

Manitoba Monthly Communicable Disease Report

Reported up to July 31, 2009

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C.difficile*) accounted for 66% of all non-STI/HIV related communicable diseases reported to Manitoba Health and Healthy Living during July 2009.

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

There were 513 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in July 2009:

- 433 reported cases of chlamydia (Ct) only
- 40 reported cases of gonorrhoea (GC) only
- 34 reported co-infections of Ct and GC
- 6 reported cases of syphilis

Chlamydia has the highest incidence of reported STI. Females between the ages of 15 and 24 years comprised 42% of all reported chlamydia cases in the province.

In July 2009, there were no cases of Hepatitis B virus (HBV); 29 cases of Hepatitis C virus (HCV); and 14 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

The numbers of reported cases within July 2009 were within the statistically expected range for these reported communicable diseases.

The expected number of cases and range is statistically based on the average number of reported cases during June, July and August, 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 July 2009

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2008	2009	Expected*	Ex. Range**	2008	2009
006.9	AMEBIASIS	1		3	0-7	23	24
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1		
005.8	B. CEREUS			0	0-1	1	2
320.1	BAC. MENINGITIS - PNEUM		1	0	0-1	1	3
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	11	16		***	69	95
116.0	BLASTOMYCOSIS		1		***	7	4
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1		1
005.2	C. PERFRINGENS			1	0-3		2
008.43	CAMPYLOBACTER	24	25	28	18-38	118	127
558.2	CLOSTRIDIUM DIFFICILE	69	70		***	509	508
046.1	CREUTZFELD-JACOB DISEASE				***	1	2
007.8	CRYPTOSPORIDIOSIS	4	2	6	0-22	11	11
061.0	DENGUE FEVER			0	0-0	1	
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS	1		0	0-1	4	1
032	DIPHTHERIA CASES			0	0-1	1	
123.4	DIPHYLLOBOTHRIUM SPP			1	0-4	1	1
008.0	E. COLI-VEROTOXIGENIC	4	2	12	0-37	21	18
054.3	ENCEPHALITIS			0	0-1		
005.9	FOOD POISONING OTHER			0	0-1		
007.1	GIARDIA LAMBLIA	18	7	15	6-24	81	63
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			***	8	1
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0		
070.1	HEPATITIS A	1	1	1	0-4	7	10
070.3	HEPATITIS B			0	0-1	2	1
070.51	HEPATITIS C	29	29	28	17-39	220	217
487.1A	INFLUENZA A (NON-NOVEL H1N1)		1****		***	78	90
487.1B	INFLUENZA B				***	44	38
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	2
088.81	LYME DISEASE	3		1	0-4	3	
084	MALARIA	1		1	0-5	6	7
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF			0	0-1	2	
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCAL BLOOD			0	0-1	2	
B95.6	MRSA	226	236	157	23-291	1221	1344
072.9	MUMPS			1	0-3		5
036.89	N.MENINGITIDIS OTHER			0	0-1		4
728.86	NECROTIZING FASCIITIS	1		2	0-6	8	3
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	6	1	3	0-8	14	18
038.2	PNEUM. SEPTICEMIA	6	5	7	1-13	72	71
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 62 for July 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	1	1	0-3	2	4
003.0	SALMONELLA	20	22	17	8-26	159	143
120	SCHISTOSOMIASIS			0	0-1		
004	SHIGELLOSIS	1	2	1	0-3	13	16
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***	2	1
481.9	STREP PNEUMONIA - PR	1		0	0-1	1	
041.1	STREP PYOGENES - OTHER STER	1	17		***	21	55
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-0		1
481	STREPTOCOCCUS PNEUMONIAE			0	0-1	2	
127.2	STRONGYLOIDES		1	0	0-1	3	5
037	TETANUS			0	0-1		
130.9	TOXOPLASMOSIS			0	0-1		1
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI			0	0-1		
013	TUBERCULOSIS - NON-RESP.	2	3	2	0-4	11	13
010	TUBERCULOSIS - PRIM.			1	0-3	3	6
011	TUBERCULOSIS - RESP	12	9	8	2-14	65	71
021.9	TULAREMIA			0	0-1	1	
002.0	TYPHOID			0	0-0	1	1
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	5	12		***	43	44
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	1			***	1	
008.44	YERSINIA ENTEROCOLITICA		1	1	0-3	2	3
		450	466			2870	3042

* 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 July 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				
320.1	BAC. MENINGITIS - PNEUM		1																												1
038.0	BETA STREP SEPTICEMIA							1									1	1	1	1	2	2	3	1				3		16	
116.0	BLASTOMYCOSIS																1													1	
008.43	CAMPYLOBACTER		1	2	1					1	2		1			1	4	1	4		2		1	2			1	1		25	
558.2	CLOSTRIDIUM DIFFICILE									1	1	1	1			3		3	1	3	5	7	5	7	13	9	10			70	
007.8	CRYPTOSPORIDIOSIS									1	1																			2	
008.0	E. COLI 0157				1													1												2	
007.1	GIARDIA LAMBLIA			1	1	1		1					1				1							1						7	
070.1	HEPATITIS A																										1			1	
070.51	HEPATITIS C							1				3	1	1	1	7	2	6	2	3	1	1								29	
487.1A	INFLUENZA A (NON-NOVEL H1N1)												1																	1	
027.0	LISTERIA MONOCYTOGENES																				1									1	
B95.6	MRSA	2	4	10	17	10	12	8	9	6	7	7	9	9	12	11	14	5	11	10	7	11	12	6	6	10	11			236	
033.0	PERTUSSIS		1																											1	
038.2	PNEUM. SEPTICEMIA	2										1								1					1					5	
003.0	SALMONELLA		1	1			1	1			4	2				2	2	1		2	1	1	1	1	1			1		22	
004	SHIGELLOSIS															1					1									2	
041.1	STREP PYOGENES - OTHER ST					1					2		1			1	2	1		2	4		1		2					17	
041.2	STREP.PNEUM.OTHER															1														1	
127.2	STRONGYLOIDIASIS															1														1	
013	TUBERCULOSIS - NON-RESP.												2								1									3	
010	TUBERCULOSIS - PRIM.																														
011	TUBERCULOSIS - RESP	1					1	1								3	1			1	1									9	
B96.8	VANCOMYCIN RES. ENTER.															1	2			1	1			3	1	1	2			12	
008.44	YERSINIA ENTEROCOLITICA																			1										1	
		5	8	14	20	12	14	10	11	8	17	12	18	12	13	24	29	19	26	20	28	25	23	23	25	22	28			466	

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR July 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						
320.1	BAC. MENINGITIS - PNEUM	1																					1
038.0	BETA STREP SEPTICEMIA	9								2		1				1	1	1				1	16
116.0	BLASTOMYCOSIS	1																					1
008.43	CAMPYLOBACTER	9	2		1		5	2	1			2		3									25
558.2	CLOSTRIDIUM DIFFICILE	41	4		3		3	1	4		3		6		4		1						70
007.8	CRYPTOSPORIDIOSIS		2																				2
008.0	E. COLI 0157	2																					2
007.1	GIARDIA LAMBLIA	3								4													7
070.1	HEPATITIS A								1														1
070.51	HEPATITIS C	17	2					3	1		1	1	1		1		1					1	29
487.1A	INFLUENZA A (NON-NOVEL H1N1)						1																1
027.0	LISTERIA MONOCYTOGENES	1																					1
B95.6	MRSA	82	4	5	3		4	3	8		9	1	3	2	6	1	5	83	16	1			236
033.0	PERTUSSIS	1																					1
038.2	PNEUM. SEPTICEMIA	2								1							2						5
003.0	SALMONELLA	9		1					1		1	1	5	3			1						22
004	SHIGELLOSIS	2																					2
041.1	STREP PYOGENES - OTHER	12		1					2		1			1									17
041.2	STREP.PNEUM.OTHER									1													1
127.2	STRONGYLOIDIASIS	1																					1
013	TUBERCULOSIS - NON-RESP.	3																					3
010	TUBERCULOSIS - PRIM.																						
011	TUBERCULOSIS - RESP	4		2													2	1					9
B96.8	VANCOMYCIN RES. ENTER.	5					1	1	2				2				1						12
008.44	YERSINIA ENTEROCOLITICA	1																					1
		206	14	9	7		14	10	20		22	3	16	7	18	1	8	90	18	1		2	466

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

STD Infection Summary Report - July 2009

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2008	2009	2008	2009
All Chlamydia Infections	586	467	4060	3833
All Gonorrhea Infections (including PRNG)	109	74	881	670
All Syphilis Infections	8	6	27	30
Gonorrhea & Chlamydia Co-infections	44	34	396	281
HIV	10	14	55	68

Total Number of STD Cases by Age and Gender - July 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							3		89	35	94	55	32	40	42	22	7	11	2	1								433
Gonorrhea Only Cases									7	3	8	9		5	1	1	1	3		1		1						40
Syphilis Only Cases												1		1		2		2										6
GC and CT Cases							1		7	4	6	2	4	1	3	4		1		1								34
							4		103	42	108	67	36	47	46	29	8	17	2	3		1						513
HIV													1	1	4	3	2	1		1								14

Regional STD Distribution - July 2009

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	251	20	6	3		10	6	14		26		18	7	12	3	18	40	26		7		467
All Gonorrhea Infections	42		2				1			2					1	1	14	8		2	1	74
All Syphilis Infections	5							1														6
GC and CT Infections	16						1			1					1	9	5			1		34

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