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## Mycology Specimen Collection Instructions

The recovery of fungi from clinical specimens depends largely on the collection of an appropriate specimen and its prompt transport to the laboratory. The specimen must be labeled per laboratory policy with its source indicated. Unless otherwise indicated, all specimens are inoculated onto BHI and Inhibitory Mold agar and incubated at 30 + 2 C. Flasks with screw caps are used as a safety precaution.

### **Types of Specimens:**

**CSF:** 1-3 ml of freshly collected fluid is optimal for fungal investigation. CSF specimens should be transported to the laboratory as soon as possible and processed promptly. If there is a delay, do not refrigerate the samples, rather they should be left at room temperature or incubated at 30 C. The specimen should be centrifuged. Inoculate sediment onto IMA and BHI (with 5% sheep blood). Hold cultures for at least 30 days.

**Blood:** minimum of 5 ml into the aerobic blood bottle and incubated at 35 C, and whole blood (collected in an SPS yellow vacutainer tube) can be directly inoculated onto BHI and IM media at 30 C. If there is a delay in transport, the sample should be held at room temperature. Do not refrigerate. Hold cultures for at least 30 days. If dimorphic fungi are suspected, refer samples to the reference lab for testing.

**Bone Marrow:** Collect sample of bone marrow in an SPS yellow vacutainer tube, (making sure to clean the stopper properly prior to injecting sample). The bone marrow can be directly inoculated onto BHI and IM media. If there is a delay, do not refrigerate the sample, rather it should be left at room temperature or incubated at 30 C. Hold cultures for at least 30 days. If dimorphic fungi are suspected, refer samples to the reference lab for testing.

**Respiratory Secretions:** An adequate specimen is absolutely essential. Spit is not sputum; and early first morning specimen is preferable. Respiratory Therapy may be required to induce the patient for an acceptable specimen. All specimens must be sent to the laboratory and processed as soon as possible, a delay of longer than 2 hours at room temperature may impede the detection of some fungi. Store at refrigerated temperature if short delays in processing are anticipated. Inoculate sample onto BHI and IM media. Hold for at least 30 days.

**Urines:** Early morning sample if possible; should not be collected in a bedpan. Urine samples must be processed as soon as possible, a delay of longer than 2 hours at room temperature may impede the detection of some fungi. Store at 4 C if short delays in processing are anticipated. Yeasts recovered from routine urine bacteriology cultures of catheterized urine or urine collected by sterile technique should be identified and reported regardless of colony count. The isolation of yeasts from clean catch specimens must be interpreted with caution.

**Tissues:** Tissue samples should be kept moist with saline and transported to the laboratory as soon as possible. If a delay should occur store at Room Temperature (for up to 72 hours). If zygomycosis is suspected do not grind the tissue, however for isolation of other fungi, soft tissue can be ground in a tissue grinder if possible using sterile technique. A small amount of sterile saline can be used if desired. Inoculate sediment onto IMA and BHI (with 5% sheep blood). Hold cultures for at least 30 days.

**Skin Scrapings, Nail, and Hair:** Samples are taken by plucking hairs, scraping skin scales, or clipping infected nails into a sterile container. If there is a delay in setup, specimen can be held at Room Temperature for up to 7 days. Do not refrigerate. Hold cultures for at least 30 days.

**Body Fluids, Special Sites:** The media should be inoculated as soon as possible. Samples from sterile sites can be held at Room Temperature if a delay in set up occurs for up to 72 hours. Hold cultures for at least 30 days.