

## Manitoba Monthly Communicable Disease Report

Reported up to October 31, 2009

### Highlights:

#### 1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 65% of all non-STI/HIV related communicable diseases reported to Manitoba Health and Healthy Living during October 2009.

- The number of reported cases of MRSA was outside the statistically expected range in October 2009 – 300 positive lab-confirmed cases reported; less than 299 expected in an average month.

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

There were 609 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in October 2009:

- 522 reported cases of chlamydia (Ct) only
- 54 reported cases of gonorrhoea (GC) only
- 28 reported co-infections of Ct and GC and
- 5 reported cases of syphilis

Chlamydia has the highest incidence of reported STI. Females between the ages of 15 and 24 years comprised 44% of all reported chlamydia cases in the province.

In October 2009, there were no cases of Hepatitis B virus (HBV), 29 cases of Hepatitis C virus (HCV) and 11 cases of HIV newly reported in Manitoba.

#### 3. Other Communicable Diseases

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

- Amebiasis – 5 positive lab-confirmed cases reported; less than 5 expected in an average month.
- Neisseria Meningitidis (other) – 1 positive lab-confirmed case reported; less than 1 expected in an average month.
- Salmonella – 26 positive lab-confirmed cases reported; less than 23 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, 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 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 OCTOBER 2009**

ICD9	Disease Name	MONTHLY TOTAL				YEAR-TO-DATE	
		2008	2009	Expected*	Ex. Range**	2008	2009
006.9	AMEBIASIS	3	5	2	0-4	29	38
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1		
005.8	B. CEREUS			0	0-1	1	5
320.1	BAC. MENINGITIS - PNEUM		1	0	0-1	2	4
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	15	13		***	119	132
116.0	BLASTOMYCOSIS	6	3		***	16	8
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-0		1
005.2	C. PERFRINGENS		1	1	0-2		3
008.43	CAMPYLOBACTER	26	32	22	7-37	203	213
558.2	CLOSTRIDIUM DIFFICILE	83	77		***	733	700
046.1	CREUTZFELD-JACOB DISEASE		1		***	1	3
007.8	CRYPTOSPORIDIOSIS	11	4	5	0-17	66	33
061.0	DENGUE FEVER			0	0-0	1	
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-1	5	1
032	DIPHTHERIA CASES			0	0-1	1	
123.4	DIPHYLLOBOTHRUM SPP		3	1	0-3	5	4
008.0	E. COLI-VEROTOXIGENIC	5	4	6	0-21	32	38
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	10	17	11	2-20	116	109
320.0	H.INFLUENZAE (CSF)			0	0-0		
041.5	H.INFLUENZAE (OTHER STERILE)	1		0	0-1	3	3
041.59	HAEM. INFLUENZAE (non-B)	3			***	12	1
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-1		
070.1	HEPATITIS A	2		1	0-3	10	10
070.3	HEPATITIS B			0	0-1	4	3
070.51	HEPATITIS C	20	29	33	22-44	290	297
487.1A	INFLUENZA A (NON-pH1N1)****		4		***	78	93
487.1B	INFLUENZA B				***	44	38
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	5	2
88.81	LYME DISEASE			0	0-0	5	
084	MALARIA	1	1	1	0-3	10	8
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF			0	0-1	2	
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCEMIA BLOOD			0	0-0	2	
B95.6	MRSA	273	300	171	44-298	2087	2275
072.9	MUMPS			0	0-1	1	5
036.89	N.MENINGITIDIS OTHER		1	0	0-0		7
728.86	NECROTIZING FASCIITIS	4		1	0-3	16	3
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-1		
033.1	PARAPERTUSSIS		2		***		2
033.0	PERTUSSIS		2	2	0-9	15	25
038.2	PNEUM. SEPTICEMIA	14	12	7	0-16	98	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 Influenza A Pandemic H1N1 (pH1N1). There were 280 cases of pH1N1 in October 2009.

## SUMMARY OF COMMUNICABLE DISEASE FOR OCTOBER 2009

ICD9	Disease Name	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	0-3	2	10
003.0	SALMONELLA	22	26	13	4-22	211	224
120	SCHISTOSOMIASIS			0	0-1		1
004	SHIGELLOSIS	8	1	2	0-6	28	19
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***	2	
481.9	STREP PNEUMONIA - PR			0	0-1	1	
041.1	STREP PYOGENES - OTHER STERILE	8	12		***	36	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	2	
127.2	STRONGYLOIDES		2	1	0-2	5	10
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.	2	2	2	0-4	18	23
010	TUBERCULOSIS - PRIM.	1		1	0-3	5	9
011	TUBERCULOSIS - RESP	11	7	7	0-15	94	107
021.9	TULAREMIA			0	0-1	1	1
002.0	TYPHOID			0	0-0	1	1
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	10	17		***	66	77
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				***	2	
008.44	YERSINIA ENTEROCOLITICA	2	1	1	0-4	13	7
		<b>541</b>	<b>581</b>			<b>4500</b>	<b>4746</b>

\* 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 280 cases of pH1N1 in October 2009.

**SUMMARY OF COMMUNICABLE DISEASE BY AGE AND GENDER FOR OCTOBER 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/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		1				1										5
320.1	BAC. MENINGITIS - PNEUM		1																										1	
038.0	BETA STREP SEPTICEMIA		1														2	2		1	3			1			3		13	
116.0	BLASTOMYCOSIS															1			1	1									3	
005.2	C. PERFRINGENS																			1									1	
008.43	CAMPYLOBACTER		2	1	2	1	2	1	2	1	2		2		2	1	1	1		3	2	1	1	1		2	1		32	
558.2	CLOSTRIDIUM DIFFICILE				1							2		2	1	4		2	3	4	4	6	10	9	5	15	9		77	
046.1	CREUTZFELD JACOB DISEASE																					1							1	
007.8	CRYPTOSPORIDIOSIS				2								2																4	
123.4	DIPHYLLOBOTHRIUM				1											1					1								3	
008.0	E. COLI 0157				1	1																			2				4	
007.1	GIARDIA LAMBLIA				2	3			1	1			1		1	1		2	1		2	1							17	
070.51	HEPATITIS C													3	5	5	3	6	2	3		1						1	29	
487.1A	INFLUENZA A (NON-pH1N1)					1		1		1			1																4	
084	MALARIA	1																											1	
B95.6	MRSA	2	3	17	18	12	11	13	12	11	11	6	7	12	9	13	18	16	17	7	16	6	8	7	14	17	17		300	
036.89	NEISSERIA MGTS(Other)										1																		1	
033.1	PARAPERTUSSIS		2																										2	
033.0	PERTUSSIS	2																											2	
038.2	PNEUM. SEPTICEMIA		1	1			1	1		1								2	1		2	1							12	
003.0	SALMONELLA	1	1			1	3	1		2			1	1	1	2	1	2	2		2	3		2					26	
004	SHIGELLOSIS																			1									1	
041.1	STREP PYOGENES - OTHER ST							1		2	1			2	3		1				2								12	
041.2	STREP.PNEUM.OTHER	1																											1	
127.2	STRONGYLOIDIASIS																				1	1							2	
013	TUBERCULOSIS - NON-RESP.																			1	1								2	
011	TUBERCULOSIS - RESP												1	1	1					1	2					1			7	
B96.8	VANCOMYCIN RES. ENTER.								1							1				2		1	1	1	4	2	4		17	
008.44	YERSINIA ENTEROCOLITICA											1																	1	
		7	11	22	29	16	17	19	15	19	15	10	12	20	22	26	32	26	34	25	37	25	24	21	26	39	31		<b>581</b>	

**SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR OCTOBER 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						
	<b>Case Referred to:*</b>																						
006.9	AMEBIASIS	2	3																				5
320.1	BAC. MENINGITIS - PNEUM																	1					1
038.0	BETA STREP SEPTICEMIA	7	1		1					2						1	1						13
116.0	BLASTOMYCOSIS	2																			1		3
005.2	C. PERFRINGENS		1																				1
008.43	CAMPYLOBACTER	14	1			3	1	6		3	1	2						1					32
558.2	CLOSTRIDIUM DIFFICILE	49	4		3	3		8		5		2		1		1			1				77
046.1	CREUTZFELD JACOB DISEASE	1																					1
007.8	CRYPTOSPORIDIOSIS							2	1					1									4
123.4	DIPHYLLOBOTHRIUM	1			1	1																	3
008.0	E. COLI 0157	1				1				1		1											4
007.1	GIARDIA LAMBLIA	6		1		3				2		4		1									17
070.51	HEPATITIS C	19	2		5			1		1		1											29
487.1A	INFLUENZA A (NON-pH1N1)	3				1																	4
084	MALARIA	1																					1
B95.6	MRSA	111	10	10	2	6	1	8		3		2		6	3	7	122	7			2		300
036.89	NEISSERIA MGTS(Other)					1																	1
033.1	PARAPERTUSSIS	1												1									2
033.0	PERTUSSIS	2																					2
038.2	PNEUM. SEPTICEMIA	7								2							2	1					12
003.0	SALMONELLA	15	1					4		1		3		1		1							26
004	SHIGELLOSIS	1																					1
041.1	STREP PYOGENES - OTHER ST	6		1	2												2	1					12
041.2	STREP.PNEUM.OTHER	1																					1
127.2	STRONGYLOIDIASIS	2																					2
013	TUBERCULOSIS - NON-RESP.	1															1						2
011	TUBERCULOSIS - RESP	5						1									1						7
B96.8	VANCOMYCIN RES. ENTER.	14								2				1									17
008.44	YERSINIA ENTEROCOLITICA	1																					1
		<b>273</b>	<b>23</b>	<b>12</b>	<b>14</b>	<b>19</b>	<b>5</b>	<b>28</b>		<b>22</b>	<b>1</b>	<b>15</b>		<b>12</b>	<b>3</b>	<b>10</b>	<b>131</b>	<b>10</b>		<b>3</b>			<b>581</b>

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

**STD Infection Summary Report - October 2009**

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2008	2009	2008	2009
All Chlamydia Infections	656	550	5877	5433
All Gonorrhea Infections (including PRNG)	107	82	1198	924
All Syphilis Infections	9	5	54	40
Gonorrhea & Chlamydia Co-infections	51	28	535	380
HIV	5	11	77	94

**Total Number of STD Cases by Age and Gender - October 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/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				
Chlamydia Only Cases							18	2	123	44	107	54	54	31	35	20	19	7	3	3					1		1	522
Gonorrhea Only Cases							2		6	5	14	8	3	4	2	4	3	2		1								54
Syphilis Only Cases														1		1		3										5
GC and CT Cases							2		8	4	7	3	2				2											28
HIV							20	4	137	53	128	65	59	36	37	25	22	14	3	4				1				609
									1		1			2	3	3		1										11

**Regional STD Distribution - October 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	F	P	F	P					
<b>Case Referred to:*</b>																									
All Chlamydia Infections	283		27		11	9		12	6	16	1	32		16	4	9	7	22	53	39			1	2	550
All Gonorrhea Infections	37		5			3			1	2	1	3		2		1	2	2	14	8			1		82
All Syphilis Infections	3		1			1																			5
GC and CT Infections	8		1			1				1	1	2		1		1	1	1	6	4					28

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