MICROBIOLOGY SECTION – MILWAUKEE HEALTH DEPARTMENT

M O N T H L Y R E P O R T

April 2007 Vol. 12, No. 4 **Ajaib Singh, D.V.M., Ph. D.**

MICROBIOLOGY REPORT: The April 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 March 2007 and new cases of syphilis in Milwaukee during February 2007. Information on the laboratory diagnosed mycobacterial infections in Wisconsin during February is also included.

Legionnaires Disease *(March 2007)

No positive case was detected**.**

Pertussis (Whooping cough) March 2007

No positive case was detected**.**

Syphilis (March 2007)

Test	Number Positive	Test	Number Positive
RPR	2	FTA-ABS	14
VDRL	30	DARK FIELD	0

New Cases of Syphilis

The Wisconsin Division of Health has reported 5 new cases (early stages) of syphilis during February 2007 in Milwaukee. The median age of early syphilis cases is 24.0 years (range: 17-43 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 2007 and February 2006)

Stage	Number of Cases	
	February 2007	February 2006
Primary syphilis	1	0
Secondary syphilis	1	3
Early latent	3	6
Late latent	0	2
Total	5	11

Gonorrhea (March 2007)

Number Tested	Decreased Susceptibility (DS) / Resistance (R) Antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
55	3 (R)	0	0	2 (DS)

Gonorrhea from Other Sources (Aurora Consolidated Labs) March 2007

Number Tested	Decreased Susceptibility (DS) / Resistance (R) Antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
5	0	0	0	0

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

Organism	Site	Number Isolates	Organism	Site	Number Isolates
Ureaplasma urealyticum	Genital	1	*Mycoplasma hominis*	Genital	0

Parasitic Enteric Pathogens (March 2007)

Age	Sex	Pathogen	Number Cases
4	M	*Giardia lamblia*	1
		Blastocystis hominis	

Mycobacterial Infections (March 2007)

Age	Sex	Test Results			Identification
		Sputum Smear	Culture	DNA Probe	
69	M	-	+	+	*M. avium complex*
32	M*	-	+	+	*M. tuberculosis complex*
		-	+	+	*M. avium complex*
60	F	-	+	+	*M. avium complex*
61	M	-	+	+	*M. tuberculosis complex*

***Dual infection**

Reference Cultures (March 2007)

Age	Sex	Site/Specimen Source	Culture Identification
69	M	Wound	*Moraxella osloensis*
38	F	Wound	*CDC Group EO-3*
31	M	CSF	*Propionibacterium acnes*
54	M	Wound	*Actinomyces israelii*
49	F	Blood	*Corynebacterium striatum*
16	M	Blood	*Corynebacterium species*
73	F	Urine	*Hafnia alvei*
51	M	Thumb	*Pantoea species*
38	F	Sputum	*Neisseria cinerea*
88	F	Blood	*Psychrobacter phenylpyruvicus*
57	M	Urine	*Enterococcus faecium*
37	F	Blood	*Enterococcus faecium*
82	M	Blood	*Enterococcus faecium*

Bacterial Enteric Pathogens (March 2007)

Age	Sex	Pathogen	Age	Sex	Pathogen
40	M	*Shigella sonnei*	26	F	*Salmonella give*
19	F	*Shigella sonnei*	50	F	*Salmonella schwarzengrund*
25	M	*Shigella sonnei*	18 mo	M	*Salmonella wandsworth*
86	F	*Shigella sonnei*	4	F	*Salmonella heidelberg*
25 mo	M	*Shigella sonnei*	45	F	*Salmonella oranienberg*
10 mo	M	*Shigella sonnei*	11 mo	F	*Salmonella typhimurium*
92	F	*Shigella sonnei*	82	F	*Salmonella tennessee*
			60	M	*Salmonella enteritidis*
			9 mo	M	*Salmonella hadar*

Laboratory Diagnosed Mycobacterial Infections in Wisconsin during February 2007

***Mycobacterium** species*		**Brown**	**Dane**	**Eau Claire**	**Milwaukee**	**Outagamie**	**Racine**	**Trempealeau**	**Washington**	**Waukesha**	**Winnebago**	**Wood**	**TOTALS**
M. tuberculosis complex	Pulm	1	1		2			1					**5**
	Extra									1			**1**
Total *M. tuberculosis* complex		**1**	**1**	**0**	**2**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**6**
M. avium complex	Pulm			2	39	1	2			3	3	1	**51**
	Extra				2								**2**
M. gordonae	Pulm	1	2	1	7	1	2		1	2		2	**19**
	Extra				1								**1**
M. abscessus	Pulm		1		1								**2**
	Extra												**0**
M. chelonae	Pulm				2								**2**
	Extra				2								**2**
M. fortuitum group	Pulm	1			3							1	**5**
	Extra					1							**1**
M. kansasii	Pulm				1								**1**
	Extra												**0**
M. marinum	Pulm												**0**
	Extra	1	1		1								**3**
M. mucogenicum	Pulm												**0**
	Extra				1								**1**
M. xenopi	Pulm				4								**4**
	Extra												**0**
M. simiae complex	Pulm				2								**2**
	Extra												**0**
TOTALS		**3**	**4**	**3**	**66**	**3**	**4**	**0**	**1**	**5**	**3**	**4**	**96**

Extra-Pulmonary Sources of Isolation:

M. tuberculosis Extra-pulmonary:	1 lymph node
M. avium complex Extra-pulmonary:	2 gastric
M. gordonae Extra-pulmonary:	1 elbow
Other *Mycobacterium* species	*M. abscessus*: 1 abdomen, *M. chelonae*: 1 elbow, 1 breast *M. fortuitum* group: 1 thigh wound, *M. marinum*: 1 arm, 1 thumb, 1 finger *M. mucogenicum*: 1 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 February, all 5 new *M. tuberculosis* isolates from Wisconsin patients are sensitive to first line of 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 April 2007 ISSUE # 1216

March 2007 Data

Agent	No. of Isolates	Age	Sex	Specimen	Symptoms
Adenovirus	1	7	F	Trach wound Referred isolate	N/A
Adenovirus	1	21	F	Throat	Cough, sore throat, fever
Adenovirus	1	22	F	Throat	ARD, fever, headache
Coxsackie A9	1	7	F	Wound - colon Referred isolate	N/A
Influenza A (H1)	1	20	F	Throat	Cough, sore throat, fever, headache, pleurodynia
Influenza A (H3)	1	25	F	Throat	ARD
Influenza A (H3)	1	18	F	Throat	Cough, sore throat, fever
Influenza A (H3)	1	19	M	Throat	ARD, cough, fever
Influenza A (H3)	1	22	M	Throat	ARD
Influenza A (H3)	1	20	F	Throat	Cough, fever, headache, pleurodynia
Influenza A (H3)	1	23	F	Throat	Cough, fever, headache
Influenza A (H3)	1	19	F	Throat	ARD, cough, fever, headache
Influenza A (H3)	1	21	M	Throat	ARD, URI, cough, fever, nausea
Influenza A (H3)	1	19	F	Throat	Cough, sore throat, fever
Influenza A (H3)	1	20	F	Throat	ARD, cough, sore throat, fever, headache
Influenza A (H3)	1	19	M	Throat	URI, cough, sore throat, fever, headache, nausea
Influenza A (H3)	1	22	F	Throat	URI, headache
Influenza A (H3)	1	23	F	Throat	ARD
Influenza A (H3)	1	19	F	Throat	ARD, cough, sore throat, fever, headache, vomiting
Influenza A (H3)	1	20	F	Throat	URI, cough, sore throat, fever, headache
Influenza A (H3)	1	22	M	Throat	ARD, cough, fever
Influenza A (H3)	1	18	F	Throat	Cough, fever

Influenza A (H3)	1	20	F	Throat	Cough, sore throat, fever, headache, myalgias, fatigue
Influenza A (H3)	1	32	M	NP	Vaccinated
Influenza A (H3)	1	19	M	Throat	ARD, cough, fever, headache
Influenza A (H3)	1	22	M	Throat	Cough, fever, headache, myalgias, fatigue
Influenza A (H3)	1	26	F	Throat	Cough, sore throat, fever, headache
Influenza A (H3)	1	18	F	Throat	R/O influenza
Influenza A (H3)	1	19	M	Throat	Cough, sore throat, fever, headache, vomiting
Influenza A (H3)	1	21	M	Throat	Cough, sore throat, fever, headache, bronchitis
Influenza A (H3)	1	19	M	Throat	URI, cough, sore throat, fever, headache
Influenza A (H3)	1	24	F	Throat	Cough, sore throat, fever
Influenza A (H3)	1	24	M	Sub-lingual lesion	Lymphadenopathy
Influenza A (H3)	1	20	F	Throat	URI, cough, sore throat, fever, headache
Influenza A (H3)	1	19	M	Throat	Cough, sore throat, fever, headache, pleurodynia, myalgias, fatigue
Influenza A (H3)	1	18	F	Throat	Cough, sore throat, fever
Influenza A (H3)	1	18	F	Throat	URI, cough, sore throat, fever, headache, pleurodynia, lymphadenopathy
Influenza A (H3)	1	27	F	Throat	ARD
Influenza A (H3)	1	19	F	Throat	Cough, sore throat, fever, headache
Influenza A (H3)	1	25	M	Throat	Cough, fever, headache, nausea
Influenza A (H3)	1	29	M	Throat	Cough, fever, myalgias
Influenza A (H3)	1	20	M	Throat	Cough, sore throat, fever, headache, myalgias, fatigue
Influenza A (H3)	1	20	M	Throat	Cough, sore throat, fever, headache, myalgias, fatigue
Influenza A (H3)	1	22	M	Throat	Cough, fever, headache, myalgias
Influenza A (H3)	1	23	M	Throat	URI, cough, sore throat, fever,

					headache, pleurodynia
Influenza A (H3)	1	19	F	Throat	Cough, fever, headache
Influenza A (H3)	1	21	F	Throat	Cough, fever
Influenza A (H3)	1	24	F	Throat	Cough, fever, headache, pleurodynia, myalgias, bronchitis
Influenza A (H3)	1	20	F	Throat	Bronchitis, arthritis L ankle, R knee pain
Influenza A (H3)	1	21	F	Throat	Cough, sore throat, fever
Influenza A (H3)	1	35	F	Throat	Cough, sore throat, fever, headache, myalgias - vaccinated
Influenza A (H3)	1	18	M	Throat	ARD, URI, cough, sore throat, fever
Influenza A (H3)	1	31	M	Throat	URI, cough, sore throat, fever, myalgias, fatigue
Influenza A (H3)	1	21	M	Throat	Cough, fever, vomiting
Influenza B	1	21	M	Throat	ARD, URI, cough
Influenza B	1	20	M	Throat	URI, cough, sore throat, fever, myalgias, vomiting, nausea, diarrhea
Influenza B	1	20	M	Throat	URI, cough, sore throat, fever, headache
Rhinovirus	1	2 mo	M	NP Referred isolate	N/A
Rhinovirus	1	22 mo	M	NP Referred isolate	N/A
Rhinovirus	1	10 mo	F	NP Referred isolate	Hypoxia
Varicella Zoster Virus	1	23	F	Abdomen lesion	Rash
Herpes simplex, type 1	9				
Herpes simplex, type 2	11				

***N/A – Not Available**

Agent	Method	Tested	Positive	% Positive
Chlamydia trachomatis	ProbeTec	512	66	12.9%
Neisseria gonorrhoeae	ProbeTec/GenProbe	672	76	11.3%
Mumps virus	EIA	65	0	0%
Mumps virus	Real-time RT-PCR	2	0	0%
Enterovirus	Real-time RT-PCR	1	0	0%
Influenza virus	Real-time RT-PCR	80	51	63.8%
Norovirus	Real-time RT-PCR	2	0	0%

Important News

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

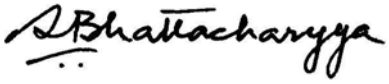
1) Norovirus (Geno-groups GI & GII: Single/Duplex assay) – Please call the Lab prior to submission
2) Influenza (Subtypes A – H1, H3, H5) and B (Single, Duplex and/or Multiplex assay)
3) Mumps Virus (Duplex assay)
4) *Bordetella pertussis/parapertussis* (single and/or duplex assay)
5) Herpes Simplex 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 is no longer offering the complement fixation test.



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