

Manitoba Monthly Surveillance Unit Report

Reported up to March 31, 2011

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 52% of all non-STBBI related communicable diseases reported to Manitoba Health during March 2011.

- The number of reported cases of MRSA was above the statistically expected range in March 2011 – 257 positive lab-confirmed cases reported; less than 257 expected in an average month.

The data reveal that there are increased numbers of Vancomycin-resistant *Enterococcus* (VRE) in 2011 compared to 2010. The increased number of VRE cases in 2011 is attributable to hospital-related VRE outbreaks reported this year.

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

There were 656 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in March 2011:

- 571 reported cases of chlamydia (CT) only
- 44 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 44% 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 March 2011, there were no cases of Hepatitis B virus (HBV), 29 cases of Hepatitis C virus (HCV) and 6 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

The number of reported cases in March 2011 was within or below the statistically expected range for these reported communicable diseases with the exception of the following disease(s):

- Mumps: 4 positive lab-confirmed cases reported; less than 2 expected in an average month. Five of the six cases in 2011 are part of a cluster identified related to travel outside Canada.

- Congenital Rubella Syndrome: 1 positive lab-confirmed case reported; less than 1 expected in an average month. The infection was imported from outside Canada.
- Streptococcus pneumoniae (other sterile site): 4 positive lab-confirmed cases reported; less than 4 expected in an average month.
- Shigellosis: 7 positive lab-confirmed cases reported; less than 6 expected in an average month.
- Trypanosoma cruzi: 2 positive lab-confirmed cases reported; less than 1 expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during February, March, and April, 2006-2010.

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 March 2011

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2010	2011	Expected*	Ex. Range**	2010	2011
006.9	AMEBIASIS	4	2	4	0-8	13	5
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-0		
005.8	B. CEREUS			0	0-1		
320.1	BAC. MENINGITIS - PNEUM			0	0-1		
320.7	BAC.MENINGITIS-LISTERIA				***		1
038.0	BETA STREP SEPTICEMIA	9	23		***	27	40
116.0	BLASTOMYCOSIS				***		2
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-0		
005.2	C. PERFRINGENS			0	0-1		
008.43	CAMPYLOBACTER	17	20	15	8-22	48	52
558.2	CLOSTRIDIUM DIFFICILE	88	74		***	239	212
046.1	CREUTZFELD-JACOB DISEASE				***		
007.8	CRYPTOSPORIDIOSIS	2	2	1	0-3	3	5
061.0	DENGUE FEVER			0	0-1		1
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			1	0-3	4	1
032	DIPHThERIA CASES			0	0-1		
123.4	DIPHYLLOBOTHRIUM SPP			0	0-1		1
008.0	E. COLI-VEROTOXIGENIC	2	3	3	0-7	10	9
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	11	10	9	4-14	29	20
320.0	H.INFLUENZAE (CSF)			0	0-0		1
041.5	H.INFLUENZAE (OTHER STERILE)		1	0	0-1		1
041.59	HAEM. INFLUENZAE (non-B)				***		
480.8	HANTA VIRUS			0	0-1		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-1		
070.1	HEPATITIS A		1	1	0-3	2	1
070.3	HEPATITIS B			1	0-3		
070.51	HEPATITIS C	31	29	28	15-41	71	74
487.1A	INFLUENZA A		7		***		113
487.1B	INFLUENZA B		2		***		2
482.83	LEGIONELLA			0	0-1		1
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-1		
027.0	LISTERIA MONOCYTOGENES			0	0-1		
088.81	LYME DISEASE			0	0-1		
084	MALARIA	1	1	1	0-3	3	3
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF		1	0	0-1		1
036.82	MENINGOCOCCAL ARTHROPATHY	1			***	2	
036.2	MENINGOCOCCEMIA BLOOD	2		0	0-1	2	
B95.6	MRSA	235	257	165	74-256	707	719
072.9	MUMPS		4	0	0-1		6
036.89	N.MENINGITIDIS OTHER			0	0-1		
728.86	NECROTIZING FASCIITIS			1	0-2	2	
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	1	1	2	0-9	2	4
038.2	PNEUM. SEPTICEMIA	10	14	11	3-19	38	41
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 Wave 1 and 2 cases reported during the 2009/2010 Influenza A H1N1 pandemic. There were no cases of pandemic H1N1 in March 2011.

SUMMARY OF COMMUNICABLE DISEASE FOR March 2011

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2010	2011	Expected*	Ex. Range**	2010	2011
083.0	Q FEVER			0	0-1		
082.0	RICKETTSIA RICKETTSII				***		
056.9	RUBELLA			0	0-1	1	
771.0	RUBELLA CONGENITAL		1	0	0-0		1
041.2	S.PNEUM.OTHER	3	4	1	0-3	4	6
003.0	SALMONELLA	24	16	19	8-30	80	56
079.82	SARS (CORONAVIRUS)				***		
120	SCHISTOSOMIASIS			0	0-0		
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS	4	7	2	0-5	7	14
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	7	10		***	27	25
711.0	STREP.PNEUM.ARTHRITIS			0	0-1		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-0		
481	STREPTOCOCCUS PNEUMONIAE			0	0-1		
127.2	STRONGYLOIDES	1	2	1	0-3	4	8
037	TETANUS	1		0	0-1	1	
130.9	TOXOPLASMOSES			0	0-0	1	
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI		2	0	0-0		2
013	TUBERCULOSIS - NON-RESP.	1	3	2	0-6	6	6
010	TUBERCULOSIS - PRIM.		1	1	0-5		1
011	TUBERCULOSIS - RESP	7	6	8	4-12	14	24
021.9	TULAREMIA			0	0-0		
002.0	TYPHOID	1		0	0-1	1	1
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	15	133		***	33	223
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				***		
008.44	YERSINIA ENTEROCOLITICA			1	0-4		6
		478	637			1381	1689

* 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 MARCH 2011

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													2
036.0	BAC.MGTS-NMGTS(MGCCL MGTS)																									1				1
038.0	BETA STREP SEPTICEMIA		1		1	1	1											4		1	1	4	3			1	5		23	
008.43	CAMPYLOBACTER	1			3		1						1	1	2		1	1	1	1	2	3			2				20	
558.2	CLOSTRIDIUM DIFFICILE								2		4				1		2	1	3	1	4	6	6	8	10	7	14	5	74	
771.0	CONGENITAL RUBELLA		1																										1	
007.8	CRYPTOSPORIDIOSIS									1					1														2	
008.0	E. COLI 0157											1					1				1								3	
007.1	GIARDIA LAMBLIA					5	1								1		2				1								10	
041.5	H.INFLUENZAE (OTHER STER	1																											1	
070.1	HEPATITIS A																				1								1	
070.51	HEPATITIS C											2		3	4	2	7	3	2	2	2	1	1						29	
487.1A	INFLUENZA A									1						2	1	1	1	1					1				7	
487.1B	INFLUENZA B					2																							2	
084	MALARIA																				1								1	
B95.6	MRSA	7	10	14	17	5	10	5	3	4	7	7	9	10	6	11	7	16	17	14	17	8	14	6	10	14	9		257	
072.9	MUMPS						1									1	1				1								4	
033.0	PERTUSSIS	1																											1	
038.2	PNEUM. SEPTICEMIA		1	1														3	4	1			1		1	2			14	
003.0	SALMONELLA				2		1	1					2	2	1			1	2	2		2							16	
004	SHIGELLOSIS				2	1									1	1		1			1								7	
041.1	STREP PYOGENES - OTHER ST															1			4	1	2	1					1		10	
041.2	STREP.PNEUM.OTHER																	1	2							1			4	
127.2	STRONGYLOIDIASIS														1					1									2	
086	TRYPANOSOMIASIS														1						1								2	
013	TUBERCULOSIS - NON-RESP.														1				1	1									3	
010	TUBERCULOSIS - PRIM.				1																								1	
011	TUBERCULOSIS - RESP									2	1						1	1	1										6	
B96.8	VANCOMYCIN RES. ENTER.												1	1			5	2	6	4	11	13	9	20	14	20	17	10	133	
		10	13	18	30	9	13	8	4	10	10	13	13	18	16	24	25	37	44	42	47	31	48	35	41	49	29		637	

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR MARCH 2011

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						
Case Referred to:*																							
006.9	AMEBIASIS	2																					2
036.0	BAC.MGTS-NMGTS(MGCCL MGTS)	1																					1
038.0	BETA STREP SEPTICEMIA	17	1					4	1														23
008.43	CAMPYLOBACTER	11				2				1		3	2					1					20
558.2	CLOSTRIDIUM DIFFICILE	48	4	1		1		3	5			5	1					2	4				74
771.0	CONGENITAL RUBELLA	1																					1
007.8	CRYPTOSPORIDIOSIS	2																					2
008.0	E. COLI 0157					2						1											3
007.1	GIARDIA LAMBLIA	3	1					1	1			4											10
041.5	H.INFLUENZAE (OTHER STER								1														1
070.1	HEPATITIS A															1							1
070.51	HEPATITIS C	17	2		1			1	2	1								1	2	1	1		29
487.1A	INFLUENZA A	6								1													7
487.1B	INFLUENZA B	1			1																		2
084	MALARIA	1																					1
B95.6	MRSA	81	2	3	2		7	10	11	11	1	3	4	3	1	10	92	12				4	257
072.9	MUMPS									4													4
033.0	PERTUSSIS	1																					1
038.2	PNEUM. SEPTICEMIA	12						1										1					14
003.0	SALMONELLA	10	1					2	2			1											16
004	SHIGELLOSIS	4																3					7
041.1	STREP PYOGENES - OTHER ST	3			1			1				2						2	1				10
041.2	STREP.PNEUM.OTHER	2													1			1					4
127.2	STRONGYLOIDIASIS	2																					2
086	TRYPANOSOMIASIS											2											2
013	TUBERCULOSIS - NON-RESP.	3																					3
010	TUBERCULOSIS - PRIM.																	1					1
011	TUBERCULOSIS - RESP	1							1			1						3					6
B96.8	VANCOMYCIN RES. ENTER.	98		1	2		1	2	10		5		5			1	7	1					133
		327	11	5	7		13	13	35	2	32	1	27	4	6	2	12	114	20	1	1	4	637

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

** OOP=Out of Province

STBBI Infection Summary Report - March 2011

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2010	2011	2010	2011
All Chlamydia Infections	608	608	1685	1719
All Gonorrhea Infections (including PRNG)	101	81	255	234
All Syphilis Infections*	7	4	15	11
Gonorrhea & Chlamydia Co-infections	48	37	120	115
HIV	11	6	29	21

Total Number of STBBI Cases by Age and Gender - March 2011

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							6	1	119	35	135	76	54	41	48	34	11	7		2	2							571
Gonorrhea Only Cases									3	3	7	1	10	3	4	3	2	5		1		1		1				44
Syphilis Only Cases																1		2						1				4
GC and CT Cases							1		13	2	3	4	5	2	2	5												37
TOTAL							7	1	135	40	145	81	69	46	54	43	13	14		3	2	1		2				656
HIV									1						1	2		2										6

Regional STBBI Distribution - March 2011

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	308	23	19	13		9	9	9		27	1	11	8	10	9	30	85	28		9			608
All Gonorrhea Infections	27		4	2		1								2		1	28	16					81
All Syphilis Infections	3	1																					4
GC and CT Infections	8		2	1										1		1	20	4					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