

Cytology Specimens

Specimens should be sent to Cytology immediately. If specimen cannot be sent immediately, refrigerate. DO NOT FREEZE. Fill out a cytology requisition form for each specimen submitted.

Cytology Requisition Requirements

Include the following information:

- First and last name of the patient.
- Medical Center identification number or unique identifier.
- Patient location.
- Ordering physician.
- Name or initials of person collecting the specimen.
- Date and time of collection.
- Pertinent clinical data including clinical history.

Cytology Container Labeling Requirements

Each specimen container must be labeled with the following information.

- First and last name of the patient.
- Medical Center identification number or unique identifier.
- Patient location.
- Ordering physician.

Source Specific Specimen Collection

Body Cavity Fluids

- Examples: spinal, pleural, ascitic and cystic fluids.
- Portions of fluid that are clotting should be submitted anticoagulated (heparinized).
- The fluid is transported to the lab in any suitable, clearly labeled container. Specimens should be refrigerated until sent to the lab. If volume is less than 50 ml put specimen into a cup containing CytoRich Red to avoid specimen cellular degeneration.

Breast Specimen Collection

Nipple Discharge:

- The first few drops of discharge should be wiped away because they will contain mainly degenerated cellular debris.
- Using a pre-labeled slide, draw the glass slide across the nipple to produce a uniform smear.
- Fix immediately with spray fixative.
- Continue to make slides until the secretion stops.

Cyst Fluid Aspiration:

- Draw the cyst fluid into a syringe and submit to the lab, properly labeled with patient's name.
- Specimen should be refrigerated until it is sent to the lab.

Solid Mass Aspiration:

- Aspirate specimen into a syringe.
- Properly label with patient's name.
- Submit to the lab or refrigerate until specimen can be sent to the lab.

Cytology Non-Gynecological Collection

Bronchial Brush and Wash Collections

Bronchial Brush:

Bronchial brushings can be handled in one of two ways:

1. Place the entire brush in a screw top test tube containing saline and submit to laboratory as soon as possible.
2. Smear the brush material directly onto a pre-labeled (use pencil) glass slide. Spread all of the brush material uniformly over the slide. Immediately spray cytology fixative.

Bronchial Wash:

- Specimen should be sent in a clean, tightly sealed tube or container.
- The specimen must be quickly transported to the lab in a clearly labeled container. If there is a delay, refrigerate specimen or put specimen into a cup containing CytoRich Red to avoid specimen cellular degeneration.

Sputum

- A deep cough specimen is the only acceptable one. Saliva, post-nasal discharge and food-contaminated materials are not acceptable.
- Instruct the patient to obtain the specimen the first thing in the morning. Have the patient rinse his/her mouth with water and discard the material. Next have the patient breathe deeply as possible and exhale with an expulsive cough into a sample cup.
- If the patient cannot bring up any material from his lungs, contact respiratory therapy about sputum induction.
- The specimen must be quickly transported to the lab in a clearly labeled container. If there is a delay, refrigerate specimen or put specimen into a cup containing CytoRich Red to avoid specimen cellular degeneration.

Thyroid Aspiration Collection

- For a small amount of fluid (1-2 mL) smears can be made by expressing a drop of specimen onto a glass slide. Using a second slide, place on top of the first slide (frosted sides together) and pull apart to make a uniform smear. Fix smears immediately with spray fixative.
- For Wright stained slides: repeat the smearing procedure for 1 or 2 slides and let air dry. Please indicate which smear is air dried on the slides.
- For larger amounts of fluid expressed, put specimen into a cup containing CytoRich Red to avoid specimen cellular degeneration.

Tzank Smear Collection (for Herpes)

- The lesion to be sampled can be broken with a sterile blade or an inoculating needle.
- Scrape the base of the lesion with a tongue depressor, cervical spatula or sterile blade. If fluid is present it can be captured with an inoculating needle.
- Immediately smear the specimen onto a glass microscope slide labeled with the patient's name (**use pencil**).
- Spray the slide immediately with cytology spray fixative, if the slide is not sprayed immediately, the specimen will air-dry and a diagnosis cannot be rendered.
- Place slides in a plastic Pap smear container. Transport the specimen to the lab.

Urine

- Specimens other than the first morning void are preferred.

Cytology Non-Gynecological Collection

- Minimal sample size is 5cc; 50 to 100cc are preferred.
- Catheterized or voided specimens should be transported in a clean clearly labeled container.
- All specimens must be quickly transported to the lab to prevent cellular degeneration or refrigerated until it is sent to the lab. 24-hour specimens are unacceptable.
- The specimen must be quickly transported to the lab in a clearly labeled container. If there is a delay, refrigerate specimen or put specimen into a cup containing CytoRich Red to avoid specimen cellular degeneration.