

Manitoba Monthly Communicable Disease Report

Reported up to June 30, 2009

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C.difficile*) accounted for 64% of all non-STI/HIV related communicable diseases reported to Manitoba Health and Healthy Living during June 2009.

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

There were 580 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in June 2009:

- 502 reported cases of chlamydia (Ct) only
- 48 reported cases of gonorrhoea (GC) only
- 25 reported co-infections of Ct and GC
- 5 reported cases of syphilis

Chlamydia has the highest incidence of reported STI. Females between the ages of 15 and 24 years comprised 48 % of all reported chlamydia cases in the province.

In June 2009, there were no cases of Hepatitis B virus (HBV); 28 cases of Hepatitis C virus (HCV); and 8 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

The numbers of reported cases within June 2009 were within the statistically expected range for these reported communicable diseases with the exception of the following diseases:

- Pneumococcal septicemia – 18 positive lab-confirmed cases reported; less than 15 expected in an average month.
- Salmonella - 29 positive lab-confirmed cases reported; less than 26 expected in an average month.
- Streptococcal toxic shock – 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 average number of reported cases during May, June and July, 2004-2008.

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 June 2009

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2008	2009	Expected*	Ex. Range**	2008	2009
006.9	AMEBIASIS	3	4	3	0-7	22	24
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-0		
005.8	B. CEREUS	1	1	0	0-1	1	2
320.1	BAC. MENINGITIS - PNEUM	1	1	0	0-1	1	2
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	7	12		***	58	78
116.0	BLASTOMYCOSIS	3	1		***	7	3
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-0		1
005.2	C. PERFRINGENS			0	0-1		2
008.43	CAMPYLOBACTER	17	14	24	11-37	94	102
558.2	CLOSTRIDIUM DIFFICILE	76	77		***	440	438
046.1	CREUTZFELD-JACOB DISEASE	1			***	1	2
007.8	CRYPTOSPORIDIOSIS	1		2	0-6	7	9
061.0	DENGUE FEVER			0	0-0	1	
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-1	3	1
032	DIPHTHERIA CASES			0	0-1	1	
123.4	DIPHYLLOBOTHRIUM SPP			1	0-3	1	1
008.0	E. COLI-VEROTOXIGENIC	5		8	0-21	17	16
054.3	ENCEPHALITIS			0	0-1		
005.9	FOOD POISONING OTHER			0	0-1		
007.1	GIARDIA LAMBLIA	20	13	13	3-23	62	56
320.0	H.INFLUENZAE (CSF)			0	0-0		
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1	1	2
041.59	HAEM. INFLUENZAE (non-B)	1			***	7	1
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0		
070.1	HEPATITIS A		2	2	0-5	6	9
070.3	HEPATITIS B			1	0-2	2	1
070.51	HEPATITIS C	36	28	31	16-46	191	188
487.1A	INFLUENZA A (NON-NOVEL H1N1)		12****		***	78	89
487.1B	INFLUENZA B	1			***	44	38
482.83	LEGIONELLA			0	0-1		
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-1		
027.0	LISTERIA MONOCYTOGENES			0	0-1	2	1
088.81	LYME DISEASE			1	0-4		
084	MALARIA	1		2	0-6	5	7
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF	1		0	0-1	2	
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCAL BLOOD			0	0-1	2	
B95.6	MRSA	166	216	130	36-224	995	1106
072.9	MUMPS		1	1	0-3		5
036.89	N.MENINGITIDIS OTHER			0	0-0		4
728.86	NECROTIZING FASCIITIS	2		2	0-6	7	3
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	1	1	3	0-8	8	17
038.2	PNEUM. SEPTICEMIA	8	18	8	1-15	66	67
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.

**** Influenza A cases excluding novel H1N1. Total number of novel H1N1 cases was 699 for June 2009.

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2008	2009	Expected*	Ex. Range**	2008	2009
083.0	Q FEVER			0	0-0	1	1
056.9	RUBELLA			0	0-0		2
771.0	RUBELLA CONGENITAL			0	0-0		
041.2	S.PNEUM.OTHER			1	0-3	1	3
003.0	SALMONELLA	25	29	16	6-26	139	119
120	SCHISTOSOMIASIS			0	0-0		
004	SHIGELLOSIS			0	0-1	12	14
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***	2	1
481.9	STREP PNEUMONIA - PR			0	0-1		
041.1	STREP PYOGENES - OTHER STER	1	2		***	20	38
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK		1	0	0-0		1
481	STREPTOCOCCUS PNEUMONIAE			0	0-1	2	
127.2	STRONGYLOIDES			1	0-5	3	4
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			0	0-1		1
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI			0	0-1		
013	TUBERCULOSIS - NON-RESP.	1	1	2	0-4	9	10
010	TUBERCULOSIS - PRIM.			2	0-5	3	6
011	TUBERCULOSIS - RESP	11	14	9	3-16	53	61
021.9	TULAREMIA	1		0	0-1	1	
002.0	TYPHOID			0	0-0	1	1
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	9	8		***	38	32
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		1	0-3	2	2
		401	456			2419	2571

* 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 June 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	2		1																					4			
005.8	B. CEREUS										1																			1			
320.1	BAC. MENINGITIS - PNEUM													1																1			
038.0	BETA STREP SEPTICEMIA													1			2		1	1	2	1			1	1	1	1		12			
116.0	BLASTOMYCOSIS														1															1			
008.43	CAMPYLOBACTER				1		1	1	1			1		1			1	1		2	1				2	1				14			
558.2	CLOSTRIDIUM DIFFICILE	1									1	2	1		2		1	5	4	1	1	6	2	7	9	18	16			77			
007.1	GIARDIA LAMBLIA				2	3		4				1				1			1			1								13			
070.1	HEPATITIS A															1						1								2			
070.51	HEPATITIS C								1					1	1	4	2	2	8	2	3		1				1	1		1	28		
487.1A	INFLUENZA A (NON-NOVEL H1N1)	2	2	1						1		2				1			1	1		1								12			
B95.6	MRSA	1	3	16	13	6	4	7	7	8	7	10	7	9	5	10	14	13	12	9	10	9	7	6	7	9	7			216			
072.9	MUMPS																		1												1		
033.0	PERTUSSIS		1																												1		
038.2	PNEUM. SEPTICEMIA				2	1				1	1	1		1		2	4		3	1					1						18		
003.0	SALMONELLA					2	1	1	3	1	1		1		4		1		6		1	5		1				1			29		
041.1	STREP PYOGENES - OTHER ST																				1					1						2	
040.89	STREPTOCOCCAL TOXIC SHOCK																				1											1	
013	TUBERCULOSIS - NON-RESP.																				1											1	
010	TUBERCULOSIS - PRIM.																																
011	TUBERCULOSIS - RESP									1	1					2	2	1		2	1	2				1	1					14	
B96.8	VANCOMYCIN RES. ENTER.										1	1						1			1	2	1				1					8	
		4	6	21	20	8	12	11	11	12	12	17	10	18	11	22	25	28	33	20	27	21	12	18	20	30	26				456		

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR June 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	F	P				
006.9	AMEBIASIS	4																					4
005.8	B. CEREUS	1																					1
320.1	BAC. MENINGITIS - PNEUM							1															1
038.0	BETA STREP SEPTICEMIA	9				1				1									1				12
116.0	BLASTOMYCOSIS	1																					1
008.43	CAMPYLOBACTER	5	1		1	1		2		2			1		1								14
558.2	CLOSTRIDIUM DIFFICILE	51	4					7							3				2	2			77
007.1	GIARDIA LAMBLIA	9							1	1										2			13
070.1	HEPATITIS A	1											1										2
070.51	HEPATITIS C	16	2			1		4	2	1			1			1							28
487.1A	INFLUENZA A (NON-NOVEL H1N1)	6												1		1		2				2	12
B95.6	MRSA	79	3	2	3		3	2	5	1	4		3			1	17	85	8				216
072.9	MUMPS				1																		1
033.0	PERTUSSIS																	1					1
038.2	PNEUM. SEPTICEMIA	5		1					1		2							7	1				18
003.0	SALMONELLA	9	1		1		1			1	3				11	2							29
041.1	STREP PYOGENES - OTHER	2																					2
040.89	STREPTOCOCCAL TOXIC SH	1																					1
013	TUBERCULOSIS - NON-RESP.	1																					1
010	TUBERCULOSIS - PRIM.																						
011	TUBERCULOSIS - RESP	7		3								1						3					14
B96.8	VANCOMYCIN RES. ENTER.	4			2				1		1												8
		211	11	6	8			14	7	12	2	23	1	7	12	6	1	19	100	14		2	456

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

STD Infection Summary Report - June 2009

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2008	2009	2008	2009
All Chlamydia Infections	551	527	3474	3367
All Gonorrhoea Infections (including PRNG)	127	73	772	597
All Syphilis Infections	2	5	19	24
Gonorrhoea & Chlamydia Co-infections	64	25	352	247
HIV	5	8	45	54

Total Number of STD Cases by Age and Gender - June 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							8	1	124	31	118	68	38	28	37	23	11	8	4	3								502
Gonorrhoea Only Cases									7	2	13	2	5	7	3	2	1	3		3								48
Syphilis Only Cases														1	1	1				1		1						5
GC and CT Cases									5	2	3	4	4	1	2	2		1		1								25
							8	1	136	35	134	74	47	37	43	28	12	12	4	8		1						580
HIV													1			1	2		3		1							8

Regional STD Distribution - June 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	278	24	5	16	1	7	4	18	1	26		18	5	14	5	19	62	17		7		527
All Gonorrhoea Infections	41	1				1	1	4		3			1		2	1	15	1		1	1	73
All Syphilis Infections	4									1												5
GC and CT Infections	10					1		1		1			1		1		9			1		25

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