

INFLUENZA IN MANITOBA – 2007/2008 SEASON

Wednesday, June 25, 2008

Dear Colleague,

The following report details influenza activity in Manitoba from the start of the 2007/2008 flu season. The Communicable Diseases Control Branch of Manitoba Health received its first laboratory-confirmed positive case of influenza for the season during the week of December 23rd, 2007 to December 29th, 2007. This flu season, there have been **thirty-nine** lab-confirmed cases of Influenza B and **seventy-nine** lab-confirmed cases of Influenza A in Manitoba.

To date in the province, **nine** cases have been characterised, two of which were found to be B/Florida/04/2006-like and seven of which were found to be antigenically similar to A/Solomon Islands/3/2006. A/Solomon Islands/03/2006-like virus is the recommended H1N1 component for the 2007/2008 influenza vaccine. B/Florida/04/2006-like virus which belongs to the B/Yamagata lineage is the recommended influenza B component for the 2008 Southern Hemisphere influenza vaccine. Since September 1, 2007, National Microbiology Laboratory (NML) reports that it has antigenically characterized 1334 influenza viruses that were received from Canadian provincial and hospital laboratories: 231 influenza A (H3N2), 463 influenza A (H1N1) and 640 influenza B viruses.

LABORATORY-CONFIRMED INFLUENZA

- Reports of culture isolations and EIA detections from Cadham Provincial Laboratory (CPL) are forwarded to the Communicable Disease Control (CDC) Branch 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 Branch weekly. Information contained within this update is based on positive lab reports received at the CDC Branch as of **June 25th, 2008**.

- 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 **79** 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 4** for an illustration of the number of lab-confirmed cases by month and year in Manitoba, 2002/2003 to 2007/2008.

Influenza B

- There have been **39** cases 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 and Figure 2** for a summary of cases by age group.

- Refer to **Figure 5** for an illustration of the number of lab-confirmed cases by month and year in Manitoba, 2002/2003 to 2007/2008.

SUSPECTED/CONFIRMED REPORTS OF INFLUENZA OUTBREAKS

- Reports of suspected/confirmed influenza outbreaks are directed to the CDC Branch 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 25th, 2008** there have been **six** lab-confirmed outbreaks of Influenza A and **five** lab-confirmed outbreaks of Influenza B reported to the CDC Branch since the beginning of the current flu season. **Ten** outbreaks were in Long-term Care Homes/Hospitals; of which seven were reported by the WRHA and three by the Interlake. The **eleventh** outbreak was reported by a school in N. Eastman.

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 lab-confirmation of influenza, this program relies on weekly reports of influenza-like illness (ILI) as reported by 15 sentinel physicians reflecting 9 health authorities: North Eastman, South Eastman, Central, Parkland, Winnipeg, Assiniboine, Burntwood, Brandon, and Interlake. The CDC Branch 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 **2007/2008** 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 6** for an illustration of the ILI rate as it relates to the number of lab-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:

- Epidemiology: Myrna Dyck (204) 788-6786
- Programme: Jennifer McTaggart (204) 788-6330

For other CDC Branch 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 2007/2008

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

Week	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOTAL
RHA	23/12-29/12	30/12-05/01	06/01-12/01	13/01-19/01	20/01-26/01	27/01-02/02	03/02-09/02	10/02-16/02	17/02-23/02	24/02-01/03	02/03-08/03	09/03-15/03	16/03-22/03	23/03-29/03	30/03-05/04	06/04-12/04	13/04-19/04	20/04-26/04	27/04-03/05	04/05-10/05	11/05 - 17/05	TOTAL
Winnipeg	0	0	0	4	3	3	3	3	5	4	6	0	0	0	5	0	1	0	0	0	0	37
Brandon	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
North Eastman	0	0	0	0	0	0	0	1	3	0	1	0	0	0	0	0	0	0	0	0	0	5
South Eastman	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3
Interlake	0	0	0	0	0	0	0	1	1	3	3	0	0	0	0	0	0	0	0	0	0	8
Central	0	0	0	0	0	0	0	1	0	3	1	0	0	0	0	0	0	0	0	0	0	5
Assiniboine	0	0	0	0	0	1	2	0	1	4	0	0	0	1	0	0	0	0	0	0	0	9
Parkland	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
Norman	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Burntwood/Churchill	1	0	0	2	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	8
MANITOBA	1	1	0	6	3	4	8	6	14	15	12	1	0	1	6	0	1	0	0	0	0	79

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

Week	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOTAL
RHA	23/12-29/12	30/12-05/01	06/01-12/01	13/01-19/01	20/01-26/01	27/01-02/02	03/02-09/02	10/02-16/02	17/02-23/02	24/02-01/03	02/03-08/03	09/03-15/03	16/03-22/03	23/03-29/03	30/03-05/04	06/04-12/04	13/04-19/04	20/04-26/04	27/04-03/05	04/05-10/05	11/05 - 17/05	TOTAL
Winnipeg	0	0	0	0	0	0	0	2	4	1	0	0	0	0	0	1	2	5	0	0	0	15
Brandon	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	0	0	0	0	0	0
South Eastman	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3
Interlake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Central	1	0	0	1	1	2	0	1	1	0	1	1	0	1	0	0	0	0	0	0	0	10
Assiniboine	0	0	0	0	0	0	0	0	0	3	2	2	0	1	0	0	0	0	0	0	0	8
Parkland	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
Burntwood/Churchill	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
MANITOBA	1	0	0	1	1	3	1	4	5	4	3	4	0	2	0	3	2	5	0	0	0	39

Figure 1. Epidemic Curve for Influenza A and B by Specimen Collection Date, Manitoba 2007/2008

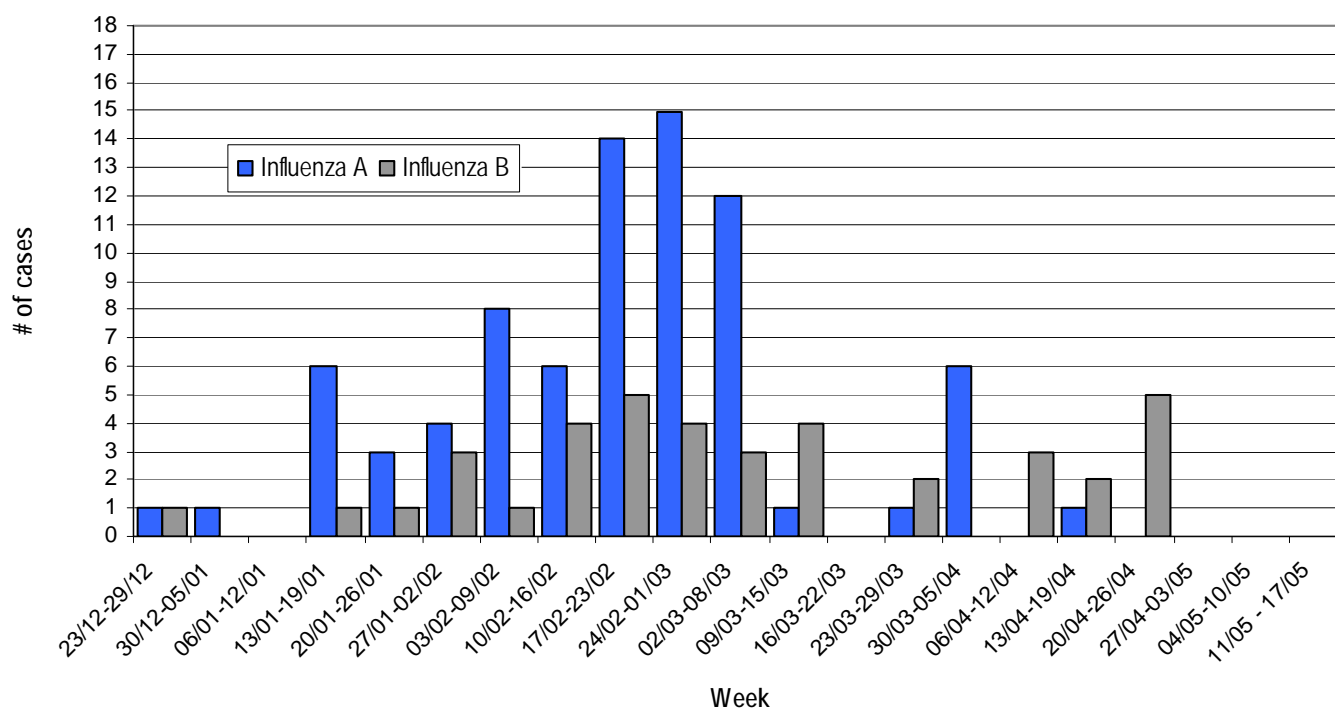


Table 2. Number of Cases of Influenza A and B by Age Group, Manitoba 2007/2008

Age Group	Influenza A		Influenza B	
	# of cases	% of total	# of cases	% of total
<2 yrs	17	21.5%	1	2.6%
2-4 yrs	5	6.3%	1	2.6%
5-9 yrs	9	11.4%	5	12.8%
10-14 yrs	1	1.3%	3	7.7%
15-19 yrs	3	3.8%	0	0.0%
20-24 yrs	6	7.6%	1	2.6%
25-29 yrs	3	3.8%	0	0.0%
30-39 yrs	7	8.9%	6	15.4%
40-49 yrs	7	8.9%	3	7.7%
50-59 yrs	5	6.3%	4	10.3%
60-69 yrs	2	2.5%	0	0.0%
70-79 yrs	3	3.8%	5	12.8%
>79 yrs	11	13.9%	10	25.6%
missing	0	0.0%	0	0.0%
TOTAL	79		39	

Figure 2. Age Distribution of Influenza A Cases, Manitoba 2007/2008

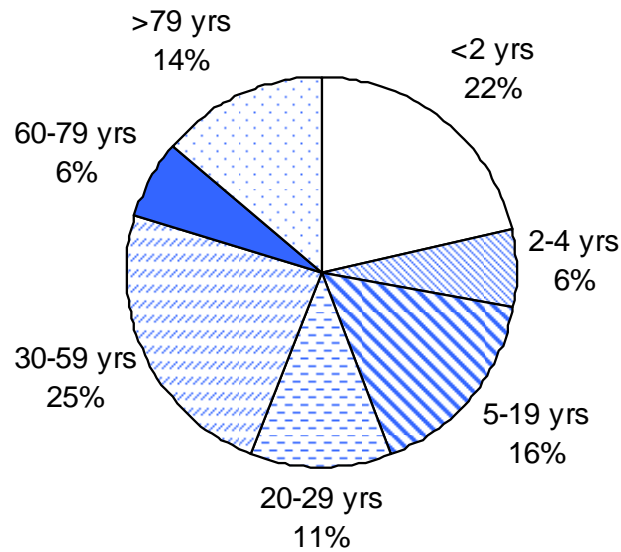


Figure 3. Age Distribution of Influenza B Cases, Manitoba 2007/2008

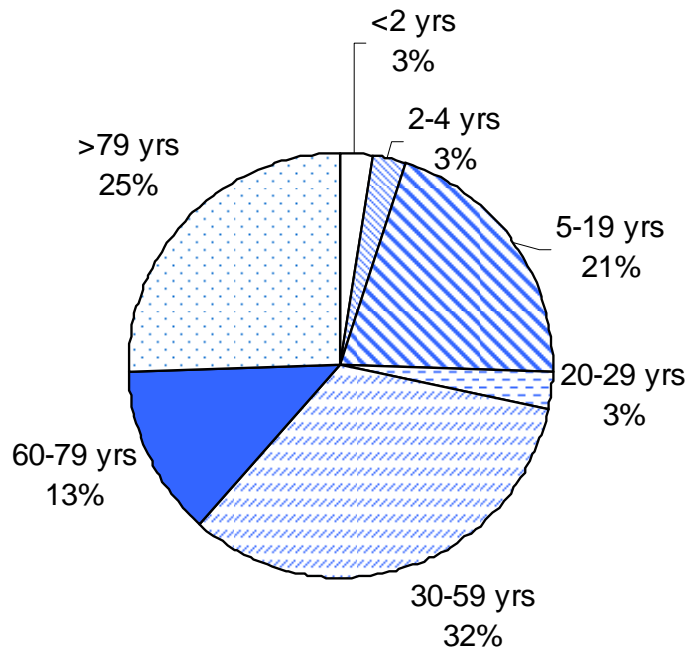


Figure 4. Influenza A: Number of Laboratory-Confirmed Cases, 2002/2003-2007/2008

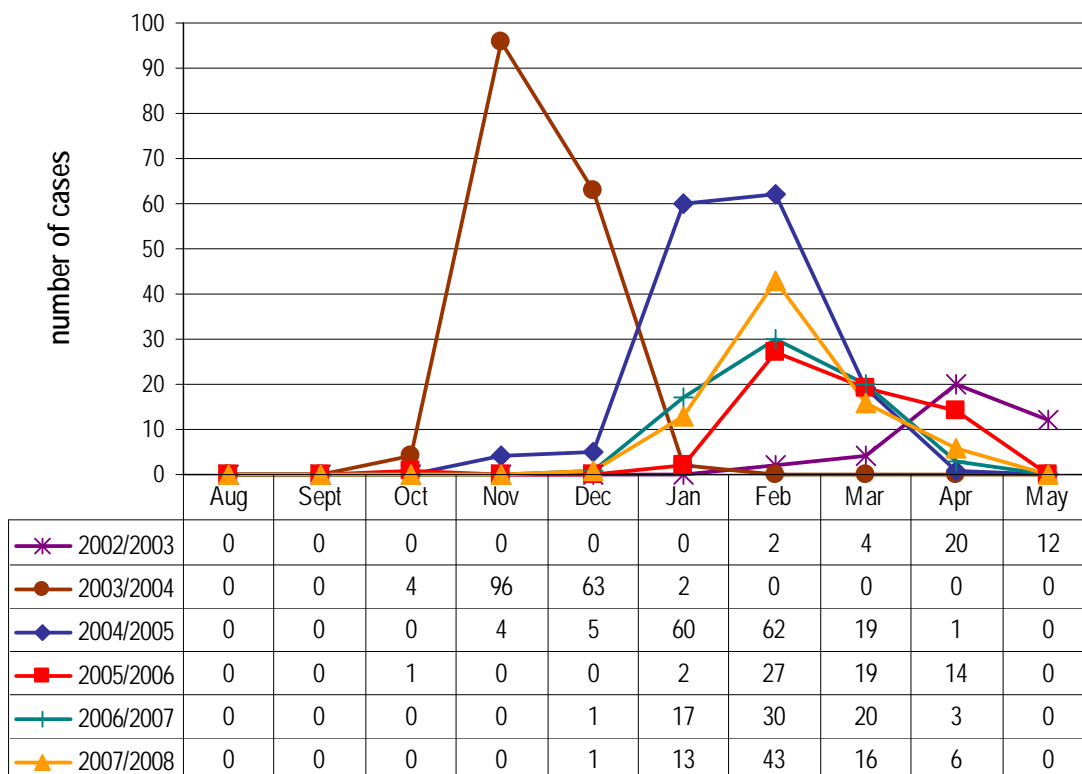


Figure 5. Influenza B: Number of Laboratory-Confirmed Cases, 2002/2003-2007/2008

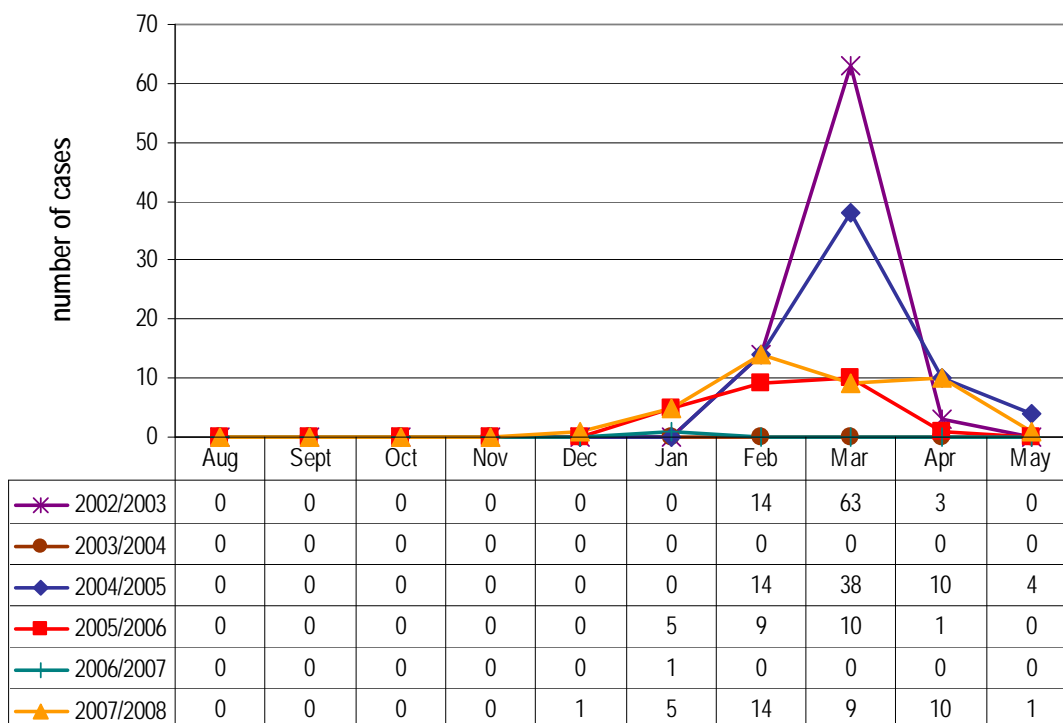
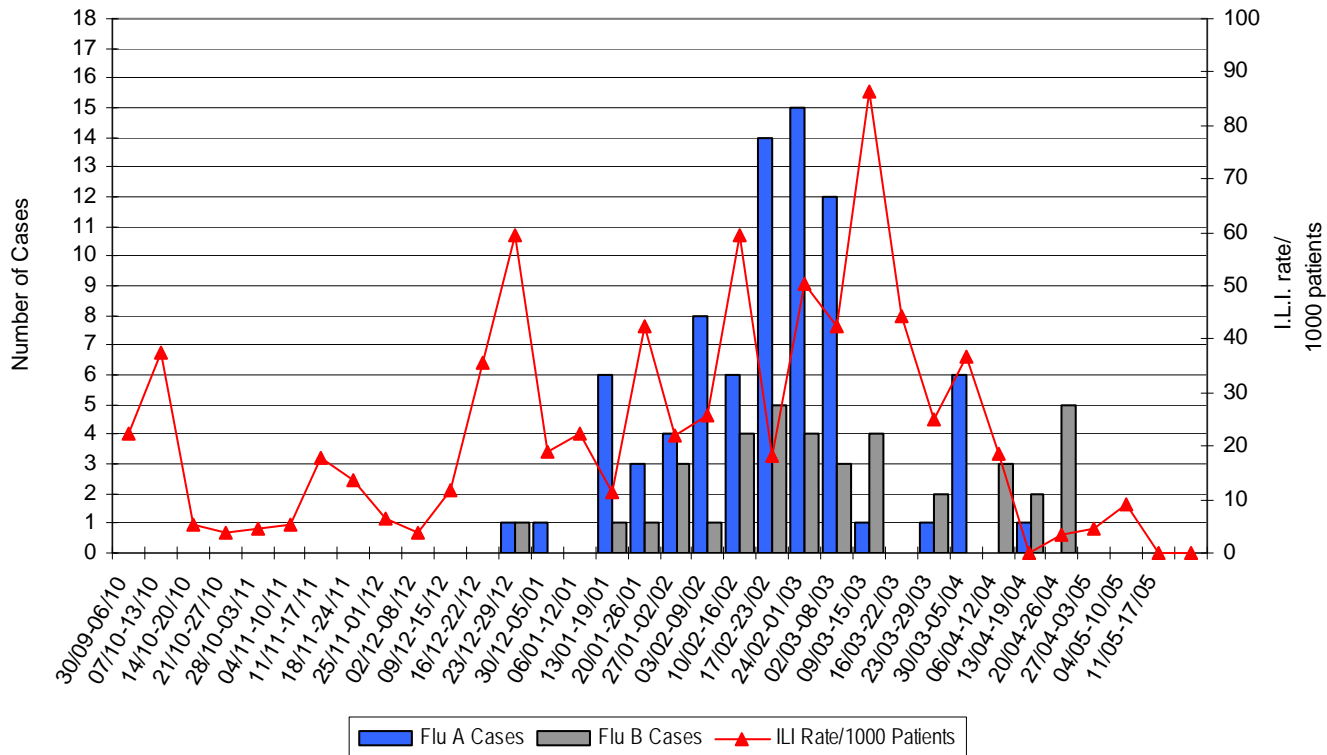


Figure 6. Influenza-Like Illness (I.L.I.) Rate* and Number of Influenza A and B Cases by Week of Specimen Collection, 2007/2008 Season



*Most recent I.L.I. rate is based upon the reporting of 5 sentinel physicians in the province.