

INFLUENZA IN MANITOBA 2005/2006 END OF SEASON REPORT

Dear Colleague,

The influenza season of 2005/2006 began in October with the reporting of several respiratory illness outbreaks in personal care homes across the province. The Communicable Diseases Control Unit of Manitoba Health received its first laboratory-confirmed positive case of influenza for the season on October 25, 2005. In spite of these early-season hints of flu activity, a subsequent positive case was not laboratory confirmed until January 2006. From January until the end of April an additional 87 lab-confirmed cases were reported, bringing the season total to **88** cases. The last case of influenza was reported to the province at the end of April. Of Manitoba's 88 cases, six isolates were typed by the National Microbiology Laboratory: five A/California; one B/Hong Kong. Typing of isolates from other provinces revealed that A/California and B/Hong Kong (as well as B/Malaysia) were generally circulating in the country.

Each year the Province is notified of influenza activity in one of four ways: laboratory confirmation of individual cases and/or confirmed outbreaks; notification of suspected outbreaks by regional Public Health offices; influenza-like activity via a national surveillance programme; and influenza-related deaths from the regional Medical Officers of Health.

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 tests 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 tested 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. All data in this report were analysed on the basis of the date on which the specimen was collected (specimen collection date; acute specimen collection date was used for seroconversions).

Influenza A

There were **63** cases of Influenza A reported this season in Manitoba.

- Refer to **Table 1a** 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, 2000/2001 to 2005/2006.

Influenza B

There were **25** cases of Influenza B reported this season in Manitoba.

- Refer to **Table 1b** 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 4** for an illustration of the number of laboratory-confirmed cases by month and year in Manitoba, 2000/2001 to 2005/2006.

SUSPECTED or CONFIRMED REPORTS OF INFLUENZA OUTBREAKS

Reports of suspected or confirmed influenza outbreaks are directed to the CDC Unit by:

- a phone call/email from public health staff within a RHA
- a phone call/email from CPL advising of the assignment of an outbreak code
- completion and submission of an outbreak form

There were **36** outbreaks of respiratory illness reported to the CDC Unit since the beginning of flu season; 13 of which were lab confirmed as Influenza. Twelve of the confirmed outbreaks were Influenza A and occurred among residents and/or staff of personal care homes throughout the province. Three schools reported outbreaks of influenza-like illness, although only one was lab-confirmed as Influenza B.

NATIONAL FLU WATCH PROGRAM

Manitoba Health participates in the National Flu Watch Program co-ordinated by Health 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 in Manitoba: South Eastman, Central, Brandon, Winnipeg, Assiniboine, Interlake, Norman and Burntwood. The CDC Unit receives weekly reports from Health Canada presenting the provincial ILI rate and the specific data for each of the participating sentinel physicians.

For the 2005/2006 season, ILI in the general population was 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:

- Chief Medical Examiner,
- Medical Officers of Health in the Regional Health Authorities, or
- Infection Control Practitioners in long term care facilities
- There were **five** influenza-related death reported this season, all among individuals with other health concerns for which respiratory or flu-like illness may have contributed to their deaths.

CONTACT INFORMATION

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

- Epidemiology: Dr. Carole Beaudoin (204) 788-6786
- Programme: Jill Chambers (204) 788-6330

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.hc-sc.gc.ca/hpb/lcdc/bid/respdis/fluwatch>

Table 1a. Number of Cases of Influenza A by Regional Health Authority and Week of Specimen Collection, Manitoba 2005/2006

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

RHA	23/10-29/10	30/10-31/12	01/01-07/01	08/01-14/01	15/01-21/01	22/01-28/01	29/01-04/02	05/02-11/02	12/02-18/02	19/02-25/02	26/02-04/03	05/03-11/03	12/03-18/03	19/03-25/03	26/03-01/03	02/04-08/04	09/04-15/04	16/04-22/04	23/04-29/04	30/04-06/05	07/05-13/05	14/05-20/05	TOTAL	
Winnipeg	0	0	0	1	0	0	0	4	0	1	3	0	5	2	1	3	4	0	0	0	0	0	0	24
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	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
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	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3
Central	0	0	0	0	0	1	0	3	0	0	1	2	0	1	1	3	0	0	0	0	0	0	0	12
Assiniboine	0	0	0	0	0	0	1	13	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	19
Parkland	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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	2	0	0	0	0	0	2
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	1	0	0	1	0	1	1	21	0	1	4	5	9	3	2	6	6	2	0	0	0	0	0	63

Table 1b. Number of Cases of Influenza B by Regional Health Authority and Week of Specimen Collection, Manitoba 2005/2006

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

RHA	23/10-29/10	30/10-31/12	01/01-07/01	08/01-14/01	15/01-21/01	22/01-28/01	29/01-04/02	05/02-11/02	12/02-18/02	19/02-25/02	26/02-04/03	05/03-11/03	12/03-18/03	19/03-25/03	26/03-01/03	02/04-08/04	09/04-15/04	16/04-22/04	23/04-29/04	30/04-06/05	07/05-13/05	14/05-20/05	TOTAL
Winnipeg	0	0	0	0	0	0	1	2	1	1	4	1	0	1	0	1	0	0	0	0	0	0	12
Brandon	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
North Eastman	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Eastman	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Interlake	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	1	0	0	0	0	0	0	0	0	0	0	1
Assiniboine	0	0	0	0	0	5	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	7
Parkland	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Norman	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	1	0	1	0	0	0	0	0	0	0	0	0	2
Churchill	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	5	1	2	1	2	6	3	2	2	0	1	0	0	0	0	0	0	25

Figure 1. Epidemic Curve for Influenza A and B by Specimen Collection Date, Manitoba 2005/2006

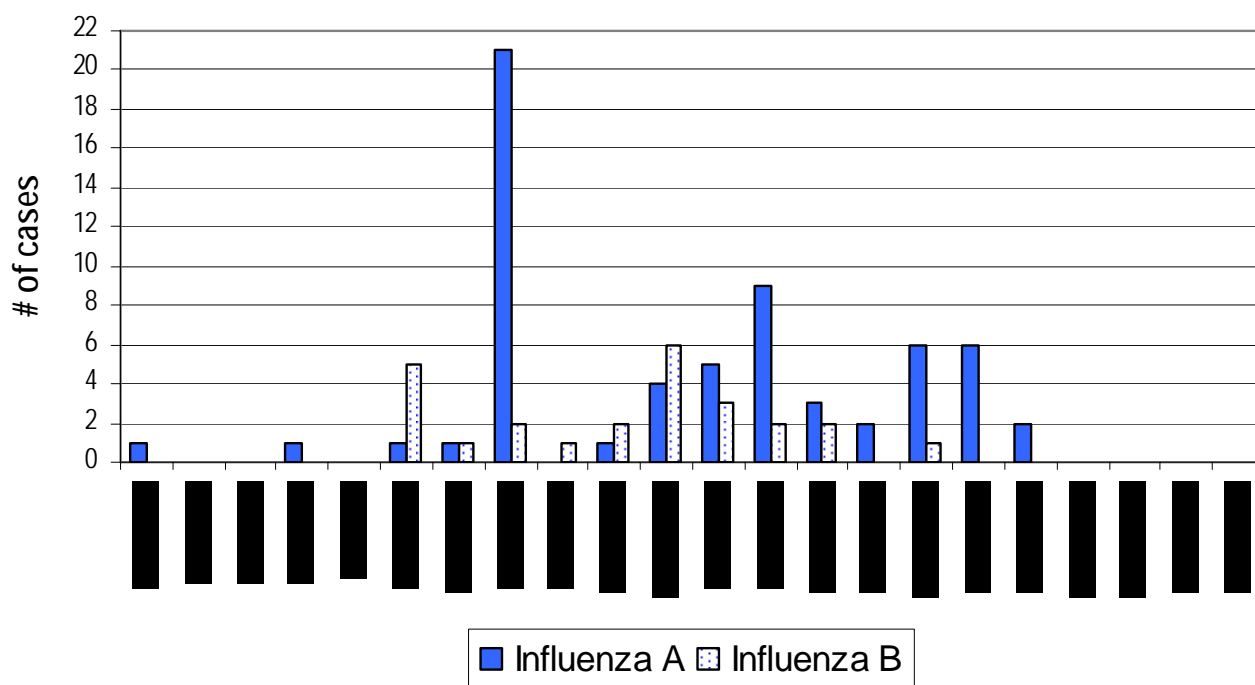


Table 2. Number of Cases of Influenza A and B by Age Group, Manitoba 2005/2006

Age Group	Influenza A		Influenza B	
	# of cases	% of total	# of cases	% of total
<2 yrs	6	9.5%	8	32.0%
2-4 yrs	0	0.0%	0	0.0%
5-9 yrs	3	4.8%	0	0.0%
10-14 yrs	3	4.8%	3	12.0%
15-19 yrs	1	1.6%	6	24.0%
20-24 yrs	0	0.0%	3	12.0%
25-29 yrs	0	0.0%	0	0.0%
30-39 yrs	4	6.3%	0	0.0%
40-49 yrs	6	9.5%	3	12.0%
50-59 yrs	2	3.2%	1	4.0%
60-69 yrs	4	6.3%	0	0.0%
70-79 yrs	7	11.1%	0	0.0%
>79 yrs	27	42.9%	1	4.0%
missing	0	0.0%	0	0.0%
TOTAL	63		25	

Figure 2. Age Distribution of Influenza Cases, Manitoba 2005/2006

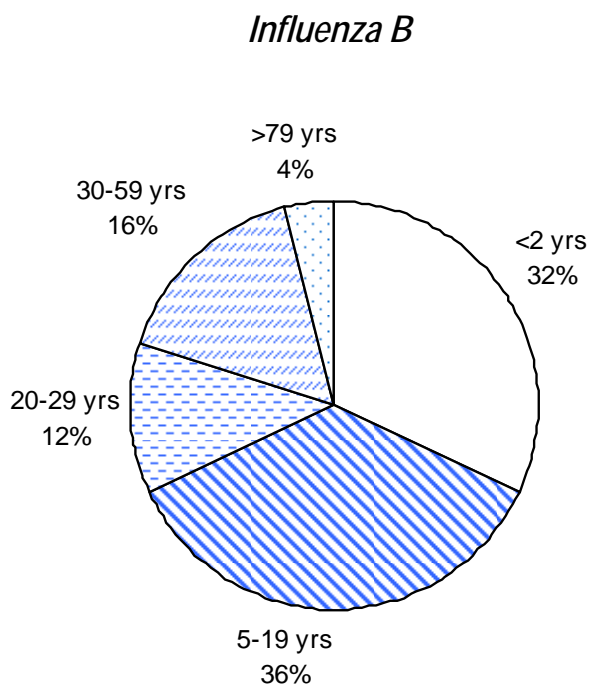
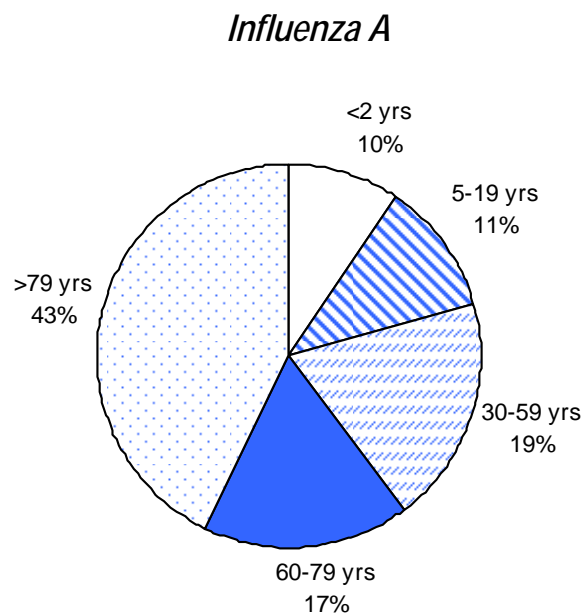


Figure 3. Influenza A: Number of Laboratory-Confirmed Cases, 2000/2001 – 2005/2006*

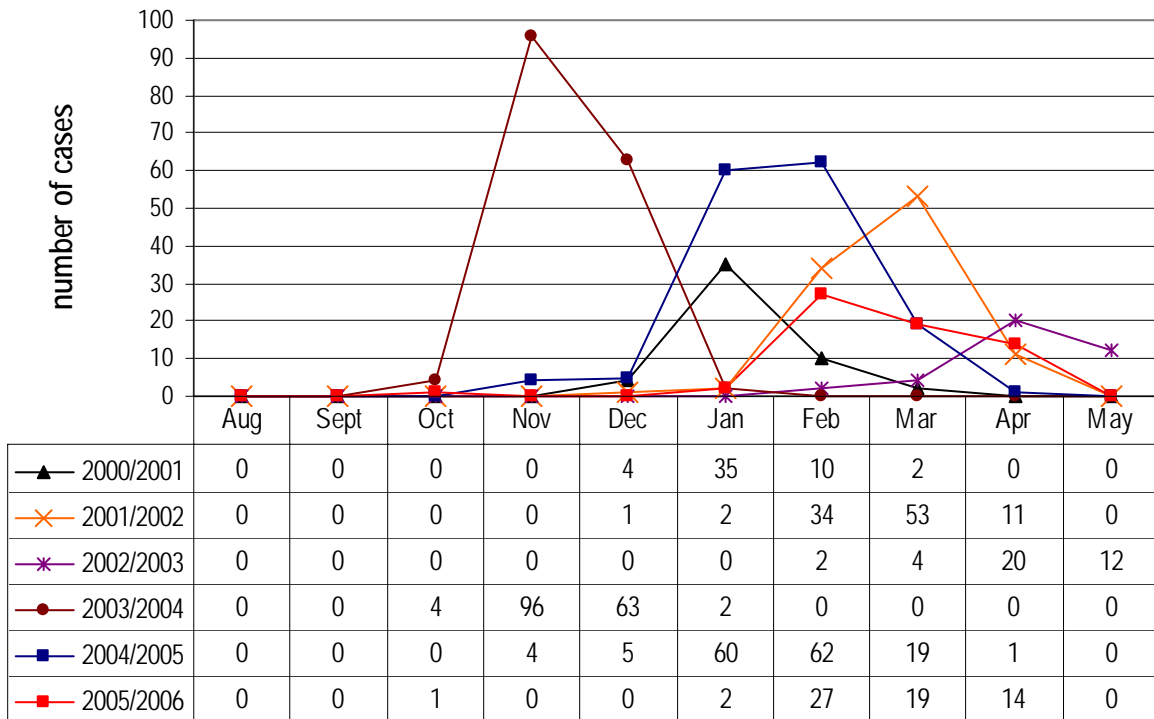
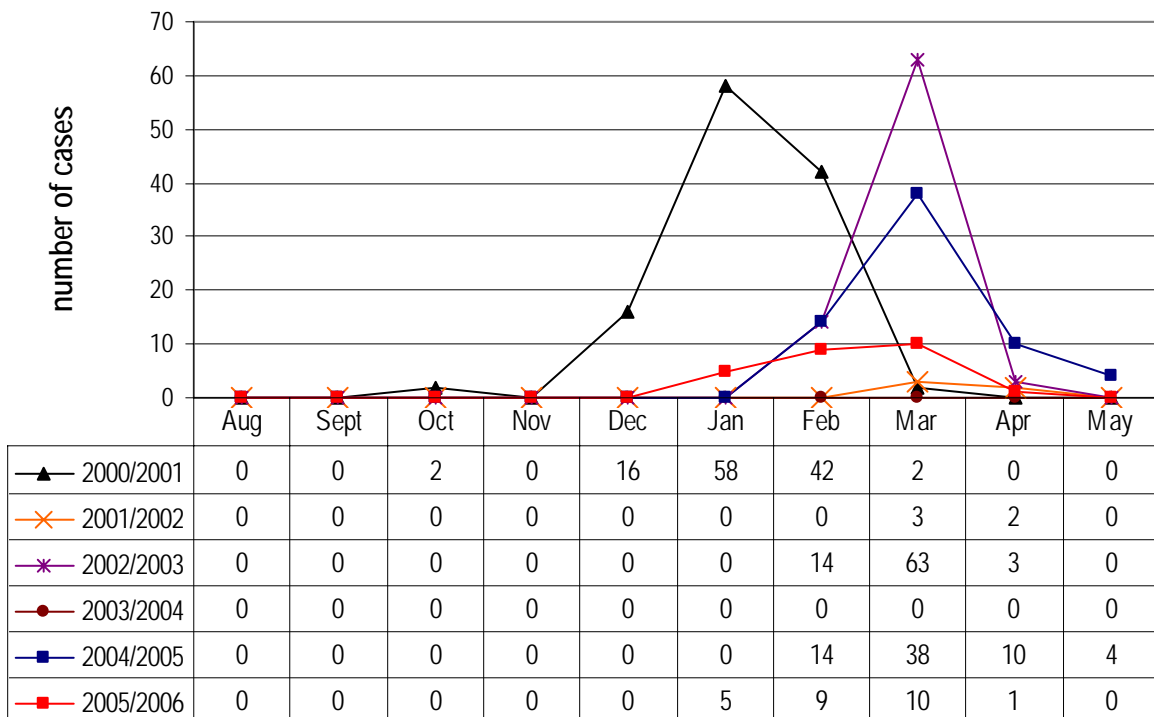


Figure 4. Influenza B: Number of Laboratory-Confirmed Cases, 2000/2001 – 2005/2006*



*Based on specimen collection date

Figure 5. Influenza-Like Illness (I.L.I.) Rate and Number of Influenza A and B Cases by Week of Specimen Collection, 2005/2006 Season

