MICROBIOLOGY SECTION – MILWAUKEE HEALTH DEPARTMENT

MONTHLY REPORT

July 2006 Vol. 11, No. 7 Ajaib Singh, D.V.M.,Ph. D.

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

Legionnaires Disease (June 2006)

No positive case detected.

Pertussis (Whooping cough) June 2006

No positive case detected.

Syphilis (June 2006)

Test	Number Positive	Test	Number Positive
RPR	1	FTA-ABS	10
VDRL	14	DARK FIELD	0

New Cases (Syphilis)

The Wisconsin Division of Health has reported 9 new cases (early stages) of syphilis during May 2006 in Milwaukee. The median age of early syphilis cases is 35.0 years (range: 19-56 years). Morbidity distributions of the disease reported in this and the corresponding month of the previous year are as follows:

New Cases of Syphilis (May 2006 and May 2005)

Stage	Number of Cases	
	May 2006	May 2005
Primary syphilis	**0**	**0**
Secondary syphilis	**1**	**0**
Early latent	**8**	**1**
Late latent	**0**	**0**
Total	**9**	**1**

Gonorrhea (June 2006)

Number Tested	Decreased Susceptibility (DS) / Resistance (R) antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
72	4 R, 2 IR	1 DS	0	1 DS

Gonorrhea from Other Sources (Aurora Consolidated Labs) June 2006

Number Tested	Decreased Susceptibility (DS) / Resistance (R) antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
6	2 R , 1 IR	0	0	0

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

Organism	Site	Number Isolates	Organism	Site	Number Isolates
Ureaplasma urealyticum	Genital	10	*Mycoplasma hominis*	Genital	2

Parasitic Enteric Pathogens (June 2006)

No positive case detected.

Mycobacterial infections (June 2006)

Age	Sex	Test Results			Identification
		Sputum Smear	Culture	DNA Probe	
26	M	-	+	+	*M. avium* Complex

Reference Cultures (June 2006)

Age	Sex	Site/Specimen Source	Culture Identification
62	M	Sputum	*Corynebacterium pseudodiphtheriticum*
11	M	Ear	*Mycobacterium abscessus*
80	F	Urine	*Escherichia coli*
62	M	Hand	*Pasteurella dagmatis*
75	M	Blood	*Streptococcus sp*
78	F	Stool	*Aeromonas caviae*
79	F	Blood	*Streptococcus mutans*
45	F	Blood	*Corynebacterium amycolatum*
3	M	Stool	*Yersinia enterocolitica*
44	M	Sputum	*Neisseria subflava*
70	F	Stool	*Escherichia coli 0157:H7*
24	M	Throat	*Neisseria subflava*
28	M	Throat	*Neisseria mucosa*
55	M	Blood	*Isolate NOT Bacillus anthracis*

Bacterial Enteric Pathogens (June 2006)

Age	Sex	Pathogen	Age	Sex	Pathogen
21	F	*Shigella flexneri typeB6*	41	F	*Salmonella edinburg*
49	F	*Shigella sonnei*	22	M	*Salmonella typhi*
26	M	*Shigella sonnei*	29	F	*Salmonella newport*
			37	F	*Salmonella gaminara*
			7	M	*Salmonella montevideo*
30	F	*Salmonella panama*	13	M	*Salmonella B monophasic i*
55	F	*Salmonella enteritidis*	56	M	*Salmonella B monophasic i*
44	M	*Salmonella enteritidis*	17mo	M	*Salmonella telekebir*
14	F	*Salmonella enteritidis*	12	M	*Salmonella typhi*
63	M	*Salmonella enteritidis*	50	M	*Salmonella java*

Laboratory Diagnosed Mycobacterial Infections in Wisconsin during May 2006

***Mycobacterium* species**		**Brown**	**Dane**	**Eau Claire**	**Kenosha**	**La Crosse**	**Marathon**	**Milwaukee**	**Outagamie**	**Racine**	**Rock**	**Sheboygan**	**Waukesha**	**Winnebago**	**Wood**	**TOTALS**
M. tuberculosis complex	Pulm								1							**1**
	Extra		1					2								**3**
Total *M. tuberculosis* complex		**0**	**1**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
***M. avium* complex**	Pulm	3	8	1	1	1	1	54	3	1			1	4	3	**81**
	Extra		2					1	1							**4**
M. gordonae	Pulm		7		1			14				1		2	4	**29**
	Extra															**0**
M. abscessus	Pulm		1					5								**6**
	Extra							1								**1**
M. chelonae	Pulm							1	1		1					**3**
	Extra							1								**1**
M. fortuitum *group*	Pulm	2						6					1	1		**10**
	Extra		2													**2**
M. kansasii	Pulm															**0**
	Extra															**0**
M. marinum	Pulm															**0**
	Extra										1				2	**3**
M. mucogenicum	Pulm							5	1	1						**7**
	Extra							1								**1**
M. xenopi	Pulm							8								**8**
	Extra															**0**
M. celatum	Pulm			1												**1**
M. bovis *BCG*	Extra							1								**1**
M. neoaurum	Pulm							1								**1**
TOTALS		***5***	**20**	**2**	**2**	**1**	**1**	**99**	**6**	**2**	**2**	**1**	**2**	**7**	**9**	**159**

Extra-Pulmonary Sources of Isolation:

Mycobacterium species	**Extra-pulmonary Site of Isolation**
M. tuberculosis complex	1 gastric, 1 neck abscess, 1 omentum
M. avium complex	1 colon, 1 thoracic, 1 hip, 1 tibia
M. gordonae	
other *Mycobacterium* species	abscessus: 1 leg, chelonae: 1 toe, fortuitum group: 1 hickman site, 1 chest marinum: 1 wrist, 1 arm, 1 hand, mucogenicum: 1 face

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), razinamide=PZA (100 ug/ml), There are 3 new *M. tuberculosis* isolates from Wisconsin and 1from an Illinos patient.
One isolate of MTB is resistant to both INH concentrations.

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 **ISSUE # 1207**

June 2006

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) **<u>Norovirus</u> (Geno-groups G1 & G2 duplex assay)**
   a) **Only for specimens of Public Health significance, (call the lab).**
2) **<u>Influenza</u> (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) **<u>Mumps</u>**
4) **<u>Bordetella pertussis/parapertussis</u> 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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