

## Manitoba Monthly Surveillance Unit Report

Reported up to May 31, 2010

### Highlights:

#### 1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 62% of all non-STBBI related communicable diseases reported to Manitoba Health during May 2010.

- The number of reported cases of MRSA was above the statistically expected range in May 2010 – 265 positive lab-confirmed cases reported; less than 221 expected in an average month.

#### 2. Sexually Transmitted & Blood-Borne Infections (STBBI)

There were 569 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in May 2010:

- 471 reported cases of chlamydia (Ct) only
- 56 reported cases of gonorrhoea (GC) only
- 37 reported co-infections of Ct and GC and
- 5 reported cases of syphilis

Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 46% of all reported chlamydia cases in the province.

The five syphilis cases in May 2010 include both infectious and non-infectious cases, as well as those requiring further follow-up to determine their status.

In May 2010, there were no cases of Hepatitis B virus (HBV), 23 cases of Hepatitis C virus (HCV) and 9 cases of HIV newly reported in Manitoba.

#### 3. Other Communicable Diseases

The number of reported cases in May 2010 was within or below the statistically expected range for these reported communicable diseases with the exception of the following diseases:

- Legionella – 1 positive lab-confirmed case reported; less than 1 expected in an average month.
- Measles – 1 positive lab-confirmed case reported; less than 1 expected in an average month.
- Pertussis – 10 positive lab-confirmed cases reported; less than 9 expected in an average month.
- Q Fever – 2 positive lab-confirmed cases reported; less than 1 expected in an average month.

- Shigellosis – 4 positive lab-confirmed cases reported; less than 4 expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during April, May, and June, 2005-2009.

## **Explanatory Notes:**

### **General:**

Each monthly communicable disease report includes the number of cases of notifiable communicable diseases reported by lab or health provider during each individual month. Data for the monthly summary are aggregated based on the earliest of: symptom onset date, specimen collection date, or report date. For the majority of cases, the date used will be the specimen collection date as symptom onset date is frequently not recorded. Some discrepancy of numbers may be based on reporting delays.

The observed numbers of cases are compared to the statistically expected range for each reportable communicable disease. This involves comparing the current month's case counts to the average case counts for the same month, one month subsequent and one month prior for the previous five years. These same months over the five years are used to determine the expected range of cases using the statistical calculation of standard deviation. Using this specific monthly pattern allows for adjustment within the statistics for both seasonality and cyclical disease patterns.

The year-to-date case counts are based on the calendar year.

The disease data reported in the monthly report has not been analyzed for severity or associated deaths at this time.

### **Disease specific information:**

Methicillin-resistant *Staphylococcus aureus* (MRSA) positive results within Manitoba include both individuals who are symptomatic of infection and colonized individuals who have no symptoms and are mostly diagnosed during admission screening activities at facilities. If facilities increase their screening activities, it would usually result in a rise in colonized MRSA cases.

A new case of Hepatitis C Virus (HCV) infection is defined as a first positive test for an identifiable individual.

A new case of Human Immunodeficiency Virus (HIV) infection is defined as a positive test with a unique code that has not been previously linked to a positive test result in Manitoba. Positive HIV tests included in this month's statistics include both nominal and non-nominal testing results.

The number of Tuberculosis cases year-to-date may not equal the sum of cases reported for each month of this year. As new test results are received, there may be a change in diagnosis. Occasionally, diagnosis dates are updated, which also contributes to total numbers varying from month to month.

**SUMMARY OF COMMUNICABLE DISEASE FOR May 2010**

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2009	2010	Expected*	Ex. Range**	2009	2010
006.9	AMEBIASIS	9	3	5	1-9	20	17
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-0		
005.8	B. CEREUS			0	0-1	1	
320.1	BAC. MENINGITIS - PNEUM			0	0-1	1	
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	18	14		***	66	46
116.0	BLASTOMYCOSIS		2		***	2	3
005.1	BOTULISM				***		
023	BRUCELLOSIS	1		0	0-1	1	
005.2	C. PERFRINGENS	2		0	0-1	2	
008.43	CAMPYLOBACTER	19	20	20	5-35	92	77
558.2	CLOSTRIDIUM DIFFICILE	71	70		***	361	384
046.1	CREUTZFELD-JACOB DISEASE	1			***	2	
007.8	CRYPTOSPORIDIOSIS			1	0-3	9	6
061.0	DENGUE FEVER			0	0-0		
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPHTHERIA CARRIERS		2	0	0-2	1	6
032	DIPHTHERIA CASES			0	0-0		4
123.4	DIPHYLLOBOTHRIUM SPP			1	0-3	1	
008.0	E. COLI-VEROTOXIGENIC	3	4	5	0-14	17	18
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	12	8	10	3-17	45	46
320.0	H.INFLUENZAE (CSF)			0	0-0		
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1	2	
041.59	HAEM. INFLUENZAE (non-B)				***	1	
480.8	HANTA VIRUS			0	0-1		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0		
070.1	HEPATITIS A	2		1	0-3	9	2
070.3	HEPATITIS B			1	0-3	2	
070.51	HEPATITIS C	30	23	31	16-46	159	124
487.1A	INFLUENZA A****	24			***	77	
487.1B	INFLUENZA B	2			***	38	
482.83	LEGIONELLA		1	0	0-0		2
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-1		
027.0	LISTERIA MONOCYTOGENES	1	1	0	0-1	1	1
088.81	LYME DISEASE			0	0-2		
084	MALARIA	1		2	0-6	7	4
055.9	MEASLES		1	0	0-0		1
036.0	MENINGOCOCCAL CSF			0	0-1		
036.82	MENINGOCOCCAL ARTHROPATHY				***	2	
036.2	MENINGOCOCCEMIA BLOOD			0	0-0		2
B95.6	MRSA	147	265	138	56-220	892	1196
072.9	MUMPS	1		1	0-3	4	1
036.89	N.MENINGITIDIS OTHER			0	0-0	4	
728.86	NECROTIZING FASCIITIS		1	1	0-4	3	5
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	3	10	2	0-8	16	20
038.2	PNEUM. SEPTICEMIA	15	15	10	3-17	51	70
073.9	PSITTACOSIS			0	0-0		

\* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years.

\*\* Mean +/- 2 standard deviations of the mean.

\*\*\* Data collected for less than 5 years.

\*\*\*\* Excludes Influenza A Pandemic H1N1 (pH1N1). There were no cases of pH1N1 in May 2010.

**SUMMARY OF COMMUNICABLE DISEASE FOR May 2010**

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2009	2010	Expected*	Ex. Range**	2009	2010
083.0	Q FEVER		2	0	0-0	1	4
056.9	RUBELLA	2		0	0-1	2	1
771.0	RUBELLA CONGENITAL			0	0-0		
041.2	S.PNEUM.OTHER		2	1	0-3	3	10
003.0	SALMONELLA	26	9	18	6-30	95	106
120	SCHISTOSOMIASIS			0	0-0		
004	SHIGELLOSIS	1	4	1	0-3	14	13
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***		
481.9	STREP PNEUMONIA - PR			0	0-0		
041.1	STREP PYOGENES - OTHER	5	3		***	36	33
711.0	STREP.PNEUM.ARTHRITIS			0	0-1		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-1		
481	STREPTOCOCCUS PNEUMONIAE			0	0-1		
127.2	STRONGYLOIDES		2	1	0-5	4	6
037	TETANUS			0	0-0		1
130.9	TOXOPLASMOSIS	1	1	0	0-1	1	2
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI			0	0-1		
013	TUBERCULOSIS - NON-RESP.	3	3	2	0-4	10	15
010	TUBERCULOSIS - PRIM.	2	1	1	0-3	6	2
011	TUBERCULOSIS - RESP	13	11	9	1-17	47	37
021.9	TULAREMIA	1		0	0-1	1	
002.0	TYPHOID			0	0-1	1	1
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	5	64		***	24	127
005.4	VIBRIO PARAHAEMOLYTICUS				***		
070.59	VIRAL HEP. OTHER				***		
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL				***		
008.44	YERSINIA ENTEROCOLITICA			1	0-2	2	4
		<b>421</b>	<b>542</b>			<b>2134</b>	<b>2399</b>

\* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years.  
 \*\* Mean +/- 2 standard deviations of the mean.  
 \*\*\* Data collected for less than 5 years.

**SUMMARY OF COMMUNICABLE DISEASE BY AGE AND GENDER FOR MAY 2010**

ICD9	Disease Name	<1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-49		50-59		60-69		70-79		80+		Missing Age/Gender	Total
		F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M		
006.9	AMEBIASIS				1	1	1																						3
038.0	BETA STREP SEPTICEMIA											1				1	1	1			2	1		1	3	2	1		14
116.0	BLASTOMYCOSIS								1												1							2	
008.43	CAMPYLOBACTER				6				1		1			2	1	1		2		1	2	1		1	1			20	
558.2	CLOSTRIDIUM DIFFICILE									2				1	2	3		2	2	8	2	5	4	5	7	20	7		70
V02.4	DIPHTHERIA CARRIERS		1				1																					2	
008.0	E. COLI 0157										1			1	1				1									4	
007.1	GIARDIA LAMBLIA			2	2		1											1	2									8	
070.51	HEPATITIS C									1		2	1			1		3	4	2	7		1				1	23	
482.83	LEGIONELLA																					1						1	
027.0	LISTERIA MONOCYTOGENES																			1								1	
055.9	MEASLES				1																							1	
B95.6	MRSA	4	3	12	11	10	7	8	10	8	9	13	12	7	8	11	20	15	17	11	14	10	9	9	7	13	7		265
728.86	NECROTIZING FASCIITIS																						1					1	
033.0	PERTUSSIS	1	3			1	3				1						1											10	
038.2	PNEUM. SEPTICEMIA					1				1				1	1	2		1	1		2	1	1	1		2		15	
083.0	Q. FEVER																							1				2	
003.0	SALMONELLA			1						1			1	2				1	1	1	1							9	
004	SHIGELLOSIS					1	1											1			1							4	
041.1	STREP PYOGENES - OTHER ST	1									1				1													3	
041.2	STREP.PNEUM.OTHER																1	1										2	
127.2	STRONGYLOIDIASIS																	1				1						2	
130.9	TOXOPLASMOSIS													1														1	
013	TUBERCULOSIS - NON-RESP.													1	1					1								3	
010	TUBERCULOSIS - PRIM.					1																						1	
011	TUBERCULOSIS - RESP									1			1				2	3			2	1						11	
B96.8	VANCOMYCIN RES. ENTER.				1								2		1		1		4	4	5	3	8	6	8	9	6	6	64
		6	7	15	22	14	15	8	12	14	13	18	15	16	16	21	25	36	32	31	37	29	22	25	28	43	21		<b>542</b>

**SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR MAY 2010**

ICD9	Disease/Infection	Winnipeg	Brandon	N. Eastman		S. Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP**	Missing	TOTAL
				F	P	F	P	F	P	F	P	F	P	F	P	F	P						
	<b>Case Referred to:*</b>																						
006.9	AMEBIASIS	2															1						3
038.0	BETA STREP SEPTICEMIA	8	1					2		1				1					1				14
116.0	BLASTOMYCOSIS	2																					2
008.43	CAMPYLOBACTER	8	2			4		1		1			1					2	1				20
558.2	CLOSTRIDIUM DIFFICILE	38	10		2	8		1		5			4		1		1						70
V02.4	DIPHTHERIA CARRIERS			1														1					2
008.0	E. COLI 0157	1								1		1		1									4
007.1	GIARDIA LAMBLIA	4								2		2											8
070.51	HEPATITIS C	11	2	1		1		3		3		1		1									23
482.83	LEGIONELLA	1																					1
027.0	LISTERIA MONOCYTOGENES	1																					1
055.9	MEASLES	1																					1
B95.6	MRSA	92	2	5	4	3	2	5		4		4		3	1	22	109	8			1		265
728.86	NECROTIZING FASCIITIS							1															1
033.0	PERTUSSIS															1	9						10
038.2	PNEUM. SEPTICEMIA	10		1				1	1			1						1					15
083.0	Q. FEVER	1	1																				2
003.0	SALMONELLA	6	1									1		1									9
004	SHIGELLOSIS																	4					4
041.1	STREP PYOGENES - OTHER ST	2																1					3
041.2	STREP.PNEUM.OTHER	2																					2
127.2	STRONGYLOIDIASIS	2																					2
130.9	TOXOPLASMOSIS	1																					1
013	TUBERCULOSIS - NON-RESP.	2						1															3
010	TUBERCULOSIS - PRIM.																	1					1
011	TUBERCULOSIS - RESP	8		1														2					11
B96.8	VANCOMYCIN RES. ENTER.	48				2		8		1				1		1	2	1					64
		<b>251</b>	<b>19</b>	<b>8</b>	<b>7</b>	<b>18</b>	<b>3</b>	<b>23</b>	<b>18</b>		<b>15</b>		<b>9</b>	<b>1</b>	<b>26</b>	<b>132</b>	<b>11</b>		<b>1</b>			<b>542</b>	

\* F=Federal Jurisdiction (First Nations and Inuit Health); P=Provincial Jurisdiction

\*\* OOP=Out of Province

**STBBI Infection Summary Report - May 2010**

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2009	2010	2009	2010
All Chlamydia Infections	513	508	2843	2755
All Gonorrhoea Infections (including PRNG)	79	93	525	439
All Syphilis Infections*	3	5	19	34
Gonorrhoea & Chlamydia Co-infections	20	37	223	189
HIV	4	9	46	50

**Total Number of STBBI Cases by Age and Gender - May 2010**

Disease Name	<1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-49		50-59		60-69		70-79		80+		Missing age/gender	TOTAL
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M				
Chlamydia Only Cases					1	5	2	119	48	99	41	54	36	25	20	11	5	1	3			1					471	
Gonorrhoea Only Cases									6	2	6	8	6	6	8	9	2	2				1					56	
Syphilis Only Cases												2									1	2					5	
GC and CT Cases						1			9	3	7	2	6	3	2	2		1		1							37	
<b>TOTAL</b>					1	6	2	134	53	112	51	68	45	35	31	13	8	1	4	1	4						569	
HIV												1				2	2	2			1	1					9	

**Regional STBBI Distribution - May 2010**

Disease/Infection	Winnipeg	Brandon	N. Eastman		S. Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP***	Missing	TOTAL	
			F	P	F	P	F	P	F	P	F	P	F	P	F	P							
<b>Case Referred to:**</b>																							
All Chlamydia Infections	277	15	8	2	1	14	9	13	1	17		19	3	11	3	34	54	19		7		1	508
All Gonorrhoea Infections	41	3	1			2	2			1		1		1	3	8	18	8		3		1	93
All Syphilis Infections	2							1						1								1	5
GC and CT Infections	13	2	1			1	2							1	1	2	9	3		2			37

\* The five cases in May 2010 include both infectious and non-infectious cases, as well as those requiring further follow-up to determine their status.

\*\* F=Federal Jurisdiction (First Nations and Inuit Health); P=Provincial Jurisdiction

\*\*\* OOP=Out of Province