MICROBIOLOGY DIVISION – MILWAUKEE HEALTH DEPARTMENT

MONTHLY REPORT

April 2005 Vol. 10, No. 4 Ajaib Singh, D.V.M., Ph. D.

MICROBIOLOGY REPORT: The April 2005 issue of Microbiology Monthly Report, Volume 10, presents the laboratory diagnosis of some of the infectious diseases, the reference microbiology work done in this laboratory during March 2005 and new cases of syphilis in Milwaukee during February 2005. Information on the laboratory diagnosed mycobacterial infections in Wisconsin during February is also included.

Legionnaires Disease (March 2005)

Patient		Test		
Age	**Sex**	**Urine Antigen**	**Culture**	**DFA**
38 Y	F	ND	+ (BAL)	ND

ND = Not Done

Pertussis (Whooping cough, March 2005)

Many specimens for pertussis were directed to the Wisconsin State Laboratory of Hygiene, in Madison, for Real-time PCR assay

The City of Milwaukee Health department Laboratory has resumed testing of selected samples (City Health Centers) for pertussis using culture and real-time PCR assays, Information is as follows:

Pertussis (Whooping cough, March (2005)

Patient		Test	
Age	Sex	Culture	Real-time PCR
20yr	F	-	+
17yr	M	-	+

ND = Not done DFA test is no longer performed

Syphilis (March 2005)

Test	Number Positive	Test	Number Positive
RPR	0	FTA-ABS	9
VDRL	34	DARK FIELD	0

New Cases Syphilis

The Wisconsin Division of Health has reported 4 new cases (early stages) of syphilis during February 2005 in Milwaukee. The median age of early syphilis cases is 46.5 years (range: 39-64 years). Morbidity distributions of the disease reported in this and the corresponding month of the previous year are as follows:

New Cases of Syphilis (February 2005 and February 2004)

Stage	Number of Cases	
	February 2005	February 2004
Primary syphilis	0	0
Secondary syphilis	0	0
Early latent	4	0
Late latent	0	0
Total	4	0

Gonorrhea (MHD (March 2005)

Number Tested	Decreased Susceptibility (DS)/Resistance (R) to Antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
56	2(I); 1(R)	1(DS)	0	1(DS)

Gonorrhea from Other Sources (March 2005)

Number Tested	Decreased Susceptibility (DS)/Resistance (R) to Antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
6	1(R)	0	0	0

Isolates Other Than *N. gonorrhoeae* (March 2005)

Organism	Site	Number Isolates	Organism	Site	Number Isolates
Ureaplasma urealyticum	Genital	22	*Mycoplasma hominis*	Genital	1

Parasitic Enteric Pathogens (March 2005)

Age	Sex	Pathogen	Number Cases
44	M	*Blastocystis hominis*	1
11	M	*Entamoeba coli*	1
		Endolimax nana	
		Giardia lamblia	
		Entamoeba sp	
11	M	*Entamoeba histolytica/dispar*	1
		Giardia lamblia	
34	F	*Entamoeba coli*	1

*****Dual infection

Mycobacterial Infections (March 2005)

Mycobacteriology laboratory is being renovated and not operational at this time.

Reference Cultures (March 2005)

Age	Sex	Site/Specimen Source	Culture Identification
6	F	Urine	*Escherichia coli*
57	F	Urine	*Neisseria sunflava*
40	F	Wound	*Tsukamurella sp*
74	F	Urine	*Citrobacter freundii*
74	F	Urine	*Citrobacter freundii*
67	M	Blood	*Bacteroides urelyticus*
53	F	Other	*Corynebacterium jeikeum*
88	M	Sputum	*Moraxella nonliquefaciens*
75	M	Other	*Streptococcus milleri sp gp*
48	M	Blood	*Streptococcus salivarius sp gp*
58	M	Other	*Bacillus sp. NOT B. anthracis*
18mo	M	Other	*Moraxella nonliquefaciens*
79	F	Blood	*Bacteroides fragilis*
36	F	Stool	*Escherichia coli* O157:H7

Bacterial Enteric Pathogens (March 2005)

Age	Sex	Pathogen	Age	Sex	Pathogen
32	F	*Shigella sonnei*	3mo	M	*Salmonella edinburg*
6	F	*Shigella sonnei*	77	F	*Salmonella saintpaul*
3	M	*Shigella sonnei*	17	F	*Salmonella enteritidis*
6	F	*Shigella sonnei*	7mo	M	*Salmonella poona*
3	M	*Shigella sonnei*	12	M	*Salmonella heidelberg*
6	M	*Shigella sonnei*	24	M	*Salmonella typhimurium*
			67	M	*Salmonella oranienburg*
56	F	*Salmonella java*	9	M	*Salmonella heidelberg*
3	M	*Salmonella java*	78	F	*Salmonella heidelberg*
81	F	*Salmonella java*	7mo	F	*Salmonella montevideo*
24	F	*Salmonella enteritidis*	65	F	*Salmonella typhimurium*
24mo	F	*Salmonella saintpaul*	25	M	*Salmonella subsp IIIb* 48(v); l,v:z

Laboratory Diagnosed Mycobacterial Infections in Wisconsin during February 2005

***Mycobacterium* species**		**Ashland**	**Brown**	**Dane**	**Eau Claire**	**Kenosha**	**La Crosse**	**Manitowoc**	**Marathon**	**Milwaukee**	**Outagamie**	**Racine**	**Rock**	**Sheboygan**	**Waukesha**	**Winnebago**	**Wood**	
M. tuberculosis complex	Pulm								1	2								**3**
	Extra																	**0**
Total *M. tuberculosis* complex									**1**	**2**								**3**
***M. avium* complex**	Pulm		2	5		1			1	61		3			2	6	2	**83**
	Extra									2					1			**3**
M. gordonae	Pulm	1		3	1	1	1			7			1	2	1	1		**19**
	Extra									1								**1**
M. abscessus	Pulm												1					**1**
	Extra									1								**1**
M. chelonae	Pulm			1						2								**3**
	Extra																	**0**
M. fortuitum group	Pulm			2						2	1							**5**
	Extra									1								**1**
M. kansasii	Pulm									1								**1**
	Extra																	**0**
M. marinum	Pulm																	**0**
	Extra									3							1	**4**
M. mucogenicum	Pulm									1						1		**2**
	Extra									3								**3**
M. xenopi	Pulm									3					1			**4**
	Extra																	**0**
M smegmatis	Pulm											1						**1**
	Extra			1														**1**
M. simiae *complex*	Pulm							1										**1**
M. scrofulaceaum	Extra									1								**1**
M. *species*	Pulm									1								**1**
M. gilvum	Pulm			2														**2**
M. bovis *BCG*	Extra															1		**1**
M. nebraskense	Pulm																1	**1**
TOTALS		***1***	**2**	**14**	**1**	**2**	**1**	**1**	**1**	**90**	**1**	**4**	**2**	**2**	**5**	**9**	**4**	**140**

Extra-Pulmonary Sources of Isolation:

M. tuberculosis Extra-pulmonary:	
M. avium complex Extra-pulmonary:	1 pleural, 1 blood, 1 stool
M. gordonae Extra-pulmonary:	1 stool
Other *Mycobacterium* species	1 *smegmatis* cheek, 1 *abscessus* scapula cyst, 1 *fortuitum* group lymph node, 3 *marinum* hand, 1 *marinum* finger, 2 *mucogenicum* blood, 1 *mucogenicum* lymph node, 1 *scrofulaceum* neck, 1 *bovis* BCG scrotal.

Wisconsin TB Isolations and Antibiotic Susceptibilities:

Three of TBC isolates reported by Wisconsin laboratories this month were from Wisconsin TB cases.
Two of the TB isolates were susceptible to all first-line drugs. One isolate has first-line drug susceptibility testing pending.

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