

Specimen Collection Instructions: Dermatophyte Cultures

Provider Information

Appropriate specimen collection is essential to improve detection of dermatophytes.

General Considerations

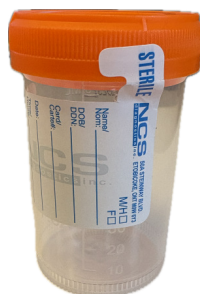
- Do not use a swab to collect specimens for dermatophyte culture.
- Ensure all samples are submitted in a dermatophyte collection kit (mycopak) or sterile container – Figure 1. Specimens collected from different body sites must be placed in separate containers.
- Ensure specimen source is included on the requisition.

Figure 1.

Collection containers for dermatophytes



Mycopak



Sterile
Container

Skin specimens:

1. Clean affected areas gently with soap and water or disinfect the affected area with 70% isopropyl alcohol.
2. Allow to air dry before sample collection.
3. Use a blunt sterile scalpel to gently scrape the outer border of the lesions. Place at least 10-15 pieces of scale from the raised edges of the lesions into a dermatophyte collection kit (mycopak) or a sterile container.
4. Label the mycopak or the specimen container with patient information.
5. Place the specimen in the biohazard bag and seal bag. Place completed requisition in the pocket on the outside of the sealed biohazard bag.
6. Transport to laboratory within 12 hours of collection. Ensure specimen is stored at room temperature after collection and during transportation.

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Nail Specimens:

Debris from the junction of the nail and nail bed, as well as the dorsal layers of the diseased nails are the best specimens for dermatophyte culture as they contain the most living fungi compared to other areas of nails.

1. If the nail is heavily soiled, wash with soap and water first. If required, remove nail polish.
2. Wipe nail with 70% isopropyl alcohol.
3. Clip the affected nail(s). Collect up to 3-5 pieces of visibly infected nail samples. Discard or sterilize nail clippers after use.
4. Place the nail samples into a dermatophyte collection kit (mycopak) or a sterile container.
5. If excess keratin material is present under the nail, use a blunted scalpel or curette to collect the material and place material into the same mycopak or sterile container containing the nail samples.
6. Label the mycopak or the specimen container with patient information.
7. Place the specimen in the biohazard bag and seal bag. Place completed requisition in the pocket on the outside of the sealed biohazard bag.
8. Transport to laboratory within 12 hours of collection. Ensure specimen is stored at room temperature after collection and during transportation.

Hair / scalp specimens:

Note: Hairs that have been cut rather than plucked are seldom satisfactory. It is best to collect the specimen(s) from the outer borders of several suspect areas of the lesions to achieve the best recovery of fungal elements.

1. Disinfect the affected area by 70% isopropyl alcohol wipe and allow air dry before sample collection.
2. **Hair:** With sterile forceps, pluck affected hair by grasping the hair shafts close to the skin and rolling the hairs from the follicles to ensure that the root hairs just beneath the skin surface are obtained. Collect at least 10-20 root hairs. Cut the collected hairs at the proximal (root) end into 2-3 cm length and place in dermatophyte collection kit (mycopak) or sterile container. Discard the distal aspects of the hair.
3. **Scalp:** Use a blunt sterile scalpel to scrap the active border of the lesion and place the skin scraping samples into a dermatophyte collection kit (mycopak) or sterile container.
4. Label the mycopak or the specimen container with patient information.
5. Place the specimen in the biohazard bag and seal bag. Place completed requisition in the pocket on the outside of the sealed biohazard bag.
6. Transport to laboratory within 12 hours of collection. Ensure specimen is stored at room temperature after collection and during transportation.