

MICROBIOLOGY DIVISION – MILWAUKEE HEALTH DEPARTMENT

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

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MICROBIOLOGY REPORT: The June 2006 issue of Microbiology Monthly Report, Volume 11, presents the laboratory diagnosis of some of the infectious diseases, the reference microbiology work done in this laboratory during May 2006 and new cases of syphilis in Milwaukee during April 2006. Information on the laboratory diagnosed mycobacterial infections in Wisconsin during April is also included.

Legionnaires Disease (May 2006)

Patient		Test		
Age	Sex	Urine Antigen	Culture	DFA
53 Y	F	ND	+	ND

ND = Not done +* = Legionella pneumophila sgp 1

Pertussis (Whooping cough) May 2006

No positive case detected.

Syphilis (May 2006)

Test	Number Positive	Test	Number Positive
RPR	2	FTA-ABS	14
VDRL	3	DARK FIELD	0

New Cases Syphilis

The Wisconsin Division of Health has reported 2 new cases (age 27 & 45 Y) of early syphilis during April 2006 in Milwaukee. Morbidity distributions of the disease reported in this and the corresponding month of the previous year are as follows:

New Cases of Syphilis (April 2006 and April 2005)

Stage	Number of Cases	
	April 2006	April 2005
Primary syphilis	0	0
Secondary syphilis	1	0
Early latent	1	3
Late latent	0	2
Total	2	5

Gonorrhea (May 2006)

Number Tested	Decreased Susceptibility (DS) / Resistance (R) antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
39	1(R), 1(I)	0	0	0

Gonorrhea from Other Sources (Aurora Consolidated Labs) May 2006

Number Tested	Decreased Susceptibility (DS) / Resistance (R) antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
3	0	0	0	0

Isolates Other Than *N. gonorrhoeae* (May 2006)

Organism	Site	Number Isolates	Organism	Site	Number Isolates
<i>Ureaplasma urealyticum</i>	Genital	18	<i>Mycoplasma hominis</i>	Genital	4

Parasitic Enteric Pathogens (May 2006)

Age	Sex	Pathogen	Number Cases
22	F	<i>Giardia lamblia</i>	1
43	M	<i>Giardia lamblia</i>	1
17mo	F	<i>Giardia lamblia</i>	1
		<i>Entamoeba coli</i>	
26	F	<i>Giardia lamblia</i>	1
		<i>Entamoeba coli</i>	
25	M	<i>Giardia lamblia</i>	1
51	M	<i>Blastocystis hominis</i>	1
		<i>Entamoeba coli</i>	
12	M	<i>Blastocystis hominis</i>	1
6	F	<i>Trichuris trichiura</i>	1
		<i>Blastocystis hominis</i>	
7	M	<i>Trichuris trichiura</i>	1
		<i>Blastocystis hominis</i>	

Mycobacterial infections (May 2006)

Age	Sex	Test Results			Identification
		Sputum Smear	Culture	DNA Probe	
None					

Reference Cultures (May 2006)

Age	Sex	Site/Specimen Source	Culture Identification
72	F	Blood	<i>Corynebacterium jeikeium</i>
76	M	Sputum	<i>Corynebacterium pseudodiphtheriticum</i>
19	F	N.A.	<i>Escherichia coli</i>
31	F	Urine	<i>Acinetobacter baumannii</i>
83	M	Back Lower	<i>Corynebacterium propinquum</i>
55	M	Blood	<i>Bacillus</i> sp NOT anthracis
21	M	Throat	<i>Neisseria meningitidis</i>

Bacterial Enteric Pathogens (May 2006)

Age	Sex	Pathogen	Age	Sex	Pathogen
8	M	<i>Shigella sonnei</i>	10mo	M	<i>Salmonella enteritidis</i>
7	F	<i>Shigella sonnei</i>	22	F	<i>Salmonella enteritidis</i>
3	F	<i>Shigella sonnei</i>	13	F	<i>Salmonella enteritidis</i>
3	F	<i>Shigella sonnei</i>	6	M	<i>Salmonella enteritidis</i>
7	M	<i>Shigella sonnei</i>	49	F	<i>Salmonella enteritidis</i>
67	F	<i>Salmonella javiana</i>	11	M	<i>Salmonella typhimurium</i>
21mo	M	<i>Salmonella subsp</i> I;serogroup B, I monophasic	49	F	<i>Salmonella typhimurium</i>
70	F	<i>Salmonella subsp</i> I;serogroup B, I monophasic	31	F	<i>Salmonella heidelberg</i>
22mo	M	<i>Salmonella subsp</i> i;serogroup B, I monophasic	37	M	<i>Salmonella heidelberg</i>

Laboratory Diagnosed Mycobacterial Infections in Wisconsin during April 2006

<i>Mycobacterium</i> species		Brown	Dane	Eau Claire	Kenosha	La Crosse	Marathon	Milwaukee	Outagamie	Racine	Rock	Waukesha	Winnebago	Wood	TOTALS
<i>M. tuberculosis</i> complex	Pulm		1				1	4							6
	Extra		1					2							3
Total <i>M. tuberculosis</i> complex		0	2	0	0	0	1	6	0	0	0	0	0	0	9
<i>M. avium</i> complex	Pulm	1	2		1	1		49	2		2	1	7	3	69
	Extra		1					3					1		5
<i>M. gordonae</i>	Pulm	5	3	1		1		12		1			2		25
	Extra														0
<i>M. abscessus</i>	Pulm													1	1
	Extra														0
<i>M. chelonae</i>	Pulm							1			1				2
	Extra														0
<i>M. fortuitum</i> group	Pulm	1						3	1				1	2	8
	Extra							2						1	3
<i>M. kansasii</i>	Pulm								1						1
	Extra														0
<i>M. marinum</i>	Pulm														0
	Extra							1						1	2
<i>M. mucogenicum</i>	Pulm							1							1
	Extra														0
<i>M. xenopi</i>	Pulm		1					3							4
	Extra														0
<i>M. terrae</i> complex	Extra		1												1
<i>M. chelonae-abscessus</i>	Extra					1									1
<i>M. bovis</i> BCG	Extra							1							1
TOTALS		7	8	1	1	3	0	76	4	1	3	1	11	8	124

Extra-Pulmonary Sources of Isolation

<i>Mycobacterium</i> species	Extra-pulmonary Site of Isolation
<i>M. tuberculosis</i> complex	1 pleural, 1 (<i>bovis</i>) hip, 1 submandibular
<i>M. avium</i> complex	2 stool, 1 neck mass, 1 urine, 1 blood
other <i>Mycobacterium</i> species	<i>bovis</i> BCG: 1 urine; <i>chelonae-abscessus</i> : 1 ulcer; <i>fortuitum</i> group: 1 gastric, 1 lymph node, 1 G-tube stoma; <i>marinum</i> : 1 arm, 1 elbow; <i>terrae</i> complex: 1 finger

Antibiotic Susceptibilities: TB First-Line Drugs tested (7 new *M. tuberculosis* isolates from Wisconsin and two from Illinois) isoniazid=INH (0.2 ug/ml and 1.0 ug/ml), rifampin (1.0 ug/ml), ethambutol (5.0 ug/ml), pyrazinamide=PZA (100 ug/ml)

Drug Resistance	Number of Isolates
Susceptible to all first-line drugs	5
Resistant to INH (0.2 ug/ml) only	
Resistant to both INH concentrations	
Resistant to rifampin only	
Resistant to ethambutol only	
Resistant to PZA, PZA indeterminate, or PZA pending	2
Multi-drug resistant	1
susceptibility testing pending	1*
TOTAL	9

(*) Multi-drug resistant isolate was resistant to INH, ethambutol and rifampin and susceptible to PZA.

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

SUMMARY OF CONFIRMED INFECTIONS
Molecular & Virology SECTION

City of Milwaukee Health Department Laboratory
(414) 286-3526

WEBSITE: www.milwaukee.gov/healthlab

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Agent	# Isolates
Herpes simplex, Type 1	17
Herpes simplex, Type 2	9
Rhinovirus	9
Trichomonas species	2
Mumps virus	1
Coxsackievirus Type B3	1

	Method	Tested	Positive	% Positive
Chlamydia trachomatis	ProbeTec	734	114	16%
Neisseria gonorrhoeae	ProbeTec/GenProbe	738	93	13%
Mumps	EIA	35	0	0%
HIV	EIA	137	0	0%
Norovirus	Real-time RT PCR	55	23	42%

Norovirus detected in multiple foodborne outbreak clusters in April, May, June 2006.

Please note new tests offered by the City Lab by Real-time RT-PCR (SmartCycler) assays:

- 1) **Norovirus** (Geno-groups G1 & G2 duplex assay)
 - a) Only for specimens of Public Health significance, (call the lab).
- 2) **Influenza** (subtypes A – H1, H3, H5, B)
 - a) A case of Influenza B from a university student was recently (7/06) isolated and confirmed by Real-time RT-PCR.
- 3) **Mumps**
- 4) **Bordetella pertussis/parapertussis** duplex assay
- 5) The City Lab will be changing confirmatory syphilis testing from the FTA-ABS test to the TPPA test as of August 1, 2006.



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