

## Manitoba Monthly Surveillance Unit Report

Reported up to March 31, 2012

### Highlights:

#### 1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 44% of all non-STBBI related communicable diseases reported to Manitoba Health during March 2012.

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

There were 619 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in March 2012:

- 511 reported cases of chlamydia (CT) only
- 59 reported cases of gonorrhoea (GC) only
- 42 reported co-infections of CT and GC and
- 7 reported cases of syphilis

Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 48% 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 2012, there were no acute cases of Hepatitis B virus (HBV), 27 cases of Hepatitis C virus (HCV) and 12 cases of HIV newly reported in Manitoba.

#### 3. Other Communicable Diseases

The number of reported cases in March 2012 was within or below the statistically expected range for these reported communicable diseases with the exception of the following disease(s):

- *Clostridium perfringens*: 1 positive lab-confirmed case reported; less than 1 expected in an average month.
- *Streptococcus pneumoniae* (septicaemia): 21 positive lab-confirmed cases reported; less than 20 expected in an average month.
- Schistosomiasis: 2 positive lab-confirmed cases reported; less than 1 expected in an average month.
- Toxoplasmosis: 2 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 February, March, and April, 2007-2011.

## **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 2012**

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2011	2012	Expected*	Ex. Range**	2011	2012
006.9	AMEBIASIS	2	6	4	0-8	5	11
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
320.7	BAC.MENINGITIS-LISTERIA				***	1	
038.0	BETA STREP SEPTICEMIA	23	12		***	40	38
116.0	BLASTOMYCOSIS		1		***	2	4
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1	1	1
005.2	C. PERFRINGENS		1	0	0-0		1
008.43	CAMPYLOBACTER	19	14	16	8-24	52	34
558.2	CLOSTRIDIUM DIFFICILE	75	76		***	216	235
046.1	CREUTZFELD-JACOB DISEASE				***		
007.8	CRYPTOSPORIDIOSIS	2	2	2	0-4	5	3
061.0	DENGUE FEVER			0	0-1	1	
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			1	0-3		
032	DIPHTHERIA CASES			0	0-1		
123.4	DIPHYLLOBOTHRIUM SPP			0	0-1	1	3
008.0	E. COLI-VEROTOXIGENIC	3	3	3	0-6	9	9
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	12	12	8	2-14	25	27
038.42	H.INFLUENZAE (BLOOD)		3		***		7
320.0	H.INFLUENZAE (CSF)			0	0-0	1	1
041.5	H.INFLUENZAE (OTHER STERILE)	1		0	0-1	1	
480.8	HANTA VIRUS			0	0-1		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-1		
070.1	HEPATITIS A	1		1	0-3	2	
070.3	HEPATITIS B			1	0-3	3	
070.51	HEPATITIS C	28	27	29	18-40	72	103
487.1A	INFLUENZA A	7	39		***	113	48
487.1B	INFLUENZA B	3	137		***	3	142
482.83	LEGIONELLA			0	0-1	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	1	1	1	0-3	3	2
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF	1		0	0-1	1	
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCAL BLOOD			0	0-1		
B95.6	MRSA	257	262	190	107-273	719	756
072.9	MUMPS	4		1	0-4	6	6
036.89	N.MENINGITIDIS OTHER			0	0-1		
728.86	NECROTIZING FASCIITIS			1	0-3		
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	1	1	2	0-9	4	1
038.2	PNEUM. SEPTICEMIA	15	21	11	3-19	41	44
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 2012**

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2011	2012	Expected*	Ex. Range**	2011	2012
083.0	Q FEVER	1		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	1		0	0-1	1	
041.2	S.PNEUM.OTHER	3	2	1	0-3	5	9
003.0	SALMONELLA	18	14	20	11-29	60	45
079.82	SARS (CORONAVIRUS)				***		
120	SCHISTOSOMIASIS		2	0	0-0		4
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS	7	4	3	0-7	14	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	10	8		***	25	29
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	2	4	1	0-4	8	7
037	TETANUS			0	0-1		
130.9	TOXOPLASMOSIS		2	0	0-1		2
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI	2	1	0	0-1	2	1
013-018	TUBERCULOSIS - NON-RESP.	3	1	2	0-6	6	4
010	TUBERCULOSIS - PRIM.	1	1	1	0-3	3	3
011-012	TUBERCULOSIS - RESP	5	7	8	4-12	21	23
021.9	TULAREMIA			0	0-0		
002.0	TYPHOID		1	0	0-1	1	2
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	133	105		***	224	388
005.4	VIBRIO PARAHAEMOLYTICUS				***		
070.59	VIRAL HEP. OTHER		1		***		2
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL				***		
008.44	YERSINIA ENTEROCOLITICA			1	0-4	6	5
		<b>641</b>	<b>773</b>			<b>1706</b>	<b>2011</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 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						1		1	1							1						6
320.1	BAC. MENINGITIS - PNEUM																								1				1	
038.0	BETA STREP SEPTICEMIA	1			1											1			1		1	1	1	1	1	3	1		12	
116.0	BLASTOMYCOSIS																	1											1	
005.2	C. PERFRINGENS																								1				1	
008.43	CAMPYLOBACTER		1	1			1						1	1	2						2	2	2	1					14	
558.2	CLOSTRIDIUM DIFFICILE												1	5	1	9				9	3	5	9	5	8	10	11		76	
007.8	CRYPTOSPORIDIOSIS				1							1																	2	
008.0	E. COLI 0157									1				1		1	1												3	
007.1	GIARDIA LAMBLIA	1			2	2	1		2				1		1	1	1	1											12	
038.42	H.INFLUENZAE (BLOOD)	2																					1						3	
070.51	HEPATITIS C										1	1	6	3		5	3	5		3	5	1	1	1					27	
070.59	HEPATITIS OTHER (VIRAL)										1																		1	
487.1A	INFLUENZA A		1	2	3	2	1	1	2	3			1	3	1	1	3	2	2	2	1				1	5	2		39	
487.1B	INFLUENZA B	6	8	16	13	10	22	6	7	1	5	1	1	1		6	5	6	2	4	4	1		2	1	8	1		137	
027.0	LISTERIA MONOCYTOGENES																					1							1	
084	MALARIA				1																								1	
B95.6	MRSA	4	6	15	6	6	10	8	8	9	1	15	8	9	6	12	11	19	15	14	19	11	9	6	11	14	10		262	
033.0	PERTUSSIS		1																										1	
038.2	PNEUM. SEPTICEMIA	1		1	4							1		1	2		1	2	1	3	1	1		1	1				21	
003.0	SALMONELLA		1									2	1	2	2	1	1		1	1	1			1					14	
120	SCHISTOSOMIASIS					1										1													2	
004	SHIGELLOSIS			1			3																						4	
041.1	STREP PYOGENES - OTHER ST													1		1		2	1			2		1					8	
041.2	STREP.PNEUM.OTHER	1																							1				2	
127.2	STRONGYLOIDIASIS					1										1		1				1							4	
130.9	TOXOPLASMOSIS			2																									2	
086	TRYPANOSOMIASIS													1															1	
013-018	TUBERCULOSIS - NON-RESP.																1												1	
010	TUBERCULOSIS - PRIM.				1																								1	
011-012	TUBERCULOSIS - RESP									1		2						1	1		1		1		1				7	
002.0	TYPHOID																	1											1	
B96.8	VANCOMYCIN RES. ENTER.				1								1		1	2	2	2	2	6	4	9	7	10	12	28	20		105	
		16	18	39	32	21	39	17	17	16	7	19	15	21	12	39	31	42	37	43	43	33	34	27	41	69	45		<b>773</b>	

**SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR MARCH 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						
006.9	AMEBIASIS	5										1											6
320.1	BAC. MENINGITIS - PNEUM	1																					1
038.0	BETA STREP SEPTICEMIA	7						1				1						2				1	12
116.0	BLASTOMYCOSIS	1																					1
005.2	C. PERFRINGENS											1											1
008.43	CAMPYLOBACTER	6		1		3				1								1	1	1			14
558.2	CLOSTRIDIUM DIFFICILE	37	4		2		8	2		10		5		5					3				76
007.8	CRYPTOSPORIDIOSIS		1							1													2
008.0	E. COLI 0157	2						1															3
007.1	GIARDIA LAMBLIA	6	3			1						1		1									12
038.42	H.INFLUENZAE (BLOOD)															1	1					1	3
070.51	HEPATITIS C	20						1	1	3				1		1							27
070.59	HEPATITIS OTHER (VIRAL)			1																			1
487.1A	INFLUENZA A	17		2		2		1	1	7		1	1	1				6					39
487.1B	INFLUENZA B	29	2	3	3	1		1		3		1		1				90	3				137
027.0	LISTERIA MONOCYTOGENES	1																					1
084	MALARIA	1																					1
B95.6	MRSA	97	3	5	3	5	2	8		6	1	3	2	4	8	6	102	7					262
033.0	PERTUSSIS							1															1
038.2	PNEUM. SEPTICEMIA	14						1		1		1				2	2						21
003.0	SALMONELLA	10								1				3									14
120	SCHISTOSOMIASIS	1	1																				2
004	SHIGELLOSIS	1														1	2						4
041.1	STREP PYOGENES - OTHER ST	4	1					1										2					8
041.2	STREP.PNEUM.OTHER									1						1							2
127.2	STRONGYLOIDIASIS	4																					4
130.9	TOXOPLASMOSIS	1						1															2
086	TRYPANOSOMIASIS	1																					1
013-018	TUBERCULOSIS - NON-RESP.																	1					1
010	TUBERCULOSIS - PRIM.																	1					1
011-012	TUBERCULOSIS - RESP	4								1								2					7
002.0	TYPHOID	1																					1
B96.8	VANCOMYCIN RES. ENTER.	75			4		3		6	7		1							9				105
		346	15	12	12		23	3	25	1	42	1	16	3	16	11	12	209	23	1		2	773

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

\*\* OOP=Out of Province

**STBBI Infection Summary Report - March 2012**

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2011	2012	2011	2012
All Chlamydia Infections	605	553	1724	1660
All Gonorrhea Infections (including PRNG)	81	101	237	289
All Syphilis Infections*	4	7	9	24
Gonorrhea & Chlamydia Co-infections	37	42	117	119
HIV	6	12	21	24

**Total Number of STBBI Cases by Age and Gender - March 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	3	125	32	120	45	54	46	34	27	8	9	3	3								511
Gonorrhea Only Cases									6	1	11	8	7	8	5	6	2	5										59
Syphilis Only Cases												1			3	2						1						7
GC and CT Cases							1	8	4	10	4	3	4		5		1					2						42
<b>TOTAL</b>							2	4	139	37	141	58	64	58	42	40	10	15	3	3		3						619
HIV											1	1			2	1	1	3		2		1						12

**Regional STBBI Distribution - March 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	261	21	15	5	1	16	19	9	1	20		15	2	15	5	38	80	26		4		553	
All Gonorrhea Infections	52	1	1			1	1	4		5		2				7	25	1		1		101	
All Syphilis Infections	6			1																		7	
GC and CT Infections	20					1		1								3	17					42	

\* 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