

Manitoba Monthly Surveillance Unit Report

Reported up to September 30, 2012

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 62% of all non-STBBI related communicable diseases reported to Manitoba Health during September 2012.

- The number of reported cases of MRSA was above the statistically expected range in September 2012: 398 positive lab-confirmed cases reported; less than 390 expected in an average month.

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

There were 628 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in September 2012:

- 483 reported cases of chlamydia (CT) only
- 73 reported cases of gonorrhoea (GC) only
- 63 reported co-infections of CT and GC and
- 9 reported cases of syphilis

Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 46% 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 2012, there were no acute cases of Hepatitis B virus (HBV), 25 cases of Hepatitis C virus (HCV) and 6 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

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

- Pertussis: 19 positive lab-confirmed cases reported; less than 8 expected in an average month. The increased number of cases is attributable to community clusters in southern Manitoba. Investigations are ongoing.
- Shigellosis: 13 positive lab-confirmed cases reported; less than 10 expected in an average month.

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

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2011	2012	Expected*	Ex. Range**	2011	2012
006.9	AMEBIASIS	5	5	3	0-6	23	28
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1		
005.8	B. CEREUS			0	0-2		
320.1	BAC. MENINGITIS - PNEUM			0	0-1	2	3
320.7	BAC.MENINGITIS-LISTERIA				***	1	
038.0	BETA STREP SEPTICEMIA	14	14		***	116	159
116.0	BLASTOMYCOSIS	2	2		***	7	9
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1	2	1
005.2	C. PERFRINGENS	1		0	0-1	3	1
008.43	CAMPYLOBACTER	40	27	28	15-41	239	196
558.2	CLOSTRIDIUM DIFFICILE	85	61		***	692	615
046.1	CREUTZFELD-JACOB DISEASE				***		
007.8	CRYPTOSPORIDIOSIS	3	8	9	0-26	16	39
061.0	DENGUE FEVER			0	0-0	3	2
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-1		
032	DIPHtheria CASES			0	0-1		
123.4	DIPHYLLOBOTHRIUM SPP			1	0-4	6	3
008.0	E. COLI-VEROTOXIGENIC	9	6	8	0-32	47	31
054.3	ENCEPHALITIS			0	0-0	1	
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	13	15	11	1-21	78	88
038.42	H.INFLUENZAE (BLOOD)	1			***	6	9
320.0	H.INFLUENZAE (CSF)			0	0-0	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	0-0		
070.1	HEPATITIS A			1	0-3	7	3
070.3	HEPATITIS B			0	0-1	5	
070.51	HEPATITIS C	30	25	27	17-37	237	264
487.1A	INFLUENZA A		3		***	113	69
487.1B	INFLUENZA B				***	12	215
482.83	LEGIONELLA			0	0-1	3	2
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0		1
027.0	LISTERIA MONOCYTOGENES			0	0-1	3	4
088.81	LYME DISEASE	1		1	0-3	7	2
084	MALARIA	3	2	2	0-5	17	13
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	321	398	299	209-389	2465	2879
072.9	MUMPS			0	0-1	9	7
036.89	N.MENINGITIDIS OTHER			0	0-1	1	
728.86	NECROTIZING FASCIITIS	1		1	0-4	5	
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-1		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	7	19	2	0-7	26	51
038.2	PNEUM. SEPTICEMIA	8	7	9	1-17	91	107
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 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	0-0	1	
056.9C	RUBELLA (confirmed)			0	0-0		1
771.0	RUBELLA CONGENITAL			0	0-0	1	
041.2	S.PNEUM.OTHER	3		1	0-3	11	10
003.0	SALMONELLA	10	15	18	3-33	140	133
079.82	SARS (CORONAVIRUS)				***		
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS		13	3	0-9	22	56
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	11	11		***	79	70
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	0-0		1
127.2	STRONGYLOIDES	5		2	0-5	31	14
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			0	0-1	1	2
124	TRICHINOSIS			0	0-1		
086	TRYPANOSOMA CRUZI	1		0	0-1	7	3
013-018	TUBERCULOSIS - NON-RESP.	2	2	2	0-4	20	17
010	TUBERCULOSIS - PRIM.	1	1	1	0-3	7	7
011-012	TUBERCULOSIS - RESP	8	10	8	0-16	65	73
021.9	TULAREMIA	1		0	0-1	1	1
002.0	TYPHOID			1	0-2	4	4
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	109	99		***	854	1101
005.4	VIBRIO PARAHAEMOLYTICUS		1		***		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		2		***		10
008.44	YERSINIA ENTEROCOLITICA	2		1	0-4	10	9
		697	746			5502	6320

* 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 SEPTEMBER 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		2											5
038.0	BETA STREP SEPTICEMIA	2	1											2			1	1				1	2		1	2	1		14	
116.0	BLASTOMYCOSIS												1													1			2	
008.43	CAMPYLOBACTER	2			2		3				1	1	1		1	1		2	1	3	3	3	2				1		27	
558.2	CLOSTRIDIUM DIFFICILE	1		1				1		1		2	1	1	1	5	1	1	1	7	1	3	7	11	5	5	5		61	
007.8	CRYPTOSPORIDIOSIS			1				1	1			1				2				1			1						8	
008.0	E. COLI 0157					1				2					2							1							6	
007.1	GIARDIA LAMBLIA			1	1	2	1		2			1				1	2	1	1		1								15	
070.51	HEPATITIS C													1	1	4	3	1	4	3	4		4						25	
487.1A	INFLUENZA A																					1			1	1			3	
084	MALARIA												1		1														2	
B95.6	MRSA	13	11	27	21	11	7	17	10	16	15	16	11	9	14	20	22	16	26	18	20	15	14	4	14	19	12		398	
033.0	PERTUSSIS	2	5	3	1	2	1		1						2						1								19	
038.2	PNEUM. SEPTICEMIA	1			1															1			1		1	1	1		7	
003.0	SALMONELLA	1			1				1	2	1	1	1		1			1	1				1		2		1		15	
004	SHIGELLOSIS			2		1	2		1					1		2		1		2			1						13	
041.1	STREP PYOGENES - OTHER ST		1				1				1				1			1	1	2	3								11	
013-018	TUBERCULOSIS - NON-RESP.											1				1													2	
010	TUBERCULOSIS - PRIM.			1																									1	
011-012	TUBERCULOSIS - RESP.								1			1			1		2	3		1		1							10	
B96.8	VANCOMYCIN RES. ENTER.							1					1	2	1			1	1	9	5	11	10	11	26	20			99	
005.4	VIBRIO PARAHAEMOLYTICUS																					1							1	
066.41	WNV Neurological Syndrome							1														1							2	
		22	20	34	28	18	14	21	15	21	19	22	18	16	25	40	30	26	41	40	42	32	46	25	35	56	40		746	

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR SEPTEMBER 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	3	2																				5
038.0	BETA STREP SEPTICEMIA	6					1	1			2				3					1			14
116.0	BLASTOMYCOSIS	1					1																2
008.43	CAMPYLOBACTER	9	1				2		6	4			4							1			27
558.2	CLOSTRIDIUM DIFFICILE	32	4		1		5		10	2		3				3			1				61
007.8	CRYPTOSPORIDIOSIS	3					1				3	1											8
008.0	E. COLI 0157	3			1		1		1														6
007.1	GIARDIA LAMBLIA	8					3		1	1		1							1				15
070.51	HEPATITIS C	20							2	1					1						1		25
487.1A	INFLUENZA A	3																					3
084	MALARIA	1							1														2
B95.6	MRSA	114	3	6	9		5	6	14	1	7	1	9	5	12	3	13	131	59				398
033.0	PERTUSSIS	3									10		2						4				19
038.2	PNEUM. SEPTICEMIA		1				1		1	1				1		1	1	1					7
003.0	SALMONELLA	6	1	1	1		2		1	1	1								1				15
004	SHIGELLOSIS													3		5	4	1					13
041.1	STREP PYOGENES - OTHER ST	4	1		1				1	1								1	2				11
013-018	TUBERCULOSIS - NON-RESP.	2																					2
010	TUBERCULOSIS - PRIM.																	1					1
011-012	TUBERCULOSIS - RESP.	5	1															4					10
B96.8	VANCOMYCIN RES. ENTER.	49	3		3		3		16	9		7		2				1	6				99
005.4	VIBRIO PARAHAEMOLYTICUS	1																					1
066.41	WNV Neurological Syndrome	2																					2
		275	17	7	16		25	7	54	2	42	2	26	5	22	3	22	148	71	1	1		746

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

** OOP=Out of Province

STBBI Infection Summary Report - September 2012

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2011	2012	2011	2012
All Chlamydia Infections	622	546	5108	5082
All Gonorrhoea Infections (including PRNG)	122	136	764	1053
All Syphilis Infections*	3	9	44	61
Gonorrhoea & Chlamydia Co-infections	47	63	337	456
HIV	7	6	59	65

Total Number of STBBI Cases by Age and Gender - September 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							7	1	121	38	103	49	60	32	31	22	7	10	1	1								483
Gonorrhoea Only Cases							3		12	3	13	12	7	9	2	5		3		3		1						73
Syphilis Only Cases												2		1		1		2		1		1		1				9
GC and CT Cases							1		16	6	8	15	6	1	4	4				1		1						63
TOTAL							11	1	149	47	124	78	73	43	37	32	7	15	1	6		3		1				628
HIV															2		2	1		1								6

Regional STBBI Distribution - September 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	281	15	12	9	2	6	14	16	6	23		5	1	17	2	33	71	21	1	10		1	546
All Gonorrhoea Infections	64	2	5	3			7	11	3	4				4		12	14	7					136
All Syphilis Infections	7						1											1					9
GC and CT Infections	25		4	2			4	5	2	1				3		5	9	3					63

* 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