

Manitoba Monthly Surveillance Unit Report

Reported up to October 31, 2013

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA), *Clostridium difficile* (*C. difficile*), and Vancomycin Resistant Enterococci (VRE) accounted for 83% of all non-STBBI related communicable diseases reported to Manitoba Health during October 2013.

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

There were 704 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in October 2013:

- 562 reported cases of chlamydia (CT) only
- 62 reported cases of gonorrhoea (GC) only
- 54 reported co-infections of CT and GC and
- 26 reported cases of syphilis

Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 40% 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 2013, there were 35 cases of hepatitis C virus (HCV) and 17 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

The number of reported cases in October 2013 was within or below the statistically expected range for these reported communicable diseases with the exception of the following disease(s):

- *C. Perfringens*: 2 positive lab-confirmed cases were reported; between 0 and 1 cases expected
- Dengue Fever: 2 positive lab-confirmed cases were reported; between 0 and 1 cases expected
- MRSA: 473 positive lab-confirmed cases were reported; between 214 and 412 cases expected

The expected number of cases and range is statistically based on the number of reported cases during September, October, and November 2008-2012.

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 2013

ICD9	DISEASE/INFECTION	MONTHLY TOTAL			YEAR-TO-DATE		
		2012	2013	Expected*	Ex. range**	2012	2013
006.9	AMEBIASIS	6	1	3	0-7	32	14
022	ANTHRAX			***	***		
127.0	ASCARIASIS			0	0-0		1
005.8	B. CEREUS			0	0-0		
320.1	BAC. MENINGITIS - PNEUM	2		0	0-1	5	6
320.7	BAC.MENINGITIS-LISTERIA			***	***		
038.0	BETA STREP SEPTICEMIA	20	15	***	***	179	161
116.0	BLASTOMYCOSIS		2	***	***	8	16
005.1	BOTULISM			***	***		
023	BRUCELLOSIS			0	0-1		2
005.2	C. PERFRINGENS		2	0	0-1	1	5
008.43	CAMPYLOBACTER	29	14	24	8-40	226	183
558.2	CLOSTRIDIUM DIFFICILE	61	74	***	***	673	723
046.1	CREUTZFELD-JACOB DISEASE			***	***	1	
007.8	CRYPTOSPORIDIOSIS	1	4	5	0-17	40	32
061.0	DENGUE FEVER	1	2	0	0-1	3	9
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-1		2
032	DIPHThERIA CASES			0	0-1		
123.4	DIPHYLLOBOTHRIUM SPP		1	1	0-3	3	11
008.0	E. COLI-VEROTOXIGENIC	3		4	0-8	34	27
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	11	5	10	3-17	99	79
038.42	H.INFLUENZAE (BLOOD)	2	1	***	***	10	8
320.0	H.INFLUENZAE (CSF)			0	0-0	3	2
041.5	H.INFLUENZAE (OTHER STERILE)		1	0	0-1		2
480.8	HANTA VIRUS	1		0	0-1	1	
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0		
070.1	HEPATITIS A	1	2	1	0-2	4	10
070.3	HEPATITIS B			1	0-2	1	2
070.51	HEPATITIS C	34	35	27	17-37	300	270
487.1A	INFLUENZA A	3	1	***	***	74	482
487.1B	INFLUENZA B		1	***	***	217	104
482.83	LEGIONELLA	1		0	0-1	3	3
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0	1	
027.0	LISTERIA MONOCYTOGENES			0	0-1	4	2
088.81	LYME DISEASE			0	0-1	6	
084	MALARIA	4		2	0-5	17	10
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF			0	0-1	1	4
036.82	MENINGOCOCCAL ARTHROPATHY			***	***		
036.2	MENINGOCOCCEMIA BLOOD			0	0-1		3
B95.6	MRSA	392	473	313	214-412	3277	3690
072.9	MUMPS			0	0-1	10	1
036.89	N.MENINGITIDIS OTHER			0	0-1		
728.86	NECROTIZING FASCIITIS	1	1	1	0-3	3	16
729.1	NECROTIZING MYOSITIS			***	***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS			***	***	1	3
033.0	PERTUSSIS	24	1	7	0-25	85	5
038.2	PNEUM. SEPTICEMIA	14	11	11	2-20	119	94
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 2013

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2012	2013	Expected*	Ex. Range**	2012	2013
083.0	Q FEVER			0	0-0		1
A82.9	RABIES			***	***		
082.0	RICKETTSIA RICKETTSII			***	***		
083.9	RICKETTSIAL DISEASE, OTHER			0	0-0		
056.9C	RUBELLA (confirmed)			0	0-0	1	
771.0	RUBELLA CONGENITAL			0	0-0		
041.2	S.PNEUM.OTHER	2	1	1	0-3	9	16
003.0	SALMONELLA	10	19	15	3-27	148	192
079.82	SARS (CORONAVIRUS)			***	***		
079.99	SEVERE RESPIRATORY ILLNESS			***	***		
004	SHIGELLOSIS	13	1	4	0-13	71	22
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	9	6	***	***	79	88
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-0		4
481	STREPTOCOCCUS PNEUMONIAE			0	0-0	1	1
127.2	STRONGYLOIDES	1	2	2	0-6	14	20
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			0	0-1	3	
124	TRICHINOSIS	2		0	0-1	2	
086	TRYPANOSOMA CRUZI			0	0-1	3	3
013-01	TUBERCULOSIS - NON-RESP.	2	2	3	0-5	18	21
010	TUBERCULOSIS - PRIM.	0	0	1	0-2	7	8
011-01	TUBERCULOSIS - RESP	12	11	8	2-15	82	118
021.9	TULAREMIA			0	0-1		4
002.0	TYPHOID	1		1	0-2	5	2
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	120	144	***	***	1223	1178
005.4	VIBRIO PARAHAEMOLYTICUS			***	***	2	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	1
008.44	YERSINIA ENTEROCOLITICA			1	0-4	9	3
		784	833			7130	7666

* 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 BY AGE AND GENDER FOR OCTOBER 2013

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+		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						1		1						2	2	2	3					1	1		1	15	
116.0	BLASTOMYCOSIS										1										1							2	
005.2	C. PERFRINGENS	1																				1						2	
008.43	CAMPYLOBACTER					1			1		1			1		1	2	1	3	1			2					14	
558.2	CLOSTRIDIUM DIFFICILE							1		1	1		1	1			3	4	2	5	10	6	6	5	4	2	10	12	74
007.8	CRYPTOSPORIDIOSIS			1						1						1				1								4	
061.0	DENGUE FEVER									1										1								2	
123.4	DIPHYLLOBOTHRIUM												1															1	
007.1	GIARDIA LAMBLIA					2									1		1				1							5	
041.5	H.INFLUENZAE (OTHER STER																	1										1	
038.42	H.INFLUENZAE (BLOOD)																				1							1	
070.1	HEPATITIS A									2																		2	
070.51	HEPATITIS C											3	2	5	1	5	7	2	4	1	1		3				1	35	
487.1A	INFLUENZA A																	1										1	
487.1B	INFLUENZA B																				1							1	
B95.6	MRSA	7	9	19	19	25	20	9	10	12	12	21	22	19	19	22	28	22	30	23	32	12	23	14	10	25	9	473	
728.86	NECROTIZING FASCIITIS																				1							1	
033.0	PERTUSSIS				1																							1	
038.2	PNEUM. SEPTICEMIA									1					1			1	2	1	1	1	1	1		1		11	
003.0	SALMONELLA		1	2	3	1	1		2							2		2	1					1	2		1	19	
004	SHIGELLOSIS																		1									1	
041.1	STREP PYOGENES - OTHER ST											1						2	1		2							6	
041.2	STREP.PNEUM.OTHER	1																										1	
127.2	STRONGYLOIDIASIS															1					1							2	
013-018	TUBERCULOSIS - NON-RESP.														1	1												2	
011-012	TUBERCULOSIS - RESP											1		1		2		2		3		1				1		11	
B96.8	VANCOMYCIN RES. ENTER.	1	1							1		1			2	4	2	4	5	10	7	12	16	11	20	29	18	144	
		11	11	22	25	27	22	11	14	16	18	27	27	26	25	44	46	42	55	52	54	35	48	32	35	66	42	833	

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR OCTOBER 2013

ICD9	Disease/Infection	Winnipeg	Brandon	N. Eastman		S. Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	TOTAL
				F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P		
	Case Referred to:*																				
006.9	AMEBIASIS	1																			1
038.0	BETA STREP SEPTICEMIA	7	1			1		2				1	1					1	1		15
116.0	BLASTOMYCOSIS	2																			2
005.2	C. PERFRINGENS	1			1																2
008.43	CAMPYLOBACTER	1	1		2		3		2	1	1		1		1				1		14
558.2	CLOSTRIDIUM DIFFICILE	37	6		4		3		8		7		4		1		3		1		74
007.8	CRYPTOSPORIDIOSIS	1	1								1		1								4
061.0	DENGUE FEVER	2																			2
123.4	DIPHYLLOBOTHRIUM	1																			1
007.1	GIARDIA LAMBLIA	3	1																1		5
041.5	H.INFLUENZAE (OTHER STER																1				1
038.42	H.INFLUENZAE (BLOOD)																		1		1
070.1	HEPATITIS A	2																			2
070.51	HEPATITIS C	21	2	1				3		1		1		2		1	1	2			35
487.1A	INFLUENZA A	1																			1
487.1B	INFLUENZA B	1																			1
B95.6	MRSA	155	5	5	1		10	7	23	2	6		3	5	9	7	20	195	20		473
728.86	NECROTIZING FASCIITIS	1																			1
033.0	PERTUSSIS	1																			1
038.2	PNEUM. SEPTICEMIA	2	1			2		2		1	1							1	1		11
003.0	SALMONELLA	9	3			3	1						2		1						19
004	SHIGELLOSIS					1															1
041.1	STREP PYOGENES - OTHER ST	3						1		1						1					6
041.2	STREP.PNEUM.OTHER							1													1
127.2	STRONGYLOIDIASIS	2																			2
013-018	TUBERCULOSIS - NON-RESP.	2																			2
011-012	TUBERCULOSIS - RESP	4														1		5	1		11
B96.8	VANCOMYCIN RES. ENTER.	101	1		2		3	2	7		3	1	2	1	11	3	1	6			144
		361	22	6	10		26	11	48	4	20	3	15	6	25	11	27	210	28		833

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

**OOP=Out of Province

STBBI Infection Summary Report - October 2013

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2012	2013	2012	2013
All Chlamydia Infections	600	616	5689	5512
All Gonorrhoea Infections (including PRNG)	101	116	1159	1066
All Syphilis Infections*	10	26	78	205
Gonorrhoea & Chlamydia Co-infections	47	54	505	459
HIV	11	17	61	116

Total Number of STBBI Cases by Age and Gender - October 2013

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+		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							8	1	134	42	108	59	77	41	40	27	9	5	2	6	1	1			1	562	
Gonorrhoea Only Cases									6	3	11	13	7	7	6	3	1	2		2			1			62	
Syphilis Only Cases										2	1	1		3	2	4		4		3	1	4	1			26	
GC and CT Cases							1		7	9	12	8	4	3	4	3		2		1						54	
TOTAL							9	1	147	56	132	81	88	54	52	37	10	13	2	12	2	5	2		1	704	
HIV											1	1	1	1	4	1		6		1		1				17	

Regional STBBI Distribution - October 2013

Disease/Infection	Winnipeg	Brandon	N. Eastman		S. Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP***	Missing	TOTAL
Case Referred to:**			F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P				
All Chlamydia Infections	293	15	16	9		6	4	25	5	30		19	5	10	8	35	98	30	1	6	1	616
All Gonorrhoea Infections	54		6	1		1			2	3		3		1	1	4	34	6				116
All Syphilis Infections	23	1															1	1				26
GC and CT Infections	20		4										1			2	24	3				54

* 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