

# Ontario Influenza Bulletin

**Early Fall Edition** 

Vol. 9, Issue 1 Weeks 35 - 43 (August 28 – October 29, 2005)

#### Introduction

The current issue of the Ontario Influenza Bulletin summarizes influenza activity for weeks 35 to 43 (August 28 – October 29, 2005). Please refer to Appendix A for the 2005-2006 reporting calendar. This is the first issue of the Ontario Influenza Bulletin for the 2005/2006 influenza season.

The Ontario Influenza Bulletin is currently being re-designed, and the new version will be available soon. The new Bulletin will feature only information relevant to influenza surveillance in Ontario. As well, maps will be produced to more clearly illustrate influenza activity in the province.

The influenza immunization campaign has begun in Ontario. The trivalent vaccine for the 2005-2006 season in Canada contains: A/New Caledonia/20/99 (H1N1)-like, A/California /7/2004 (H3N2)-like, and a B/Shanghai/ 361/2002-like virus strains. The influenza vaccine is available at no charge to anyone aged six months and older living, working or going to school in Ontario. More information on the influenza vaccine can be found at: http://www.publichealthontario.ca

## Influenza Activity in Ontario

#### a. Laboratory Surveillance

For the influenza surveillance period between weeks 35 and 43, one laboratory-confirmed case of influenza B was reported by Ontario laboratories to the Centre for Infectious Disease Prevention and Control (CIDPC). No laboratory-confirmed cases of influenza A were reported. In total, 2,549 laboratory tests for influenza were submitted. Positive laboratory results are presented in Table 1.

In this period, there were 7 respiratory syncytial virus (RSV) reports, 119 parainfluenza virus (PIV) reports (all types), and 16 adenovirus reports, all of which were laboratory-confirmed (Table 1).

# b. integrated Public Health Information System (iPHIS) and Reportable Disease Information System (RDIS)

Between weeks 35 and 43, there were three new sporadic cases of laboratory-confirmed influenza reported to the Ministry of Health and Long-Term Care (MOHLTC) through either RDIS or iPHIS (Table 2).

York Region reported a case of influenza B (Week 36), Toronto reported a case of influenza A (Week 38), and Huron Country reported a case of unspecified influenza (Week 41).

# c. Institutional Respiratory Infection Outbreaks

Between weeks 35 and 43, 132 institutional respiratory infection outbreaks were reported to the MOHLTC (Table 3). None of the outbreaks were due to influenza A or B. Eight (6.0%) laboratory-confirmed outbreaks were due to parainfluenza virus; however, in 90 outbreaks the causative organism was not identified (68.2%).

Respiratory outbreaks in long-term care homes represented the majority of the institutional outbreaks reported, with 112 outbreaks occurring in these institutions (84.8%).

At the time of analysis, 32 of the 132 (24.2%) outbreaks initiated during the reporting period were still on-going.

## d. Influenza Activity Levels

Influenza activity in Ontario is reported to the MOHLTC weekly during peak influenza season (November to April), and bi-weekly the rest of the year. The activity level is assigned based on surveillance sources which can include: school absenteeism, work site absenteeism, walk-in clinics, institutional outbreaks, physician's offices, hospitals, pharmacies, laboratories, and other sources as appropriate. When interpreting these results, please note that data was received from only approximately one-third of all Ontario health units.

During the reporting period between August 28 and October 29, 2005, influenza activity was low. No activity was reported for the majority of health regions (Table 4). The South West health region reported sporadic activity during week 41.

#### e. Summary

The data indicates lower influenza activity in Ontario during the period from August 28 to October 29, 2005 compared to the same time period in 2004.

## Influenza Activity in Canada

Source: FluWatch, Public Health Agency of Canada (PHAC)

#### a. Sentinel Physicians:

During weeks 35 - 43, the proportion of influenza-like illness (ILI) visits to sentinel physicians was at or below the national baseline rate (Figure 1).

#### b. Outbreaks:

In total, between weeks 35 and 43, two outbreaks were reported in long-term care facilities: one in Manitoba (MB) and the other in Saskatchewan (SK).

#### c. Strain Characterization:

In total, 7,310 influenza tests were conducted across Canada, with a total of 17 positive results returned. 15 isolates were identified as influenza A; of which 13 were located in SK. There were 2 positive tests for influenza B; one occurring in Quebec (QC), and one in Ontario (ON). The National Microbiology Laboratory (NML) antigenically characterized 5 influenza viruses; four A/California/07/04-like viruses (3 in Saskatchewan and 1 in British Columbia), and one B/Shanghai/361/02-like in Ontario (Figure 2).

#### d. Influenza Activity Levels:

Influenza activity for most of Canada remained at the lowest level ("No Activity"), with some sporadic activity reported in parts of ON, BC, QC and SK. Localized influenza activity was reported in one health region each in MB and SK.

Additional information on influenza activity in Canada can be found at: http://www.phac-aspc.gc.ca/fluwatch/

**Table 1:** Respiratory viruses with positive results isolated in Ontario and reported to the Centre for Infectious Disease Prevention and Control (CIDPC), August 28, 2005 – October 29, 2005 (Weeks 35 – 43)<sup>†</sup>.

	Influ	enza			Other Respiratory Viruses				
Reporting Week	Influenza A	Influenza B	RSV	PIV1	PIV2	PIV3	PIV4	PIV (Other)	Adenovirus
Aug 28 – Sep 3, 2005 (Week 35)	0	0	1	2	0	6	0	0	3
Sep 4 – Sep 10, 2005 (Week 36)	0	0	0	9	0	1	0	0	3
Sep 11 – Sep 17, 2005 (Week 37)	0	0	0	4	2	1	0	0	2
Sep 18 – Sep 24, 2005 (Week 38)	0	1	0	6	1	0	0	0	0
Sep 25 – Oct 1, 2005 (Week 39)	0	0	0	4	7	1	0	0	1
Oct 2 – Oct 8, 2005 (Week 40)	0	0	0	5	4	0	0	0	0
Oct 9 – Oct 15, 2005 (Week 41)	0	0	3	8	2	1	0	0	1
Oct 16 – Oct 22, 2005 (Week 42)	0	0	3	17	5	3	0	0	0
Oct 23 – Oct 29, 2005 (Week 43)	0	0	0	7	10	2	0	0	4
TOTAL <sup>‡</sup> (Aug 28 – Oct 29, 2005)	o	1	7	70	33	16	o	o	16

<sup>†</sup> Data was analyzed on November 16, 2005; therefore the information presented includes late reports received as of that date.

<sup>‡</sup> Total numbers reported include late reports; therefore totals may not be equal to the sum of the weekly numbers.

Lab-confirmed cases of influenza by health unit & health region, August 28, 2005 – October 29, 2005 (Weeks 35-43) $^{\dagger}$  (Source: iPHIS, RDIS $^{\ddagger}$ ) Table 2:

		La	Lab Confirmed Influenza			
Region	Health Unit	Influenza A	Influenza B	Unspecified*		
	Algoma	0	0	0		
Northern	North Bay Parry Sound District	0	0	0		
	Northwestern	0	0	0		
ŧ	Porcupine	0	0	0		
Š	Sudbury & District	0	0	0		
	Thunder Bay District	0	0	0		
	Timiskaming	0	0	0		
	TOTAL NORTHERN	0	0	0		
	Eastern Ontario	0	0	0		
۶	Hastings & Prince Edward Counties	0	0	0		
Eastern	Kingston, Frontenac, Lennox & Addington	0	0	0		
Ж	Leeds, Grenville & Lanark	0	0	0		
_	Ottawa	0	0	0		
	Renfrew	0	0	0		
	TOTAL EASTERN	0	0	0		
_	Durham Region	0	0	0		
Central East	Haliburton, Kawartha, Pine Ridge District	0	0	0		
entra East	Peterborough County-City	0	0	0		
O	Simcoe Muskoka District	0	0 1 <sup>1</sup>	0		
	York Region	0		0		
	TOTAL CENTRAL EAST	0	1	0		
Toronto	Toronto	1 <sup>2</sup>	0	0		
	TOTAL TORONTO	1	0	0		
	Grey-Bruce	0	0	0		
	Elgin-St. Thomas	0	0	0		
	Huron County	0	0	1 <sup>3</sup>		
Southwest	Chatham-Kent	0	0	0		
ţ	Lambton	0	0	0		
no o	Middlesex-London	0	0	0		
0)	Oxford	0	0	0		
	Perth District	0	0	0		
	Windsor-Essex County	0	0	0		
	TOTAL SOUTHWEST	0	0	1		
<u>=</u> -	Brant	0	0	0		
ntral	Haldimand-Norfolk	0	0	0		
Sou	Hamilton	0	0	0		
	Niagara Region	0	0	0		
	TOTAL CENTRAL SOUTH	0	0	0		
+ <u>a</u>	Halton Region	0	0	0		
Central West	Peel Region	0	0	0		
გ ≥	Waterloo Region	0	0	0		
	Wellington-Dufferin-Guelph	0	0	0		
	TOTAL CENTRAL WEST	0	0	0		
	TOTAL ONTARIO	1	1	1		
	I OTAL OITTAIN			1		

<sup>†</sup> Data was analyzed on November 16, 2005; therefore the information presented includes late reports received as of that date.

† At the time of analysis, Toronto was the only remaining health unit reporting using RDIS.

† Type of influenza, i.e. A vs B, was not specified in iPHIS (i.e. Influenza subtype dropdown menu left blank or reported as unspecified)

† Occurred in Week 36.

Occurred in Week 38.

† Occurred in Week 41

**Table 3:** Institutional respiratory outbreaks in Ontario, August 28 – October 29, 2005 (Weeks 35 – 43)<sup>†</sup>

Institutional Respiratory Infection Outbreaks	August 28 – October 29, 2005 (Weeks 35-43)		
	N	%	
Total Respiratory Infection Outbreaks	132	100.0	
Influenza A	0	0.0	
Influenza B	0	0.0	
Parainfluenza (All types)	8	6.0	
Other organisms	34	25.8	
No organism identified	90	68.2	
Ongoing Outbreaks	32	100.0	
Influenza A	0	0.0	
Influenza B	0	0.0	
Parainfluenza (All types)	3	9.4	
Other organisms	2	6.2	
No organism identified	27	84.4	
Types of Institutions (All Outbreaks)	132	100.0	
Long-Term Care Homes	112	84.8	
Hospitals	8	6.1	
Retirement Homes	12	9.1	

<sup>†</sup> Data was analyzed on November 16, 2005; therefore the information presented includes late reports received as of that date.

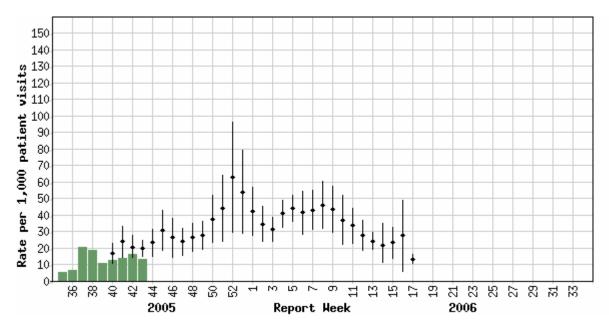
**Table 4:** Influenza activity in Ontario by health region, August 28 to October 29, 2005 (Weeks 35 - 43)

Health Region <sup>‡</sup>	East	Central East	Central West	South West	North
Week 35	1	1	1	1	1
Week 36	1	1	1	1	1
Week 37	1	1	1	1	1
Week 38	1	1	1	1	1
Week 39	1	1	1	1	1
Week 40	1	1	1	1	1
Week 41	1	1	2	1	1
Week 42	1	1	1	1	1
Week 43	1	1	1	1	1

#### Influenza activity levels are defined as:

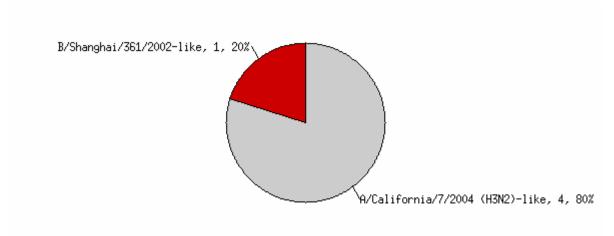
- 1 = No activity reported
- 2 = Sporadic: sporadically occurring ILI and confirmed influenza\* with NO outbreaks detected within the influenza surveillance region
- 3 = Localized: sporadically occurring ILI and confirmed influenza\* together with outbreaks of ILI in schools and worksites or laboratory confirmed influenza in residential institutions occurring in less than 50% of the influenza surveillance region(s)
- 4 = Widespread: sporadically occurring ILI and 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
- ‡ Health regions within Ontario correspond to those reported in FluWatch (PHAC)

**Figure 1:** Influenza-like illness (ILI) reporting rates in Canada, by report week, 2005/06, compared to the national average (1996/97 through 2004/05 seasons)<sup>†.</sup>



† Source: http://www.phac-aspc.gc.ca/fluwatch/05-06/w43 05/index.html#5

**Figure 2:** Influenza strains identified by the National Microbiology Lab between August 28 and October 29, 2005 (Weeks 35 - 43)<sup>†</sup>.



† Source: http://www.phac-aspc.gc.ca/fluwatch/05-06/w43 05/index.html#5

Appendix A: 2005-2006 Reporting Calendar

Week	Start	End
35	August 28, 2005	September 3, 2005
36	September 4, 2005	September 10, 2005
37	September 11, 2005	September 17, 2005
38	September 18, 2005	September 24, 2005
39	September 24, 2005	October 1, 2005
40	October 2, 2005	October 8, 2005
41	October 9, 2005	October 15, 2005
42	October 16, 2005	October 22, 2005
43	October 23, 2005	October 29, 2005
44	October 30, 2005	November 5, 2005
45	November 6, 2005	November 12, 2005
46	November 13, 2005	November 19, 2005
47	November 20, 2005	November 26, 2005
48	November 27, 2005	December 3, 2005
49	December 4, 2005	December 10, 2005
50	December 11, 2005	December 17, 2005
51	December 18, 2005	December 24, 2005
52	December 25, 2005	December 31, 2005
1	January 1, 2006	January 7, 2006
2	January 8, 2006	January 14, 2006
3	January 15, 2006	January 21, 2006
4	January 22, 2006	January 28, 2006
5	January 29, 2006	February 4, 2006
6	February 5, 2006	February 11, 2006
7	February 12, 2006	February 18, 2006
8	February 19, 2006	February 25, 2006
9	February 26, 2006	March 4, 2006
10	March 5, 2006	March 11, 2006
11	March 12, 2006	March 18, 2006
12	March 19, 2006	March 25, 2006
13	March 26, 2006	April 1, 2006
14	April 2, 2006	April 8, 2006
15	April 9, 2006	April 15, 2006
16	April 16, 2006	April 22, 2006
17	April 23, 2006	April 29, 2006
18	April 30, 2006	May 6, 2006
19	May 7, 2006	May 13, 2006
20	May 14, 2006	May 20, 2006
21	May 21, 2006	May 27, 2006
22	May 28, 2006	June 3, 2006
23	June 4, 2006	June 10, 2006
24	June 11, 2006	June 17, 2006
25	June 18, 2006	June 24, 2006
26	June 25, 2006	July 1, 2006
27	July 2, 2006	July 8, 2006
28	July 9, 2006	July 15, 2006
29	July 16, 2006	July 22, 2006
30	July 23, 2006	July 29, 2006
31	July 30, 2006	August 5, 2006
32	August 6, 2006	August 12, 2006
33	August 13, 2006	August 19, 2006
34	August 20, 2006	August 26, 2006