

## Manitoba Monthly Surveillance Unit Report

Reported up to August 31, 2013

### Highlights:

#### 1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA), *Clostridium difficile* (*C. difficile*), and Vancomycin Resistant Enterococci (VRE) accounted for 78% of all non-STBBI related communicable diseases reported to Manitoba Health during August 2013.

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

There were 606 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in August 2013:

- 491 reported cases of chlamydia (CT) only
- 52 reported cases of gonorrhoea (GC) only
- 40 reported co-infections of CT and GC and
- 23 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 August 2013, there were 26 cases of hepatitis C virus (HCV) and 10 cases of HIV newly reported in Manitoba.

#### 3. Other Communicable Diseases

The number of reported cases in August 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 216 and 450 cases expected

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

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2012	2013	Expected*	Ex. Range**	2012	2013
006.9	AMEBIASIS	1	1	2	0-6	22	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	30	21	***	***	145	132
116.0	BLASTOMYCOSIS		2	***	***	6	12
005.1	BOTULISM			***	***		
023	BRUCELLOSIS			0	0-1		2
005.2	C. PERFRINGENS			0	0-1	1	3
008.43	CAMPYLOBACTER	41	32	31	18-44	168	151
558.2	CLOSTRIDIUM DIFFICILE	51	66	***	***	552	577
046.1	CREUTZFELD-JACOB DISEASE			***	***		1
007.8	CRYPTOSPORIDIOSIS	7	7	7	0-21	33	16
061.0	DENGUE FEVER	1		0	0-1	2	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			1	0-3	3	9
008.0	E. COLI-VEROTOXIGENIC	1	5	8	0-32	25	19
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	13	14	13	4-22	75	66
038.42	H.INFLUENZAE (BLOOD)			***	***	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	1		1	0-3	3	6
070.3	HEPATITIS B	1		0	0-1	1	2
070.51	HEPATITIS C	20	26	27	19-35	242	219
487.1A	INFLUENZA A	1	1	0	0-2	67	467
487.1B	INFLUENZA B			0	0	214	99
482.83	LEGIONELLA			0	0-1	2	2
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY	1		0	0-1	1	
027.0	LISTERIA MONOCYTOGENES			1	0-3	4	1
088.81	LYME DISEASE			1	0-4	5	
084	MALARIA	1		1	0-3	10	10
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF			0	0-0	1	4
036.82	MENINGOCOCCAL ARTHROPATHY			***	***		
036.2	MENINGOCOCCAL BLOOD			0	0-1		3
B95.6	MRSA	439	478	333	216-450	2488	2746
072.9	MUMPS			0	0-1	10	
036.89	N.MENINGITIDIS OTHER			0	0-1		
728.86	NECROTIZING FASCIITIS	2	2	1	0-3	2	14
729.1	NECROTIZING MYOSITIS			***	***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS			***	***		3
033.0	PERTUSSIS	16	1	7	0-19	38	3
038.2	PNEUM. SEPTICEMIA	10	8	7	2-12	97	78
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 August 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	0-0	1	
771.0	RUBELLA CONGENITAL			0	0-0		
041.2	S.PNEUM.OTHER		1	1	0-3	7	12
003.0	SALMONELLA	19	20	19	7-31	124	144
079.82	SARS (CORONAVIRUS)			***	***		
079.99	SEVERE RESPIRATORY ILLNESS			***	***		
004	SHIGELLOSIS	7	4	4	0-11	46	19
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	5	6	***	***	59	74
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	1		0	0-1	1	1
127.2	STRONGYLOIDES	1	4	2	0-5	13	16
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			0	0-1	3	
124	TRICHINOSIS			0	0-1		
013-018	TUBERCULOSIS - NON-RESP.	2	3	3	0-5	14	18
010	TUBERCULOSIS - PRIM.		1	1	0-3	6	7
011-012	TUBERCULOSIS - RESP	12	11	10	4-15	63	92
021.9	TULAREMIA			0	0-1		4
002.0	TYPHOID	1		1	0-2	4	2
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	118	66	***	***	1004	903
005.4	VIBRIO PARAHAEMOLYTICUS		1	***	***	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	5	1	***	***	8	1
008.44	YERSINIA ENTEROCOLITICA			1	0-4	9	1
		808	782			5595	5982

\* 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 AUGUST 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	
006.9	AMEBIASIS			1																								1
038.0	BETA STREP SEPTICEMIA						1									1	1	2	1		6		3	2	2		2	21
116.0	BLASTOMYCOSIS				1								1															2
008.43	CAMPYLOBACTER			2	1				1			2		1	3	2		4	1	6	1	2	1	2	1	1	1	32
558.2	CLOSTRIDIUM DIFFICILE	1								2			2			1	2	2	4	7	2	9	8	6	6	9	5	66
007.8	CRYPTOSPORIDIOSIS					2		1	2	1		1															7	
008.0	E. COLI 0157						1	1				1		1	1												5	
007.1	GIARDIA LAMBLIA			3	3	3	1											2	1	1							14	
070.51	HEPATITIS C											1	1	3	1	3	3	3	5	2		1	1	2			26	
487.1A	INFLUENZA A																										1	1
B95.6	MRSA	11	15	18	26	25	19	11	17	16	5	16	15	19	17	35	28	30	22	23	22	9	24	8	10	18	19	478
728.86	NECROTIZING FASCIITIS																				1	1					2	
033.0	PERTUSSIS																									1	1	
038.2	PNEUM. SEPTICEMIA			1	1				1		1				1		1	1								1	8	
003.0	SALMONELLA			1			1		1			1	1	4	2		2	3	1	2			1				20	
004	SHIGELLOSIS									1			1					2									4	
041.1	STREP PYOGENES - OTHER ST															2	1				1	1	1				6	
041.2	STREP.PNEUM.OTHER														1												1	
127.2	STRONGYLOIDIASIS			1												1	1		1								4	
013-018	TUBERCULOSIS - NON-RESP.							1			1				1												3	
011-012	TUBERCULOSIS - RESP									2				1	2			1			3		1	1			11	
10	TUBERCULOSIS - PRIM.			1																							1	
B96.8	VANCOMYCIN RES. ENTER.		1									1		2	1	1	7	2	1	3	5	6	7	7	13	9	66	
005.4	VIBRIO PARAHAEMOLYTICUS																									1	1	
066.41	WNV Neurological Syndrome																									1	1	
		12	16	27	33	30	23	14	22	20	9	22	22	28	31	47	40	53	41	42	40	28	46	28	26	43	38	782

**SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR AUGUST 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>																						
006.9	AMEBIASIS	1																				1
038.0	BETA STREP SEPTICEMIA	14	1					1	1			1						3				21
116.0	BLASTOMYCOSIS	2																				2
008.43	CAMPYLOBACTER	12	1			3		3		3		6		1		3						32
558.2	CLOSTRIDIUM DIFFICILE	41	4		1	3		3		6		4		2		1	1					66
007.8	CRYPTOSPORIDIOSIS	1				2				3						1						7
008.0	E. COLI 0157	1				1						2		1								5
007.1	GIARDIA LAMBLIA	8	4			1				1												14
070.51	HEPATITIS C	18						1		1	1		1		1	2			1			26
487.1A	INFLUENZA A												1									1
B95.6	MRSA	160	10	13	2		10	3	14	1	11	3	5	4	6	7	18	201	10			478
728.86	NECROTIZING FASCIITIS	1																1				2
033.0	PERTUSSIS																			1		1
038.2	PNEUM. SEPTICEMIA	1			1	1				1	2					1				1		8
003.0	SALMONELLA	9	1			2	1	2		3				2								20
004	SHIGELLOSIS	4																				4
041.1	STREP PYOGENES - OTHER ST	3						1		1						1						6
041.2	STREP.PNEUM.OTHER		1																			1
127.2	STRONGYLOIDIASIS	3	1																			4
013-18	TUBERCULOSIS - NON-RESP	1										1						1				3
10	TUBERCULOSIS- PRIM																	1				1
011-12	TUBERCULOSIS-RESP	7										1						3				11
B96.8	VANCOMYCIN RES. ENTER.	44		2	1	4	1	5		4		1		2				2				66
005.4	VIBRIO PARAHAEMOLYTICUS	1																				1
066.41	WNV Neurological Syndrome							1														1
		<b>332</b>	<b>23</b>	<b>15</b>	<b>5</b>		<b>27</b>	<b>6</b>	<b>30</b>	<b>3</b>	<b>36</b>	<b>5</b>	<b>21</b>	<b>4</b>	<b>15</b>	<b>8</b>	<b>26</b>	<b>213</b>	<b>12</b>	<b>1</b>		<b>782</b>

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

\*\*OOP=Out of Province

**STBBI Infection Summary Report - August 2013**

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2012	2013	2012	2013
All Chlamydia Infections	581	531	4543	4321
All Gonorrhea Infections (including PRNG)	147	92	922	841
All Syphilis Infections*	5	23	57	159
Gonorrhea & Chlamydia Co-infections	71	395	395	359
HIV	9	10	47	86

**Total Number of STBBI Cases by Age and Gender - August 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							5	1	100	31	110	55	52	42	40	32	9	8	2	4							491
Gonorrhea Only Cases							1		6	7	7	10	4		6	4	1	3	1	2							52
Syphilis Only Cases												1	1		3	8	2	4	1	2				1			23
GC and CT Cases							2		13	6	5	2	4	4	1	1		1		1							40
<b>TOTAL</b>							8	1	119	44	122	68	61	46	50	45	12	16	4	9				1			606
HIV									1			1			2		1	3		1				1			10

**Regional STBBI Distribution - August 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				
<b>Case Referred to:**</b>																						
All Chlamydia Infections	230	30	1	17		8	7	15	2	23	1	19	6	19	7	28	80	26	4	7	1	531
All Gonorrhea Infections	34	1	2	4			3	4		5		4		2		2	23	7		1		92
All Syphilis Infections	18						1			1					1	1					1	23
GC and CT Infections	13	1		2						2		1			1	16	4					40

\* 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