

## Manitoba Monthly Surveillance Unit Report

Reported up to May 31, 2011

### Highlights:

#### 1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 55% of all non-STBBI related communicable diseases reported to Manitoba Health during May 2011.

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 646 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in May 2011:

- 569 reported cases of chlamydia (CT) only
- 38 reported cases of gonorrhoea (GC) only
- 36 reported co-infections of CT and GC and
- 3 reported cases of syphilis

Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 43% 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 May 2011, there were no cases of Hepatitis B virus (HBV), 35 cases of Hepatitis C virus (HCV) and 8 cases of HIV newly reported in Manitoba.

#### 3. Other Communicable Diseases

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

- *Clostridium Perfringens*: 2 positive lab-confirmed cases reported; less than 2 expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during April, May, and June, 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 May 2011**

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2010	2011	Expected*	Ex. Range**	2010	2011
006.9	AMEBIASIS	3	1	5	1-9	19	8
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1		
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	14	10		***	46	61
116.0	BLASTOMYCOSIS	2			***	3	2
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1		
005.2	C. PERFRINGENS		2	0	0-1		2
008.43	CAMPYLOBACTER	21	19	19	6-32	80	93
558.2	CLOSTRIDIUM DIFFICILE	72	68		***	386	376
046.1	CREUTZFELD-JACOB DISEASE				***		
007.8	CRYPTOSPORIDIOSIS		1	1	0-3	6	8
061.0	DENGUE FEVER			0	0-0		1
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS	2		0	0-2	6	
032	DIPHTHERIA CASES			0	0-1	1	
123.4	DIPHYLLOBOTHRIUM SPP			1	0-3		2
008.0	E. COLI-VEROTOXIGENIC	4	3	5	0-13	19	18
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	9	8	10	3-17	51	38
320.0	H.INFLUENZAE (CSF)			0	0-0		1
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1		2
041.59	HAEM. INFLUENZAE (non-B)				***		
480.8	HANTA VIRUS			0	0-1		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0		
070.1	HEPATITIS A		3	1	0-3	2	5
070.3	HEPATITIS B			1	0-2		2
070.51	HEPATITIS C	24	35	28	17-39	122	136
487.1A	INFLUENZA A				***		113
487.1B	INFLUENZA B		1		***		11
482.83	LEGIONELLA	1		0	0-1	2	1
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-1		
027.0	LISTERIA MONOCYTOGENES	1	1	0	0-1	1	1
088.81	LYME DISEASE			0	0-1	1	
084	MALARIA		4	2	0-6	4	7
055.9	MEASLES	1		0	0-1	1	
036.0	MENINGOCOCCAL CSF			0	0-1		1
036.82	MENINGOCOCCAL ARTHROPATHY				***	2	
036.2	MENINGOCOCCAL BLOOD			0	0-1	2	
B95.6	MRSA	266	249	171	62-280	1199	1201
072.9	MUMPS			1	0-3	1	9
036.89	N.MENINGITIDIS OTHER			0	0-0		
728.86	NECROTIZING FASCIITIS	1		1	0-4	5	3
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	12	3	3	0-11	22	8
038.2	PNEUM. SEPTICEMIA	15	10	12	5-19	71	69
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 May 2011.

**SUMMARY OF COMMUNICABLE DISEASE FOR May 2011**

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2010	2011	Expected*	Ex. Range**	2010	2011
083.0	Q FEVER			0	0-0		1
082.0	RICKETTSIA RICKETTSII				***		
056.9	RUBELLA			0	0-1	1	
771.0	RUBELLA CONGENITAL			0	0-0		1
041.2	S.PNEUM.OTHER	1	1	0	0-1	8	7
003.0	SALMONELLA	9	10	17	4-30	106	84
079.82	SARS (CORONAVIRUS)				***		
120	SCHISTOSOMIASIS			0	0-0		
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS	5	1	1	0-4	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	3	8		***	33	43
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	2	3	1	0-5	6	15
037	TETANUS			0	0-0	1	
130.9	TOXOPLASMOSIS	1		0	0-1	2	1
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI		1	0	0-1		4
013	TUBERCULOSIS - NON-RESP.	2	1	2	0-6	15	11
010	TUBERCULOSIS - PRIM.	1	1	1	0-3	2	5
011	TUBERCULOSIS - RESP	10	8	10	2-18	34	35
021.9	TULAREMIA	1		0	0-1	1	
002.0	TYPHOID		1	0	0-1	1	4
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	64	121		***	127	419
005.4	VIBRIO PARAHAEMOLYTICUS				***		
070.59	VIRAL HEP. OTHER	1			***	1	
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL				***		
008.44	YERSINIA ENTEROCOLITICA			1	0-3	4	7
		<b>548</b>	<b>574</b>			<b>2408</b>	<b>2832</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.

**SUMMARY OF COMMUNICABLE DISEASE BY AGE AND GENDER FOR MAY 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
038.0	BETA STREP SEPTICEMIA				1											1		1			1	1		1		3	1		10	
005.2	C. PERFRINGENS																				1					1			2	
008.43	CAMPYLOBACTER			2	1		2					1	4			1	1			1	2		2		1	1			19	
558.2	CLOSTRIDIUM DIFFICILE	1								1		1	1		2	1	3	2	1	6	5	7	7	3	3	14	10		68	
007.8	CRYPTOSPORIDIOSIS										1																		1	
008.0	E. COLI 0157						1	1				1																	3	
007.1	GIARDIA LAMBLIA			2		1	1	1								1			1	1									8	
070.1	HEPATITIS A			1																1			1						3	
070.51	HEPATITIS C											3	1	2	1	3	3	2	11	1	5	1	1	1					35	
487.1B	INFLUENZA B																	1											1	
027.0	LISTERIA MONOCYTOGENES																									1			1	
084	MALARIA															1		1	2										4	
B95.6	MRSA	10	5	7	9	1	6	7	5	7	4	6	4	8	13	19	9	15	15	8	12	13	12	13	7	18	16		249	
033.0	PERTUSSIS	3																											3	
038.2	PNEUM. SEPTICEMIA	1												1						1	2				3	2			10	
003.0	SALMONELLA	1			1					1			1				1	1		2	1		1						10	
004	SHIGELLOSIS																							1					1	
041.1	STREP PYOGENES - OTHER ST							1				1		1		1			1		1	2							8	
041.2	STREP.PNEUM.OTHER																									1			1	
127.2	STRONGYLOIDIASIS													1	1									1					3	
086	TRYPANOSOMIASIS																			1									1	
013	TUBERCULOSIS - NON-RESP.																							1					1	
010	TUBERCULOSIS - PRIM.				1																								1	
011	TUBERCULOSIS - RESP												1		1		1	1	1	1	1	1					1		8	
002.0	TYPHOID											1																	1	
B96.8	VANCOMYCIN RES. ENTER.		1							1		1		2	6	1	5	8	6	4	14	17	12	17	17	9			121	
		16	6	12	12	3	10	10	5	9	6	12	14	14	19	34	19	28	42	28	33	40	43	32	32	57	38		<b>574</b>	

**SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR MAY 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						
<i>Case Referred to:*</i>																							
006.9	AMEBIASIS	1																					1
038.0	BETA STREP SEPTICEMIA	8										1				1							10
005.2	C. PERFRINGENS	1				1																	2
008.43	CAMPYLOBACTER	4	1			4		3		3	1	2		1									19
558.2	CLOSTRIDIUM DIFFICILE	38	1		4		1	5		9		3		5				1	1				68
007.8	CRYPTOSPORIDIOSIS											1											1
008.0	E. COLI 0157	1				2																	3
007.1	GIARDIA LAMBLIA	2								4		2											8
070.1	HEPATITIS A	2										1											3
070.51	HEPATITIS C	23	1		1					3				3		1	2				1		35
487.1B	INFLUENZA B											1											1
027.0	LISTERIA MONOCYTOGENES							1															1
084	MALARIA	3								1													4
B95.6	MRSA	103	5	6	4		4	1	10	6		8	1	8		6	74	11				2	249
033.0	PERTUSSIS	2						1															3
038.2	PNEUM. SEPTICEMIA	7			1									1		1							10
003.0	SALMONELLA	6	1			1		1	1														10
004	SHIGELLOSIS	1																					1
041.1	STREP PYOGENES - OTHER ST	5															3						8
041.2	STREP.PNEUM.OTHER	1																					1
127.2	STRONGYLOIDIASIS	2						1															3
086	TRYPANOSOMIASIS					1																	1
013	TUBERCULOSIS - NON-RESP.															1							1
010	TUBERCULOSIS - PRIM.	1																					1
011	TUBERCULOSIS - RESP	3						1									4						8
002.0	TYPHOID	1																					1
B96.8	VANCOMYCIN RES. ENTER.	91		2	1		5	2	8	5		2		1			4						121
		306	9	8	11		19	3	31	32	1	21	1	19	1	9	88	12			1	2	<b>574</b>

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

\*\* OOP=Out of Province

**STBBI Infection Summary Report - May 2011**

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2010	2011	2010	2011
All Chlamydia Infections	507	605	2755	2795
All Gonorrhea Infections (including PRNG)	93	74	438	365
All Syphilis Infections*	4	3	24	15
Gonorrhea & Chlamydia Co-infections	37	36	190	174
HIV	8	8	45	35

**Total Number of STBBI Cases by Age and Gender - May 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		1					5		117	44	130	67	52	44	40	43	8	13	3		1	1							569
Gonorrhea Only Cases									5	4	5	3	3	7	3	5		2				1						38	
Syphilis Only Cases															1		1		1									3	
GC and CT Cases							1	1	13	4	6	4	3	1	2		1											36	
<b>TOTAL</b>		1					6	1	135	52	141	74	58	52	44	50	9	16	4		1	2						646	
HIV										1	1				3	2		1										8	

**Regional STBBI Distribution - May 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						
<b>Case Referred to:**</b>																						
All Chlamydia Infections	296	18	11	7	1	10	10	21	2	25		14	3	14	6	35	89	29	3	10	1	605
All Gonorrhea Infections	23	2	2	1		1	2	1		1			2		2	4	19	10	1	3		74
All Syphilis Infections	3																					3
GC and CT Infections	8		2	1			1						1		1	1	14	4	1	2		36

\* 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