

MICROBIOLOGY DIVISION – MILWAUKEE HEALTH DEPARTMENT

MONTHLY REPORT

January 2005 Vol. 10, No. 1

Ajaib Singh, D.V.M., Ph. D.

MICROBIOLOGY REPORT: The January 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 December 2004 and new cases of syphilis in Milwaukee during November 2004. Information on the laboratory diagnosed mycobacterial infections in Wisconsin during November is also included.

Legionnaires Disease (December 2004)

Patient		Test		
Age	Sex	Urine Antigen	Culture	DFA
70 y	M	+	ND	ND
44 y	M	+	ND	ND

ND = Not Done.

Pertussis (Whooping cough, an update)

Specimens from most clinics for pertussis were directed to the Wisconsin State Laboratory of Hygiene (WSLH), in Madison, for Real-time PCR assay. During the month of December more cases were identified in the Milwaukee County including the city of Milwaukee. The exact number has not yet been determined. The City of Milwaukee Health department Laboratory continues testing of selected samples for pertussis using culture and real-time PCR assay. However, no positive case was detected during December 2004.

Syphilis (December 2004)

Test	Number Positive	Test	Number Positive
RPR	1	FTA-ABS	6
VDRL	33	DARKFIELD	0

New Cases (Syphilis)

The Wisconsin Division of Health has reported 2 new cases (age 31 & 41 years) of syphilis (early stages) during November 2004 in Milwaukee. Morbidity distributions of the disease reported in this and the corresponding month of the previous year are as follows:

New Cases of Syphilis (November 2004 and November 2003)

Stage	Number of Cases	
	November 2004	November 2003
Primary syphilis	0	0
Secondary syphilis	0	0
Early latent syphilis	2	0
Late latent syphilis	1	2
Total	3	2

Gonorrhea (MHD – December 2004)

Number Tested	Decreased Susceptibility (DS)/Resistance (R) to Antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
37	0	0	0	0

Gonorrhea from Other Sources (December 2004)

Number Tested	Decreased Susceptibility (DS)/Resistance (R) to Antibiotics			
	Ciprofloxacin	Ceftriaxone	Spectinomycin	Azithromycin
5	1R	0	0	1DS

Isolates Other Than *N. gonorrhoeae* (December 2004)

Organism	Site	Number Isolates	Organism	Site	Number Isolates
<i>Ureaplasma urealyticum</i>	Genital	22	<i>Mycoplasma hominis</i>	Genital	2

Parasitic Enteric Pathogens (December 2004)

Age	Sex	Pathogen	Number Cases
26	M	<i>Strongyloides stercoralis</i>	1
11	F	<i>Entamoeba coli</i>	1
23*	F*	<i>Iodamoeba buetschlii</i>	1
		<i>Giardia lamblia</i>	
		<i>Entamoeba coli</i>	
5	F	<i>Entamoeba coli</i>	1
6	M	<i>Hymenolepis nana</i>	1
12	M	<i>Entamoeba histolytica/E. dispar</i>	1
9*	M*	<i>Entamoeba hartmanni</i>	1
		<i>Entamoeba coli</i>	
8	F	<i>Giardia lamblia</i>	1
42	M	<i>Entamoeba coli</i>	1
18	M	<i>Giardia lamblia</i>	1
10	M	<i>Giardia lamblia</i>	1
7	F	<i>Giardia lamblia</i>	1

*Dual infection

Mycobacterial Infections (December 2004)

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

Reference Cultures (December 2004)

Age	Sex	Site/Specimen Source	Culture Identification
22	F	Stool	<i>Escherichia coli</i> NOT o157:H7
79	M	Blood	<i>Streptococcus mitis</i> group
77	M	Other	<i>Corynebacterium striatum</i>
45	F	N.A.	<i>Escherichia coli</i>
21	M	Throat	<i>Neisseria meningitidis</i>
20	F	Throat	<i>Neisseria lactamica</i>

Bacterial Enteric Pathogens (December 2004)

Age	Sex	Pathogen	Age	Sex	Pathogen
27mo	F	<i>Shigella sonnei</i>	28	M	<i>Salmonella</i> gp B monophasic i
77	F	<i>Shigella sonnei</i>	62	F	<i>Salmonella newport</i>
29	F	<i>Shigella sonnei</i>	25	M	<i>Salmonella</i> gp B monophasic i
4	F	<i>Shigella sonnei</i>	45	F	<i>Salmonella litchfield</i>
21	F	<i>Shigella sonnei</i>	20	M	<i>Salmonella heidelberg</i>
11d	F	<i>Shigella sonnei</i>	14	M	<i>Salmonella enteritidis</i>
10	F	<i>Shigella sonnei</i>	19	F	<i>Salmonella typhimurium</i>
27mo	F	<i>Shigella sonnei</i>	21	F	<i>Salmonella enteritidis</i>
28mo	F	<i>Shigella sonnei</i>	22	F	<i>Salmonella typhimurium</i>
6	F	<i>Shigella sonnei</i>	30	F	<i>Salmonella typhimurium</i>
25mo	M	<i>Shigella sonnei</i>	32mo	M	<i>Salmonella panama</i>

Laboratory Diagnosed Mycobacterial Infections in Wisconsin during November 2004

Mycobacterium Species	Pulmonary or Extra-Pulmonary															
		Brown	Dane	Eau Claire	Jefferson	Kenosha	La Crosse	Marathon	Milwaukee	Outagamie	Racine	Rock	Sheboygan	Washington	Waukesha	Winnebago
<i>M. tuberculosis</i> complex	Pulm				1			2	3				1			
	Extra		1						1							
Total <i>M. tuberculosis</i> complex			1		1			2	4				1			
<i>M. avium</i> complex	Pulm	1	2			2	1		31	2		1			1	5
	Extra								1							
<i>M. gordonae</i>	Pulm		5			2	2		5		1				1	3
	Extra	1														
<i>M. abscessus</i>	Pulm								1	1						
<i>M. chelonae</i>	Pulm	1	1			1			2							
<i>M. fortuitum</i> group	Pulm		2						5							
	Extra													1		
<i>M. kansasii</i>	Pulm		1						2							
<i>M. marinum</i>	Extra	1													1	
<i>M. mucogenicum</i>	Pulm								1							
<i>M. smegmatis</i>	Pulm		1													
<i>M. bovis BCG</i>	Extra			1												
<i>M. asiaticum</i>	Pulm	1														
<i>M. xenopi</i>	Pulm		1						3						1	
Total Non-TB Mycobacteria		5	13	1	0	5	3	0	51	3	1	1	0	1	4	8

Extra-Pulmonary Isolation Data:

M. tuberculosis Extra-pulmonary: 2 pleural, 1 shoulder *M. avium* complex : 1 blood *M. gordonae* 1 urine

Other Species Extra-pulmonary: 1 *marinum* hand, 1 *bovis* BCG urine, 1 *fortuitum* group blood, 1 *marinum* finger.

Out-of-State Isolation data: 10 TBC isolates reported by Wisconsin laboratories this month were from Wisconsin TB cases.

Not included in this table: 1 extra-pulmonary TBC (pleural) isolated in Milwaukee County, patient is from Illinois.

Isolate Resistance Data: 1 TBC isolate from Milwaukee County is resistant to PZA. 9 TBC isolates are susceptible to all first-line drugs.

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

SUMMARY OF CONFIRMED VIRUS INFECTIONS

ISSUE #1189 PAGE ONE

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 JANUARY 13 TO JANUARY 31, 2005

Patient	Symptoms	Specimen	Submitted	Virus
F 24 yr M.U.	A.R.D., fever, headache, cough	Throat Swab	01/28/05	Influenza A
F 24 yr U.W.M.	R/o influenza	Throat Swab	01/27/05	Influenza A
M 21 yr M.U.	Fever, sore throat, vomiting	Throat Swab	01/27/05	Influenza A
F 20 yr M.U.	Fever, headache, cough	Throat Swab	01/27/05	Influenza A
F 52 yr	A.R.D., asthma	Sputum	01/26/05	Influenza A
F 27 yr U.W.M.	Fever, headache, cough, sore throat, pleurodynia	Throat Swab	01/26/05	Influenza A
F 20 yr	Fever, cough, sore throat, diarrhea	Throat Swab	01/26/05	Influenza A
F 9 mo	A.R.D.	NP/RMK Cells	01/26/05	Influenza A (H3)
F 22 yr M.U.	Fever, headache, cough, myalgia	Throat Swab	01/25/05	Influenza A (H3)
F 21 yr M.U.	Fever, cough, sore throat, myalgia, vomiting, nausea	Throat Swab	01/24/05	Influenza A
F 21 yr	Fever, vomiting,	Throat Swab	01/24/05	Influenza A

M.U.	diarrhea, cough, myalgia			
M 21 yr M.U.	Cough, fever, headache, myalgia	Throat Swab	01/24/05	Influenza A
F 31 yr	A.R.D.	Nasal Swab/RMK Cells	01/24/05	Influenza A (H3)
F 54 yr	A.R.D.	NP Swab/RMK Cells	01/24/05	Influenza A (H3)
F 38 yr	A.R.D.	NP Swab/RMK Cells	01/24/05	Influenza A (H3)
F 42 yr	A.R.D.	Nasal/RMK Cells	01/24/05	Influenza A (H3)

SUMMARY OF CONFIRMED VIRUS INFECTIONS

ISSUE #1189 PAGE TWO

MILWAUKEE HEALTH DEPARTMENT

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

VIRUS ISOLATION: WEEKS OF JANUARY 13 TO JANUARY 31, 2005

Patient	Symptoms	Specimen	Submitted	Virus
M 3 yr	A.R.D.	NP/RMK Cells	01/24/05	Influenza A (H3)
M 32 yr	A.R.D.	Throat Swab/RMK Cells	01/24/05	Influenza A (H3)
M 8 yr	A.R.D.	Throat Swab/RMK Cells	01/21/05	Influenza A (H3)
M 4 mo	A.R.D.	NP/ RMK Cells	01/21/05	Influenza A (H3)
M 25 yr	A.R.D.	NP/RMK Cells	01/21/05	Influenza A (H3)
M 78 yr	A.R.D.	Nasal/RMK Cells	01/20/05	Influenza A (H3)
M 13 yr	A.R.D.	NP/RMK Cells	01/14/05	Influenza A (H3)
F 48 yr	A.R.D.	NP/RMK Cells	01/14/05	Influenza A (H3)
M 33 yr	A.R.D.	NP/RMK Cells	01/14/05	Influenza A (H3)
M 16 yr	A.R.D., cough, fever	NP Swab	01/12/05	Influenza A
M 14 yr	Cough, fever, headache	NP Swab	01/13/05	Influenza A
F 10 yr	Cough, fever	NP Swab	01/10/05	Influenza A (H3)
M 43 yr	A.R.D.	NP/RMK Cells	01/12/05	Influenza A (H3)
M 41 yr	Fever, chills, headache, cough, sore throat	Throat Swab	01/12/05	Influenza A (H3)
F 8 mo	A.R.D.	NP Swab	01/20/05	Respiratory Syncytial Virus

F 29 yr M.U.	Fever, vomiting	Throat Swab	01/26/05	Adenovirus
M 9 yr	Chronic U.R.I.	Sputum/MRC-5 Cells	01/18/05	Rhinovirus
M 3 yr	Diarrhea	Stool	01/12/05	Adenovirus 40/41 EIA
M 5 wk	Diarrhea	Stool	01/13/05	Rotavirus
F 5 yr	Viral meningitis	CSF/MRC-5 Cells	01/18/05	Echovirus-9

SUMMARY OF CONFIRMED VIRUS INFECTIONS
ISSUE #1189 PAGE THREE
MILWAUKEE HEALTH DEPARTMENT
VIROLOGY DIVISION, G. SEDMAK, Ph.D. (414)286-3526

VIRUS ISOLATION: WEEKS OF JANUARY 13 TO JANUARY 31, 2005

Patient	Symptoms	Specimen	Submitted	Virus
M 4 mo	No Information	NP/HEp-2 Cells	01/06/05	Echovirus-22 (now called human parechovirus - Type 1)
F 39 yr	Vulva lesion	Lesion Swab	01/26/05	HSV (Type 2 CPE)
F 65 yr	Vulva lesions	Lesion Swab	01/27/05	HSV (Type 2 CPE)
F 27 yr	S.T.D.	Labial Lesion Swab	01/27/05	HSV (Type 2 CPE)
F 29 yr	Lip ulcer	Ulcer Swab	01/25/05	HSV (Type 1 CPE)
F 20 yr	S.T.D.	Labial Ulcer Swab	01/25/05	HSV (Type 1 CPE)
F 72 yr	Fever, sore throat	Throat Swab	01/25/05	HSV (Type 1 CPE)
F 19 yr	S.T.D.	Genital Lesion Swab	01/24/05	HSV (Type 2 CPE)
M 27 yr	R-groin lesion	Lesion Swab	01/24/05	HSV (Type 2 CPE)
M 24 yr	Penis lesion	Penis Swab	01/21/05	HSV (Type 2 CPE)
F 35 yr	S.T.D.	Genital Lesion Swab	01/21/05	HSV (Type 2 CPE)

M 67 yr	No Information	Urine/HEp2 Cells	01/20/05	HSV (Type 2 CPE)
F 64 yr	No Information	Urine/HEp2 Cells	01/20/05	HSV (Type 2 CPE)
M 27 yr	S.T.D.	Pubic Area Lesion Swab	01/20/05	HSV (Type 2 CPE)
F 19 yr	S.T.D.	Vaginal Lesion Swab	01/20/05	HSV (Type 2 CPE)
F 48 yr	Hard palate blister	Blister Swab	01/20/05	HSV (Type 1 CPE)
F 30 yr	R-shoulder lesion	Lesion Swab	01/20/05	HSV (Type 1 CPE)
M 18 yr	S.T.D.	Penis Lesion Swab	01/18/05	HSV (Type 2 CPE)
M 34 yr	Mouth lesion	Mouth Swab	01/18/05	HSV (Type 1 CPE)
M 19 yr	S.T.D.	Penis Lesion Swab	01/14/05	HSV (Type 2 CPE)

SUMMARY OF CONFIRMED VIRUS INFECTIONS
ISSUE #1189 PAGE FOUR
MILWAUKEE HEALTH DEPARTMENT
VIROLOGY DIVISION, G. SEDMAK, Ph.D. (414)286-3526

VIRUS ISOLATION: WEEKS OF JANUARY 13 TO JANUARY 31, 2005

Patient	Symptoms	Specimen	Submitted	Virus
F 6 yr	Abuse??	Vaginal Swab	01/18/05	Chlamydia trachomatis by culture

SEROLOGY:

Patient	Symptoms	Acute Serum Date	Viral Agent
F 44 yr	STD Clinic; HIV Screen	01/15/05	HIV+ by EIA

Gerald V. Sedmak, Ph.D.
Chief Virologist
GVS/kb

WISCONSIN VIROLOGY LABORATORY INFORMATION NETWORK

DATA FOR WEEK ENDING: January 22, 2005

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

Total Number of Viral Specimens Positive / Tested by Specimens source:	Respiratory 139 / 354	CNS 1 / 5	Enteric 0 / 15	Eye 0 / 1	Lesion 1 / 20	Other 1 / 12
--	--------------------------	--------------	-------------------	--------------	------------------	-----------------

Reporting Laboratory & City	NUMBER OF VIRAL POSITIVES BY AGENT & (SPECIMEN SOURCE)																
	Influenza			RSV	Parainfluenza					Res p Unk	Rhino	Adeno		Entero		VZV	
A	B	Un k	1		2	3	4	Un k	(Resp)			(Other)	(Resp)	(CNS)	(Other)		
Bellin Hsp, Green Bay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Vincent Hsp, Green Bay	11	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Gundersen Lutheran, LaCrosse	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Mary's Hsp Med Ctr, Madison	61	3	0	0	0	1	0	0	0	0	0	2	0	0	0	0	1
Wisconsin State Lab, Madison	34	8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Marshfield Labs, Marshfield	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Childrens Hsp, Milwaukee	2	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0
Milwaukee Hlth Dept, Milwaukee	6	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	0
United Dynacare, Milwaukee	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Medical Science Lab, Milwaukee	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
TOTAL	119	14	0	0	0	1	0	0	0	0	2	3	1	0	1	0	1

*39.9% of respiratory specimens were reported positive this week by culture (this includes rapid test positive specimens submitted for culture confirmation).

***Influenza:** The number of influenza positives reported by Wisconsin virology laboratories continued to increase; most influenza positive continue to be influenza A, but the number of influenza B positives also increased. All subtyped influenza A viruses in Wisconsin have been influenza A (H3). The percent of specimens positive for influenza by antigen detection increased for the 6th consecutive week and is now approximately 27%. **The positive predictive values of rapid influenza tests are increasing and are expected to reach their highest level during the next few weeks.**

***In Wisconsin:** for the week ending January 15, 2005, influenza-like illness (ILI) rates were moderate in the Southeastern, Southern and Western regions and low in the Northwestern and Northern regions.

***RSV:** The percent of antigen detection tests that were reported positive for RSV increased this week and is now approximately 19%.