# Manitoba Monthly Surveillance Unit Report

Reported up to November 30, 2012

# **Highlights:**

# 1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 60% of all non-STBBI related communicable diseases reported to Manitoba Health during November 2012.

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

There were 643 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in November 2012:

- 508 reported cases of chlamydia (CT) only
- 64 reported cases of gonorrhoea (GC) only
- 58 reported co-infections of CT and GC and
- 13 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 November 2012, there were no acute cases of Hepatitis B virus (HBV), 32 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 November 2012 was within or below the statistically expected range for these reported communicable diseases with the exception of the following disease(s):

- Pertussis: 21 positive lab-confirmed cases reported; less than 6 expected in an average month. The increased number of cases is attributable to community clusters in northern and southern Manitoba. Investigations are ongoing.
- Streptococcus pneumoniae, other sterile site: 5 positive lab-confirmed cases reported; less than 4 expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during October, November, and December, 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

November 2012

			MONT	HLY TOTAL		YEAR-T	O-DATE
ICD9	DISEASE/INFECTION	2011	2012	Expected*	Ex. Range**	2011	2012
006.9	AMEBIASIS	2	2	3	0-6	27	38
022	ANTHRAX				***		
	ASCARIASIS			0	0-0		
005.8	B. CEREUS			0	0-0		
320.1	BAC. MENINGITIS - PNEUM	2		0	0-1	4	5
320.7	BAC.MENINGITIS-LISTERIA				***	1	
038.0	BETA STREP SEPTICEMIA	14	15		***	154	194
	BLASTOMYCOSIS		1		***	8	9
	BOTULISM				***		
	BRUCELLOSIS			0	0-1	2	1
	C. PERFRINGENS			0	0-1	4	1
	CAMPYLOBACTER	15	17	17	2-32	275	243
	CLOSTRIDIUM DIFFICILE	88	69		***	842	741
	CREUTZFELD-JACOB DISEASE				***	•	
	CRYPTOSPORIDIOSIS	2	1	3	0-9	18	42
	DENGUE FEVER			0	0-0	3	3
	DENGUE HEMORRHAGIC FEVER			0	0-0		Ť
	DIPH.CARRIERS			0	0-1		
	DIPHTHERIA CASES			0	0-1	1	
	DIPHYLLOBOTHRIUM SPP	1	1	1	0-3	9	4
	E. COLI-VEROTOXIGENIC	3		3	0-6	54	35
	ENCEPHALITIS	5		0	0-0	1	
	FOOD POISONING OTHER			0	0-0		
	GIARDIA LAMBLIA	12	6	9	4-14	96	103
	H.INFLUENZAE (BLOOD)	3	0	5	***	11	103
	H.INFLUENZAE (CSF)	5		0	0-0	1	3
	H.INFLUENZAE (OTHER STERILE)		1	0	0-0	1	1
	HANTA VIRUS		1	0	0-0	I	1
	HEMOLYTIC UREMIC SYNDROME			0	0-0		1
	HEPATITIS A			0	0-0	7	4
	HEPATITIS B	2		0	0-1	7	4
	HEPATITIS C	28	32	27	13-41	292	329
	INFLUENZA A	20	6	21	***	113	78
	INFLUENZA B		3		***	12	218
	LEGIONELLA		3	0	0-1	4	3
	LEISHMANIASIS			0	0-1	4	3
				-			4
	LEPROSY LISTERIA MONOCYTOGENES	1		0	0-0 0-1	Λ	1
	LISTERIA MONOCYTOGENES	1		0	0-1	4 7	4
	MALARIA	1	1	2	0-1	22	2 18
	MEASLES	1		0	0-5	22	10
			4	0		4	2
	MENINGOCOCCAL CSF		1	U	0-1 ***	1	2
	MENINGOCOCCAL ARTHROPATHY			-			
	MENINGOCOCCEMIA BLOOD		050	0	0-1	2022	0040
	MRSA	293	350	257	154-360	3080	3619
				0	0-1	9	7
	N.MENINGITIDIS OTHER			0	0-1	1	<u> </u>
	NECROTIZING FASCIITIS			1	0-4	3	1
-	NECROTIZING MYOSITIS						L
323.9	OTHER ENCEPHALITIS			0	0-0		L
033.1	PARAPERTUSSIS	1			***	1	
033.0	PERTUSSIS		21	2	0-5	30	101
	PNEUM. SEPTICEMIA	2	8	11	0-23	100	130
073.9	PSITTACOSIS	le and subseq		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

### November 2012

			YEAR-TO-DATE				
ICD9	DISEASE/INFECTION	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	1	
056.9C	RUBELLA (confirmed)			0	0-0		1
771.0	RUBELLA CONGENITAL			0	0-0	1	
041.2	S.PNEUM.OTHER		5	1	0-3	12	15
003.0	SALMONELLA	12	15	15	3-27	160	159
079.82	SARS (CORONAVIRUS)				***		
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS	3	2	3	0-9	25	73
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***		
481.9	STREP PNEUMONIA - PR			0	0-1		
041.1	STREP PYOGENES - OTHER	5	10	-	***	98	89
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-1	1	
481	STREPTOCOCCUS PNEUMONIAE			0	0-0		1
127.2	STRONGYLOIDES	5	2	2	0-6	41	17
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			1	0-3	3	3
124	TRICHINOSIS			0	0-0	-	2
086	TRYPANOSOMA CRUZI			0	0-0	6	4
013-018	TUBERCULOSIS - NON-RESP.	1	1	2	0-4	24	20
010	TUBERCULOSIS - PRIM.		1	0	0-2	7	9
011-012	TUBERCULOSIS - RESP	7	12	7	1-13	76	96
021.9	TULAREMIA			0	0-0	1	1
002.0	TYPHOID	1	1	1	0-3	7	5
081.9	TYPHUS		-	0	0-0	-	
B96.8	VANCOMYCIN R. ENTEROCOCCI	126	111	Ŭ	***	1117	1334
005.4	VIBRIO PARAHAEMOLYTICUS				***		2
070.59	VIRAL HEP. OTHER			1	***		2
B95.7	VRSA			0	0-0		-
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL			Ť	***		10
008.44	YERSINIA ENTEROCOLITICA			1	0-2	11	9
		630	695		<u> </u>	6797	7803

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 NOVEMBER 2012

			<1	1	1-4		-9	10	-14	15	-19	20-	-24	25	-29	30-	-39	40	49	50	-59	60	-69	70	-79	8	0+	Missing	1
ICD9	Disease Name	F	M	F	M	F	м	F		F	M	F	M	-	M	F	M	F	M	F		F	M	F	M	F		Age/Gender	Total
006.9	AMEBIASIS															1			1										2
036.0	BAC.MGTS-NMGTS(MGCCL MGTS			1																									1
038.0	BETA STREP SEPTICEMIA											1		1		1		1	2	1	1	1		2	2	1	1		15
116.0	BLASTOMYCOSIS																			1									1
008.43	CAMPYLOBACTER		1	1				1		1					2	1	1	3			1	2	1	1			1		17
558.2	CLOSTRIDIUM DIFFICILE				1							1		2		4	3	4	1	5	3	9	4	6	4	14	8		69
007.8	CRYPTOSPORIDIOSIS				1																								1
123.4	DIPHYLLOBOTHRIUM															1													1
007.1	GIARDIA LAMBLIA			2	2	1														1									6
041.5	H.INFLUENZAE (OTHER STER																1												1
070.51	HEPATITIS C		1									2			1	1	5	4	5	1	5	1	4					2	32
487.1A	INFLUENZA A		1	2			1		1																1				6
487.1B	INFLUENZA B					1		1								1													3
084	MALARIA																1												1
B95.6	MRSA	4	8	19	17	11	9	12	8	12	13	10	14	20	5	26	20	15	23	19	13	10	13	15	5	16	13		350
033.0	PERTUSSIS	5	2	1	2	1	1		1	2	2			1	1	1		1											21
038.2	PNEUM. SEPTICEMIA											1				1				1		2	1			2			8
003.0	SALMONELLA			3	1	1	2		2					1	1			1			1				1		1		15
004	SHIGELLOSIS						2																						2
041.1	STREP PYOGENES - OTHER ST	1														1		1		1	1	1	1	1	1		1		10
041.2	STREP.PNEUM.OTHER			1															1	1			2						5
127.2	STRONGYLOIDIASIS					2																							2
013-018	TUBERCULOSIS - NON-RESP.											1																	1
010	TUBERCULOSIS - PRIM.				1																								1
011-012	TUBERCULOSIS - RESP										1		2		2	1	1	1	2		1				1				12
002.0	TYPHOID																1												1
B96.8	VANCOMYCIN RES. ENTER.									1		1	1	1		2	3	2	3	10	9	7	11	15	11	14	20		111
		10	13	30	25	17	15	14	12	16	16	17	17	26	12	42	36	33	38	41	35	33	37	40	26	47	45		695

### SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR NOVEMBER 2012

ICD9	Disease/Infection	Winnipeg	Brandon	N. Ea	stman	S. Ea	stman	Inte	rlake	Cer	ntral	Assin	iboine	Park	kland	Nor	man	Burn	twood	Churchill	00P**	Missing	TOTAL
Case Ref	ferred to:*			F	Р	F	Р	F	Р	F	Ρ	F	Р	F	Р	F	Р	F	Р				
006.9	AMEBIASIS	1									1												2
036.0	BAC.MGTS-NMGTS(MGCCL MGTS									1													1
038.0	BETA STREP SEPTICEMIA	10	1								1						1	2					15
116.0	BLASTOMYCOSIS	1																					1
008.43	CAMPYLOBACTER	3	1		1		5		1		1		4						1				17
558.2	CLOSTRIDIUM DIFFICILE	35	1		5		6		3		5	1	6		4		1	1	1				69
007.8	CRYPTOSPORIDIOSIS												1										1
123.4	DIPHYLLOBOTHRIUM	1																					1
007.1	GIARDIA LAMBLIA	4									1		1										6
041.5	H.INFLUENZAE (OTHER STER	1																					1
070.51	HEPATITIS C	26			1			1	1	1	1										1		32
487.1A	INFLUENZA A	5									1												6
487.1B	INFLUENZA B	3																					3
084	MALARIA	1																					1
B95.6	MRSA	121	5	4	2		6	5	6	3	5	5	3	2	6	11	15	142	9				350
033.0	PERTUSSIS	2									5					1		12	1				21
038.2	PNEUM. SEPTICEMIA	4	1					1	1									1					8
003.0	SALMONELLA	7			1		2				1	1	1		1		1						15
004	SHIGELLOSIS														1			1					2
041.1	STREP PYOGENES - OTHER ST	6							2								2						10
041.2	STREP.PNEUM.OTHER	3								1			1										5
127.2	STRONGYLOIDIASIS	2																					2
013-018	TUBERCULOSIS - NON-RESP.	1																					1
010	TUBERCULOSIS - PRIM.																	1					1
011-012	TUBERCULOSIS - RESP	4																7	1				12
002.0	TYPHOID	1																					1
B96.8	VANCOMYCIN RES. ENTER.	82	4	1	2		3	1	4		4		3		2			5					111
		324	13	5	12		22	8	18	6	26	7	20	2	14	12	20	172	13		1		695

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

\*\* OOP=Out of Province

#### STBBI Infection Summary Report - November 2012

	MONTHL	Y TOTAL	YEAR-TO-DATE						
DISEASE/INFECTION	2011	2012	2011	2012					
All Chlamydia Infections	636	566	6334	6249					
All Gonorrhea Infections (including PRNG)	100	122	974	1275					
All Syphilis Infections*	2	13	51	30					
Gonorrhea & Chlamydia Co-infections	38	58	427	560					
HIV	8	8	75	77					

#### Total Number of STBBI Cases by Age and Gender - November 2012

	<1		1-4	ļ į	5	-9	10	-14	15	19	20-	-24	25-	29	30-3	39	40-	49	50-	·59	60-	69	70-7	9	80+	Missing	
Disease Name	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	M age/gender	TOTAL
																											1
Chlamydia Only Cases							3		124	42	113	58	53	35	32	29	9	9		1							508
Gonorrhea Only Cases								2	7	3	11	2	10	7	5	10	1	2		3		1					64
Syphilis Only Cases														2		2	1	2	1	4				1			13
GC and CT Cases								1	16	4	11	10	4	8	1	1		1		1							58
TOTAL							3	3	147	49	135	70	67	52	38	42	11	14	1	9		1		1			643
HIV													1		3	1	1	2									8

#### **Regional STBBI Distribution - November 2012**

Disease/Infection	Winnipeg	Brandon	N. Eas	stman	S. Ea	astman	Inte	lake	Centr	ral	Assini	iboine	Park	land	Nori	nan	Burnt	wood	Churchill	00P***	Missing	TOTAL
Case Referred to:**			F	Р	F	- Р	F	Р	F	Р	F	Р	F	Р	F	Р	F	Р				
All Chlamydia Infections	266	22	8	15		1 16	10	20	3	33		14	2	12	10	22	68	36	1	7		566
All Gonorrhea Infections	76		3	2			9	1				2	1		1	14	6	6		1		122
All Syphilis Infections	9					1				3												13
GC and CT Infections	30		3	1			7	1				1	1		1	5	5	3				58

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