

BACTERIOLOGY PROFICIENCY TESTING PROGRAM

General Category

January 16, 2001

This report summarizes the results of the proficiency test administered January 16, 2001 to laboratories in the General Bacteriology category.

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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. Failure of 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 90% 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 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 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%.

Notes of Interest

Several years ago we asked laboratories to participate in a survey to assess the use of NCCLS guidelines for disk diffusion antimicrobial susceptibility testing. Those results have been published in the *Journal of Clinical Microbiology* (Use of National Committee for Clinical Laboratory Standards guidelines for disk diffusion susceptibility testing in New York State laboratories. 2000. *J. Clin. Microbiol.* 38 (9):3341-3348). Reprints can be obtained by calling 518-474-4177 or email at bacti@wadsworth.org. We thank all the laboratories that participated.

JANUARY 16, 2001 TEST EVENT

Number of Participating Laboratories

Receiving specimens 266
Returning results 265 (99.6%)

Grade Distribution		
Score	Number	Percent
100	237	89.4
90 - 99	19	7.2
80 - 89	5	1.9
70 - 79	1	0.4
60 - 69	1	0.4
<60	2	0.8

BACTERIOLOGY - GENERAL
JANUARY 16, 2001
ANSWER KEY

Specimen No. 1 - Stool (Pathogens Only)

Shigella sonnei (group D)

Specimen No. 2 – Urine (All Organisms)

Citrobacter freundii

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

No anaerobic organisms

Plesiomonas shigelloides

Specimen No. 4 – Tracheal Aspirate (Pathogens Only) Antibiotic Susceptibility

Acinetobacter baumannii

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

Imipenem - Susceptible

Specimen No. 5 - CSF (All Organisms)

Listeria monocytogenes

Educational specimen – Perforated Appendix

Bilophila wadsworthia

Direct Antigen Detection

A (Throat)

Negative for Group A *Streptococcus*

B (CSF)

Neisseria meningitidis group B (not authenticated)

C (Genital)

Negative for Group B *Streptococcus*

REFEREE LABORATORY RESULTS

Specimen Number	Referee Laboratory Responses	Percent*
1	<i>Shigella sonnei</i>	100
2	<i>Citrobacter freundii</i>	80
	<i>Citrobacter freundii</i> complex	20
3	No anaerobic organisms	100
	<i>Plesiomonas shigelloides</i>	100
4	<i>Acinetobacter baumannii</i>	60
	<i>A. calcoaceticus-baumannii</i> complex	30
	<i>Acinetobacter anitratus</i>	10
5	<i>Listeria monocytogenes</i>	100

* Based on responses of 10 referee laboratories

Specimen Number 1 - Stool (Pathogens Only)

This simulated stool specimen contained *Shigella sonnei*. This organism was reported by all referee laboratories and by ninety-five percent of participating laboratories that process stool specimens. *Citrobacter freundii* and *Escherichia coli* were included as additional nonpathogenic organisms.

Systems used for biochemical identification of *Shigella sonnei*:

Vitek GNI	94
Dade MicroScan	65
bioMerieux API 20E	59
Conventional biochemicals	6
Two or more systems	6
BBL Crystal	4
IDS RapID ONE	2
BBL Enterotube II	1
Difco Pasco	1
No system indicated	1
Remel MicroID	1
TOTAL	240

Other responses:

Do not process stool specimens 13

***Shigella* species**

Vitek GNI	5
Dade MicroScan	3
BBL Crystal	1
bioMerieux API 20E	1
TOTAL	10

No Enteric Pathogens 1

***Salmonella* species**

bioMerieux API 20E	1
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Methods of serological identification used by labs reporting the following results:

Shigella sonnei

No information given	130
BBL <i>Shigella</i> antisera	66
Murex Wellcolex Colour <i>Shigella</i> antisera	29
Difco Bacto <i>Shigella</i> antisera	15
TOTAL	240

***Shigella* species**

No information given	10
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***Salmonella* species**

No information given	1
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Specimen No. 2 - Urine (All Organisms)

This simulated urine specimen contained *Citrobacter freundii*. Eighty percent of the referee laboratories reported *C. freundii*, while the remaining 20% reported *C. freundii* complex. Of the participating laboratories which processed this specimen source, 85% identified *Citrobacter freundii* while 14% reported the organism as *Citrobacter freundii* complex.

Methods of identification used by laboratories reporting *Citrobacter freundii*:

Dade MicroScan	83
Vitek GNI	63
bioMerieux API 20E	52
BBL Crystal	9
Two or more systems	7
Conventional biochemicals	4
IDS RapID ONE	2
Cathra Autoreader	1
Difco Pasco	1
Enterotube II	1
Remel MicroID	1
TOTAL	224

Other responses:

***Citrobacter freundii* complex**

Vitek GNI	37
Dade MicroScan	1
TOTAL	38

Do not process urine specimens 2

***Citrobacter* species**

Dade MicroScan	1
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Specimen No. 3 - Blood - Aerobic/anaerobic (All Organisms)

This simulated blood specimen was indicated for both aerobic and anaerobic culture. *Plesiomonas shigelloides* was the only organism included in this specimen. All referee laboratories and 99.6% of participants which processed this specimen for anaerobic culture did not report the presence of any anaerobic organisms. *Plesiomonas shigelloides* was identified by all referee laboratories identified and by 97% of participating laboratories which process blood cultures.

Participating laboratories reporting that Specimen No. 3 contained:

No anaerobic organisms	248
Do not process blood cultures	10
Do not isolate anaerobes	6
<i>Propionibacterium acnes</i>	1

Methods of identification used by laboratories reporting *Plesiomonas shigelloides*:

Vitek GNI	97
Dade MicroScan	77
bioMerieux API 20E	38
Two or more systems	19
BBL Crystal	6
bioMerieux API 20NE	4
Conventional biochemicals	4
Difco Pasco	1
IDS RapID NF Plus	1
TOTAL	247

Other reports:

Do not process blood specimens	10
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***Plesiomonas* species**

Dade MicroScan	2
bioMerieux API 20E	1
TOTAL	3

Aerobic gram negative bacilli	2
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Aeromonas hydrophila

IDS RapID ONE	1
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Escherichia coli
Conventional biochemicals 1

Providencia stuartii
bioMerieux API 20E 1

Additional organisms reported in Specimen 3:

Coagulase-negative *Staphylococcus* 3

Gemella species 1

Gram positive bacillus 1

Staphylococcus aureus 1

Staphylococcus warneri 1

Streptococcus oralis 1

Specimen No. 4 – Tracheal Aspirate (Pathogens Only) and Antibiotic Susceptibility

This simulated tracheal aspirate from a hospital inpatient contained *Acinetobacter baumannii* as the reportable organism. *Staphylococcus hominis* and *Streptococcus sanguis* were included as normal flora in this specimen.

A. baumannii is a nosocomial pathogen of increasing importance. This organism has the ability to acquire resistance to multiple antibiotics and there have been reports in the literature of nosocomial outbreaks caused by multiply resistant strains of *A. baumannii*. Patients most at risk for infection are the elderly, neonates, surgical patients and those with underlying conditions such as burns, malignancy or immunosuppression. Respiratory tract infections are the most common nosocomial infections caused by this organism and are linked to contaminated ventilators or other invasive devices such as endotracheal tubes. Other nosocomial infections include urinary tract and wound infections.

The nomenclature of *Acinetobacter* is complex and continues to be a source of confusion, as demonstrated by the variety of responses provided by the participating laboratories. The genus *Acinetobacter* currently consists of 21 DNA homology groups, or genomospecies, 7 of which have been named. Among these are: genomospecies 1 - *A. calcoaceticus*, an organism which is usually isolated from soil; genomospecies 2 - *A. baumannii*, which was previously known as *Acinetobacter calcoaceticus* var. *anitratus*; genomospecies 4 - *A. haemolyticus*; and genomospecies 8/9 - *A. lwoffii*, which was previously designated *A. calcoaceticus* var. *lwoffii*. Since it can be difficult to distinguish biochemically between genomospecies 1, 2, 3 and 13, the designation of *Acinetobacter calcoaceticus-baumannii* complex is often used by laboratories.

Sixty percent of the referee laboratories identified *Acinetobacter baumannii*, while 30% identified it as *A. calcoaceticus-baumannii* complex and 10% as *Acinetobacter anitratus*.

The distribution of results from participating laboratories which processed this specimen source is as follows: *A. baumannii* (45%), *A. calcoaceticus-baumannii* complex (26%), and *A. baumannii/haemolyticus* (17%). There are several laboratories which reported this organism as *A. calcoaceticus* var. *anitratus* (4.6%) and *A. anitratus* (2.7%), both of which are invalid nomenclature although credit was not deducted for these responses.

Antimicrobial susceptibility testing was also indicated for this specimen. This isolate was reported as susceptible for both doxycycline and imipenem. Results of susceptibility testing of *Acinetobacter baumannii* can be found on pages 19 and 20.

Bergogne-Børžin, E. 1999. Pseudomonads and Miscellaneous Gram-Negative Bacilli, 8.18.1– 8.18.22. In D Armstrong and J Cohen (eds.) *Infectious Diseases*, Mosby, Philadelphia.

Schreckenberger, PC and VonGraevenitz, A. 1999. *Acinetobacter*, *Achromobacter*, *Alcaligenes*, *Moraxella*, *Methylobacterium*, and Other Nonfermentative Gram-Negative Rods, pp. 539 – 560. In PR Murry, EJ Baron, MA Pfaller, FC Tenover, RH Tenover, (eds.) *Manual of Clinical Microbiology*, 7th Edition. ASM Press, Washington, DC.

Methods of identification used by laboratories reporting *Acinetobacter baumannii*:

Dade MicroScan	37
bioMerieux API 20E	31
Vitek GNI	26
bioMerieux API 20NE	6
Two or more systems	6
BBL Crystal	5
Conventional biochemicals	3
Difco Pasco	1
IDS RapID ONE	1
TOTAL	116

Other reports:

***Acinetobacter calcoaceticus–baumannii* complex**

Vitek GNI	60
bioMerieux API 20E	4
Dade MicroScan	2
bioMerieux API 20NE	1
TOTAL	67

Acinetobacter baumannii/haemolyticus

Dade MicroScan	42
bioMerieux API 20E	1
TOTAL	43

Acinetobacter calcoaceticus* var. *anitratus

Vitek GNI	8
bioMerieux API 20E	1
Cathra Autoreader	1
IDS RapID ONE	1
No information given	1
TOTAL	12

Do not process tracheal aspirates **9**

Acinetobacter anitratus

Vitek GNI	3
Dade MicroScan	2
bioMerieux API 20E	1
Conventional biochemicals	1
TOTAL	7

***Acinetobacter baumannii* complex**

Vitek GNI	3
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<i>Acinetobacter</i> species	
Conventional biochemicals	1
Dade MicroScan	1
IDS RapID ONE	1
TOTAL	3

<i>Acinetobacter calcoaceticus</i>	
bioMerieux API 20E	1
Vitek GNI	1
TOTAL	2

<i>Acinetobacter</i> species (glucose positive)	
Vitek GNI	1

<i>Burkholderia cepacia</i>	
IDS RapID NF Plus	1

Saccharolytic, non-hemolytic <i>Acinetobacter</i>	
Two or more systems	1

Results of Antibiotic Susceptibility Testing of *Acinetobacter baumannii* with:

DOXYCYCLINE	
Do not test doxycycline	204

Susceptible	
Kirby-Bauer	30
MicroScan	8
E-test	2
Sceptor	1
Sensititre	1
Two or more systems	1
Vitek	1
TOTAL	44

Do not process specimen source (trach aspirate)	9
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No result given	5
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Intermediate	
Kirby-Bauer	3

IMIPENEM

Susceptible

Vitek	80
MicroScan	73
Kirby-Bauer	56
E-test	3
No information given	2
Agar dilution	1
MIC	1
Sceptor	1
Sensititre	1
Two or more systems	1
TOTAL	219

Do not test imipenem 36

Do not process specimen source (trach aspirate) 9

No result reported 1

Antibiotic Susceptibility Results - Participating & Referee Labs <i>Acinetobacter baumannii</i>												
Antibiotic	Susceptible		Intermediate		Resistant		Not Tested ¹		Do not process source ²		No result reported	
	R ^a	P ^b	R	P	R	P	R	P	R	P	R	P
Doxycycline	3	41	0	3	0	0	6	198	0	9	1	4
Imipenem	10	209	0	0	0	0	0	36	0	9	0	1

^aReferee Laboratories (10 labs total)

^bOther Participating Laboratories (265 labs total)

¹Antibiotic not tested / reported for this organism

²Do not process specimen source

Specimen No. 5 – CSF (All Organisms)

This simulated cerebrospinal fluid contained *Listeria monocytogenes*. All referee laboratories and 95% of laboratories which process CSF specimens reported *L. monocytogenes*.

Methods of identification used by laboratories reporting *Listeria monocytogenes*:

Dade MicroScan	65
Conventional biochemicals	64
Vitek GPI	43
bioMerieux API Coryne	33
Two or more systems	17
bioMerieux API 20 STREP	7
IDS RapID STR	4
Gen-Probe Accuprobe <i>L. monocytogenes</i>	2
BBL Crystal	1
Difco Pasco	1
IDS RapID CB	1
No information given	1
TOTAL	239

Other responses:

Do not process CSF specimens 14

***Listeria* species**

Conventional biochemicals	6
Vitek GPI	4
TOTAL	10

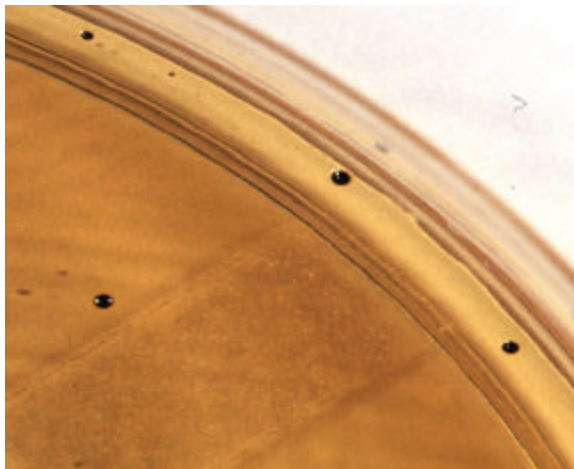
Presumptive *Listeria* species

Conventional biochemicals	2
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Educational Specimen – Perforated Appendix

This simulated specimen from a perforated appendix contained *Bilophila wadsworthia*. Approximately 34% of participating laboratories which isolate anaerobes and which process specimens from this source were able to identify *B. wadsworthia* and an additional 4% reported *Bilophila* species. Approximately 14% of participating laboratories were unable to isolate this organism and reported this specimen as ‘No growth’. Due to the slow growth and minute colony size, these laboratories may not have incubated the plates for an adequate length of time or did not notice the pinpoint colonies. An additional 20% of laboratories reported the presence of an anaerobic gram negative bacillus, but were unable to obtain an identification.

B. wadsworthia was first described in 1989. It is a very slow-growing organism, producing tiny transparent colonies on blood agar plates after 4 –6 days incubation. Due to its fastidious growth, *B. wadsworthia* is often overlooked on routine anaerobic culture. On BBE (Bacteroides bile esculin) agar, *B. wadsworthia* produces a characteristic colony which has transparent edges with a black center after 3-4 days incubation. Approximately 85-90% of strains have been found to produce β -lactamase. Testing for β -lactamase production in this organism requires growth on Columbia blood agar supplemented with 1% pyruvate.



B. wadsworthia on BBE agar. Plate was incubated 4 days.



B. wadsworthia on anaerobic blood agar after 4 days incubation. Note minute colony size.

On gram stain, *Bilophila* appears as pleomorphic gram negative bacilli, which often stain unevenly. The most striking biochemical characteristic of this organism is a very strong catalase reaction utilizing 15% hydrogen peroxide. Additionally, *B. wadsworthia* will grow in 20% bile, most strains are urease positive and have the ability to reduce nitrate. All strains are asaccharolytic and negative for gelatinase, esculin hydrolysis, lecithinase and lipase.

Bilophila wadsworthia is part of the normal flora of the mouth, colon and vagina. In addition to cases of gangrenous and perforated appendicitis where *B. wadsworthia* is the third most commonly isolated anaerobe, this organism has been isolated from numerous sites of infection including blood, bile, brain abscess, pericardial fluid, joint fluid, pleural fluid, liver abscess, and breast abscess. *B. wadsworthia* is seldom isolated in pure culture and is usually present in mixed cultures, often with numerous other anaerobes. β -lactamase production by *B. wadsworthia* may influence treatment options when this organism is present in polymicrobial infections.

Laboratories may wish to modify their anaerobic protocol to increase recovery of this organism. Modifications may include: prolonged incubation of primary plates and blood culture bottles for up to 7 days, screening of small translucent colonies on anaerobic blood agar plates for a strong catalase reaction, and use of BBE plates for primary plating of anaerobic cultures.

Baron, E.J. 1997. *Bilophila wadsworthia*: a unique gram-negative anaerobic rod. *Anaerobe* 3:83-86.

Baron, E.J. et al. 1992. *Bilophila wadsworthia* isolates from clinical specimens. *J. Clin. Microbiol.* 30: 1882-1884.

Baron, E.J. et al. 1989. *Bilophila wadsworthia*, gen. nov. and sp. nov., a unique gram-negative anaerobic rod recovered from appendicitis specimens and human faeces. *J. General Microbiol.* 135: 3405-3411.

Finegold, S.M. et al. 1992. Clinical Importance of *Bilophila wadsworthia*. *Eur. J. Clin. Microbiol. Infect. Dis.* 11: 1058-1063.

Finegold, S.M. and H. Jousimies-Somer. 1997. Recently described clinically important anaerobic bacteria: medical aspects. *Clin. Infect. Dis.* 25(Suppl 2): S88-93.

Summanen, P.H. et al. 1995. *Bilophila wadsworthia* isolates from clinical specimens. *Clin. Infect. Dis.* 20(Suppl 2):S210-1.

Methods of identification used by participating laboratories reporting:

Bilophila wadsworthia

Conventional biochemicals	33
IDS RapID ANA II	32
bioMerieux API 20A	6
bioMerieux An-IDENT	5
BBL Crystal	4
Two or more systems	3
No information given	3
16S rRNA sequencing	1
TOTAL	87

Other reports:

No growth	35
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Anaerobic gram negative bacilli (did not attempt to ID)	31
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Anaerobic gram negative bacilli (unable to ID)	
bioMerieux API An-IDENT	5
Conventional biochemicals	5
Two or more systems	5
Vitek ANI	3
bioMerieux API 20A	1
IDS RapID ANA II	1
TOTAL	20

No result reported 16

<i>Bilophila</i> species	
Conventional biochemicals	6
IDS RapID ANA II	3
No information given	1
Two or more systems	1
TOTAL	11

Do not isolate anaerobes 9

<i>Bacteroides (Campylobacter) gracilis</i>	
IDS RapID ANAII	7

<i>Eubacterium lentum</i>	
bioMerieux API An-IDENT	2
bioMerieux API 20A	1
No information given	1
TOTAL	4

<i>Wolinella</i> species	
IDS RapID ANA II	3
bioMerieux API An-IDENT	1
TOTAL	4

Anaerobic gram positive bacilli 3

<i>Bacteroides</i> species	
Conventional biochemicals	2
bioMerieux API 20A	1
TOTAL	3

<i>Bacteroides ureolyticus</i>	
bioMerieux API An-IDENT	1
IDS RapID ANA II	1
Vitek ANI	1
TOTAL	3

<i>Capnocytophaga</i> species	
IDS RapID ANAII	2
Two or more systems	1
TOTAL	3
Do not test specimen source (appendix)	3
<i>Fusobacterium varium</i>	
IDS RapID ANA II	2
Vitek ANI	1
TOTAL	3
<i>Clostridium difficile</i>	
bioMerieux API An-IDENT	1
MicroScan	1
TOTAL	2
<i>Clostridium</i> species	
Conventional biochemicals	2
<i>Eubacterium</i> species	
bioMerieux API An-IDENT	1
bioMerieux API 20A	1
TOTAL	2
<i>Peptostreptococcus</i> species	
IDS RapID ANAII	1
Vitek ANI	1
TOTAL	2
<i>Porphyromonas asaccharolytica</i>	
bioMerieux API 20A	2
<i>Actinomyces</i> species	
Conventional biochemicals	1
<i>Actinomyces viscosus</i>	
Conventional biochemicals	1
Anaerobic gram negative bacilli (not <i>B. fragilis</i> group)	
Conventional biochemicals	1
<i>Arcobacter butzleri</i>	
Conventional biochemicals	1

<i>Bacteroides</i> species (not <i>B. fragilis</i>)	
Two or more systems	1
<i>Clostridium hastiiforme</i>	
Vitek ANI	1
<i>Clostridium subterminale</i>	
IDS RapID ANAII	1
<i>Fusobacterium necrophorum</i>	
MicroScan	1
<i>Fusobacterium</i> species	
No information given	1
<i>Helicobacter pylori</i>	
No information given	1
<i>Peptostreptococcus tetradius</i>	
IDS RapID ANAII	1
<i>Prevotella</i> species	
Vitek ANI	1
<i>Propionibacterium granulosum</i>	
bioMerieux API An-IDENT	1
Additional organisms reported:	
Coagulase-negative <i>Staphylococcus</i>	5
<i>Propionibacterium acnes</i>	4
<i>Staphylococcus aureus</i>	2
<i>Staphylococcus epidermidis</i>	2
<i>Citrobacter freundii</i> complex	1
<i>Listeria monocytogenes</i>	1
<i>Listeria</i> species	1
<i>Micrococcus</i> species	1
<i>Staphylococcus saccharolyticus</i>	1
<i>Staphylococcus warneri</i>	1

Direct Antigen Detection Specimen

All participating laboratories which perform direct antigen testing received either a throat swab to be tested for Group A *Streptococcus* or a simulated CSF to be tested for bacterial antigens. 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 negative for Group A *Streptococcus*. Approximately 98% of the participating laboratories that tested this specimen reported it as negative.

Test kits used by laboratories reporting Specimen A as:

Negative for Group A *Streptococcus*

Becton-Dickinson Directigen 1-2-3 Grp A Strep	14
Abbott Signify Strep A	9
BioStar Strep A OIA	3
Lifesign Status AccuStrep A	3
Pacific Biotech Cards Q.S. Strep A	3
Beckman-Coulter Icon Fx Strep A	2
Wampole Clearview Strep A	2
No test kit indicated	2
BioStar Aceeava Strep A	1
Becton-Dickinson Link 2 Strep A	1
DPC PathoDx Strep A	1
Fisher Scientific Sure-View Strep A	1
GenProbe Group A Strep	1
Genzyme Contrast Strep A	1
IDS PathoDx	1
Medicorp Strep-Pak	1
Quidel QuickVue Flex Strep A	1
Quidel QuickVue In Line Strep A	1
TOTAL	48

Positive for Group A *Streptococcus*

Quidel QuickVue	1
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Specimen B - Source: CSF

This specimen contained *Neisseria meningitidis* B. Unfortunately, this specimen was not authenticated as positive for this antigen. Only 63% of participating laboratories were able to detect the presence of *N. meningitidis* B. However, when analyzed by commercial product, 97% of the labs using the B-D Directigen kit detected *N. meningitidis* B versus 39% of laboratories using the Murex Wellcogen kit.

Those laboratories that did not find this specimen positive for *N. meningitidis* B should carefully evaluate their test procedure and interpretation of results.

Test kits used by laboratories reporting Specimen B as positive for:

***Neisseria meningitidis* B/*E. coli* K1**

B-D Directigen Meningitis Combo Test	32
Murex-Wellcogen Bacterial Antigen kit	18
No information provided	2
TOTAL	52

Negative for all bacterial antigens

Murex-Wellcogen Bacterial Antigen kit	28
B-D Directigen Meningitis Combo Test	1
No information provided	1
TOTAL	30

Specimen C – Source: Genital tract for Group B Streptococcus

This specimen was to be tested for the presence of Group B *Streptococcus*. All laboratories which tested this specimen reported it as negative.

Test kits used by laboratories reporting Specimen C as negative for Group B

***Streptococcus*:**

BioStar Strep B OIA	9
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Note:

The inclusion of specimens for direct antigen testing does not reflect any endorsement by the New York State Department of Health of use of these tests in the clinical laboratory.

BACTERIAL IDENTIFICATION BY PARTICIPATING LABORATORIES

	<u>Number Reported</u>	<u>%</u>
SPECIMEN NUMBER 1		
<i>Shigella sonnei</i>	240	90.6
Do not process stool specimens	13	4.9
<i>Shigella</i> species	10	3.8
No Enteric Pathogens	1	0.4
<i>Salmonella</i> species	1	0.4

SPECIMEN NUMBER 2		
<i>Citrobacter freundii</i>	224	84.5
<i>Citrobacter freundii</i> complex	38	14.3
Do not process urine specimens	2	0.8
<i>Citrobacter</i> species	1	0.4

SPECIMEN NUMBER 3		
No anaerobic organisms	248	93.6
Do not process blood cultures	10	3.8
Do not isolate anaerobes	6	2.3
<i>Propionibacterium acnes</i>	1	0.4
<i>Plesiomonas shigelloides</i>	247	93.2
Do not process blood cultures	10	3.8
<i>Plesiomonas</i> species	3	1.1
Aerobic gram negative bacilli	2	0.8
<i>Aeromonas hydrophila</i>	1	0.4
<i>Escherichia coli</i>	1	0.4
<i>Providencia stuartii</i>	1	0.4

SPECIMEN NUMBER 4		
<i>Acinetobacter baumannii</i>	116	43.8
<i>Acinetobacter calcoaceticus-baumannii</i> complex	67	25.3
<i>Acinetobacter baumannii/haemolyticus</i>	43	16.2
<i>Acinetobacter calcoaceticus</i> var. <i>anitratus</i>	12	4.5
Do not process tracheal aspirates	9	3.4
<i>Acinetobacter anitratus</i>	7	2.6
<i>Acinetobacter baumannii</i> complex	3	1.1
<i>Acinetobacter</i> species	3	1.1
<i>Acinetobacter calcoaceticus</i>	2	0.8
<i>Acinetobacter</i> species (glucose positive)	1	0.4
<i>Burkholderia cepacia</i>	1	0.4
Saccharolytic, nonhemolytic <i>Acinetobacter</i>	1	0.4

SPECIMEN NUMBER 5

<i>Listeria monocytogenes</i>	239	90.2
Do not process CSF specimens	14	5.3
<i>Listeria</i> species	10	3.8
Presumptive <i>Listeria</i> species	2	0.8

EDUCATIONAL SPECIMEN

<i>Bilophila wadsworthia</i>	87	32.8
No growth	35	13.2
Anaerobic gram negative bacilli (did not attempt to ID)	31	11.7
Anaerobic gram negative bacilli (unable to ID)	20	7.5
No result reported	16	6.0
<i>Bilophila</i> species	11	4.1
Do not isolate anaerobes	9	3.4
<i>Bacteroides (Campylobacter) gracilis</i>	7	2.6
<i>Eubacterium lentum</i>	4	1.5
<i>Wolinella</i> species	4	1.5
Anaerobic gram positive bacilli	3	1.1
<i>Bacteroides</i> species	3	1.1
<i>Bacteroides ureolyticus</i>	3	1.1
<i>Capnocytophaga</i> species	3	1.1
Do not test specimen source (appendix)	3	1.1
<i>Fusobacterium varium</i>	3	1.1
<i>Clostridium difficile</i>	2	0.8
<i>Clostridium</i> species	2	0.8
<i>Eubacterium</i> species	2	0.8
<i>Peptostreptococcus</i> species	2	0.8
<i>Porphyromonas asaccharolytica</i>	2	0.8
<i>Actinomyces</i> species	1	0.4
<i>Actinomyces viscosus</i>	1	0.4
Anaerobic gram negative bacilli (not <i>B. fragilis</i> group)	1	0.4
<i>Arcobacter butzleri</i>	1	0.4
<i>Bacteroides</i> species (not <i>B. fragilis</i>)	1	0.4
<i>Clostridium hastiiforme</i>	1	0.4
<i>Clostridium subterminale</i>	1	0.4
<i>Fusobacterium necrophorum</i>	1	0.4
<i>Fusobacterium</i> species	1	0.4
<i>Helicobacter pylori</i>	1	0.4
<i>Peptostreptococcus tetradius</i>	1	0.4
<i>Prevotella</i> species	1	0.4
<i>Propionibacterium granulosum</i>	1	0.4

DIRECT ANTIGEN SPECIMEN

A.	Negative for Group A <i>Streptococcus</i>	48	97.9
	Positive for Group A <i>Streptococcus</i>	1	2.0
B.	<i>Neisseria meningitidis</i> B/ <i>E. coli</i> K1	52	63.4
	Negative for all bacterial antigens	30	36.6
C.	Negative for Group B <i>Streptococcus</i>	9	100.0