

## Manitoba Monthly Surveillance Unit Report

Reported up to March 31, 2013

### Highlights:

#### 1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 51% of all non-STBBI related communicable diseases reported to Manitoba Health during March 2013.

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

There were 591 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in March 2013:

- 474 reported cases of chlamydia (CT) only
- 54 reported cases of gonorrhoea (GC) only
- 49 reported co-infections of CT and GC and
- 14 reported cases of syphilis

Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 41% 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 March 2013, there were no acute cases of hepatitis B virus (HBV), 29 cases of hepatitis C virus (HCV) and 6 cases of HIV newly reported in Manitoba.

#### 3. Other Communicable Diseases

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

- Dengue fever: 1 positive lab-confirmed case reported; less than 1 expected in an average month.
- Respiratory tuberculosis: 13 cases reported; less than 13 expected in an average month.

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

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2012	2013	Expected*	Ex. Range**	2012	2013
006.9	AMEBIASIS	6	1	3	0-6	12	5
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-0		
005.8	B. CEREUS			0	0-1		
320.1	BAC. MENINGITIS - PNEUM	1		0	0-1	1	2
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	13	18		***	41	55
116.0	BLASTOMYCOSIS	1	1		***	4	3
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1		
005.2	C. PERFRINGENS	1	1	0	0-1	1	1
008.43	CAMPYLOBACTER	15	12	15	5-25	36	45
558.2	CLOSTRIDIUM DIFFICILE	76	67		***	236	191
046.1	CREUTZFELD-JACOB DISEASE		1		***		1
007.8	CRYPTOSPORIDIOSIS	5	1	2	0-7	6	3
061.0	DENGUE FEVER		1	0	0-0		3
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			1	0-3		1
032	DIPHThERIA CASES			0	0-1		
123.4	DIPHYLLOBOTHRIUM SPP		2	0	0-2	3	4
008.0	E. COLI-VEROTOXIGENIC	3	1	3	0-6	9	5
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	7	5	9	2-16	26	25
038.42	H.INFLUENZAE (BLOOD)	2	2		***	5	3
320.0	H.INFLUENZAE (CSF)		1	0	0-1	2	1
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	1	0-3		1
070.3	HEPATITIS B			0	0-1		1
070.51	HEPATITIS C	28	29	30	18-42	106	76
487.1A	INFLUENZA A	39	32		***	48	460
487.1B	INFLUENZA B	138	14		***	143	48
482.83	LEGIONELLA			0	0-1		
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0		
027.0	LISTERIA MONOCYTOGENES	1		0	0-1	1	
088.81	LYME DISEASE			0	0-1		
084	MALARIA	2	2	1	0-3	2	7
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF		1	0	0-1		2
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCAL BLOOD		1	0	0-1		1
B95.6	MRSA	264	282	214	131-297	763	888
072.9	MUMPS			1	0-4	9	
036.89	N.MENINGITIDIS OTHER			0	0-1		
728.86	NECROTIZING FASCIITIS		2	1	0-3		9
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	1	2	2	0-9	2	2
038.2	PNEUM. SEPTICEMIA	19	2	12	3-21	43	28
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 March 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)			0	0-1	1	
771.0	RUBELLA CONGENITAL			0	0-1		
041.2	S.PNEUM.OTHER	3	1	1	0-3	6	3
003.0	SALMONELLA	13	15	19	10-28	46	53
079.82	SARS (CORONAVIRUS)				***		
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS	5	1	3	0-7	8	8
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	8	15		***	29	26
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK		1	0	0-1		3
481	STREPTOCOCCUS PNEUMONIAE			0	0-1		
127.2	STRONGYLOIDES	4	1	1	0-4	6	4
037	TETANUS			0	0-1		
130.9	TOXOPLASMOSIS	2		0	0-1	2	
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI	1		0	0-1	1	1
013-018	TUBERCULOSIS - NON-RESP.	2	4	2	0-6	5	7
010	TUBERCULOSIS - PRIM.	1	2	1	0-3	3	6
011-012	TUBERCULOSIS - RESP	6	13	8	4-12	22	39
021.9	TULAREMIA			0	0-0		
002.0	TYPHOID	1		0	0-1	2	2
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	105	151		***	388	375
005.4	VIBRIO PARAHAEMOLYTICUS	1			***	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	0-4	7	1
		<b>774</b>	<b>686</b>			<b>2027</b>	<b>2400</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 MARCH 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
036.0	BAC.MGTS-NMGTS(MGCCL MGTS)				1																									1
038.0	BETA STREP SEPTICEMIA	1					2								2		1				3	2		1		2	2	2		18
116.0	BLASTOMYCOSIS																							1						1
005.2	C. PERFRINGENS																				1									1
008.43	CAMPYLOBACTER									1		1					2	2	1		2				2			1		12
558.2	CLOSTRIDIUM DIFFICILE				1					1	1				1		2	1	1	1	9	7	11	2	5	6	8	10		67
046.1	CREUTZFELD JACOB DISEASE																							1						1
007.8	CRYPTOSPORIDIOSIS															1														1
061.0	DENGUE FEVER																					1								1
123.4	DIPHYLLOBOTHRIUM																1	1												2
008.0	E. COLI 0157																					1								1
007.1	GIARDIA LAMBLIA				1	2		1													1									5
320.0	H. INFLUENZAE (CSF)	1																												1
038.42	H.INFLUENZAE (BLOOD)				1																							1		2
070.1	HEPATITIS A																		1											1
070.51	HEPATITIS C											2		3		1	5		3	1	5	1	5		1			2		29
487.1A	INFLUENZA A	4	1	1	3		1	1			1		1	2	2		1	1	1	1	1	1	1	2	1	2	4	1		32
487.1B	INFLUENZA B				1	1	1	1	1		1			1		1			1	1	3		1							14
084	MALARIA									1						1														2
036.2	MENINGOCOCCEMIA(MGCCEMIA)									1																				1
B95.6	MRSA	7	8	18	14	11	5	4	7	12	9	7	6	9	15	13	13	12	11	18	19	12	10	11	7	15	9			282
728.86	NECROTIZING FASCIITIS																2													2
033.0	PERTUSSIS	2																												2
038.2	PNEUM. SEPTICEMIA																1													2
003.0	SALMONELLA					1				1	1	1			1			3		1	1	1	1	1				1		15
004	SHIGELLOSIS									1																				1
041.1	STREP PYOGENES - OTHER ST																											1		15
041.2	STREP.PNEUM.OTHER																1													1
040.89	STREPTOCOCCAL TOXIC SHOCK																1													1
127.2	STRONGYLOIDIASIS																		1											1
013-018	TUBERCULOSIS - NON-RESP.														1	1					1									4
010	TUBERCULOSIS - PRIM.				1	1																								2
011-012	TUBERCULOSIS - RESP									1		2	2		1		1	1			1	2		1				1		13
B96.8	VANCOMYCIN RES. ENTER.											2		1	2	2		2	9	12	7	14	17	20	13	28	22			151
		15	9	24	21	14	9	6	8	19	12	16	8	19	22	23	32	24	29	50	60	43	41	39	35	57	49			<b>686</b>

**SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR MARCH 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
036.0	BAC.MGTS-NMGTS(MGCCL MGTS									1													1
038.0	BETA STREP SEPTICEMIA	13			1								3						1				18
116.0	BLASTOMYCOSIS	1																					1
005.2	C. PERFRINGENS	1																					1
008.43	CAMPYLOBACTER	7	1		1				1	1			1										12
558.2	CLOSTRIDIUM DIFFICILE	33	2		2		2		10	2			6		3	1	2	2	2				67
046.1	CREUTZFELD JACOB DISEASE									1													1
007.8	CRYPTOSPORIDIOSIS	1																					1
061.0	DENGUE FEVER				1																		1
123.4	DIPHYLLOTHRIUM	1																	1				2
008.0	E. COLI 0157	1																					1
007.1	GIARDIA LAMBLIA	2				1				1									1				5
320.0	H. INFLUENZAE (CSF)												1										1
038.42	H.INFLUENZAE (BLOOD)	1													1								2
070.1	HEPATITIS A	1																					1
070.51	HEPATITIS C	19	4							3					3								29
487.1A	INFLUENZA A	19				3		1	1				2		3				2	1			32
487.1B	INFLUENZA B	3											10									1	14
084	MALARIA	2																					2
036.2	MENINGOCOCCEMIA(MGCCEMIA														1								1
B95.6	MRSA	97	3	4	4		7	2	7	2	6	3	6	1	5	5	8	111	11				282
728.86	NECROTIZING FASCIITIS		1						1														2
033.0	PERTUSSIS									2													2
038.2	PNEUM. SEPTICEMIA	1															1						2
003.0	SALMONELLA	8	1		3		1								1		1						15
004	SHIGELLOSIS	1																					1
041.1	STREP PYOGENES - OTHER ST	9			1				1	1			1	1					1				15
041.2	STREP.PNEUM.OTHER									1													1
040.89	STREPTOCOCCAL TOXIC SHOCK														1								1
127.2	STRONGYLOIDIASIS	1																					1
013-018	TUBERCULOSIS - NON-RESP.	2								1									1				4
010	TUBERCULOSIS - PRIM.																		2				2
011-012	TUBERCULOSIS - RESP	2			2					1	1								6	1			13
B96.8	VANCOMYCIN RES. ENTER.	102	6	1	6		4	2	6	1	3		7	1	5		2	4		1			151
		329	18	6	20		18	4	27	4	25	3	37	4	22	6	14	132	16	1			<b>686</b>

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

\*\* OOP=Out of Province

**STBBI Infection Summary Report - March 2013**

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2012	2013	2012	2013
All Chlamydia Infections	554	523	1668	1682
All Gonorrhea Infections (including PRNG)	101	103	294	329
All Syphilis Infections*	8	14	26	39
Gonorrhea & Chlamydia Co-infections	42	49	121	153
HIV	10	6	21	26

**Total Number of STBBI Cases by Age and Gender - March 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							5	1	96	43	96	55	48	47	34	25	9	10	1	3	1							474
Gonorrhea Only Cases							2		4	4	4	9	9	6	8	4		2		2								54
Syphilis Only Cases												1		3		2	1	4		1		2						14
GC and CT Cases							2	1	8	2	6	15	8	2	1	3		1										49
<b>TOTAL</b>							9	2	108	49	106	80	65	58	43	34	10	17	1	6	1	2						591
HIV														1	1	2				2								6

**Regional STBBI Distribution - March 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							
<b>Case Referred to:**</b>																							
All Chlamydia Infections	260	28	8	15	11	9	14	5	24		15		13	7	22	66	22			4			523
All Gonorrhea Infections	48	1	2	2			3		6		1		1	1	8	20	9			1			103
All Syphilis Infections	12																2						14
GC and CT Infections	25	1	2	1					2		1			1	6	9	1						49

\* 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