

Manitoba Monthly Surveillance Unit Report

Reported up to December 31, 2012

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 51% of all non-STBBI related communicable diseases reported to Manitoba Health during December 2012.

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

There were 477 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in December 2012:

- 378 reported cases of chlamydia (CT) only
- 51 reported cases of gonorrhoea (GC) only
- 41 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 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 December 2012, there were no acute cases of Hepatitis B virus (HBV), 24 cases of Hepatitis C virus (HCV) and 5 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

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

- Pertussis: 14 positive lab-confirmed cases reported; less than 6 expected in an average month. The increased number of cases is attributable to community clusters in northern and southern Manitoba.
- Strept Glomerulonephritis: 1 positive lab-confirmed case reported; no cases expected in an average month.
- Tuberculosis-Respiratory: 15 cases reported; less than 14 expected in an average month. The increased number of cases is attributable to community cluster in northern Manitoba.
- Streptococcus Pneumoniae: 1 positive lab-confirmed case reported; no cases expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during November 2007-2011, December 2007-2011, and January 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 December 2012

ICD9	Disease Name	MONTHLY TOTAL				YEAR-TO-DATE	
		2011	2012	Expected*	Ex. Range**	2011	2012
006.9	AMEBIASIS	2	2	3	0-7	29	40
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1		
005.8	B. CEREUS			0	0-0		
320.1	BAC. MENINGITIS - PNEUM			0	0-1	4	5
320.7	BAC.MENINGITIS-LISTERIA				***	1	
038.0	BETA STREP SEPTICEMIA	15	11		***	169	205
116.0	BLASTOMYCOSIS	2	5		***	10	14
005.1	BOTULISM				***		
023	BRUCELLOSIS	1		0	0-1	4	
005.2	C. PERFRINGENS		1	0	0-1	4	2
008.43	CAMPYLOBACTER	10	6	14	6-22	289	249
558.2	CLOSTRIDIUM DIFFICILE	64	64		***	906	805
046.1	CREUTZFELD-JACOB DISEASE	1			***	1	
007.8	CRYPTOSPORIDIOSIS	1		2	0-6	19	42
061.0	DENGUE FEVER		1	0	0-1	3	4
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-1		
032	DIPHTHERIA CASES			0	0-1	1	
123.4	DIPHYLLOBOTHRIUM SPP			1	0-2	9	4
008.0	E. COLI-VEROTOXIGENIC	1	2	3	0-7	56	37
054.3	ENCEPHALITIS			0	0-0	1	
005.9	FOOD POISONING OTHER			0	0-1		
007.1	GIARDIA LAMBLIA	7	7	9	4-14	104	110
038.42	H.INFLUENZAE (BLOOD)	1	1		***	12	12
320.0	H.INFLUENZAE (CSF)			0	0-1	1	3
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-0	1	1
480.8	HANTA VIRUS			0	0-0		1
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0		
070.1	HEPATITIS A			1	0-3	7	4
070.3	HEPATITIS B			0	0-1	8	
070.51	HEPATITIS C	23	24	26	12-40	315	353
487.1A	INFLUENZA A		101		***	113	179
487.1B	INFLUENZA B		9		***	12	227
482.83	LEGIONELLA			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	4	4
088.81	LYME DISEASE			0	0-1	7	2
084	MALARIA	4		1	0-3	28	17
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF			0	0-1	1	2
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCEMIA BLOOD			0	0-1		
B95.6	MRSA	245	297	217	111-323	3325	3922
072.9	MUMPS	2		0	0-1	11	6
036.89	N.MENINGITIDIS OTHER			0	0-1	1	
728.86	NECROTIZING FASCIITIS		1	1	0-4	3	3
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS		3		***	1	3
033.0	PERTUSSIS	2	14	2	0-5	32	115
038.2	PNEUM. SEPTICEMIA	9	8	11	1-21	110	137
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 December 2012

ICD9	Disease Name	MONTHLY TOTAL				YEAR-TO-DATE	
		2011	2012	Expected*	Ex. Range**	2011	2012
083.0	Q FEVER			0	0-1	1	
A82.9	RABIES				***		
082.0	RICKETTSIA RICKETTSII				***		
083.9	RICKETTSIAL DISEASE, OTHER			0	0-0	1	
056.9C	RUBELLA (confirmed)			0	0-1		1
771.0	RUBELLA CONGENITAL			0	0-0	1	
041.2	S.PNEUM.OTHER	3		1	0-3	15	15
003.0	SALMONELLA	11	14	17	2-32	171	173
079.82	SARS (CORONAVIRUS)				***		
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS	2	1	2	0-6	29	73
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 STERILE	5	9		***	103	98
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS		1	0	0-0		1
040.89	STREPT TOXIC SHOCK			0	0-1	1	
481	STREPTOCOCCUS PNEUMONIAE		1	0	0-0		2
127.2	STRONGYLOIDES	3	3	1	0-5	44	20
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS	2		0	0-1	5	3
124	TRICHINOSIS			0	0-0		2
086	TRYPANOSOMA CRUZI			0	0-0	6	4
013-018	TUBERCULOSIS - NON-RESP.	2	1	2	1-5	26	21
010	TUBERCULOSIS - PRIM.			1	0-3	7	9
011-012	TUBERCULOSIS - RESP	8	15	7	1-13	84	111
021.9	TULAREMIA			0	0-0	1	1
002.0	TYPHOID	1	1	0	0-1	8	6
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	130	110		***	1247	1444
005.4	VIBRIO PARAHAEMOLYTICUS				***		2
070.59	VIRAL HEP. OTHER				***		2
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL SYNDROMES				***		10
008.44	YERSINIA ENTEROCOLITICA			1	0-3	11	9
		557	713			7367	8519

* 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 DECEMBER 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																						2	
038.0	BETA STREP SEPTICEMIA	1															1	2	1	1	3					1	1		11	
116.0	BLASTOMYCOSIS						1						1				1							1	1			5		
005.2	C. PERFRINGENS																				1								1	
008.43	CAMPYLOBACTER							1	1			1									1		2						6	
558.2	CLOSTRIDIUM DIFFICILE	2			1							1	1	1	3		2	2	6	3	6	2	7	5	13	9		64		
061.0	DENGUE FEVER															1													1	
008.0	E. COLI 0157															1									1				2	
007.1	GIARDIA LAMBLIA			2	2		2	1																					7	
038.42	H.INFLUENZA (BLOOD)		1																										1	
070.51	HEPATITIS C										1	2		4	1	3	3		2	3	2	3							24	
487.1A	INFLUENZA A	4	2	4	3	7	3	1	3	5	8	2	2	1		6	2	1	4	3	6	3	2	1	4	10	14		101	
487.1B	INFLUENZA B						2			2			1							1			1			1	1		9	
B95.6	MRSA	7	7	12	18	16	6	8	8	3	14	13	7	9	10	17	14	16	17	13	11	15	16	5	11	13	10	1	297	
728.86	NECROTIZING FASCIITIS													1																1
033.1	PARAPERTUSSIS	2																			1									3
033.0	PERTUSSIS	2	1	1	2	1				3	1					1		1			1									14
038.2	PNEUM. SEPTICEMIA				2								1		1	1		1	1			1								8
003.0	SALMONELLA		1	2	1								2		1	1		1		2		1	1			1				14
004	SHIGELLOSIS						1																							1
041.1	STREP PYOGENES - OTHER ST												3			1	1			1	2		1							9
580.0	STREP. GLOMERULONEPHRITIS																			1										1
481	STREP. PNEUMONIAE PNEUMON																			1										1
127.2	STRONGYLOIDIASIS											1		1								1								3
013-018	TUBERCULOSIS - NON-RESP.															1														1
011-012	TUBERCULOSIS - RESP							1	2			2				2	1	1		1	1	2	1		1					15
002.0	TYPHOID				1																									1
B96.8	VANCOMYCIN RES. ENTER.											1		2			4	4	6	6	5	11	15	11	11	16	18		110	
		18	12	21	31	24	16	10	12	15	25	18	22	15	17	34	30	31	31	39	38	41	45	24	34	56	53		713	

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR DECEMBER 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	F	P				
<i>Case Referred to:*</i>																							
006.9	AMEBIASIS	2																					2
038.0	BETA STREP SEPTICEMIA	11																					11
116.0	BLASTOMYCOSIS	4				1																	5
005.2	C. PERFRINGENS	1																					1
008.43	CAMPYLOBACTER	3						1				2											6
558.2	CLOSTRIDIUM DIFFICILE	44	3			3	1	4		4				4		1							64
061.0	DENGUE FEVER	1																					1
008.0	E. COLI 0157	2																					2
007.1	GIARDIA LAMBLIA	2	1					1				1			1		1						7
038.42	H.INFLUENZAE (BLOOD)	1																					1
070.51	HEPATITIS C	16	1				1	1		4				1									24
487.1A	INFLUENZA A	14				2		3		20		47		4		3		8					101
487.1B	INFLUENZA B					1		4		1		2						1					9
B95.6	MRSA	103	2	5	2	1	6	4	10	1	6	4	2	6	6	11	103	24	1				297
728.86	NECROTIZING FASCIITIS									1													1
033.1	PARAPERTUSSIS			1						1		1											3
033.0	PERTUSSIS	2						3		2								6	1				14
038.2	PNEUM. SEPTICEMIA	4						1		1								1	1				8
003.0	SALMONELLA	10	1					1	1	1													14
004	SHIGELLOSIS															1							1
041.1	STREP PYOGENES - OTHER ST	5	1					1				1			1								9
580.0	STREP. GLOMERULONEPHRITIS	1																					1
481	STREP. PNEUMONIAE PNEUMON	1																					1
127.2	STRONGYLOIDIASIS	3																					3
013-018	TUBERCULOSIS - NON-RESP.													1									1
011-012	TUBERCULOSIS - RESP	4				1												10					15
002.0	TYPHOID	1																					1
B96.8	VANCOMYCIN RES. ENTER.	71	1		1		10	1	6		6	3		2		4	4	1					110
		306	10	6	3	2	23	10	33	3	46	61	2	18	7	21	134	27	1				713

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

** OOP=Out of Province

STBBI Infection Summary Report - December 2012

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2011	2012	2011	2012
All Chlamydia Infections	480	419	6813	6673
All Gonorrhea Infections (including PRNG)	100	92	1074	1370
All Syphilis Infections*	9	7	60	96
Gonorrhea & Chlamydia Co-infections	42	41	469	604
HIV	5	5	80	74

Total Number of STBBI Cases by Age and Gender - December 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		4	2	92	26	83	47	38	28	25	20	6	1	1	4								378
Gonorrhea Only Cases									6	3	13	7	7	3	2	7		1	1	1								51
Syphilis Only Cases												1	1			3			1	1								7
GC and CT Cases							1		10	3	12	8	2	2	1	1				1								41
TOTAL					1		5	2	108	32	108	63	48	33	28	31	6	2	3	7								477
HIV														1		1	1	1		1								5

Regional STBBI Distribution - December 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	197	29	6	3		12	7	14	3	30		6	2	8	5	17	59	16	2	3			419
All Gonorrhea Infections	40	2		1		1	3	2		5			1	2	2	8	17	5		2	1		92
All Syphilis Infections	5									1							1						7
GC and CT Infections	17	1				1	1			5			1		1	5	6	2		1			41

* 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