

Manitoba Monthly Surveillance Unit Report

Reported up to July 31, 2013

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 69% of all non-STBBI related communicable diseases reported to Manitoba Health during July 2013.

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

There were 605 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in July 2013:

- 460 reported cases of chlamydia (CT) only
- 74 reported cases of gonorrhoea (GC) only
- 51 reported co-infections of CT and GC and
- 20 reported cases of syphilis

Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 43% 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 July 2013, there were no acute cases of Hepatitis B virus (HBV), 30 cases of Hepatitis C virus (HCV) and 12 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

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

- MRSA: 477 positive lab-confirmed cases reported; less than 455 expected in an average month.
- Strep Toxic Shock: 1 positive lab-confirmed case reported; no cases expected in an average month.
- Tularemia: 3 positive lab-confirmed cases reported; less than 2 cases expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during June, July, and August, 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 July 2013

ICD9	Disease Name	MONTHLY TOTAL				YEAR-TO-DATE	
		2012	2013	Expected*	Ex. Range**	2012	2013
006.9	AMEBIASIS		1	3	0-6	21	12
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1		1
005.8	B. CEREUS			0	0-2		
320.1	BAC. MENINGITIS - PNEUM		1	0	0-1	3	6
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	19	16		***	115	111
116.0	BLASTOMYCOSIS	1	3		***	6	10
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1		1
005.2	C. PERFRINGENS			0	0-1	1	3
008.43	CAMPYLOBACTER	28	23	29	12-46	127	113
558.2	CLOSTRIDIUM DIFFICILE	68	82		***	501	510
046.1	CREUTZFELD-JACOB DISEASE				***		1
007.8	CRYPTOSPORIDIOSIS	6	1	4	0-15	26	8
061.0	DENGUE FEVER		1	0	0-1	1	6
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		2	1	0-4	3	9
008.0	E. COLI-VEROTOXIGENIC	5	2	8	0-32	24	13
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	12	3	13	3-23	62	51
038.42	H.INFLUENZAE (BLOOD)	1			***	8	6
320.0	H.INFLUENZAE (CSF)			0	0-1	3	2
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1		1
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-1		
070.1	HEPATITIS A	2	1	1	0-2	2	6
070.3	HEPATITIS B			0	0-1		2
070.51	HEPATITIS C	30	30	27	16-38	222	193
487.1A	INFLUENZA A		1		***	66	466
487.1B	INFLUENZA B		1		***	214	99
482.83	LEGIONELLA		1	0	0-1	2	2
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-1		
027.0	LISTERIA MONOCYTOGENES	3		1	0-3	4	1
088.81	LYME DISEASE	4		1	0-4	5	
084	MALARIA	2	1	1	0-3	9	10
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF		1	0	0-1	1	4
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCEMIA BLOOD			0	0-1		3
B95.6	MRSA	407	477	301	148-454	2049	2268
072.9	MUMPS			0	0-1	10	
036.89	N.MENINGITIDIS OTHER			0	0-1		
728.86	NECROTIZING FASCIITIS			1	0-4		11
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		3
033.0	PERTUSSIS	10		5	0-13	22	2
038.2	PNEUM. SEPTICEMIA	6	7	7	1-13	87	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 mean.

*** Data collected for less than 5 years.

SUMMARY OF COMMUNICABLE DISEASE FOR July 2013

ICD9	Disease Name	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		2	1	0-3	7	11
003.0	SALMONELLA	23	20	20	7-33	105	117
079.82	SARS (CORONAVIRUS)				***		
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS	10	1	3	0-9	39	15
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 STERILE	4	12		***	54	69
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK		1	0	0-0		4
481	STREPTOCOCCUS PNEUMONIAE		1	0	0-1		1
127.2	STRONGYLOIDES		1	1	0-4	12	12
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSES	1		0	0-1	3	
124	TRICHINOSIS			0	0-1		
086	TRYPANOSOMA CRUZI	1		0	0-2	2	3
013-018	TUBERCULOSIS - NON-RESP.	2	1	3	0-5	12	16
010	TUBERCULOSIS - PRIM.	3		1	0-3	6	6
011-012	TUBERCULOSIS - RESP	4	9	10	3-16	51	81
021.9	TULAREMIA		3	0	0-1		4
002.0	TYPHOID	1		0	0-1	3	2
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	96	103		***	886	837
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 SYNDROMES	3			***	3	
008.44	YERSINIA ENTEROCOLITICA	1		1	0-3	9	1
		753	809			4789	5186

* 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 BY AGE AND GENDER FOR July 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													1
320.1	BAC. MENINGITIS - PNEUM	1																											1
036.0	BAC.MGTS-NMGTS(MGCCCL MGTS			1																									1
038.0	BETA STREP SEPTICEMIA		1	1	1									1		1	2		1	1		2		2	1	2			16
116.0	BLASTOMYCOSIS													1		1								1					3
008.43	CAMPYLOBACTER		1	1	1	2	1		1			2	1			1	2	1		1	2		1	3	2				23
558.2	CLOSTRIDIUM DIFFICILE	1									3	1	1			6	6	7	6	6	10	5	8	7	11	4			82
007.8	CRYPTOSPORIDIOSIS											1																	1
061.0	DENGUE FEVER				1																								1
123.4	DIPHYLLOTHRIUM															1			1										2
008.0	E. COLI 0157									1					1														2
007.1	GIARDIA LAMBLIA			1	1			1																					3
070.1	HEPATITIS A											1																	1
070.51	HEPATITIS C										2	2			4	2	2	5	4	8	1								30
487.1A	INFLUENZA A					1																							1
487.1B	INFLUENZA B			1																									1
482.83	LEGIONELLA																				1								1
084	MALARIA					1																							1
B95.6	MRSA	9	10	32	24	17	18	15	28	17	21	9	12	22	17	15	31	19	25	18	16	10	16	18	19	17	22		477
038.2	PNEUM. SEPTICEMIA							1			1				1	1		1					1			1			7
003.0	SALMONELLA	1	1			1	1			1	1		1	3	1				3		3		3	1	2				20
004	SHIGELLOSIS										1																		1
041.1	STREP PYOGENES - OTHER ST		2									1				1	2	1		1	1	1	1	1	1				12
481	STREP. PNEUMONIAE PNEUMON						1																						1
041.2	STREP.PNEUM.OTHER					1																		1					2
040.89	STREPTOCOCCAL TOXIC SHOCK														1														1
127.2	STRONGYLOIDIASIS							1																					1
013-018	TUBERCULOSIS - NON-RESP.																								1				1
011-012	TUBERCULOSIS - RESP										1						1	1		1	3			2					9
021.9	TULAREMIA														1	1				1									3
B96.8	VANCOMYCIN RES. ENTER.								1					1		4	1	10	1	8	5	8	10	14	10	10	20		103
		12	15	37	28	20	22	18	31	18	22	21	19	25	22	28	48	45	41	40	41	35	38	43	48	43	49		809

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR July 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	F	P				
<i>Case Referred to:*</i>																							
006.9	AMEBIASIS	1																					1
320.1	BAC. MENINGITIS - PNEUM																	1					1
036.0	BAC.MGTS-NMGTS(MGCCL MGTS	1																					1
038.0	BETA STREP SEPTICEMIA	8				1	1			2		1						3					16
116.0	BLASTOMYCOSIS	1				1				1													3
008.43	CAMPYLOBACTER	7	1		1	6				5				1		1		1					23
558.2	CLOSTRIDIUM DIFFICILE	44	1		3	7		2		9	1	8		2		3	2	2					82
007.8	CRYPTOSPORIDIOSIS		1																				1
061.0	DENGUE FEVER	1																					1
123.4	DIPHYLLOBOTHRIUM	2																					2
008.0	E. COLI 0157	1								1													2
007.1	GIARDIA LAMBLIA	1	1							1													3
070.1	HEPATITIS A	1																					1
070.51	HEPATITIS C	19	1			1		1		3	1		1	1				1			1		30
487.1A	INFLUENZA A	1																					1
487.1B	INFLUENZA B															1							1
482.83	LEGIONELLA					1																	1
084	MALARIA				1																		1
B95.6	MRSA	153	2	10	2	7	5	18	2	6	5	5	5	6	10	26	197	18					477
038.2	PNEUM. SEPTICEMIA	3	1					1		1						1							7
003.0	SALMONELLA	13		1	1	3				1						1							20
004	SHIGELLOSIS	1																					1
041.1	STREP PYOGENES - OTHER ST	7			1					2						1	1						12
481	STREP. PNEUMONIAE PNEUMON																		1				1
041.2	STREP.PNEUM.OTHER	2																					2
040.89	STREPTOCOCCAL TOXIC SHOCK	1																					1
127.2	STRONGYLOIDIASIS	1													1								1
013-18	TUBERCULOSIS - NON-RESP.													1									1
011-12	TUBERCULOSIS - RESP.	4									1						4						9
021.9	TULAREMIA		2							1													3
B96.8	VANCOMYCIN RES. ENTER.	65	3	1	6	7		4		4		4		1			8						103
		338	13	12	15	0	34	6	26	2	37	8	18	6	12	10	34	217	20	0	1	0	809

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

** OOP=Out of Province

STBBI Infection Summary Report - July 2013

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2012	2013	2012	2013
All Chlamydia Infections	628	511	3962	3791
All Gonorrhoea Infections (including PRNG)	126	125	775	749
All Syphilis Infections*	11	20	52	137
Gonorrhoea & Chlamydia Co-infections	64	51	324	319
HIV	4	12	38	76

Total Number of STBBI Cases by Age and Gender - July 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							9	1	89	25	106	50	64	35	29	26	12	8	3	1		2					460	
Gonorrhoea Only Cases							1		15	7	9	9	9	6	6	4	1	6		1							74	
Syphilis Only Cases											1				1	4	2	2	1	5		3	1				20	
GC and CT Cases							1		16	7	7	7	3	4	3	1	2										51	
TOTAL							15	13	157	115	122	67	76	45	39	35	17	16	4	7		5	1				605	
HIV					1						2	1		1	1	3	2	1									12	

Regional STBBI Distribution - July 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	250	25	7	1		10	8	17	4	23	1	14	1	11	10	24	77	23		2		3		511
All Gonorrhoea Infections	56	2				2	2	5		4			1	1		10	32	8				2		125
All Syphilis Infections	17				1					1			1											20
GC and CT Infections	24					1		2		1						3	18	2						51

* 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