

## Manitoba Monthly Surveillance Unit Report

Reported up to September 30, 2013

### Highlights:

#### 1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA), *Clostridium difficile* (*C. difficile*), and Vancomycin Resistant Enterococci (VRE) accounted for 83% of all non-STBBI related communicable diseases reported to Manitoba Health during September 2013.

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

There were 754 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in September 2013:

- 577 reported cases of chlamydia (CT) only
- 110 reported cases of gonorrhoea (GC) only
- 47 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 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 September 2013, there were 18 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 September 2013 was within or below the statistically expected range for these reported communicable diseases with the exception of the following disease(s):

- MRSA: 478 positive lab-confirmed cases were reported; between 241 and 429 cases expected

The expected number of cases and range is statistically based on the number of reported cases during August, September, and October 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 September 2013**

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2012	2013	Expected*	Ex. Range**	2012	2013
006.9	AMEBIASIS	4		3	0-7	26	13
022	ANTHRAX			***	***		
127.0	ASCARIASIS			0	0-0		1
005.8	B. CEREUS			0	0-2		
320.1	BAC. MENINGITIS - PNEUM			0	0-1	3	6
320.7	BAC.MENINGITIS-LISTERIA			***	***		
038.0	BETA STREP SEPTICEMIA	14	14	***	***	159	146
116.0	BLASTOMYCOSIS	2	2	***	***	8	14
005.1	BOTULISM			***	***		
023	BRUCELLOSIS			0	0-1		2
005.2	C. PERFRINGENS			0	0-1	1	3
008.43	CAMPYLOBACTER	29	14	30	17-43	197	166
558.2	CLOSTRIDIUM DIFFICILE	60	72	***	***	612	649
046.1	CREUTZFELD-JACOB DISEASE			***	***		1
007.8	CRYPTOSPORIDIOSIS	5	11	7	0-22	39	27
061.0	DENGUE FEVER		1	0	0-1	2	7
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-1		2
032	DIPHThERIA CASES			0	0-1		
123.4	DIPHYLLOBOTHRIUM SPP		1	1	0-4	3	10
008.0	E. COLI-VEROTOXIGENIC	7	7	7	0-31	32	27
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	13	6	12	3-21	88	72
038.42	H.INFLUENZAE (BLOOD)			***	***	8	6
320.0	H.INFLUENZAE (CSF)			0	0-0	3	2
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1		1
480.8	HANTA VIRUS			0	0-1		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0		
070.1	HEPATITIS A			1	0-3	3	7
070.3	HEPATITIS B			0	0-1	1	2
070.51	HEPATITIS C	24	18	27	18-36	266	236
487.1A	INFLUENZA A	3		***	***	71	481
487.1B	INFLUENZA B			***	***	217	103
482.83	LEGIONELLA			0	0-1	2	2
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-1	1	
027.0	LISTERIA MONOCYTOGENES		1	0	0-1	4	2
088.81	LYME DISEASE	1		1	0-2	6	
084	MALARIA	3		2	0-6	13	10
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF			0	0-0	1	4
036.82	MENINGOCOCCAL ARTHROPATHY			***	***		
036.2	MENINGOCOCCEMIA BLOOD			0	0-1		3
B95.6	MRSA	397	478	335	241-429	2885	3223
072.9	MUMPS		1	0	0-1	10	1
036.89	N.MENINGITIDIS OTHER			0	0-1		
728.86	NECROTIZING FASCIITIS		1	1	0-4	2	15
729.1	NECROTIZING MYOSITIS			***	***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS	1		***	***	1	3
033.0	PERTUSSIS	23	1	7	0-23	61	4
038.2	PNEUM. SEPTICEMIA	8	5	9	1-17	105	83
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 September 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	0-0		
056.9C	RUBELLA (confirmed)			0	0-0	1	
771.0	RUBELLA CONGENITAL			0	0-0		
041.2	S.PNEUM.OTHER		3	1	0-3	7	15
003.0	SALMONELLA	14	25	18	4-32	138	171
079.82	SARS (CORONAVIRUS)			***	***		
079.99	SEVERE RESPIRATORY ILLNESS			***	***		
004	SHIGELLOSIS	12	2	5	0-14	58	21
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 STERILE	11	9	***	***	70	83
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-0		4
481	STREPTOCOCCUS PNEUMONIAE			0	0-1	1	1
127.2	STRONGYLOIDES		2	2	0-5	13	18
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			0	0-1	3	
124	TRICHINOSIS			0	0-1		
086	TRYPANOSOMA CRUZI	1		0	0-1	3	3
013-01	TUBERCULOSIS - NON-RESP.	2	1	2	0-5	16	19
010	TUBERCULOSIS - PRIM.	1	1	1	0-3	7	8
011-01	TUBERCULOSIS - RESP	8	15	9	3-15	71	107
021.9	TULAREMIA			0	0-1		4
002.0	TYPHOID			1	0-2	4	2
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	99	131	***	***	1103	1034
005.4	VIBRIO PARAHAEMOLYTICUS	1	1	***	***	2	2
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	2		***	***	10	1
008.44	YERSINIA ENTEROCOLITICA		2	1	0-4	9	3
		745	825			6347	6831

\* 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 SEPTEMBER 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+		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	
038.0	BETA STREP SEPTICEMIA		2											1			2		2	1	3		2				1	14
116.0	BLASTOMYCOSIS						1																1				2	
008.43	CAMPYLOBACTER						1	2			1		1	1	1	2		1		1			2				1	14
558.2	CLOSTRIDIUM DIFFICILE						1			1	3		1	1			1		2	9	3	11	3	7	7	9	13	72
007.8	CRYPTOSPORIDIOSIS				3	2		2					1				3										11	
061.0	DENGUE FEVER								1																		1	
123.4	DIPHYLLOBOTHRIUM																	1									1	
008.0	E. COLI 0157		1				1			1	1		1							1	1						7	
007.1	GIARDIA LAMBLIA				2	1							1	1			1										6	
070.51	HEPATITIS C											2		2	2	3	4	1	2	1	1						18	
027.0	LISTERIA MONOCYTOGENES																						1				1	
B95.6	MRSA	7	9	36	21	20	20	15	13	15	23	17	12	15	19	22	26	24	38	24	23	15	11	12	11	16	14	478
072.9	MUMPS																1										1	
728.86	NECROTIZING FASCIITIS															1											1	
033.0	PERTUSSIS	1																									1	
038.2	PNEUM. SEPTICEMIA																1			1		1	1	1			5	
003.0	SALMONELLA				1	1	1	1			1		1	3	1	4	1	1		1		6		1			25	
004	SHIGELLOSIS												1					1									2	
041.1	STREP PYOGENES - OTHER ST	1					1								1	1	1		1			2			1		9	
041.2	STREP.PNEUM.OTHER	1																	1		1						3	
127.2	STRONGYLOIDIASIS														2												2	
013-018	TUBERCULOSIS - NON-RESP.																	1									1	
011-012	TUBERCULOSIS - RESP									1	1			1		2	1	2	1	4			2				15	
10	TUBERCULOSIS - PRIM.							1																			1	
B96.8	VANCOMYCIN RES. ENTER.												2	1	1	2	2	6	4	4	12	13	10	13	11	31	19	131
005.4	VIBRIO PARAHAEMOLYTICUS															1											1	
008.44	YERSINIA ENTEROCOLITICA	1															1										2	
		11	12	42	25	22	27	19	15	20	27	21	20	25	27	41	42	37	52	47	44	48	32	34	31	56	48	825

## SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR SEPTEMBER 2013

ICD9	Disease/Infection	Winnipeg	Brandon	N. Eastman		S. Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP**	TOTAL
				F	P	F	P	F	P	F	P	F	P	F	P	F	P					
<b>Case Referred to:*</b>																						
038.0	BETA STREP SEPTICEMIA	8	2									1						3				14
116.0	BLASTOMYCOSIS	1								1												2
008.43	CAMPYLOBACTER	4	1		2		1			1		2		1		1		1				14
558.2	CLOSTRIDIUM DIFFICILE	32	8		6		3	1	7		6		5	1	1		1		1			72
007.8	CRYPTOSPORIDIOSIS	1	7	1			1					1										11
061.0	DENGUE FEVER	1																				1
123.4	DIPHYLLOBOTHRIUM	1																				1
008.0	E. COLI 0157				1		1					2		2					1			7
007.1	GIARDIA LAMBLIA	3	1							1							1					6
070.51	HEPATITIS C	10	1	2				1	1		1			1		1						18
027.0	LISTERIA MONOCYTOGENES	1																				1
B95.6	MRSA	177	3	16	3		6	4	21	3	14	4	4	9	10	6	19	163	16			478
072.9	MUMPS	1																				1
728.86	NECROTIZING FASCIITIS	1																				1
033.0	PERTUSSIS																1					1
038.2	PNEUM. SEPTICEMIA	4															1					5
003.0	SALMONELLA	15				3	1	2		1				2	1							25
004	SHIGELLOSIS	1																	1			2
041.1	STREP PYOGENES - OTHER ST	8																	1			9
041.2	STREP.PNEUM.OTHER	2	1																			3
127.2	STRONGYLOIDIASIS	2																				2
013-018	TUBERCULOSIS - NON-RESP.	1																				1
011-012	TUBERCULOSIS - RESP	5		1			1										1	7				15
10	TUBERCULOSIS - PRIM.																		1			1
B96.8	VANCOMYCIN RES. ENTER.	84	4		4	1			16		8	1	3	3	3		2	2				131
005.4	VIBRIO PARAHAEMOLYTICUS	1																				1
008.44	YERSINIA ENTEROCOLITICA	1	1																			2
		<b>365</b>	<b>29</b>	<b>20</b>	<b>16</b>	<b>1</b>	<b>16</b>	<b>7</b>	<b>47</b>	<b>3</b>	<b>33</b>	<b>5</b>	<b>18</b>	<b>15</b>	<b>19</b>	<b>6</b>	<b>28</b>	<b>179</b>	<b>18</b>			<b>825</b>

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

\*\*OOP=Out of Province

**STBBI Infection Summary Report - September 2013**

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2012	2013	2012	2013
All Chlamydia Infections	546	577	5089	4896
All Gonorrhoea Infections (including PRNG)	136	110	1058	949
All Syphilis Infections*	11	20	68	179
Gonorrhoea & Chlamydia Co-infections	63	47	458	405
HIV	3	13	50	99

**Total Number of STBBI Cases by Age and Gender - September 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+		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							13	1	112	41	105	62	59	46	35	30	9	12	2	3							530
Gonorrhoea Only Cases									9	8	19	8	2	3	4	4		3	1	2							63
Syphilis Only Cases											1	1			2	4	1	3	2	3		2		1			20
GC and CT Cases							1	17	4	5	8	4	3	1	2	1	1										47
<b>TOTAL</b>							13	2	138	53	129	79	66	52	42	40	11	19	5	8		2		1			660
HIV													2	1	3	2	1	1	1	2							13

**Regional STBBI Distribution - September 2013**

Disease/Infection	Winnipeg	Brandon	N. Eastman		S. Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP***	Missing	TOTAL
Case Referred to:**			F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P				
All Chlamydia Infections	245	22	8	12		12	5	16	11	36	1	19	1	29	5	37	72	35	1	10		577
All Gonorrhoea Infections	51	1	5	1		1	1	1	3	4		2		3		3	22	10		2		110
All Syphilis Infections	16					1		1						1			1					20
GC and CT Infections	22		1						1	1		1		3		1	13	2		2		47

\* 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