



**PURPOSE:** To define a standard method for the requirements of surgical specimens and how to receive them.

### **PRINCIPLE**

In order for the Histology Department to adequately process a specimen, the tissue must be received in the proper state or fixative, and labeled in an appropriate manner. The accompanying requisition must also have the correct and necessary information. This will produce a record of the specimen for any future reference.

### **PROCEDURE:**

#### **SURGICAL SPECIMEN REQUIREMENTS:**

1. Labeling Requirements for Histology Specimens and Requisitions:

- Patient's name
- Patient MRN number or DOB
- Time and Date of collection
- Initials of the person collecting the specimen
- Specimen identity (type) or source
- Surgeon, last **and** first name or 6-digit ID (on requisition only)
- Relevant clinical information (on requisition only)

**NOTE: If any of the above information is missing, contact the ordering department to obtain all correct information before proceeding with processing of the specimen. Fill out a Specimen Label Verification Form (GEN103F2) and have the party taking responsibility fill out and sign the form. Also, make sure an RL Event report is written on all occurrences. Unacceptable specimens may be processed at the discretion of a pathologist, especially if the specimen cannot be easily recollected.**

2. Special Requests:

- Specimen retention (at the request of patient, doctor, or manufacturer) includes an orange sticker stating "DO NOT THROW AWAY-HOLD SPECIMEN" (return to manufacturer, save for patient/doctor.)
- Other special requests, for example Microbiology (should have separate Microbiology form)
- 24 hour read or STAT.

3. Specimen Storage Requirements. Tissues noted in Table 1, as well as tissue requiring special studies, should be fresh or placed on a saline moistened Telfa Pad (not gauze). Fresh tissues are delivered to the histology laboratory immediately, or refrigerated until delivered. With few exceptions, the remaining tissues should be placed in formalin\* and sent to the laboratory for evaluation.



**Table 1.**

| <b>Specimen</b>   | <b>Storage requirements *</b> |
|---|-------------------------------|
| Appendix  | Formalin                      |
| Auditory canal cysts and tumors   | Formalin                      |
| Axillary dissection (NEEDS TO BE SENT IMMEDIATELY)                      | Fresh                         |
| Bladder cystectomy  | Fresh                         |
| Bladder calculi   | No preservative               |
| Bowel resection (NEEDS TO BE SENT IMMEDIATELY)                          | Fresh                         |
| Breasts ** (NEEDS TO BE SENT IMMEDIATELY)                               | Fresh                         |
| Bronchial biopsy  | Formalin                      |
| Calculus analysis   | No preservative               |
| Cervical cone biopsy  | Formalin                      |
| Colectomy for Tumor (NEEDS TO BE SENT IMMEDIATELY)                      | Fresh                         |
| Colon polyps and resection  | Formalin                      |
| Digit (fingers and toes) amputations                                    | Formalin                      |
| Endarterectomy  | Formalin                      |
| Enterostomy and Colostomy   | Formalin                      |
| Esophageal resections   | Fresh                         |
| Fallopian tubes   | Formalin                      |
| Gallbladder   | Formalin                      |
| Gastrectomy (NEEDS TO BE SENT IMMEDIATELY)                              | Fresh                         |
| GI biopsies   | Formalin                      |
| Heart valves  | Formalin                      |
| Intestinal resection  | Fresh                         |
| Kidney  | Fresh                         |
| Kidney calculi  | No preservative               |
| Larynx and Hypopharynx resection  | Fresh                         |
| Limb amputations except fingers and toes (NEEDS TO BE SENT IMMEDIATELY) | Fresh                         |
| Lip wedge   | Formalin                      |
| Liver biopsy  | Formalin                      |
| Liver biopsy for Iron studies   | Fresh                         |
| Lung (NEEDS TO BE SENT IMMEDIATELY)                                     | Fresh                         |
| Lymph nodes (NEEDS TO BE SENT IMMEDIATELY)                              | Fresh                         |
| Nasal cartilage, mucosa and bone  | Formalin                      |
| Neck dissection   | Fresh                         |
| Oral mucosa   | Formalin                      |
| Ovarian tumors or cysts   | Fresh                         |
| Pancreatectomy  | Fresh                         |
| Parathyroid   | Fresh                         |
| Placenta  | Fresh                         |



|   |                 |
|---|-----------------|
| Products of conception ( <b>NEEDS TO BE SENT IMMEDIATELY</b> )  | Fresh           |
| Prostatectomy specimen  | Fresh           |
| Radical neck dissections  | Fresh           |
| Rectal biopsy   | Formalin        |
| Salivary gland (i.e. parotid/submandibular/submaxillary glands) | Fresh           |
| Soft tissue, benign   | Formalin        |
| Spleen  | Fresh           |
| Sputa   | Fresh           |
| Stomach resections  | Fresh           |
| Testis-Orchiechomy  | Fresh           |
| Tongue, jaw and pharynx   | Fresh           |
| Tonsils and adenoids  | Formalin        |
| Thyroid   | Fresh           |
| Urethral calculi  | No preservative |
| Uterus  | Fresh           |

**\*\*NOTE: If a Breast case is received fresh, consult with pathologist assigned to Gross immediately. It is imperative that these specimens be evaluated and placed into formalin within 60 minutes. This is to assure that the tissue will have the optimum reaction in the immunostaining process.**

### **Specimens Exempt from Pathology Exam**

The following specimens **DO NOT** require pathology examination unless the physician requests it:

1. Cataracts
2. Orthopedic appliances
3. Foreign Bodies including stents, ear tubes, shunt tubing, shunt valves, tissue expanders, breast implants and surgical mesh
4. Portions of bone removed only to enhance operative exposure (i.e. Ribs)
5. Birth control devices
6. Traumatically injured members that have been amputated and for which examinations for either medical or legal reasons is not deemed necessary
7. Placentas (grossly normal appearing, does not meet criteria for review)
8. Radioactive materials
9. Teeth, provided the number, including fragments, is recorded in the medical record
10. Bullets that are given directly to law enforcement
11. Scar tissue, except from a previous neoplasm
12. Skin/fat removed with plastic procedure/extraneous tissue except from a previous neoplasm.
13. Foreskins removed from circumcision of newborn
14. Kidney, urethral or bladder stones. **Note:** If stones are sent to Histology, and if the physician requests "stone analysis", specimen will go straight to Reference for



send out. The only exception is bladder stones that are sent to histology that are **NOT** requesting “stone analysis”. Handle those specimens as a surgical tissue. No preservative is needed for stones.

15. Fetal Remains

**\*Formaldehyde/Formalin - Suspected Carcinogen:** Formaldehyde is a suspected carcinogen; extreme caution must be exercised in handling specimens preserved in Formaldehyde. Barrier coats, gloves, and eye protection must be worn. 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 or Formaldehyde-preserved specimens near combustible materials. If an accident should occur, transport the exposed individual, accompanied by appropriate SDS, to the Emergency Department.

**RECEIVING SURGICAL SPECIMENS:**

1. Routine histology specimens

- a. A volunteer lab runner will pick up specimens from OR and Digestive Health to deliver them to Histology hourly, from 0830 to 1630, Monday through Friday. The Birth Care Center will deliver their own specimens. The requisition must be initialed by the Histology staff and the person that delivered the specimen, then stamped with the time and date received in the lab. Extremely large specimens may be submitted fresh. Place fresh specimens in the fridge ASAP until they are able to be grossed.
- b. If specimens are brought to Central during open Histology hours, send the runner with the specimen to Histology to be received. Weekend and after hours specimens will be delivered to the lab by OR, Digestive Health, and the Birth Care Center personnel, as collected. If received in Central after hours or weekends the person dropping off specimen and the person receiving the specimen must initial requisition and then then stamp/write the time and date on it. Fresh specimens must be placed in the reagent/specimen refrigerator in the blue buckets, on the bottom shelf ASAP. Place the accompanying requisition in the basket on the side of the refrigerator. **DO NOT** put paperwork in the refrigerator. Extra-large or overflow specimens that do not fit in the fridge may be placed in the white leg refrigerator in the backroom. The neon sign must be filled out, initialed and placed on the reagent fridge next to the basket with paperwork.
- c. Routine specimens (exceptions listed in Table 1) are delivered in formalin (10-20 times the volume of the specimen).



- d. The person receiving the specimens in the lab will verify that the specimen(s) match the paperwork received, and review labels/requisitions for completeness, using two forms of identification to assure correct patient ID.
  - e. 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.
  - f. Specimens that need both Histology and Microbiology cultures need to go to Histology first as a fresh specimen. This is to make sure that there aren't any special circumstances that would require histology take a certain portion of the tissue. The specimen will then be sent to Microbiology and they will take a sterile portion of the specimen. Once Micro is finished with the specimen, the rest will come to histology to be grossed.
2. Surgeons should consult with the Pathologist regarding other tissues that may require special handling (such as lymph nodes and muscle biopsies).
  3. Frozen Sections
    1. Pathologists are available 24 hours for frozen section examination of specimens.
    2. Laboratory staff will contact the pathologist on-call if there is a need for a frozen section after office hours.

---

**References**

1. College of American Pathologists; CAP Anatomic Pathology Checklist. August 17, 2017.

---

**Related Documents**

- AP200 Accessioning in PowerPath
  - AP203 Breast Specimen Handling
  - AP205 Release of Fresh Surgical Specimens (Gross) to Patients
  - AP213 Sendouts for Chromosome Analysis or Cytogenetics
  - AP214 Muscle Specimens to UIHC
  - AP331 Frozen Section Reporting
-