

Manitoba Monthly Surveillance Unit Report

Reported up to October 31, 2011

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 57.9% of all non-STBBI related communicable diseases reported to Manitoba Health during October 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 657 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in October 2011:

- 540 reported cases of chlamydia (CT) only
- 59 reported cases of gonorrhoea (GC) only
- 53 reported co-infections of CT and GC and
- 5 reported cases of syphilis

Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 45.6% 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 2011, there were no acute cases of Hepatitis B virus (HBV), 26 cases of Hepatitis C virus (HCV) and 10 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

The number of reported cases in October 2011 was within or below the statistically expected range for these reported communicable diseases with the exception of the following disease(s):

- Strongyloidiasis: 5 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.
- Typhoid: 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 September, October, and November, 2006-2010.

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 2011

ICD9	Disease Name	MONTHLY TOTAL				YEAR-TO-DATE	
		2010	2011	Expected*	Ex. Range**	2010	2011
006.9	AMEBIASIS	2	3	2	0-6	29	24
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1	1	
005.8	B. CEREUS			0	0-0		
320.1	BAC. MENINGITIS - PNEUM			0	0-1		2
320.7	BAC.MENINGITIS-LISTERIA				***		1
038.0	BETA STREP SEPTICEMIA	13	25		***	125	141
116.0	BLASTOMYCOSIS	1	1		***	6	8
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1		3
005.2	C. PERFRINGENS		1	0	0-1	1	4
008.43	CAMPYLOBACTER	23	19	23	7-39	213	257
558.2	CLOSTRIDIUM DIFFICILE	51	63		***	687	749
046.1	CREUTZFELD-JACOB DISEASE				***		
007.8	CRYPTOSPORIDIOSIS	2		7	0-18	19	16
061.0	DENGUE FEVER			0	0-0		3
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS	1		0	0-1	8	
032	DIPHTHERIA CASES		1	0	0-1	1	1
123.4	DIPHYLOBOTRIUM SPP		2	1	0-3	7	8
008.0	E. COLI-VEROTOXIGENIC	2	5	6	0-20	83	51
054.3	ENCEPHALITIS			0	0-0		1
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	10	3	9	2-16	107	79
320.0	H.INFLUENZAE (CSF)			0	0-0	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		1	0-3	7	7
070.3	HEPATITIS B			0	0-1	1	3
070.51	HEPATITIS C	22	26	29	15-43	264	263
487.1A	INFLUENZA A	1			***	1	113
487.1B	INFLUENZA B				***		11
482.83	LEGIONELLA		1	0	0-1	5	4
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0		
027.0	LISTERIA MONOCYTOGENES	1		0	0-1	4	3
088.81	LYME DISEASE			0	0-1	3	4
084	MALARIA	1	4	2	0-4	11	21
055.9	MEASLES			0	0-0	1	
036.0	MENINGOCOCCAL CSF			0	0-0		1
036.82	MENINGOCOCCAL ARTHROPATHY				***	2	
036.2	MENINGOCOCCAL BLOOD	2		0	0-1	6	
B95.6	MRSA	307	322	252	132-372	2818	2787
072.9	MUMPS			0	0-1	2	9
036.89	N.MENINGITIDIS OTHER			0	0-1		1
728.86	NECROTIZING FASCIITIS	1		1	0-3	11	5
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-1		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	4	4	2	0-6	50	30
038.2	PNEUM. SEPTICEMIA	18	6	12	3-21	124	98
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 October 2011.

SUMMARY OF COMMUNICABLE DISEASE FOR October 2011

ICD9	Disease Name	MONTHLY TOTAL				YEAR-TO-DATE	
		2010	2011	Expected*	Ex. Range**	2010	2011
083.0	Q FEVER			0	0-0		1
A82.9	RABIES				***		
082.0	RICKETTSIA RICKETTSII				***	1	1
083.9	RICKETTSIAL DISEASE, OTHER			0	0-0		
056.9	RUBELLA			0	0-0	2	1
771.0	RUBELLA CONGENITAL			0	0-0		1
041.2	S.PNEUM.OTHER		1	1	0-3	11	12
003.0	SALMONELLA	22	8	16	2-30	202	145
079.82	SARS (CORONAVIRUS)				***		
120	SCHISTOSOMIASIS		1	0	0-1		2
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS	10		3	0-9	43	22
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 STERILE	8	12		***	77	91
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-0		
481	STREPTOCOCCUS PNEUMONIAE			0	0-0		
127.2	STRONGYLOIDES	2	5	1	0-3	15	36
037	TETANUS			0	0-0	1	
130.9	TOXOPLASMOSIS	2	2	0	0-1	4	3
124	TRICHINOSIS			0	0-0	2	
086	TRYPANOSOMA CRUZI			0	0-1	3	7
013-018	TUBERCULOSIS - NON-RESP.		4	2	0-4	27	25
010	TUBERCULOSIS - PRIM.		1	1	0-2	8	8
011-012	TUBERCULOSIS - RESP	5	4	8	0-16	79	69
021.9	TULAREMIA			0	0-0	1	1
002.0	TYPHOID	1	2	0	0-1	5	6
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	36	138		***	263	990
005.4	VIBRIO PARAHAEMOLYTICUS				***	2	
070.59	VIRAL HEP. OTHER	2			***	4	
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL SYNDROMES				***		
008.44	YERSINIA ENTEROCOLITICA	1	1	1	0-4	6	11
		552	665			5356	6143

* 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 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				1																3
038.0	BETA STREP SEPTICEMIA			1	1	1								1			2	2	1		1	3	3	3	4	1	1		25
116.0	BLASTOMYCOSIS																	1											1
005.2	C. PERFRINGENS																							1					1
008.43	CAMPYLOBACTER	1		1	1									1	2	1	1	3		2	3	1			2				19
558.2	CLOSTRIDIUM DIFFICILE				1			1		1	1		1	1		4	1	1	3	5	3	7	1	6	13	7	6		63
032	DIPH. CASES			1																									1
123.4	DIPHYLLOBOTHRIUM																	1				1							2
008.0	E. COLI 0157			2														1		1							1		5
007.1	GIARDIA LAMBLIA						1				1											1							3
070.51	HEPATITIS C											1			2		9	2	5		3		2			1		1	26
482.83	LEGIONELLA																	1											1
084	MALARIA			1			1		1								1												4
B95.6	MRSA	4	11	22	16	8	13	6	6	7	7	13	9	14	10	26	19	19	19	18	16	9	14	7	8	11	10		322
033.0	PERTUSSIS		2	2																									4
038.2	PNEUM. SEPTICEMIA			1	1													1				1		1	1				6
003.0	SALMONELLA				3					1				1								1	1	1					8
120	SCHISTOSOMIASIS					1																							1
041.1	STREP PYOGENES - OTHER		1	2	1					1								1	1		2	1	1	1					12
041.2	STREP.PNEUM.OTHER			1																									1
127.2	STRONGYLOIDIASIS					1										1	2					1							5
013-018	TUBERCULOSIS - NON-RESP															2				1				1					4
010	TUBERCULOSIS - PRIM.													1															1
011-012	TUBERCULOSIS - RESP									1						2						1							4
130.9	TOXOPLASMOSIS										1							1											2
002.0	TYPHOID				1									1															2
B96.8	VANCOMYCIN RES. ENTER.												1		1	2	2	6	3	6	7	7	21	14	18	31	19		138
008.44	YERSINIA ENTEROCOLITICA												1																1
		5	14	34	26	11	15	7	8	10	10	15	13	19	16	36	39	35	36	33	34	32	45	33	50	51	37	1	665

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

ICD9	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								
006.9	AMEBIASIS	2							1										3				
038.0	BETA STREP SEPTICEMIA	16						1		1			2				4	1	25				
116.0	BLASTOMYCOSIS	1																	1				
005.2	C. PERFRINGENS						1												1				
008.43	CAMPYLOBACTER	10		1	2		3		1			2							19				
558.2	CLOSTRIDIUM DIFFICILE	34			2		6		2		9		4		2		1	1	2	63			
032	DIPH. CASES	1																	1				
123.4	DIPHYLLOBOTHRUM	2																	2				
008.0	E. COLI 0157	4					1												5				
007.1	GIARDIA LAMBLIA	2								1									3				
070.51	HEPATITIS C	16	3				1		1		1			1				2	1	26			
482.83	LEGIONELLA																	1		1			
084	MALARIA	3	1																	4			
B95.6	MRSA	106	2	2	4		6	3	12	1	8		6	2	5	8	8	131	14	1	1	2	322
033.0	PERTUSSIS						2				1				1								4
038.2	PNEUM. SEPTICEMIA	3	1															2					6
003.0	SALMONELLA	2	2				1	1			1		1										8
120	SCHISTOSOMIASIS	1																					1
041.1	STREP PYOGENES - OTHER S	7	1						1					1				2					12
041.2	STREP.PNEUM.OTHER	1																					1
127.2	STRONGYLOIDIASIS	5																					5
013-018	TUBERCULOSIS - NON-RESP.	3																1					4
010	TUBERCULOSIS - PRIM.																	1					1
011-012	TUBERCULOSIS - RESP	1		1														2					4
130.9	TOXOPLASMOSIS	1					1																2
002.0	TYPHOID	2																					2
B96.8	VANCOMYCIN RES. ENTER.	105		1	5		4		8		5		4					1	5				138
008.44	YERSINIA ENTEROCOLITICA		1																				1
		328	11	5	13		25	6	25	1	28		17	2	12	8	9	141	28	1	3	2	665

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

** OOP=Out of Province

STBBI Infection Summary Report - October 2011

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2010	2011	2010	2011
All Chlamydia Infections	514	593	5426	5708
All Gonorrhea Infections (including PRNG)	89	112	829	874
All Syphilis Infections*	6	5	58	49
Gonorrhea & Chlamydia Co-infections	37	53	372	388
HIV	10	10	102	73

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

	<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
Disease Name	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		
Chlamydia Only Cases							9		124	46	122	63	53	35	40	27	10	8	1	2								540
Gonorrhea Only Cases	1								9	5	11	5	10	4	7	5	1				1							59
Syphilis Only Cases															1	2			1				1					5
GC and CT Cases							1	11	8	8	10	3	9	2		1											53	
TOTAL	1						9	1	144	59	141	78	66	48	50	34	11	9	2	2			1	1			657	
HIV													1		1	1	3	2				2				1		10

Regional STBBI Distribution - October 2011

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	F	P	F	P				
All Chlamydia Infections	292		27		13	12	1	12	11	23	1	35		20	1	15	4	28	77	15	1	3	2	593
All Gonorrhea Infections	51		2		3	1		1	1	3		3		1		3	1	6	29	7				112
All Syphilis Infections	2					1				1												1		5
GC and CT Infections	21		1		1	1			1	2		2		1				3	16	4				53

* 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