

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 May 2007 issue of Microbiology Monthly Report, Volume 12, presents the laboratory diagnosis of some of the infectious diseases, the reference microbiology work done in this laboratory during April 2007 and new cases of syphilis in Milwaukee during March 2007. Information on the laboratory diagnosed mycobacterial infections in Wisconsin during March is also included.

Legionnaires Disease (April 2007)

Patient		Test		
Age	Sex	Urine Antigen	Culture	DFA
88	M	+	ND	ND

ND = Not done

Pertussis (Whooping cough) April 2007

No positive case was detected.

Syphilis (April 2007)

Test	Number Positive	Test	Number Positive
RPR	1	TP-PA	3
VDRL	19	DARK FIELD	1

New Cases of Syphilis

The Wisconsin Division of Health has reported 7 new cases (early stages) of syphilis during March 2007 in Milwaukee. The median age of early syphilis cases is 25.0 years (range: 21-33 years). Morbidity distributions of the disease reported in this and the corresponding month of the previous year are as follows:

New Cases of Syphilis (March 2007 and March 2006)

Stage	Number of Cases	
	March 2007	March 2006
Primary syphilis	4	0
Secondary syphilis	3	0
Early latent	0	2
Late latent	1	2
Total	8	4

Gonorrhea (April 2007)

Number Tested	Decreased Susceptibility (DS) / Resistance (R) Antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
28	1 (I); 2 (R)	0	0	0

Gonorrhea from Other Sources (Aurora Consolidated Labs) April 2007

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

Isolates Other Than *N. gonorrhoeae* (April 2007)

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

Parasitic Enteric Pathogens (April 2007)

Age	Sex	Pathogen	Number Cases
14	M	<i>Giardia lamblia</i>	1
47	M	<i>Entamoeba coli</i>	1
15	M	<i>Giardia lamblia</i>	1
		<i>Entamoeba coli</i>	

Mycobacterial Infections (April 2007)

Age	Sex	Test Results		DNA Probe	Identification
		Sputum Smear	Culture		
44	M	-	+	Not done	<i>M. xenopi</i>
61	M	-	+	+	<i>M. goodii</i>

Reference Cultures (April 2007)

Age	Sex	Site/Specimen Source	Culture Identification
75	F	Blood	<i>Enterococcus faecium</i>
75	F	Urine	<i>Escherichia coli</i>
70	F	Wound	<i>Moraxella osloensis</i>
21	F	Wound	<i>Neisseria subflava</i> bv <i>perflava</i>
49	M	Wound	<i>Corynebacterium striatum</i>
47	M	Urine	<i>Bacillus</i> sp
63	M	Wound	<i>Propionibacterium</i> sp
74	F	Urine	<i>Escherichia coli</i>
50	F	Wound	<i>Corynebacterium striatum</i>
69	F	N.A.	<i>Corynebacterium striatum</i>

Bacterial Enteric Pathogens (April 2007)

Age	Sex	Pathogen	Age	Sex	Pathogen
28	F	<i>Shigella flexneri</i> type 4	10	M	<i>Salmonella enterica</i> subsp 1 java
51	F	<i>Shigella sonnei</i>	53	M	<i>Salmonella typhimurium</i>
35	F	<i>Shigella sonnei</i>	6	M	<i>Salmonella B monophasic i</i>
6	F	<i>Shigella sonnei</i>	31	F	<i>Salmonella virchow</i>
28m	M	<i>Shigella sonnei</i>	5	F	<i>Salmonella typhimurium</i>
26	F	<i>Shigella sonnei</i>	36	F	<i>Salmonella braenderup</i>
38	F	<i>Shigella sonnei</i>	48	M	<i>Salmonella enteritidis</i>
37	F	<i>Shigella sonnei</i>	11	F	<i>Salmonella typhimurium</i>
33m	M	<i>Shigella sonnei</i>	54	F	<i>Salmonella oranienburg</i>
3	M	<i>Shigella sonnei</i>			
7	M	<i>Shigella sonnei</i>			

<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							2
	Extra							3			1				4
Total <i>M. tuberculosis</i> complex		0	1	0	0	0	0	4	0	0	1	0	0	0	6
<i>M. avium</i> complex	Pulm	2	6	2	3	1		53	2	2		1	5		77
	Extra		1					2							3
<i>M. gordonae</i>	Pulm	4	3	2	1	3		16				1	2		32
	Extra		1												1
<i>M. abscessus</i>	Pulm			1		1	1								3
	Extra							1							1
<i>M. chelonae</i>	Pulm		1					1							2
	Extra							3							3
<i>M. fortuitum</i> group	Pulm							3	2				1		6
	Extra														0
<i>M. kansasii</i>	Pulm		1					1							2
	Extra														0
<i>M. marinum</i>	Pulm														0
	Extra														0
<i>M. mucogenicum</i>	Pulm							1							1
	Extra							2							2
<i>M. xenopi</i>	Pulm		1					7							8
	Extra														0
<i>M. smegmatis</i> group	Pulm							1							1
	Extra														0
TOTALS		6	14	5	4	5	1	91	4	2	0	2	8	0	142

Extra-Pulmonary Sources of Isolation:

<i>M. tuberculosis</i> Extra-pulmonary:	1 (bovis) omentum, 1 neck mass, 1 lymph node, 1 pericardial
<i>M. avium</i> complex Extra-pulmonary:	1 stool, 2 blood
<i>M. gordonae</i> Extra-pulmonary:	1 wrist/synovial
Other <i>Mycobacterium</i> species	<i>M. abscessus</i> : 1 sinus; <i>M. chelonae</i> : 1 wrist, 1 skin, 1 leg; <i>M. mucogenicum</i> : 2 blood

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)

In March there were 6 new *M. tuberculosis* isolations from Wisconsin patients

Drug Resistance	Number of Isolates
Susceptible to all first-line drugs	4
Resistant to PZA, PZA indeterminant, or PZA pending	2*
TOTAL	6

(*) One isolate is *M. bovis*

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 May 2007 ISSUE # 1217

April 2007 Data

Agent	No. of Isolates	Age	Sex	Specimen	Symptoms
Adenovirus	1	19	F	Throat	Pneumonia, cough, sore throat, fatigue, headache
Influenza A (H3)	1	35	F	Throat	Cough, fever, myalgias
Influenza A (H3)	1	29	M	Throat	Bronchitis, cough, sore throat, fever, headache, nausea
Influenza A (H3)	1	27	F	Throat	URI, sore throat, myalgias, fever, headache
Influenza A (H3)	1	20	F	Throat	R/O influenza
Influenza A (H3)	1	28	F	Throat	URI, cough, sore throat, fatigue, fever
Influenza A (H3)	1	26	M	Throat	ARD
Influenza A (H3)	1	22	F	Throat	ARD, fever, headache
Influenza A (H3)	1	18	F	Throat	Cough, fever, myalgias
Influenza B	1	18	F	Throat	Cough, sore throat, fever
Rhinovirus	1	14	F	NP Referred isolate	N/A
Rhinovirus	1	4	M	NP Referred isolate	N/A
Rhinovirus	1	26 mo	M	NP Referred isolate	N/A
Rhinovirus	1	18	F	Throat	Cough, sore throat, headache
Herpes simplex, type 1	7				
Herpes simplex, type 2	8				

*N/A – Not Available

Agent	Method	Tested	Positive	% Positive
<i>Chlamydia trachomatis</i>	ProbeTec	508	74	14.6%
<i>Neisseria gonorrhoeae</i>	ProbeTec/GenProbe	669	75	11.2%
Mumps virus	EIA	29	0	0%
Enterovirus	Real-time RT-PCR	12	0	0%
Influenza virus	Real-time RT-PCR	17	4	23.5%
Norovirus	Real-time RT-PCR	2	0	0%
Adenovirus	Real-time PCR	5	1	20%

Important News

The following new Real-time PCR-based tests are now being offered by the City laboratory:

- 1) Norovirus (Geno-groups GI & GII: Single/Duplex assay) – Please call the Lab prior to submission
- 2) Influenza (Subtypes A – H1, H3, H5) and B (Single, Duplex and/or Multiplex assay)
- 3) Mumps Virus (Duplex assay)
- 4) *Bordetella pertussis/parapertussis* (single and/or duplex assay)
- 5) Herpes Simplex Virus (HSV Type 1 & 2: Multiplex assay)
- 6) Enterovirus (Duplex assay)
- 7) Adenovirus (Duplex assay)

Test Method Change:

The City Lab has changed confirmatory Syphilis testing from the FTA-ABS test to the TPPA test as of August 1, 2006.

Discontinuation of Tests:

As of November 1, 2006, the City Lab will no longer offer the complement fixation test.

A handwritten signature in black ink, reading "S. Bhattacharyya". The signature is stylized with a large initial 'S' and a cursive 'Bhattacharyya'.

Sanjib Bhattacharyya, Ph.D.
Chief Molecular Scientist