

Manitoba Monthly Surveillance Unit Report

Reported up to December 31, 2011

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 55% of all non-STBBI related communicable diseases reported to Manitoba Health during December 2011.

The data reveal that there are increased numbers of Vancomycin-resistant *Enterococcus* (VRE) in 2011 compared to 2010. The increased number of VRE cases in 2011 is attributable to hospital-related VRE outbreaks reported this year.

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

There were 546 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in December 2011:

- 438 reported cases of chlamydia (CT) only
- 58 reported cases of gonorrhoea (GC) only
- 42 reported co-infections of CT and GC and
- 8 reported cases of syphilis

Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 48% 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 2011, there were no acute cases of Hepatitis B virus (HBV), 23 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 2011 was within or below the statistically expected range for these reported communicable diseases with the exception of the following disease(s):

- Malaria: 4 positive lab-confirmed cases reported; less than 4 expected in an average month.
- Toxoplasmosis: 2 positive lab-confirmed cases reported; less than 2 expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during November 2006-2010, December 2006-2010, and January 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 December 2011

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2010	2011	Expected*	Ex. Range**	2010	2011
006.9	AMEBIASIS	3	2	3	0-6	33	28
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1	1	
005.8	B. CEREUS			0	0-1		
320.1	BAC. MENINGITIS - PNEUM			0	0-1		4
320.7	BAC.MENINGITIS-LISTERIA				***		1
038.0	BETA STREP SEPTICEMIA	7	15		***	139	170
116.0	BLASTOMYCOSIS		2		***	6	10
005.1	BOTULISM				***		
023	BRUCELLOSIS		1	0	0-1	1	3
005.2	C. PERFRINGENS			0	0-1	1	4
008.43	CAMPYLOBACTER	8	14	13	7-19	243	289
558.2	CLOSTRIDIUM DIFFICILE	69	63		***	822	902
046.1	CREUTZFELD-JACOB DISEASE		1		***		1
007.8	CRYPTOSPORIDIOSIS	1	1	2	0-6	23	19
061.0	DENGUE FEVER			0	0-1		3
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-1	9	
032	DIPHTHERIA CASES			0	0-1	1	1
123.4	DIPHYLLOBOTHRIUM SPP	2		0	0-1	10	9
008.0	E. COLI-VEROTOXIGENIC	6	2	3	0-7	91	56
054.3	ENCEPHALITIS			0	0-1		1
005.9	FOOD POISONING OTHER			0	0-1		
007.1	GIARDIA LAMBLIA	9	10	8	3-13	125	104
320.0	H.INFLUENZAE (CSF)			0	0-1	1	1
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1		2
041.59	HAEM. INFLUENZAE (non-B)				***	1	
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0	1	
070.1	HEPATITIS A			1	0-3	7	7
070.3	HEPATITIS B	1		0	0-1	2	4
070.51	HEPATITIS C	16	23	27	13-41	314	317
487.1A	INFLUENZA A	311			***	361	113
487.1B	INFLUENZA B	1			***	1	11
482.83	LEGIONELLA	1		0	0-1	6	4
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0		
027.0	LISTERIA MONOCYTOGENES			0	0-1	4	4
088.81	LYME DISEASE			0	0-1	3	4
084	MALARIA		4	1	0-3	14	26
055.9	MEASLES			0	0-0	1	
036.0	MENINGOCOCCAL CSF	1		0	0-1	1	1
036.82	MENINGOCOCCAL ARTHROPATHY				***	3	
036.2	MENINGOCOCCAL BLOOD			0	0-1	6	
B95.6	MRSA	281	245	187	98-276	3424	3326
072.9	MUMPS		1	0	0-1	2	10
036.89	N.MENINGITIDIS OTHER	1		0	0-1	1	1
728.86	NECROTIZING FASCIITIS	1		1	0-4	12	5
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***	1	
033.0	PERTUSSIS	5	1	1	0-3	59	32
038.2	PNEUM. SEPTICEMIA	23	9	9	1-17	164	109
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 the mean.

*** Data collected for less than 5 years.

**** Excludes Wave 1 and 2 cases reported during the 2009/2010 Influenza A H1N1 pandemic. There were no cases of pandemic H1N1 in December 2011.

SUMMARY OF COMMUNICABLE DISEASE FOR December 2011

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2010	2011	Expected*	Ex. Range**	2010	2011
083.0	Q FEVER			0	0-1		1
A82.9	RABIES				***		
082.0	RICKETTSIA RICKETTSII				***		
083.9	RICKETTSIAL DISEASE, OTHER			0	0-0	1	1
056.9	RUBELLA			0	0-1	2	1
771.0	RUBELLA CONGENITAL			0	0-0		1
041.2	S.PNEUM.OTHER		3	1	0-3	14	15
003.0	SALMONELLA	21	11	17	1-33	236	169
079.82	SARS (CORONAVIRUS)				***		
120	SCHISTOSOMIASIS		1	0	0-1		5
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS	3	3	1	0-4	52	28
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	3	5		***	88	101
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-1		1
481	STREPTOCOCCUS PNEUMONIAE			0	0-0		
127.2	STRONGYLOIDES		3	1	0-5	15	44
037	TETANUS			0	0-0	1	
130.9	TOXOPLASMOSIS		2	0	0-1	4	5
124	TRICHINOSIS			0	0-0	2	
086	TRYPANOSOMA CRUZI			0	0-0	3	7
013-018	TUBERCULOSIS - NON-RESP.	1	2	2	0-4	32	27
010	TUBERCULOSIS - PRIM.			1	0-3	8	7
011-012	TUBERCULOSIS - RESP	5	8	6	0-12	92	84
021.9	TULAREMIA			0	0-1	1	1
002.0	TYPHOID	1	1	0	0-1	6	8
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	38	130		***	342	1244
005.4	VIBRIO PARAHAEMOLYTICUS	1			***	3	
070.59	VIRAL HEP. OTHER	1			***	6	
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL				***		
008.44	YERSINIA ENTEROCOLITICA	1		0	0-1	7	11
		822	563			6809	7343

* 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 DECEMBER 2011

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								2		1		1		4	3		2				1		15	
116.0	BLASTOMYCOSIS										1																1		2	
023	BRUCELLOSIS																										1		1	
008.43	CAMPYLOBACTER	1			1		1				2			2		1	3				1	1		1					14	
558.2	CLOSTRIDIUM DIFFICILE						1		1	2	1					4	1	10	3	2	4	5	1	4	9	12	3		63	
046.1	CREUTZFELD JACOB DISEASE																							1					1	
007.8	CRYPTOSPORIDIOSIS										1																		1	
008.0	E. COLI 0157																				1		1						2	
007.1	GIARDIA LAMBLIA				3	1	3		1							1								1					10	
070.51	HEPATITIS C													3	1	2	6	3	3		2	1	2						23	
084	MALARIA								1		1				1						1								4	
B95.6	MRSA	7	5	15	18	8	11	3	1	5	5	5	7	8	9	10	15	8	19	10	12	10	12	9	8	9	16		245	
072.9	MUMPS								1																				1	
033.0	PERTUSSIS						1																						1	
038.2	PNEUM. SEPTICEMIA					1										1		1		1	1	1				2			9	
003.0	SALMONELLA		1	1	1						1			1	1		1	1		3									11	
120	SCHISTOSOMIASIS											1																	1	
004	SHIGELLOSIS				1											1							1						3	
041.1	STREP PYOGENES - OTHER ST													1		1				1			1	1					5	
041.2	STREP.PNEUM.OTHER																			1						1	1		3	
127.2	STRONGYLOIDIASIS															1		2											3	
130.9	TOXOPLASMOSIS												2																2	
013-018	TUBERCULOSIS - NON-RESP.									1													1						2	
011-012	TUBERCULOSIS - RESP													1	1	1				2	1	1			1				8	
002.0	TYPHOID				1																								1	
B96.8	VANCOMYCIN RES. ENTER.														2	3	1	6	5	3	7	16	14	20	11	27	15		130	
		8	6	17	25	11	17	3	5	8	12	5	8	16	19	24	30	29	37	27	32	34	37	36	28	51	38		563	

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR DECEMBER 2011

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	2																					2
038.0	BETA STREP SEPTICEMIA	11						1										1	2				15
116.0	BLASTOMYCOSIS	1																			1		2
023	BRUCELOSIS	1																					1
008.43	CAMPYLOBACTER	9				2		1				1		1									14
558.2	CLOSTRIDIUM DIFFICILE	28	4		3	5		11		6		4		1		1							63
046.1	CREUTZFELD JACOB DISEASE		1																				1
007.8	CRYPTOSPORIDIOSIS									1													1
008.0	E. COLI 0157	2																					2
007.1	GIARDIA LAMBLIA	5				2				2		1											10
070.51	HEPATITIS C	15	1	1	1			1	1	2				1									23
084	MALARIA	3	1																				4
B95.6	MRSA	80	1		2	3	5	7	2	5	2	3	3	6	5	8	101	10				2	245
072.9	MUMPS	1																					1
033.0	PERTUSSIS									1													1
038.2	PNEUM. SEPTICEMIA	4				1						1		1		1	1						9
003.0	SALMONELLA	6	1					1		1		1							1				11
120	SCHISTOSOMIASIS	1																					1
004	SHIGELLOSIS	2													1								3
041.1	STREP PYOGENES - OTHER ST	3	1																1				5
041.2	STREP.PNEUM.OTHER	3																					3
127.2	STRONGYLOIDIASIS	3																					3
130.9	TOXOPLASMOSIS	1						1															2
013-018	TUBERCULOSIS - NON-RESP.	2																					2
011-012	TUBERCULOSIS - RESP	1		1											1		4	1					8
002.0	TYPHOID									1													1
B96.8	VANCOMYCIN RES. ENTER.	92			6	4		8		6		3		1		3		6				1	130
		276	10	2	12		17	6	31	2	25	2	14	3	11	7	13	107	21		1	3	563

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

** OOP=Out of Province

STBBI Infection Summary Report - December 2011

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2010	2011	2010	2011
All Chlamydia Infections	488	480	6449	6815
All Gonorrhoea Infections (including PRNG)	74	100	998	1074
All Syphilis Infections*	5	8	65	58
Gonorrhoea & Chlamydia Co-infections	37	42	451	469
HIV	9	5	122	83

Total Number of STBBI Cases by Age and Gender - December 2011

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		106	31	104	51	27	42	31	27	6	2	2	1	1					1		438
Gonorrhoea Only Cases							1		9	5	6	6	5	6	7	5	4	3	1									58
Syphilis Only Cases													1	1	3	1		1		1								8
GC and CT Cases							12	7	3	7	4	3	2	3			1											42
TOTAL	1						5	1	127	43	113	64	37	52	43	36	10	7	3	2	1				1			546
HIV														1			1		1	1						1		5

Regional STBBI Distribution - December 2011

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	225	21	6	10	11	7	15		22	1	7	4	14	10	32	66	22			7		480
All Gonorrhoea Infections	56		2	1		1	1		5	1			1	2	1	21	6			2		100
All Syphilis Infections	3	1				1			2						1							8
GC and CT Infections	18		1	1		1	1		2	1			1	2		13	1					42

* 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