

Manitoba Monthly Surveillance Unit Report

Reported up to October 31, 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 October 2012.

- The number of reported cases of MRSA was above the statistically expected range in October 2012: 392 positive lab-confirmed cases reported; less than 381 expected in an average month.

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

There were 666 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in October 2012:

- 555 reported cases of chlamydia (CT) only
- 54 reported cases of gonorrhoea (GC) only
- 46 reported co-infections of CT and GC and
- 11 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 October 2012, there were no acute cases of Hepatitis B virus (HBV), 33 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 October 2012 was within or below the statistically expected range for these reported communicable diseases with the exception of the following disease(s):

- Amebiasis: 8 positive lab-confirmed cases reported; less than 6 expected in an average month.
- Pneumococcal meningitis: 2 positive lab-confirmed cases reported; less than 2 expected in an average month.
- Dengue fever: 1 positive lab-confirmed case reported; less than 1 expected in an average month.
- Hanta virus: 1 positive lab-confirmed case reported; less than 1 expected in an average month.
- Pertussis: 21 positive lab-confirmed cases reported; less than 8 expected in an average month. The increased number of cases is attributable to community clusters in northern and southern Manitoba. Investigations are ongoing.

- Shigellosis: 13 positive lab-confirmed cases reported; less than 10 expected in an average month.
- Trichinosis: 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 September, October, and November, 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 October 2012

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2011	2012	Expected*	Ex. Range**	2011	2012
006.9	AMEBIASIS	2	8	2	0-5	25	36
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-0		
005.8	B. CEREUS			0	0-0		
320.1	BAC. MENINGITIS - PNEUM		2	0	0-1	2	5
320.7	BAC.MENINGITIS-LISTERIA				***	1	
038.0	BETA STREP SEPTICEMIA	24	20		***	140	179
116.0	BLASTOMYCOSIS	1			***	8	9
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1	2	1
005.2	C. PERFRINGENS	1		0	0-1	4	1
008.43	CAMPYLOBACTER	21	30	23	6-40	260	226
558.2	CLOSTRIDIUM DIFFICILE	62	60		***	754	675
046.1	CREUTZFELD-JACOB DISEASE				***		
007.8	CRYPTOSPORIDIOSIS		2	7	0-19	16	41
061.0	DENGUE FEVER		1	0	0-0	3	3
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-1		
032	DIPHTHERIA CASES	1		0	0-1	1	
123.4	DIPHYLLOBOTHRIUM SPP	2		1	0-3	8	3
008.0	E. COLI-VEROTOXIGENIC	4	3	4	0-8	51	35
054.3	ENCEPHALITIS			0	0-0	1	
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	6	9	9	2-16	84	97
038.42	H.INFLUENZAE (BLOOD)	2	3		***	8	12
320.0	H.INFLUENZAE (CSF)			0	0-0	1	3
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1	1	
480.8	HANTA VIRUS		1	0	0-0		1
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0		
070.1	HEPATITIS A		1	0	0-1	7	4
070.3	HEPATITIS B			0	0-2	5	
070.51	HEPATITIS C	27	33	27	15-39	264	296
487.1A	INFLUENZA A		3		***	113	72
487.1B	INFLUENZA B				***	12	214
482.83	LEGIONELLA	1	1	0	0-1	4	3
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			0	0-1	7	2
084	MALARIA	4	4	2	0-5	21	17
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF			0	0-0	1	1
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCEMIA BLOOD			0	0-1		
B95.6	MRSA	322	392	277	174-380	2787	3269
072.9	MUMPS			0	0-1	9	7
036.89	N.MENINGITIDIS OTHER			0	0-1	1	
728.86	NECROTIZING FASCIITIS		1	1	0-3	5	1
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-1		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	3	21	2	0-7	30	80
038.2	PNEUM. SEPTICEMIA	7	15	11	1-21	98	122
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 October 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	1		1	0-3	12	10
003.0	SALMONELLA	8	10	15	2-28	148	143
079.82	SARS (CORONAVIRUS)				***		
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS		13	3	0-9	22	71
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	12	9		***	91	79
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	1	2	0-6	36	15
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS	2		0	0-1	3	2
124	TRICHINOSIS		2	0	0-0		2
086	TRYPANOSOMA CRUZI			0	0-1	6	4
013-018	TUBERCULOSIS - NON-RESP.	3	2	2	0-4	23	19
010	TUBERCULOSIS - PRIM.	0	1	1	0-3	7	8
011-012	TUBERCULOSIS - RESP	4	12	7	1-13	69	85
021.9	TULAREMIA			0	0-1	1	1
002.0	TYPHOID	2		1	0-3	6	4
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	137	120		***	991	1221
005.4	VIBRIO PARAHAEMOLYTICUS				***		2
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				***		10
008.44	YERSINIA ENTEROCOLITICA	1		1	0-4	11	9
		665	781			6167	7109

* 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 OCTOBER 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			2						1			1	1		1	1													8
320.1	BAC. MENINGITIS - PNEUM																			1		1							2	
038.0	BETA STREP SEPTICEMIA	1	3											2				3		1	1	1	2	1	1	3	1		20	
008.43	CAMPYLOBACTER		1			1	2	2		1	1	1	3		1	3	2	1	2	1	2	1	1	1	3				30	
558.2	CLOSTRIDIUM DIFFICILE		2				1				2	1	1	1		1		3	3	7	2	6	5	6	2	10	7		60	
007.8	CRYPTOSPORIDIOSIS											1	1																2	
061.0	DENGUE FEVER		1																										1	
008.0	E. COLI 0157			1				1								1													3	
007.1	GIARDIA LAMBLIA			2	2									1	2						2								9	
038.42	H.INFLUENZAE (BLOOD)				1											1										1			3	
480.8	HANTA VIRUS																			1									1	
070.1	HEPATITIS A											1																	1	
070.51	HEPATITIS C											1	1	1		4	5		7	2	7		2	1				2	33	
070.59	HEPATITIS OTHER (VIRAL)															1													1	
487.1A	INFLUENZA A															1								1			1		3	
482.83	LEGIONELLA																								1				1	
084	MALARIA							1					1			1							1						4	
B95.6	MRSA	4	8	21	14	13	13	13	10	18	18	14	10	12	7	31	16	25	19	20	13	22	12	10	18	16	15		392	
728.86	NECROTIZING FASCIITIS																		1										1	
033.0	PERTUSSIS	6	3	6	2			2	1						1														21	
038.2	PNEUM. SEPTICEMIA													1		1	1	2	3		1	2	2		1		1		15	
003.0	SALMONELLA		1		2				1	1			1					1		1	1	1		1					10	
004	SHIGELLOSIS			3	2	1	3	1	1				1												1				13	
041.1	STREP PYOGENES - OTHER ST															1	2	2	2		1		1						9	
127.2	STRONGYLOIDIASIS												1																1	
124	TRICHINOSIS					2																							2	
013-018	TUBERCULOSIS - NON-RESP.												1			1													2	
010	TUBERCULOSIS - PRIM.		1																										1	
011-012	TUBERCULOSIS - RESP							1			2		1	1	1	2	1	1				1	1						12	
B96.8	VANCOMYCIN RES. ENTER.									1	1	2	1	2	6	4	5	5	11	9	6	15	12	12	20	8			120	
		11	20	35	23	17	19	19	14	22	22	23	23	20	13	54	36	43	44	43	38	42	42	35	38	50	33		781	

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR OCTOBER 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	5								2		1											8
320.1	BAC. MENINGITIS - PNEUM	2																					2
038.0	BETA STREP SEPTICEMIA	16	1	1				1										1					20
008.43	CAMPYLOBACTER	9	2		4		4	4	3		1							2	1				30
558.2	CLOSTRIDIUM DIFFICILE	30	1		3		5	6	6	1	2		6										60
007.8	CRYPTOSPORIDIOSIS	1							1														2
061.0	DENGUE FEVER	1																					1
008.0	E. COLI 0157	3																					3
007.1	GIARDIA LAMBLIA	4			2				2								1						9
038.42	H.INFLUENZAE (BLOOD)	2							1														3
480.8	HANTA VIRUS	1																					1
070.1	HEPATITIS A	1																					1
070.51	HEPATITIS C	19	1		2			3	1	2			1	1				1	1		1		33
070.59	HEPATITIS OTHER (VIRAL)	1																					1
487.1A	INFLUENZA A											3											3
482.83	LEGIONELLA	1																					1
084	MALARIA	3										1											4
B95.6	MRSA	132	10	3	2		4	4	7	2	9	4	6	5	5	15	8	165	10	1			392
728.86	NECROTIZING FASCIITIS						1																1
033.0	PERTUSSIS	3					1			15						1		1					21
038.2	PNEUM. SEPTICEMIA	10										1	1					3					15
003.0	SALMONELLA	3	1			1		1		1	1	1						1					10
004	SHIGELLOSIS	1						1						1		1		8	1				13
041.1	STREP PYOGENES - OTHER ST	4			1		1	1										2					9
127.2	STRONGYLOIDIASIS	1																					1
124	TRICHINOSIS	2																					2
013-018	TUBERCULOSIS - NON-RESP.	2																					2
010	TUBERCULOSIS - PRIM.																	1					1
011-012	TUBERCULOSIS - RESP	3																9					12
B96.8	VANCOMYCIN RES. ENTER.	69	7		1		2		8	2	6	1	8	1	1	1		12	1				120
		329	23	4	15		19	7	30	4	48	7	24	8	14	17	10	206	14	1	1		781

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

** OOP=Out of Province

STBBI Infection Summary Report - October 2012

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2011	2012	2011	2012
All Chlamydia Infections	590	601	5698	5682
All Gonorrhea Infections (including PRNG)	110	100	874	1153
All Syphilis Infections*	5	11	49	74
Gonorrhea & Chlamydia Co-infections	52	46	389	502
HIV	8	12	67	73

Total Number of STBBI Cases by Age and Gender - October 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							6	1	141	38	116	65	52	42	37	28	11	10	3	5								555
Gonorrhea Only Cases							1		8	2	8	3	7	8	2	5		8	1	1								54
Syphilis Only Cases									1		1		1		1		3	1	2				1					11
GC and CT Cases								1	14	2	11	2	3	3	2	4	1	1		1		1						46
TOTAL							7	2	163	43	135	71	62	54	41	38	12	22	5	9		1		1				666
HIV												2	2	1	1	2		2	1			1						12

Regional STBBI Distribution - October 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	302	30	12	14		9	12	21	3	30	2	14	3	17	6	23	66	28	5	4			601
All Gonorrhea Infections	62	4		1		3	1	3		4		1	2	2		2	12	3					100
All Syphilis Infections	6	2		1										1			1						11
GC and CT Infections	29	1		1			1	2		2		1	1	2			4	2					46

* 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