

## Manitoba Monthly Surveillance Unit Report

Reported up to June 30, 2012

### Highlights:

#### 1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 58% of all non-STBBI related communicable diseases reported to Manitoba Health during June 2012.

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

There were 606 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in June 2012:

- 480 reported cases of chlamydia (CT) only
- 69 reported cases of gonorrhoea (GC) only
- 53 reported co-infections of CT and GC and
- 4 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 June 2012, there were no acute cases of Hepatitis B virus (HBV), 23 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 June 2012 was within or below the statistically expected range for these reported communicable diseases with the exception of the following disease(s):

- Campylobacteriosis: 37 positive lab-confirmed cases reported; less than 37 expected in an average month.
- Legionellosis: 2 positive lab-confirmed cases reported; less than 2 expected in an average month.
- Parasitic Diseases, Other\*: 5 positive lab-confirmed cases reported; less than 1 expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during May, June, and July, 2007-2011.

*\*Parasitic diseases other than amoebiasis, cryptosporidiosis, cyclosporiasis, fish tapeworm, giardiasis, malaria, strongyloidiasis, toxoplasmosis, trichinosis and trypanosomiasis.*

## **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 June 2012**

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2011	2012	Expected*	Ex. Range**	2011	2012
006.9	AMEBIASIS	3	2	3	0-7	12	19
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1		
005.8	B. CEREUS			0	0-1		
320.1	BAC. MENINGITIS - PNEUM		1	0	0-1		3
320.7	BAC.MENINGITIS-LISTERIA				***	1	
038.0	BETA STREP SEPTICEMIA	8	12		***	69	93
116.0	BLASTOMYCOSIS		1		***	2	5
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1	1	1
005.2	C. PERFRINGENS			0	0-2	2	1
008.43	CAMPYLOBACTER	30	37	24	12-36	124	94
558.2	CLOSTRIDIUM DIFFICILE	93	60		***	474	433
046.1	CREUTZFELD-JACOB DISEASE				***		
007.8	CRYPTOSPORIDIOSIS	3	4	2	0-7	12	20
061.0	DENGUE FEVER	1		0	0-1	3	1
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-1		
032	DIPHTHERIA CASES			0	0-0		
123.4	DIPHYLLOBOTHRIUM SPP	3		1	0-4	5	3
008.0	E. COLI-VEROTOXIGENIC	7	7	5	0-11	26	18
054.3	ENCEPHALITIS			0	0-1	1	
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	5	9	11	2-20	46	49
038.42	H.INFLUENZAE (BLOOD)	1			***	2	8
320.0	H.INFLUENZAE (CSF)			0	0-1	1	3
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-0	2	
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-1		
070.1	HEPATITIS A	1	1	1	0-3	6	1
070.3	HEPATITIS B	1		0	0-1	4	
070.51	HEPATITIS C	15	23	28	16-40	149	189
487.1A	INFLUENZA A				***	113	66
487.1B	INFLUENZA B				***	12	214
482.83	LEGIONELLA	2	2	0	0-1	3	2
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0		
027.0	LISTERIA MONOCYTOGENES			0	0-1	1	1
088.81	LYME DISEASE	3		1	0-4	3	
084	MALARIA	3	4	1	0-4	10	8
055.9	MEASLES			0	0-1		
036.0	MENINGOCOCCAL CSF			0	0-1	1	1
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCAL BLOOD			0	0-1		
B95.6	MRSA	244	289	222	91-353	1444	1633
072.9	MUMPS			1	0-3	9	6
036.89	N.MENINGITIDIS OTHER	1		0	0-1	1	
728.86	NECROTIZING FASCIITIS			1	0-4	3	
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
120	PARASITIC DISEASES, OTHER****		5	0	0-0		9
033.0	PERTUSSIS	3	1	4	0-11	11	8
038.2	PNEUM. SEPTICEMIA	8	9	9	0-18	77	84

\* 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.

\*\*\*\* Parasitic diseases other than amoebiasis, cryptosporidiosis, cyclosporiasis, fish tapeworm, giardiasis, malaria, strongyloidiasis, toxoplasmosis, trichinosis and trypanosomiasis.

**SUMMARY OF COMMUNICABLE DISEASE FOR June 2012**

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2011	2012	Expected*	Ex. Range**	2011	2012
073.9	PSITTACOSIS			0	0-0		
083.0	Q FEVER			0	0-0	1	
A82.9	RABIES				***		
082.0	RICKETTSIA RICKETTSII		1		***		1
083.9	RICKETTSIAL DISEASE, OTHER	1		0	0-1	1	
056.9C	RUBELLA (confirmed)	1		0	0-1	1	1
771.0	RUBELLA CONGENITAL			0	0-0	1	
041.2	S.PNEUM.OTHER	1		0	0-1	8	9
003.0	SALMONELLA	14	11	18	4-32	101	77
079.82	SARS (CORONAVIRUS)				***		
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS	2	4	2	0-5	17	29
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	10	6		***	53	50
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-0	1	
481	STREPTOCOCCUS PNEUMONIAE			0	0-1		
127.2	STRONGYLOIDES	3	2	2	0-6	18	12
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			0	0-1	1	2
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI	1	1	0	0-2	5	2
013-018	TUBERCULOSIS - NON-RESP.	2	2	2	0-4	11	11
010	TUBERCULOSIS - PRIM.			1	0-3	5	4
011-012	TUBERCULOSIS - RESP	5	6	10	2-18	40	47
021.9	TULAREMIA			0	0-1		
002.0	TYPHOID			0	0-1	4	2
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	102	104		***	523	788
005.4	VIBRIO PARAHAEMOLYTICUS				***		1
070.59	VIRAL HEP. OTHER				***		2
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL				***		
008.44	YERSINIA ENTEROCOLITICA		1	0	0-1	7	8
		<b>577</b>	<b>605</b>			<b>3428</b>	<b>4019</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 JUNE 2012**

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													2
320.1	BAC. MENINGITIS - PNEUM																				1									1
038.0	BETA STREP SEPTICEMIA	1														2		1			2	2		1	1	1		1	12	
116.0	BLASTOMYCOSIS													1																1
008.43	CAMPYLOBACTER			3	4		2				2	4	3	1	2	2	1	3	1	4	2	1	1	1						37
558.2	CLOSTRIDIUM DIFFICILE					1	1	1			1			2	2		8	1	6	4	4	2	6	10	5	6			60	
007.8	CRYPTOSPORIDIOSIS			1								2	1																4	
008.0	E. COLI 0157			3		1		1					1								1								7	
007.1	GIARDIA LAMBLIA			1	2					1		1	1	1	1			1											9	
070.1	HEPATITIS A																	1												1
070.51	HEPATITIS C											1	2	1	5	1	2	3	1	3		2	1	1					23	
482.83	LEGIONELLA																	1					1							2
084	MALARIA																	1			1					1			4	
B95.6	MRSA	1	4	16	14	6	10	11	10	12	11	9	7	13	10	15	12	16	23	12	14	12	11	10	9	13	8		289	
120	PARASITIC DISEASES, OTHER*			1	2								1	1																5
033.0	PERTUSSIS		1																											1
038.2	PNEUM. SEPTICEMIA											1				1	1	1				1		1			3		9	
082.0	RICKETTSIA RICKETTSII																	1												1
003.0	SALMONELLA			1	1	1	1			1		1	1				1	1					1				1		11	
004	SHIGELLOSIS			1		1	1	1																						4
041.1	STREP PYOGENES - OTHER ST													1	1			1	1	1							1		6	
127.2	STRONGYLOIDIASIS				1	1																								2
086	TRYPANOSOMIASIS																				1									1
013-018	TUBERCULOSIS - NON-RESP.																	1												2
011-012	TUBERCULOSIS - RESP											1				2				1		1	1							6
B96.8	VANCOMYCIN RES. ENTER.					1								1	2	1	1	2	3	11	11	10	13	18	22	8			104	
008.44	YERSINIA ENTEROCOLITICA															1														1
		2	5	22	27	12	17	13	11	14	15	18	15	23	17	31	20	35	36	29	37	31	30	34	40	42	28		<b>605</b>	

\* Parasitic diseases other than amoebiasis, cryptosporidiosis, cyclosporiasis, fish tapeworm, giardiasis, malaria, strongyloidiasis, toxoplasmosis, trichinosis and trypanosomiasis.

**SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR JUNE 2012**

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		1									1										2	
320.1	BAC. MENINGITIS - PNEUM		1																			1	
038.0	BETA STREP SEPTICEMIA	6	1			1	1			2		1										12	
116.0	BLASTOMYCOSIS	1																				1	
008.43	CAMPYLOBACTER	10	1			4		3		3		10		4				2				37	
558.2	CLOSTRIDIUM DIFFICILE	33	4		1	3		5		3		4		4		2		1				60	
007.8	CRYPTOSPORIDIOSIS	3												1								4	
008.0	E. COLI 0157	1						1		1				4								7	
007.1	GIARDIA LAMBLIA	8	1																			9	
070.1	HEPATITIS A	1																				1	
070.51	HEPATITIS C	15				1		1		1		2		1				1		1		23	
482.83	LEGIONELLA	1			1																	2	
084	MALARIA	3								1												4	
B95.6	MRSA	110	4	3	6	4		10		6	2	5	3	6	7	11	85	27				289	
120	PARASITIC DISEASES, OTHER***	3				1						1										5	
033.0	PERTUSSIS									1												1	
038.2	PNEUM. SEPTICEMIA	4				2				2								1				9	
082.0	RICKETTSIA RICKETTSII	1																				1	
003.0	SALMONELLA	8				1	1					1										11	
004	SHIGELLOSIS													3		1						4	
041.1	STREP PYOGENES - OTHER ST	2			1	1		1						1								6	
127.2	STRONGYLOIDIASIS	2																				2	
086	TRYPANOSOMIASIS					1																1	
013-018	TUBERCULOSIS - NON-RESP.	1																1				2	
011-012	TUBERCULOSIS - RESP	3																1	2			6	
B96.8	VANCOMYCIN RES. ENTER.	80	1		2	3		1		1		5	1			3		7				104	
008.44	YERSINIA ENTEROCOLITICA	1																				1	
		297	14	3	11	22	2	22		21	2	30	4	24	7	17	89	39		1		<b>605</b>	

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

\*\* OOP=Out of Province

\*\*\* Parasitic diseases other than amoebiasis, cryptosporidiosis, cyclosporiasis, fish tapeworm, giardiasis, malaria, strongyloidiasis, toxoplasmosis, trichinosis and trypanosomiasis.

**STBBI Infection Summary Report - June 2012**

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2011	2012	2011	2012
All Chlamydia Infections	597	533	3403	3325
All Gonorrhea Infections (including PRNG)	87	122	455	644
All Syphilis Infections*	11	4	25	35
Gonorrhea & Chlamydia Co-infections	40	53	216	258
HIV	6	10	39	42

**Total Number of STBBI Cases by Age and Gender - June 2012**

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							2	1	114	42	90	62	52	34	29	27	14	7	2	1							1	<b>480</b>
Gonorrhea Only Cases									11	4	12	9	8	6	6	3	1	6		2							1	<b>69</b>
Syphilis Only Cases					1										2		1											<b>4</b>
GC and CT Cases									17	5	14	5	2	5	1	3		1										<b>53</b>
<b>TOTAL</b>					1		2	1	142	51	116	76	62	45	38	33	16	14	2	3		2				2	<b>606</b>	
HIV									1						2	2		3		1		1						<b>10</b>

**Regional STBBI Distribution - June 2012**

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	250	15	19	16		8	10	19	7	26		14	7	27	5	18	59	19	4	10		<b>533</b>	
All Gonorrhea Infections	78		4	1		1	1	5		3			1		2	2	15	5	2	2		<b>122</b>	
All Syphilis Infections	3	1																				<b>4</b>	
GC and CT Infections	26		3	1		1	1	3		3					1	1	10	1	1	1		<b>53</b>	

\* 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