

## Mycobacteria and *Nocardia* Culture, Varies

**Test ID:** CTB

### Explanation:

Effective July 1, 2025, the Clinical Microbiology Mycology and Mycobacteriology Laboratory will accept only flocked swabs (e.g., E-swabs) for this test.

Flocked swabs should be surgically collected and will be accepted for fungal and mycobacterial culture only if collection of tissue or aspirate fluid is not possible. Swabs sent with multiple tests ordered on them which do not have sufficient volume for all tests will have the mycobacterial culture cancelled because higher specimen volumes are required.

The reason for this change is to improve the quality of specimens received for culture:

- Although easy to collect, swabs hold very small amounts of specimen and it is difficult to recover the specimen from non-flocked swabs
- Mycobacteria are especially affected due to their highly hydrophobic cell wall that adheres strongly to swab fibers
- Mycobacterial culture requires extensive pre-processing of the specimen in the laboratory to inactivate extraneous bacteria which can overgrow mycobacteria, and the preprocessing steps require a higher specimen volume than needed for standard bacterial or fungal cultures

Current Specimen Required
<p><b>Submit only 1 of the following specimens:</b></p> <p><b>Specimen Type:</b> Body fluid  <b>Container/Tube:</b> Sterile container  <b>Specimen Volume:</b> 1.5 mL</p> <p><b>Specimen Type:</b> Bone marrow  <b>Container/Tube:</b> Sterile container, or green top (lithium or sodium heparin)  <b>Specimen Volume:</b> Entire collection</p> <p><b>Specimen Type:</b> Gastric washing  <b>Container/Tube:</b> Sterile container  <b>Specimen Volume:</b> 10 mL  <b>Collection Instructions:</b> Neutralize specimen within 4 hours of collection with 100 mg of sodium carbonate per 5 to 10 mL of gastric wash.</p> <p><b>Specimen Type:</b> Respiratory  <b>Sources:</b> Bronchoalveolar lavage fluid, bronchial washing, sputum  <b>Container/Tube:</b> Sterile container  <b>Specimen Volume:</b> 3 mL  <b>Collection Instructions:</b></p>

New Specimen Required
<p><b>Submit only 1 of the following specimens:</b></p> <p><b>Specimen Type:</b> Body fluid  <b>Container/Tube:</b> Sterile container  <b>Specimen Volume:</b> 1.5 mL</p> <p><b>Specimen Type:</b> Bone marrow  <b>Container/Tube:</b> Sterile container, or green top (lithium or sodium heparin)  <b>Specimen Volume:</b> Entire collection</p> <p><b>Specimen Type:</b> Gastric washing  <b>Container/Tube:</b> Sterile container  <b>Specimen Volume:</b> 10 mL  <b>Collection Instructions:</b> Neutralize specimen within 4 hours of collection with 100 mg of sodium carbonate per 5 to 10 mL of gastric wash.</p> <p><b>Specimen Type:</b> Respiratory  <b>Sources:</b> Bronchoalveolar lavage fluid, bronchial washing, sputum  <b>Container/Tube:</b> Sterile container  <b>Specimen Volume:</b> 3 mL  <b>Collection Instructions:</b></p>

1. Collect 3 respiratory specimens for acid-fast smears and culture in patients with clinical and chest X-ray findings compatible with tuberculosis.
2. These 3 specimens should be collected at 8 to 24-hour intervals (24 hours when possible) and should include at least 1 **first-morning** specimen.

**Specimen Type:** Stool

**Supplies:** Stool Collection Kit, Random (T635)

**Container/Tube:** Sterile container

**Specimen Volume:** 5 to 10 g

**Specimen Type:** Tissue

**Container/Tube:** Sterile container

**Specimen Volume:** 5 to 10 mm

**Collection Instructions:** Collect a fresh tissue specimen.

**Specimen Type:** Urine

**Container/Tube:** Sterile container

**Specimen Volume:** 20 to 50 mL

**Collection Instructions:** Collect a random urine specimen.

**Fresh tissue or body fluid is the preferred specimen type instead of a swab specimen. Recovery of mycobacteria from swabs is generally very low yield.**

**Specimen Type:** Swab

**Sources:** Wound, tissue, or body fluid

**Container/Tube:** Culture transport swab (noncharcoal) culturette, or Eswab

**Specimen Volume:** Adequate specimen

**Collection Instructions:**

1. Before collecting specimen, wipe away any excessive amount of secretion and discharge, if appropriate.
2. Obtain secretions or fluid from source with sterile swab.
3. If smear and culture are requested or both a bacterial culture and mycobacterial culture are requested, collect a second swab to maximize test sensitivity.

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**Collection Instructions:** Collect a random urine specimen.

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**Specimen Type:** Flocked Swab (e.g. Eswab)

**Supplies:** BD Eswab (T853)

**Sources:** Surgically collected wound, tissue, or body fluid only if tissue biopsy or fluid aspiration is not possible.

**Container/Tube:** Flocked swab (e.g. Eswab)

**Specimen Volume:** Entire 1 ml in swab container with swab

**Collection Instructions:**

1. Before collecting specimen, wipe away any excessive amount of secretion and discharge, if appropriate.
2. Obtain secretions or fluid from source with sterile flocked swab. Paranasal sinus collections must use a nasopharyngeal flocked swab.
3. If smear and culture are requested or both a bacterial culture and mycobacterial culture are requested, collect a second swab to maximize test sensitivity.
4. Swabs from the following sources are **not acceptable**: respiratory fluid (eg, sputum), nasal, sinus, outer ear (surgically collected inner ear swab is acceptable), mouth, throat, or scalp.

## Questions

Contact Dunisha Messmer, Laboratory Resource Coordinator at 800-533-1710.