

Manitoba Monthly Communicable Disease Report

Reported up to February 28, 2010

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 70% of all non-STI/HIV related communicable diseases reported to Manitoba Health during February 2010.

- The number of reported cases of MRSA was above the statistically expected range in February 2010 – 243 positive lab-confirmed cases reported; less than 228 expected in an average month.

2. Sexually Transmitted Infections (STI) & Blood-Borne Pathogens (BBP)

There were 608 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in February 2010:

- 518 reported cases of chlamydia (Ct) only
- 41 reported cases of gonorrhoea (GC) only
- 41 reported co-infections of Ct and GC and
- 8 reported cases of syphilis

Chlamydia has the highest incidence of reported STI. Females between the ages of 15 and 24 years comprised 47% of all reported chlamydia cases in the province.

In February 2010, there were no cases of Hepatitis B virus (HBV), 23 cases of Hepatitis C virus (HCV) and 13 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

The number of reported cases in February 2010 was within or below the statistically expected range for these reported communicable diseases with the exception of the following diseases:

- Diphtheria Carriers – 4 positive lab-confirmed cases reported; less than 2 expected in an average month. No cases appear to be epidemiologically-linked or outbreak-associated.
- Rubella – 1 positive lab-confirmed case 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 January, February, and March, 2005-2009.

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.

SUMMARY OF COMMUNICABLE DISEASE FOR FEBRUARY 2010

ICD9	Disease Name	MONTHLY TOTAL				YEAR-TO-DATE	
		2009	2010	Expected*	Ex. Range**	2009	2010
006.9	AMEBIASIS	2	4	3	1-5	3	8
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-0		
005.8	B. CEREUS			0	0-1		
320.1	BAC. MENINGITIS - PNEUM			0	0-1	1	
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	10	11		***	20	18
116.0	BLASTOMYCOSIS				***	1	
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-0		1
005.2	C. PERFRINGENS			0	0-1		
008.43	CAMPYLOBACTER	16	13	14	8-20	35	29
558.2	CLOSTRIDIUM DIFFICILE	58	76		***	138	150
046.1	CREUTZFELD-JACOB DISEASE				***	1	
007.8	CRYPTOSPORIDIOSIS	2	1	2	0-5	5	1
061.0	DENGUE FEVER			0	0-1		
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS		4	0	0-1		4
032	DIPHThERIA CASES			0	0-1		
123.4	DIPHYLLOBOTHRIUM SPP			0	0-1		
008.0	E. COLI-VEROTOXIGENIC	6	3	3	0-6	10	7
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	9	6	8	2-14	13	13
320.0	H.INFLUENZAE (CSF)			0	0-0		
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1		
041.59	HAEM. INFLUENZAE (non-B)				***	1	
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-1		
070.1	HEPATITIS A	1	1	1	0-3	1	1
070.3	HEPATITIS B			0	0-1		
070.51	HEPATITIS C	29	23	30	16-44	61	42
487.1A	INFLUENZA A (NON-pH1N1)****	14			***	15	
487.1B	INFLUENZA B	10			***	11	
482.83	LEGIONELLA			0	0-1		
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0		
027.0	LISTERIA MONOCYTOGENES			0	0-1		
88.81	LYME DISEASE			0	0-0		
084	MALARIA	3	1	1	0-3	4	2
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF			1	0-2		
036.82	MENINGOCOCCAL ARTHROPATHY				***		1
036.2	MENINGOCOCCAL BLOOD			0	0-1		
B95.6	MRSA	171	243	141	55-227	380	470
072.9	MUMPS	2		0	0-1	3	
036.89	N.MENINGITIDIS OTHER	1	1	0	0-1	2	1
728.86	NECROTIZING FASCIITIS	1	2	1	0-3	3	2
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS			2	0-7	1	
038.2	PNEUM. SEPTICEMIA	3	13	9	3-15	16	28
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 Influenza A Pandemic H1N1 (pH1N1). There were no cases of pH1N1 in February 2010.

SUMMARY OF COMMUNICABLE DISEASE FOR FEBRUARY 2010

ICD9	Disease Name	MONTHLY TOTAL				YEAR-TO-DATE	
		2009	2010	Expected*	Ex. Range**	2009	2010
083.0	Q FEVER		1	0	0-1		1
056.9	RUBELLA		1	0	0-0		1
771.0	RUBELLA CONGENITAL			0	0-0		
041.2	S.PNEUM.OTHER			1	0-3		2
003.0	SALMONELLA	14	24	18	5-31	36	50
120	SCHISTOSOMIASIS			0	0-0		
004	SHIGELLOSIS	5	1	2	0-5	9	3
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	9	11		***	18	20
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-1		
481	STREPTOCOCCUS PNEUMONIAE			0	0-1		
127.2	STRONGYLOIDES	2		1	0-3	4	3
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			0	0-0		1
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI			0	0-0		
013	TUBERCULOSIS - NON-RESP.	4	3	2	0-4	6	5
010	TUBERCULOSIS - PRIM.			1	0-5	1	
011	TUBERCULOSIS - RESP	8	4	7	1-13	10	7
021.9	TULAREMIA			0	0-0		
002.0	TYPHOID			0	0-1	1	
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	8	11		***	14	18
005.4	VIBRIO PARAHAEMOLYTICUS				***		
070.59	VIRAL HEP. OTHER				***		
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL SYNDROMES				***		
008.44	YERSINIA ENTEROCOLITICA			1	0-3		
		388	458			824	889

SUMMARY OF COMMUNICABLE DISEASE BY AGE AND GENDER FOR FEBRUARY 2010

		<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	
ICD9	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			
006.9	AMEBIASIS			1								1									2								4	
038.0	BETA STREP SEPTICEMIA	1	1														2	1		1	2	1			1	1			11	
008.43	CAMPYLOBACTER	2			1								4				1			2	1		1		1				13	
558.2	CLOSTRIDIUM DIFFICILE			1			1			1		2			2	4		5	1	1	1	5	8	8	7	18	11			76
007.8	CRYPTOSPORIDIOSIS							1																					1	
V02.4	DIPH. CARRIERS								1						1		1		1										4	
008.0	E. COLI 0157															1	1		1										3	
007.1	GIARDIA LAMBLIA				1	1			1							1	2												6	
070.1	HEPATITIS A												1																1	
070.51	HEPATITIS C												1	1		2	4	4	4	1	5	1							23	
084	MALARIA	1																											1	
B95.6	MRSA	6	7	16	15	14	11	8	3	8	5	10	7	7	9	16	12	11	13	7	11	7	8	7	6	9	10			243
728.86	NECROTIZING FASCIITIS																	1								1			2	
036.89	NEISSERIA MGTS(Other)																						1						1	
038.2	PNEUM. SEPTICEMIA			1						1						1	3	1	2	1		1		1	1				13	
083.0	Q. FEVER																	1											1	
056.9	RUBELLA															1													1	
003.0	SALMONELLA	1		1		1	1	1	1	1	1	1		1		3		5	1	1	1		3						24	
004	SHIGELLOSIS															1													1	
041.1	STREP PYOGENES - OTHER ST	1	2			1						1				2			1	1	1	1							11	
013	TUBERCULOSIS - NON-RESP.											1	1							1									3	
011	TUBERCULOSIS - RESP																1	1	1						1				4	
B96.8	VANCOMYCIN RES. ENTER.									1								2		1	1	1	1		3	1			11	
		12	10	20	17	17	13	10	6	11	7	14	15	10	12	30	23	33	26	19	24	16	25	16	19	31	22			458

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR FEBRUARY 2010

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	F	P	F	P				
006.9	AMEBIASIS	4																					4
038.0	BETA STREP SEPTICEMIA	7	1							1		2											11
008.43	CAMPYLOBACTER	7					2			3		1											13
558.2	CLOSTRIDIUM DIFFICILE	51	4		1		6	1	3	4		2		3					1				76
007.8	CRYPTOSPORIDIOSIS											1											1
V02.4	DIPH. CARRIERS																	4					4
008.0	E. COLI 0157	2							1														3
007.1	GIARDIA LAMBLIA	4				1				1													6
070.1	HEPATITIS A	1																					1
070.51	HEPATITIS C	15	2				1		2					1		1		1					23
084	MALARIA	1																					1
B95.6	MRSA	69	1	10	3		1	2	3	4	1	1	2	5	1	5	129	5	1				243
728.86	NECROTIZING FASCIITIS	1															1						2
036.89	NEISSERIA MGTS(Other)	1																					1
038.2	PNEUM. SEPTICEMIA	7		2			1			2							1						13
083.0	Q. FEVER															1							1
056.9	RUBELLA	1																					1
003.0	SALMONELLA	12					3		1	1		2		2		1	2						24
004	SHIGELLOSIS				1																		1
041.1	STREP PYOGENES - OTHER ST	6															4			1			11
013	TUBERCULOSIS - NON-RESP.	2																1					3
011	TUBERCULOSIS - RESP	3															1						4
B96.8	VANCOMYCIN RES. ENTER.	7					1		2	1													11
		201	8	12	5		16	3	12	17	1	9	2	11	1	8	143	7	1	1			458

* F=Federal Jurisdiction (First Nations and Inuit Health) P=Provincial Jurisdiction OOP=Out of Province

STD Infection Summary Report - February 2010

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2009	2010	2009	2010
All Chlamydia Infections	516	559	1160	1075
All Gonorrhea Infections (including PRNG)	105	82	231	151
All Syphilis Infections	4	8	6	15
Gonorrhea & Chlamydia Co-infections	46	41	103	70
HIV	7	13	21	22

Total Number of STD Cases by Age and Gender - February 2010

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		
Chlamydia Only Cases		1					5	2	143	40	98	47	65	34	30	27	9	13	1	3								518
Gonorrhea Only Cases					1		1		10	4	2	1	5	5	3	4		2	1	2								41
Syphilis Only Cases			1		1								1	1	1				1	1	1							8
GC and CT Cases							2	1	12	5	12	5	2	2														41
		1	1		2		8	3	165	49	112	53	73	42	34	31	9	15	2	6	1	1						608
HIV										1		1			3	4	1	2		1								13

Regional STD Distribution - February 2010

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	279	17	9	10		10	12	20		33		13	4	11	7	28	74	26		6		559
All Gonorrhea Infections	33					1	2			6				1	3	4	23	7		2		82
All Syphilis Infections	6											1			1							8
GC and CT Infections	14					1	1			3					1	2	15	4				41

* F=Federal Jurisdiction (First Nations and Inuit Health) P=Provincial Jurisdiction OOP=Out of Province