

# Histology – Receipt of Specimens

With the exception of the tissues noted below, as well as tissue requiring special studies, histology specimens should be placed in formalin.

**Note:** Since formaldehyde is a suspected carcinogen, extreme caution must be exercised in handling specimens preserved in formaldehyde. Avoid skin, eye, or clothing contact. In case of eye or skin exposure, flush with copious amounts of water for at least 15 minutes. **Do not** store formaldehyde-preserved specimens near combustible materials. If an accident should occur, transport the exposed individual to the Emergency Department (ED) for medical attention.

The tissues noted in the list below (and tissues for special studies) should be kept fresh or placed in a small amount of saline (not submerged in saline). These fresh tissues should be delivered to the histology laboratory as soon as possible, and should be refrigerated until they can be delivered.

## Tissues to be Sent Fresh as Soon as Possible

- Axillary dissection
- Bladder cystectomy specimen (**NEEDS TO BE SENT IMMEDIATELY**)
- Bowel resections (**NEEDS TO BE SENT IMMEDIATELY**)
- Breast (**NEEDS TO BE SENT IMMEDIATELY**)
- Cervical cone biopsy
- Esophageal resections
- Kidney
- Limb amputations (except fingers and toes)
- Liver biopsy (if to be sent for iron studies)
- Lung (**NEEDS TO BE SENT IMMEDIATELY**)
- Lymph nodes (**NEEDS TO BE SENT IMMEDIATELY**)
- Ovarian tumors or cysts
- Placenta
- Prostatectomy specimen
- Radical neck dissections
- Salivary gland (includes parotid and submandibular/submaxillary glands)
- Spleen
- Stomach resections (**NEEDS TO BE SENT IMMEDIATELY**)
- Testicle
- Thyroid
- Uterus

## Specimens that Do Not Require Pathology Examination Unless the Physician Requests it

- Birth control devices
- Bullets (that are given directly to law enforcement)
- Cataracts

- Orthopedic appliances
- Foreign Bodies (including stents, ear tubes)
- Foreskins removed from circumcision of newborn
- Kidney, urethral or bladder stones
- **Note:** If the physician requests a “stone analysis,” handle the specimen as a surgical tissue and label the histology requisition with “For Stone Analysis.” No preservative is needed.
- Placentas (grossly normal appearing placentas)
- Portions of bone removed only to enhance operative exposure (ie, ribs)
- Radioactive materials
- Scar tissue (except from a previous neoplasm)
- Skin/fat removed with plastic procedure/extraneous tissue except from a previous neoplasm
- Teeth, provided the number, including fragments, is recorded in the medical record
- Traumatically injured members that have been amputated and for which examinations for either medical or legal reasons is not deemed necessary

## Acceptable Specimens for Histology

- Must be labeled with:
  - Patient’s full name
  - Sex
  - Age
  - Medical Record Number (MRN)
  - Time and date of collection
  - Names of attending **physician and surgeon**
  - Initials of the person collecting the specimen
- The accompanying requisition must include all of the above information in addition to the specimen identity (type) and any relevant clinical data. If the specimen is to be retained for any reason (at the request of the patient or physician, or if it is to be returned to the manufacturer) an orange sticker stating “DO NOT THROW AWAY-HOLD SPECIMEN” will be attached to the requisition by Operating Room (OR) personnel. Either “Return to manufacturer,” “Save for patient,” or “Save for Dr” will be written on the bottom line of the label.
- To maintain specimen integrity and assure timeliness of result reporting, all tissue specimens are delivered to the laboratory promptly following collection. **Do not** send tissue specimens through the pneumatic tube system.
- Upon receipt of a Histology/Cytology specimen in the lab, the requisition will be stamped with the time and date and the initials of the person delivering the specimen.

Weekend specimens will be delivered to the laboratory by OR personnel, as collected. Specimens are received in Central Collection in the evenings, on Saturday afternoons, and all day Sunday. Specimens are taken to Histology and placed in the refrigerator. The accompanying requisition should be placed in the basket on the side of the refrigerator.

- Routine specimens (those not listed above as needing to be sent fresh) are delivered in formalin (10-20 times the volume of the specimen). Extremely large specimens may be submitted in the fresh state if promptly delivered during the hours of 0600 to 1700 Monday through Friday and 0600 to 1200 on Saturday. If the histology department is closed, keep all fresh specimens refrigerated until they can be delivered.
- The person receiving the specimens in the laboratory will verify the contents of the container and the proper identification. The requisition will be stamped with the time/date and the initials of the person delivering the specimen and the person receiving the specimen. If the requisition has an orange "HOLD SPECIMEN" label, Histology personnel will then attach a like label to the specimen container to assure that the specimen is retained as long as necessary or returned to the manufacturer if requested.
- The surgeon should consult with the pathologist regarding other tissue sections that may require special handling, such as lymph nodes and muscle biopsies.

- If specimen has a STAT gram stain, deliver immediately to microbiology for processing.

## **Frozen Sections**

- Pathologists are available 24 hours for frozen section examination of specimens.
- Laboratory staff will identify which pathologist is on-call after hours and will page them.

## **Microbiology Cultures (From Same Sample as Histology Exam)**

- If physician has requested cultures from surgical tissues, and separate specimens have not been collected for this purpose, specimens must be brought down fresh or in sterile saline, **not in formalin**.
- A special microbiology order form must be filled out, designating which cultures/stains need to be performed.
- Deliver to the Histology department first, they will refer it to microbiology.