been reported in the region where the school is located.

Antigenic Characterization:

The National Microbiology Laboratory (NML) has not reported any influenza strain characterizations for the 2006-2007 influenza season. Strain characterization of the early season influenza isolates are pending. However, 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.

Influenza-associated Pediatric Hospitalizations :

During weeks 39 and 40, 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:

EISS: In week 39, the Netherlands reported one positive influenza A(H1) specimen. The reporting of laboratory confirmed cases of influenza has remained sporadic throughout Europe since late-June of this year. In addition, there have been no unusual influenza outbreaks reported since then.

http://www.eiss.org/cgi-files/bulletin_v2.cgi

Human Avian Influenza: Since 30 September 2006, the WHO reported 2 new cases of human infection with the H5N1 avian influenza virus. The first case is a 21-year-old female from Indonesia who developed symptoms on 19 September and remains hospitalized since 25 September. The second case is a 39-year-old female from Egypt who developed symptoms on 30 September, hospitalized on 4 October and remains in stable condition.

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].

Further information on resistance to antivirals (such as amantadine and oseltamivir) of influenza strains circulating in the current season will be reported in this season's FluWatch reports.

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

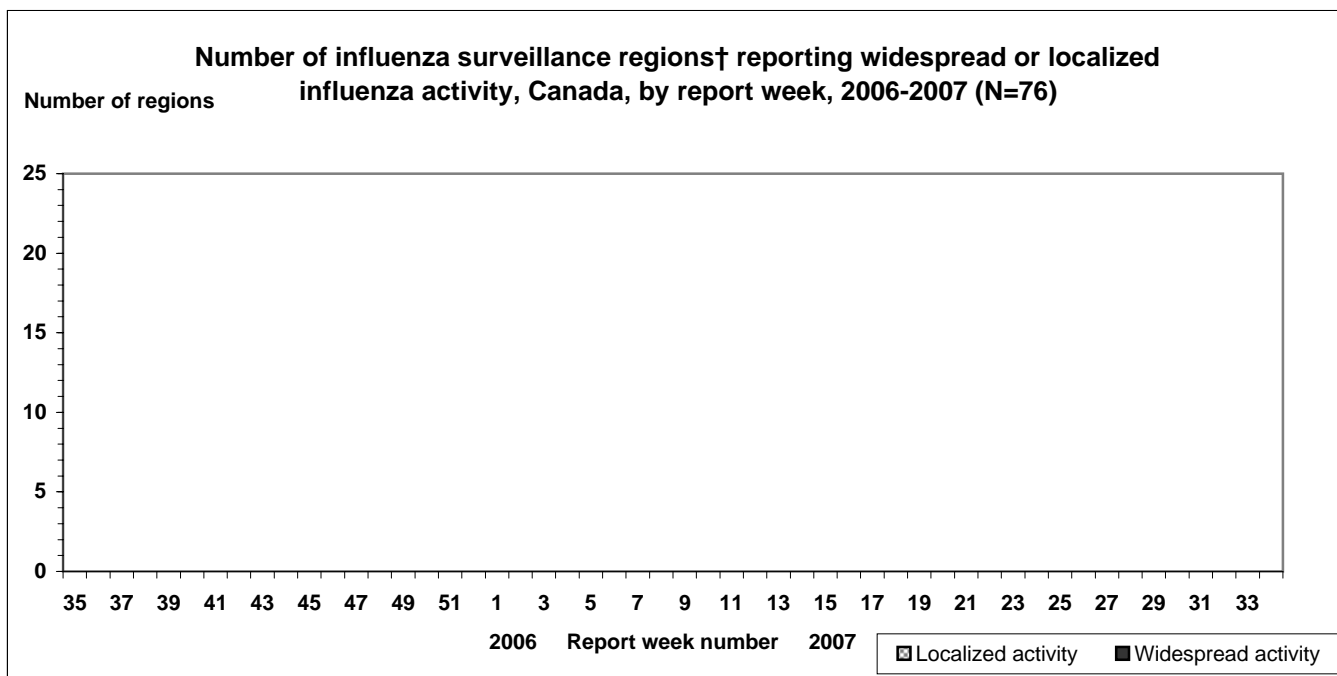
Province of reporting laboratories	Report Period: September 24, 2006 to October 7, 2006				Season to Date: August 27, 2006 to October 7, 2006			
	Total # of influenza tests	# of positive tests			Total # of influenza tests	# of positive tests		
		Influenza A	Influenza B	Total		Influenza A	Influenza B	Total
NL	8	0	0	0	14	0	0	0
PE	0	0	0	0	0	0	0	0
NS	8	0	0	0	42	0	0	0
NB	35	0	0	0	87	0	0	0
QC	348	0	0	0	898	0	0	0
ON	654	1	0	1	1572	2	0	2
MB	66	0	0	0	175	0	0	0
SK	218	0	0	0	460	0	0	0
AB	685	1	1	2	1846	3	1	4
BC	121	0	0	0	252	2	0	2
Canada	2143	2	1	3	5346	7	1	8

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.

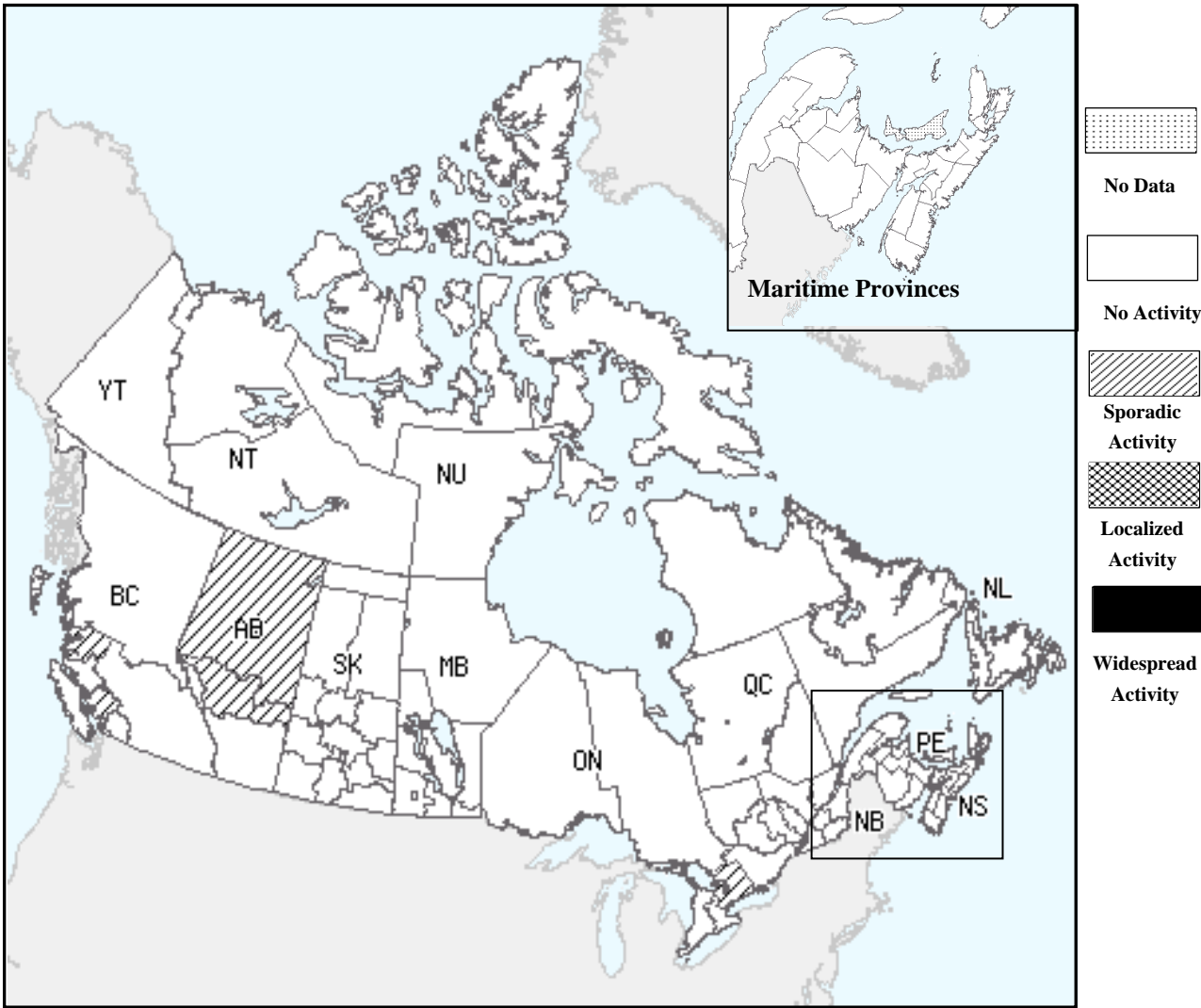
Abbreviations: Newfoundland/Labrador (NL), Prince Edward Island (PE), New Brunswick (NB), Nova Scotia (NS), Quebec (QC), Ontario (ON), Manitoba (MB), Saskatchewan (SK), Alberta (AB), British Columbia (BC), Yukon (YT), Northwest Territories (NT), Nunavut (NU)

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>>

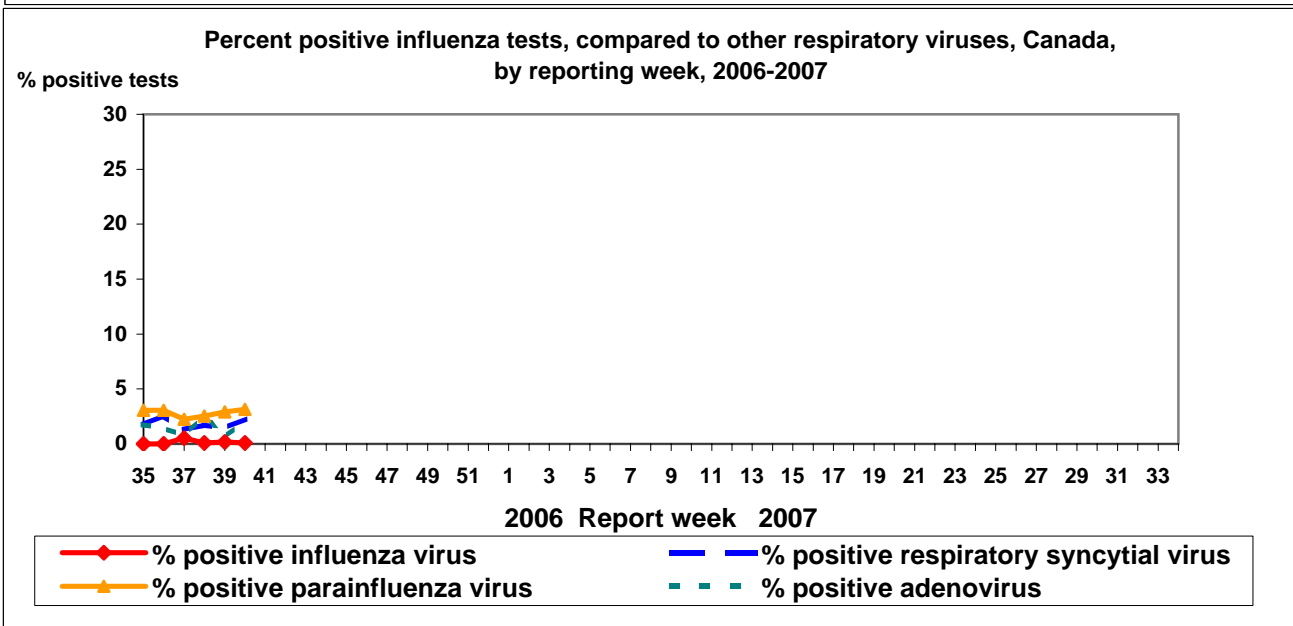
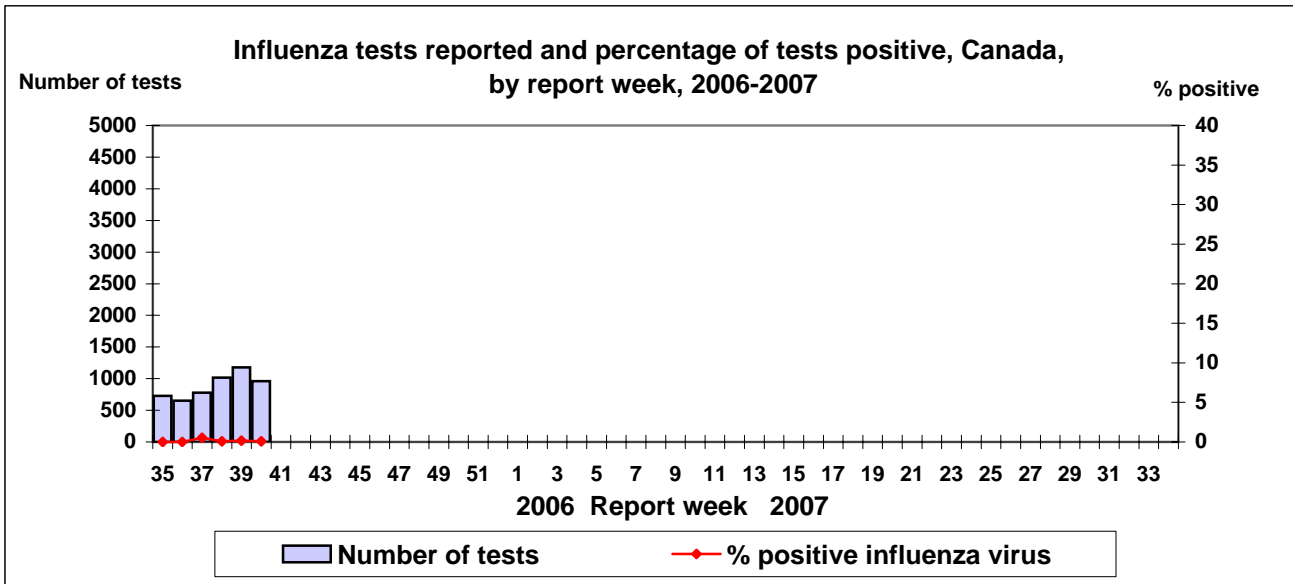


† sub-regions within the province or territory as defined by the provincial/territorial epidemiologist. Graph may change as late returns come in.

**Influenza Activity Level by Provincial and Territorial Influenza Surveillance Regions,
Canada; October 1, 2006 to October 7, 2006 (Week 40)**



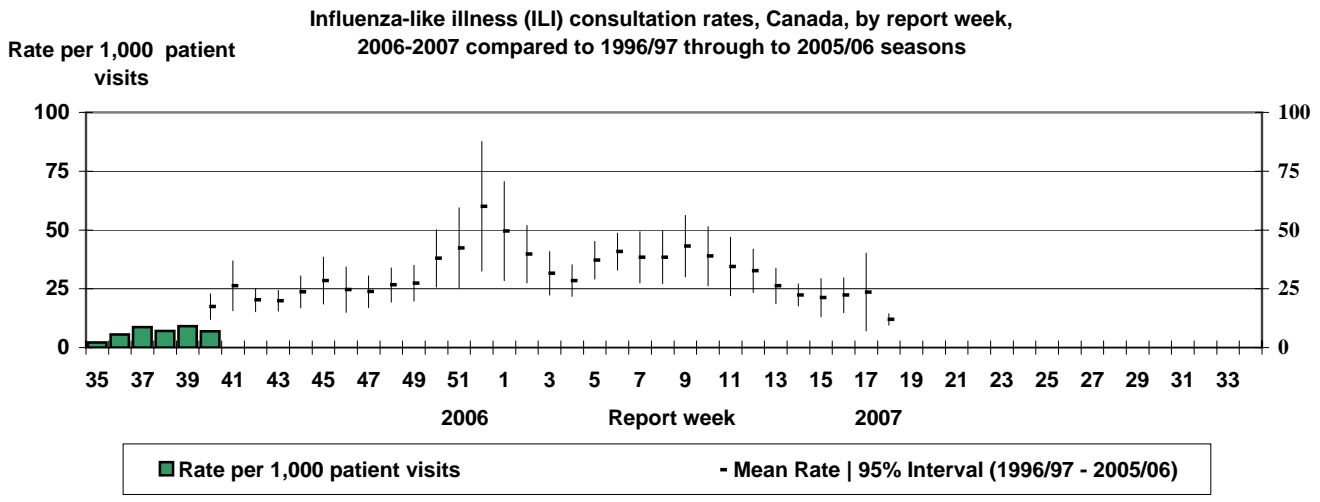
Note: Influenza activity levels, as represented on this map, are assigned and reported by Provincial and Territorial Ministries of Health, **based on laboratory confirmations, sentinel ILI rates (see graphs and tables) and outbreaks**. Please refer to detailed definitions on the last page. For areas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



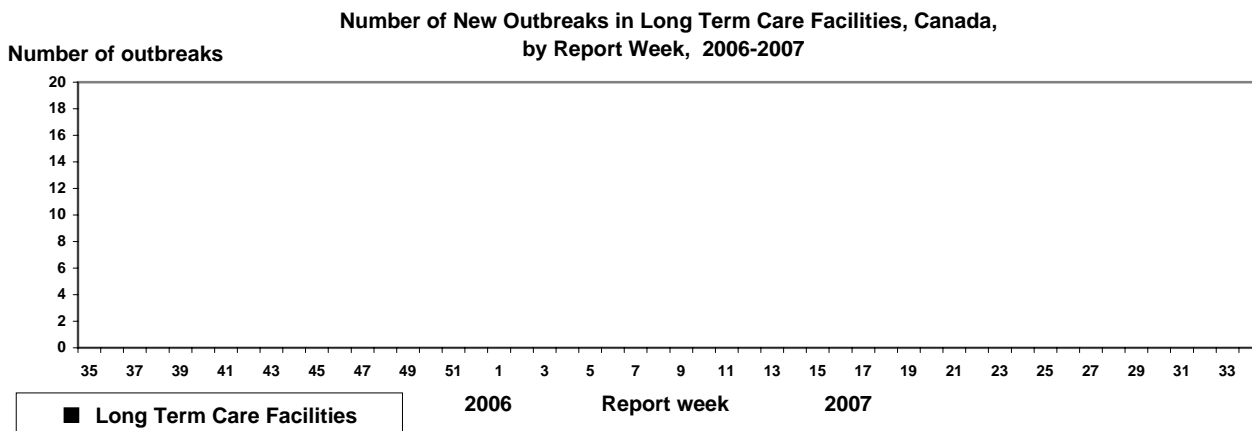
Influenza strain characterization, Canada, cumulative, 2006-2007 influenza season by the Respiratory Viruses Section at the National Microbiology Laboratory (N=0)

{ Strain characterization, number identified, per cent of total number }

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