

Manitoba Monthly Communicable Disease Report

Reported up to February 28, 2009

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 59% of all non-STI/HIV related communicable diseases reported to Manitoba Health and Healthy Living during February, 2009.

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

There were 583 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in February 2009:

- 475 reported cases of chlamydia (Ct) only
- 59 reported cases of gonorrhoea (GC) only
- 45 reported co-infections of Ct and GC and
- 4 reported cases of syphilis

Chlamydia has the highest incidence of reported STI. Females between the ages of 15 and 24 years comprised 45% of all reported chlamydia cases in the province.

In February 2009, there were no cases of Hepatitis B virus (HBV), 30 cases of Hepatitis C virus (HCV) and 7 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

The number of reported cases in February 2009 was within the statistically expected range for these reported communicable diseases with the exception of the following diseases:

- Verotoxigenic *E. coli* – 5 lab confirmed cases reported; less than 5 expected in an average month
- Mumps – 2 lab confirmed cases reported; less than 2 expected in an average month
- *Neisseria meningitidis* (in a sterile site other than blood or brain fluid) – 1 positive lab confirmed case reported; less than one expected in an average month

The expected number of cases and range is statistically based on the average number of reported cases during January, February and March, 2004-2009.

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. 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 2009

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2008	2009	Expected*	Ex. Range**	2008	2009
006.9	AMEBIASIS	4	2	3	0-6	8	3
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-0		
005.8	B. CEREUS			0	0-0		
320.1	BAC. MENINGITIS - PNEUM			0	0-1		1
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	6	10		***	18	20
116.0	BLASTOMYCOSIS	1			***	1	1
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-0		
005.2	C. PERFRINGENS			0	0-2		
008.43	CAMPYLOBACTER	17	16	14	8-20	31	35
558.2	CLOSTRIDIUM DIFFICILE	67	58		***	148	138
046.1	CREUTZFELD-JACOB DISEASE				***		1
007.8	CRYPTOSPORIDIOSIS	1	2	2	0-5	4	5
061.0	DENGUE FEVER			0	0-1	1	
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-0		
032	DIPHTHERIA CASES	1		0	0-1	1	
123.4	DIPHYLLOBOTHRIUM SPP	1		0	0-1	1	
008.0	E. COLI-VEROTOXIGENIC	2	5	2	0-4	5	8
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	4	9	8	2-14	12	12
320.0	H.INFLUENZAE (CSF)			0	0-0		
041.5	H.INFLUENZAE (OTHER STERILE)	1		0	0-2	1	
041.59	HAEM. INFLUENZAE (non-B)				***	2	1
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-1		
070.1	HEPATITIS A	1	1	2	0-4	2	1
070.3	HEPATITIS B	1		0	0-1	1	
070.51	HEPATITIS C	34	30	33	13-53	57	63
487.1A	INFLUENZA A	43	14		***	56	15
487.1B	INFLUENZA B	14	11		***	19	12
482.83	LEGIONELLA			0	0-1		
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-1		
027.0	LISTERIA MONOCYTOGENES	1		0	0-1	2	
088.81	LYME DISEASE			0	0-0		
084	MALARIA	2	3	1	0-3	4	4
055.9	MEASLES			0	0-1		
036.0	MENINGOCOCCAL CSF			1	0-2		
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCAL BLOOD			0	0-1	1	
B95.6	MRSA	137	169	116	26-206	326	378
072.9	MUMPS		2	0	0-1		3
036.89	N.MENINGITIDIS OTHER		1	0	0-0		2
728.86	NECROTIZING FASCIITIS	1	1	1	0-3	1	3
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	6		3	0-10	7	1
038.2	PNEUM. SEPTICEMIA	9	3	8	1-15	20	16
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.

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2008	2009	Expected*	Ex. Range**	2008	2009
083.0	Q FEVER	1		0	0-1	1	
056.9	RUBELLA			0	0-0		
771.0	RUBELLA CONGENITAL			0	0-0		
041.2	S.PNEUM.OTHER			1	0-4		
003.0	SALMONELLA	16	13	17	3-31	39	33
120	SCHISTOSOMIASIS			0	0-0		
004	SHIGELLOSIS	5	4	2	0-4	7	8
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK	2			***	2	
481.9	STREP PNEUMONIA - PR			0	0-0		
041.1	STREP PYOGENES - OTHER STER	1	9		***	3	18
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	1		0	0-1	1	
127.2	STRONGYLOIDES		2	0	0-2		4
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			0	0-0		
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI			0	0-0		
013	TUBERCULOSIS - NON-RESP.		4	2	1-4	2	6
010	TUBERCULOSIS - PRIM.			4	1-9		1
011	TUBERCULOSIS - RESP.	4	7	7	3-12	9	10
021.9	TULAREMIA			0	0-0		
002.0	TYPHOID			0	0-0		1
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	3	8		***	8	14
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 SYNDROME				***		
008.44	YERSINIA ENTEROCOLITICA			1	0-3		
		387	384			801	818

* 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 February 2009

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/gendr	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	1		3		1					10	
008.43	CAMPYLOBACTER			2		2				1						2	1	2	1	1	1	1	1		1				16	
558.2	CLOSTRIDIUM DIFFICILE		1			1								1		2	3	4		3	1	5	7	3	4	15	8		58	
007.8	CRYPTOSPORIDIOSIS					1					1																		2	
008.0	E. COLI 0157			1		1				1		1									1								5	
007.1	GIARDIA LAMBLIA			1		1	1	1			1	2					1		1										9	
070.1	HEPATITIS A															1													1	
070.51	HEPATITIS C								1		1	1	5	1	3	5		5		5		2	1						30	
487.1A	INFLUENZA A		1		1										1			1					2		6	2			14	
487.1B	INFLUENZA B			2		2	1	1	1	1	1	1													1				11	
084	MALARIA											1	1					1											3	
B95.6	MRSA	6	3	5	5	5	5	3	4	3	5	2	8	5	7	11	7	12	13	8	10	1	7	5	10	10	9		169	
072.9	MUMPS													1		1													2	
728.86	NECROTIZING FASCIITIS															1													1	
036.89	NEISSERIA MGTS(Other)																			1									1	
038.2	PNEUM. SEPTICEMIA									1										1		1							3	
003.0	SALMONELLA		1						2	1						2	1			3				2	1				13	
004	SHIGELLOSIS			1	1											1					1								4	
041.1	STREP PYOGENES - OTHER ST					1				1					1			2		3	1								9	
127.2	STRONGYLOIDIASIS			1											1														2	
013	TUBERCULOSIS - NONRESP.							1						1		1				1									4	
011	TUBERCULOSIS - RESP.							1						1				1		1	1	2							7	
B96.8	VANCOMYCIN RES. ENTER.										1			1	1		1					2			1	1			8	
		6	7	13	7	12	9	5	9	9	7	7	13	13	14	25	21	23	23	20	24	9	25	13	17	33	20		384	

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR February 2009

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						
006.9	AMEBIASIS		1											1									2
038.0	BETA STREP SEPTICEMIA	7								1				1					1				10
008.43	CAMPYLOBACTER	8				1		2		3		1						1					16
558.2	CLOSTRIDIUM DIFFICILE	30	7		1		5		3	1		4		5		1		1					58
007.8	CRYPTOSPORIDIOSIS	1								1													2
008.0	E. COLI 0157	5																					5
007.1	GIARDIA LAMBLIA	5				1				2		1											9
070.1	HEPATITIS A	1																					1
070.51	HEPATITIS C	21	3			2	1	1								1					1		30
487.1A	INFLUENZA A	13														1							14
487.1B	INFLUENZA B	3			2					5				1									11
084	MALARIA	2										1											3
B95.6	MRSA	60	1	2	4		1	1	5	3		6		7		6	43	29			1		169
072.9	MUMPS			1	1																		2
728.86	NECROTIZING FASCIITIS	1																					1
036.89	NEISSERIA MGTS(Other)	1																					1
038.2	PNEUM. SEPTICEMIA	1																2					3
003.0	SALMONELLA	6							3					2				2					13
004	SHIGELLOSIS	1							1	1						1							4
041.1	STREP PYOGENES - OTHER	4							1			1				1	1	1					9
127.2	STRONGYLOIDIASIS	1								1													2
013	TUBERCULOSIS - NONRESP.	2		1														1					4
011	TUBERCULOSIS - RESP.	6																1					7
B96.8	VANCOMYCIN RES. ENTER.	6			1							1											8
		185	12	4	9		10	2	16	18		15		17		11	51	32		2			384

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

STD Infection Summary Report - February 2009

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2008	2009	2008	2009
All Chlamydia Infections	561	520	1216	1162
All Gonorrhoea Infections (including PRNG)	110	104	258	229
All Syphilis Infections	2	4	7	6
Gonorrhoea & Chlamydia Co-infections	61	45	124	101
HIV	7	7	13	21

Total Number of STD Cases by Age and Gender - February 2009

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/gendr	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					9	3	136	46	93	68	38	18	21	18	9	11	2	1				1				475
Gonorrhoea Only Cases									2	6	11	8	5	5	9	8		2		2				1				59
Syphilis Only Cases														2		1		1										4
GC and CT Cases							2		9	3	11	9	2		3	4		1		1								45
		1					11	3	147	55	115	85	45	25	33	31	9	15	2	4				2				583
HIV									1						3	1		2										7

Regional STD Distribution - February 2009

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				
All Chlamydia Infections	250	17	14	6		5	11	18		24		23	3	16	2	25	74	25		6	1	520
All Gonorrhoea Infections	48	1	1	2			2	2		5			1	4	5	1	18	11		3		104
All Syphilis Infections	3							1														4
GC and CT Infections	21			1			1							2	1		13	6				45

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