

MICROBIOLOGY SECTION – MILWAUKEE HEALTH DEPARTMENT

MONTHLY REPORT

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

Legionnaires Disease (July, 2007)

Patient		Test		
Age	Sex	Urine Antigen	Culture	DFA
		0	0	0

No positive case was detected.

Pertussis (Whooping cough) July 2007

Patient		Test		
Age	Sex	Real-time PCR	Culture	DFA
		0	0	0

No positive case was detected.

Syphilis (July 2007)

Test	Number Positive	Test	Number Positive
RPR	2	TP-PA	10
VDRL	34	DARKFIELD	0

New Cases of Syphilis

The Wisconsin Division of Health has reported 6 new cases (early stages) of syphilis during June 2007 in Milwaukee. The median age of early syphilis cases is 38.0 years (range: 21-67 years). Morbidity distributions of the disease reported in this and the corresponding month of the previous year are as follows:

New Cases of Syphilis (June 2007 and June 2006)

Stage	Number of Cases	
	June 2007	June 2006
Primary syphilis	2	1
Secondary syphilis	3	4
Early latent	1	1
Late latent	0	3
Total	6	9

Gonorrhea (July 2007)

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

Gonorrhea from Other Sources (Aurora Consolidated Labs) July 2007

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

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

Organism	Site	Number Isolates	Organism	Site	Number Isolates
<i>Ureaplasma urealyticum</i>	Genital	4	<i>Mycoplasma hominis</i>	Genital	4

Parasitic Enteric Pathogens (July 2007)

Age	Sex	Pathogen	Number Cases
5	M	<i>Giardia lamblia</i>	1
32m	M	<i>Blastocystis hominis</i>	1
16	M	<i>Entamoeba coli</i> <i>Trichuris trichiura</i> <i>Strongyloides stercoralis</i> <i>Giardia lamblia</i>	1
10	M	<i>Blastocystis hominis</i> <i>Giardia lamblia</i>	1
3	M	<i>Entamoeba coli</i> <i>Giardia lamblia</i>	1
28	M	<i>Blastocystis hominis</i>	1
26	F	<i>Entamoeba coli</i>	1
9	F	<i>Entamoeba coli</i>	1
20	F	<i>Iodamoeba buetschlii</i>	1

Mycobacterial Infections (July 2007)

Age	Sex	Test Results		DNA Probe	Identification
		Sputum Smear	Culture		
39	M	-	+	+	<i>M. avium complex</i>
53	M	-	+	+	<i>M. avium complex</i>
		-	+	ND	<i>M. chelonae</i>
34	F	-	+	+	<i>M. avium complex</i>
		-	+	+	<i>M. goodii</i>
44	M	+	+	+	<i>M. tuberculosis complex</i>
61	M	-	+	ND	<i>M. xenopi</i>

ND: Not done

Reference Cultures (July 2007)

Age	Sex	Source	Culture Identification
5	M	Stool	<i>Shigella sonnei</i>
30m	M	Stool	<i>Shigella sonnei</i>
27m	M	Stool	<i>Shigella sonnei</i>
22m	F	Stool	<i>Shigella sonnei</i>
5	M	Stool	<i>Shigella sonnei</i>
14	M	Stool	<i>Shigella sonnei</i>
9	F	Stool	<i>Shigella sonnei</i>
3	M	Stool	<i>Shigella sonnei</i>
24	F	Stool	<i>Shigella sonnei</i>
7	M	Stool	<i>Shigella sonnei</i>
21m	M	Stool	<i>Shigella sonnei</i>
10	F	Stool	<i>Shigella sonnei</i>
33	F	Stool	<i>Shigella sonnei</i>
9	F	Stool	<i>Shigella sonnei</i>
17m	M	Stool	<i>Shigella sonnei</i>
4	M	Stool	<i>Shigella sonnei</i>
17	F	Stool	<i>Shigella sonnei</i>
5	M	Stool	<i>Shigella sonnei</i>
4	M	Stool	<i>Shigella sonnei</i>
5	F	Stool	<i>Shigella sonnei</i>
30	M	Stool	<i>Shigella sonnei</i>
31m	M	Stool	<i>Shigella sonnei</i>
24	F	Stool	<i>Shigella sonnei</i>
9	F	Stool	<i>Shigella sonnei</i>
17	F	Stool	<i>Shigella sonnei</i>
56	F	Stool	<i>Shigella sonnei</i>
32	M	Stool	<i>Shigella sonnei</i>
6	M	Stool	<i>Shigella sonnei</i>
7	F	Stool	<i>Shigella sonnei</i>
3	M	Stool	<i>Shigella sonnei</i>
11m	M	Stool	<i>Shigella sonnei</i>
23m	F	Stool	<i>Shigella sonnei</i>
25	F	Stool	<i>Shigella sonnei</i>
7	F	Stool	<i>Shigella sonnei</i>
24	F	Stool	<i>Shigella sonnei</i>
16m	M	Stool	<i>Shigella sonnei</i>
6	M	Stool	<i>Shigella sonnei</i>
3	M	Stool	<i>Shigella sonnei</i>
10	F	Stool	<i>Shigella sonnei</i>
8	F	Stool	<i>Shigella sonnei</i>
16m	M	Stool	<i>Shigella sonnei</i>

Age	Sex	Source	Culture Identification
17m	-	Stool	<i>Shigella sonnei</i>
3	M	Stool	<i>Shigella sonnei</i>
11	M	Stool	<i>Shigella sonnei</i>
3	F	Stool	<i>Shigella sonnei</i>
20m	M	Stool	<i>Shigella sonnei</i>
38	M	Stool	<i>Shigella sonnei</i>
24	M	Stool	<i>Shigella sonnei</i>
57	F	Stool	<i>Shigella sonnei</i>
5	M	Stool	<i>Shigella sonnei</i>
14	F	Stool	<i>Shigella sonnei</i>
56	F	Stool	<i>Salmonella anatum</i>
37	F	Stool	<i>Salmonella richmond</i>
75	F	Stool	<i>Salmonella enteritidis</i>
36	F	Stool	<i>Salmonella enteritidis</i>
55	M	Stool	<i>Salmonella heidelberg</i>
24	F	Urine	<i>Salmonella muenchen</i>
66	M	Stool	<i>Salmonella typhimurium</i>
27	F	Stool	<i>Salmonella typhimurium</i>
19	M	Stool	<i>Salmonella typhimurium</i>
31	F	Other	<i>Acinetobacter sp</i>
18	M	Blood	<i>Bacillus sp. Not anthracis</i>
59	M	Blood	<i>Bacillus sp. Not anthracis</i>
77	F	Urine	<i>Bacillus mycoides</i>
77	M	Blood	<i>Cardiobacterium hominis</i>
81	F	Urine	<i>Enterococcus faecalis</i>
80	M	Blood	<i>Enterococcus faecalis</i>
57	M	Blood	<i>Moraxella osloensis</i>
18	F	Other	<i>Methylobacterium sp.</i>
24	M	Urine	<i>Oligella urethralis</i>
67	M	Urine	<i>Oligella urethralis</i>
83	M	Sputum	<i>Pseudomonas aeruginosa</i>
22	M	Other	<i>Propionibacterium acne</i>

Bacterial Enteric Pathogens (July 2007)

Age	Sex	Pathogen	Age	Sex	Pathogen
6	F	<i>Shigella sonnei</i>	21	F	<i>Shigella sonnei</i>
7	M	<i>Shigella sonnei</i>	31	F	<i>Shigella sonnei</i>
29m	M	<i>Shigella sonnei</i>	3	F	<i>Shigella sonnei</i>
3	M	<i>Shigella sonnei</i>	5	F	<i>Shigella sonnei</i>
20	F	<i>Shigella sonnei</i>	12	F	<i>Shigella sonnei</i>
10	F	<i>Shigella sonnei</i>	3	M	<i>Shigella sonnei</i>
18m	F	<i>Shigella sonnei</i>	10	M	<i>Shigella sonnei</i>
12	F	<i>Shigella sonnei</i>	23m	M	<i>Shigella sonnei</i>
27	F	<i>Shigella sonnei</i>	23m	F	<i>Shigella sonnei</i>

Laboratory Diagnosed Mycobacterial Infections in Wisconsin during June 2007

<i>Mycobacterium</i> species		Brown	Dane	Eau Claire	Kenosha	La Crosse	Marathon	Milwaukee	Outagamie	Portage	Racine	Washara	Washington	Waukesha	Winnebago	Wood	TOTALS
<i>M. tuberculosis</i> complex	Pulm							5			1	1	1				8
	Extra					1											1
Total <i>M. tuberculosis</i> complex		0	0	0	0	1	0	5	0	0	1	1	1	0	0	0	9
<i>M. avium</i> complex	Pulm	4	6		2			43			1		1		4	4	65
	Extra							3									3
<i>M. gordonae</i>	Pulm	2	2	2				6	1					1	1		15
	Extra						1										1
<i>M. abscessus</i>	Pulm	1	1					1									3
	Extra							1									1
<i>M. chelonae</i>	Pulm															4	4
	Extra							2	1						1	1	5
<i>M. fortuitum</i> group	Pulm				1			4									5
	Extra							3									3
<i>M. kansasii</i>	Pulm															1	1
	Extra																0
<i>M. marinum</i>	Pulm																0
	Extra															1	1
<i>M. mucogenicum</i>	Pulm	1	1					1									3
	Extra		1					1									2
<i>M. xenopi</i>	Pulm							1						1			2
	Extra																0
<i>M. bovis</i> BCG	Extra		1														1
<i>M. gilvum</i>	Pulm							1									1
<i>M. smegmatis</i> group	Pulm		1							1							2
TOTALS		8	13	2	3	0	1	67	2	1	1	0	1	2	6	11	118

Extra-Pulmonary Sources of Isolation:

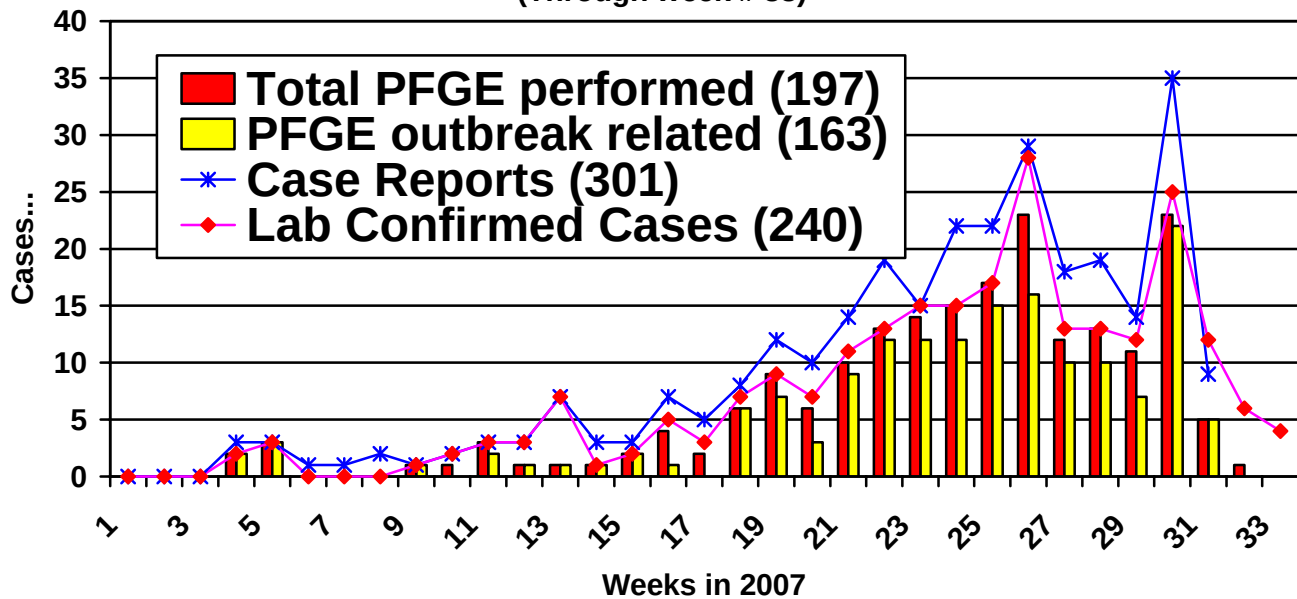
<i>M. tuberculosis</i> Extra-pulmonary:	21 neck abscess
<i>M. avium</i> complex Extra-pulmonary:	2
<i>M. gordonae</i> Extra-pulmonary:	1 small bowel
Other <i>Mycobacterium</i> species	<i>M. abscessus</i> : 1 hand; <i>M. bovis</i> BCG: 1 cellulitis; <i>M. chelonae</i> : 1 hand, 1 scalp, 1 arm, 1 foot, 1 finger; <i>M. fortuitum</i> group: 1 thigh, 1 nail, 1 blood; <i>M. marinum</i> : 1 forearm; <i>M. mucogenicum</i> : 2 blood

M. tuberculosis complex First-Line Drug Susceptibility Testing*

In June 2007, isolation of *M. tuberculosis* was not reported by the participating laboratories and thus, antimicrobial susceptibility tests were not performed.

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

Lab Report for *Shigella sonnei* 2007 Outbreak (Through week # 33)



As of August 17, 2007, 301 confirmed cases of shigellosis have been reported in Milwaukee County via SURVNET with 281 of these cases occurring in residents of the City of Milwaukee. Childcare centers continue to be implicated in the outbreak. Only two (2) additional new cases have been reported to the MHD during the past week which represents a continuation of a downward trend in overall case reporting during the past three (3) weeks.

One case of *Vibrio cholera* 01 was recently diagnosed in Milwaukee and confirmed by CDC, associated with sea food consumption and appears to be a single case of an individual with underlying health issues.

SUMMARY OF CONFIRMED INFECTIONS
Virology & Molecular Diagnostic Section
City of Milwaukee Health Department Laboratory
(414) 286-3526

WEBSITE: www.milwaukee.gov/healthlab **August 2007 ISSUE # 1220**

July 2007 Data

Agent	No. of Isolates	Age	Sex	Specimen	Symptoms
Adenovirus	1	6 mo	M	NP Referred isolate	NA
Enterovirus	1	2 mo	M	NP	Autopsy
Rhinovirus	1	15	M	NP Referred isolate	NA
Rhinovirus	1	10	M	NP Referred isolate	NA
Rhinovirus	1	2 mo	M	NP Referred isolate	NA
Varicella zoster	1	23	F	Buttock lesion	For HSV
Herpes simplex, type 1	4				
Herpes simplex, type 2	10				

*N/A – Not Available

Agent	Method	Tested	Positive	% Positive
<i>Chlamydia trachomatis</i>	ProbeTec	648	71	11.0%
<i>Neisseria gonorrhoeae</i>	ProbeTec/GenProbe	843	91	10.8%
Mumps virus	EIA	29	0	0%
Enterovirus	Real-time RT-PCR	22	1	4.5%
Influenza virus	Real-time RT-PCR	2	1	50%
Adenovirus	Real-time PCR	5	1	20%
HSV	Real-time PCR	2	1	50%
Varicella zoster	Real-time PCR	1	1	100%

Important News

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

- 1) Respiratory Syncytial Virus (RSV)
- 2) Adenovirus

Discontinuation of Tests:

As of July 10, 2007 the City lab will no longer offer *Legionella* IFA serology.



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