

Manitoba Monthly Surveillance Unit Report

Reported up to April 30, 2012

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 49% of all non-STBBI related communicable diseases reported to Manitoba Health during April 2012.

2. Sexually Transmitted & Blood-Borne Infections (STBBI)

There were 597 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in April 2012:

- 489 reported cases of chlamydia (CT) only
- 67 reported cases of gonorrhoea (GC) only
- 37 reported co-infections of CT and GC and
- 4 reported cases of syphilis

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

Syphilis cases include both infectious and non-infectious cases, as well as those requiring further follow-up to determine their status.

In April 2012, there were no acute cases of Hepatitis B virus (HBV), 37 cases of Hepatitis C virus (HCV) and 4 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

The number of reported cases in April 2012 was within or below the statistically expected range for these reported communicable diseases with the exception of the following disease(s):

- Cryptosporidiosis: 13 positive lab-confirmed cases reported; less than 4 expected in an average month. An outbreak was reported in April in south western Manitoba associated with a petting zoo, which has since been declared over.
- Shigellosis: 7 positive lab-confirmed cases reported; less than 7 expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during March, April, and May, 2007-2011.

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.

The number of Tuberculosis cases year-to-date may not equal the sum of cases reported for each month of this year. As new test results are received, there may be a change in diagnosis. Occasionally, diagnosis dates are updated, which also contributes to total numbers varying from month to month.

SUMMARY OF COMMUNICABLE DISEASE FOR April 2012

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2011	2012	Expected*	Ex. Range**	2011	2012
006.9	AMEBIASIS	2	1	4	0-9	8	11
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-0		
005.8	B. CEREUS			0	0-1		
320.1	BAC. MENINGITIS - PNEUM		1	0	0-1		2
320.7	BAC.MENINGITIS-LISTERIA				***	1	
038.0	BETA STREP SEPTICEMIA	11	20		***	51	58
116.0	BLASTOMYCOSIS				***	2	4
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1	1	1
005.2	C. PERFRINGENS			0	0-1		1
008.43	CAMPYLOBACTER	22	8	17	9-25	74	43
558.2	CLOSTRIDIUM DIFFICILE	97	72		***	313	307
046.1	CREUTZFELD-JACOB DISEASE				***		
007.8	CRYPTOSPORIDIOSIS	2	13	1	0-3	7	16
061.0	DENGUE FEVER			0	0-1	1	
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-2		
032	DIPHtheria CASES			0	0-1		
123.4	DIPHYLLOBOTHRIUM SPP	1		0	0-1	2	3
008.0	E. COLI-VEROTOXIGENIC	6	1	3	0-6	15	10
054.3	ENCEPHALITIS			0	0-1		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	7	9	10	5-15	32	35
038.42	H.INFLUENZAE (BLOOD)		2		***		9
320.0	H.INFLUENZAE (CSF)			0	0-0	1	1
041.5	H.INFLUENZAE (OTHER STERILE)	1		0	0-1	2	
480.8	HANTA VIRUS			0	0-1		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-1		
070.1	HEPATITIS A	1		1	0-3	3	
070.3	HEPATITIS B			0	0-1	3	
070.51	HEPATITIS C	27	37	31	21-41	99	140
487.1A	INFLUENZA A		14		***	113	62
487.1B	INFLUENZA B	8	47		***	11	189
482.83	LEGIONELLA			0	0-1	1	
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0		
027.0	LISTERIA MONOCYTOGENES			0	0-1		1
088.81	LYME DISEASE			0	0-1		
084	MALARIA			1	0-4	3	3
055.9	MEASLES			0	0-1		
036.0	MENINGOCOCCAL CSF		1	0	0-1	1	1
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCAL BLOOD			0	0-1		
B95.6	MRSA	233	275	194	103-285	952	1031
072.9	MUMPS	3		1	0-4	9	6
036.89	N.MENINGITIDIS OTHER			0	0-1		
728.86	NECROTIZING FASCIITIS	3		1	0-3	3	
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	1	3	3	0-11	5	4
038.2	PNEUM. SEPTICEMIA	17	15	12	4-20	58	60
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.

SUMMARY OF COMMUNICABLE DISEASE FOR April 2012

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2011	2012	Expected*	Ex. Range**	2011	2012
083.0	Q FEVER			0	0-1	1	
A82.9	RABIES				***		
082.0	RICKETTSIA RICKETTSII				***		
083.9	RICKETTSIAL DISEASE, OTHER			0	0-0		
056.9C	RUBELLA (confirmed)			0	0-1		1
771.0	RUBELLA CONGENITAL			0	0-1	1	
041.2	S.PNEUM.OTHER	1		1	0-3	6	9
003.0	SALMONELLA	17	12	18	7-29	77	58
079.82	SARS (CORONAVIRUS)				***		
120	SCHISTOSOMIASIS			0	0-0		4
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS		7	2	0-6	14	15
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	10	6		***	35	35
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		
127.2	STRONGYLOIDES	4	2	2	0-6	12	9
037	TETANUS			0	0-1		
130.9	TOXOPLASMOSIS	1		0	0-1	1	2
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI	1		0	0-1	3	1
013-018	TUBERCULOSIS - NON-RESP.	2	3	2	0-6	8	8
010	TUBERCULOSIS - PRIM.	1		1	0-3	4	3
011-012	TUBERCULOSIS - RESP	6	9	9	3-15	27	31
021.9	TULAREMIA			0	0-1		
002.0	TYPHOID	2		0	0-1	3	2
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	76	150		***	300	537
005.4	VIBRIO PARAHAEMOLYTICUS		1		***		1
070.59	VIRAL HEP. OTHER				***		2
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL				***		
008.44	YERSINIA ENTEROCOLITICA	1	1	1	0-3	7	7
		564	710			2271	2723

* 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.

SUMMARY OF COMMUNICABLE DISEASE BY AGE AND GENDER FOR APRIL 2012

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
320.1	BAC. MENINGITIS - PNEUM																					1								1
036.0	BAC.MGTS-NMGTS(MGCCL MGT																	1												1
038.0	BETA STREP SEPTICEMIA	1	2														1	2		2	1	1	1	1		3	3	3		20
008.43	CAMPYLOBACTER				3			1					1			1	1										1			8
558.2	CLOSTRIDIUM DIFFICILE							1						2	1	4	1	5	4	6	8	4	7	9	7	5	8			72
007.8	CRYPTOSPORIDIOSIS				1			4	2			1	1			3						1								13
008.0	E. COLI 0157													1																1
007.1	GIARDIA LAMBLIA						2		2					1	1			2					1							9
038.42	H.INFLUENZAE (BLOOD)																						2							2
070.51	HEPATITIS C							1		1		3	1	3		3	4	3	7	1	6		2	1				1		37
487.1A	INFLUENZA A		2	1	1	1	1					1					1	1	4		1									14
487.1B	INFLUENZA B	3	3	4	2	2	7	3	3	2			1	1	1		1		3	2	1		1	3		3	1			47
B95.6	MRSA	8	4	18	16	7	15	11	7	7	5	7	7	7	7	9	7	15	12	21	19	13	17	8	8	8	11		1	275
033.0	PERTUSSIS		2	1																										3
038.2	PNEUM. SEPTICEMIA			1						1	1	1	1			2		2	2			2		2						15
003.0	SALMONELLA	1	1		1		1		1	1		1			1					1					1		2			12
004	SHIGELLOSIS				1		2	1			1													1	1					7
041.1	STREP PYOGENES - OTHER ST		1									1	2	1								1								6
127.2	STRONGYLOIDIASIS																1						1							2
013-018	TUBERCULOSIS - NON-RESP.													1	1			1												3
011-012	TUBERCULOSIS - RESP											2	1		2	1	1	1	1											9
B96.8	VANCOMYCIN RES. ENTER.		2									1		1		3	2	10	10	5	12	12	20	11	17	24	20			150
005.4	VIBRIO PARAHAEMOLYTICUS																					1								1
008.44	YERSINIA ENTEROCOLITICA									1																				1
		13	17	29	23	11	33	18	11	13	8	19	14	18	13	26	21	42	40	42	47	38	51	35	37	44	45			710

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR APRIL 2012

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						
<i>Case Referred to:*</i>																							
006.9	AMEBIASIS	1																					1
320.1	BAC. MENINGITIS - PNEUM		1																				1
036.0	BAC.MGTS-NMGTS(MGCCL MGT									1													1
038.0	BETA STREP SEPTICEMIA	15						1						1		1			2				20
008.43	CAMPYLOBACTER	2	1	1		1				1		1	1	1									8
558.2	CLOSTRIDIUM DIFFICILE	42	2		3		6		2	8		7							2				72
007.8	CRYPTOSPORIDIOSIS	1	7						1	2		2											13
008.0	E. COLI 0157	1																					1
007.1	GIARDIA LAMBLIA	8								1													9
038.42	H.INFLUENZAE (BLOOD)	1													1								2
070.51	HEPATITIS C	22	2		3				2	1	1		2		2				1		1		37
487.1A	INFLUENZA A	7									1		1						3	2			14
487.1B	INFLUENZA B	15	1		1				4	4					1		3	15	3				47
B95.6	MRSA	103	5	4	3		4	4	13		1	3	1		11	3	9	77	32			2	275
033.0	PERTUSSIS	1					1			1													3
038.2	PNEUM. SEPTICEMIA	6														1		4	4				15
003.0	SALMONELLA	5	1		1					3					1			1					12
004	SHIGELLOSIS	6															1						7
041.1	STREP PYOGENES - OTHER ST	3									1				1					1			6
127.2	STRONGYLOIDIASIS	2																					2
013-018	TUBERCULOSIS - NON-RESP.	3																					3
011-012	TUBERCULOSIS - RESP	4		2						1			1						1				9
B96.8	VANCOMYCIN RES. ENTER.	107			5		4		11		4		4		2		2	1	10				150
005.4	VIBRIO PARAHAEMOLYTICUS	1																					1
008.44	YERSINIA ENTEROCOLITICA												1										1
		356	20	7	16		16	4	34	2	29	3	20		21	4	16	103	56		1	2	710

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

** OOP=Out of Province

STBBI Infection Summary Report - April 2012

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2011	2012	2011	2012
All Chlamydia Infections	476	526	2200	2186
All Gonorrhea Infections (including PRNG)	57	104	294	393
All Syphilis Infections*	2	4	11	27
Gonorrhea & Chlamydia Co-infections	23	37	140	156
HIV	6	4	27	28

Total Number of STBBI Cases by Age and Gender - April 2012

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							3	1	114	32	117	50	52	31	30	29	15	9	1	4			1					489
Gonorrhea Only Cases					2				8	2	10	9	5	9	4	9	2	3	1	3								67
Syphilis Only Cases												1	1					2										4
GC and CT Cases									6	2	8	5	7	2	1	3	2	1										37
TOTAL					2		3	1	128	36	135	65	65	42	35	41	19	15	2	7			1					597
HIV																	1		1	1			1					4

Regional STBBI Distribution - April 2012

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									
Case Referred to:**																									
All Chlamydia Infections	250	19	9	11	2	5	11	12	7	25		12	4	16	3	36	66	32				5	1		526
All Gonorrhea Infections	62	1		2			1	4	2	3		1	2		1	20	4					1			104
All Syphilis Infections	3					1																			4
GC and CT Infections	19						1	1	2	3			1		1	9									37

* Syphilis cases include both infectious and non-infectious cases, as well as those requiring further follow-up to determine their status.

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

*** OOP=Out of Province