MICROBIOLOGY SECTION – MILWAUKEE HEALTH DEPARTMENT

MONTHLY REPORT

January 2007 Vol. 12, No. 1 Ajaib Singh, D.V.M., Ph. D.

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

Legionnaires Disease *(December 2006)

No positive case detected.

Pertussis (Whooping cough) December 2006

No positive case detected.

Syphilis (December 2006)

Test	Number Positive	Test	Number Positive
RPR	1	TP-PA	9
VDRL	20	DARKFIELD	1

New Cases of Syphilis

The Wisconsin Division of Health has reported 9 new cases (early stages) of syphilis during November 2006 in Milwaukee. The median age of early syphilis cases is 30.0 years (range: 20-59 years). Morbidity distributions of the disease reported in this and the corresponding month of the previous year are as follows:

New Cases of Syphilis (November 2006 and November 2005)

Stage	Number of Cases	
	Nov. 2006	Nov. 2005
Primary syphilis	0	2
Secondary syphilis	6	2
Early latent	3	1
Late latent	0	1
Total	9	6

Gonorrhea (December 2006)

Number Tested	Decreased Susceptibility (DS) / Resistance (R) Antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
34	2 (R)	0	0	0

Gonorrhea from Other Sources (Aurora Consolidated Labs) December 2006

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

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

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

Parasitic Enteric Pathogens (December 2006)

Age	Sex	Pathogen	Number Cases
59 yr	M	*Endolimax nana*	1

Mycobacterial infections (December 2006)

Age	Sex	Test Results			Identification
		Sputum Smear	Culture	DNA Probe	
42 yr	M	-	+	+	*M. avium* complex
37 yr*	F*	-	+	+	*M. avium* complex
		-	+	+	*M. tuberculosis* complex
65 yr	F	-	+	+	*M. avium* complex
73 yr	F	-	+	+	*M. avium* complex
36 yr	M	-	+	+	*M. avium* complex
47 yr	M	+	+	+	*M. avium* complex
75 yr	M	+	+	+	*M. tuberculosis* complex

*** Same patient**

Reference Cultures (December 2006)

Age	Sex	Site/Specimen Source	Culture Identification
31 yr	M	Stool	*Yersinia enterocolitica*
51 yr	M	Blood	*Bacillus circulans*
28 yr	M	Blood	*Bacillus cereus*
21 yr	F	Stool	*Escherichia coli O157:H7*
76 yr	F	Blood	*Bergeyella zoohelcum*
16 yr	F	Stool	*Escherichia coli O157:H7*
42 yr	F	Blood	*Corynebacterium striatum*
79 yr	M	Sputum	*Corynebacterium pseudodiphtheriticum*

Bacterial Enteric Pathogens (December 2006)

Age	Sex	Pathogen	Age	Sex	Pathogen
32 yr	F	*Salmonella enteritidis*	21 mo	M	*Salmonella typhimurium*
62 yr	F	*Salmonella enteritidis*	40 yr	F	*Salmonella heidelberg*
84 yr	F	*Salmonella mbandaka*	3 yr	M	*Salmonella heidelberg*
27 yr	M	*Salmonella derby*			

Laboratory Diagnosed Mycobacterial Infections in Wisconsin during November 2006

***Mycobacterium* species**		**Brown**	**Barron**	**Dane**	**Eau Claire**	**Kenosha**	**La Crosse**	**Marinette**	**Marathon**	**Milwaukee**	**Outagamie**	**Racine**	**Rock**	**Sheboygan**	**Waukesha**	**Winnebago**	**Wood**	**TOTALS**
M. tuberculosis complex	Pulm					2		1								1		**4**
	Extra																	**0**
Total *M. tuberculosis* complex		**0**	**0**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**
***M. avium* complex**	Pulm	3		5	1				1	36		2	1		1	3	1	**54**
	Extra									2								**2**
M. gordonae	Pulm	1	1	4	1	1	1		1	10	1		1	1		2		**25**
	Extra																	**0**
M.abscessus	Pulm												1					**1**
	Extra			1														**1**
M. chelonae	Pulm				1													**1**
	Extra			2														**2**
M. fortuitum group	Pulm									3								**3**
	Extra												1					**1**
M. kansasii	Pulm				1											1		**2**
	Extra																	**0**
M. marinum	Pulm																	**0**
	Extra																1	**1**
M. mucogenicum	Pulm									1								**1**
	Extra																	**0**
M. xenopi	Pulm	1								3								**4**
	Extra																	**0**
M. terrae complex	Pulm				1													**1**
TOTALS		***5***	**1**	**12**	**5**	**1**	**1**	**0**	**2**	**55**	**1**	**2**	**4**	**1**	**1**	**6**	**2**	**99**

Extra-Pulmonary Sources of Isolation

***Mycobacterium* species**	**Extra-pulmonary Site of Isolation**
***M. tuberculosis* complex**	
***M. avium* complex**	1 blood, 1 stool
M. gordonae	
Other *Mycobacterium* species	*M. abscessus*: 1 hickman site; *M. chelonae*: 1 contact lens case, 1 eyelid; *M. fortuitum* group: 1 knee; *M. marinum*: 1 hand

All four new *M. tuberculosis* isolates from Wisconsin patients are Susceptible to all first-line drugs.

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 **January 2007 ISSUE # 1213**

December 2006 Data

Agent	No. of Isolates	Age	Sex	Specimen	Symptoms
Echovirus 3	1	26 mo	M	Stool Referred isolate	N/A
Parainfluenza 3 Rhinovirus	1 1	3 mo	M	NP	Autopsy
Rhinovirus	1	8 mo	F	NP	Autopsy
Herpes Simplex, type 1	5				
Herpes Simplex, type 2	11				
Trichomonas species	1	18 yr	F	Vulva	STD

***N/A – Not Available**

	Method	Tested	Positive	% Positive
Chlamydia trachomatis	ProbeTec	467	56	12.0%
Neisseria gonorrhoeae	ProbeTec/GenProbe	607	57	9.3%
Mumps	EIA	38	0	0%
Influenza A and B	Real-time RT-PCR	12	0	0%
Norovirus	Real-time RT-PCR	3	0	0%
HSV typing	Real-time PCR	3	0	0%

Please note the following new tests are now being offered by the City laboratory:

1) Norovirus (Geno-groups GI & GII: Single/Duplex RT-PCR assay)
   Lab is now accepting both outbreak and non-outbreak related specimens (Please 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) As of November 1, 2006, the City Lab no longer offers the complement fixation test.

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