

**CENTEGRA CLINICAL LABORATORIES**  
*McHenry/Woodstock, Illinois*

**FUNGAL CULTURES**

**SPECIAL CONSIDERATIONS**

1. For some fungal infections, the fungal load may be low. Inadequate amounts of specimen may yield false-negative results. In order to maximize the chance of recovering organisms in sterile fluids, it is recommended that as much specimen as possible be sent for culture. If the volume received is not adequate for the tests requested, the physician should be contacted to prioritize test requests.
2. In general, swabs for the collection of material from open wounds or draining lesions are not recommended because these sites are frequently contaminated with environmental microorganisms.
3. When possible, to increase the chance of recovery of a fungal organism, the specimen should be collected before an antifungal agent is administered.

**COLLECTION AND DELIVERY**

1. Collect specimens aseptically and place in sterile, leakproof containers.
2. Deliver specimen to the laboratory within 2 hours. Rapid transport is critical to ensure the survival and isolation of fastidious organisms and to prevent overgrowth by more hardy bacteria.
3. If the specimen cannot be delivered within 2 hours:
  - a. incubate normally sterile specimens room temperature (e.g., blood, bone marrow, CSF, or deep lesion material).
  - b. refrigerate at 4<sup>0</sup>C specimens that are potentially contaminated with bacterial microbiota (e.g., dermatological specimens, conjunctiva cultures).

**COLLECTION GUIDELINES**

**Abscess/Drainage/Wound**

1. Sample advancing margin of lesion. If specimen is collected at surgery, also submit a portion of the abscess wall.
2. Aspirate sample and transport in a syringe without a needle or collect sample BBL Swab (Red or White Cap) transport system (non-cotton-tip swabs are recommended).
3. If swabs are used, several swabs, if possible should be sent to allow for multiple testing.

**Blood**

1. Collect sample as instructed in Specimen Collection: Blood Culture procedure (PR05-004).
2. Use Pediatric blood culture bottles for collection with maximum amounts of blood recommended.
3. For difficult to grow fungi, collect specimen in green top tube (heparin) or Isolator tube.

**CENTEGRA CLINICAL LABORATORIES**  
*McHenry/Woodstock, Illinois*

**Body Fluids (includes CSF)**

1. Collect as for bacterial culture in screw-cap tube.
2. Keep at room temperature for transport.

**Bone Marrow**

1. Collect in SPS, or green top (heparin) tube and deliver to lab immediately.

**Ear, external**

1. Firmly rotate swab in outer ear canal

**Eye**

Corneal Scrapings

1. Use direct inoculation onto appropriate fungal medium. The physician should contact the laboratory to obtain medium prior to corneal scraping procedure.
2. Agar plates are inoculated by lightly touching both sides of the spatula in a row of separate C streak marks.

Conjunctiva

1. Use direct inoculation onto appropriate fungal medium or aerobic swab transport system.
2. Sample both eyes (even if one is uninfected) prior to applying anesthetic. The uninfected eye can act as a control to compare agents isolated from the infected eye.

Intraocular Fluid

1. Collect in a sterile screw-cap container.
2. If intraocular washings, fluid should be concentrated prior to plating.

**Hair**

1. After selecting infected area, remove at least 10 hairs and scrape scalp scales if present.
2. Use bedside inoculation onto appropriate fungal medium or transport in a clean glass slides taped together (transport slides in slide carrier).

**Nails**

1. Clean nail with alcohol.
2. Remove the distal portion of debris under the nail and discard.
3. Scrape infected nail area, or clip infected nail.
4. Use bedside inoculation onto appropriate fungal medium or transport in a clean envelope or between two clean glass slides.

**Respiratory Sites (sputum, bronchial washing, etc.)**

1. Collect early-morning sputa resulting from deep cough.
2. Collect bronchoalveolar lavage, transtracheal aspirate, etc.
3. Transport specimens in sterile screw cap container.

**CENTEGRA CLINICAL LABORATORIES**  
*McHenry/Woodstock, Illinois*

**Skin Scrapings**

1. To reduce likelihood of bacterial contamination, the skin surface should be disinfected with 70% alcohol.
2. The specimen should be collected from the edge of the lesion and inoculated directly onto fungal medium or placed in a clean envelope or between two clean glass slides taped together.

**Tissue**

1. Collect tissue and transport in sterile screw-cap container.
2. If there will be a delay in processing, add a small amount of sterile non-bacteriostatic saline to prevent drying.
3. *Never transport in formalin.*

**Urine**

1. First morning clean-catch urine in sterile screw-cap cup. Use midstream collection technique.
2. Catheterized specimen in sterile screw-cap cup.
3. NOTE: Patients with blastomycosis or cryptococcosis may have prostatic infection.
4. 24- hour urine collections and Foley catheter urine specimens are not acceptable.

**Vaginal**

1. Collect as for bacterial cultures.

**Wounds**

1. Aspirate or swab deeply. Sample the base of the lesion and abscess wall.