

MICROBIOLOGY SECTION – MILWAUKEE HEALTH DEPARTMENT

M O N T H L Y R E P O R T

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MICROBIOLOGY REPORT: The April 2008 issue of Microbiology Monthly Report, Volume 13, presents the laboratory diagnosis of some of the infectious diseases, the reference microbiology work done in this laboratory during March 2008 and new cases of syphilis in Milwaukee during February 2008. Information on the laboratory diagnosed mycobacterial infections in Wisconsin during February is also included.

Syphilis (March 2008)

Test	Number Positive	Test	Number Positive
RPR	2	TP-PA	13
VDRL	26	DARKFIELD	0

New Cases of Syphilis

The Wisconsin Division of Health has reported 13 new cases (early stages) of syphilis during February 2008 in Milwaukee. The median age of early syphilis cases is 39 years (range: 24–47 years). Morbidity distributions of the disease reported in this and the corresponding month of the previous year are as follows:

New Cases of Syphilis (February 2008 and February 2007)

Stage	Number of Cases	
	February 2008	February 2007
Primary syphilis	3	1
Secondary syphilis	3	1
Early latent	7	4
Late latent	0	0
Total	13	6

Gonorrhea (March 2008)

Number Tested	Decreased Susceptibility (DS) / Resistance (R) Antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
45	1 I; 3 R	0	0	1 DS

Isolates Other Than *N. gonorrhoeae* (March 2008)

Organism	Site	Number Isolates	Organism	Site	Number Isolates
<i>Ureaplasma urealyticum</i>	Genital	0	<i>Mycoplasma hominis</i>	Genital	1

Enteric Parasites Identified (March 2008)

Age	Sex	Pathogen	Number Cases
13m	F	<i>Ascaris lumbricoides</i>	1
30	F	<i>Blastocystis hominis</i>	1
13	M	<i>Endolimax nana</i>	1
34	F	<i>Entamoeba coli</i>	1
11	F	<i>Iodamoeba buetschlii</i>	1

Mycobacterial Infections (March 2008)

Age	Sex	Test Results			Identification
		Sputum Smear	Culture	DNA Probe	
53	F	-	+	-	<i>M. abscessus</i>
27	F	-	+	+	<i>M. avium</i> complex
30	M	-	+	+	<i>M. avium</i> complex
43	F	-	+	+	<i>M. avium</i> complex

Reference Cultures (March 2008)

Age	Sex	Source	Culture Identification
80	M	Peritoneal fluid	<i>Bacillus</i> species, NOT <i>Bacillus anthracis</i>
3	F	Stool	<i>Campylobacter jejuni</i>
58	F	Stool	<i>Campylobacter jejuni</i>
45	M	Stool	<i>Campylobacter jejuni</i>
60	F	Urine	<i>Escherichia coli</i>
33	F	Blood	<i>Flavimonas oryzihabitans</i> (Group Ve-2)
75	F	Urine	<i>Klebsiella pneumoniae</i>
21	F	Cervix	<i>Neisseria gonorrhoeae</i>
19	F	Cervix	<i>Neisseria gonorrhoeae</i>
20	M	Urethra	<i>Neisseria gonorrhoeae</i>
92	F	Urine	<i>Salmonella</i> Hadar
4	F	Stool	<i>Salmonella</i> Infantis
5m	M	Stool	<i>Salmonella</i> Senftenberg
30	F	Stool	<i>Salmonella</i> Typhimurium
24	M	Stool	<i>Shigella flexneri</i> type 2
8	F	Stool	<i>Shigella sonnei</i>
27	F	Stool	<i>Shigella sonnei</i>
14m	F	Stool	<i>Shigella sonnei</i>
9	M	Stool	<i>Shigella sonnei</i>
4	M	Stool	<i>Shigella sonnei</i>

Bacterial Enteric Pathogens (March 2008)

Age	Sex	Pathogen	Age	Sex	Pathogen
6	M	<i>Shigella sonnei</i>	35	F	<i>Shigella sonnei</i>
3	M	<i>Shigella sonnei</i>	3	M	<i>Shigella sonnei</i>
13	M	<i>Shigella sonnei</i>			

Antimicrobial Susceptibility of *Shigella sonnei* Associated with 2007-08 Outbreak (March 2008)

Number Tested	Decreased Susceptibility (DS) / Resistance (R) Antibiotics		
	Ampicillin	Norfloxacin	Sulfamethoxazole-Trimethoprim (SXT)
9	4	0	8

* Intermediate susceptibility

Laboratory Diagnosed Mycobacterial Infections in Wisconsin during month of February, 2008

<i>Mycobacterium</i> species		Brown	Dane	Eau Claire	Green	Kenosha	La Crosse	Marathon	Milwaukee	Outagamie	Racine	Rock	Walworth	Waukesha	Winnebago	Wood	TOTALS
<i>M. tuberculosis</i> complex	Pulm								1				1				2
	Extra								1								1
Total <i>M. tuberculosis</i> complex		0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	3
<i>M. avium</i> complex	Pulm	1	6		1	1			41	2	2	3		1	4		62
	Extra		3						2								5
<i>M. goodii</i>	Pulm	1	2	1		1		1	8	1				1	2		18
	Extra								1								1
<i>M. chelonae-abscessus</i>	Pulm		1				1		4	1						1	8
	Extra		1						6								7
<i>M. fortuitum</i> group	Pulm								6						1		7
<i>M. marinum</i>	Extra									1							1
<i>M. mucogenicum</i>	Pulm								2						1		3
	Extra								1								1
<i>M. xenopi</i>	Pulm						1		3								4
<i>M. nebraskense</i>	Pulm			1													1
<i>M. obuense</i>	Pulm								1								1
<i>M. scrofulaceum</i>	Pulm								1								1
<i>M. simiae</i>	Pulm		1														1
<i>M. szulgai</i>	Extra									1							1
Total NTM		2	14	2	1	2	2	1	76	6	2	3	0	2	8	1	122

Extra-Pulmonary Sources of Isolation:

<i>M. tuberculosis</i> Extra-pulmonary:	1 wrist
<i>M. avium</i> complex Extra-pulmonary:	2 neck, 1 lymph node, 1 blood, 1 parotid
<i>M. goodii</i> Extra-pulmonary:	1 head (temple)
Other <i>Mycobacterium</i> species	<i>M. chelonae/abscessus</i> : 1 bursa, 1 JP3 drain, 1 shin, 1 leg, 1 arm, 1 nail, 1 forearm <i>M. marinum</i> : 1 finger; <i>M. mucogenicum</i> : 1 blood; <i>M. szulgai</i> : 1 lymph node

***M. tuberculosis* complex First-Line Drug Susceptibility Testing*:**

Drug Resistance	Number of Isolates
Susceptible to all first-line drugs	3
TOTAL	3

(*) Drugs tested: isoniazid=INH (0.2 ug/ml and 1.0 ug/ml), rifampin (1.0 ug/ml), ethambutol (5.0 ug/ml), and pyrazinamide=PZA (100 ug/ml).

Source: Mycobacteriology Laboratory Network Data Report, WI State Laboratory of Hygiene, Madison, WI.

SUMMARY OF CONFIRMED INFECTIONS

Virology & Molecular Diagnostic Section
City of Milwaukee Health Department Laboratory
(414) 286-3526

WEBSITE: www.milwaukee.gov/healthlab April 2008 ISSUE # 1228

March 2008 Data

Agent	No. of Isolates	Age	Sex	Specimen	Symptoms
Influenza A (H3)	1	24	F	Throat	Sore throat, myalgias, fever, headache
Influenza A (H3)	1	55	M	NP	Influenza confirmation
Influenza A (H3)	1	64	M	NP	Influenza confirmation
Influenza A (H3)	1	36	M	NP	Influenza confirmation
Influenza A (H3)	1	83	M	NP	Influenza confirmation
Influenza A (H3)	1	29	M	Throat	Cough
Influenza A (H3)	1	22	F	Throat	Pneumonia
Influenza A (H3)	1	20	F	Throat	Cough, sore throat, fever
Influenza A (H3)	1	19	F	Throat	Acute respiratory disease
Influenza A (H3)	1	20	F	Throat	Pneumonia
Influenza A (H3)	1	21	M	Throat	Cough, sore throat, fever, headache
Influenza A (H3)	1	21	F	Throat	Cough, fever, headache
Influenza A (H3)	1	30	M	NP	Influenza confirmation
Influenza A (H3)	1	22	M	Throat	Myalgias, sore throat, nausea, headache
Influenza A (H3)	1	58	M	NP	Influenza confirmation
Influenza A (H3)	1	48	M	NP	Influenza confirmation
Influenza A (H3)	1	21	F	Throat	R/O influenza
Influenza A (H3)	1	22	F	Throat	Cough, fever, headache
Influenza A (H3)	1	24	F	Throat	Cough, sore throat
Influenza A (H3)	1	22	F	Throat	URI, cough, sore throat, fever, headache
Influenza A (H3)	1	18	M	Throat	Cough, fever, headache
Influenza A (H3)	1	67	M	NP	Influenza confirmation
Influenza A (H3)	1	21	F	Throat	Acute respiratory disease
Influenza A (H3)	1	19	M	Throat	Myalgias, sore throat, fever, headache
Influenza A (H3)	1	21	F	Throat	Myalgias, nausea, fever, headache
Influenza A (H3)	1	36	M	NP	Influenza confirmation
Influenza A (H3)	1	22	F	Throat	Cough, sore throat, fever
Influenza A (H3)	1	26	F	NP	Influenza confirmation
Influenza A (H3)	1	56	M	NP	Influenza confirmation
Influenza A (H3) and Influenza B	2	87	M	NP	Influenza confirmation
influenza B	1	21	F	Throat	Cough, sore throat, fever
Influenza B	1	42	M	NP	Influenza confirmation
Influenza B	1	44	F	NP	Influenza confirmation
Influenza B	1	60	F	NP	Influenza confirmation
Influenza B	1	37	M	NP	Influenza confirmation
Influenza B	1	37	M	Throat	Cough, myalgias
Influenza B	1	24	M	Throat	Cough, sore throat, fever, headache
Influenza B	1	19	F	Throat	ARD, bronchitis, URI, cough, sore throat, fever, headache
Influenza B	1	65	M	NP	Influenza confirmation
Influenza B	1	58	F	NP	Influenza confirmation

Influenza B	1	38	M	NP	Influenza confirmation
Influenza B	1	52	M	NP	Influenza confirmation
Influenza B	1	13	F	Lung	Referred isolate
Adenovirus	1	18	M	Throat	N/A*
Respiratory Syncytial Virus	2	58	M	Throat	R/O influenza
Rhinovirus	1	27	F	NP	Influenza confirmation
Echovirus 30	1	19	F	Stool	Referred isolate
Varicella-zoster virus	1	19	M	Lesion	Vesicular rash
Herpes simplex, type-1	12				
Herpes simplex, type-2	9				

*N/A – Not Available

Agent	Method	Tested	Positive	% Positive
<i>Chlamydia trachomatis</i>	ProbeTec	652	92	14.1%
<i>Neisseria gonorrhoeae</i>	ProbeTec/GenProbe	882	81	9.2%
Adenovirus	Real-time PCR	4	1	25.0%
Enterovirus	Real-time RT-PCR	1	1	100.0%
Influenza virus	Real-time RT-PCR	113	47	41.6%
Norovirus	Real-time RT-PCR	8	7	87.5%
RSV	Real-time RT-PCR	3	1	33.3%

Important News

Influenza Laboratory Surveillance in Milwaukee: The MHD laboratory reports 108 influenza cases for the 2007-08 season (as of April 25, 2008): 7 A (H1), 69 A (H3), 32 influenza B, and 1 case of an influenza A (H3) and influenza B dual infection. The last positive case was from a sample collected April 7, 2008. The cases are identified by RT-PCR and confirmed by culture.

Norovirus Outbreaks: The MHD laboratory tested eight (8) samples in March, of which 7 were confirmed positive for Norovirus Genogroup II by Real-time RT-PCR assay.

Measles and Rubella Outbreaks: As of now, there are seven (7) confirmed cases of Measles, three (3) of those are in the City of Milwaukee and two (2) cases of Rubella in Waukesha. The State Lab of Hygiene, with CDC, is providing testing at this time for the outbreaks.



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