

# **BACTERIOLOGY PROFICIENCY TESTING PROGRAM**

## **General Category**

**April 29, 2008**

This report summarizes the results of the proficiency test administered April 29, 2008 to laboratories in the General Bacteriology category.

If you have any questions or comments, please contact either:

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# ***Bacteriology Proficiency Testing Program***

## ***GENERAL INFORMATION***

**The Bacteriology Proficiency Testing Program.** Three proficiency testing events are given annually, each consisting of a minimum of five specimens. In order to successfully complete a test event, participating laboratories must achieve a score of 80% or greater. Unsuccessful performance in the testing program is defined as a score of less than 80% on two of three consecutive test events.

**Authentication.** The presence and identity of the organism(s) in each specimen must be confirmed by at least 80% of the referee or participating laboratories. Referee laboratories are selected from New York State participating laboratories (located throughout the State) with acceptable and reproducible levels of performance. Sample vials are subjected to extensive quality control testing in our laboratory during preparation and storage.

**Grading System.** Laboratories are to process proficiency test specimens in the same manner as patient specimens. Thus, laboratories are responsible for identifying test isolates to the same level as performed on patient isolates. If your laboratory speciates an organism on special request, then you must also speciate it in the proficiency test; consider speciation to have been requested on all reportable isolates. In addition, laboratories are not responsible for culturing any test samples from specimen sources which they do not process. Information regarding your laboratory's reporting protocol was provided to us in the questionnaire previously distributed to all laboratories. Any changes in reporting protocol must be received by our office prior to the mailout date for proficiency testing for that information to be considered in grading.

Our testing format is in compliance with HCFA CMS guidelines as specified in the regulations of CLIA '88. One-half of our samples require identification of all organisms present. The other half requires that only the pathogenic organism(s) be reported. We recognize the potential for any organism to be pathogenic depending on the clinical condition of the patient. However, our samples are designed so that only well-established pathogens should be reported.

Tests are graded in strict adherence to HCFA CMS guidelines, as specified in the regulations of CLIA '88. Each of the specimens receives a score as determined by the following formula:

$$(a + b)/(c + d + e) \times 100\%$$

a = # correct identifications

b = # correct antibiotic susceptibility results (if applicable)

c = # possible identifications

d = # possible antibiotic susceptibility results (if applicable)

e = # additional organisms reported

Grades for each sample are then averaged to determine the final grade for this testing event. The minimum passing grade for each test event is 80%.

### **Disclaimer**

The use of brand and/or trade names in this report does not constitute an endorsement of the products on the part of the Wadsworth Center or the New York State Department of Health.

## *Notes of Interest*

### **Elimination of proficiency testing sample for Group B *Streptococcus* antigen detection**

Due to the extremely small number of laboratories offering this test, we will no longer be including sample “C”, antigen detection for Group B *Streptococcus*, in our proficiency test panels. This will become effective with the September 2008 test. Laboratories that are still performing this test will need to implement a twice-yearly quality assurance program to fulfill the requirements as specified in Quality Assessment Sustaining Standard of Practice 3 (QA S3): Ongoing Verification of Examination Accuracy of the New York State Health Department Clinical Laboratory Standards of Practice.

### **New Bacteriology Proficiency Testing Program Section Head**

Effective May 1, 2008, Dr. Kimberlee Musser assumed the duties of Section Head for the Bacteriology Proficiency Testing Program. Dr. Musser is also the director of the Bacteriology Laboratory of the Wadsworth Center, NYSDOH. She can be reached at (518) 474-4177 or by email to [bacti@wadsworth.org](mailto:bacti@wadsworth.org).

### **EPTRS Reporting Tips**

The EPTRS system has greatly streamlined the transmission of proficiency test results and has drastically reduced the turnaround time for scoring test events. However, the system has certain restrictions and attempts by users to circumvent these restrictions result in a slower grading process and can cause scoring errors. Below are some helpful tips on data entry that can help minimize these problems:

1. Please do not enter an organism more than once for the same sample. For example, do not enter ‘*E. coli*’ under Bacterial Identification 1 and again under Bacterial Identification 2. Do not enter an identification twice in order to list multiple methods of identification – see 2.
2. Please do not enter multiple systems for one identification. The system information is only for statistical purposes and we do not count multiple systems entered. Please choose the ONE system you relied on most for your identification.
3. Please use the drop down list if at all possible. There are very few times when you should need to use the "other" box. Entries such as "Catalase, sugars, gram stain" should be entered as "Conventional biochemicals" rather than typed in the “Other” box. Individual biochemical results are not noted in the statistics.
4. Please do not enter both an MIC and a zone size for one susceptibility result. Enter only the value appropriate for the main system you used to generate your response.
5. Please do not enter extraneous information in the Bacterial Identification field, such as "would send to reference lab for confirmation". We realize this is what you may report to a physician but it is unnecessary for proficiency results and does not affect your grade. If you would like to enter additional information, please utilize the “Comment” field on the first page of the EPTRS form.

Please follow these suggestions to ensure that your grade is accurate. All extra information, etc can adversely affect the grading program we use.

### **Bacteriology Questionnaires**

Please make sure that the information on your laboratory's Bacteriology Questionnaire is accurate. If you need a copy of your questionnaire for review, please contact our office at 518-474-4177 or email us at [bacti@wadsworth.org](mailto:bacti@wadsworth.org). Please note that proficiency test results are graded in accordance with information on the questionnaire. **Grades will not be revised due to incorrect information on the questionnaire.**

**APRIL 29, 2008 TEST EVENT**

**Number of Participating Laboratories:**

**Receiving specimens            216**  
**Returning results                216    (100%)**

Grade Distribution		
Score	Number	Percent
100%	167	77.3
90 – 99%	6	2.8
80 – 89%	33	15.3
70 – 79%	3	1.4
60 – 69%	7	3.2

**BACTERIOLOGY - GENERAL**  
**APRIL 29, 2008**  
**ANSWER KEY**

**Specimen No. 1 - Stool (Pathogens Only)**

*Campylobacter jejuni*

**Specimen No. 2 – Urine (All Organisms)**

*Salmonella* serogroup D

**Specimen No. 3 – Blood - Aerobic / Anaerobic (All Organisms)**

No anaerobic organisms

*Listeria monocytogenes*

**Specimen No. 4 – Wound (Pathogens Only) and Antibiotic Susceptibility**

*Acinetobacter baumannii* or *Acinetobacter calcoaceticus* – *baumannii* complex

Susceptibility of *A. baumannii* to: Imipenem - Susceptible

Trimethoprim/sulfamethoxazole - Resistant

**Specimen No. 5 – Throat (Pathogens Only)**

*Arcanobacterium haemolyticum*

***Chlamydia* Specimen**

Negative for *Chlamydia trachomatis*

**Direct Antigen Detection**

A (Throat)

Positive for Group A *Streptococcus*

C (Genital)

Positive for Group B *Streptococcus*

## REFEREE LABORATORY RESULTS

Specimen Number	Referee Laboratory Responses	Percent*
1	<i>Campylobacter jejuni</i>	90
	No pathogens isolated	10
2	<i>Salmonella</i> serogroup D	80
	<i>Salmonella</i> serotype Enteritidis	10
	<i>Salmonella</i> species not <i>typhi</i>	10
3	No anaerobic organisms	100
	<i>Listeria monocytogenes</i>	100
4	<i>Acinetobacter-baumannii</i> complex	60
	<i>Acinetobacter baumannii</i>	40
5	<i>Arcanobacterium haemolyticum</i>	100

\* Based on responses of 10 referee laboratories

### ***Specimen Number 1 - Stool (Pathogens Only)***

This simulated stool specimen contained *Campylobacter jejuni*. This pathogen was identified by 90% of the referee laboratories. Of the participating laboratories that process stool cultures, a total of 88% isolated this organism, with 70% of them reporting *Campylobacter jejuni* and 30% reporting *Campylobacter* species.

Additional organisms in this sample were *Escherichia coli* and *Morganella morganii*.

<b>Result</b>	<b>Method Used</b>	<b># Labs</b>
<i>Campylobacter jejuni</i>	Conventional biochemicals	122
	bioMerieux Vitek 2 NH	4
	Not given	1
	Campy JCL Latex	1
	<b>Total <i>Campylobacter jejuni</i></b>	<b>128</b>
<i>Campylobacter</i> species	Conventional biochemicals	50
	PANBIO <i>Campylobacter</i> Latex	3
	16s rDNA sequencing	1
	Remel <i>Campylobacter</i> Enzyme Immunoassay kit	1
	<b>Total <i>Campylobacter</i> species</b>	<b>55</b>
No enteric pathogens isolated		<b>14</b>
Specimen source not tested		<b>9</b>
Do not culture for <i>Campylobacter</i>		<b>7</b>
<i>Escherichia coli</i> O157	Two or more systems	<b>1</b>
No report		<b>1</b>
No <i>Salmonella</i> or <i>Shigella</i> isolated		<b>1</b>
	<b>Total All Responses</b>	<b>216</b>

## ***Specimen No. 2 – Urine (All Organisms)***

This simulated urine specimen contained *Salmonella* serogroup D. This organism was identified by all referee laboratories with 80% reporting *Salmonella* serogroup D, 10% reporting *Salmonella* serotype Enteritidis and 10% reporting *Salmonella* species, not typhi. Of the participating laboratories that process urine cultures, a total of 59% reported *Salmonella* serogroup D, *Salmonella* serotype enteritidis or *Salmonella* serogroup D, not typhi. An additional 30% reported *Salmonella* species.

A summary of participating laboratory responses along with methods of identification appear on the following page. Please note that only the **primary method of identification** should be reported. This information is not graded and is for statistical purposes only. In the case of this specimen, laboratories that perform serogrouping used antisera in addition to the method that biochemically identified this organism as *Salmonella* species. Although we realize that the serogrouping is an important part of the final result, the electronic system can only capture one method for each organism. In this case, the primary method is the one that gave the initial result of *Salmonella* species, even though additional testing may have been necessary to obtain a more specific result.

Salmonellosis is most commonly associated with gastroenteritis. However, bacteremia and extra-intestinal infections such as urinary tract infections (UTIs) can also occur. Studies of UTIs caused by *Salmonella* sp. consistently show a higher incidence of infection in female patients than in males. Infections are more common in the elderly and those with underlying conditions such as diabetes mellitus or urinary tract structural abnormalities. However, there are also reports of *Salmonella* bacteriuria in young, healthy individuals without any underlying conditions. During 2006 – 2007, there was a large, well-publicized multistate outbreak of *Salmonella* serotype Tennessee associated with contaminated peanut butter. There were 628 confirmed cases as of May 22, 2007. While most (61%) of the *Salmonella* isolates attributed to this outbreak were recovered from stool specimens, a surprisingly large percentage (35%) were urinary isolates.

Abbott, SL et al. Urinary Tract Infections Associate with Nontyphoidal *Salmonella* Serogroups. J Clin Microbiol 1999. 37(12), 4177-4178.

Paterson, DL et al. Clinical Spectrum of Urinary Tract Infections Due to Nontyphoidal *Salmonella* Species. Clin Infect Dis 1997. 25:754.

Sivapalasingam, S. et al. *Salmonella* bacteriuria: an increasing entity in elderly women in the United States. Epidemiol Infect 2004. (132), 897-902.

Tena, D. et al. Urinary tract infection due to non-typhoidal *Salmonella*: Report of 19 cases. J Infect 2007. (54), 245-249.

Multistate Outbreak of *Salmonella* Serotype Tennessee Infections Associated with Peanut Butter – United States, 2006-2007. MMWR 2007; 56(21), 521-524.

<b>Result</b>	<b>Method Used</b>	<b># Labs</b>
<i>Salmonella</i> serogroup D	Dade Behring MicroScan Gram Neg ID	36
	bioMerieux Vitek 2 GN	29
	bioMerieux Vitek 1 GNI +	19
	bioMerieux API 20E	17
	Wellcolex Colour Salmonella	7
	Conventional biochemicals	3
	BD BBL Crystal Enteric/Nonfermenter	1
	BD BBL Enterotube II	1
	BD Phoenix Gram Negative ID	1
	bioMerieux API 20A	1
	Dade Behring MicroScan Rapid Gram Neg	1
	BD BBL Salmonella Antisera (A-E)	1
	MicroScan Gram Negative Overnight Brkpt Combo #30	1
	BD Salmonella Grouping Antisera Kit	1
	Two plus systems	1
	<b>Total <i>Salmonella</i> serogroup D</b>	<b>120</b>
<i>Salmonella</i> species	Dade Behring MicroScan Gram Neg ID	26
	bioMerieux Vitek 2 GN	18
	bioMerieux Vitek 1 GNI +	12
	bioMerieux API 20E	4
	BD BBL Crystal Enteric/Nonfermenter	1
	BD Phoenix Gram Negative ID	1
	Dade Behring MicroScan Rapid Gram Neg	1
	Dade Behring Gram Negative Urine Combo 34	1
		<b>Total <i>Salmonella</i> species</b>
<i>Salmonella</i> species, not <i>typhi</i>	Dade Behring MicroScan Gram Neg ID	6
	bioMerieux Vitek 2 GN	4
	bioMerieux Vitek 1 GNI +	3
	bioMerieux API 20E	2
	BD Phoenix Gram Negative ID	1
	Conventional biochemicals	1
		<b>Total <i>Salmonella</i> species, not <i>typhi</i></b>
<i>Salmonella</i> group D, not <i>typhi</i>	bioMerieux Vitek 1 GNI +	2
	Dade Behring MicroScan Gram Neg ID	2
	Wellcolex	1
	Conventional biochemicals	1
		<b>Total <i>Salmonella</i> Group D, not <i>typhi</i></b>
<i>Salmonella</i> serotype <i>Enteritidis</i>	bioMerieux API 20E	2
	Conventional biochemicals	1
		<b>Total <i>Salmonella</i> serotype <i>Enteritidis</i></b>
<i>Salmonella</i> serogroup D1	Conventional biochemicals	1
<i>Shigella sonnei</i> , group D	Dade Behring MicroScan Gram Neg ID	1
Specimen source not tested		1
Organism not reported on this source	bioMerieux Vitek 1 GNI +	1
Gram negative bacillus		1
<i>Salmonella</i> serogroup B	Dade Behring MicroScan Gram Neg ID	1
	<b>Total All Responses</b>	<b>216</b>

### ***Specimen No. 3 – Blood - Aerobic/Anaerobic (All Organisms)***

This simulated blood specimen was to be cultured both aerobically and anaerobically. The specimen contained only a pure culture of *Listeria monocytogenes*, with no anaerobic organisms present.

*Listeria monocytogenes* was identified by all of the referee laboratories and by 91% of participating laboratories that processed this sample. An additional 6% reported '*Listeria species*'.

<b>Result</b>	<b>Method Used</b>	<b># Labs</b>
<i>Listeria monocytogenes</i>	Dade Behring MicroScan Gram Pos ID	55
	bioMerieux Vitek 2 GP	45
	Conventional biochemicals	27
	bioMerieux API Coryne	25
	bioMerieux Vitek 1 GPI	18
	Remel RapID STR	5
	BD Phoenix Gram Positive ID	5
	Dade Behring Gram Positive Combo 20	3
	bioMerieux API 20 Strep	2
	BD BBL Crystal Gram Positive	1
	Biolog MicroLog Gram Positive	1
	Dade Behring MicroScan Gram Neg ID	1
	Dade Behring MicroScan Rapid Anaerobe	1
	Dade Behring MicroScan Rapid Gram Pos	1
	Remel RapID CB Plus	1
	Dupont RiboPrinter	1
	bioMerieux API Listeria	1
<b>Total <i>L. monocytogenes</i></b>	<b>193</b>	
<i>Listeria species</i>	Conventional biochemicals	5
	Dade Behring MicroScan Gram Pos ID	4
	bioMerieux Vitek 1 GPI	2
	bioMerieux API 20 Strep	1
<b>Total <i>Listeria species</i></b>	<b>12</b>	
Specimen source not tested		<b>5</b>
No report		<b>2</b>
<i>Listeria monocytogenes/innocua</i>	bioMerieux API Coryne	<b>1</b>
Gram positive organism	Conventional tests	<b>1</b>
<i>Corynebacterium jeikeium</i>	Conventional biochemicals	<b>1</b>
<i>Streptococcus</i> , group F	DPC PathoDX Strep Grouping	<b>1</b>
	<b>Total All Responses</b>	<b>216</b>
<b>Also Reported</b>		
Anaerobic gram positive bacilli	Conventional tests	1
No anaerobic organisms		73
<i>Propionibacterium acnes</i>	Remel RapID ANA II	1
No Bifidobacterium isolated		1

### ***Specimen No. 4 – Wound (Pathogens Only) and Antibiotic Susceptibility***

This simulated wound specimen contained *Acinetobacter baumannii*. This organism was reported as *Acinetobacter baumannii* by 40% of the referee laboratories while 60% identified it as *Acinetobacter calcoaceticus-baumannii* complex. Both answers are considered correct.

Of the participating laboratories that processed this sample, 67% identified *A. baumannii* while 24% reported *Acinetobacter calcoaceticus-baumannii* complex and an additional 4% reported *Acinetobacter* species.

Antimicrobial susceptibility testing was indicated with imipenem and trimethoprim/sulfamethoxazole. This isolate was susceptible to imipenem and resistant to TMP/SMX. All of the referee and participating laboratories that tested this imipenem reported a result of susceptible. TMP/SMX was reported as resistant by all of the referee laboratories and by 98% of participants that tested this antibiotic.

Result	Method Used	# Labs
<i>Acinetobacter baumannii</i>	Dade Behring MicroScan Gram Neg ID	61
	bioMerieux Vitek 2 GN	46
	bioMerieux API 20E	13
	bioMerieux Vitek 1 GNI +	8
	bioMerieux API 20NE	6
	BD BBL Crystal Enteric/Nonfermenter	3
	Conventional biochemicals	1
	bioMerieux API 20A	1
	Dade Behring MicroScan Gram Pos ID	1
	BD Phoenix Gram Negative ID	1
	BD BBL Enterotube II	1
	Remel RapID NF Plus	1
	16s rDNA sequencing	1
	<b>Total <i>A. baumannii</i></b>	<b>144</b>
	<i>Acinetobacter calcoaceticus</i> - <i>baumannii</i> complex	bioMerieux Vitek 1 GNI +
bioMerieux API 20E		6
Dade Behring MicroScan Gram Neg ID		5
bioMerieux API 20NE		5
bioMerieux Vitek 2 GN		4
BD Phoenix Gram Negative ID		2
Dupont RiboPrinter		1
<b>Total <i>A. calcoaceticus</i>-<i>baumannii</i> complex</b>		<b>52</b>
<i>Acinetobacter</i> species	Dade Behring MicroScan Gram Neg ID	4
	Conventional biochemicals	1
	bioMerieux Vitek 2 GN	1
	Biolog MicroLog Gram Negative	1
	BD Phoenix Gram Negative ID	1
	<b>Total <i>Acinetobacter</i> species</b>	<b>8</b>
<i>Acinetobacter baumannii/haemolyticus</i>	Dade Behring MicroScan Gram Neg ID	7
	MicroScan Gram Negative Overnight Breakpoint Combo #30	1
	<b>Total <i>A. baumannii/haemolyticus</i></b>	<b>8</b>
<i>Acinetobacter baumannii</i> complex	bioMerieux Vitek 2 GN	2
Specimen source not tested		2
	<b>Total All Responses</b>	<b>216</b>

**Results of Antimicrobial Susceptibility Testing – *A. baumannii* with Imipenem**

Result	Method (# Labs)	# Labs	Zone	MIC	
Susceptible	MicroScan (82)	55		≤4	
		17		<4	
		5		<1	
		3		Not given	
		1		≥4	
		1		1	
	bioMerieux Vitek 2 (47)	44		≤1	
		3		<1	
		23		<4	
	bioMerieux Vitek 1 (28)	3		Not given	
		2		<4	
		2		≤2	
	Trek Sensititre (5)	1		2	
		1		1.0	
		1		0.5	
		1			
	BD Phoenix	3		≤1	
	Not given	1		1	
	Agar dilution	1		<4	
	E-test	1		1.5	
	Broth Dilution	1		≤2	
	Disk diffusion (28)	1	29		
		1	28		
		3	27		
		3	26		
		7	25		
		6	24		
		1	23		
3		22			
1		20			
1		19			
1		17			
Total		197			
Test not performed on antibiotic		14			
Test not performed on organism		2			
Test not performed on source		2			
Do not perform susceptibility testing		1			

**Results of Antimicrobial Susceptibility Testing – *A. baumannii* with TMP/SMX**

Result	Method (# Labs)	# Labs	Zone	MIC
Resistant	MicroScan (82)	69		>2/38
		7		>2/38
		3		Not given
		1		>2
		1		72/38
		1		>32
	bioMerieux Vitek 2 (49)	40		≥320
		5		80
		1		>16/304
		1		≥16/304
		1		160
		1		>320
	bioMerieux Vitek 1 (24)	13		80
		5		≥320
		4		160
		1		Not given
		1		<80
	Trek Sensititre (4)	2		>4
		1		≥8/152
		1		>4
	BD Phoenix	3		>2/38
	E-test (2)	1		>32
		1		Not given
	Not given (2)	1		>2/38
		1		≥32
	Agar dilution	1		>2/38
	frozen, in house prepared	1		>16/304
Broth Dilution	1		>4/76	
Disk diffusion (36)	1	10		
	1	8		
	4	7		
	11	6		
	19	0		
Total		205		
Susceptible	bioMerieux Vitek 1 (4)	1		≤10
		1		<10
		1		Not given
		1		20
Total		4		
Test not performed on antibiotic		1		
Test not performed on organism		3		
Test not performed on source		2		
Do not perform susceptibility testing		1		

Antibiotic Susceptibility Results - Participating & Referee Labs <i>Acinetobacter baumannii</i>				
	Imipenem		TMP/SMX	
	Referee <sup>a</sup>	Participant <sup>b</sup>	Referee <sup>a</sup>	Participant <sup>b</sup>
Susceptible	10	187	0	4
Intermediate	0	0	0	0
Resistant	0	0	9	196
Antibiotic not tested <sup>c</sup>	0	16	1	3
Do not process source <sup>d</sup>	0	2	0	2
Susceptibility testing not performed	0	1	0	1
No result reported	0	0	0	0

<sup>a</sup>Referee Laboratories (10 labs)

<sup>b</sup>Other Participating Laboratories (206 labs)

<sup>c</sup>Antibiotic not tested / reported for this organism

<sup>d</sup>Do not process specimen source

## Specimen No. 5 – Throat (Pathogens Only)

This simulated throat culture contained *Arcanobacterium haemolyticum*. All referee laboratories correctly identified this organism as did 75% of the participating laboratories that processed this specimen source.

Additional organisms included in this sample were *Corynebacterium striatum* and *Streptococcus salivarius*.

Approximately 6% of participants reported that this specimen was negative for pathogens. Most of these laboratories do not screen throat specimens for *A. haemolyticum*, a documented cause of pharyngitis found primarily in the adolescent and young adult population. Therefore, a report of ‘No Pathogens’ is incorrect and misleading to the physician. Laboratories that screen throat specimens for selected pathogens only should report the specimen as negative for those specific organisms that have been ruled out.

Result	Method Used	# Labs
<i>Arcanobacterium haemolyticum</i>	bioMerieux API Coryne	58
	Conventional biochemicals	52
	Remel RapID CB Plus	28
	bioMerieux Vitek 1 ANI	10
	BD Phoenix Gram Positive ID	5
	bioMerieux Vitek 2 ANC	1
	bioMerieux Vitek 1 GPI	1
	bioMerieux API 20 Strep	1
	Biolog MicroLog Gram Positive	1
	Remel RapID ANA II	1
	Two plus systems	1
	<b>Total <i>A. haemolyticum</i></b>	
<i>Arcanobacterium</i> species	Conventional biochemicals	12
	Remel RapID CB Plus	4
	bioMerieux API Coryne	1
	<b>Total <i>Arcanobacterium</i> species</b>	<b>17</b>
No pathogens isolated		<b>13</b>
Negative for beta-hemolytic <i>Streptococcus</i> , Group A		<b>5</b>
Specimen source not tested		<b>5</b>
Gram positive bacillus	Conventional biochemicals	<b>4</b>
<i>Arcanobacterium pyogenes</i>	Remel RapID CB Plus	2
	Conventional biochemicals	1
	<b>Total <i>A. pyogenes</i></b>	<b>3</b>
<i>Streptococcus</i> , group B ( <i>S. agalactiae</i> )	Murex Streptex	<b>2</b>
Not identified		<b>2</b>
<i>Agrobacterium</i> species	Conventional biochemicals	<b>1</b>
Beta hemolytic colony		<b>1</b>
Beta Hemolytic <i>Streptococcus</i> not group A or Group B	Conventional biochemicals	<b>1</b>
<i>Corynebacterium</i> species	bioMerieux API Coryne	<b>1</b>
<i>Streptococcus</i> beta-hemolytic not Group A, B or F	Remel Patho DX Strep Grouping Kit	<b>1</b>
<i>Streptococcus</i> , group C	DPC PathoDX Strep Grouping	<b>1</b>
	<b>Total All Responses</b>	<b>216</b>

### ***Chlamydia – cervical swab for direct testing***

This simulated cervical swab was provided to laboratories that test for *Chlamydia* using direct detection methods. This sample contains non-viable organisms and is not suitable for laboratories performing *Chlamydia* culture. Currently, 105 out of 216 participating laboratories (48.6%) perform direct detection testing for *Chlamydia*.

This sample was negative for *Chlamydia* and was reported as such by all of the participating laboratories that tested this specimen.

#### **All Laboratories reported “Negative”**

<b>Method Used</b>	<b># Labs</b>
Gen-Probe PACE 2 CT or CT/GC	36
Gen-Probe Aptima Combo 2	28
BD ProbeTec ET CT or CT/GC	19
Roche Diagnostics COBAS AMPLICOR CT/NG	10
bioMerieux VIDAS	5
BioStar Chlamydia OIA	1
Digene Hybrid Capture hc2 CT/GC	1
Roche Diagnostics AMPLICOR CT/NG	1
Wampole Clearview Chlamydia	1
BioRad Chlamydia Microplate EIA	1
Aptima (Tigris)	1
In-house developed real-time PCR	1
<b>TOTAL</b>	<b>105</b>

## ***Direct Antigen Detection***

All participating laboratories which perform direct antigen testing received either a simulated throat swab to be tested for Group A *Streptococcus* or a genital swab to be tested for Group B *Streptococcus*. Information provided in the Bacteriology Questionnaire was used to determine which type of specimen to send to each laboratory.

### **Specimen A - Source: Throat for Group A *Streptococcus***

This specimen was positive for Group A *Streptococcus*. All of the participating laboratories that processed this specimen reported it as positive.

#### **All laboratories reported “Positive”**

<b>Method Used</b>	<b># Labs</b>
BioStar Aceava Strep A	13
Quidel QuickVue + Strep A	7
Abbott Signify Strep A Dipstick	6
Fisher Sure-Vue Strep A Lateral Flow Test	5
BioStar Strep A OIA Max	4
Fisher Sure-Vue SELECT Strep A	4
BD Chek Strep A	3
Cardinal Health SP Brand Strep A Cassette	3
GenProbe Group A Strep	3
Meridian Bioscience ImmunoCard STAT Strep A	3
Quidel QuickVue Inline Strep A	3
Wampole Clearview Strep A Extract	3
Abbott Signify Strep A Cassette	2
Quidel QuickVue Dipstick Strep A	2
Remel PathoDx Strep A	2
Beckman Coulter Icon SC Strep A	1
Beckman Coulter Icon DS Strep A	1
Cardinal Health SP Brand Strep A Dipstick	1
Polymedco Poly Stat Strep A	1
Sacks Medical Corp RefuAH Strep A	1
Stanbio QuStick	1
BD Directigen EZ Group A Strep	1
Genzyme OSOM Strep A Test	1
Fisher Sure-Vue Signature Strep A Test	1
Mainline Confirms Strep A	1
<b>TOTAL</b>	<b>73</b>

**Specimen C – Source: Genital for Group B *Streptococcus***

This specimen was positive for Group B *Streptococcus*. All laboratories that tested this sample reported it as positive.

**IMPORTANT NOTE:** Due to the extremely small number of laboratories offering this test, this was the last proficiency panel to include sample “C”, antigen detection for Group B *Streptococcus*. Laboratories that are still performing this test will need to implement a twice-yearly quality assurance program to fulfill the requirements as specified in Quality Assessment Sustaining Standard of Practice 3 (QA S3): Ongoing Verification of Examination Accuracy of the New York State Health Department Clinical Laboratory Standards of Practice.

**All laboratories reported “Positive”**

<b>Method Used</b>	<b># Labs</b>
BioStar Strep B OIA	2

**BACTERIAL IDENTIFICATION BY PARTICIPATING LABORATORIES**

	<u>Number Reported</u>	<u>%</u>
<b>SPECIMEN NUMBER 1</b>		
<i>Campylobacter jejuni</i>	128	59.3
<i>Campylobacter</i> species	55	25.5
No enteric pathogens isolated	14	6.5
Specimen source not tested	9	4.2
Do not culture for <i>Campylobacter</i>	7	3.2
<i>Escherichia coli</i> O157	1	0.5
No report	1	0.5
No <i>Salmonella</i> or <i>Shigella</i>	1	0.5

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<b>SPECIMEN NUMBER 2</b>		
<i>Salmonella</i> serogroup D	120	55.6
<i>Salmonella</i> species	64	29.6
<i>Salmonella</i> species not <i>typhi</i>	17	7.9
<i>Salmonella</i> group D, not <i>typhi</i>	6	2.8
<i>Salmonella</i> serotype Enteritidis	3	1.4
<i>Salmonella</i> serogroup D1	1	0.5
<i>Salmonella</i> serogroup B	1	0.5
Gram negative bacillus	1	0.5
<i>Shigella sonnei</i> group D	1	0.5
Organism not reported in this source	1	0.5
Specimen source not tested	1	0.5

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<b>SPECIMEN NUMBER 3</b>		
<i>Listeria monocytogenes</i>	193	89.3
<i>Listeria</i> species	12	5.6
Specimen source not tested	5	2.3
No report	2	0.9
<i>Corynebacterium jeikeium</i>	1	0.5
Gram positive organism	1	0.5
<i>Listeria monocytogenes/innocua</i>	1	0.5
<i>Streptococcus</i> , group F	1	0.5

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<b>SPECIMEN NUMBER 4</b>		
<i>Acinetobacter baumannii</i>	144	66.7
<i>Acinetobacter calcoaceticus-baumannii</i> complex	52	24.1
<i>Acinetobacter</i> species	8	3.7
<i>Acinetobacter baumannii/haemolyticus</i>	8	3.7
<i>Acinetobacter baumannii</i> complex	2	0.9
Specimen source not tested	2	0.9

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**SPECIMEN NUMBER 5**

<i>Arcanobacterium haemolyticum</i>	159	73.6
<i>Arcanobacterium</i> species	17	7.9
No pathogens isolated	13	6.0
Negative for beta-hemolytic <i>Streptococcus</i> , group A	5	2.3
Specimen source not tested	5	2.3
Gram positive bacillus	4	1.9
<i>Arcanobacterium pyogenes</i>	3	1.4
<i>Streptococcus</i> group B ( <i>S. agalactiae</i> )	2	0.9
Not identified	2	0.9
<i>Agrobacterium</i> species	1	0.5
Beta hemolytic colony	1	0.5
Beta hemolytic <i>Streptococcus</i> not group A or group B	1	0.5
<i>Corynebacterium</i> species	1	0.5
<i>Streptococcus</i> beta-hemolytic not group A, B or F	1	0.5
<i>Streptococcus</i> , group C	1	0.5

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**CHLAMYDIA SPECIMEN**

Negative for <i>Chlamydia trachomatis</i>	105	100
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**DIRECT ANTIGEN SPECIMENS**

A. Positive for Group A <i>Streptococcus</i>	73	100%
C. Positive for Group B <i>Streptococcus</i>	2	100%