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SUMMARY OF CONFIRMED INFECTIONS

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The June 2011 issue presents the laboratory diagnosis of some of the infectious diseases and the reference microbiology, virology and molecular work done in this laboratory during and new cases of syphilis in the City of Milwaukee during May 2011.

Clinical and Environmental Microbiology

Syphilis

Test	Total	Test	Total
RPR Reactive	4	TPPA Reactive	17
VDRL Reactive	33	Darkfield Positive	0

New Cases of Syphilis

Stage	Number of Cases	
	May 2011	May 2010
Primary syphilis	0	0
Secondary syphilis	2	0
Early latent	0	0
Late latent	1	1
Total	3	1

Source: Wisconsin Division of Health

Gonorrhea Antimicrobial Susceptibility Testing

Number Tested	Decreased Susceptible (DS) / Resistant (R) Antibiotics			
	Ciprofloxacin	Cefixime	Ceftriaxone	Azithromycin
34	1(R)	0	0	0

Isolates Other Than *N. gonorrhoeae*

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

DNA Sequencing: The MHD laboratory uses 16S rRNA and the D2 region of the 26S rRNA genes for DNA sequence-based microbial identification of selective reference bacteria and fungal isolates.

Reference Microbe	**Age**	**Sex**	**Source**	**Target gene**	**Final Identification**
Bacteria	2m	M	CSF	16S rRNA	*Moraxella atlantae*

Enteric Parasites Identified

Age	Sex	Parasite
27	M	*Blastocystis hominis*
10	F	*Blastocystis hominis*
		Entamoeba coli
21	F	*Blastocystis hominis*
		Entamoeba coli
		Entamoeba histolytica/Entamoeba dispar
30	F	*Endolimax nana*
32	M	*Entamoeba coli*
40	F	*Entamoeba coli*
38	M	*Entamoeba coli*
24	F	*Giardia lamblia*
7	F	*Giardia lamblia*
9	M	*Giardia lamblia*

Reference Cultures

Age	Sex	Source	Identification
60	F	Hip	*Helococcus kunzii*
22	M	Throat	*Neisseria meningitidis*
23	M	Throat	*Neisseria meningitidis*
20	M	Throat	*Neisseria meningitidis*
26	F	Whole Blood	*Neisseria gonorrhoea*
35	M	Stool	*Plesiomonas shigelloides*
31	F	Stool	*Salmonella* Agona
8	M	Neck, abscess	*Salmonella enterica* subspecies IIIb (diarizonae)
38	M	Stool	*Salmonella* Enteritidis
52	F	Urine	*Salmonella* Enteritidis
6	F	Stool	*Salmonella* Heidelberg
80	M	Urine	*Salmonella* Kokolemle
24	F	Stool	*Salmonella* Monophasic
69	M	Stool	*Salmonella* Newport
26	M	Stool	*Shigella flexneri* type 3
70	M	Stool	*Shigella sonnei*

Antimicrobial Susceptibility pattern of *Shigella sonnei* isolates

Organism	Number Tested	Decreased Susceptibility (DS) / Resistant (R) Antibiotics			
		Ampicillin	Nalidixic Acid	Sulfamethoxazole-Trimethoprim (SXT)	Tetracyclin
1	1	0	0	0	0

Virology and Molecular Science

Virus Isolations from Clinical Specimens

Age	Sex	Source	Symptoms	Agent
20	F	Throat and NP	Fever, headache, cough, sore throat	Influenza A (H3)
22	F	Throat and NP	Fever, headache, cough, sore throat	Influenza A (H3)
18	M	Throat	Fever, URI, cough, sore throat	Adenovirus
20	M	Throat	Sore throat	Adenovirus
12m	F	NP	Respiratory distress; Autopsy	Adenovirus
4m	F	Throat	Autopsy	Rhinovirus

Influenza Real-time RT-PCR Testing

Samples Tested	2009 Influenza A (H1N1) Positive	Influenza A (H3) Positive	Influenza B Positive
14	0	1	0

Herpes Simplex Virus Isolations

Agent	Number of Isolates
Herpes Simplex type 1	7
Herpes Simplex type 2	14

Molecular Amplification and PCR

Agent	Method	Tested	Positive	% Positive
Parechovirus	RT-PCR	3	0	0%
Bordetella pertussis/parapertussis	RT-PCR	1	0	0%
Mumps virus	RT-PCR	1	0	0%
Norovirus	RT-PCR	2	0	0%
Chlamydia trachomatis	Gen-Probe Aptima	633	65	10.3%
Neisseria gonorrhoeae	Gen-Probe Aptima	767	64	8.3%

Respiratory Virus Surveillance: Samples tested: 247 (Sept. 1, 2010 – June 21, 2011)

Respiratory Virus Panel Test Results		
Virus	**Positives**	**Percent**
Human Rhinovirus (HRV)	**15**	**6.1%**
Parainfluenza virus 3 (PIV3)	**8**	**3.2%**
Coronavirus OC43	**7**	**2.8%**
Parainfluenza virus 2 (PIV2)	**4**	**1.6%**
Adenovirus Type E (Adeno E)	**4**	**1.6%**
Respiratory Syncytial virus (RSV)	**4**	**1.6%**
Coronavirus NL63	**3**	**1.2%**
Adenovirus Type C (Adeno C)	**3**	**1.2%**
Human metapneumovirus (hMPV)	**2**	**0.8%**
Parainfluenza virus 1 (PIV1)	**1**	**0.4%**