

Manitoba Monthly Surveillance Unit Report

Reported up to August 31, 2012

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 60% of all non-STBBI related communicable diseases reported to Manitoba Health during August 2012.

- The number of reported cases of MRSA was above the statistically expected range in August 2012: 440 positive lab-confirmed cases reported; less than 411 expected in an average month.

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

There were 661 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in August 2012:

- 510 reported cases of chlamydia (CT) only
- 76 reported cases of gonorrhoea (GC) only
- 70 reported co-infections of CT and GC and
- 5 reported cases of syphilis

Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 45% 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 2012, there were no acute cases of Hepatitis B virus (HBV), 20 cases of Hepatitis C virus (HCV) and 9 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

The number of reported cases in August 2012 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.
- Leprosy: 1 positive lab-confirmed case reported; less than 1 expected in an average month.
- Pertussis: 15 positive lab-confirmed cases reported; less than 11 expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during July, August, and September, 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 August 2012

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2011	2012	Expected*	Ex. Range**	2011	2012
006.9	AMEBIASIS	5	1	2	0-6	18	23
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1		
005.8	B. CEREUS			0	0-2		
320.1	BAC. MENINGITIS - PNEUM	1		0	0-1	2	3
320.7	BAC.MENINGITIS-LISTERIA				***	1	
038.0	BETA STREP SEPTICEMIA	18	33		***	102	145
116.0	BLASTOMYCOSIS	3	2		***	5	8
005.1	BOTULISM				***		
023	BRUCELLOSIS	1		0	0-1	2	1
005.2	C. PERFRINGENS			0	0-1	2	1
008.43	CAMPYLOBACTER	40	42	29	16-42	199	169
558.2	CLOSTRIDIUM DIFFICILE	67	53		***	607	555
046.1	CREUTZFELD-JACOB DISEASE				***		
007.8	CRYPTOSPORIDIOSIS	1	7	9	0-27	13	31
061.0	DENGUE FEVER		1	0	0-0	3	2
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			1	0-4	6	3
008.0	E. COLI-VEROTOXIGENIC	6	1	8	0-32	38	25
054.3	ENCEPHALITIS			0	0-0	1	
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	14	14	12	2-22	65	73
038.42	H.INFLUENZAE (BLOOD)	3			***	5	9
320.0	H.INFLUENZAE (CSF)			0	0-1	1	3
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	1	0-2	7	3
070.3	HEPATITIS B			0	0-1	5	
070.51	HEPATITIS C	35	20	28	20-36	207	239
487.1A	INFLUENZA A				***	113	66
487.1B	INFLUENZA B		1		***	12	215
482.83	LEGIONELLA			0	0-1	3	2
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY		1	0	0-0		1
027.0	LISTERIA MONOCYTOGENES			1	0-3	3	4
088.81	LYME DISEASE			1	0-3	6	2
084	MALARIA	3	1	1	0-3	14	11
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF			0	0-0	1	1
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCAL BLOOD			0	0-1		
B95.6	MRSA	355	440	292	174-410	2144	2481
072.9	MUMPS			0	0-1	9	7
036.89	N.MENINGITIDIS OTHER			0	0-1	1	
728.86	NECROTIZING FASCIITIS			1	0-4	4	
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-1		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	4	15	4	0-10	19	32
038.2	PNEUM. SEPTICEMIA	5	11	6	1-11	83	100
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 2012

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2011	2012	Expected*	Ex. Range**	2011	2012
083.0	Q FEVER			0	0-0	1	
A82.9	RABIES				***		
082.0	RICKETTSIA RICKETTSII				***		
083.9	RICKETTSIAL DISEASE, OTHER			0	0-1	1	
056.9C	RUBELLA (confirmed)			0	0-0		1
771.0	RUBELLA CONGENITAL			0	0-0	1	
041.2	S.PNEUM.OTHER			1	0-3	8	10
003.0	SALMONELLA	14	19	19	7-31	130	117
079.82	SARS (CORONAVIRUS)				***		
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS	2	6	3	0-7	22	43
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	8	6		***	68	59
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		1	0	0-1		1
127.2	STRONGYLOIDES	4	1	2	0-5	26	14
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			0	0-0	1	2
124	TRICHINOSIS			0	0-1		
086	TRYPANOSOMA CRUZI			0	0-2	6	3
013-018	TUBERCULOSIS - NON-RESP.	4	2	3	0-5	18	15
010	TUBERCULOSIS - PRIM.	1		1	0-3	6	7
011-012	TUBERCULOSIS - RESP	6	11	9	3-15	57	62
021.9	TULAREMIA			0	0-1		1
002.0	TYPHOID		1	0	0-1	4	4
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	119	118		***	745	1002
005.4	VIBRIO PARAHAEMOLYTICUS				***		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		***		7
008.44	YERSINIA ENTEROCOLITICA	1	1	1	0-4	8	9
		721	815			4805	5574

* 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 AUGUST 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
038.0	BETA STREP SEPTICEMIA			1	2			1		1						2	1	4		1	6	3	2	3	1	1	4			33
116.0	BLASTOMYCOSIS		1		1																									2
008.43	CAMPYLOBACTER					2	3	1	1	1	3	1	3	2	2	1	2	3	2	4	3	1	1	3	2	1				42
558.2	CLOSTRIDIUM DIFFICILE				1					1					1		2		7	4	5	3	10	3	4	11				53
007.8	CRYPTOSPORIDIOSIS				1	1	1						2		1				1											7
061.0	DENGUE FEVER														1															1
008.0	E. COLI 0157											1																		1
007.1	GIARDIA LAMBLIA			2	1	3							2			2	2		1	1										14
070.1	HEPATITIS A								1																					1
070.51	HEPATITIS C												1	4		1	6	1		4	1	1	1							20
487.1B	INFLUENZA B																			1										1
030.9	LEPROSY																						1							1
084	MALARIA																	1												1
B95.6	MRSA	5	5	23	23	26	15	14	15	16	12	22	16	20	18	20	30	20	32	13	25	15	13	7	12	14	9			440
033.0	PERTUSSIS	4	3	1	3		3								1															15
038.2	PNEUM. SEPTICEMIA			1								2		1		2	1			1	1			1	1					11
003.0	SALMONELLA		2	2	1				1	2	1			1	2	1				1	1			1	1	2				19
004	SHIGELLOSIS			2	1		1		1						1															6
041.1	STREP PYOGENES - OTHER ST					1						1						1	1	1								1		6
481	STREP. PNEUMONIAE PNEUMON																	1												1
127.2	STRONGYLOIDIASIS															1														1
013-018	TUBERCULOSIS - NON-RESP.											1						1												2
011-012	TUBERCULOSIS - RESP.							1		1	1			1	1	1	1		2			1		1						11
002.0	TYPHOID															1														1
B96.8	VANCOMYCIN RES. ENTER.		1						2		1	1						5	6	8	9	8	9	16	11	23	18			118
066.41	WNV Neurological Syndrome															1				1		1	1		1					5
008.44	YERSINIA ENTEROCOLITICA													1																1
		9	12	32	34	33	23	17	18	23	18	32	23	32	25	31	48	37	47	40	51	36	31	43	31	46	43			815

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR AUGUST 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
038.0	BETA STREP SEPTICEMIA	16			2		1		2		2		3	1	1		1	3	1				33
116.0	BLASTOMYCOSIS	1																				1	2
008.43	CAMPYLOBACTER	17		1			6		4		2		9			2		1					42
558.2	CLOSTRIDIUM DIFFICILE	23	7		2		3	1			6		8		2			1					53
007.8	CRYPTOSPORIDIOSIS	2					3				1				1								7
061.0	DENGUE FEVER	1																					1
008.0	E. COLI 0157	1																					1
007.1	GIARDIA LAMBLIA	8			1		1		1		2		1										14
070.1	HEPATITIS A	1																					1
070.51	HEPATITIS C	13	1					1			2				1		1	1					20
487.1B	INFLUENZA B												1										1
030.9	LEPROSY	1																					1
084	MALARIA	1																					1
B95.6	MRSA	153	5	6	4		5		13	2	10		5	5	10	10	9	155	47			1	440
033.0	PERTUSSIS	3									8		2		1			1					15
038.2	PNEUM. SEPTICEMIA	6						1					1		1			2					11
003.0	SALMONELLA	12	1		1		1						2		2								19
004	SHIGELLOSIS	1	1												1		2		1				6
041.1	STREP PYOGENES - OTHER ST		1								1		1		1			1	1				6
481	STREP. PNEUMONIAE PNEUMON										1												1
127.2	STRONGYLOIDIASIS	1																					1
013-018	TUBERCULOSIS - NON-RESP.	2																					2
011-012	TUBERCULOSIS - RESP.	4					1				3							3					11
002.0	TYPHOID	1																					1
B96.8	VANCOMYCIN RES. ENTER.	65	12		2		4		8		4		11		3		5	1	2			1	118
066.41	WNV Neurological Syndrome	1	1						1		2												5
008.44	YERSINIA ENTEROCOLITICA	1																					1
		336	29	7	12		25	3	29	2	44		44	6	24	10	20	167	54			3	815

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

** OOP=Out of Province

STBBI Infection Summary Report - August 2012

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2011	2012	2011	2012
All Chlamydia Infections	598	580	4486	4535
All Gonorrhea Infections (including PRNG)	106	146	642	916
All Syphilis Infections*	9	5	41	51
Gonorrhea & Chlamydia Co-infections	44	70	290	392
HIV	7	9	52	54

Total Number of STBBI Cases by Age and Gender - August 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		1					5	1	118	44	114	56	51	35	38	30	4	9		4									510
Gonorrhea Only Cases								1	12	5	11	9	10	6	3	7	4	2		6								76	
Syphilis Only Cases														1					2		1		1					5	
GC and CT Cases							3		12	11	12	12	5	5	4	4	1			1								70	
TOTAL		1					8	2	142	60	137	77	66	47	45	41	9	11	2	11	1		1					661	
HIV					1									1	1	1		2		1	1	1						9	

Regional STBBI Distribution - August 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						
Case Referred to:**																						
All Chlamydia Infections	317	24	15	10	1	9	12	15	7	28		10	5	10	6	23	52	27		9		580
All Gonorrhea Infections	94		3	3		1	3	2		6		1	1	1		6	16	7		2		146
All Syphilis Infections	5																					5
GC and CT Infections	40		3	2				2		4			1			4	10	4				70

* 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