

MICROBIOLOGY DIVISION – MILWAUKEE HEALTH DEPARTMENT

MONTHLY REPORT

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MICROBIOLOGY REPORT: The August 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 July 2006 and new cases of syphilis in Milwaukee during June 2006. Information on the laboratory diagnosed mycobacterial infections in Wisconsin during June 2006 is also included.

Legionnaires Disease (July 2006)

No positive case detected.

Pertussis (Whooping cough) July 2006

No positive case detected.

Syphilis (July 2006)

Test	Number Positive	Test	Number Positive
RPR	0	FTA-ABS	60
VDRL	19	DARK FIELD	0

New Cases (Syphilis)

The Wisconsin Division of Health has reported 7 new cases (early stages) of syphilis during June 2006 in Milwaukee. The median age of early syphilis cases is 35 years (range: 8-45 years). Morbidity distributions of the disease reported in this and the corresponding month of the previous year are as follows:

New Cases of Syphilis (June 2006 and June 2005)

Stage	Number of Cases	
	June 2006	June 2005
Primary syphilis	1	0
Secondary syphilis	4	1
Early latent	2	5
Late latent	0	2
Total	7	8

Gonorrhea (July 2006)

Number Tested	Decreased Susceptibility (DS) / Resistance (R) antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
56	2 (IR): 2 (R)	0	0	0

IR = Intermediate resistance R = Resistance

Gonorrhea from Other Sources (Aurora Consolidated Labs) July 2006

Number Tested	Decreased Susceptibility (DS) / Resistance (R) antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
2	0	0	0	0

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

Organism	Site	Number Isolates	Organism	Site	Number Isolates
<i>Ureaplasma urealyticum</i>	Genital	5	<i>Mycoplasma hominis</i>	Genital	1

Parasitic Enteric Pathogens (July 2006)

Age	Sex	Pathogen	Number Cases
None			

Mycobacterial infections (July 2006)

Age	Sex	Test Results			Identification
		Sputum Smear	Culture	DNA Probe	
76	M	-	+	+	<i>M. avium</i> complex
54	F	-	+	+	<i>M. avium</i> complex

Reference Cultures (July 2006)

Age	Sex	Site/Specimen Source	Culture Identification
69	M	Blood	<i>Streptococcus mutans</i>
72	F	Sputum	<i>Moraxella catarrhalis</i>
5	F	Wound	<i>Bacillus megaterium</i>
37	M	Wound	<i>Moraxella osloensis</i>
29	M	Wound	<i>Leclercia adecarboxylata</i>
68	F	Blood	<i>Methylobacterium</i> sp.
64	M	Wound	CDC Gp EF4
89	M	Blood	<i>Roseomonas gilardii</i>
62	M	Blood	<i>Moraxella lacunata</i>

Bacterial Enteric Pathogens (July 2006)

Age	Sex	Pathogen	Age	Sex	Pathogen
26	M	<i>Shigella sonnei</i>	52	M	<i>Salmonella weltevreden</i>
32	M	<i>Shigella sonnei</i>	29	F	<i>Salmonella newport</i>
3	M	<i>Shigella flexneri</i> B2	29	F	<i>Salmonella newport</i>
7	M	<i>Shigella sonnei</i>	22	F	<i>Salmonella enteritidis</i>
8	M	<i>Shigella sonnei</i>	3mo	F	<i>Salmonella urbana</i>
60	M	<i>Shigella sonnei</i>	39	F	<i>Salmonella enteritidis</i>
22	M	<i>Shigella sonnei</i>	45	M	<i>Salmonella typhimurium</i>
13mo	M	<i>Shigella flexneri</i> B1	5	M	<i>Salmonella typhimurium</i>
20	F	<i>Shigella sonnei</i>	45	M	<i>Salmonella</i> subsp I; serogroup B; i, monophasic
26mo	M	<i>Shigella sonnei</i>	8	F	<i>Salmonella paratyphi</i> B var. Java

Laboratory Diagnosed Mycobacterial Infections in Wisconsin during June 2006:

<i>Mycobacterium</i> species		Brown	Dane	Eau Claire	Kenosha	La Crosse	Marathon	Milwaukee	Outagamie	Shawano	Racine	Rock	Waukesha	Winnebago	Wood	TOTALS
<i>M. tuberculosis</i> complex	Pulm									1						1
	Extra							3								3
Total <i>M. tuberculosis</i> complex		0	0	0	0	0	0	3	0	1	0	0	0	0	0	4
<i>M. avium</i> complex	Pulm		5	1	1		1	45					2	5	7	67
	Extra							3								3
<i>M. gordonae</i>	Pulm	1	6			1		11			1	1	2	2	5	30
	Extra													1		1
<i>M. abscessus</i>	Pulm							5								5
	Extra							1								1
<i>M. chelonae</i>	Pulm		1													1
	Extra							1								1
<i>M. fortuitum</i> group	Pulm							2			1					3
	Extra															0
<i>M. kansasii</i>	Pulm								1							1
	Extra													1		1
<i>M. marinum</i>	Pulm															0
	Extra		2			1										3
<i>M. mucogenicum</i>	Pulm							1						1		2
	Extra							2	1							3
<i>M. xenopi</i>	Pulm		1					5					1			7
	Extra							1								1
<i>M. parafortuitum</i>	Extra		1													1
<i>M. bovis</i> BCG	Extra							1								1
<i>M. scrofulaceum</i>	Pulm							1								1
<i>M. terrae</i> complex	Pulm							1								1
<i>M. parascrofulaceum</i>	Pulm											1				1
TOTALS		1	16	1	1	2	1	80	2	0	2	2	5	10	12	135

Extra-Pulmonary Sources of Isolation:

<i>Mycobacterium</i> species	Extra-pulmonary Site of Isolation
<i>M. tuberculosis</i> complex	2 lymph node, 1 neck
<i>M. avium</i> complex	1 knee effusion, 1 vertebrae, 1 stool
<i>M. gordonae</i>	1 urine
other <i>Mycobacterium</i> species	abscessus: 1 ear; bovis BCG: 1 urine; chelonae: 1 palm; kansasii: 1 urine; mucogenicum: 1 lymph node, 2 blood; marinum: 1 finger, 1 forearm, 1 dorsal mass (hand); parafortuitum: 1 blood; xenopi: 1 psoas

Antibiotic Susceptibilities: TB First-Line Drugs tested: 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)

There were 6 new *M. tuberculosis* isolates. Of these 3 were resistant to INH (0.2 ug/ml).

Source: Mycobacteriology Laboratory Network Data Report, Wisconsin 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

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Agent	# Isolates	Patient	Specimen	Symptoms
Rhinovirus	1	18 mo. M	BAL Referral isolate	N/A*
Rhinovirus	1	3 yr. M	NP Referral isolate	N/A
Rhinovirus	1	4 mo. M	NP Referral isolate	N/A
Rhinovirus	1	68 yr. M	BAL Referral isolate	N/A
Parainfluenza Type 3	1	4 wk. M	NP	Autopsy sample
Coxsackievirus Type B3	1	8 wk. F	CSF Referral isolate	R/O sepsis
Influenza Virus Type B	1	26 yr. M**	Throat swab	Cough, Fever, body aches
Cytomegalovirus	1	6 yr. M	NP Referral isolate	N/A
Herpes Simplex, Type 1	10			
Herpes Simplex, Type 2	8			

*N/A – Not Available

	Method	Tested	Positive	% Positive
<i>Chlamydia trachomatis</i>	ProbeTec	526	72	13.7%
<i>Neisseria gonorrhoeae</i>	ProbeTec/GenProbe	524	65	12.4%
Mumps	EIA	36	0	0%
Influenza Virus Type A & B	Real-time RT PCR	4	1	25%
Mumps	Real-time RT PCR	5	0	0%
Enterovirus	Real-time RT PCR	9	0	0%

Please note the following new tests are now being offered by the City laboratory using Real-time PCR (SmartCycler) assays:

- 1) **Norovirus (Geno-groups GI & GII: Single/Duplex RT-PCR assay)**
Only for specimens of Public Health significance (Contact lab)
- 2) **Influenza (Subtypes A – H1, H3, H5) and B (Single, Duplex and/or Multiplex RT-PCR)**
** Flu B was isolated from the patient with travel history to Bangladesh
- 3) **Mumps (Duplex RT-PCR assay)**
- 4) ***Bordetella pertussis/parapertussis* (Single/Duplex assay)**
- 5) **Herpes Simplex Virus (HSV Type 1 & 2: Multiplex assay)**
- 6) **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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