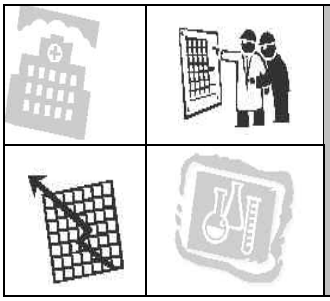

Ontario Influenza Bulletin

Ministry of Health and Long-Term Care

Public Health Branch

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Week #12: Week Ending March 20, 2004

Influenza Activity in Ontario

Ontario continued to experience low influenza activity during the week ending March 20, 2004 (see map). Influenza activity levels were ranked as follows by the 24 health units that reported: no activity **-** 16 (67%), sporadic activity - 6 (25%), localized activity - 2 (8 %) and none reported widespread influenza activity. There were only 4 (0.5%) positive influenza isolations, (1 Flu A and 3 Flu B) of the 797 influenza tests that the Ontario laboratories reported to the Centre for Infectious Disease Prevention and Control (CIDPC), Health Canada. Between August 24, 2003 and March 20, 2004, these laboratories reported 4,465 influenza A, and 25 influenza B isolates or detections (Table 1). Also reported during this season to date are other respiratory isolates and detections shown in Table 1. However, health units reported 53 cases of laboratory-confirmed influenza (48 influenza A, 5 influenza B) through the Reportable Diseases Information System (RDIS) during this surveillance week (Table 2). These two indicators show that there was some increase in the level of influenza B viruses circulating in the province during the reporting period. Overall, there was an increase of 130.4% in the number of influenza cases reported when compared to the number reported during the previous week (Week 11). An increase in the overall rate of influenza-like illness (ILI) reported by sentinel physicians in Ontario was also recorded at 32.2/1,000 when compared to 23.5/1,000 for week 11. Since September 1, 2003, to date, 143 (142 Flu A, 1 Flu B) influenza-related deaths have been reported in the province through RDIS. Table 3 shows data on the respiratory infection outbreaks in institutions that were reported to the Ministry by the health units from October 27, 2003 to March 20, 2004. These include 17 respiratory infection outbreaks in institutions that met the provincial surveillance case definition and were reported during this surveillance period. No laboratory confirmed influenza outbreaks were reported to the Ministry during this period.

Table 1.

Indicator	2002-03 Season Week Ending March 22, 2003 (week 12 Season to Date**	2003-04 Season Week Ending March 20, 2004 (week 12) Season to Date***
CIDPC Laboratory Surveillance (Flu isolates)Total	774	**4,490**
Influenza A	759	4,465
Influenza B	15	25
Other respiratory Viruses		
RSV	1,790	1,839
PIV1	124	235
PIV2	19	150
PIV3	310	201
PIV4	5	6
Other PIVs	1	11
Adenoviruses	134	145
***% of Flu tests that were positive**	**3.1**	**0.5**
+No. of ILI Visits to Sentinel Physicians (ILI Rate/1000 patients seen for all reasons)	**N/A**	**32.2**

Consistent with Health Canada year round surveillance periods (only for Laboratory Surveillance Data)

+ October 27, 2003 – March 20, 2004. *% of positive cases based on the total specimens submitted for the surveillance week.

**Season to Date: August 24, 2002 – March 22, 2003. ***Season to Date: August 24, 2003 – March 20, 2004.

Note: 16 public health and hospital laboratories in the Province report to the CIDPC.

Table 2. Week Ending March 20, 2004 Influenza Cases in Ontario Reported Through the Reportable Disease Information System (RDIS), 2003-2004 (September 1, 2003 to March 20, 2004)

Health Unit	Flu A Week 12 (Ending Mar. 20)	Flu A Week 11 (Ending Mar. 13)	Flu A Change (Week 12-Week 11)	Flu B (Season-to-date)
Algoma	136	136	0	
Brant	39	39	0	
Chatham-Kent	34	34	0	
Durham Region	177	177	0	1
Eastern Ontario	56	54	2	
Elgin-St. Thomas	16	16	0	
Grey-Bruce	93	93	0	
Haldimand-Norfolk Region	58	58	0	1
Haliburton-Kawartha	116	116	0	1
Halton Region	222	222	0	2
Hamilton City	416	416	0	
Hastings-Prince Edward	202	202	0	
Huron	42	42	0	
Kingston-Frontenac	95	95	0	
Lambton	46	46	0	
Leeds-Grenville	17	17	0	
Middlesex-London	89	79	10	
Muskoka-Parry Sound	85	85	0	
Niagara Region	201	201	0	
North Bay	101	83	18	
Northwestern	0	0	0	
Ottawa-Carleton	237	235	2	1
Oxford	40	40	0	
Peel Region	542	539	3	2
Perth	49	49	0	
Peterborough	101	101	0	
Porcupine	94	94	0	
Renfrew	37	37	0	
Simcoe County	238	238	0	2
Sudbury	184	184	0	
Thunder Bay	30	30	0	
Timiskaming	43	43	0	
Toronto City	584	577	7	5
Waterloo Region	150	150	0	
Wellington-Dufferin	138	133	5	
Windsor-Essex	23	23	0	
York Region	319	318	1	2
	5,050	5,002	48	17

*48 new cases of influenza A and 5 cases of influenza B were reported during Week 12.

(Based on 2001 Provincial Population Estimate)

PROVINCIAL INFLUENZA CASES PER 100,000 (September 1,2003-March 20, 2004) = 44.5/100,000.

PROVINCIAL INFLUENZA CASES PER 100,000 **(September 1,2002-March 22, 2003) = N/A**

NOTE: RDIS Reporting is usually incomplete for the reporting week. Hence, numbers may change as more reports are received.

N/A= Data for 2002-2003 for week 12 were not available.

Table 3: Respiratory Infection Outbreaks in Institutions October 27, 2003 – March 20, 2004

Respiratory Infection Outbreaks in Institutions	2003-04 Season Week Ending March 20, (week 12) Season to Date
Total Respiratory Infection Outbreaks in Institutions	**694**
Influenza A Outbreaks	**380**
Flu A & other organisms	**8**
Other Organisms	50
Influenza B	0
No organism detected	207
Laboratory Results pending	49
***Declared Over**	**571**
Influenza A	346
Flu A & other Organisms	8
Other Organisms	41
Reported as "N/A results pending" or no definitive laboratory results reported	6
No organism detected	170
Onset of illness in index case October 27/03 – March 20, 2004	555
Onset of illness in index case prior to October 27/03	16
****Ongoing Outbreaks**	**123**
Influenza A	34
Other organisms	9
Results pending	43
No Organism detected	37
Categories & Types of Institutions	
LTCF 's (NH, HFA)	**462**
Combined (e.g. NH/HFA, NH/Hospital)	21
Hospitals (ACH, CCH, Psychiatric Hosp.)	**54**
Other (RHs, Children Residences, Developmentally Act Institutions/Jail)	**140**

*** Declared over respiratory infection outbreaks = Appendix E (Final Report) has been received by the Ministry.**
**** Ongoing respiratory infection outbreaks = Appendix E not yet received or outbreak onset is recent and is still active.**

Federal FluWatch Sentinel Physician Surveillance Activity in Ontario v
During Week 12, the overall rate of influenza-like illness (ILI) reported for Ontario through the Federal FluWatch system was 32.2 ILI patients seen per 1,000 patients that were seen by the sentinel physicians for all reasons, including ILI. This represents a 37.0% increase in the rate for this surveillance week when compared to that reported for week 11. However, it does not seem to represent an increase in influenza cases among the patients seen by the sentinel physicians based on the results of the other surveillance indicators. As observed earlier during the season, the ILI rates were higher among the younger age groups (131/1,000 among the 0-4 age group, and 65/1,000 among the 5-19 year age group) than among the older age groups.

Canada: Summary for Week 12
During the week ending March 20 (week 12), influenza activity continued to decline across the country with localized activity only being reported in Quebec, while the rest of the country reports sporadic or no activity**.** Across Canada, sentinel physicians reported 18 cases of influenza-like illness (ILI) per 1000 patient visits, which is below the expected range for this time of year.
Avian Situation in BC: The Canadian Food Inspection Agency (CFIA) depopulated all remaining chicken flocks in the high-risk region of British Columbia's Fraser Valley, in order to contain further spread of the disease. The decision followed the detection of avian influenza on two farms, bringing the total number of infected premises in the high-risk region to five. Approximately 275,000 birds were destroyed and removed from 10 farms and 33 smaller flocks. For more information:
See CFIA update: **http://www.inspection.gc.ca/english/anima/heasan/disemala/avflu/avflue.shtml**

Laboratory Confirmations:
During week 12, Health Canada received 2,156 reports of laboratory tests for influenza, including 58 (2.7%) influenza A detections and 12 influenza B detections.
Source:1) http://www.hc-sc.gc.ca/pphb-dgspsp/fluwatch/03-04/w12_04/index.html

United States: CDC: Influenza activity remained low during the week of March 14-20, 2004. The percentage of patient visits for influenza-like illness (ILI) has remained below the national baseline (2.5%) for 10 consecutive weeks. During week ending March 20, mortality due to pneumonia and influenza (P&I) remained below the epidemic threshold (8.3%). Four (0.3%) of 1,189 specimens collected from throughout the United States were positive for influenza. Twenty-one states, New York City, Guam, and Puerto Rico reported sporadic activity and 29 states and the District of Columbia reported no influenza activity.
Source: CDC: http://www.cdc.gov/flu/weekly/

WHO and EISS Summary: The intensity of influenza activity was low in Europe. Only sporadic cases of laboratory confirmed influenza were reported. Local activity (i.e. increased activity in local areas within a region, or outbreaks in two or more institutions within a region) was reported in Germany and Italy. Sporadic activity was reported by six networks and no influenza activity by 15 networks. The intensity of activity was low in all reporting networks. All networks reported decreasing or steady levels of clinical activity. Of the 297 respiratory specimens collected by sentinel physicians in week 12/2004, 30 (10.1%) were positive for influenza virus.
Source: EISS: **http://www.eiss.org**

Avian Influenza (WHO): WHO is continuing to monitor the situation in collaboration with Member States as the number of human cases of avian influenza A(H5N1) reported to WHO appears to be stable in the affected Asian countries.

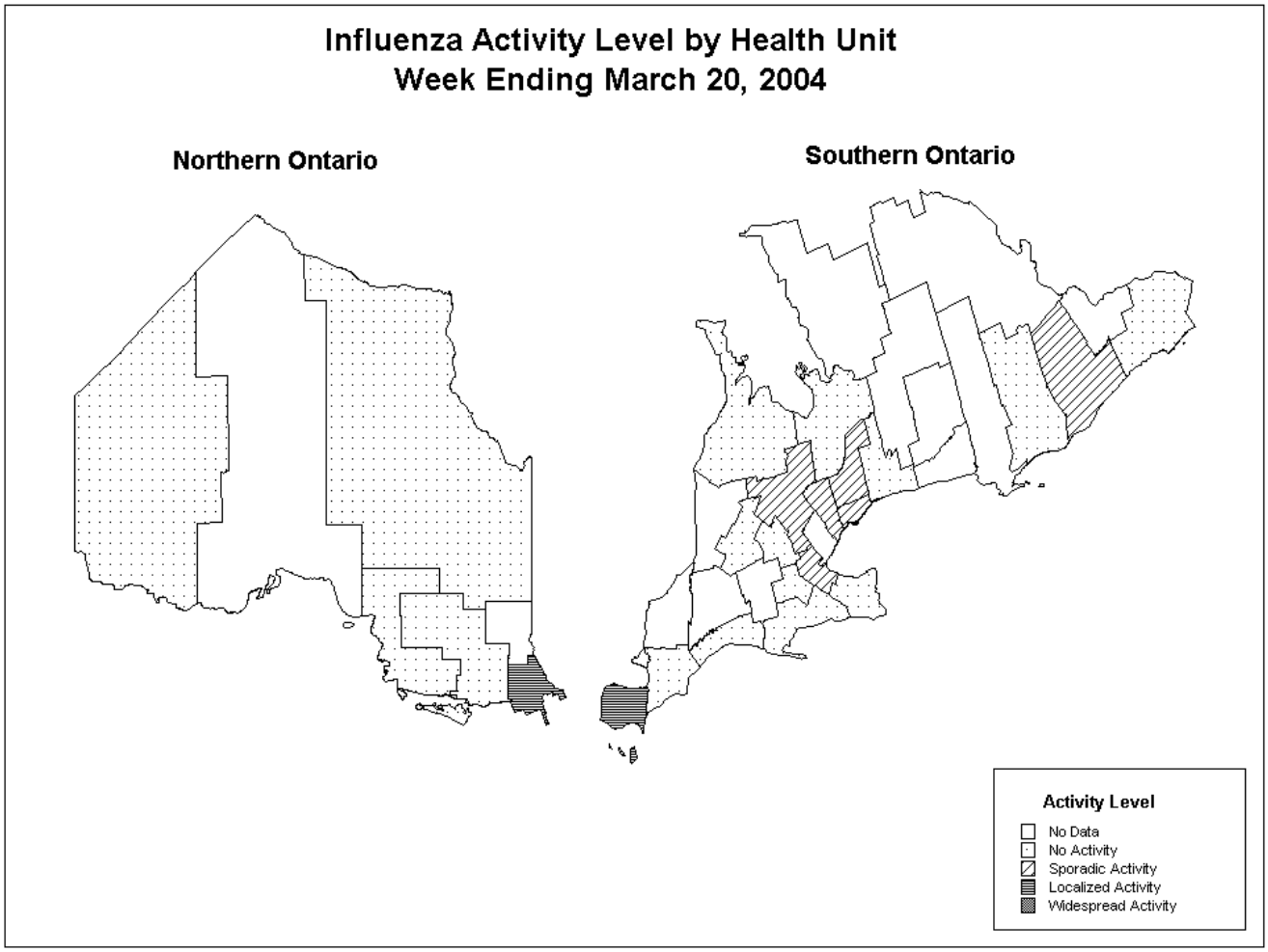
March 16-18, 2004, WHO held a consultation on priority public health interventions before and during an influenza pandemic. WHO indicated that the recent avian influenza outbreaks in Asia serve as stark reminders that another influenza pandemic is inevitable and possibly imminent. Epidemiological models project that an influenza pandemic will be responsible for major disease burden and significant economic costs both in developed and developing countries. The impact in poor countries is likely to be greatest, due to limited health care resources and poor health and nutritional status of the population. Clearly, the most important immediate intervention is to contain as rapidly as possible the current avian influenza emergency, thereby reducing the likelihood of the emergence and spread of a new pandemic virus.
Source: **http://www.who.int/csr/disease/avian_influenza/guidelines/pandemicconsultation/en/**

Strain Characterization:
The National Microbiology Laboratory (NML) reported on strain characterization completed on influenza isolates submitted from October 1, 2003 to March 18, 2004 (Table 4). During this period, the Ontario laboratories submitted a total of 349 viruses which were characterised as shown in Table 4.

Table 4. Strain Characterization Completed on Influenza Isolates in Canada

Province/Territory	Influenza Virus						
	Type A(H1N1)	Type A(H3N2)		Type A(H1N2)	Type B		TOTAL
	*A/New Caledonia/20/99-like	A/Panama/2007/99-like	A/Fujian/411/02-like		Hong Kong/330/01-like	Sichuan/379/99-like	
Newfoundland			9				9
Prince Edward Island			5				5
Nova Scotia			21	1			22
New Brunswick			9				9
Quebec			67			2	69
Manitoba			16				16
Saskatchewan		14	61				75
Alberta		6	63				69
British Columbia	1	5	107				113
Yukon			2				2
North West Territory			2				2
Nunavut			6				6
ONTARIO			337		3	9	349
TOTAL	1	25	705	1	3	11	746

Source: National Microbiology Laboratory (NML), Population and Public Health Branch (PPHB).



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