

## B

### Bacterial Vaginosis

#### Specimen Container

Sterile leak-proof screw cap container (SCM)

#### Preferred Specimen

Vaginal secretions from the lower 1/3 of the vaginal wall collected using a sterile cotton tipped applicator

#### Instructions

- Use a sterile cotton tipped applicator to collect vaginal secretions from the lower 1/3 of the vaginal wall. Do not touch the cervix. **DO NOT USE A STANDARD CULTURE SWAB.**
- Place the sample in a properly labeled, clean, dry, sterile glass or plastic tube and immediately transport to the laboratory.
- Inform the laboratory of the patient's recent antimicrobial therapy history.

#### PowerChart Name

Bacterial Vaginosis Screen

#### Transport Temperature

- Immediately upon collection (transport within 10 – 15 minutes)
- If delayed, store the specimen at room temperature (15 – 30 degrees celsius) for up to 48 hours, or refrigerated (2 – 8 degrees celsius) for up to 7 days.

#### Stability

- Room Temperature (15 – 30 degrees celsius): 48 hours
- Refrigerated (2 – 8 degrees celsius): 7 days
- DO NOT FREEZE

#### Rejection Criteria

- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Specimens containing preservatives or fixatives (i.e. Formalin).
- Specimens stored at room temperature >48 hours
- Specimens stored refrigerated > 7 days
- Specimens submitted using transport swabs (standard culture swab)

#### Test Performed

Sun – Sat; Day and Evening Shifts

#### Report Available

Within 90 minutes of specimen processing.

#### Normal Value

Negative

## Test Results

Positive	An elevated sialidase enzyme level has been detected. This enzyme may be produced by organisms associated with bacterial vaginosis (i.e. Gardnerella vaginosis, Bacteroides species, Prevotella species, Mobiluncus species). Please correlate test results with other clinical findings.
Negative	A normal level of sialidase enzyme activity has been detected.
Invalid	Unable to rule out the presence of the sialidase enzyme. Please correlate results with other available clinical information and patient signs and symptoms.

## Limitations

- This test is intended for vaginal fluid only. Do not use samples from the cervix.
- Patients may have mixed infections. This test shows that the sialidase enzyme is active in the sample. It does not show if other organisms (i.e. yeasts, parasites) are present in the sample.
- The test procedure must be followed or incorrect test results may be obtained.
- Insufficient sample volume or samples collected from patients undergoing antimicrobial therapy may cause false negative results.
- Test results should be considered in conjunction with other clinical and patient information.
- Sialidase levels below the detection limit of the test may yield false negative results.

## Interfering Substances

Samples contaminated with vaginal creams or ointments, douche, spermicide, vaginal lubricants, or feminine sprays.

## Alternate Name(s)

BV, Sialidase

# C

## Chlamydia trachomatis/Neisseria gonorrhoeae Amplified DNA Probe

### Message

A negative test result does not exclude the possibility of infection because test results may be affected by improper specimen collection, technical error, specimen mix-up, concurrent antibiotic therapy, or the number of organisms in the specimen which may be below the sensitivity of the test. All test results should be interpreted in conjunction with other available laboratory and clinical data.

### Preferred Specimen

Females: Endocervical specimen

Males: Urine\* (1st morning void preferred)

\*Please note that we cannot perform this test on male, urethral swabs.

### Specimen Container

Cepheid Xpert® CT/NG Vaginal/Endocervical Specimen Collection Kit

Sterile Urine Cup or Tube

### Minimum Volume

1 Specimen Collection Kit – Female

1 milliliter (mL) Urine

**Instructions**

Inform the laboratory of the patient's recent antimicrobial therapy history.

**PowerChart Name**

Chlamydia/GC DNA Probe

**Transport Temperature**

- **Endocervical Specimen:** Store the specimen at 2°C – 30°C before testing
- **Male Urine:** Store the specimen at 2° – 8°C before testing

**Stability**

- **Endocervical Specimen:** 2 – 30 degrees celsius for a maximum of 60 days
- **Male Urine:** 2° – 8°C before testing for a maximum of 8 days

**Rejection Criteria**

- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Specimens collected using swabs other than the manufacturer's collection kit
- Male, urethral swabs.

**Test Performed**

Mon-Wed-Fri; Day Shift only

**Report Available**

Within 24 hours of specimen processing.

**Reference Range**

Normal Value	Negative
Critical Value	Any detection of Chlamydia trachomatis and/or Neisseria gonorrhoeae

**Limitations**

- This assay will not be performed for patients less than 14 years of age.
- This assay has not been evaluated for patient samples from patients with a history of hysterectomy.
- The current laboratory test method should not be used for the evaluation of suspected sexual abuse or for other medico-legal indications. Additional testing is recommended in any circumstance when false positive or false negative results could lead to adverse medical, social, or psychological consequences.
- This test method cannot be used to assess therapeutic success or failure since nucleic acids from Chlamydia trachomatis and Neisseria gonorrhoeae may persist following antimicrobial therapy.
- The predictive value of the assay depends on the prevalence of the disease in any particular population. If a negative result is obtained with this assay and Chlamydia trachomatis or Neisseria gonorrhoeae infection is highly suspected, repeat testing using an alternative method is recommended.

**Interfering Substances**

The following substances may cause indeterminate or false negative results:

#### Endocervical Specimen:

- Blood > 5% (v/v)
- Mucin > 0.8% (w/v)

#### Male Urine:

- Blood > 0.3% (v/v)
- Mucin > 0.2% (w/v)
- Bilirubin > 0.2 mg/mL

#### Alternate Names

Chlamydia/GC  
CT/NG

## Clostridium Difficile Disease Assay

This test is no longer available. Please see [Clostridium difficile Toxin PCR](#).

## Clostridium difficile Toxin PCR

#### Message

This test does not define the presence of Clostridium difficile disease. This test is not performed on children under the age of 1 year because they have been shown to have relatively high colonization rates with this organism. Test of cure is not recommended because asymptomatic patients may remain positive for weeks to months after a symptomatic episode. Repeat testing will not be performed within 21 days of a positive test.

#### Specimen Container

Leak-proof screw cap container (XST)

#### Preferred Specimen

Diarrheal stool

#### Minimum Volume

1 mL liquid or 1 gram (pea sized) semi-solid human stool.

#### Instructions

Inform the laboratory of the patient's recent antimicrobial therapy history.

#### PowerChart Name

Clostridium Difficile Panel

#### Transport Temperature

Refrigerate the specimen (2-8 degrees celsius) if testing will be performed within 5 days.

#### Stability

Room temperature (20-25 degrees celsius): 24 hours; Refrigerated (2 – 8 degrees celsius): 5 days

### Rejection Criteria

- Unlabeled or mislabeled specimens
- Non-sterile or Leaking containers
- Specimens containing preservatives or fixatives (i.e. Formalin, PVA, etc.)
- Formed stool (Non-diarrheal)
- Specimens collected on swabs

### Test Performed

Sun – Sat; Day and Evening Shifts

### Report Available

Within 24 hours of specimen processing.

### Reference Range

Normal Value	Negative
Critical Value	Any detection of Clostridium difficile toxins

### Reflex Tests

Specimens with a positive toxin PCR result will be reflexed to Fecal Lactoferrin testing for the detection of inflammatory diarrheal disease.

### Limitations

This test does not define the presence of Clostridium difficile disease. Test of cure is not recommended because asymptomatic patients may remain positive weeks to months after a symptomatic episode. Repeat testing will not be performed within 21 days of a positive test result.

### Interfering Substances

Vagisil cream and zinc oxide paste (Listing may not be all inclusive)

### Alternative Name(s)

C. DIFF PCR

## Cryptococcal AG CSF

### Specimen Container

Lumbar puncture tube; Sterile screw cap tube

### Preferred Specimen

Cerebrospinal fluid: 3 – 5 mL.

### Minimum Volume

1 mL cerebrospinal fluid.

### Instructions

Inform the laboratory of the patient's recent antimicrobial therapy history, and any prior patient history of cryptococcal infection or treatment.

**PowerChart Name**

Cryptococcal Antigen CSF

**Transport Temperature**

Immediately upon collection; if delayed, refrigerate the specimen (2 – 8 degrees celsius).

**Stability**

Refrigerated (2 – 8 degrees celsius): 1 week; Frozen (- 20 degrees celsius): > 1 week

**Rejection Criteria**

- Unlabeled or mislabeled specimens
- Non-sterile or Leaking containers
- Specimens collected on a swab

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 24 hours of specimen processing.

**Reference Range**

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Normal Value	Negative
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Critical Value	Any detection of cryptococcal antigens
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**Reflex Tests**

If sufficient sample volume is available, quantitative titers will be performed for positive qualitative specimens.

**Limitations**

Some immunocompromised patients may retain cryptococcal polysaccharide antigens for long periods of time. Positive test may not be indicative of active infection.

## Cryptococcal AG Serum

**Specimen Container**

Sterile screw capped tube; Gold top Vacutainer Tube

**Preferred Specimen**

2 mL of clotted blood (Minimum Volume: 1 mL)

**Instructions**

- Immediately transport to the laboratory upon collection. If transportation to the laboratory will be delayed, centrifuge the vacutainer tube to separate the serum from whole blood, and transfer the serum to a sterile screw capped tube for storage.
- Inform the laboratory of the patient's recent antimicrobial therapy history.
- Inform the laboratory of any prior patient history of cryptococcal infection or treatment

**PowerChart Name**

Cryptococcal Antigen

**Transport Temperature**

Immediately upon collection; if delayed, refrigerate the specimen (2 – 8 degrees celsius).

**Stability**

Refrigerated (2 – 8 degrees celsius): 1 week; Frozen (- 20 degrees celsius): > 1 week

**Rejection Criteria**

- Unlabeled or mislabeled specimens
- Non-sterile or Leaking containers

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 24 hours of specimen processing.

**Reference Range**

Normal Value	Negative
Critical Value	Any detection of cryptococcal antigens

**Reflex Tests**

If sufficient sample volume is available, quantitative titers will be performed for positive qualitative specimens.

**Limitations**

Some immunocompromised patients may retain cryptococcal polysaccharide antigens for long periods of time. Positive test may not be indicative of active infection.

**Culture AFB Blood**

**Message**

Test performed by a commercial reference laboratory.

NOTE: Positive cultures reflex to organism identification, and antimicrobial susceptibility tests (when appropriate).

**Specimen Container**

Bactec Myco/F Lytic Bottle (MYC)

**Preferred Specimen**

Whole Blood or Bone Marrow

**Minimum Volume**

3 – 5 mL

**Instructions**

- Inform the laboratory of any prior patient history of mycobacterial infection or treatment
- Notify the laboratory if mycobacteria other than tuberculosis (MOTT or NTM) are suspected.

**PowerChart Name**

Culture AFB Blood

**Transport Temperature**

Transport immediately upon collection; if delayed, store at room temperature (20 – 25 degrees celsius)

**Stability**

Room Temperature: 48 hours

**Rejection Criteria**

- Refrigerated or frozen specimens
- Unlabeled or mislabeled specimens
- Compromised specimen container integrity (i.e. cracked or broken bottle)

**Test Performed**

Sun – Sat; Test performed by commercial reference laboratory

**Report Available**

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Negative culture	8 weeks
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Positive culture	variable
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**Reference Range**

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Normal Value	No acid fast bacilli isolated.
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Critical Value	Isolation or detection of acid fast bacilli
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**Limitations**

Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Alternative Name(s)**

AFB Blood Culture; Acid Fast Bacilli Blood Culture; TB Blood Culture



# Culture AFB w/ Smear

## Components

AFB Smear; AFB Culture

## Specimen Container

Sterile leak-proof screw cap container

## Preferred Specimen

1st morning specimen before eating, drinking or performing oral hygiene.

## Minimum Volume

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Sputum or other respiratory specimens, gastric aspirates, CSF, sterile body fluids	5-10 mL
Urine	40 mL
Tissue	3-5 punch biopsies or a 1 cm <sup>2</sup> biopsy.

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## Instructions

- Inform the laboratory of any prior patient history of mycobacterial infection or treatment.
- Optimal Urine and Sputum Specimens: Collect specimen every 8 hours with at least one morning specimen.
- Gastric Aspirates – Contact the laboratory prior to collection. Gastric aspirates must be buffered within 2 hours of collection.
- Notify the laboratory if mycobacteria other than tuberculosis (MOTT or NTM) are suspected.

## PowerChart Name

Culture AFB

## Transport Temperature

Transport immediately upon collection; if delayed, refrigerate the specimen (2-8 degrees celsius).

## Stability

Room Temperature – Not Established; Refrigerated – 2 days

## Rejection Criteria

- Inadequate specimen quantity
- Frozen specimens
- Specimens collected with swabs (Exception: Calcium alginate swabs for laryngeal specimens only.)
- Specimens unsafe to handle (sharps)
- Non-sterile or leaking containers

## Test Performed

Monday-Friday; Day Shift Only

### Report Available

Smear	24 hours
Negative Culture	8 weeks
Positive Culture	Variable

### Reference Range

Normal Value	Smear = No AFB Seen Culture = No AFB isolated.
Critical Value	Isolation or detection of acid fast bacilli.

### Limitations

Positive cultures reflex to organism identification, and antimicrobial susceptibility testing performed by a commercial reference laboratory. Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

### Reflex Tests

1. Organism identification
2. Antimicrobial susceptibility testing

### Alternative Name(s)

TB Culture & Smear; Acid Fast Bacilli Culture and Smear; AFB Culture and Smear

## Culture Autopsy

### Message

This test is orderable by the pathologist only.

### Specimen Container

Sterile leak-proof screw cap container

### Preferred Specimen

Source and test specific; contact the laboratory for assistance if needed

### Instructions

Inform the laboratory of any suspected pathogens.

### PowerChart Name

Culture Autopsy

### Transport Temperature

Transport immediately upon collection; if delayed, refrigerate the specimen (2-8 degrees celsius) unless otherwise specified by source specific culture instructions.

**Stability**

See source specific culture instructions.

**Rejection Criteria**

- Inadequate specimen quantity
- Frozen specimens
- Specimens collected with swabs
- Specimens unsafe to handle (sharps)
- Non-sterile or leaking containers

**Test Performed**

Upon pathologist request only; Day and Evening Shift.

**Report Available**

See source specific culture instructions.

**Reference Range**

See source specific culture instructions.

**Limitations**

See source specific culture instructions: delays in specimen collection post mortem may yield false positive (overgrowth of contaminating flora) or false negative (death of fastidious organisms) results. Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

## Culture Blood

**Message**

The quality of the test results is dependent on collection method, the timing of collection , and the volume of the specimen.

**Components**

Aerobic Blood Culture, Anaerobic Blood Culture

**Specimen Container**

- Blood Culture Bottle (XBC)
- Standard Aerobic (8- 10 mL)
- Standard Anaerobic (5 -7 mL)
- Plus Aerobic (8-10 mL)
- PEDS Plus (1 – 5 mL)

**Preferred Specimen**

Whole Blood or Bone Marrow

**Minimum Volume**

Standard Aerobic	(3 mL)
Standard Anaerobic	(3 mL)
Plus Aerobic	(3 mL)
PEDS Plus	(0.5 mL)

**Instructions**

- Collect the specimen prior to the administration of antibiotic therapy if possible.
- Notify the laboratory if the patient is suspected of having infection with Bartonella species, Brucella species, Francisella species or any unusual organism.
- DO NOT COVER THE BOTTLE BARCODE WITH THE PATIENT LABEL.
- Inform the laboratory of the patient's recent antimicrobial therapy history.

**Instructions for Adult & Pediatric Patients > 80 kg**

- Collect 1 set of blood culture bottles per venipuncture site.
- Bacteria = 1 aerobic + 1 anaerobic bottle
- Yeast = 2 aerobic bottles.

**Instructions for Neonates & Pediatric Patients < 80 kg**

- 1 bottle per venipuncture site
- Bacteria or Yeasts = PEDS Plus bottle
- Add a Standard Anaerobic bottle if anaerobes are suspected.

**PowerChart Name**

Culture Blood

**Transport Temperature**

Transport immediately upon collection; if delayed, store at room temperature (20 – 25 degrees celsius).

**Stability**

Room temperature: 48 hours for non-fastidious pathogens only. NOTE: Delays in the proper incubation of the specimen may significantly delay or prevent the detection/isolation of significant pathogens.

**Rejection Criteria**

- Refrigerated or frozen specimens
- Unlabeled or mislabeled specimens
- compromised specimen container integrity (i.e. cracked or broken bottle);
- > 6 sets per 24 hour period

**Test Performed**

Sun – Sat

**Report Available**

Within 5 days of specimen processing

Preliminary Negative after 1 day incubation

Final Negative

After 5 days incubation unless prolonged incubation is required by the suspected pathogen

**Reference Range**

Normal Value

Negative (No growth)

Critical Value

Any detection or isolation of aerobic or anaerobic bacteria, or yeasts.

**Limitations**

Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.  
Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification and antimicrobial susceptibility testing if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Alternative Name(s)**

Routine Blood Culture

## Culture Campylobacter

**Message**

This test is a component of the Gastrointestinal (Stool) Culture

**Specimen Container**

Sterile leak-proof screw cap container OR Sterile transport swab (XOC)

**Preferred Specimen**

Fresh specimen or in enteric transport medium

**Minimum Volume**

1 – 2 grams semi-solid stool or 1 – 2 mL liquid stool

**Instructions**

- Inform the laboratory of the patient's recent antimicrobial therapy.
- Inform the laboratory of the patient's recent travel history or ingestion of tainted food or water sources.
- Submit for testing up to 3 separate specimens collected on different days because organisms may be shed intermittently.

**PowerChart Name**

Culture Campylobacter Screen

**Transport Temperature**

Transport immediately upon collection; if delayed, refrigerate the specimen (2-8 degrees celsius).

**Stability**

Enteric Transport Medium – Room Temperature: 72 hours; Fresh stool – Refrigerated: 8 hours

**Rejection Criteria**

- Specimen collected and submitted for testing > 3 days after the patient's hospital admission
- Frozen specimens
- Unlabeled or mislabeled specimens
- Leaking specimens
- Specimens contaminated with urine, soap or disinfectants
- Specimens containing fixatives or additives
- Formed stool.

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 3 days of specimen processing

Preliminary Negative after 1 day incubation

Final Negative

After 3 days incubation unless prolonged incubation is required by the suspected pathogen.

**Reference Range**

Normal Value

No Campylobacter isolated

Critical Value

Any detection or isolation of pathogenic Campylobacter species

**Limitations**

Overgrowth of contaminating flora or prior antimicrobial therapy may prevent isolation of pathogens. Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification and culture confirmation by the Maryland State Department of Health and Mental Hygiene Laboratory Administration.

**Alternative Name(s)**

Campylobacter Culture

**Culture Catheter Tip****Message**

The laboratory uses a semiquantitative culture method.

**Specimen Container**

Sterile leak-proof screw cap container (SCM)

**Preferred Specimen**

Internal end of an intravenous catheter

**Minimum Volume**

1 inch length of the internal end of an intravenous catheter

**Instructions**

1. Collect one set of blood cultures through the catheter just prior to the removal of the catheter for culture submission.
2. Collect one companion set of peripheral blood cultures within 30 minutes after catheter removal.
3. Inform the laboratory of the patient's recent antimicrobial therapy history.

**PowerChart Name**

Culture Catheter Tip

**Transport Temperature**

Immediately upon collection; if delayed, refrigerate (2 – 8 degrees celsius)  
DO NOT DELAY OR REFRIGERATE BLOOD CULTURES.

**Stability**

Room Temperature: 72 hours; Refrigerated: 8 hours

**Rejection Criteria**

Frozen specimens, Unlabeled or mislabeled specimens.

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 3 days of specimen processing	Preliminary Negative after 1 day incubation
Final Negative	After 3 days incubation

**Reference Range**

Normal Value	No growth or < 15 colonies isolated
Medical Alert:	> 15 colonies isolated;

**Limitations**

The collection of companion blood cultures is required to evaluate and diagnose catheter related sepsis. Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification and antimicrobial susceptibility testing if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Alternative Name(s)**

Catheter Tip Culture, Cath Tip Culture

**Culture CSF with Smear****Components**

Gram Stain and Aerobic Culture

**Specimen Container**

Sterile lumbar puncture tube (XCF) Tube #2 or higher; Sterile leak-proof screw cap tube or container

**Preferred Specimen**

1 – 3 mL of Cerebrospinal Fluid

**Minimum Volume**

1 mL

**Instructions**

Inform the laboratory:

- if the specimen is collected from an Ommaya reservoir or ventricular shunt
- of the patient's recent antimicrobial therapy history

**PowerChart Name**

Culture CSF

**Transport Temperature**

Transport immediately upon collection; if delayed, store at room temperature (20 – 25 degrees celsius).

**Stability**

Room Temperature: 24 hours; DO NOT REFRIGERATE THE SPECIMEN.

**Rejection Criteria**

- Refrigerated or frozen specimens
- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Swabs.

**Test Performed**

Sun – Sat



**Report Available**

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Within 3 days of specimen processing	Preliminary Negative after 1 day incubation
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Final Negative	After 3 days incubation
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**Reference Range**

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Normal Value	No growth
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Critical Value	Any detection or isolation of aerobic or anaerobic bacteria, or yeasts
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**Limitations**

Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification and antimicrobial susceptibility testing if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Alternative Name(s)**

Cerebrospinal Fluid Culture

**Culture E. Coli 0157/H7****Message**

This test and Shiga Toxin Assay are components of the Gastrointestinal (Stool) Culture.

**Specimen Container**

Sterile leak-proof screw cap container (SCM)

**Preferred Specimen**

Fresh specimen OR specimen in enteric transport medium

**Minimum Volume**

1 – 2 grams semi-solid stool OR 1 – 2 mL liquid stool

**Instructions**

1. Inform the laboratory of the patient's:
  - recent antimicrobial therapy
  - recent travel history
  - ingestion of tainted food or water sources
2. Submit for testing up to 3 separate specimens collected on different days because organisms may be shed intermittently.

**PowerChart Name**

Culture Escherichia coli 0157:H7

**Transport Temperature**

Transport immediately upon collection; if delayed, refrigerate the specimen (2-8 degrees celsius).

**Stability**

Enteric Transport Medium – Room Temperature: 72 hours; Fresh stool – Refrigerated: 8 hours

**Rejection Criteria**

- Specimen collected and submitted for testing > 3 days after the patient's hospital admission
- Frozen specimens
- Unlabeled or mislabeled specimens
- Leaking specimens
- Specimens contaminated with urine, soap or disinfectants
- Specimens containing fixatives or additives
- Formed stool

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 3 days of specimen processing

Preliminary Negative after 1 day incubation

Final Negative

After 3 days incubation unless prolonged incubation is required by the suspected pathogen

**Reference Range**

Normal Value

No Escherichia coli O157:H7 isolated

Critical Value

Any detection or isolation of Escherichia coli O157:H7

**Limitations**

Antimicrobial susceptibility testing will not be performed due to the risk of Hemolytic Uremic Syndrome associated with their use. Overgrowth of contaminating flora or prior antimicrobial therapy may prevent isolation of pathogens. Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification and culture confirmation by the Maryland State Department of Health and Mental Hygiene Laboratory Administration.

**Culture Eye****Specimen Container**

Sterile leak-proof screw cap container (SCM)

**Preferred Specimen**

Fluid, Aspirate, or moistened sterile swab.

**Eligible Specimen Sources**

Conjunctiva, Cornea, Vitreous Fluids, Eye Lid Margin, Intraocular Fluids, Lacrimal Fluid/Drainage

**Minimum Volume**

1 mL Fluid/Aspirate or 2 moistened sterile swabs

**Instructions**

1. Specimen transport should occur within 1 hour of collection.
2. Inform the laboratory of the patient's recent antimicrobial therapy history.

**PowerChart Name**

Culture Eye (SS)

**Transport Temperature**

Transport immediately upon collection; if delayed, room temperature (20 – 25 degrees celsius).

**Stability**

Room Temperature: 24 hours; DO NOT REFRIGERATE THE SPECIMEN.

**Rejection Criteria**

- Refrigerated or frozen specimens
- Unlabeled or mislabeled specimens.

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 3 days of specimen processing

Preliminary Negative after 1 day incubation

Final Negative

After 10 days incubation unless prolonged incubation is required by the suspected pathogen

**Reference Range**

Normal Value

No growth

Critical Value

Any detection or isolation of aerobic or anaerobic bacteria, or fungi

**Limitations**

Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification and antimicrobial susceptibility testing if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Alternative Names**

Ocular Culture

## Culture Fungal

**Message**

The quality of the test results is dependent on collection method, the timing of collection , and the volume of the specimen. Prolonged incubation > 30 days may be required.

**Components**

Fungal Smear and Fungal Culture

**Specimen Container**

Sterile leak-proof screw cap container (SCM)

**Preferred Specimen**

See requirements for source specific routine bacterial culture

**Minimum Volume**

See requirements for source specific routine bacterial culture. EXCEPTIONS:

- CSF and Sterile body fluids: 3 – 5 mL
- Urine = 5 – 20mL

**Instructions**

- Inform the laboratory of the patient's recent antimicrobial therapy history (i.e. antifungal therapy).
- Avoid the use of cotton swabs for the collection of specimens because cotton fibers may interfere with some fungal smear methods.

**PowerChart Name**

Culture Fungus (w Smear)

**Transport Temperature**

See requirements for source specific routine bacterial culture.

**Stability**

See requirements for source specific routine bacterial culture.

**Rejection Criteria**

See requirements for source specific routine bacterial culture.

**Test Performed**

Sun – Sat

### Report Available

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Within 30 days of specimen processing	Preliminary Negative after 7 days incubation
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Final Negative	After 30 days incubation unless prolonged incubation is required by the suspected pathogen
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### Reference Range

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Normal value	No fungus isolated.
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Critical Value	Any isolation of thermally dimorphic fungi or <i>Coccidioides immitis</i>
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\*See requirements for source specific routine bacterial culture.

### Limitations

Suboptimal specimen volumes may prevent or delay the detection/isolation of pathogens.

### Reflex Tests

Positive cultures reflex to organism identification and antimicrobial susceptibility testing if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

### Alternative Name(s)

Yeast Culture, Fungus Culture

## Culture Fungal (Skin, Hair, Nails)

### Message

Culture only.

### Specimen Container

Sterile leak-proof screw cap container (SCM); Sterile petri dish, microscope slides or envelope

### Preferred Specimen

Hair, skin scrapings, or nail clippings

### Minimum Volume

2 – 3 flakes of skin, 2 – 3 strands of hair, or 2 – 3 nail clippings

### Instructions

Inform the laboratory of the patient's:

- prior use of topical agents (i.e. antifungal cream)
- recent antimicrobial therapy

**PowerChart Name**

Culture Fungus Hair, Nail, Skin w Smear

**Transport Temperature**

Immediately upon collection; if delayed, store at room temperature (20 – 25 degrees celsius).

**Stability**

Room temperature: 48 hours.

**Rejection Criteria**

- Refrigerated or frozen specimens
- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers

**Test Performed**

Sun – Sat

**Report Available**

Within 30 days of specimen processing

Preliminary Negative within 14 days incubation

Final Negative

After 30 days incubation unless prolonged incubation is required by the suspected pathogen

**Reference Range**

Normal value

No fungus isolated.

**Limitations**

Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification and antimicrobial susceptibility testing if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Alternative Name(s)**

Fungus Culture

**Culture Gastrointestinal****Message**

- This test provides a culture screen for Salmonella, Shigella, Campylobacter and E. coli 0157:H7, and a serological screen for presence of Shiga Toxin.
- Test stool for Clostridium difficile toxin for all patients over 6 months of age with clinically significant diarrhea and a history of antibiotic exposure.

- Consider C. difficile testing as an alternative to routine microbiologic studies for inpatients who have test requests for routine enteric pathogens.

**Components**

Includes [Culture E. Coli O157/H7](#), [Culture Campylobacter](#)

**Specimen Container**

- Sterile leak-proof screw cap container (SCM)
- Sterile transport swab (XOC) OR
- Enteric transport medium (i.e. Cary Blair)

**Preferred Specimen**

- Semi-solid stool
- liquid stool – fresh or in enteric transport medium
- Aspirate
- Moistened transport swab

**Eligible Specimen Sources**

Stool/Feces, Gastric Contents, Rectal Swab/Bopsy, Duodenal Contents, Colostomy Contents, Ileostomy Contents

**Minimum Volume**

Semi-solid stool	1 – 2 grams
Liquid stool	1 – 2 mL
Biopsy tissue	1 cm <sup>2</sup> in size
Transport swab	1 moistened swab

**Instructions**

- Inform the laboratory of the patient's:
  - recent antimicrobial therapy
  - travel history
  - ingestion of tainted food or water sources
- Submit for testing up to 2 separate specimens collected on different days because organisms may be shed intermittently.

**PowerChart Name**

Culture Stool

**Transport Temperature**

Transport immediately upon collection; if delayed, refrigerate the specimen (2-8 degrees celsius).

**Stability**

Enteric Transport Medium – Room Temperature: 72 hours; Fresh stool – Refrigerated: 8 hours

## Rejection Criteria

- Specimen collected and submitted for testing > 3 days after the patient's hospital admission
- Frozen specimens
- Unlabeled or mislabeled specimens
- Leaking specimens
- Specimens contaminated with urine, soap or disinfectants
- Specimens containing fixatives or additives
- Formed stool specimens other than for carriage investigations

## Test Performed

Sun – Sat; Day and Evening Shifts

## Report Available

Within 3 days of specimen processing

Preliminary Negative after 1 day incubation

Final Negative

After 3 days incubation unless prolonged incubation is required by the suspected pathogen

## Reference Range

Normal Value

No Salmonella, Shigella, Campylobacter or Escherichia coli 0157:H7 isolated. No Shiga Toxins detected.

Critical Value

Any detection or isolation of Salmonella species, Shigella species, Campylobacter species, Escherichia coli 0157:H7 or detection of Shiga Toxins

## Limitations

Overgrowth of contaminating flora, prior antimicrobial therapy or suboptimal specimen volumes may prevent isolation or detection of pathogens.

## Reflex Tests

Positive cultures reflex to organism identification and culture confirmation by the Maryland State Department of Health and Mental Hygiene Laboratory Administration.

## Culture Genital

### Message

This test includes culture for Neisseria Gonorrhoeae.

### Specimen Container

Sterile leak-proof screw cap container (SCM) or Sterile transport swab

### Preferred Specimen

Aspirate, Fluid, Tissue or sterile transport swab;

### Alternate Specimens



Amniotic Fluid, Cul de sac (Culdocentesis), Endometrium, Intrauterine Device (IUD), Products of Conception, Urethra, Bartholin Glands, Cervix, Inguinal Lymph Nodes, Labia, Rectum, Vagina/Vaginal Cuff

**Minimum Volume**

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Fluid or Aspirate	1 – 5 mL
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Sterile Transport Swabs	2 swabs
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Tissue	3 – 5 punch biopsies or a 1 cm <sup>2</sup> biopsy
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**Instructions**

- Anaerobe culture is included for properly collected specimens when indicated by laboratory guidelines.
- Inform the laboratory:
  - of the patient’s recent antimicrobial therapy history
  - if the patient is pregnant or has a post partum status.

**PowerChart Name**

Culture Genital

**Transport Temperature**

Transport immediately upon collection; if delayed, store at room temperature (20 – 25 degrees celsius).

**Stability**

Room Temperature: 24 hours; DO NOT REFRIGERATE THE SPECIMEN.

**Rejection Criteria**

- Refrigerated or frozen specimens
- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Dry swabs

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

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Within 3 days of specimen processing	Preliminary Negative after 1 day incubation
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Final Negative	After 3 days incubation unless prolonged incubation is required by the suspected pathogen
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**Reference Range**

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Normal Value	No growth or Normal Flora for Site
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Critical Value	All patients – Neisseria gonorrhoeae, Streptococcus pyogenes, Haemophilus ducreyi
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**Limitations**

Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification and antimicrobial susceptibility testing if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Culture Gonorrhoeae****Specimen Container**

Sterile leak-proof screw cap container (SCM) or Sterile transport swab

**Preferred Specimen**

Aspirate, Fluid, Tissue or sterile transport swab

**Alternate Specimens**

Amniotic Fluid, Cul de sac (Culdocentesis), Endometrium, Intrauterine Device (IUD), Products of Conception, Urethra, Bartholin Glands, Cervix, Inguinal Lymph Nodes, Labia, Rectum, Vagina/Vaginal Cuff

**Minimum Volume**

Fluid or Aspirate	1 – 5 mL
Sterile Transport Swabs	2 swabs
Tissue	3 – 5 punch biopsies or a 1 cm <sup>2</sup> biopsy

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**Instructions**

Inform the laboratory:

- of the patient's recent antimicrobial therapy history
- if the patient is pregnant or has a post partum status.

**PowerChart Name**

Culture GC

**Transport Temperature**

Transport immediately upon collection; if delayed, store at room temperature (20 – 25 degrees celsius).

**Stability**

Room Temperature: 24 hours; DO NOT REFRIGERATE THE SPECIMEN.

**Rejection Criteria**

- Refrigerated or frozen specimens
- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Dry swabs

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 3 days of specimen processing	Preliminary Negative after 1 day incubation
Final Negative	After 3 days incubation unless prolonged incubation is required by the suspected pathogen

**Reference Range**

Normal Value	Culture negative for <i>Neisseria gonorrhoeae</i> .
Critical Value	Any isolation of <i>Neisseria gonorrhoeae</i> .

**Limitations**

Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification only. Some testing may be performed by a commercial reference laboratory.

**Culture Group A Strep**

**Components**

Group A Streptococcus Culture, GAS Culture, *Streptococcus pyogenes* Culture

**Specimen Container**

Sterile transport swab (X0C)

**Preferred Specimen**

Aspirate, Fluid, Tissue or sterile transport swab;

**Alternate Specimen**

Throat, Genital sources

**Minimum Volume**

Fluid or Aspirate	1 – 5 mL
Sterile Transport Swabs	2 swabs

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Tissue

3 – 5 punch biopsies or a 1 cm<sup>2</sup> biopsy

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**Instructions**

Inform the laboratory

- of the patient's recent antimicrobial therapy history
- if the patient is allergic to penicillin.

**PowerChart Name**

Culture Strep A Screen

**Transport Temperature**

Transport immediately upon collection; if delayed, store at room temperature (20 – 25 degrees celsius) or refrigerate (2 – 8 degrees celsius).

**Stability**

Room Temperature or Refrigerated: 72 hours.

**Rejection Criteria**

- Frozen specimens
- Unlabeled or mislabeled specimens
- Expired transport medium
- Non-sterile or leaking containers
- Dry swabs

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

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Within 2 days of specimen processing

Preliminary Negative after 1 day incubation

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Final Negative

After 2 days incubation

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**Reference Range**

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Normal Value

Culture negative for Group A Streptococcus.

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Critical Value

Any isolation of beta hemolytic Group A Streptococcus (*Streptococcus pyogenes*).

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**Limitations**

Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens. Antimicrobial susceptibility testing will be performed only when the patient is allergic to penicillin or has failed penicillin therapy.

**Reflex Tests**

Positive cultures reflex to organism identification only. Some testing may be performed by a commercial reference laboratory.

## Culture Lower Respiratory with Smear

### Message

The isolation of Legionella species is performed by a commercial reference laboratory. Contact the Sendout department for specimen collection guidelines. Send Out Phone #: 301-754-7299.

### Components

Gram Stain and Aerobic Culture (Lung Aspirate – Anaerobe culture is included for properly collected specimens when indicated by laboratory guidelines or suspected pathogen).

### Specimen Container

Sterile wide-mouth, leak-proof screw cap container or sterile leak-proof screw cap tube (SCM)

### Preferred Specimen

First early morning sputum, or other lower respiratory specimens

### Alternate Specimen

Bronchial biopsy, Bronchial Brushing, Bronchoalveolar Lavage, Bronchial Washing, Expecterated Sputum, Endotracheal Suction, Induced or Nebulized Sputum, Lung Aspirate, Lung Biopsy, Transtracheal Aspirate

### Minimum Volume

Sputum or other respiratory specimens	5-10 mL
Tissue	3 – 5 punch biopsies or a 1 cm <sup>2</sup> biopsy

### Instructions

Inform the laboratory of the patient's recent antimicrobial therapy history.

### PowerChart Name

Culture Respiratory Lower (SS)

### Transport Temperature

Immediately upon collection (for specimen processing with 2 hours of collection); if delayed, refrigerate the specimen (2 – 8 degrees celsius).

### Stability

Room temperature: 2 hours; Refrigerated: 48 hours.

### Rejection Criteria

- Frozen specimens
- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers

- Specimens containing fixatives or additives
- Specimens collected with swabs
- Sputum and Endotracheal Suction specimens: The gram stain will be used to assess specimen quality and acceptability for the performance of culture. Poor – borderline quality specimens will not be cultured.

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 2 days of specimen processing	Preliminary Negative after 1 day incubation
Final Negative	After 2 days incubation unless prolonged incubation is required by the suspected pathogen

**Reference Range**

Normal Value	Normal flora for Site.
Critical Value	None specific to culture type; see current laboratory critical values listing.

**Limitations**

Overgrowth of contaminating flora, prior antibiotic therapy, or suboptimal specimen volumes may prevent or delay the detection/isolation of pathogens; Some pathogens require special specimen collection and handling, specimen processing or testing by commercial reference laboratories. Failure to inform the laboratory of the suspected pathogen may delay or prevent detection of certain organisms (i.e. Legionella species or Bordetella species).

**Reflex Tests**

Positive cultures reflex to organism identification and antimicrobial susceptibility testing if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Culture MRSA**

**Specimen Container**

Sterile transport swab (X0C)

**Preferred Specimen**

Sterile transport swab

**Alternate Specimen**

Nose/Nares

**Minimum Volume**

2 sterile transport swabs

**Instructions**

Inform the laboratory of the patient's recent antimicrobial therapy history and any prior MRSA carriage status, if known.

**PowerChart Name**

Culture MRSA (SS/BIA)

**Transport Temperature**

Immediately upon collection; if delayed, store at room temperature (20 – 25 degrees celsius).

**Stability**

Room temperature: 48 hours; Refrigerated: 24 hours.

**Rejection Criteria**

- Frozen specimens
- Expired transport medium
- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Dry swabs.

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 2 days of specimen processing	Preliminary Negative after 1 day incubation
Final Negative	After 2 days incubation

**Reference Range**

Normal Value	Culture negative
Critical Value	Any isolation of Methicillin Resistant Staphylococcus aureus (MRSA)

**Limitations**

Overgrowth of contaminating flora may prevent the isolation/detection of the requested pathogen; Prior antibiotic therapy or suboptimal specimen sampling may prevent or delay the detection/isolation of Methicillin Resistant Staphylococcus aureus (MRSA).

**Reflex Tests**

Positive cultures reflex to organism identification and antimicrobial susceptibility testing if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Culture Prenatal Group B**

**Message**

Culture should be performed between 35-37 weeks gestation.

**Components**

Group B Streptococcus Culture, GBS Culture, *Streptococcus agalactiae* Culture

**Specimen Container**

Sterile transport swab (X0C)

**Preferred Specimen**

Sterile transport swab submitted in LIM Broth (obtain the broth from the laboratory prior to specimen collection).

NOTE: Collect the specimen using one continuous swabbing from the vaginal introitus to the anorectum

**Minimum Volume**

2 sterile transport swabs

**Instructions**

Inform the laboratory of the patient's recent antimicrobial therapy history and if the patient is allergic to penicillin.

**PowerChart Name**

Culture Strep B Screen

**Transport Temperature**

Immediately upon collection; if delayed, store at room temperature (20 – 25 degrees celsius) or refrigerate (2 – 8 degrees celsius).

**Stability**

Room Temperature or Refrigerated: 48 hours.

**Rejection Criteria**

- Frozen specimens
- Unlabeled or mislabeled specimens
- Expired swab transport medium
- Expired broth medium
- Non-sterile or leaking containers
- Dry swabs.

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

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Within 3 days of specimen processing

Preliminary Negative after 1 day incubation

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Final Negative

After 3 days incubation

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**Reference Range**

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Normal Value

Culture negative for Group B Strep.

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Critical Value

Any isolation of Group B Streptococcus (*Streptococcus agalactiae*)

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**Limitations**

Transport swabs submitted in the original culturette transport instead of LIM broth will be accepted. However, the overgrowth of contaminating flora, prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/isolation of low numbers of *Streptococcus agalactiae*; Antimicrobial susceptibility testing will be performed only when the patient is allergic to penicillin or has failed penicillin therapy; Failure to sample from the vaginal introitus to the anorectum may prevent or delay the detection/isolation of *Streptococcus agalactiae*.

**Reflex Tests**

Organism identification only. Antimicrobial susceptibility test will be performed for penicillin allergic patients only.

## Culture Sterile Body Fluid with Smear

**Components**

Gram Stain; Aerobic and Anaerobic Culture

**Specimen Container**

Sterile leak-proof screw cap container (SCM)

**Preferred Specimen**

> 10 mL of fluid.

**Eligible Specimen Sources**

Amniotic fluid, Bile, Bone Marrow, Breast Milk, Dialysate Fluid, Pericardial Fluid, Peritoneal (Ascites) Fluid, Pleural Fluid, Synovial (Joint) Fluid, Vitreous Fluid/Vitreotomy Washings

**Minimum Volume**

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Amniotic, Bile, Dialysate, Pericardial, Peritoneal, Pleural, Synovial	10 cc
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Bone Marrow, Vitreous, Vitrectomy Washings	1 cc
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Breast Milk	3 cc
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**PowerChart Name**

Culture Body Fluid + Direct Smear (SS)

**Transport Temperature**

Transport immediately upon collection; if delayed, store at room temperature (20 – 25 degrees celsius).

**Stability**

Room Temperature: 24 hours; DO NOT REFRIGERATE THE SPECIMEN.

**Rejection Criteria**

- Refrigerated or frozen specimens
- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Swabs

**Test Performed**

Sun – Sat;

**Report Available**

Within 3 days of specimen processing	Preliminary Negative after 1 day incubation
Final Negative	After 3 days incubation unless prolonged incubation is required by the suspected pathogen

**Reference Range**

Normal Value	No growth
Critical Value	Any detection or isolation of aerobic or anaerobic bacteria, or fungi

**Limitations**

Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification and antimicrobial susceptibility testing if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Alternative Name(s)**

Sterile Body Fluid Culture

**Culture Upper Respiratory**

**Message**

- The isolation of the following pathogens is performed by a commercial reference laboratory: Bordetella pertussis, Corynebacterium diphtheriae.
- Contact the Sendout department for specimen collection guidelines at 301-754-7299.
- Order Culture MRSA for detection of nasal carriage of methicillin resistant staphylococcus aureus.

**Specimen Container**

Sterile leak-proof screw cap container (SCM) OR Sterile transport swab (X0C)

**Preferred Specimen**

Aspirate, Washing, Fluid, or sterile transport swab;

**Alternate Specimen**

Throat/Pharynx, Nose/Nares/Nasal, Nasopharynx, Epiglottis, External Ear, Tympanocentesis Fluid (Inner Ear)

**Minimum Volume**

1 – 3 mL Fluid, Aspirate or Washing OR 2 sterile transport swabs

**Instructions**

- Inform the laboratory of the patient's recent antimicrobial therapy history
- Notify the laboratory if the patient is suspected of having infection with *Bordetella pertussis*, *Corynebacterium diphtheriae*, or any other unusual organism.

**PowerChart Name**

Culture Respiratory Upper or Ear

**Transport Temperature**

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Epiglottis, Nasopharynx, Tympanocentesis (Inner Ear)	Immediately upon collection; if delayed, store at room temperature (20 – 25 degrees celsius).
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Throat/Pharynx, Nose/Nares/Nasal, External Ear	Immediately upon collection; if delayed, refrigerate the specimen (2 – 8 degrees celsius)
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**Stability**

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Epiglottis, Nasopharynx, Tympanocentesis (Inner Ear)	Room Temperature: 48 hours.
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Throat/Pharynx, Nose/Nares/Nasal, External Ear	Room Temperature or Refrigerated: 72 hours
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**Rejection Criteria**

- Frozen specimens
- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Specimens containing fixatives or additives

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

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Within 2 days of specimen processing	Preliminary Negative after 1 day incubation
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Final Negative	After 2 days incubation
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**Reference Range**

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Normal Value	No Growth or Normal Flora for Site.
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Critical Value	None specific to culture type; see current laboratory critical values listing.
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**Limitations**

Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification and antimicrobial susceptibility testing if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

## Culture Urine, Quantitative

**Message**

Gram stain is not routinely performed for this specimen. If required, order Gram Stain Direct.

**Specimen Container**

Sterile leak-proof screw cap container (SCM)

**Preferred Specimen**

3 – 5 mL of urine in a boric acid preservative tube (NOTE: 3 – 5 mL of fresh, unpreserved urine will be accepted if received within 1 hour of collection, preferably transported on ice or with cold packs)

**Alternate Specimen**

Bladder Aspirate/Wash, Cytoscopy, Midstream Clean Catch, Indwelling Catheter, Straight In & Out Catheter, Ileal Conduit, Kidney, Pediatric Clean Catch (Pediatric Bag), Suprapubic Aspirate, Post Prostatic Massage

**Minimum Volume**

1 mL of urine

**Instructions**

Inform the laboratory of the patient's recent antimicrobial therapy history and any prior kidney transplant history for the patient.

**PowerChart Name**

Culture Urine (SS)

**Transport Temperature**

Immediately upon collection (for specimen processing with 2 hours of collection); if delayed, refrigerate the specimen (2 – 8 degrees celsius).

**Stability**

Refrigerated: 24 hours (Optimal storage); DO NOT FREEZE THE SPECIMEN.

**Rejection Criteria**

- Unpreserved specimens > 2 hours old
- Inadequate specimen quantity
- Frozen specimens
- Specimens collected with swabs

- Specimens unsafe to handle (sharps)
- Specimens containing additives or fixatives (i.e. Formalin) other than boric acid
- Non-sterile or leaking containers

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 3 days of specimen processing	Preliminary Negative after 1 day incubation
Final Negative	After 3 days incubation

**Reference Range**

Normal Value	Based on urine specimen type – No growth or growth < 1000 colonies
Critical Value	None specific to culture type. See current laboratory critical values listing

**Limitations**

Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification and antimicrobial susceptibility testing if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Alternative Name(s)**

Quantitative Urine Culture; Urine Culture

**Culture Vibrio**

**Message**

This test is not a component of the Gastrointestinal Culture

**Specimen Container**

Sterile leak-proof screw cap container (SCM), Sterile transport swab (X0C) or Enteric transport medium (i.e. Cary Blair)

**Preferred Specimen**

Fresh specimen or specimen in enteric transport medium

**Minimum Volume**

1 – 2 grams semi-solid stool OR 1 – 2 mL liquid stool

**Instructions**

- Inform the laboratory of the patient's:

- recent antimicrobial therapy
- recent travel history
- ingestion of tainted food or water sources
- Submit for testing up to 3 separate specimens collected on different days because organisms may be shed intermittently

**PowerChart Name**

Culture Vibrio

**Transport Temperature**

Transport immediately upon collection; if delayed, refrigerate the specimen (2-8 degrees celsius).

**Stability**

Enteric Transport Medium – Room Temperature: 72 hours; Fresh stool – Refrigerated: 8 hours

**Rejection Criteria**

- Specimen collected and submitted for testing > 3 days after the patient’s hospital admission
- Frozen specimens
- Unlabeled or mislabeled specimens
- Leaking specimens
- Specimens contaminated with urine, soap or disinfectants
- Specimens containing fixatives or additives
- Formed stool.

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 3 days of specimen processing	Preliminary Negative after 1 day incubation
Final Negative	After 3 days incubation unless prolonged incubation is required by the suspected pathogen

**Reference Range**

Normal Value	No Vibrio species isolated.
Critical Value	Any detection or isolation of pathogenic <i>Vibrio species</i> .

**Limitations**

Overgrowth of contaminating flora, prior antimicrobial therapy or suboptimal specimen volumes may prevent isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification and culture confirmation by the Maryland State Department of Health and Mental Hygiene Laboratory Administration.

**Alternative Name(s)**

Cholera Culture

**Culture VRE****Preferred Specimen**

Sterile transport swab (XOC)

**Minimum Volume**

2 sterile transport swabs

**Instructions**

Inform the laboratory of the patient's recent antimicrobial therapy.

**PowerChart Name**

Culture VRE

**Transport Temperature**

Transport immediately upon collection; if delayed, refrigerate the specimen (2-8 degrees Celsius).

**Stability**

Enteric Transport Medium	Room Temperature: 72 hours
Fresh stool or Rectal Swab	Refrigerated: 48 hours

**Rejection Criteria**

- Frozen specimens
- Expired transport medium
- Unlabeled or mislabeled specimens
- Leaking containers
- Dry swabs
- Specimens contaminated with urine, soap or disinfectants
- Specimens containing fixatives or additives.

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 2 days of specimen processing	Preliminary Negative after 1 day incubation
Final Negative	After 2 days incubation

**Reference Range**

Normal Value	Culture negative for vancomycin resistant <i>Enterococcus species</i> .
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**Transport Temperature**

Transport immediately upon collection; if delayed, refrigerate the specimen (2-8 degrees celsius).

**Stability**

Refrigerated: 24 hours (Optimal storage); Room Temperature: 24 hours; DO NOT FREEZE THE SPECIMEN.

**Rejection Criteria**

- Inadequate specimen quantity
- Frozen specimens
- Specimens collected with swabs
- Specimens unsafe to handle (sharps)
- Specimens containing additives or fixatives (i.e. Formalin)
- Non-sterile or leaking containers

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 5 days of specimen processing

Preliminary Negative after 1 day incubation. Interim after 3 days incubation

Final Negative

After 5 days incubation unless prolonged incubation is required by the suspected pathogen

**Reference Range**

Normal Value

No Growth or Normal Flora for Site

Critical Value

None specific to culture type; see current laboratory critical values listing.

**Limitations**

Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification and antimicrobial susceptibility testing if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Alternative Name(s)**

Surgical Wound Culture; Trauma Wound Culture; Abscess/Pus Culture

**Culture Wound Superficial with Smear****Message**

Anaerobic culture will not be performed because the likelihood of an anaerobic cause of infection is remote.

**Components**

Gram Stain (May be used for the assessment of the specimen quality); Aerobic Culture only

**Specimen Container**

Sterile leak-proof screw cap container (SCM). Sterile transport swab collection should be avoided due to the increase likelihood of specimen contamination with normal skin flora.

**Preferred Specimen**

Pus/drainage aspiration, superficial wound debridement

**Alternate Specimen**

Pus/Drainage, Superficial wound debridement, Rash, Ulcer

**Minimum Volume**

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Abscess, pus or drainage aspiration	1 – 3 mL
Tissue	3 – 5 pieces of debrided tissue or 1 cm <sup>2</sup> tissue section biopsy

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**Instructions**

1. Inform the laboratory of:
  - o the patient’s recent antimicrobial therapy history
  - o any suspected pathogens
2. Use sterile non-bacteriostatic saline to keep the tissue specimen moist.

**PowerChart Name**

Culture Wound Superficial

**Transport Temperature**

Transport immediately upon collection; if delayed, refrigerate the specimen (2-8 degrees celsius).

**Stability**

Refrigerated: 24 hours (Optimal storage); Room Temperature: 24 hours; DO NOT FREEZE THE SPECIMEN.

**Rejection Criteria**

- Inadequate specimen quantity
- Frozen specimens
- Specimens collected with swabs
- Specimens unsafe to handle (sharps)
- Non-sterile or leaking containers

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

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Within 3 days of specimen processing	Preliminary Negative after 1 day incubation
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Final Negative	After 3 days incubation
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**Reference Range**

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Normal Value	No Growth or Normal Flora for Site
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Critical Value	None specific to culture type; see current laboratory critical values listing
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**Limitations**

Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive cultures reflex to organism identification and antimicrobial susceptibility testing if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Alternative Name(s)**

Superficial culture; Surface culture; Skin culture

## Culture Yersinia

**Message**

This test is not a component of the Gastrointestinal Culture

**Specimen Container**

Sterile leak-proof screw cap container (SCM), Sterile transport swab (X0C) or Enteric transport medium (i.e. Cary Blair)

**Preferred Specimen**

Fresh specimen or in enteric transport medium

**Minimum Volume**

1 – 2 grams semi-solid stool OR 1 – 2 mL liquid stool

**Instructions**

1. Inform the laboratory of:
  - the patient's recent antimicrobial therapy history
  - recent travel history
  - ingestion of tainted food or water sources
2. Submit for testing up to 3 separate specimens collected on different days because organisms may be shed intermittently.

**PowerChart Name**

Culture Yersinia

**Transport Temperature**

Transport immediately upon collection; if delayed, refrigerate the specimen (2-8 degrees celsius).

### Stability

Enteric Transport Medium	Room Temperature: 72 hours
Fresh stool	Refrigerated: 8 hours

### Rejection Criteria

- Specimen collected and submitted for testing > 3 days after the patient's hospital admission
- Frozen specimens
- Unlabeled or mislabeled specimens
- Leaking specimens
- Specimens contaminated with urine, soap or disinfectants
- Specimens containing fixatives or additives
- Formed stool

### Report Available

Within 3 days of specimen processing	Preliminary Negative after 1 day incubation
Final Negative	After 3 days incubation unless prolonged incubation is required by the suspected pathogen

### Reference Range

Normal Value	No <i>Yersinia species</i> isolated.
Critical Value	Any detection or isolation of pathogenic <i>Yersinia species</i> .

### Limitations

Overgrowth of contaminating flora, prior antimicrobial therapy, or sub-optimal specimen volumes may prevent isolation of pathogens.

### Reflex Tests

Positive cultures reflex to organism identification and culture confirmation by the Maryland State Department of Health and Mental Hygiene Laboratory Administration.

### Alternative Name(s)

Yersina culture

## F

### Fungal Smear

#### Specimen Container

Sterile leak-proof screw cap container (SCM)

#### Preferred Specimen

See requirements for source specific routine bacterial culture

**Minimum Volume**

See requirements for source specific routine bacterial culture. EXCEPTIONS:

- CSF and Sterile body fluids: 3 – 5 mL
- Urine: 5 – 20mL

**Instructions**

- Inform the laboratory of the patient's recent antimicrobial therapy history (i.e. antifungal therapy)
- NOTE: Avoid the use of cotton swabs for the collection of specimens because cotton fibers may interfere with some fungal smear methods.

**PowerChart Name**

Smear Fungal (Non-Skin)

**Transport Temperature**

See requirements for source specific routine bacterial culture.

**Stability**

See requirements for source specific routine bacterial culture.

**Rejection Criteria**

See requirements for source specific routine bacterial culture.

**Test Performed**

Sun – Sat

**Report Available**

Within 24 hours of specimen processing.

**Reference Range**

Normal Value	No fungus seen on smear.
Critical Value	Detection of fungi in a sterile body fluid, CSF or sterile site/source.

**Limitations**

Prior antibiotic therapy or suboptimal specimen volumes may prevent or delay the detection/ isolation of pathogens.

**Reflex Tests**

Positive smears reflex to culture (unless a component of a culture order or otherwise specified) if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Alternative Name(s)**

KOH Prep; Wet Prep; Fungal Stain; Fungus Stain

# G

## Gastric, Occult Blood

### Message

**Do not use routine occult blood test methods with gastric samples.** This is a qualitative test. It cannot be used as an indication of the quantity of blood loss.

### Components

Gastric pH, Occult Blood

### Specimen Container

Sterile leak-proof screw cap container (SCM)

### Preferred Specimen

Gastric Aspirate (Minimum Volume: 1 mL)

### Alternate Specimen

Vomit (Minimum Volume: 1 mL)

### Instructions

Note any history of the consumption of the following drugs, vitamins and foods within 4 hours of the specimen collection:

- Aspirin or other non-steroidal anti-inflammatory drugs
- Antacids, particularly those containing magnesium hydroxide (Mylanta II and Maalox Plus)
- Vitamin C from all sources both dietary and supplemental
- Red meat (beef, lamb), including processed meats and liver
- Raw fruits and vegetables (especially melons, radishes, turnips and horseradish)

### PowerChart Name

Occult Blood Gastric Fluid

### Transport Temperature

Immediately upon collection, if delayed, refrigerate the specimen (2 – 8 degrees C)

### Stability

Separate serum by centrifugation and store – Refrigerated (2 – 8 degrees celsius): 48 hours; Frozen (-20 degrees celsius or below): 3 months.

### Rejection Criteria

- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Inadequate specimen quantity
- Specimens containing additives, fixatives or buffers

- Grossly bloody specimens
- Frozen specimens

**Test Performed**

Sun – Sat; All Shifts

**Report Available**

Within 1 hour of specimen processing.

**Reference Range**

Normal Value	Negative
Critical Value	Any detection of occult blood

**Limitations**

Inaccurate or incomplete patient histories may compromise the accuracy and/or interpretation of test results; Foods (i.e. incompletely cooked meat, raw fruits and vegetables, etc.) that have peroxidase activity may produce a false positive test result; The results of this test cannot be considered conclusive evidence of the presence or absence of upper gastrointestinal bleeding or pathology; This test is designed to be use a preliminary screen and it not intended to replace other diagnostic procedure such as gastroscopic examination or x-ray studies.

**Alternate Names**

Gastroccult

**Gram Stain Direct**

**Message**

CSF and Sterile Body Fluid specimens will not be processed for gram stain only. If the specimen quantity is insufficient for both gram stain and culture, the culture will be performed.

The gram stain may be used for rapid presumptive detection and diagnosis of infectious agents. It also may be sued for the assessment of specimen quality and acceptability for the performance or interpretation of the culture.

**Specimen Container**

Sterile leak-proof screw cap container (SCM) or Sterile transport swab (X0C)  
 See *source specific routine bacterial culture criteria*: Sterile leak-proof screw cap container; Sterile transport swab; Properly labeled, air dried or fixed (heat or methanol), specimen smeared glass microscope slide;

**Preferred Specimen**

See requirements for source specific routine bacterial culture criteria.

**Minimum Volume**

See requirements for source specific routine bacterial culture criteria

**Instructions**

- Inform the laboratory of the patient's recent antimicrobial therapy history
- Note the specific source/site of the specimen on the specimen container or glass microscope slide
- Label the microscope slide with 2 patient identifiers (i.e. name and medical record number).

**PowerChart Name**

Gram Stain

**Transport Temperature**

See requirements for source specific routine bacterial culture criteria: NOTE: Smears may be stored at a room temperature up to 29 degrees Celsius.

**Stability**

See requirements for source specific routine bacterial culture criteria.

Sterile transport swab	Room temperature:48 hours
Air dried specimen smeared glass microscope slide	Room temperature:24 hours
Fixed specimen smeared glass microscope slide	Room temperature:10 days.

**Rejection Criteria**

- See requirements for source specific routine bacterial culture criteria
- Inadequate specimen quantity
- Dry swabs
- Specimens unsafe to handle (sharps)

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Non-STAT request	Within 3 hours of specimen processing.
STAT request	Within 1 hour of specimen processing.

**Reference Range**

Normal Value	Defined the specimen source.
Critical Value	Detection of an organism in a sterile body fluid, CSF or sterile site/source.

**Limitations**

Overgrowth of contaminating flora, prior antibiotic therapy, or sub-optimal specimen volumes may prevent detection of pathogens.

**Reflex Tests**



Positive smears reflex to culture (unless a component of a culture order or otherwise specified) if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Alternative Name(s)**

Gram Smear

## **Group B Strep PCR**

**Message**

A separate LIM Broth culture must be submitted with this specimen. A positive test result does not indicate the presence of viable organisms; This assay should be used as an adjunct to other available testing. It should not be used as a replacement for antepartum (35 – 37 weeks gestation) culture; this assay is not intended to differentiate between Group B Streptococcus carriage and infection.

**Specimen Container**

This test requires a special collection and transport swab device (obtain from the laboratory prior to collection)

**Preferred Specimen**

First sample secretions from the mucosa of the lower one-third part of the vagina with sampling of the anal crypts using the same collection device.

**Minimum Volume**

One collection device containing 2 special transport swabs

**Instructions**

Inform the laboratory of the patient's recent antimicrobial therapy history

**PowerChart Name**

Group B Strep (PCR)

**Transport Temperature**

Immediately upon collection; if delayed, store the specimen at room temperature (20-30 degrees celsius) if testing will be performed within 24 hours

**Stability**

Room temperature (20-30 degrees celsius): < 24 hours; Refrigerated: (2 – 8 degrees celsius): ≥ 24 hours up to 6 days

**Rejection Criteria**

- Unlabeled or mislabeled specimens
- Specimens collection using a non-approved collection device (i.e. routine transport swab)
- Specimen sources or collection sites other than those designated for the test method

**Test Performed**

Sun – Sat; Day Shift Only

**Report Available**

Within 24 hours of specimen processing.

**Reference Range**

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Normal Value	Negative: GBS target nucleic acid is NOT detected. Presumed not colonized for GBS
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Critical Value	Detection of Group B Streptococcus
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**Reflex Tests**

Negative tests require culture confirmation to ensure the accuracy of the negative nucleic acid results. Positive tests may reflex to culture to determine the viability of the organisms detected or to provide antimicrobial susceptibility testing for penicillin allergic patients requiring treatment.

**Limitations**

Test results may be affected by concurrent antibiotic therapy. Therapeutic success or failure cannot be assessed using this test because DNA may persist after antimicrobial therapy. Erroneous test results might occur from improper specimen collection, technical error, sample mix-up, or because the number of organisms in the specimen is below the detection limit of the test. The use of specimen collection and transport system other than those recommended by the manufacturer may affect the accuracy of the test result.

**Alternate Name(s)**

GBS PCR, Group B Streptococcus Polymerase Chain Reaction, GBS Polymerase Chain Reaction



## Influenza Antigen A/B Rapid

**Components**

Influenza A antigen; Influenza B antigen.

**Specimen Container**

Sterile screw capped tube; Sterile tube containing 1 – 3 mL saline; designated viral transport tube

**Preferred Specimen**

Nasopharyngeal Swab; Nasopharyngeal Wash or Aspirate.

**Minimum Volume**

1 Nasopharyngeal Swab; Nasopharyngeal Wash/Aspirate: 2.5 mL

**Instructions**

Inform the laboratory if the patient has had the administration of live, attenuated influenza virus vaccines with 4 weeks or nasally administered influenza A vaccine within 3 days of testing. Inform the laboratory of the patient's recent antimicrobial therapy history (i.e. antiviral therapy).

**PowerChart Name**

Influenza A/B Antigen

**Transport Temperature**

Immediately upon collection; if delayed, refrigerate the specimen (2-8 degrees celsius) and test within 8 hours.

**Stability**

Refrigerated (2 – 8 degrees celsius): 8 hours; Frozen (-20 degrees celsius or below): 30 days

**Rejection Criteria**

- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Specimens stored at room temperature > 30 minutes
- Calcium alginate swabs

**Test Performed**

Sun – Sat; All Shifts

**Report Available**

Within 1 hour of specimen processing.

**Reference Range**

Normal Value	Negative
Critical Value	Any detection of influenza A or B antigens.

**Limitations**

Test performed within 4 weeks of the administration of live, attenuated influenza virus vaccines may produce false positive results; Tests performed within 3 days of nasally administered influenza A vaccine may produce false positive results up to 3 days after vaccination; A negative test may occur if the antigen level is below the detection level of the test.

**Alternative Name(s)**

Rapid Flu

**L**

**Legionella Urinary AG**

**Specimen Container**

Sterile screw capped container or boric acid tube

**Preferred Specimen**

1st morning urine specimen 3 – 5 mL; Midstream Clean Catch, Indwelling Catheter, Straight In and Out Catheter, Kidney, Pediatric Bag or Suprapubic Aspirate Urine

**Minimum Volume**

1 mL

**Instructions**

Inform the laboratory of the patient's recent antimicrobial therapy history and/or suspected pathogens.

**PowerChart Name**

Legionella Antigen Urine

**Transport Temperature**

Immediately upon collection; if delayed, refrigerate the specimen (2 – 8 degrees celsius).

**Stability**

Room Temperature (20 – 25 degrees celsius): < 24 hours;  
Refrigerated (2 – 8 degrees celsius): >24 hours to < 14 days;  
Frozen (- 10 to -20 degrees celsius): > 14 days

**Rejection Criteria**

- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Inadequate specimen quantity
- Specimens collected with swabs or specimens unsafe to handle (sharps)
- Specimens containing additives or fixatives other than boric acid

**Test Performed**

Sun – Sat; All Shifts

**Report Available**

Within 1 hour of specimen processing.

**Reference Range**

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Normal Value	Negative
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Critical Value	Any detection of Legionella pneumophila serogroup 1 antigens.
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**Limitations**

This test does not detect infections caused by other Legionella pneumophila serogroups or other Legionella species. An negative antigen result does not exclude infection with the target antigen. A positive result can occur due to current or past infection. The performance of this test on diuretic urine has not been evaluated.

**LIM Broth PCR****Message**

LIM Broth is used for prenatal Group B Streptococcus screening at 35 – 37 weeks gestation.

A negative test result does not exclude the possibility of infection because test results may be affected by improper specimen collection, technical error, specimen mix-up, concurrent antibiotic therapy, or the number of organisms in the specimen which may be below the sensitivity of the test. All test results should be interpreted in conjunction with other available laboratory and clinical data.

**Specimen Container**

Sterile transport swab (X0C)

**Preferred Specimen**

Sterile transport swab submitted in LIM Broth (obtain the broth from the laboratory prior to specimen collection).

**Minimum Volume**

2 sterile transport swabs

**Instructions**

- **Collect the specimen using one continuous swabbing from the vaginal introitus to the anorectum**
- Inform the laboratory of the patient's recent antimicrobial therapy history and penicillin allergy history

**PowerChart Name**

Group B Strep LIM Broth (Probe)

**Transport Temperature**

- **LIM Broth:** Transport to the laboratory immediately upon collection. If transport must be delayed, store at room temperature.
- **Sterile Transport Swab:** Transport to the laboratory immediately upon collection. If transport must be delayed, store at 2° – 8° celsius before testing.

**Stability**

- **LIM Broth:**
  - Room Temperature: 48 hours.
  - Upon receipt the laboratory will incubate the LIM Broth at 35° – 37° celsius for 18 – 24 hours before testing.
- **Sterile Transport Swab:**
  - Room Temperature or Refrigerated: 48 hours.
  - Upon receipt the laboratory will place the swab in LIM Broth and incubate the broth at 35° – 37° celsius for 18 – 24 hours before testing.

**Rejection Criteria**

- Frozen specimens
- Unlabeled or mislabeled specimens
- Expired swab transport medium
- Expired broth medium
- Non-sterile or leaking containers
- Dry swabs.

**Test Performed**

Daily

**Report Available**

Within 24 hours of specimen processing by the laboratory.

**Normal Value**

Negative

**Critical Value**

Any detection of Group B Streptococcus

**Limitations**

- Antimicrobial susceptibility testing will be performed only when the patient is allergic to penicillin or has failed penicillin therapy.
- Failure to sample from the vaginal introitus to the anorectum may prevent or delay the detection/isolation of Group B Streptococcus (*Streptococcus agalactiae*).
- This assay should be used as an adjunct to other available methods. It should not be used for direct specimen testing without overnight incubation of an enriched LIM Broth.
- This assay should be used for antepartum (35 – 37 weeks' gestation) testing.
- This assay is not intended to differentiate between carriers of Group B Streptococcus and streptococcal infection.
- Test results may be affected by concurrent antibiotic therapy. Therapeutic success or failure cannot be assessed using this test because DNA may persist after antimicrobial therapy.

**Interfering Substances**

None noted

**Alternate Name(s)**

Prenatal LIM Broth Screen, Group B Strep LIM Broth (Probe)

## M

### Mononucleosis Test

**Message**

Some patients who contract infectious mononucleosis do not produce measurable levels of heterophile antibodies.

**Specimen Container**

Sterile Screw cap tube; Gold top vacutainer tube

**Preferred Specimen**

Serum. (Minimum Volume: 0.5 mL)

**Instructions**

The vacutainer tube must be centrifuged to separate serum from whole blood. Once separated the serum must be transferred to a sterile screw cap tube for storage.

**PowerChart Name**

## Mononucleosis Screen

### Transport Temperature

Immediately upon collection, if delayed, refrigerate the specimen (2 – 8 degrees C) and test within 48 hours.

### Stability

Separate serum by centrifugation and store – Refrigerated (2 – 8 degrees celsius): 48 hours; Frozen (-20 degrees celsius or below): 3 months.

### Rejection Criteria

- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Severely hemolyzed sera

### Test Performed

Sun – Sat; Day and Evening Shifts

### Report Available

Within 24 hours of specimen processing.

### Reference Range

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Normal Value	Negative
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Critical Value	None.
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### Limitations

The antibody level may be below the detectable limit of this assay yielding a negative result; Biological false positive tests for infectious heterophile antibodies have been seen with such disorders as leukemia, cytomegalovirus, Burkitt's lymphoma, rheumatoid arthritis, adenovirus, viral hepatitis, and Toxoplasma gondii infections.

### Alternate Names

Heterophile Antibodies

## N

## Nocardia Stain

### Message

This test is performed on a direct specimen. Both Acid Fast and Modified Acid Fast stains will be performed as required for interpretation of the Modified Acid Fast result. NOTE: Direct Acid Fast stains are not performed for the detection of mycobacteria.

### Specimen Container

Sterile leak-proof screw cap container (SCM) or Sterile transport swab (X0C); See source specific routine bacterial

culture criteria: Sterile leak-proof screw cap container; Sterile transport swab; Properly labeled, air dried or fixed (heat or methanol), specimen smeared glass microscope slide;

**Preferred Specimen**

See requirements for source specific routine bacterial culture criteria.

**Minimum Volume**

See requirements for source specific routine bacterial culture criteria.

**Instructions**

- Inform the laboratory of the patient's recent antimicrobial therapy history
- Note the specific source/site of the specimen on the specimen container or glass microscope slide
- Label the microscope slide with 2 patient identifiers (i.e. name and medical record number).

**PowerChart Name**

Nocardia Smear (SS)

**Transport Temperature**

See requirements for source specific routine bacterial culture criteria: NOTE: Smears may be stored at a room temperature up to 29 degrees celsius.

**Stability**

See requirements for source specific routine bacterial culture criteria.

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Sterile transport swab	Room temperature:48 hours
Air dried specimen smeared glass microscope slide	Room temperature:24 hours
Fixed specimen smeared glass microscope slide	Room temperature:10 days.

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**Rejection Criteria**

- See requirements for source specific routine bacterial culture criteria
- Inadequate specimen quantity
- Dry swabs
- Specimens unsafe to handle (sharps)

**Test Performed**

Sun – Sat; Day Shift Only.

**Report Available**

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Non-STAT request	Within 3 hours of specimen processing.
STAT request	Within 1 hour of specimen processing.

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**Reference Range**



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Normal Value	No modified acid fast organisms seen.
Critical Value	Detection of an organism in a sterile body fluid, CSF or sterile site/source.

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**Limitations**

Overgrowth of contaminating flora, prior antibiotic therapy, or sub-optimal specimen volumes may prevent detection of pathogens.

**Reflex Tests**

Positive smears reflex to culture (unless a component of a culture order or otherwise specified) if indicated by laboratory guidelines. Some testing may be performed by a commercial reference laboratory.

**Alternative Name(s)**

Modified Acid Fast Stain, Modified AFB Stain

## O

### Occult Blood Diagnostic Fecal

**Message**

This is a single test for the diagnosis of the presence of occult bleeding. Single point testing IS NOT the standard of care for colorectal cancer screening.

**Specimen Container**

Sterile leak-proof screw cap container or the manufacturer's collection container for the specific test method used.

**Preferred Specimen**

Unpreserved stool/feces or a test specimen collection container containing unpreserved stool/feces.

**Minimum Volume**

1 gram (pea sized ) stool sample or the sample specified by the manufacturer of the test method in use

**Instructions**

- **THIS TEST SHOULD NOT BE USED TO TEST GASTRIC SPECIMENS.**
- Reconcile the patient's medication history prior to the collection of specimens for this testing.
- Do not collect specimens from patients suffering from bleeding hemorrhoids or during menses.

**PowerChart Name**

Occult Blood Diagnostic Fecal

**Transport Temperature**

Immediately upon collection; if delayed, store the specimen at ambient temperature  $\leq 37$  degrees celsius or refrigerate the specimen (4 degrees celsius)

### Stability

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For unpreserved stool/feces	Room temperature (20 – 25 degrees celsius): 1 hour; Refrigerated (2 – 8 degrees celsius): 36 hours.
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For the manufacturer's collection tube	Ambient room temperature $\leq$ 37 degrees celsius: $\leq$ 14 days; Refrigeration at 4 degrees celsius: $\leq$ 6 months; Frozen at -20 degrees celsius: $\leq$ 12 months
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### Rejection Criteria

- Unlabeled or mislabeled specimens
- Leaking containers
- Inadequate specimen quantity
- Specimens containing preservatives or fixatives (i.e. Formalin, PVA, etc).
- Grossly bloody specimens

### Test Performed

Sun – Sat; All Shifts

### Report Available

Within 1 hour of specimen processing.

### Reference Range

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Normal Value	Negative
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Critical Value	Any detection of occult blood
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### Limitations

A negative test result may be obtained in the presence of a gastrointestinal disorder because blood may not be evenly distributed in the specimen or bowel lesions may not bleed at all or may bleed intermittently; The results of this test cannot be considered conclusive evidence of the presence or absence of upper gastrointestinal bleeding or pathology; This test is designed to be use a preliminary screen and it not intended to replace other diagnostic procedure such as gastroscopic examination or x-ray studies.

## R

### Rapid Group A Streptococcus

#### Message

Specimens with negative test results reflex to Group A Streptococcus culture.

#### Specimen Container

Sterile dacron or rayon transport swab.

#### Preferred Specimen

2 Sterile culturette swabs.

**Minimum Volume**

2 Sterile culturette swabs.

**Instructions**

- Inform the laboratory of the patient's recent antimicrobial therapy history.
- Inform the laboratory if the patient is allergic to penicillin.

**PowerChart Name**

Streptococcus A Screen Rapid

**Transport Temperature**

Immediately upon collection; if delayed, store at room temperature (20 – 25 degrees celsius) or refrigerate (2 – 8 degrees celsius).

**Stability**

Room temperature or refrigerated: 24 hours

**Rejection Criteria**

- Unlabeled or mislabeled specimens
- Frozen specimens
- Expired transport medium

**Test Performed**

Sun – Sat; All Shifts

**Report Available**

Within 24 hours of specimen receipt by the laboratory

**Reference Range**

Normal Value	Negative
Critical Value	None

**Reflex Tests**

Group A Streptococcus culture

**Limitations**

The contents of this test are intended for use in the qualitative detection of Group A streptococcal antigen from throat swabs and culture colonies only; This test does not distinguish between actual infection, colonization or carriage; A negative result may indicate an antigen level below the detection limit of the test. Culture confirmation is strongly recommended.

**Interfering Substances**

In rare cases, test specimens heavily colonized with Staphylococcus aureus can yield false positive results; Blood specimens may interfere with interpretation of the color reactions of the test.

**Alternate Name**

Rapid Group A Strep

## Rotavirus Stool

**Specimen Container**

Leak-proof, clean, dry, screw cap wide-mouth container

**Preferred Specimen**

Diarrheal stool

**Minimum Volume**

1 mL liquid or 1 gram (pea sized) semi-solid human stool

**Instructions**

- Inform the laboratory of the patient's recent antimicrobial therapy history.
- Specimen transport should occur within 1 hour of collection.

**PowerChart Name**

Rotavirus Antigen Feces

**Transport Temperature**

Immediately upon collection; if delayed, refrigerate the specimen (2-8 degrees celsius).

**Stability**

Refrigerated (2 – 8 degrees celsius): 72 hours; Frozen (-20 degrees celsius or below) in a non-defrosting freezer: >72 hours.

**Rejection Criteria**

- Unlabeled or mislabeled specimens
- Specimens containing preservatives or fixatives (i.e. Formalin, PVA, etc.)
- Formed stool (Non-diarrheal)
- Meconium stools
- Specimens collected on swabs

**Test Performed**

Sun – Sat; All Shifts

**Report Available**

Within 2 hours of specimen processing

**Reference Range**

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Normal Value	Negative
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Critical Value	Any detection of Rotavirus antigens
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**Limitations**

This test does not define the presence of rotavirus associated gastrointestinal disease. The performance of meconium stools has not been evaluated with this test, so these specimens should not be tested. The reactivity of positive samples may decrease with time due to declining levels of antigen particles.

**Interfering Substances**

Very high levels of antigen may cause an invalid test result; Bloody specimens may interfere with the interpretation of the color reactions of the test.

**RPR Qualitative****Message**

Positive qualitative tests will reflex to quantitative titer and fluorescent treponemal antibody (FTA) confirmatory testing.

**Specimen Container**

Sterile Screw cap tube; Gold top vacutainer tube

**Preferred Specimen**

Serum (Minimum Volume 0.5 mL)

**Instructions**

Centrifuge the vacutainer tube to separate the serum from whole blood, and transfer the serum to a sterile screw capped tube for storage.

**PowerChart Name**

RPR

**Transport Temperature**

Immediately upon collection; if delayed, refrigerate the specimen (2-8 degrees celsius) and test within 48 hours.

**Stability**

Separate serum by centrifugation and store. Refrigerated (2 – 8 degrees celsius): 72 hours; Frozen (-20 degrees celsius or below): 1 year

**Rejection Criteria**

- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Severely lipemic or hemolyzed specimens

**Test Performed**

Monday, Wednesday, Friday; Day Shift

**Report Available**

Within 24 hours of specimen processing

**Reference Range**

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Normal Value	Nonreactive
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Critical Value	Detection of reagin. (Weakly reactive or reactive test result.)
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**Reflex Tests**

Quantitative RPR

**Limitations**

FTA assays are performed by a commercial reference laboratory. This may result in delays in the turnaround time to reporting of these results. Biological false positives have been seen with such disorders as lupus erythematosus, rheumatic fever, pneumococcal pneumonia, infectious mononucleosis, leprosy, malaria, rheumatoid arthritis, pregnancy, infectious hepatitis, vaccinia and viral pneumonia, and in elderly patients.

**Interfering Substances**

Very high levels of antigen may cause an invalid test result.

**Alternate Name(s)**

Rapid Plasmin Reagin Test

## RSV (Respiratory Syncytial Virus) Antigen

**Specimen Container**

Sterile screw capped tube; Sterile tube containing 1 – 3 mL saline; Designated viral transport media tube

**Preferred Specimen**

Nasopharyngeal Swab; Nasopharyngeal Wash or Aspirate

**Minimum Volume**

1 Nasopharyngeal Swab; Nasopharyngeal Wash/Aspirate: 2.5 mL

**Instructions**

Inform the laboratory of the patient's recent antimicrobial therapy history (i.e. antiviral therapy).

**PowerChart Name**

RSV (Respiratory Syncytial Virus) Antigen

**Transport Temperature**

Immediately upon collection; if delayed, refrigerate the specimen (2-8 degrees celsius) and test within 48 hours.

**Stability**

Room Temperature (20 – 25 degrees celsius): 4 hours; Refrigerated (2 – 8 degrees celsius): 48 hours; Frozen (- 70 degrees celsius): 30 days

#### Rejection Criteria

- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Specimens stored at room temperature > 30 minutes
- Calcium alginate swabs

#### Test Performed

Sun-Sat; All Shifts

#### Report Available

Within 1 hour of specimen processing

#### Reference Range

Normal Value	Negative
Critical Value	Any detection of RSV antigens

#### Limitations

Inadequate sample collection or low levels of virus shedding may produce false negative results; A negative test may occur if the antigen level is below the detection limit of the test; This test may not detect all antigenic variants or new strains of RSV; This test is suitable for the pediatric population (< 18 years of age) only.

#### Alternate Name(s)

RSV

## S

### Shiga Toxin Assay

#### Message

This assay should be used as an adjunct to other available methods.

#### Specimen Container

Moistened transport swab; Clean, dry, wide-mouth screw cap container; Enteric transport medium

#### Preferred Specimen

Semi-solid or liquid stool – fresh or in enteric transport medium;

#### Minimum Volume

1 – 2 grams semi-solid stool; 1 – 2 mL liquid stool; 1 moistened transport swab

**Instructions**

Inform the laboratory of the patient's recent antimicrobial therapy history.

**PowerChart Name**

Shiga Toxin Assay

**Transport Temperature**

Immediately upon collection; if delayed, refrigerate (2 – 8 degrees celsius)

**Stability**

Unpreserved Stool or Rectal swab	Room temperature: 2 hours
Enteric Transport Medium	Room Temperature: 72 hours;
Fresh stool	Refrigerated: 8 hours; Frozen (-70 degrees celsius or below): 1 week

**Rejection Criteria**

- Unlabeled or mislabeled specimens
- Leaking specimens
- Specimens containing preservatives or fixatives other than Enteric transport media (i.e. Formalin, PVA, etc.)
- Formed stool (non-diarrheal)

**Test Performed**

Sun – Sat; Day Shift

**Report Available**

Within 48 hours of specimen processing

**Reference Range**

Normal Value	Negative
Critical Value	Any detection of shiga toxins

**Reflex Tests**

Positive toxin assays reflex to organism identification and culture confirmation by the Maryland State Department of Health and Mental Hygiene Laboratory Administration.

**Limitations**

The performance of this test with direct stool specimens has not been evaluated; The toxin produced by Shigella dysenteriae type 1 is nearly identical to Shiga toxin 1 produced by Escherichia coli. This test may yield false positive results for patients infected with this Shigella species.

**Interfering Substances**



Colonization or infection with *Shigella dysenteriae* type 1

## STL Occult Blood Screen

### Message

Colorectal screening involves the use of 2 – 3 test specimens collected on consecutive days.

### Specimen Container

Sterile leak-proof screw cap container or the manufacturer's collection container for the specific test method used.

### Preferred Specimen

Unpreserved stool/feces or a test specimen collection container containing unpreserved stool/feces.

### Minimum Volume

1 gram (pea sized ) stool sample or the sample specified by the manufacturer of the test method in use

### Instructions

- **THIS TEST SHOULD NOT BE USED TO TEST GASTRIC SPECIMENS.**
- Reconcile the patient's medication history prior to the collection of specimens for this testing.
- Do not collect specimens from patients suffering from bleeding hemorrhoids or during menses.

### PowerChart Name

Occult Blood Feces

### Transport Temperature

Immediately upon collection; if delayed, store the specimen at ambient temperature  $\leq 37$  degrees celsius or refrigerate the specimen (4 degrees celsius)

### Stability

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For unpreserved stool/feces	Room temperature (20 – 25 degrees celsius): 1 hour; Refrigerated (2 – 8 degrees celsius): 36 hours.
For the manufacturer's collection tube	Ambient room temperature $\leq 37$ degrees celsius: $\leq 14$ days; Refrigeration at 4 degrees celsius: $\leq 6$ months; Frozen at -20 degrees celsius: $\leq 12$ months

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### Rejection Criteria

- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Inadequate specimen quantity
- Specimens containing preservatives or fixatives (i.e. Formalin, PVA, etc).
- Grossly bloody specimens

### Test Performed

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 1 hour of specimen processing.

**Reference Range**

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Normal Value	Negative
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Critical Value	Any detection of occult blood
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**Limitations**

A negative test result may be obtained in the presence of a gastrointestinal disorder because blood may not be evenly distributed in the specimen or bowel lesions may not bleed at all or may bleed intermittently; The results of this test cannot be considered conclusive evidence of the presence or absence of upper gastrointestinal bleeding or pathology; This test is designed to be use a preliminary screen and it not intended to replace other diagnostic procedure such as gastroscopic examination or x-ray studies.

**Alternate Names**

Colorectal Screening, Fecal Occult Blood, FOBT, IFOBT

## Strep Group B AG Serum

**Message**

Patients who have had partial antibiotic treatment prior to specimen collection may yield false negative results

**Specimen Container**

Sterile Screw cap tube; Gold top vacutainer tube

**Preferred Specimen**

Serum (Minimum Volume: 0.4 mL)

**Instructions**

- Centrifuge the vacutainer tube to separate serum from whole blood.
- Transfer the serum to a sterile screw cap tube for storage.
- Inform the laboratory of the patient's recent antimicrobial therapy history.

**PowerChart Name**

Strep Group B

**Transport Temperature**

Immediately upon collection; do not delay transport to the laboratory.

**Stability**

Separate serum by centrifugation and store. Refrigerated (2 – 8 degrees celsius): 48 hours; Frozen (-20 degrees celsius or below): 1 year

**Rejection Criteria**

- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers

**Test Performed**

Sun – Sat; All Shifts

**Report Available**

Within 1 hour of specimen processing

**Reference Range**

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Normal Value	Negative
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Critical Value	Any detection of <i>Streptococcus agalactiae</i>
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**Limitations**

A positive or negative result is not diagnostic for the presence or absence of Group B *Streptococcus* disease; This test should not be used as a substitute for culture.

**Interfering Substances**

Partial antibiotic treatment; Extremely low or high antigen levels.

**Alternate Name(s)**

GBS antigen

## Strep Pneumo Urinary AG

**Specimen Container**

Sterile screw capped container or boric acid tube

**Preferred Specimen**

1st morning urine specimen 3 – 5 mL; Midstream Clean Catch, Indwelling Catheter, Straight In and Out Catheter, Kidney, Pediatric Bag or Suprapubic Aspirate Urine

**Minimum Volume**

1 mL

**Instructions**

Inform the laboratory of the patient's recent antimicrobial therapy history and/or suspected pathogens.

**PowerChart Name**

Strep pneumoniae Antigen Urine

**Transport Temperature**

Immediately upon collection (transport within 2 hours); if delayed, refrigerate the specimen (2 – 8 degrees celsius).

**Stability**

Room Temperature (20 – 25 degrees celsius): 24 hours; Refrigerated (2 – 8 degrees celsius): >24 hours to 14 days;  
Frozen (- 10 to -20 degrees celsius): >24 hours to 14 days

**Rejection Criteria**

- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Inadequate specimen quantity
- Specimens collected with swabs or specimens unsafe to handle (sharps)
- Specimens containing additives or fixatives other than boric acid

**Test Performed**

Sun – Sat; All shifts

**Report Available**

Within 1 hour of specimen processing

**Reference Range**

Normal Value	Negative
Critical Value	Any detection of Streptococcus pneumoniae antigens

**Limitations**

An negative antigen result does not exclude infection with the target antigen. Do not perform testing with 5 days of the administration of the Streptococcus pneumoniae vaccine. The performance of this test on diuretic urine has not been evaluated.

**Interfering Substances**

Extremely bloody specimens may interfere with the interpretation of the test results.

**T****Trichomonas Test****Specimen Container**

Sterile leak-proof screw cap container (SCM)

**Preferred Specimen**

- Vaginal secretions in 1 mL sterile physiological saline
- Vaginal swab (Rayon) in 1 mL sterile physiological saline
- Dual sterile culturette swab in liquid Stuart's transport medium

**Instructions**

- Specimen transport should occur IMMEDIATELY ( no later than within 5 – 10 minutes of collection.)

- Inform the laboratory of the patient's recent antimicrobial therapy history

**PowerChart Name**

Trichomonas Antigen

**Transport Temperature**

Immediately upon collection (transport within 10 – 15 minutes); if delayed, store at room temperature (20 – 25 degrees celsius)

**Stability**

Room Temperature (20 – 25 degrees celsius): 24 hours; Refrigerated (4degrees celsius): 36 hours; Frozen ( -20 degrees celsius): 36 hours

**Rejection Criteria**

- Unlabeled or mislabeled specimens
- Non-sterile or leaking containers
- Specimen containing preservatives or fixatives (i.e. Formalin)
- Specimens stored at room temperature >24 hours
- Specimens stored refrigerated or frozen > 36 hours
- Specimens submitted using transport swabs other than Liquid Stuart's
- Swabs with cotton tips or wooden shafts

**Test Performed**

Sun – Sat; Day and Evening Shifts

**Report Available**

Within 90 minutes of specimen processing

**Reference Range**

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Normal Value

Negative

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Critical Value

Any detection of Trichomonas antigens

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**Limitations**

This test detects both viable and non-viable antigens. Test performance depends on the antigen load of the specimen; Inadequate sample collection or low antigen levels may yield false negative results; This test does not differentiate between patients who are carriers and those that have acute infection.

**Interfering Substances**

Samples containing douche medicated with iodine may interfere with the reading of negative test results; Specimens containing Staphylococcus aureus at concentrations higher than 1 x 10<sup>8</sup> organisms per milliliter

**Alternate Name(s)**

Trich