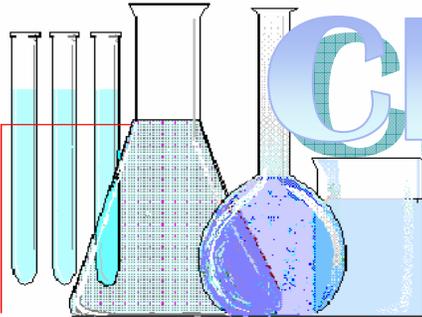




Maryland Department of Health & Mental Hygiene



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CRITICAL LINK



August 2008

Volume 12, Number 8

Additional Test to Screen for the Illusive Tyrosinemia type I

Tyrosinemia type I (TYR I), or hepatorenal tyrosinemia, is an autosomal recessive inborn error of tyrosine metabolism with an incidence of approximately 1/100,000. It is caused by a deficiency of the enzyme fumarylacetoacetate hydrolase, and results in severe liver disease, kidney dysfunction, and neurologic crises. If left untreated, patients often die in the first year of life due to liver failure. Currently, patients are treated with 2-(2-nitro-4-trifluoromethylbenzoyl)-1,3-cyclohexanedione (NTBC). This medication has proven to be very effective, especially when treatment is initiated early in life. This has provided a big incentive to identify patients with TYR I by newborn screening. Currently, Maryland, along with many other states, screens for this disorder by the measurement of tyrosine in the newborn blood samples collected on filter paper. An elevated concentration of tyrosine, however, is a poor marker and not specific to TYR I. This screening approach

(Continued on page 2)

Revising the "Guide to Public Health Laboratory Services"

The Laboratories Administration's "Guide to Public Health Laboratory Services" is about to be updated in order to make its content and accessibility better meet the needs of our customers. Our customers tell us that they would like more details about the tests, such as the minimum amount of specimen that can be submitted, the preferred conditions for storing a specimen prior to shipping, who to talk to about this test, etc.

The Guide in its current format was designed as a print document to provide a comprehensive listing of the tests offered by the Administration. To expand the amount of information provided for each test, the Guide's new design will be web-based. A basic template of information for each test will be completed by each laboratory section supervisor, who will supply additional information if necessary. Examples of in-depth information on a clinical test might include: synonyms for the test name; contact phone number for the testing lab; preferred and acceptable specimens; specimen volume required; specimen minimum volume; collection guidelines; test request forms to use; transport conditions; packaging and shipping guidelines; specimen rejection criteria; testing availability; test results interpretation; reference range; turnaround time; method used; purpose of test; interfering substances; testing lab; other comments and additional information. This template of test information might be quite different for an environmental test sample or for newborn screening.

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Governor's Grants Conference

The Maryland Governor's Grants Office will be having its annual conference on Monday, September 8, 2008, at the University of Maryland in Adelphi, Maryland. This year the conference will be "going green" so that it fits within the green conference guidelines of the U.S. Environmental Protection Agency. This conference will present changes

in government funding including the new federal and state transparency laws. There also will be a Federal Technical Desk manned by experts who will answer questions. The conference presents the best practices in the grants profession and the best ways to find, win, and manage grants. Grant managers and writers, program managers, fiscal officers, auditors, and non profit personnel should make every effort to attend. To register, you may call the Governor's Grants Office at 410-974-5090.

(Continued from page 1)
Tyrosinemia type I

is unable to differentiate TYR I from other forms of tyrosinemia (types II or III) or benign transient tyrosinemia of the newborn, the most common cause of elevated tyrosine concentrations in newborns. As a result, many newborn screening laboratories have found it necessary to raise the normal cutoff to reduce the number of false positives. This is worrisome, as many confirmed cases of TYR I have been shown to have newborn screens for tyrosine at or near the population average. If tyrosine is the only marker used for TYR I, cases may be missed.

Succinylacetone (SUAC) is a unique marker for TYR I, but not detectable as part of routine newborn screening.

Unfortunately, not every laboratory has the ability to provide testing for SUAC as part of a primary screen or as a second-tier test for those samples with elevated tyrosine levels. Beginning August 1, 2008, Newborn and Childhood Screening will be sending newborn screening dried blood spots to the Mayo Clinic for SUAC determination in samples with increased tyrosine concentrations. This will enable the Laboratories Administration to lower its current cutoff and improve sensitivity for TYR I. This arrangement will continue until the Laboratories Administration has set up the primary testing for SUAC in house. It is the goal of the Maryland Newborn Screening system to identify patients with TYR I as early as possible so treatment can be initiated and the prognosis of most patients dramatically improved.

This article was written by Drs. Fizza Majid and Erin Strovel.

(Continued from page 1)
Revising the "Guide to Public Health Laboratory Services"

We'll also increase the Guide's accessibility. For example, on our website there will be a page with an alphabetical list of all the tests we offer, with links to detailed information/fact sheets on each test. Customers seeking information on a short list of tests can access just what they need and print out a few pages for their use. In most settings, there will be no need to print the entire document. Another accessibility enhancement option is using the Administration's new test request forms ("Infectious Agents: Culture/Detection" and "Serological Testing") as formats for listing tests. These forms include the most commonly ordered tests in the clinical labs, and are very familiar to our customers. This may be a useful tool to quickly access the fact sheet for a test. Also, the entire website will be searchable so that a customer can type in a test name in a search field on the home page and go directly to the fact sheet for that test, without having to delve deeper into the website.

This revision to the "Guide to Public Health Laboratory Services" is a major project for the Administration's staff, involving many employees over the next several months. We have lots of good ideas and great examples from other labs and are hoping to meet our customers' needs with a completely redesigned format. However, we don't want to make assumptions about what you need, so we'd like to hear from you, our customers, to provide input on this project.

Contact Sheila DeLaquil at delaquils@dhmh.state.md.us or at 410-767-5426 with any ideas, suggestions, or comments.

This article was written by Sheila DeLaquil, Laboratories Administration's Quality Assurance Officer.

Below is a draft of the template to be used in the new "Guide to Public Health Laboratory Services." The Laboratories Administration is open to suggestions from customers.

TEST:	
Synonym:	
Lab/Phone:	
Turnaround Time:	
Specimen Required:	
Specimen identification:	
Specimen Volume (Optimum):	
Specimen Volume (Minimum):	
Collect:	
Form:	
Packaging and Shipping:	
Transport Conditions:	
Specimen Rejection Criteria:	
Availability:	
Results and Interpretation:	
Reference Range:	
Additional Information:	
Purpose of Test:	
Method:	
Interfering Substances:	
Testing Site:	
Comment:	
STARLIMS Order Code:	
STARLIMS Test Code:	

Dr. Razeq to Return

Following a nine-month recruitment effort, the Laboratories Administration is happy to announce that Jafar H. Razeq, Ph.D. will be starting as Chief of the Public Health Microbiology Division on September 10, 2008. Many of you may remember Dr. Razeq because he previously served five years in this position.

He earned a M.S. in Immunology from the Health Sciences Department, Long Island University, and a Ph.D. in Microbiology and Immunology from the School of Medicine, State University of New York at Buffalo. Subsequently, he completed a postdoctoral fellowship in Medical and Public Health Microbiology at the Erie County Medical Center in Buffalo, New York, and served several years as an Associate Microbiologist in the Clinical Microbiology Laboratory at Kings County Hospital Center in Brooklyn, New York.

In 1998, Dr. Razeq joined the Laboratories Administration as Chief of the Public Health Microbiology Division. During the major anthrax event in 2001, he was instrumental in leading the Department of Health and Mental Hygiene's (DHMH) anthrax testing program, training dozens of microbiologists throughout Maryland, and personally handling hundreds of telephone calls, consultations, and media interviews. For his efforts during that crisis, he was awarded the DHMH Performance Excellence Award.

During his five years with the Laboratories Administration, he also developed and presented a number of bioterrorism preparedness and other workshops for hospital microbiologists, first responders, and other partners. Dr. Razeq also served as an adjunct faculty member at the Johns Hopkins University where he taught a graduate course in Clinical and Molecular Diagnostics.

In 2003, Dr. Razeq accepted a position as Clinical Scientist for the Division of Microbiology at Al-Khor Hospital in Doha, Qatar. In that position he established a diagnostic microbiology laboratory for that newly built hospital. As an American citizen, he also occasionally consulted for the U.S. Army in Qatar on bioterrorism preparedness.

In 2006, Dr. Razeq returned to the United States and accepted a position with the New York City Public Health Laboratory. There he worked first as a Microbiologist-Educator, and then as Chief of the Mycobacteriology Laboratory and as Director of All Hazards Laboratory Training.

In the Laboratories Administration Dr. Razeq will continue to use his expertise to train sentinel laboratory staff, local health partners, and others in bioterrorism preparedness. Other important duties will include providing scientific direction and oversight to the Division's Mycology, Mycobacteriology, Enteric, Gonococcus Infections, and Reference Laboratories. He will also oversee the Division's Emerging Infections Program, Drug Resistance



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Questions concerning technical content of this
newsletter may be referred to
Dr. Jack DeBoy at 410-767-6100

Surveillance Program, Media Section, and participate in a wide range of managerial and professional duties for the Laboratories Administration, DHMH, and various national scientific and professional organizations.

We hope all of you will join with our laboratory staff in welcoming Dr. Razeq back to the Administration as he takes up his many responsibilities and duties for the State of Maryland.

"MRSA Revisited" Correction

After reading the July article on MRSA, Dr. Mary Mussman, Physician Advisor to the DHMH Deputy Secretary for Health Care Financing, was kind enough to inform us of an error. The article carried a statement that CMS would stop reimbursing hospitals for the costs of catheter-associated infections starting in October 2008. This is true nationally. However, because of our State's Medicare waiver for hospital reimbursement, Maryland's hospitals will continue to be reimbursed for the costs of those infections.



"TB Anywhere IS TB Everywhere!" The staff of the Laboratories Administration's TB/Mycology Laboratory are responsible for the statistics of Mycobacteriology, Mycology, and Mycobacterium Susceptibility Results. Pictured from left, top row are Roya Alborz, Dawn Walker, Jim Baker, Valerie Johnson, Rachel Vaden, and Nancy Hooper, Laboratory Supervisor. Seated are Michele Plehn and Diane Smith. Absent, Kelly Alban, Euline Dewbrey, Rich Oatis, and Arlene Rivera

Laboratory Statistics

NS – Not Speciated
 NT – Non-Typeable
 VRE – Vancomycin Resistant
 SP – Species
 NG – No Growth

* This genus has recently been given a new genus name.
 The genus name in parenthesis is the old name.
 ** Formerly a part of the *Trichosporon beigellii* complex.
 ***Alpha streptococci other than *S. pneumoniae* and *Enterococcus*

REPORTED 5/01/08 - 5/31/08

ENTERIC BACTERIOLOGY

GENUS SEROVAR	SEX	AGE	#	JURISDICTION
CAMPYLOBACTER				
U		57	1	PRINCE GEORGE'S
CAMPYLOBACTER JEJUNI				
M		0	1	ALLEGANY
F		37	1	BALTIMORE
M		7	1	CALVERT
M		46	1	FREDERICK
M		68	1	OUT OF STATE
M		53	1	PRINCE GEORGE'S
U		51	1	TALBOT
CAMPYLOBACTER SPECIES				
U		50	1	OUT OF STATE

U	50	1	OUT OF STATE
U	1	1	OUT OF STATE
U	18	1	OUT OF STATE
U	57	1	OUT OF STATE
SALMONELLA BERTA			
M	0	1	BALTIMORE CITY
M	1	1	FREDERICK
SALMONELLA BLOCKLEY			
U	72	1	OUT OF STATE
SALMONELLA BRAENDERUP			
M	51	1	ANNE ARUNDEL
M	2	1	BALTIMORE
SALMONELLA ENTERITIDIS			
M	0	1	ALLEGANY
F	0	1	BALTIMORE
M	0	1	BALTIMORE
F	1	1	BALTIMORE CITY
F	2	1	BALTIMORE CITY
F	4	1	BALTIMORE CITY
F	26	1	BALTIMORE CITY
M	2	1	BALTIMORE CITY
M	39	1	FREDERICK
F	29	1	MONTGOMERY
U	3	1	OUT OF STATE
U	42	1	OUT OF STATE
F	74	1	WASHINGTON
SALMONELLA HEIDELBERG			
M	10	1	MONTGOMERY
M	72	1	MONTGOMERY
SALMONELLA MBANDAKA			
F	41	1	OUT OF STATE
U	12	1	OUT OF STATE
SALMONELLA MELEAGRIS			
M	10	1	BALTIMORE

SALMONELLA SER 412:I:-				
F	85	1	BALTIMORE	
SALMONELLA SER 4512:I:-				
F	1	1	CHARLES	
SALMONELLA STANLEY				
M	0	1	ALLEGANY	
SALMONELLA THOMPSON				
F	48	1	BALTIMORE	
F	0	1	BALTIMORE	
SALMONELLA TYPHI				
M	1	1	MONTGOMERY	
F	35	1	OUT OF STATE	
SALMONELLA TYPHIMURIUM VAR COPENHAGEN				
F	0	1	TALBOT	
SHIGELLA				
M	41	1	BALTIMORE CITY	
U	0	1	BALTIMORE CITY	
SHIGELLA FLEXNERI SEROVAR 1B				
M	48	1	HARFORD	
SHIGELLA SONNEI				
M	0	1	BALTIMORE CITY	
M	78	1	BALTIMORE CITY	
TOTAL		49		

ISOLATES – THROAT CULTURES		
COUNTY	GROUP A ¹	NON-GROUP A
ALLEGANY	0	8
PRINCE GEORGE'S	0	1
SOMERSET	0	1
WICOMICO	3	3
BALTIMORE CITY	0	2
TOTAL	3	15
<i>Streptococcus pyogenes</i>		

BACTERIOLOGY IDENTIFICATIONS REFERRALS

GENUS SPECIES SOURCE	#	JURISDICTION
AEROMONAS HYDROPHILA		
STOOL	1	ANNE ARUNDEL
HAEMOPHILUS INFLUENZAE NON-TYPABLE		
BLOOD	1	BALTIMORE
BLOOD	4	BALTIMORE CITY
KLEBSIELLA PNEUMONIAE		
WOUND	1	WICOMICO
STAPHYLOCOCCUS AUREUS		
ABSCCESS	2	WICOMICO
BLOOD	1	WICOMICO
WOUND	2	WICOMICO
STREPTOCOCCUS ALPHA-HEMOLYTIC		
BLOOD	2	BALTIMORE CITY
TOTAL	14	

ISOLATES – MISCELLANEOUS

GENUS SPECIES SOURCE	#	JURISDICTION
ACINETOBACTER CALCOACETICUS		
LESION	1	BALTIMORE CITY
CITROBACTER FREUNDII		
WOUND	1	FREDERICK
CLOSTRIDIUM LIMOSUM		
BLOOD	1	BALTIMORE CITY

CORYNEBACTERIUM SPECIES		
SCALP	1	BALTIMORE CITY
OTHER	1	FREDERICK
WOUND	1	FREDERICK
ENTEROBACTER CLOACAE		
WOUND	1	UNKNOWN
ENTEROCOCCUS FAECIUM		
BLOOD	1	BALTIMORE CITY
ESCHERICHIA COLI		
BLOOD	1	BALTIMORE CITY
WOUND	1	FREDERICK
SKIN	1	MONTGOMERY
GARDNERELLA VAGINALIS		
CERVIX	1	PRINCE GEORGE'S
VAGINA	1	SOMERSET
KLEBSIELLA PNEUMONIAE		
FOOT	1	FREDERICK
PROTEUS MIRABILIS		
EAR	1	MONTGOMERY
PSEUDOMONAS AERUGINOSA		
WOUND	1	ALLEGANY
WOUND	1	FREDERICK
STAPHYLOCOCCUS AUREUS		
WOUND	1	BALTIMORE
BLOOD	1	BALTIMORE CITY
WOUND	1	BALTIMORE CITY
ABSCCESS	1	CARROLL
OTHER	1	CARROLL
WOUND	1	CARROLL
OTHER	1	FREDERICK
WOUND	1	FREDERICK
SCALP	1	MONTGOMERY
NASAL	1	PRINCE GEORGE'S
STAPHYLOCOCCUS COAGULASE NEGATIVE		
WOUND	1	BALTIMORE CITY
OTHER	1	CARROLL
WOUND	1	FREDERICK
STAPHYLOCOCCUS EPIDERMIDIS		
BLOOD	1	BALTIMORE CITY
OTHER	1	CARROLL
STAPHYLOCOCCUS SIMULANS		
BLOOD	1	BALTIMORE CITY
STREPTOCOCCUS BETA-HEMOLYTIC GROUP A		
BLOOD	1	MONTGOMERY
STREPTOCOCCUS BETA-HEMOLYTIC GROUP B		
CERVIX	1	ANNE ARUNDEL
BLOOD	1	BALTIMORE CITY
CERVIX	1	CECIL
CERVIX	2	PRINCE GEORGE'S
VAGINA	5	PRINCE GEORGE'S
VAGINA	1	SOMERSET
STREPTOCOCCUS PNEUMONIAE		
OTHER	1	BALTIMORE CITY
TOTAL	46	

SEXUALLY TRANSMITTED DISEASES

GENUS SPECIES SEX	#	JURISDICTION
SYPHILIS SEROLOGY		
F	1	ALLEGANY
M	1	ALLEGANY
F	2	ANNE ARUNDEL
M	5	ANNE ARUNDEL
F	5	BALTIMORE
M	3	BALTIMORE
F	9	BALTIMORE CITY
M	28	BALTIMORE CITY
U	1	BALTIMORE CITY

M	2	CARROLL
M	1	CHARLES
M	2	FREDERICK
M	1	HOWARD
F	8	MONTGOMERY
M	7	MONTGOMERY
U	1	MONTGOMERY
F	8	PRINCE GEORGE'S
M	19	PRINCE GEORGE'S
F	1	SOMERSET
F	1	TALBOT
M	1	WASHINGTON
F	3	WICOMICO
TOTAL	110	

CHLAMYDIA TRACHOMATIS

M	10	ALLEGANY
F	6	ANNE ARUNDEL
M	32	ANNE ARUNDEL
F	2	BALTIMORE
M	13	BALTIMORE
F	4	BALTIMORE CITY
M	67	BALTIMORE CITY
U	2	BALTIMORE CITY
M	6	CECIL
M	2	GARRETT
F	4	HARFORD
M	9	HARFORD
M	8	HOWARD
M	6	KENT
U	2	KENT
F	21	MONTGOMERY
M	34	MONTGOMERY
U	4	MONTGOMERY
F	18	PRINCE GEORGE'S
M	64	PRINCE GEORGE'S
F	5	SOMERSET
M	15	SOMERSET
F	2	WASHINGTON
F	2	WICOMICO
M	5	WICOMICO
TOTAL	343	

NEISSERIA GONORRHOEAE

F	6	PRINCE GEORGE'S
M	13	PRINCE GEORGE'S
TOTAL	19	

NEISSERIA GONORRHEAE

F	2	BALTIMORE
M	3	BALTIMORE
F	1	HARFORD
F	2	MONTGOMERY
M	1	MONTGOMERY
F	8	PRINCE GEORGE'S
M	18	PRINCE GEORGE'S
F	2	ST. MARY'S
M	1	ST. MARY'S
M	2	BALTIMORE CITY
M	2	OUT OF STATE
TOTAL	42	

PENICILLIN RESISTANT GONORRHEA STATISTICS

REPORTED QUARTERLY
NO REPORT THIS MONTH

MYCOBACTERIOLOGY

GENUS SPECIES

	SEX	AGE	#	JURISDICTION
MYCOBACTERIUM ABSCESSUS				
	M	32	1	ANNE ARUNDEL
	M	32	1	ANNE ARUNDEL
	F	36	1	BALTIMORE CITY
	M	80	1	BALTIMORE CITY
	F	78	1	CALVERT
MYCOBACTERIUM AVIUM COMPLEX				
	M	64	1	ANNE ARUNDEL
	M	79	1	BALTIMORE
	M	72	1	BALTIMORE
	F	52	1	BALTIMORE
	M	37	1	BALTIMORE
	F	81	1	BALTIMORE
	M	49	1	BALTIMORE
	F	44	1	BALTIMORE CITY
	M	48	1	BALTIMORE CITY
	F	40	1	BALTIMORE CITY
	M	69	1	BALTIMORE CITY
	F	36	1	BALTIMORE CITY
	M	48	1	CARROLL
	M	70	1	CARROLL
	F	59	1	FREDERICK
	M	74	1	FREDERICK
	F	69	1	FREDERICK
	M	84	1	FREDERICK
	F	62	1	FREDERICK
	F	69	1	FREDERICK
	M	81	1	FREDERICK
	F	75	1	FREDERICK
	F	35	1	HARFORD
	M	43	1	OUT OF STATE
	F	71	1	WASHINGTON
MYCOBACTERIUM CHELONAE				
	F	53	1	ANNE ARUNDEL
	M	43	1	BALTIMORE CITY
	M	77	1	BALTIMORE CITY
	M	52	1	CECIL
	F	69	1	FREDERICK
	F	79	1	WICOMICO
MYCOBACTERIUM FORTUITUM				
	F	70	1	BALTIMORE
	F	28	1	BALTIMORE CITY
	M	68	1	MONTGOMERY
	M	51	1	OUT OF STATE
	M	68	1	WICOMICO
MYCOBACTERIUM GORDONAE				
	M	57	1	BALTIMORE
	F	54	1	BALTIMORE CITY
	F	43	1	CARROLL
	M	52	1	CECIL
	M	47	1	FREDERICK
	F	65	1	FREDERICK
	F	40	1	MONTGOMERY
	M	79	1	MONTGOMERY
	M	40	1	OUT OF STATE
	F	23	1	PRINCE GEORGE'S
	F	84	1	PRINCE GEORGE'S
	M	50	1	PRINCE GEORGE'S
	M	59	1	PRINCE GEORGE'S
	M	64	1	PRINCE GEORGE'S
MYCOBACTERIUM KANSASII				
	M	79	1	BALTIMORE
	F	40	1	BALTIMORE CITY
	M	32	1	OUT OF STATE
	F	44	1	PRINCE GEORGE'S
MYCOBACTERIUM TUBERCULOSIS				
	F	35	1	BALTIMORE
	F	22	1	BALTIMORE CITY

M	52	1	BALTIMORE CITY
M	66	1	BALTIMORE CITY
F	27	1	BALTIMORE CITY
M	40	1	FREDERICK
M	60	1	FREDERICK
M	61	1	HOWARD
F	39	1	MONTGOMERY
F	40	1	MONTGOMERY
M	78	1	MONTGOMERY
F	64	1	MONTGOMERY
M	28	1	MONTGOMERY
M	34	1	OUT OF STATE
U	38	1	OUT OF STATE
M	38	1	OUT OF STATE
M	46	1	OUT OF STATE
M	43	1	PRINCE GEORGE'S
F	84	1	PRINCE GEORGE'S
M	29	1	PRINCE GEORGE'S
MYCOBACTERIUM TUBERCULOSIS COMPLEX			
M	32	1	ANNE ARUNDEL
F	27	1	BALTIMORE CITY
F	90	1	BALTIMORE CITY
F	62	1	BALTIMORE CITY
M	47	1	FREDERICK
M	40	1	MONTGOMERY
F	64	1	MONTGOMERY
M	48	1	MONTGOMERY
M	73	1	MONTGOMERY
M	78	1	MONTGOMERY
F	31	1	OUT OF STATE
F	33	1	OUT OF STATE
M	39	1	OUT OF STATE
F	51	1	OUT OF STATE
M	63	1	OUT OF STATE
M	31	1	PRINCE GEORGE'S
M	49	1	PRINCE GEORGE'S
F	84	1	PRINCE GEORGE'S
F	28	1	PRINCE GEORGE'S
M	29	1	PRINCE GEORGE'S
M	29	1	PRINCE GEORGE'S
M	65	1	SAINT MARY'S
M	37	1	WICOMICO
M	58	1	WICOMICO
M	58	1	WICOMICO
M	52	1	WICOMICO
RAPIDLY GROWING MYCOBACTERIA			
M	46	1	OUT OF STATE
F	61	1	OUT OF STATE
SCOTOCHROMOGENIC MYCOBACTERIA			
M	39	1	PRINCE GEORGE'S
TOTAL		108	

MYCOBACTERIUM SUSCEPTIBILITY RESULTS

DURING MAY, 2008, SUSCEPTIBILITY RESULTS ON 27 ISOLATES OF *M. TUBERCULOSIS* COMPLEX * WERE IDENTIFIED.

TOTAL: 5 DRUG RESISTANT STRAINS FOUND

- 2^{AB} FREDERICK ® to ISONIAZID, STREPTOMYCIN, RIFAMPIN, RIFABUTIN, and ETHAMBUTOL
- 2^A PRINCE GEORGE'S ® to ISONIAZID and STREPTOMYCIN
- 1 FREDERICK ® to ISONIAZID

^A Two isolates from the same patient

^B Meets the case definition of Multi-Drug Resistant Tuberculosis (MDRTB)

® RESISTANT

**Mycobacterium tuberculosis* complex consists of:

- M. tuberculosis*
- M. bovis*
- M. bovis*, BCG
- M. africanum*
- M. microti*
- M. canettii*

MYCOLOGY

GENUS SPECIES	SEX	AGE	#	JURISDICTION
ALTERNARIA				
F		16	1	TALBOT
M		11	1	TALBOT
ARTHROGRAPHIS				
F		43	1	PRINCE GEORGE'S
ASPERGILLUS FLAVUS				
M		59	1	TALBOT
ASPERGILLUS FUMIGATUS				
M		0	1	ALLEGANY
M		79	1	ALLEGANY
F		64	1	ANNE ARUNDEL
U		0	1	ANNE ARUNDEL
M		58	1	CALVERT
F		70	1	HARFORD
M		53	1	MONTGOMERY
M		72	1	MONTGOMERY
F		41	1	PRINCE GEORGE'S
F		73	1	PRINCE GEORGE'S
F		55	1	PRINCE GEORGE'S
U		46	1	TALBOT
U		46	1	TALBOT
F		79	1	TALBOT
M		68	1	TALBOT
F		86	1	BALTIMORE CITY
ASPERGILLUS NIDULANS				
F		52	1	TALBOT
ASPERGILLUS NIGER				
U		0	1	ANNE ARUNDEL
F		50	1	PRINCE GEORGE'S
ASPERGILLUS OCHRACEUS				
M		81	1	CECIL
ASPERGILLUS SPECIES				
M		26	1	ALLEGANY
M		61	1	CECIL
ASPERGILLUS TERREUS				
M		65	1	TALBOT
ASPERGILLUS USTUS				
M		72	1	MONTGOMERY
M		50	1	MONTGOMERY
CANDIDA ALBICANS				
F		30	1	BALTIMORE
F		32	1	BALTIMORE
F		83	1	CALVERT
M		77	1	CALVERT
F		17	1	CECIL
F		21	1	HOWARD
F		47	1	MONTGOMERY
F		21	1	MONTGOMERY
F		36	1	MONTGOMERY
F		54	1	MONTGOMERY
F		69	1	MONTGOMERY
F		69	1	MONTGOMERY
F		73	1	MONTGOMERY
F		82	1	MONTGOMERY
M		33	1	MONTGOMERY
M		53	1	MONTGOMERY
M		53	1	MONTGOMERY
M		78	1	MONTGOMERY
M		83	1	MONTGOMERY
M		83	1	MONTGOMERY
F		41	1	MONTGOMERY
M		34	1	MONTGOMERY
F		41	1	PRINCE GEORGE'S
F		22	1	PRINCE GEORGE'S
F		50	1	PRINCE GEORGE'S
F		73	1	PRINCE GEORGE'S
M		25	1	PRINCE GEORGE'S
M		52	1	PRINCE GEORGE'S
M		69	1	PRINCE GEORGE'S

M	76	1	PRINCE GEORGE'S
F	88	1	PRINCE GEORGE'S
M	42	1	PRINCE GEORGE'S
F	19	1	PRINCE GEORGE'S
F	20	1	PRINCE GEORGE'S
F	21	1	PRINCE GEORGE'S
U	21	1	PRINCE GEORGE'S
F	18	1	PRINCE GEORGE'S
F	20	1	PRINCE GEORGE'S
F	20	1	SOMERSET
F	20	1	SOMERSET
F	23	1	SOMERSET
F	27	1	SOMERSET
F	22	1	BALTIMORE CITY
F	42	1	BALTIMORE CITY
F	46	1	BALTIMORE CITY
F	58	1	BALTIMORE CITY
F	64	1	BALTIMORE CITY
M	54	1	BALTIMORE CITY
M	65	1	BALTIMORE CITY
M	87	1	BALTIMORE CITY
CANDIDA FAMATA			
U	68	1	BALTIMORE
F	26	1	BALTIMORE
CANDIDA GLABRATA			
M	53	1	MONTGOMERY
F	65	1	PRINCE GEORGE'S
M	58	1	PRINCE GEORGE'S
F	83	1	BALTIMORE CITY
F	92	1	BALTIMORE CITY
M	54	1	BALTIMORE CITY
CANDIDA KEFYR			
F	96	1	BALTIMORE
CANDIDA KRUSEI			
F	87	1	ALLEGANY
M	58	1	CALVERT
CANDIDA LAMBICA			
F	68	1	BALTIMORE
CANDIDA PARAPSILOSIS			
M	48	1	FREDERICK
CANDIDA TROPICALIS			
M	76	1	PRINCE GEORGE'S
F	73	1	PRINCE GEORGE'S
F	42	1	BALTIMORE CITY
F	83	1	BALTIMORE CITY
M	54	1	BALTIMORE CITY
CRYPTOCOCCUS NEOFORMANS			
M	45	1	HARFORD
M	59	1	MONTGOMERY
M	44	1	BALTIMORE CITY
FUSARIUM SOLANI			
M	36	1	PRINCE GEORGE'S
FUSARIUM SPECIES			
U	46	1	TALBOT
GORDONIA TERRAE			
M	64	1	BALTIMORE CITY
MOULD			
M	72	1	MONTGOMERY
M	77	1	PRINCE GEORGE'S
M	83	1	BALTIMORE CITY
F	82	1	BALTIMORE CITY
PAECILOMYCES VARIOTII			
U	46	1	TALBOT
PENICILLIUM SPECIES			
F	0	1	ALLEGANY
F	58	1	ALLEGANY
M	55	1	ALLEGANY
F	36	1	CALVERT
M	58	1	CECIL
F	73	1	MONTGOMERY
M	72	1	MONTGOMERY
M	83	1	BALTIMORE CITY

SCEDOSPORIUM APOSPERMUM			
F	75	1	TALBOT
STREPTOMYCES SPECIES			
M	62	1	ALLEGANY
M	100	1	ALLEGANY
F	60	1	BALTIMORE CITY
TRICHOPHYTON MENTAGROPHYTES			
F	24	1	TALBOT
TRICHOPHYTON RUBRUM			
F	52	1	ANNE ARUNDEL
U	29	1	CARROLL
F	46	1	WICOMICO
TRICHOPHYTON SPECIES			
M	5	1	CALVERT
M	6	1	CALVERT
TRICHOPHYTON TONSURANS			
F	4	1	TALBOT
TRICHOSPORON SPECIES			
F	19	1	SOMERSET
TOTAL		128	

PARASITOLOGY

GENUS SPECIES	#	JURISDICTION
PROTOZOA		
BLASTOCYSTIS HOMINIS		
1		BALTIMORE CITY
1		MONTGOMERY
ENDOLIMAX NANA		
1		FREDERICK
1		MONTGOMERY
1		MONTGOMERY
1		MONTGOMERY
2		MONTGOMERY
1		PRINCE GEORGE'S
3		PRINCE GEORGE'S
ENTAMEBA COLI		
3		CARROLL
GIARDIA LAMBLIA		
1		HOWARD
SUBTOTAL		16
BLOOD PARASITE		
PLASMODIUM FALCIPARUM		
1		CECIL
SUBTOTAL		1
NEMATODES		
ENTEROBIUS VERMICULARIS		
2		HOWARD
SUBTOTAL		2
HELMINTHS		
HOOKWORM		
3		BALTIMORE
SUBTOTAL		3
TOTAL		22

ARTHROPOD IDENTIFICATION

NONE

TICK IDENTIFICATION

DEER TICK	1	PRINCE GEORGE'S
IXODES BRUNNEUS	1	BALTIMORE
TOTAL		2

WATER MICROBIOLOGY

	# TESTED	# NON-COMPLIANT
COMMUNITY	4	0
NON-COMMUNITY	278	74
TOTAL	282	74

FOOD SAFETY

FOOD AND SHELLFISH MICROBIOLOGY

	# OF SAMPLES	NOTABLE PATHOGENS
FOOD	40	0
		# STANDARDS EXCEEDED *
CRABMEAT	10	0
		# STANDARDS EXCEEDED **
SHELLFISH	0	0
SHELLFISH GROWING WATERS	288	
TOTAL	338	0

STANDARDS

* CRABMEAT-FRESH

ESCHERICHIA COLI = LESS THAN 36 MPN/100 GRAM
STANDARD PLATE COUNT = LESS THAN 100,000 PER GRAM

** SHELLFISH

FECAL COLIFORMS = LESS THAN 230 MPN/100 GRAM
STANDARD PLATE COUNT = LESS THAN 500,000 PER GRAM

VIRUS ISOLATION

ISOLATE

SEX	AGE	#	JURISDICTION
ADENOVIRUS			
F	4	1	DORCHESTER
F	20	1	PRINCE GEORGE'S
F	20	1	PRINCE GEORGE'S
F	19	1	PRINCE GEORGE'S
F	19	1	PRINCE GEORGE'S
M	24	1	PRINCE GEORGE'S
M	19	1	PRINCE GEORGE'S
M	0	1	BALTIMORE CITY
SUBTOTAL		8	
HERPES SIMPLEX VIRUS TYPE 1			
F	20	1	PRINCE GEORGE'S
F	26	1	BALTIMORE CITY
M	77	1	BALTIMORE CITY
SUBTOTAL		3	
TOTAL		11	

NOTE: PCR (POLYMERASE CHAIN REACTION) TESTING RESULTS CANNOT BE REPORTED THIS MONTH BECAUSE WE ARE TRANSITIONING TO A NEW COMPUTER SYSTEM.

VIRAL HEPATITIS

ORGANISM	# OF SPECIMENS	POSITIVES	JURISDICTION
HEPATITIS A			
	2	0	BALTIMORE CITY
	2	0	CECIL
	1	0	HARFORD
	1	0	HOWARD
SUBTOTAL	6	0	
HEPATITIS B			
	46	0	ALLEGANY
	80	0	ANNE ARUNDEL
	49	0	BALTIMORE
	538	7	BALTIMORE CITY
	5	0	CALVERT
	42	0	CARROLL
	104	1	CECIL
	6	0	CHARLES
	2	0	DORCHESTER
	123	1	FREDERICK
	12	0	GARRETT
	55	0	HARFORD
	29	0	HOWARD
	3	0	KENT
	272	5	MONTGOMERY
	318	12	PRINCE GEORGE'S
	1	0	SAINT MARY'S
	3	0	SOMERSET
	12	0	TALBOT
	6	0	UNKNOWN
	36	0	WASHINGTON
	115	0	WICOMICO
	1	0	WORCESTER
SUBTOTAL	1,858	26	
HEPATITIS C			
	45	1	ALLEGANY
	103	25	ANNE ARUNDEL
	59	3	BALTIMORE
	235	57	BALTIMORE CITY
	5	0	CALVERT
	46	10	CARROLL
	66	4	CECIL
	8	0	CHARLES
	2	0	DORCHESTER
	117	5	FREDERICK
	14	0	GARRETT
	18	1	HARFORD
	5	1	HOWARD
	3	0	KENT
	31	1	MONTGOMERY
	162	2	PRINCE GEORGE'S
	1	0	QUEEN ANNE'S
	3	0	SAINT MARY'S
	2	0	SOMERSET
	12	0	TALBOT
	2	0	UNKNOWN
	16	0	WASHINGTON
	17	2	WICOMICO
	1	0	WORCESTER
SUBTOTAL	973	112	
TOTALS	2,837	138	

The services and facilities of the Maryland Department of Health and Mental Hygiene (DHMH) are operated on a non-discriminatory basis. This policy prohibits discrimination on the basis of age; ancestry; color; creed; marital status; mental or physical disability; national origin; race; religious affiliation, belief, or opinion; sex; or sexual orientation and applies to the provisions of employment and granting of advantages, privileges and accommodations. The Department, in compliance with the Americans with Disabilities Act, ensures that qualified individuals with disabilities are given an opportunity to participate in and benefit from DHMH services, programs, benefits, and employment opportunities.

NEWBORN & CHILDHOOD SCREENING

STATISTICS FOR MAY 2008

PRESUMPTIVE POSITIVES

DISORDERS	#
PHENYLKETONURIA	6
MAPLE SYRUP URINE DISEASE	4
HOMOCYSTEINURIA	14
TYROSINEMIA	2
ARGININEMIA	1
CITRULLINEMIA	0
GALACTOSEMIA	4
BIOTINIDASE DEFICIENCY	0
HYPOTHYROIDISM	53
HEMOGLOBIN -DISEASE	26
HEMOGLOBIN -BENIGN	349
CONGENITAL ADRENAL HYPERPLASIA (CAH)	31
CYSTIC FIBROSIS	3
FATTY ACID OXIDATIONS	12
ORGANIC ACIDEMIAS	30
ACYLCARNITINE - BORDERLINE	8
ACYLCARNITINE - OTHERS	14

RABIES

BAT	2	HARFORD
	1	WORCESTER
CAT	1	CECIL
	1	DORCHESTER
	1	FREDERICK
FOX	1	CAROLINE
GROUNDHOG	1	CECIL
	1	CHARLES
	1	HOWARD
	1	MONTGOMERY
HORSE	1	PRINCE GEORGE'S
RACCOON	2	BALTIMORE
	1	CAROLINE
	3	CARROLL
	2	CECIL
	1	CHARLES
	2	FREDERICK
	2	GARRETT
	8	MONTGOMERY
	1	PRINCE GEORGE'S
	1	QUEEN ANNE'S
	1	ST. MARY'S
	4	TALBOT
	1	WICOMICO
	2	WORCESTER
SKUNK	1	ALLEGANY
	1	ST. MARY'S
TOTAL POSITIVES	45	
TOTAL SPECIMENS	417	

CHLAMYDOPHILIA (CHLAMYDIA) PSITTACI

REPORTED QUARTERLY
NO REPORT THIS MONTH

CD4 FLOW CYTOMETRY WORKLOAD

REPORTED QUARTERLY
NO REPORT THIS MONTH

MONTHLY TOTALS

# OF SPECIMENS SCREENED	10,242
NUMBER OF TESTS	769,978
% OF UNSATISFACTORY SPECIMENS	2.5

YEAR-TO-DATE CONFIRMED CASES

CONDITIONS	# CONFIRMED
MCAD	2
3MCC	1
SCAD	1
VLCAD	0
GA-I	1
MAPLE SYRUP URINE DISEASE	0
PKU- CLINICALLY SIGNIFICANT VARIANT	1
PKU- NOT CLINICALLY SIGNIFICANT VARIANT	1
GALACTOSEMIA- CLASSICAL GALT DEFICIENCY	1
GALACTOSEMIA - VARIANT	1
BIOTINIDASE DEFICIENCY	0
GALACTOSE EPIMERASE DEFICIENCY	0
PARTIAL BIOTINIDASE DEFICIENCY	0
CAH- CLASSICAL SALT WASTING	0
CAH-NON-CLASSICAL	0
HYPOTHYROIDISM - PRIMARY	7
OTHER HYPOTHYROIDISM	3
SICKLE CELL DISEASE -SS	5
SICKLE CELL DISEASE -SE	1
SICKLE CELL DISEASE -SC	2
SICKLE CELL DISEASE -S BETA THALASSEMIA	3
CYSTIC FIBROSIS	2

ENVIRONMENTAL CHEMISTRY

SAMPLES	# NON-COMPLIANT	# TESTED
ASBESTOS		
AIR	7	12
BULK	0	0
AIR QUALITY		
PM 2.5	0	396
PM 10	0	0
RADIATION		
AIR/CHARCOAL FILTERS	0	70
MILK	0	5
WIPES	0	122
RAW WATER	0	7
VEGETATION	0	0
OTHER	0	0
DRINKING WATER		
METALS		
COMMUNITY	2	5
NON-COMMUNITY	3	5
PRIVATE WELLS	50	180
PESTICIDES & PCBs		
COMMUNITY	0	44
NON-COMMUNITY	0	4
PRIVATE WELLS	0	3
VOLATILE ORGANIC COMPOUNDS		
COMMUNITY	2	223
NON-COMMUNITY	0	118
PRIVATE WELLS	0	173
RADIATION		
COMMUNITY	10	54
NON-COMMUNITY	0	0
PRIVATE WELLS	0	0
INORGANICS		
COMMUNITY	0	7
NON-COMMUNITY	3	76
PRIVATE WELLS	5	185
FOOD CHEMISTRY		
SUSPECTED TAMPERING	0	0
MICROSCOPIC FILTH	0	0
LABELING	0	0
SURVEILLANCE	0	0
CHEMICAL CONTAMINATION	0	5
TOTAL	82	1,694

LEAD ENVIRONMENTAL

TEST	#	ELEV	BRL	UNSAT
TOTAL PAINT	15	5	0	0
TOTAL SOIL	3	0	0	0
DUST				
FLOOR	323	18	291	1
SILL	624	11	512	0
WELL	223	18	142	0
OTHER	7	3	4	0
TOTAL DUST	1,177	50	949	1
GRAND TOTAL	1,195	55	949	1

INTERPRETATION OF RESULTS:

= Number of Samples Received
 ELEV= Elevated
 BRL= Below Reporting Limit
 UNSAT = Unsatisfactory
 PAINT Positive in excess of 0.5%
 SOIL Action level 400 - 5,000 ppm
 DUST Clearance limits: Floor/Other 40 ug/sq ft
 Window Sill 250 ug/sq ft
 Window Well 400 ug/sq ft

LEAD SCREENING - BLOOD LEAD

CLASS	RANGE ug/dl	# TESTED
MARYLAND		
I	<10	141
IIA	10-14	4
IIB	15-19	10
III	20-44	7
IV	45-69	0
V	>69	0
TOTAL		162
WASHINGTON DC		
I	<10	0
IIA	10-14	0
IIB	15-19	0
III	20-44	0
IV	45-69	0
V	>69	0
TOTAL		0

HIV ANTIBODY SCREENING – BLOOD (MAY 2008)

SPECIMEN SOURCES	TOTAL	POSITIVE EIA	%	POSITIVE WB	%
HEALTH DEPARTMENTS AND CLINICS	2,226	102	4.58%	95	93.14%
HOSPITALS	127	9	7.09%	9	100.00%
DETENTION CENTERS	193	11	5.69%	11	100.00%
PRIVATE PHYSICIANS	3	0	0.00%	0	0.00%
STUDENT HEALTH CLINICS	239	0	0.00%	0	0.00%
EMPLOYEE HEALTH CLINICS	8	0	0.00%	0	0.00%
AUTOPSIES	307	18	5.86%	12	66.66%
ORGAN/TISSUE DONORS	70	0	0.00%	0	0.00%
TOTAL	3,173	140	4.41%	127	90.71%

VIRAL LOAD SPECIMENS (MAY 2008)

HIV-1 RNA Copies/ml	<10 ³	10 ³ – 10 ⁴	10 ⁴ – 10 ⁵	>10 ⁵	Totals
ALLEGANY	11	0	2	1	14
CARROLL	0	0	2	0	2
MONTGOMERY	84	12	12	8	116
PRINCE GEORGES	65	17	12	4	98
WASHINGTON	2	1	1	0	4
WICOMICO	1	0	1	1	3
SUBTOTALS	163	30	30	14	237
DEPT. OF CORRECTIONS	57	16	28	14	115
TOTALS	220	46	58	28	352

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