

Manitoba Monthly Surveillance Unit Report

Reported up to June 30, 2013

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 60% of all non-STBBI related communicable diseases reported to Manitoba Health during June 2013.

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

There were 550 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in June 2013:

- 445 reported cases of chlamydia (CT) only
- 54 reported cases of gonorrhoea (GC) only
- 36 reported co-infections of CT and GC and
- 15 reported cases of syphilis

Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 44% of all reported chlamydia cases in the province.

Syphilis cases include both infectious and non-infectious cases, as well as those requiring further follow-up to determine their status.

In June 2013, there was 1 acute case of hepatitis B virus (HBV), 21 cases of hepatitis C virus (HCV) and 13 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

The number of reported cases in June 2013 was within or below the statistically expected range for these reported communicable diseases with the exception of the following disease(s):

- Pneumococcal invasive disease (other sterile site): 3 positive lab-confirmed cases reported; less than 3 expected in an average month.
- Tuberculosis (non-respiratory): 5 cases reported; less than 5 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, 2008-2012.

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 2013

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2012	2013	Expected*	Ex. Range**	2012	2013
006.9	AMEBIASIS	4	4	3	0-7	21	12
022	ANTHRAX				***		
127.0	ASCARIASIS		1	0	0-1		1
005.8	B. CEREUS			0	0-1		
320.1	BAC. MENINGITIS - PNEUM	1		0	0-1	3	5
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	12	15		***	96	95
116.0	BLASTOMYCOSIS	1	2		***	5	7
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1		1
005.2	C. PERFRINGENS			0	0-1	1	2
008.43	CAMPYLOBACTER	38	15	24	9-39	99	88
558.2	CLOSTRIDIUM DIFFICILE	60	83		***	433	427
046.1	CREUTZFELD-JACOB DISEASE				***		1
007.8	CRYPTOSPORIDIOSIS	3	2	2	0-5	20	7
061.0	DENGUE FEVER			0	0-1	1	5
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-1		2
032	DIPHtheria CASES			0	0-0		
123.4	DIPHYLLOBOTHRIUM SPP			1	0-3	3	7
008.0	E. COLI-VEROTOXIGENIC	8	3	4	0-9	19	11
054.3	ENCEPHALITIS			0	0-1		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	7	6	11	3-19	50	47
038.42	H.INFLUENZAE (BLOOD)		1		***	7	6
320.0	H.INFLUENZAE (CSF)			0	0-1	3	2
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-0		1
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-1		
070.1	HEPATITIS A			1	0-3		5
070.3	HEPATITIS B			0	0-1		2
070.51	HEPATITIS C	23	21	27	17-37	192	163
487.1A	INFLUENZA A		1		***	66	465
487.1B	INFLUENZA B		1		***	214	98
482.83	LEGIONELLA	1		0	0-1	2	1
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0		
027.0	LISTERIA MONOCYTOGENES		1	1	0-3	1	1
088.81	LYME DISEASE	1		1	0-4	1	
084	MALARIA	4	1	1	0-4	7	9
055.9	MEASLES			0	0-1		
036.0	MENINGOCOCCAL CSF			0	0-1	1	3
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCEMIA BLOOD			0	0-1		3
B95.6	MRSA	289	317	258	111-405	1642	1792
072.9	MUMPS	1		0	0-1	10	
036.89	N.MENINGITIDIS OTHER			0	0-1		
728.86	NECROTIZING FASCIITIS		1	1	0-3		11
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		3
033.0	PERTUSSIS	2		4	0-11	12	2
038.2	PNEUM. SEPTICEMIA	9	8	10	1-19	81	63
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 mean.

*** Data collected for less than 5 years.

SUMMARY OF COMMUNICABLE DISEASE FOR June 2013

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2012	2013	Expected*	Ex. Range**	2012	2013
083.0	Q FEVER			0	0-0		1
A82.9	RABIES				***		
082.0	RICKETTSIA RICKETTSII				***		
083.9	RICKETTSIAL DISEASE, OTHER			0	0-1		
056.9C	RUBELLA (confirmed)			0	0-1	1	
771.0	RUBELLA CONGENITAL			0	0-0		
041.2	S.PNEUM.OTHER	1	3	1	0-2	7	9
003.0	SALMONELLA	13	15	18	3-33	82	97
079.82	SARS (CORONAVIRUS)				***		
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS	4	1	3	0-10	29	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	6	13		***	50	57
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-0		3
481	STREPTOCOCCUS PNEUMONIAE			0	0-0		
127.2	STRONGYLOIDES	3	4	2	0-5	12	11
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			0	0-1	2	
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI			0	0-2	1	3
013-01	TUBERCULOSIS - NON-RESP.	1	5	2	0-4	10	15
010	TUBERCULOSIS - PRIM.			1	0-3	3	6
011-01	TUBERCULOSIS - RESP	5	16	10	2-18	47	73
021.9	TULAREMIA			0	0-1		1
002.0	TYPHOID			0	0-1	2	2
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	104	123		***	790	734
005.4	VIBRIO PARAHAEMOLYTICUS				***	1	
070.59	VIRAL HEP. OTHER				***	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	0-1	8	1
		602	664			4036	4375

* 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 2013

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	3													4
127.0	ASCARIASIS																1												1	
038.0	BETA STREP SEPTICEMIA	1								1				1		1	2	1	1	1	4		1				1		15	
116.0	BLASTOMYCOSIS									1						1													2	
008.43	CAMPYLOBACTER				2	1	2				1		1				1	1	1	1	1		1		1	1			15	
558.2	CLOSTRIDIUM DIFFICILE						1	1		1		3	1			5	1	3	3	4	8	13	8	3	6	13	9		83	
007.8	CRYPTOSPORIDIOSIS			1													1											2		
008.0	E. COLI 0157											1	1									1						3		
007.1	GIARDIA LAMBLIA			2	1	1										1	1											6		
038.42	H.INFLUENZAE (BLOOD)																					1						1		
070.3	HEPATITIS B													1														1		
070.51	HEPATITIS C									1	2	2	1			2		5	6		2							21		
487.1A	INFLUENZA A																									1		1		
487.1B	INFLUENZA B									1																		1		
027.0	LISTERIA MONOCYTOGENES																					1						1		
084	MALARIA														1													1		
B95.6	MRSA	3	11	21	19	6	12	5	5	9	11	11	10	9	9	25	21	12	20	15	17	8	11	9	14	7	16	1	317	
728.86	NECROTIZING FASCIITIS															1												1		
038.2	PNEUM. SEPTICEMIA																				1	1		2	3	1		8		
003.0	SALMONELLA			1						3	3			1		1				3	1		1		1			15		
004	SHIGELLOSIS													1														1		
041.1	STREP PYOGENES - OTHER ST				1					1						1	3				5				1	1		13		
041.2	STREP.PNEUM.OTHER																1				1				1			3		
127.2	STRONGYLOIDIASIS									1				1							1					1		4		
013-018	TUBERCULOSIS - NON-RESP.				1											1		1		1						1		5		
011-012	TUBERCULOSIS - RESP							1			2	2	1		2	1	2	1		3		1						16		
B96.8	VANCOMYCIN RES. ENTER.															1	2	3	4	8	8	9	16	12	12	32	15	1	123	
		4	11	25	24	8	15	7	5	13	20	20	17	15	11	42	38	29	36	30	52	33	42	25	35	63	42	2	664	

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR JUNE 2013

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						
<i>Case Referred to:*</i>																							
006.9	AMEBIASIS	2								2												4	
127.0	ASCARIASIS	1																				1	
038.0	BETA STREP SEPTICEMIA	9		1				2	1									2				15	
116.0	BLASTOMYCOSIS	1										1										2	
008.43	CAMPYLOBACTER	2	2			4		1	1		4							1				15	
558.2	CLOSTRIDIUM DIFFICILE	46	3		1	5		4	11		9		3		1							83	
007.8	CRYPTOSPORIDIOSIS								1		1											2	
008.0	E. COLI 0157	1						2														3	
007.1	GIARDIA LAMBLIA	3	1						1		1											6	
038.42	H.INFLUENZAE (BLOOD)								1													1	
070.3	HEPATITIS B		1																			1	
070.51	HEPATITIS C	16	1						1						1	2						21	
487.1A	INFLUENZA A	1																				1	
487.1B	INFLUENZA B				1																	1	
027.0	LISTERIA MONOCYTOGENES							1														1	
084	MALARIA		1																			1	
B95.6	MRSA	119	3	7	3	3	4	6	1	4	1	7	2	4	8	7	128	9			1	317	
728.86	NECROTIZING FASCIITIS	1																				1	
038.2	PNEUM. SEPTICEMIA	4						1	1		1							1				8	
003.0	SALMONELLA	6	1			3			4		1											15	
004	SHIGELLOSIS	1																				1	
041.1	STREP PYOGENES - OTHER ST	9						1	1									2				13	
041.2	STREP.PNEUM.OTHER	2																1				3	
127.2	STRONGYLOIDIASIS	3							1													4	
013-018	TUBERCULOSIS - NON-RESP.	5																				5	
011-012	TUBERCULOSIS - RESP	9																7				16	
B96.8	VANCOMYCIN RES. ENTER.	82	5		4	5	3	6	3	2	5		3				2	3				123	
		323	18	8	9	20	7	24	1	33	3	30	2	10	8	9	145	13			1	664	

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

** OOP=Out of Province

STBBI Infection Summary Report - June 2013

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2012	2013	2012	2013
All Chlamydia Infections	534	481	3334	3278
All Gonorrhoea Infections (including PRNG)	122	90	649	624
All Syphilis Infections*	4	15	41	117
Gonorrhoea & Chlamydia Co-infections	53	36	260	268
HIV	6	13	34	64

Total Number of STBBI Cases by Age and Gender - June 2013

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							6		84	40	110	51	50	35	30	24	5	3	3	4								445
Gonorrhoea Only Cases			1						10	3	8	6	3	6	4	6	2	3		2								54
Syphilis Only Cases														1	1	2	1	6		3		1						15
GC and CT Cases							1		5	6	8	7	4	3						2								36
TOTAL			1				7		99	49	126	64	57	45	35	32	8	12	3	11		1						550
HIV							1	1				1			3	2	1	3		1								13

Regional STBBI Distribution - June 2013

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	224	20	7	11	16	8	17	3	25		17	4	17	1	23	65	18			5		481	
All Gonorrhoea Infections	53	2	1	1	2	2	2	1	2				2		3	18	2			1		90	
All Syphilis Infections	12					1		1												1		15	
GC and CT Infections	17		1	1			1		2						2	11	1					36	

* Syphilis cases 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