

Manitoba Monthly Surveillance Unit Report

Reported up to June 30, 2010

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 65% of all non-STBBI related communicable diseases reported to Manitoba Health during June 2010.

- The number of reported cases of MRSA was above the statistically expected range in June 2010 – 269 positive lab-confirmed cases reported; less than 246 expected in an average month.

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

There were 561 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in June 2010:

- 497 reported cases of chlamydia (Ct) only
- 27 reported cases of gonorrhoea (GC) only
- 31 reported co-infections of Ct and GC and
- 6 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 six syphilis cases in June 2010 include both infectious and non-infectious cases, as well as those requiring further follow-up to determine their status.

In June 2010, there were no cases of Hepatitis B virus (HBV), 29 cases of Hepatitis C virus (HCV) and 14 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

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

- Ascariasis (roundworm) – 1 positive lab-confirmed case reported; less than 1 expected in an average month.
- Meningococemia (blood) – 1 positive lab-confirmed case reported; less than 1 expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during May, June, and July, 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 June 2010

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2009	2010	Expected*	Ex. Range**	2009	2010
006.9	AMEBIASIS	5	3	4	0-9	25	21
022	ANTHRAX				***		
127.0	ASCARIASIS		1	0	0-0		1
005.8	B. CEREUS	1		0	0-1	2	
320.1	BAC. MENINGITIS - PNEUM	1		0	0-1	2	
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	14	20		***	80	66
116.0	BLASTOMYCOSIS	1			***	3	3
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1	1	
005.2	C. PERFRINGENS			0	0-1	2	
008.43	CAMPYLOBACTER	12	27	23	10-36	104	104
558.2	CLOSTRIDIUM DIFFICILE	77	83		***	438	468
046.1	CREUTZFELD-JACOB DISEASE				***	2	
007.8	CRYPTOSPORIDIOSIS	1		2	0-6	10	6
061.0	DENGUE FEVER			0	0-0		
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-1	1	6
032	DIPHThERIA CASES			0	0-0		4
123.4	DIPHYLLOBOTHRIUM SPP		3	1	0-3	1	3
008.0	E. COLI-VEROTOXIGENIC		6	7	0-21	17	24
054.3	ENCEPHALITIS			0	0-1		
005.9	FOOD POISONING OTHER			0	0-1		
007.1	GIARDIA LAMBLIA	13	8	13	4-22	58	54
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	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0		
070.1	HEPATITIS A	1		1	0-3	10	2
070.3	HEPATITIS B	1		1	0-2	3	
070.51	HEPATITIS C	28	29	31	17-45	187	153
487.1A	INFLUENZA A****	9			***	86	
487.1B	INFLUENZA B				***	38	
482.83	LEGIONELLA		1	0	0-1		3
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0		
027.0	LISTERIA MONOCYTOGENES			0	0-1	1	1
088.81	LYME DISEASE			1	0-4		
084	MALARIA		2	2	0-6	7	6
055.9	MEASLES			0	0-0		1
036.0	MENINGOCOCCAL CSF			0	0-1		
036.82	MENINGOCOCCAL ARTHROPATHY				***		2
036.2	MENINGOCOCCEMIA BLOOD		1	0	0-0		3
B95.6	MRSA	217	269	157	69-245	1109	1465
072.9	MUMPS	1		1	0-3	5	1
036.89	N.MENINGITIDIS OTHER			0	0-0	4	
728.86	NECROTIZING FASCIITIS		3	2	0-6	3	8
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	1	6	2	0-6	17	27
038.2	PNEUM. SEPTICEMIA	15	10	9	1-17	66	80
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 June 2010.

SUMMARY OF COMMUNICABLE DISEASE FOR June 2010

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2009	2010	Expected*	Ex. Range**	2009	2010
083.0	Q FEVER			0	0-0	1	4
056.9	RUBELLA		1	0	0-1	2	2
771.0	RUBELLA CONGENITAL			0	0-0		
041.2	S.PNEUM.OTHER			1	0-3	3	10
003.0	SALMONELLA	28	7	18	6-30	123	113
120	SCHISTOSOMIASIS			0	0-0		
004	SHIGELLOSIS		1	1	0-2	14	14
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***		
481.9	STREP PNEUMONIA - PR			0	0-1		
041.1	STREP PYOGENES - OTHER	2	7		***	38	40
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-0		
481	STREPTOCOCCUS PNEUMONIAE			0	0-1		
127.2	STRONGYLOIDES		1	1	0-5	4	7
037	TETANUS			0	0-0		1
130.9	TOXOPLASMOSIS			0	0-1	1	2
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI			0	0-1		
013	TUBERCULOSIS - NON-RESP.	1	5	2	0-5	11	21
010	TUBERCULOSIS - PRIM.		1	1	0-3	6	3
011	TUBERCULOSIS - RESP	15	12	9	1-17	61	48
021.9	TULAREMIA			0	0-1	1	
002.0	TYPHOID			0	0-0	1	1
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	8	34		***	32	161
005.4	VIBRIO PARAHAEMOLYTICUS				***		
070.59	VIRAL HEP. OTHER		1		***		1
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL				***		
008.44	YERSINIA ENTEROCOLITICA			1	0-3	2	4
		452	542			2585	2944

* 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 JUNE 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
127.0	ASCARIASIS													1															1
038.0	BETA STREP SEPTICEMIA					1										2	1	2			3		2	1	2	3	3		20
008.43	CAMPYLOBACTER	1			2		2		1	1	2	1	2	3		1	4			1	1		3	1	1				27
558.2	CLOSTRIDIUM DIFFICILE	1			1							1	1		1	3	1	3	3	4	5	4	10	10	8	19	8		83
123.4	DIPHYLLOBOTHRIUM														1	1					1								3
008.0	E. COLI 0157				1				1				1					1							1		1		6
007.1	GIARDIA LAMBLIA				1	1	1	1							1	1			1				1						8
070.51	HEPATITIS C											2		1	2	6	4	3	7	1	1		1	1					29
070.59	HEPATITIS OTHER (VIRAL)																										1		1
482.83	LEGIONELLA																	1											1
084	MALARIA										1				1														2
036.2	MENINGOCOCCEMIA(MGCCEMIA)					1																							1
B95.6	MRSA	5	5	13	17	12	10	5	6	14	9	16	12	7	7	10	17	10	8	14	17	9	13	6	13	7	7		269
728.86	NECROTIZING FASCIITIS									1			1										1						3
033.0	PERTUSSIS	1	3			1		1																					6
038.2	PNEUM. SEPTICEMIA	1																1	1	1		2		1	2	1			10
056.9	RUBELLA													1															1
003.0	SALMONELLA				1				1									1	2						1	1			7
004	SHIGELLOSIS														1														1
041.1	STREP PYOGENES - OTHER ST			1												1	3		1			1							7
127.2	STRONGYLOIDIASIS																						1						1
013	TUBERCULOSIS - NON-RESP.															3		2											5
010	TUBERCULOSIS - PRIM.				1																								1
011	TUBERCULOSIS - RESP							1		1		2	1			1		1	2		1				1	1			12
B96.8	VANCOMYCIN RES. ENTER.				1							1	1	1		2	1	1	1	1	3	3	5	5	5	1	3		34
		9	9	15	25	15	13	7	9	17	12	22	19	16	14	25	36	23	28	25	32	19	37	25	34	34	22		542

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR JUNE 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						
Case Referred to:*																							
006.9	AMEBIASIS	2											1										3
127.0	ASCARIASIS	1																					1
038.0	BETA STREP SEPTICEMIA	14	1	1									2						1	1			20
008.43	CAMPYLOBACTER	8	1			5		1		1			8	2				1					27
558.2	CLOSTRIDIUM DIFFICILE	46	5		1		5		6		9		4	4		1	1	1					83
123.4	DIPHYLLOBOTHRIUM	1								1			1										3
008.0	E. COLI 0157	1				1		1					1	1		1							6
007.1	GIARDIA LAMBLIA	3	1					1					2					1					8
070.51	HEPATITIS C	19		1				1	2	2			1	2							1		29
070.59	HEPATITIS OTHER (VIRAL)				1																		1
482.83	LEGIONELLA							1															1
084	MALARIA	2																					2
036.2	MENINGOCOCCEMIA(MGCCEMIA)	1																					1
B95.6	MRSA	69	6	5	4		5	1	8		2		2	1	8	4	9	138	5	2			269
728.86	NECROTIZING FASCIITIS	2				1																	3
033.0	PERTUSSIS	2								1								3					6
038.2	PNEUM. SEPTICEMIA	8																2					10
056.9	RUBELLA	1																					1
003.0	SALMONELLA	4						2					1										7
004	SHIGELLOSIS																	1					1
041.1	STREP PYOGENES - OTHER ST	5								1										1			7
127.2	STRONGYLOIDIASIS	1																					1
013	TUBERCULOSIS - NON-RESP.	4																1					5
010	TUBERCULOSIS - PRIM.																	1					1
011	TUBERCULOSIS - RESP	7								2								3					12
B96.8	VANCOMYCIN RES. ENTER.	22		1	1		2	1	1	1	2		1			1	1						34
		223	14	8	7		19	3	23	3	19		24	1	17	4	12	153	8	3	1		542

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

** OOP=Out of Province

STBBI Infection Summary Report - June 2010

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2009	2010	2009	2010
All Chlamydia Infections	525	528	3368	3277
All Gonorrhea Infections (including PRNG)	72	58	597	494
All Syphilis Infections*	5	6	24	35
Gonorrhea & Chlamydia Co-infections	25	31	248	219
HIV	7	14	53	60

Total Number of STBBI Cases by Age and Gender - June 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		8	3	115	43	114	60	50	39	27	23	6	5	2	1							1	497
Gonorrhea Only Cases									5	2	4	3	2	2		3	1	3				1				1		27
Syphilis Only Cases														2	1	1		1					1					6
GC and CT Cases							1		7	4	6	6	4	1		1				1								31
TOTAL					1		8	4	127	49	124	69	56	44	28	28	7	9	2	2		1	1			1	1	561
HIV												1	1	3		5		1		3								14

Regional STBBI Distribution - June 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							
Case Referred to:**																							
All Chlamydia Infections	247	17	17	9	1	13	14	16	2	29		15	2	11	6	14	83	24	1		5	2	528
All Gonorrhea Infections	22	3	4			1		2		1				1	2	1	14	7					58
All Syphilis Infections	3									1				2									6
GC and CT Infections	9		3					1		1						1	11	5					31

* The six cases in June 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