

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
<i>Ureaplasma urealyticum</i>	Genital	22	<i>Mycoplasma hominis</i>	Genital	1

Parasitic Enteric Pathogens (March 2005)

Age	Sex	Pathogen	Number Cases
44	M	<i>Blastocystis hominis</i>	1
11	M	<i>Entamoeba coli</i>	1
		<i>Endolimax nana</i>	
		<i>Giardia lamblia</i>	
		<i>Entamoeba sp</i>	
11	M	<i>Entamoeba histolytica/dispar</i>	1
		<i>Giardia lamblia</i>	
34	F	<i>Entamoeba coli</i>	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	<i>Escherichia coli</i>
57	F	Urine	<i>Neisseria sunflava</i>
40	F	Wound	<i>Tsukamurella sp</i>
74	F	Urine	<i>Citrobacter freundii</i>
74	F	Urine	<i>Citrobacter freundii</i>
67	M	Blood	<i>Bacteroides urelyticus</i>
53	F	Other	<i>Corynebacterium jeikeum</i>
88	M	Sputum	<i>Moraxella nonliquefaciens</i>
75	M	Other	<i>Streptococcus milleri sp gp</i>
48	M	Blood	<i>Streptococcus salivarius sp gp</i>
58	M	Other	<i>Bacillus sp. NOT B. anthracis</i>
18mo	M	Other	<i>Moraxella nonliquefaciens</i>
79	F	Blood	<i>Bacteroides fragilis</i>
36	F	Stool	<i>Escherichia coli</i> O157:H7

Bacterial Enteric Pathogens (March 2005)

Age	Sex	Pathogen	Age	Sex	Pathogen
32	F	<i>Shigella sonnei</i>	3mo	M	<i>Salmonella edinburg</i>
6	F	<i>Shigella sonnei</i>	77	F	<i>Salmonella saintpaul</i>
3	M	<i>Shigella sonnei</i>	17	F	<i>Salmonella enteritidis</i>
6	F	<i>Shigella sonnei</i>	7mo	M	<i>Salmonella poona</i>
3	M	<i>Shigella sonnei</i>	12	M	<i>Salmonella heidelberg</i>
6	M	<i>Shigella sonnei</i>	24	M	<i>Salmonella typhimurium</i>
			67	M	<i>Salmonella oranienburg</i>
56	F	<i>Salmonella java</i>	9	M	<i>Salmonella heidelberg</i>
3	M	<i>Salmonella java</i>	78	F	<i>Salmonella heidelberg</i>
81	F	<i>Salmonella java</i>	7mo	F	<i>Salmonella monteideo</i>
24	F	<i>Salmonella enteritidis</i>	65	F	<i>Salmonella typhimurium</i>
24mo	F	<i>Salmonella saintpaul</i>	25	M	<i>Salmonella subsp IIIb</i> 48(v); 1,v;z

Laboratory Diagnosed Mycobacterial Infections in Wisconsin during February 2005

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

Extra-Pulmonary Sources of Isolation:

<i>M. tuberculosis</i> Extra-pulmonary:	
<i>M. avium</i> complex Extra-pulmonary:	1 pleural, 1 blood, 1 stool

<i>M. gordonae</i> Extra-pulmonary:	1 stool
Other <i>Mycobacterium</i> species	1 <i>smegmatis</i> cheek, 1 <i>abscessus</i> scapula cyst, 1 <i>fortuitum</i> group lymph node, 3 <i>marinum</i> hand 2 <i>mucogenicum</i> blood, 1 <i>mucogenicum</i> lymph node, 1 <i>scrofulaceum</i> neck, 1 <i>bovis</i> BCG scrot

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.

SUMMARY OF CONFIRMED VIRUS INFECTIONS

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MILWAUKEE HEALTH DEPARTMENT

VIROLOGY DIVISION, G. SEDMAK, Ph.D. (414)286-3526

WEBSITE: www.milwaukee.gov/healthlab

"We welcome any question or comments you have. Please see our
"Feedback" form on our website.

VIRUS ISOLATION: WEEKS OF APRIL 6 TO MAY 9, 2005

Patient	Symptoms	Specimen	Submitted	Virus
F	Cough, fever	Throat Swab	04/11/05	Influenza B

21 yr U.W.M.				
F 19 yr U.W.M.	Fever, cough	Throat Swab	04/06/05	Influenza B
F 22 yr U.W.M.	Fever, cough, sore throat	Throat Swab	03/29/05	Influenza B
F 5 mo	Infant death	Autopsy NP Swab	04/28/05	Rhinovirus
F 4 mo	Diarrhea	Stool	04/12/05	Adenovirus
M 3 mo	Infant death	Autopsy Colon Swab	04/04/05	Adenovirus
M 4 mo	Diarrhea	Stool	04/20/05	Rotavirus
F 24 mo	Diarrhea	Stool	04/10/05	Rotavirus
M 42 yr	Skin lesion	Lesion Swab	04/20/05	Varicella-Zoster Virus
F 47 yr	Finger lesion	Lesion Swab	04/19/05	Varicella-Zoster Virus
F 26 yr	S.T.D.	Cervical Lesion Swab	05/06/05	HSV (Type 2 CPE)
F 23 yr	S.T.D.	Vulva Lesion Swab	05/04/05	HSV (Type 1 CPE)
F 20 yr	S.T.D.	Vulva Lesion Swab	05/04/05	HSV (Type 2 CPE)
F 23 yr	S.T.D.	Mons pubis Lesion Swab	05/02/05	HSV (Type 2 CPE)
F 18 yr	S.T.D.	Vulva Lesion Swab	04/28/05	HSV (Type 1 CPE)
M 22 yr	S.T.D.	Penis Lesion Swab	04/27/05	HSV (Type 2 CPE)
M 20 yr	S.T.D.	Penis Shaft Lesion Swab	04/27/05	HSV (Type 2 CPE)
M 9 yr	Fever	NP Swab	04/25/05	HSV (Type 1 CPE)

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MILWAUKEE HEALTH DEPARTMENT

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VIRUS ISOLATION: WEEKS OF APRIL 6 TO MAY 9, 2005

Patient	Symptoms	Specimen	Submitted	Virus
F 18 yr	Tongue lesion, fever, sore throat	Tongue Lesion Swab	04/20/05	HSV (Type 1 CPE)
F 35 yr	S.T.D.	Vulva Lesion Swab	04/20/05	HSV (Type 1 CPE)
F 19 yr	S.T.D.	Vulva Lesion Swab	04/15/05	HSV (Type 2 CPE)
M 27 yr	Penis lesion	Lesion Swab	04/15/05	HSV (Type 2 CPE)
F 23 yr	S.T.D.	Vulva Sore Swab	04/13/05	HSV (Type 1 CPE)
M 24 yr	Sore throat, oral lesions	Throat Swab	04/13/05	HSV (Type 2 CPE)
M 19 yr	Fever, lymphadenopat hy	Throat Swab	04/12/05	HSV (Type 1 CPE)
M 14 yr	S.T.D.	Penis Swab	04/12/05	HSV (Type 2 CPE)
M 25 yr	Eyelid lesion	Eyelid Swab	04/11/05	HSV (Type 1 CPE)
F 51 yr	Chin lesion	Chin Swab	04/08/05	HSV (Type 1 CPE)
M 33 yr	S.T.D.	Penis Lesion Swab	04/08/05	HSV (Type 2 CPE)
F 19 yr	S.T.D.	Vaginal Lesion Swab	04/07/05	HSV (Type 2 CPE)
M 24 yr	S.T.D.	Penis Lesion Swab	04/05/05	HSV (Type 2 CPE)
F 21 yr	Oral lesions	Gingival Lesion Swab	04/04/05	HSV (Type 1 CPE)
F 20 yr	Oral ulcers	Ulcer Swab	04/04/05	HSV (Type 1 CPE)
F 26 yr	S.T.D.	Vaginal Lesion Swab	04/01/05	HSV (Type 1 CPE)
F 21 yr	S.T.D.	Genital Swab	04/01/05	HSV (Type 1 CPE)

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MILWAUKEE HEALTH DEPARTMENT
VIROLOGY DIVISION, G. SEDMAK, Ph.D. (414)286-3526

VIRUS ISOLATION: WEEKS OF APRIL 6 TO MAY 9, 2005

SEROLOGY:

Patient	Symptoms	Acute Serum Date	Viral Agent
M 25 yr	Jail: HIV Screen	04/12/04	HIV + by EIA
F 24 yr	STD Clinic: HIV Screen	04/07/05	HIV + by EIA



Gerald V. Sedmak, Ph.D.
Chief Virologist

GVS/kb

WISCONSIN VIROLOGY LABORATORY INFORMATION NETWORK

DATA FOR WEEK ENDING: April 30, 2005

Data represent laboratory testing, not physician diagnoses; data are provided by virology laboratories listed and collated by Wisconsin State Laboratory of Hygiene

Total Number of Viral Specimens Positive / Tested by Specimens source:	Respiratory 7 / 89	CNS 0 / 17	Enteric 0 / 9	Eye 0 / 0	Lesion 2 / 18	Other 1 / 26
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Reporting <i>Laboratory</i> & City	NUMBER OF VIRAL POSITIVES BY AGENT & (SPECIMEN SOURCE)																VZV
	<i>Influenza</i>			<i>RSV</i>	<i>Parainfluenza</i>				Res p Unk	Rhin o	<i>Adeno</i>		<i>Entero</i>				
A	B	Un k	1		2	3	4	Un k			(Resp)	(Othe r)	(Resp)	(CNS)	(Other)		
Bellin Hsp, Green Bay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
St. Vincent Hsp, Green Bay	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Gundersen Lutheran, LaCrosse	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
St. Mary’s Hsp Med Ctr, Madison	0	0	0	2	0	0	1	0	0	0	1	0	0	0	0	0	
Wisconsin State Lab, Madison	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
Marshfield Labs, Marshfield	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Childrens Hsp, Milwaukee	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
Milwaukee Hlth Dept, Milwaukee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aurora Consolidated Labs, Milwaukee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
United Dynacare, Milwaukee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Midwest Clinical Labs, Wauwatosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
TOTAL	0	1	0	3	0	0	1	0	0	0	2	0	1	0	0	0	2

*8% of respiratory specimens were reported positive this week by culture; 3% for RSV, 2% for rhinoviruses, 1% for influenza, 1% for Parainfluenza and 0% for Adenovirus.

***Influenza:** The positive predictive value of rapid influenza tests are low; the negative predictive values of rapid influenza tests are high.

***ILI Rates:** The Wisconsin Division of Public Health reported that the influenza-like illness (ILI) rate was low throughout Wisconsin during the week ending April 23, 2005.

***Wisconsin Virology Lab Reports:** One influenza B positive was reported this week; no influenza A was reported.