

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 November 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 October 2006 and new cases of syphilis in Milwaukee during September 2006. Information on the laboratory diagnosed mycobacterial infections in Wisconsin during September is also included.

Legionnaires Disease (October 2006)

Patient		Test		
Age	Sex	Urine Antigen	Culture	DFA
61yrs	M	+	ND	ND
51yrs	M		Reference*	

ND = Not done * *L. micdadeii* sgp1(lung)

Pertussis (Whooping cough) October 2006

No positive cases detected.

Syphilis (October 2006)

Test	Number Positive	Test	Number Positive
RPR	1	TP-PA	7
VDRL	15	DARK FIELD	0

New Cases of Syphilis

The Wisconsin Division of Health has reported 5 new cases (early stages) of syphilis during September 2006 in Milwaukee. The median age of early syphilis cases is 43.0 years (range: 28-49 years). Morbidity distributions of the disease reported in this and the corresponding month of the previous year are as follows:

New Cases of Syphilis (September 2006 and September 2005)

Stage	Number of Cases	
	September 2006	September 2005
Primary syphilis	0	0
Secondary syphilis	1	0
Early latent	4	3
Late latent	0	0
Total	5	3

Gonorrhea (October 2006)

Number Tested	Decreased Susceptibility (DS) / Resistance (R) Antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
118	9 (R)	0	0	3 (DS)

Gonorrhea from Other Sources (Aurora Consolidated Labs) October 2006

Number Tested	Decreased Susceptibility (DS) / Resistance (R) Antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
7	0	0	0	0

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

Organism	Site	Number Isolates	Organism	Site	Number Isolates
<i>Ureaplasma urealyticum</i>	Genital	10	<i>Mycoplasma hominis</i>	Genital	4

Parasitic Enteric Pathogens (October 2006)

Age	Sex	Pathogen	Number Cases
66 yr	F	<i>Entamoeba coli</i>	1
		<i>Blastocystis hominis</i>	
5 yr	M	<i>Giardia lamblia</i>	1
		<i>Hymenolepis nana</i>	
		<i>Entamoeba coli</i>	
11 yr	M	<i>Giardia lamblia</i>	1
24 yr	M	<i>Iodamoeba buetschlii</i>	1
28 yr	F	<i>Giardia lamblia</i>	1
		<i>Entamoeba coli</i>	
26 yr	M	<i>Endolimax nana</i>	1
		<i>Entamoeba coli</i>	
65 yr	F	<i>Entamoeba coli</i>	1
73 yr	M	<i>Strongyloides stercoralis</i>	1
53 yr	F	<i>Iodamoeba buetschlii</i>	1
		<i>Entamoeba coli</i>	
28 yr	F	<i>Entamoeba coli</i>	1

Mycobacterial infections (October 2006)

Age	Sex	Test Results			Identification
		Sputum Smear	Culture	DNA Probe	
72 yr	F	-	+	+	<i>M. avium complex</i>
31 yr	M	-	+	+	<i>M. avium complex</i>
23 yr	F	+	+	+	<i>M. tuberculosis complex</i>

Reference Cultures (October 2006)

Age	Sex	Site/Specimen Source	Culture Identification
80 yr	F	Blood	<i>Brevundimonas vesicularis</i>
80 yr	F	Blood	<i>Roseomonas gilardii</i>
38 yr	M	Stool	<i>Hafnia alvei</i>
58 yr	M	Blood	<i>Bacillus sp NOT anthracis</i>
76 yr	M	Blood	<i>Aerococcus viridans</i>
81 yr	F	Wound	<i>Pseudomonas sp</i>
59 yr	F	Sputum	<i>Pseudomonas aeruginosa</i>
3 yr	F	Skin	<i>Moraxella osloensis</i>
45 yr	F	Wound	<i>Corynebacterium propinquum</i>
39 yr	F	CSF	<i>Streptococcus mitis sp/gp</i>
55 yr	F	Blood	<i>Streptococcus mutans sp/gp</i>
39 yr	M	Wound	<i>Staphylococcus lugdunensis</i>
66 yr	M	Blood	<i>Bacillus circulans</i>
78 yr	F	Wound	<i>Pseudomonas stutzeri</i>

Bacterial Enteric Pathogens (October 2006)

Age	Sex	Pathogen	Age	Sex	Pathogen
17 mo	M	<i>Shigella sonnei</i>	66 yr	M	<i>Salmonella enteritidis</i>
5 yr	M	<i>Shigella sonnei</i>	62 yr	F	<i>Salmonella newport</i>
36 yr	F	<i>Shigella sonnei</i>	67 yr	M	<i>Salmonella oranienberg</i>
3 yr	M	<i>Salmonella panama</i>	84 yr	F	<i>Salmonella sandiego</i>
84 yr	F	<i>Salmonella sandiego</i>	52 yr	F	<i>Salmonella enteritidis</i>
64 yr	F	<i>Salmonella newport</i>	64 yr	F	<i>Salmonella typhimurium</i>
12 yr	M	<i>Salmonella ohio</i>			

Laboratory Diagnosed Mycobacterial Infections in Wisconsin during September 2006

<i>Mycobacterium</i> species		Brown	Dane	Eau Claire	Kenosha	La Crosse	Manitowoc	Marathon	Milwaukee	Outagamie	Racine	Rock	Winnebago	Wood	TOTALS
<i>M. tuberculosis</i> complex	Pulm						1		2						3
	Extra		2						1						3
Total <i>M. tuberculosis</i> complex		0	2	0	0	0	1	0	3	0	0	0	0	0	6
<i>M. avium</i> complex	Pulm	1	3		2	1			41	3	5		7	9	72
	Extra							1	2						3
<i>M. gordonae</i>	Pulm		3	2			1		6		1	1		7	21
	Extra														0
<i>M. abscessus</i>	Pulm								2						2
	Extra														0
<i>M. chelonae</i>	Pulm								1					1	2
	Extra														0
<i>M. fortuitum</i> group	Pulm								5				1		6
	Extra														0
<i>M. kansasii</i>	Pulm														0
	Extra														0
<i>M. marinum</i>	Pulm														0
	Extra														0
<i>M. mucogenicum</i>	Pulm								2						2
	Extra								3						3
<i>M. xenopi</i>	Pulm								8						8
	Extra											1			1
<i>M. terrae</i> complex	Extra									1					1
<i>M. checlonae</i> /abscessus	Pulm	1													1
<i>M. bovis</i> BCG	Extra													1	1
<i>M. goodii</i>	Pulm									1					1
<i>Mycobacterium</i> species	Pulm													1	1
TOTALS		2	6	2	2	1	1	1	70	5	6	2	8	19	125

Extra-Pulmonary Sources of Isolation

<i>Mycobacterium</i> species	Extra-pulmonary Site
<i>M. tuberculosis</i> complex	1 mediastinal lymph node, 1 lymph node, 1 CSF
<i>M. avium</i> complex	1 paracentesis, 1 neck, 1 stool
other <i>Mycobacterium</i> species	<i>mucogenicum</i> : 1 stool, 2 blood; <i>terrae</i> complex: 1 stool; <i>xenopi</i> : 1 bone

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 4 new *M. tuberculosis* isolations from Wisconsin and two from Illinois patients this month.

Of the total 6 isolates, 5 are susceptible to all first-line drugs and one is resistant to both INH concentrations.

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 November 2006 ISSUE # 1211

October 2006 Data

Agent	# Isolates	Age	Sex	Specimen	Symptoms
Coxsackievirus B4	1	3 wk	F	NP Referred isolate	N/A
Coxsackievirus B4	1	3 wk	M	NP Referred isolate	N/A
Echovirus 22	1	11 days	F	Colon swab	Autopsy
Rhinovirus	3	19 mo	F	NP x3 Referred isolate	N/A
Rhinovirus	1	15 mo	M	NP	Autopsy
Rhinovirus	1	13 yr	M	NP Referred isolate	N/A
Rhinovirus	1	12 yr	F	NP Referred isolate	N/A
Rhinovirus	1	3 mo	M	NP Referred isolate	N/A
Rhinovirus	1	24 yr	M	Throat	Sore throat
Varicella-zoster Virus	1	20 yr	F	Lower back lesion	Vesicular rash
Varicella-zoster Virus	1	19 yr	F	Shoulder lesion	Vesicular rash
Herpes Simplex, type 1	5				
Herpes Simplex, type 2	14				
Trichomonas species	1	23	F	Labia	STD

*N/A – Not Available

	Method	Tested	Positive	% Positive
<i>Chlamydia trachomatis</i>	ProbeTec	562	82	14.6%
<i>Neisseria gonorrhoeae</i>	ProbeTec/GenProbe	726	107	14.7%
Mumps	EIA	34	0	0%
Rotavirus	EIA	1	1	100%
Influenza A/B typing	Real-time RT-PCR	5	0	0%
HSV typing	Real-time PCR	2	2	100%

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)**
- 3) **Mumps (Duplex RT-PCR assay)**
- 4) ***Bordetella pertussis/parapertussis* (Single/Duplex assay)**
- 5) **Herpes Simplex Virus (HSV Type 1 & 2: Multiplex assay)**
- 6) **Enterovirus (RT-PCR assay)**
- 7) **The City Lab has changed confirmatory Syphilis testing from the FTA-ABS test to the TPPA test as of August 1, 2006.**
- 8) **NEW: As of November 1, 2006, the City Lab will no longer offer the complement fixation test.**

A handwritten signature in black ink, appearing to read 'mfg' followed by a stylized flourish.

Steve Gradus, Ph.D., ABMM
Laboratory Director