

INFLUENZA IN MANITOBA – 2006/2007 SEASON

Final Report

Dear Colleague,

The following report details influenza activity in Manitoba from the start of the 2006/2007 flu season. The Communicable Diseases Control Unit of Manitoba Health received its first laboratory-confirmed positive case of influenza for the season during the week of January 8, 2007. To date there have been **72** laboratory-confirmed cases of Influenza in the province. **There have been no new cases of Influenza in Manitoba since April 10, 2007.**

Eighteen of the Manitoba cases have been typed by the National Microbiology Laboratory, fifteen of which were found to be A/Wisconsin/67/05-like (H3N2) and three of which have been identified as A/New Caladonia/20/99-like (H1N1). Typing of isolates from other provinces has revealed that these two strains are generally circulating in the country. Both of these strains are included in the composition of the 2006/07 Canadian influenza vaccine.

LABORATORY-CONFIRMED INFLUENZA

- Reports of culture isolations and EIA detections from Cadham Provincial Laboratory (CPL) are forwarded to the Communicable Disease Control (CDC) Unit weekly. The number of positive cultures is an underestimate of the total number of cases, since not all persons with influenza seek medical attention, and of those that do, not all are cultured for the virus. While EIA detections and culture isolations comprise the largest number of reports from CPL, seroconversions are similarly forwarded to the CDC Unit weekly. Information contained within this update is based on positive lab reports received at the CDC Unit as of June 20, 2007.
- The specimen date (acute specimen date for seroconversions) is used to:
 - (a) extract cases; and,
 - (b) assign cases to the appropriate week/month

Influenza A

- There have been **71** cases of Influenza A reported this season in Manitoba.
- Refer to **Table 1** for a summary of cases by Regional Health Authority (RHA) and week of specimen collection.
- Refer to **Figure 1** for an illustration of the Epidemic Curve by specimen collection date.
- Refer to **Table 2 and Figure 2** for a summary of cases by age group.
- Refer to **Figure 3** for an illustration of the number of laboratory-confirmed cases by month and year in Manitoba, 2001/2002 to 2006/2007.

Influenza B

- There has been **1** case of Influenza B reported this season in Manitoba.
- Refer to **Table 1** for a summary of cases by Regional Health Authority (RHA) and week of specimen collection.
- Refer to **Figure 1** for an illustration of the Epidemic Curve by specimen collection date.
- Refer to **Table 2** for a summary of cases by age group.
- Refer to **Figure 4** for an illustration of the number of laboratory-confirmed cases by month and year in Manitoba, 2001/2002 to 2006/2007.

SUSPECTED/CONFIRMED REPORTS OF INFLUENZA OUTBREAKS

- Reports of suspected/confirmed influenza outbreaks are directed to the CDC Unit by:
 - (a) a phone call/email from public health staff within a RHA;
 - (b) a phone call/email from CPL advising of the assignment of an outbreak code;
 - (c) completion and submission of an outbreak form

- As of June 20, 2007 there have been **18** outbreaks of respiratory illness reported to the CDC Unit since the beginning of the current flu season, **eight** of which have been lab confirmed as influenza A. To date all confirmed outbreaks have occurred in Personal Care Homes.

NATIONAL FLU WATCH PROGRAM

- Manitoba Health participates in the National Flu Watch Program co-ordinated by the Public Health Agency of Canada and the College of Family Physicians of Canada. In addition to laboratory-confirmation of influenza, this program relies on weekly reports of influenza-like illness (ILI) as reported by 14 sentinel physicians reflecting 8 health authorities: South Eastman, Central, Brandon, Winnipeg, Assiniboine, Interlake, Norman and Burntwood. The CDC Unit receives *weekly* reports from the Public Health Agency of Canada presenting the provincial ILI rate and the specific data for each of the participating sentinel physicians.

- For the 2006/2007 season, ILI in the general population is defined as:
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.

- Refer to **Figure 5** for an illustration of the ILI rate as it relates to the number of laboratory-confirmed cases of influenza.

INFLUENZA-RELATED DEATHS

- Reporting of influenza-related deaths is likely incomplete. Reports are based on notification by:
 - (a) Chief Medical Examiner;
 - (b) Medical Officers of Health in the Regional Health Authorities
 - (c) Infection Control Practitioners in long term care facilities

- There have been **no** suspected influenza-related deaths reported this season.

CONTACT INFORMATION

Should you have any questions or comments about this report, please do not hesitate to contact:

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For other CDC Unit reports, please view the Manitoba Health Internet Website:
<http://www.gov.mb.ca/health/publichealth/cdc/surveillance/index.html>

For national surveillance data, refer to:
<http://www.phac-aspc.gc.ca/fluwatch/index.html>

Table 1. Number of Cases of Influenza A and B by Regional Health authority and Week of Specimen Collection, Manitoba 2006/2007

Influenza A - Number of Cases by RHA (based on specimen collection date)

RHA	03/12-09/12	10/12-16/12	17/12-23/12	24/12-30/12	31/12-06/01	07/01-13/01	14/01-20/01	21/01-27/01	28/01-03/02	04/02-10/02	11/02-17/02	18/02-24/02	25/02-03/03	04/03-10/03	11/03-17/03	18/03-24/03	25/03-31/03	01/04-07/04	08/04-14/04	15/04-21/04	22/04-28/04	29/04-05/05	06/05-12/05	TOTAL
Winnipeg	0	0	0	0	0	0	0	3	1	0	3	1	5	2	4	2	2	0	0	0	0	0	0	23
Brandon	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
North Eastman	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
South Eastman	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
Interlake	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0	5
Central	0	0	0	0	0	1	1	0	4	3	3	3	0	1	1	0	0	0	0	0	0	0	0	17
Assiniboine	0	0	0	0	1	1	2	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	7
Parkland	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Norman	0	0	0	0	0	0	0	0	1	0	0	4	1	0	0	0	0	0	0	0	0	0	0	6
Burntwood	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	0	0	0	0	5
Churchill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MANITOBA	0	0	1	0	1	4	3	3	8	4	10	8	10	3	6	4	3	1	2	0	0	0	0	71

Influenza B - Number of Cases by RHA (based on specimen collection date)

RHA	03/12-09/12	10/12-16/12	17/12-23/12	24/12-30/12	31/12-06/01	07/01-13/01	14/01-20/01	21/01-27/01	28/01-03/02	04/02-10/02	11/02-17/02	18/02-24/02	25/02-03/03	04/03-10/03	11/03-17/03	18/03-24/03	25/03-31/03	01/04-07/04	08/04-14/04	15/04-21/04	22/04-28/04	29/04-05/05	06/05-12/05	TOTAL
Winnipeg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brandon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Eastman	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
South Eastman	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interlake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Central	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Assiniboine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parkland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norman	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Burntwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Churchill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MANITOBA	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

Figure 1. Epidemic Curve for Influenza A and B by Specimen Collection Date, Manitoba 2006/2007

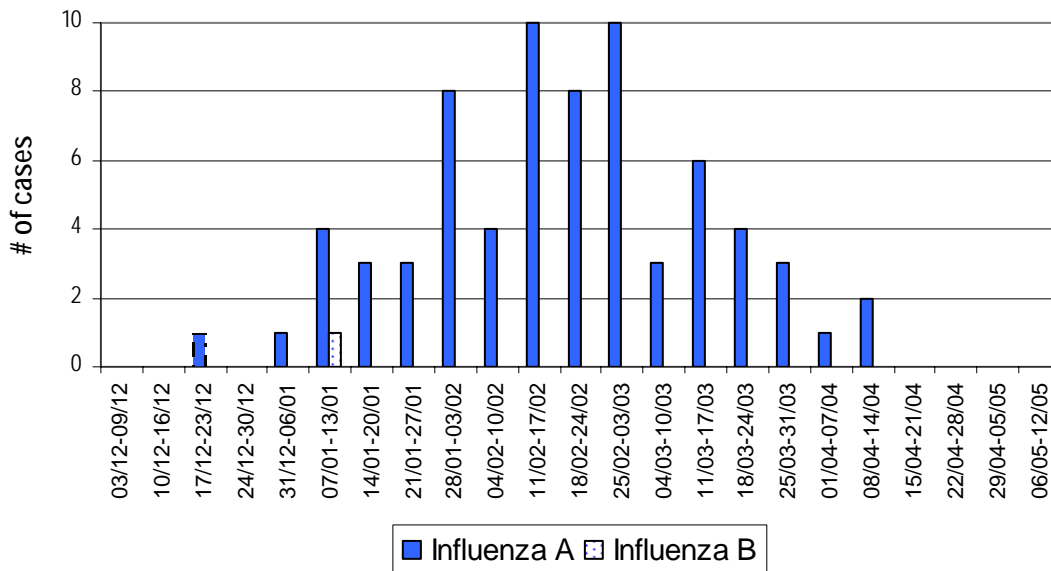


Table 2. Number of Cases of Influenza A and B by Age Group, Manitoba 2006/2007

Age Group	Influenza A		Influenza B	
	# of cases	% of total	# of cases	% of total
<2 yrs	18	25.4%	0	0.0%
2-4 yrs	5	7.0%	0	0.0%
5-9 yrs	1	1.4%	1	100.0%
10-14 yrs	5	7.0%	0	0.0%
15-19 yrs	2	2.8%	0	0.0%
20-24 yrs	1	1.4%	0	0.0%
25-29 yrs	1	1.4%	0	0.0%
30-39 yrs	4	5.6%	0	0.0%
40-49 yrs	4	5.6%	0	0.0%
50-59 yrs	7	9.9%	0	0.0%
60-69 yrs	2	2.8%	0	0.0%
70-79 yrs	4	5.6%	0	0.0%
>79 yrs	17	23.9%	0	0.0%
missing	0	0.0%	0	0.0%
TOTAL	71		1	

Figure 2. Age Distribution of Influenza A Cases, Manitoba 2006/2007

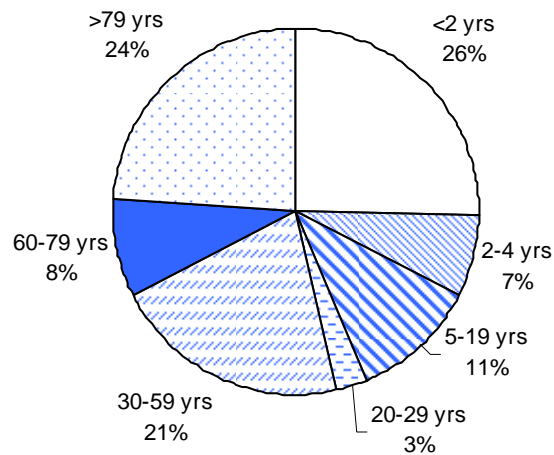


Figure 3. Influenza A: Number of Laboratory-Confirmed Cases, 2001/2002-2006/2007

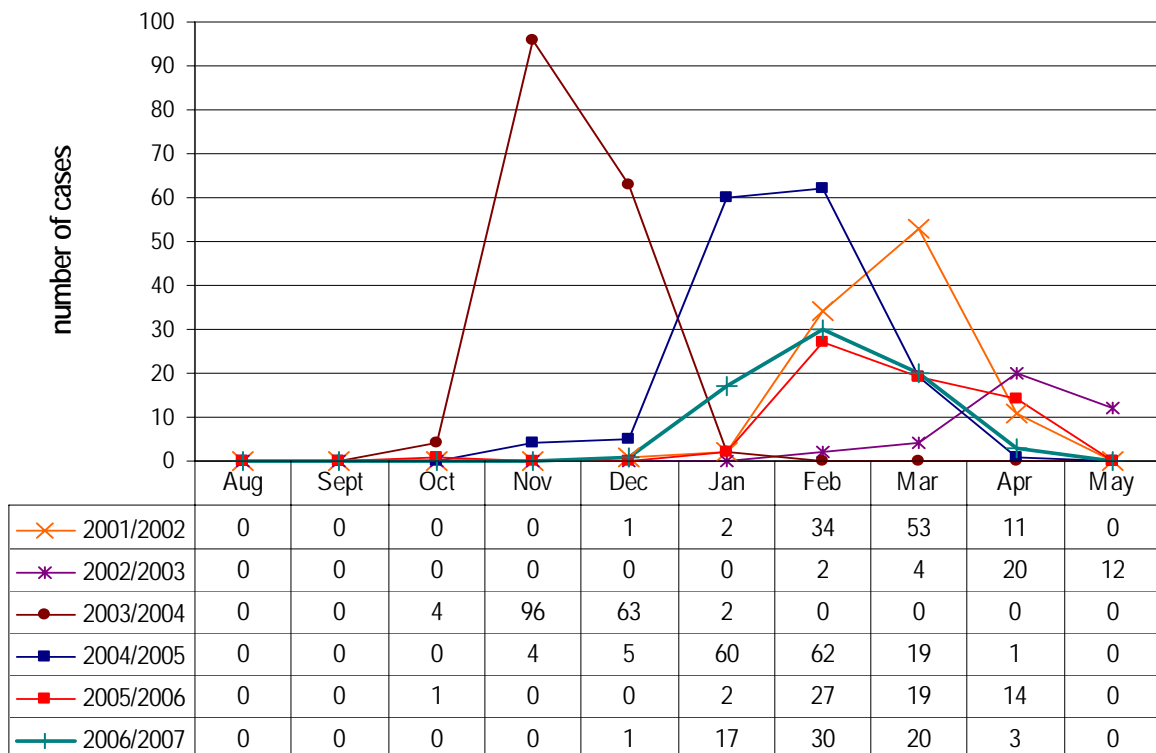


Figure 4. Influenza B: Number of Laboratory-Confirmed Cases, 2001/2002-2006/2007

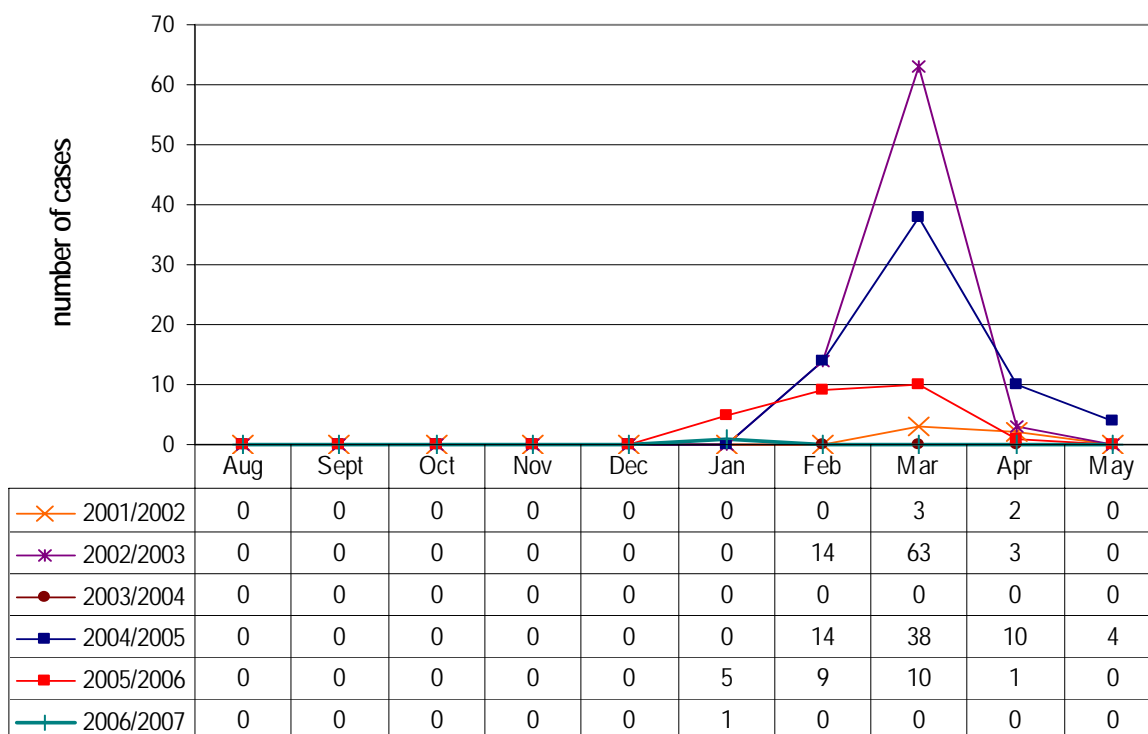
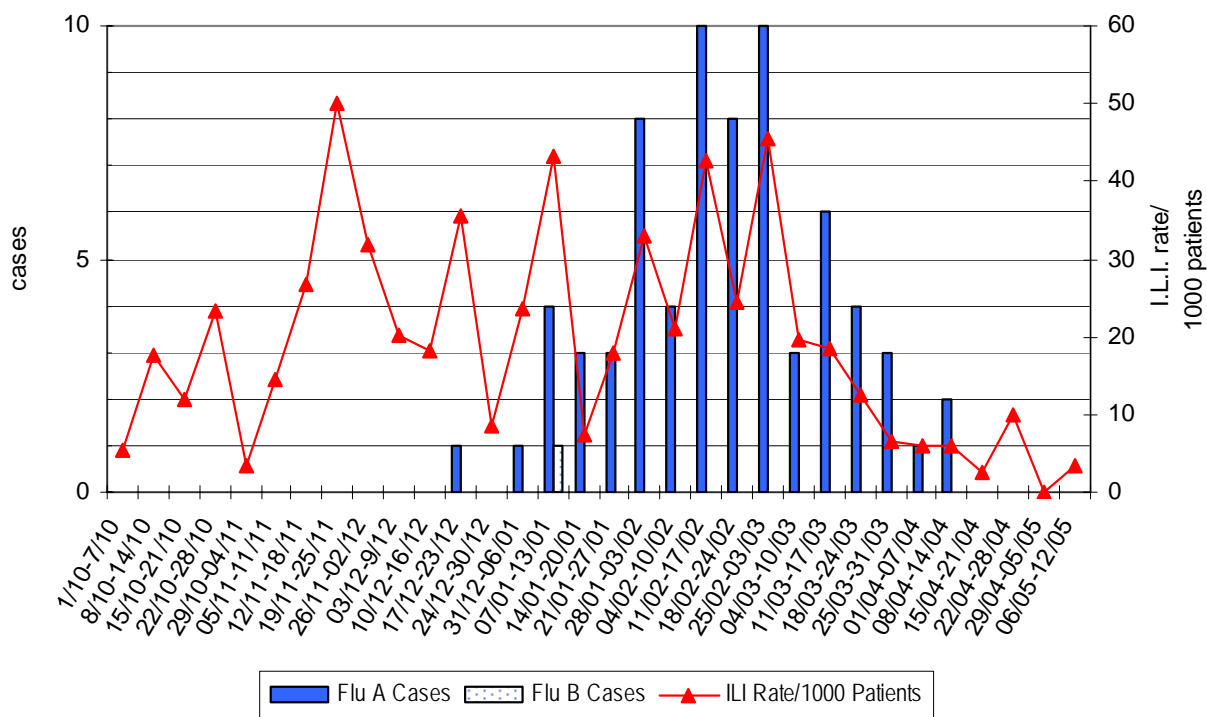


Figure 5. Influenza-Like Illness (I.L.I.) Rate and Number of Influenza a and B Cases by Week of Specimen Collection, 2006/2007 Season



*Most recent I.L.I. rate is based upon the reporting of 9 sentinel physicians in the province.