Manitoba Monthly Surveillance Unit Report

Reported up to November 30, 2013

Highlights:

1. Antimicrobial Resistant Organisms

Together Methicillin-resistant *Staphylococcus aureus* (MRSA), *Clostridium difficile* (*C. difficile*), and Vancomycin Resistant Enterorcocci (VRE) accounted for 81% of all non-STBBI related communicable diseases reported to Manitoba Health during November 2013.

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

There were 602 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in November 2013:

- 477 reported cases of chlamydia (CT) only
- 50 reported cases of gonorrhoea (GC) only
- 52 reported co-infections of CT and GC and
- 23 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 November 2013, there were 16 cases of hepatitis C virus (HCV) and 10 cases of HIV newly reported in Manitoba.

3. Other Communicable Diseases

The number of reported cases in November 2013 was within or below the statistically expected range for these reported communicable diseases with the exception of the following disease(s):

• Bacillus cereus: 1 positive lab-confirmed case was reported; 0 cases expected

The expected number of cases and range is statistically based on the number of reported cases during October, November, and December 2008-2012.

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 2013

			МС	YEAR-TO-DATE					
ICD9	DISEASE/INFECTION	2012	2013	Expected*	Ex. Range**	2012	2013		
006.9	AMEBIASIS	1	1	3	0-6	33	15		
022	ANTHRAX				***				
127.0	ASCARIASIS			0	0-0		1		
005.8	B. CEREUS		1	0	0-0		1		
320.1	BAC. MENINGITIS - PNEUM			0	0-1	5	6		
320.7	BAC.MENINGITIS-LISTERIA			***	***				
038.0	BETA STREP SEPTICEMIA	15	21	***	***	194	182		
116.0	BLASTOMYCOSIS	1	1	***	***	9	17		
005.1	BOTULISM			***	***				
023	BRUCELLOSIS			0	0-1		2		
005.2	C. PERFRINGENS			0	0-1	1	5		
008.43	CAMPYLOBACTER	15	14	17	1-33	241	197		
558.2	CLOSTRIDIUM DIFFICILE	70	74	***	***	743	797		
046.1	CREUTZFELD-JACOB DISEASE	70	, · · ·	***	***	, 13	1		
007.8	CRYPTOSPORIDIOSIS	1	6	2	0-8	41	38		
061.0	DENGUE FEVER	1	0	0	0-8	4	9		
065.4	DENGUE HEMORRHAGIC FEVER	1		0	0-1	4	9		
V02.4	DIPH.CARRIERS			0	0-0		2		
032	DIPHTHERIA CASES			0	0-1 0-1				
					_		44		
123.4	DIPHYLLOBOTHRIUM SPP	1		1	0-3	4	11		
0.800	E. COLI-VEROTOXIGENIC	1		3	0-6	35	27		
054.3	ENCEPHALITIS			0	0-0				
005.9	FOOD POISONING OTHER		_	0	0-0				
007.1	GIARDIA LAMBLIA	7	5	9	4-14 ***	106	84		
038.42	H.INFLUENZAE (BLOOD)	1				11	8		
320.0	H.INFLUENZAE (CSF)			0	0-0	3	2		
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1		2		
480.8	HANTA VIRUS			0	0-1	1			
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0				
070.1	HEPATITIS A		1	0	0-1	4	11		
070.3	HEPATITIS B	1		0	0-1	2	2		
070.51	HEPATITIS C	32	16	26	14-38	332	285		
487.1A	INFLUENZA A	7	7	***	***	81	489		
487.1B	INFLUENZA B	3	3	***	***	220	107		
482.83	LEGIONELLA			0	0-1	3	3		
085.9	LEISHMANIASIS			0	0-0				
030.9	LEPROSY			0	0-0	1			
027.0	LISTERIA MONOCYTOGENES			0	0-1	4	2		
088.81	LYME DISEASE			0	0-1	6			
084	MALARIA		2	2	0-6	17	12		
055.9	MEASLES			0	0-0				
036.0	MENINGOCOCCAL CSF	1		0	0-1	2	4		
				***	***	_	,		
036.82	MENINGOCOCCAL ARTHROPATHY MENINGOCOCCEMIA BLOOD						2		
036.2		350	202	0	0-1	2627	3		
B95.6	MRSA	350	362	289	190-388	3627	4052		
072.9	MUMPS			0	0-1	10	1		
036.89	N.MENINGITIDIS OTHER			0	0-1	_			
728.86	NECROTIZING FASCIITIS		- 10 - 10 - 1°	1	0-3	3	16		
729.1	NECROTIZING MYOSITIS		***		***				
323.9	OTHER ENCEPHALITIS			0	0-0				
033.1	PARAPERTUSSIS		***		***	1	3		
033.0	PERTUSSIS	23		6	0-22	108	5		
038.2	PNEUM. SEPTICEMIA	9	9	11	0-23	128	103		
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.

			MC	NTHLY TOTA	L	YEAR-T	O-DATE
ICD9	DISEASE/INFECTION	2012	2013	Expected*	Ex. Range**	2012	2013
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	0-0	1	
771.0	RUBELLA CONGENITAL			0	0-0		
041.2	S.PNEUM.OTHER	3		1	0-3	12	16
003.0	SALMONELLA	15	12	15	5-25	163	204
079.82	SARS (CORONAVIRUS)			***	***		
079.99	SEVERE RESPIRATORY ILLNESS			***	***		
004	SHIGELLOSIS	2		4	0-12	73	22
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 STERILE	10	12	***	***	89	100
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-1		
040.89	STREPT TOXIC SHOCK			0	0-1		4
481	STREPTOCOCCUS PNEUMONIAE			0	0-1	1	1
127.2	STRONGYLOIDES	2	4	2	0-5	16	24
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			0	0-2	3	
124	TRICHINOSIS			0	0-1	2	
086	TRYPANOSOMA CRUZI			0	0-1	3	3
013-01	TUBERCULOSIS - NON-RESP.	1	2	2	0-4	19	23
010	TUBERCULOSIS - PRIM.	1	0	0	0-2	8	8
011-01	TUBERCULOSIS - RESP	12	5	8	0-26	94	122
021.9	TULAREMIA			0	0-0		4
002.0	TYPHOID			1	0-2	5	2
081.9	TYPHUS	1		0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	111	110	***	***	1334	1288
005.4	VIBRIO PARAHAEMOLYTICUS			***	***	2	2
070.59	VIRAL HEP. OTHER		2	***	***	2	2
B95.7	VRSA	1		0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL SYNDROMES				***	10	1
008.44	YERSINIA ENTEROCOLITICA		1	1	0-2	9	4
		697	671			7826	8336

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 BY AGE AND GENDER FOR NOVEMBER 2013

		<	:1	1	-4	5	-9	10	-14	15	-19	20	-24	25	-29	30	-39	40	-49	50	-59	60	-69	70	-79	80)+	Total
ICD9	Disease Name	F	M	F	M	F	M	F	М	F	М	F	M	F	M	F	М	F	M	F	M	F	M	F	М	F	М	
006.9	AMEBIASIS					1																						1
005.8	B. CEREUS																				1							1
038.0	BETA STREP SEPTICEMIA			1	1				1							1		1	1	1	1	3	2	3	3	2		21
116.0	BLASTOMYCOSIS						1																					1
008.43	CAMPYLOBACTER				1			1			1		2	1	1	1	2			1	1					2		14
558.2	CLOSTRIDIUM DIFFICILE	1		1	1						2	1	1	1	1	1		2	7	11	6	6	3	7	5	8	9	74
007.8	CRYPTOSPORIDIOSIS					1						2		1		1				1								6
007.1	GIARDIA LAMBLIA				2										1						1						1	5
070.1	HEPATITIS A						1																					1
070.51	HEPATITIS C											1		1	3	2	3		2		1		1		2			16
070.59	HEPATITIS OTHER (VIRAL)													1											1			2
487.1A	INFLUENZA A				1				1								1	4										7
487.1B	INFLUENZA B									1						1								1				3
084	MALARIA				1												1											2
B95.6	MRSA	6	11	25	11	15	17	5	8	14	10	10	18	10	11	14	19	23	25	14	20	13	20	2	14	15	12	362
038.2	PNEUM. SEPTICEMIA		1																1	3			2	1	1			9
003.0	SALMONELLA										2		1			1	2		1	1	1		1	1	1			12
041.1	STREP PYOGENES - OTHER ST														1			2	1	1	1	3	2			1		12
127.2	STRONGYLOIDIASIS							1					1	1			1											4
013-018	TUBERCULOSIS - NON-RESP.													1				1										2
011-012	TUBERCULOSIS - RESP											2							1		1	1						5
B96.8	VANCOMYCIN RES. ENTER.	1	1							1				2	1	3	4	3	3	4	10	12	8	14	7	22	14	110
008.44	YERSINIA ENTEROCOLITICA																				1							1

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR NOVEMBER 2013

ICD9	Disease/Infection	Winnipeg	Brandon	N. Ea	stman	S. Ea	stman	Inte	rlake	Cer	ntral	Assini	boine	Park	land	Nor	man	Burnt	wood	Churchill	TOTAL
Case F	Referred to:*			F	P	F	P	F	P	F	Р	F	P	F	P	F	P	F	P		
006.9	AMEBIASIS	1																			1
005.8	B. CEREUS	1																			1
038.0	BETA STREP SEPTICEMIA	17					1								1			1	1		21
116.0	BLASTOMYCOSIS			1																	1
008.43	CAMPYLOBACTER	3	1				3		1		1		3	1				1			14
558.2	CLOSTRIDIUM DIFFICILE	41	9		2		2	1	3		4		9	1			1	1			74
007.8	CRYPTOSPORIDIOSIS	2	4																		6
007.1	GIARDIA LAMBLIA	2					1				1				1						5
070.1	HEPATITIS A		1																		1
070.51	HEPATITIS C	7	1			1					2			1	3				1		16
070.59	HEPATITIS OTHER (VIRAL)	2																			2
487.1A	INFLUENZA A	6																1			7
487.1B	INFLUENZA B						2														2
084	MALARIA	2																			2
B95.6	MRSA	125	4	12	2		1	9	10	3	10	3	2	1	8	9	16	128	18	1	362
038.2	PNEUM. SEPTICEMIA	4							1		2				1			1			9
003.0	SALMONELLA	8											3				1				12
041.1	STREP PYOGENES - OTHER ST	7		1									2	1			1				12
127.2	STRONGYLOIDIASIS	4																			4
013-01	TUBERCULOSIS - NON-RESP.	2																			2
011-01	TUBERCULOSIS - RESP	2																3			5
B96.8	VANCOMYCIN RES. ENTER.	52	6	2	4		3	2	11		4	3	6		5		3	7	2		110
008.44	YERSINIA ENTEROCOLITICA	1																			1

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

STBBI Infection Summary Report - November 2013

	MONTHL	Y TOTAL	YEAR-TO-DATE					
DISEASE/INFECTION	2012	2013	2012	2013				
All Chlamydia Infections	561	529	6250	6066				
All Gonorrhea Infections (including PRNG)	119	102	1278	1171				
All Syphilis Infections*	13	23	91	228				
Gonorrhea & Chlamydia Co-infections	58	52	563	514				
HIV	8	10	70	124				

Total Number of STBBI Cases by Age and Gender - November 2013

	<	1	,	I-4	,	5-9	1	0-14	15	-19	20)-24	25-	29	30	0-39	40-	49	50-5	9	60	-69	70-	79	80	+	
Disease Name	F	М	F	M	F	N	F	M	ı	- N	1 F	M	F	M	F	M	F	М	F	М	F	M	F	М	F	М	TOTAL
								_												. 1							
Chlamydia Only Cases					1		8	3	102	2 3	9 105	62	37	44	28	29	12	5	1	1							477
Gonorrhea Only Cases								1	4	1 :	2 6	10	8	4	6	7		2									50
Syphilis Only Cases												1		1	7	2	5	1		3		1		1	1		23
GC and CT Cases							3		10) ;	5 10	11	4	4	2	3											52
TOTAL					1		11	4	116	3 40	3 121	84	49	53	43	41	17	8	1	4		1		1	1		602
HIV										1			1	1	1	2			1	3							10

Regional STBBI Distribution - November 2013

Disease/Infection	Winnipeg	Brandon	N. Ea	astman	S. E	astman	Inter	lake	Ce	ntral	Assi	niboine	Pai	rkland	No	rman	Burnt	wood	Churchill	OOP***	Missing	TOTAL
Case Referred to:**			F	Р	F	P	F	Р	F	Р	I	P	F	Р	F	Р	F	P				
All Chlamydia Infections	251	22	9	6		7	7	10	4	30)	6	4	17	11	27	85	28	4	4		529
All Gonorrhea Infections	36	3	1	1		1	3			4	ļ			1		10	35	6		1		102
All Syphilis Infections	21					1				1												23
GC and CT Infections	18		1			1	2			2	2			1		4	20	3				52

^{*} 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