

Manitoba Monthly Surveillance Unit Report

Reported up to February 28, 2013

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 52% of all non-STBBI related communicable diseases reported to Manitoba Health during February 2013.

- The number of reported cases of MRSA was above the statistically expected range in February 2013: 304 positive lab-confirmed cases reported; less than 296 expected in an average month.

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

There were 600 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in February 2013:

- 490 reported cases of chlamydia (CT) only
- 53 reported cases of gonorrhoea (GC) only
- 48 reported co-infections of CT and GC and
- 9 reported cases of syphilis

Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 47% 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 February 2013, there were no acute cases of Hepatitis B virus (HBV), 20 cases of Hepatitis C virus (HCV) and 8 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

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

- Malaria: 5 positive lab-confirmed cases reported; less than 4 expected in an average month.
- Necrotizing fasciitis (caused by Group A, B, C, D, E, F, or G *Streptococcus*): 4 positive lab-confirmed cases reported; less than 2 expected in an average month.
- Streptococcal Toxic Shock Syndrome: 2 positive lab-confirmed cases reported; less than 2 expected in an average month.
- Typhoid fever: 2 positive lab-confirmed cases reported; less than 2 expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during January, February, and March, 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 February 2013

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2012	2013	Expected*	Ex. Range**	2012	2013
006.9	AMEBIASIS	3	2	3	0-6	6	4
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-0		
005.8	B. CEREUS			0	0-1		
320.1	BAC. MENINGITIS - PNEUM			0	0-1		2
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	16	19		***	28	37
116.0	BLASTOMYCOSIS	1	1		***	3	2
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1		
005.2	C. PERFRINGENS			0	0-1		
008.43	CAMPYLOBACTER	5	18	15	9-21	21	31
558.2	CLOSTRIDIUM DIFFICILE	81	51		***	160	124
046.1	CREUTZFELD-JACOB DISEASE				***		
007.8	CRYPTOSPORIDIOSIS	1	1	2	0-5	1	2
061.0	DENGUE FEVER			0	0-1		2
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS		1	0	0-2		1
032	DIPHTHERIA CASES			0	0-1		
123.4	DIPHYLLOBOTHRIUM SPP	3	1	0	0-2	3	2
008.0	E. COLI-VEROTOXIGENIC	2	2	3	1-5	6	4
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	14	10	9	2-16	19	18
038.42	H.INFLUENZAE (BLOOD)		1		***	3	1
320.0	H.INFLUENZAE (CSF)	1		0	0-1	2	
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1		
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0		
070.1	HEPATITIS A			1	0-3		
070.3	HEPATITIS B			0	0-1		
070.51	HEPATITIS C	38	20	30	16-44	77	47
487.1A	INFLUENZA A	3	67		***	9	427
487.1B	INFLUENZA B	3	13		***	5	34
482.83	LEGIONELLA			0	0-1		
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0		
027.0	LISTERIA MONOCYTOGENES			0	0-1		
088.81	LYME DISEASE			0	0-1		
084	MALARIA		5	1	0-3		5
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF			0	0-1		1
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCEMIA BLOOD			0	0-1		
B95.6	MRSA	239	304	217	139-295	499	606
072.9	MUMPS	1		1	0-5	9	
036.89	N.MENINGITIDIS OTHER			0	0-1		
728.86	NECROTIZING FASCIITIS		4	0	0-1		8
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS			1	0-4	1	
038.2	PNEUM. SEPTICEMIA	8	9	12	4-20	24	26
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 February 2013

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2012	2013	Expected*	Ex. Range**	2012	2013
083.0	Q FEVER			0	0-1		1
A82.9	RABIES				***		
082.0	RICKETTSIA RICKETTSII				***		
083.9	RICKETTSIAL DISEASE, OTHER			0	0-0		
056.9C	RUBELLA (confirmed)	1		0	0-1	1	
771.0	RUBELLA CONGENITAL			0	0-1		
041.2	S.PNEUM.OTHER	1	1	1	0-3	3	2
003.0	SALMONELLA	16	17	20	10-30	33	37
079.82	SARS (CORONAVIRUS)				***		
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS	1	5	3	0-7	3	7
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	14	8		***	21	11
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK		2	0	0-1		2
481	STREPTOCOCCUS PNEUMONIAE			0	0-1		
127.2	STRONGYLOIDES	2	1	1	0-4	2	3
037	TETANUS			0	0-1		
130.9	TOXOPLASMOSIS			0	0-1		
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI			0	0-1		1
013-018	TUBERCULOSIS - NON-RESP.	3	2	2	0-4	3	3
010	TUBERCULOSIS - PRIM.	1		0	0-2	2	4
011-012	TUBERCULOSIS - RESP	8	12	6	0-12	16	26
021.9	TULAREMIA			0	0-0		
002.0	TYPHOID		2	0	0-1	1	2
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	138	100		***	283	224
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	3	1	1	0-4	7	1
		608	680			1252	1708

* 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 FEBRUARY 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					
006.9	AMEBIASIS															1								1						2
038.0	BETA STREP SEPTICEMIA	1	3	1									1						2	3	1	1	2			2	2			19
116.0	BLASTOMYCOSIS																				1									1
008.43	CAMPYLOBACTER			1				1		1	3		1	1	1	1	1		1	1	3		1	1						18
558.2	CLOSTRIDIUM DIFFICILE				1		1			1							3		5	7		4	5	4	2	9	9			51
007.8	CRYPTOSPORIDIOSIS												1																	1
V02.4	DIPH. CARRIERS																			1										1
123.4	DIPHYLLOBOTHRIUM														1															1
008.0	E. COLI 0157									1					1															2
007.1	GIARDIA LAMBLIA			1	3		1		1					1	1		1			1										10
038.42	H.INFLUENZAE (BLOOD)		1																											1
070.51	HEPATITIS C											1		1	1	3	4	1	2	2	1		3					1		20
487.1A	INFLUENZA A	5	3	2	4		4	2		1	3	1		1	4	2	1	3	4	1	2	4	5	2	9	4				67
487.1B	INFLUENZA B				1				1	1					1	1	1	1			1					4	1			13
084	MALARIA									1		1				1				1										5
B95.6	MRSA	5	10	16	14	6	7	15	4	9	7	10	8	12	8	21	12	16	22	20	13	11	8	11	7	22	10			304
728.86	NECROTIZING FASCIITIS														1						2						1			4
038.2	PNEUM. SEPTICEMIA		1	1			1											1		1	1	1	1	1						9
003.0	SALMONELLA			2		2	2		1		1	1				2				2		1	1			1		1		17
004	SHIGELLOSIS						1					2			1										1					5
041.1	STREP PYOGENES - OTHER ST			1												1	1			1		1	1	1	1	1				8
041.2	STREP.PNEUM.OTHER																					1								1
040.89	STREPTOCOCCAL TOXIC SHOCK																	2												2
127.2	STRONGYLOIDIASIS							1																						1
013-018	TUBERCULOSIS - NON-RESP.								1							1														2
011-012	TUBERCULOSIS - RESP									1		1	2	2		1	1		1	1	1		1							12
002.0	TYPHOID			1													1													2
B96.8	VANCOMYCIN RES. ENTER.									2	1					2	2	3	2	9	9	10	6	15	10	17	12			100
008.44	YERSINIA ENTEROCOLITICA									1																				1
		11	18	26	23	8	17	20	7	17	14	18	14	18	17	33	32	24	43	52	35	31	33	39	25	64	40			680

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR FEBRUARY 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
038.0	BETA STREP SEPTICEMIA	13				2				1			1	1				1					19
116.0	BLASTOMYCOSIS	1																					1
008.43	CAMPYLOBACTER	6		1		5		3		1		1						1					18
558.2	CLOSTRIDIUM DIFFICILE	28	4	1		3		2		4		5		2		1		1					51
007.8	CRYPTOSPORIDIOSIS	1																					1
V02.4	DIPH. CARRIERS	1																					1
123.4	DIPHYLLOBOTHRIUM	1																					1
008.0	E. COLI 0157		1							1													2
007.1	GIARDIA LAMBLIA	9																1					10
038.42	H.INFLUENZAE (BLOOD)							1															1
070.51	HEPATITIS C	15	2							1						1	1						20
487.1A	INFLUENZA A	43	1	3	3	1	1	3		5				1			1	5					67
487.1B	INFLUENZA B	7			1		2			1		1											13
084	MALARIA	4												1									5
B95.6	MRSA	105	5	8	3	1	6	1	7	4	4	3	4	1	4	3	9	122	13	1			304
728.86	NECROTIZING FASCIITIS	2													1			1					4
038.2	PNEUM. SEPTICEMIA	5			2		1												1				9
003.0	SALMONELLA	7	3		1		1		3					1			1						17
004	SHIGELLOSIS	3															1	1					5
041.1	STREP PYOGENES - OTHER ST	3								1	1		1				1		1				8
041.2	STREP.PNEUM.OTHER																		1				1
040.89	STREPTOCOCCAL TOXIC SHOCK	1																		1			2
127.2	STRONGYLOIDIASIS	1																					1
013-018	TUBERCULOSIS - NON-RESP.	2																					2
011-012	TUBERCULOSIS - RESP	3			1													8					12
002.0	TYPHOID	2																					2
B96.8	VANCOMYCIN RES. ENTER.	65	1	1	1		4	1	2	2	6		3		2	1	1	5	5				100
008.44	YERSINIA ENTEROCOLITICA						1																1
		330	17	12	14	1	26	3	21	7	25	3	15	3	13	6	15	148	19	2			680

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

** OOP=Out of Province

STBBI Infection Summary Report - February 2013

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2012	2013	2012	2013
All Chlamydia Infections	506	538	1114	1159
All Gonorrhoea Infections (including PRNG)	87	101	193	226
All Syphilis Infections*	8	9	18	19
Gonorrhoea & Chlamydia Co-infections	33	48	79	104
HIV	5	8	11	20

Total Number of STBBI Cases by Age and Gender - February 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							1	2	112	28	116	58	54	31	36	32	5	5	4	5							1	490
Gonorrhoea Only Cases									9	3	8	4	5	12	6	5		1										53
Syphilis Only Cases										1						1		1	1	2	2		1					9
GC and CT Cases									19	4	9	3	2	5	2	2	1	1										48
TOTAL							1	2	140	36	133	65	61	48	44	40	6	8	5	7	2		1			1	600	
HIV																4	1			2	1							8

Regional STBBI Distribution - February 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	F	P				
Case Referred to:**																						
All Chlamydia Infections	270	35	7	13		10	7	26	1	25		10	3	12	7	26	54	25		4	3	538
All Gonorrhoea Infections	55	2	2	3		2	4	3	1	3				3		3	14	4		1	1	101
All Syphilis Infections	7	1								1												9
GC and CT Infections	27	1	1	2		2	3	1		1						3	5	1			1	48

* 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