Request Forms
The following information is required on the “Anatomic Pathology Request” form in “General Information” in all instances:

- Patient’s full name
- Room number
- Medical Record number
- Date of Birth
- Patient’s sex
- Name of surgeon
- Name of any referring physician desiring a report
- Type of surgical specimen
- Area of body from which specimen was removed
- Pre- and Post-operative diagnoses
- Pertinent clinical history
- Request for special procedures or other non-routine processing

Tissue Preparation in the Operating Room
Containers of various sizes are provided for specimens. Specimens, which are small and will easily fit into the four ounce and eight-ounce containers, should arrive at the Histology Laboratory with 10% formalin fixative, unless otherwise indicated. Larger specimens should not be forced into these containers. Any specimen that will not easily fit into the small containers should arrive in Histology in larger containers without fixative. A rule of thumb is that a specimen needs 10 times its volume of formalin to fix adequately. No specimen containers or fixatives other than those mentioned above should be used for routine specimens. Plastic test tubes and saline should never be used. Surgeons should consult a pathologist if they think special procedures or fixatives may be required. Any specimen, which is not delivered to the Histology Laboratory prior to closing, should be refrigerated until delivered, unless otherwise indicated. If there is any doubt as to how a specimen should be handled, the pathologist on call should be consulted. Some tissues require special attention. The handling of these is detailed under Specimens Requiring Special Handling.

Routine Processing
Routine surgical specimens arriving before 3:30 p.m. in the Histology Laboratory will have a microscopic dictation completed within 2 working days, Monday through Friday, unless special fixation, special studies, or extra procedures are required.

Rapid Processing
The indication for rapid processing is, of course, left to the discretion of the clinician, but since the pathologist is responsible for correct handling of the patient’s specimen, it may not be possible to honor all requests for rapid processing. A common example is the
request for rapid processing of a large breast biopsy specimen. Fatty breast specimens may require fixation in formalin for several hours, precluding rapid processing. The request form should have the telephone number or the pager number of the clinician to be called. An anatomic pathologist is on call before 7:30 a.m. and after 4:30 p.m. on weekdays and on weekends to perform frozen sections or take specimens for rapid processing. The pathologist on call can be reached through the page operator. Specimens submitted for rapid or rush examination will have a verbal microscopic report by 12 noon the day (Monday -Saturday) following receipt of the specimen in the Histology Laboratory, provided they are received by 4 p.m.. Exceptions to this will be cases requiring special fixation, special stains, or extra procedures, which may require extra time. The clinician requesting the “rapid” will be notified of the delay.

**Frozen Section Consultation**

The performance of frozen section for rapid diagnosis is a specialized procedure, which should not be used simply as a matter of routine. In certain instances freezing of a tissue specimen may be contraindicated. Frozen sections are performed to establish the presence and nature of a lesion, to determine the adequacy of surgical margins and to establish whether the tissue obtained contains diagnosable material. As commented upon in “Ackerman’s Surgical Pathology”, the surgeon should ask himself, “Will the result of the frozen section examination influence in any way the surgical procedure? If the answer is no, the procedure is not indicated.” The need for intraoperative surgical pathology consultation with frozen section should be anticipated whenever possible and scheduled in advance by a notation on the operative schedule or by contacting the Histology Laboratory. However, there is a pathologist available all day, every day to perform frozen sections. The pathologist on call should be contacted for frozen sections during hours or days when the Histology Laboratory is closed. In all cases of anticipated need for such consultation, preoperative communication between surgeon and pathologists is invaluable and strongly encouraged. Specimens submitted for frozen section will be processed and the results reported by a pathologist within 20 minutes under normal circumstances. The data required on the “Anatomic Pathology Request” form in “General Information” is also required on the Frozen Section Requisition and Report form. In addition, the contributing clinician should indicate:

- Pertinent clinical history, including the reason for frozen section.
- Radiography request.
- Type of request, i.e., disease identification, tissue for hormone receptors, or margins of resection.

**Specimens Which Need not be Sent to Surgical Pathology**

In accordance with the rules and regulations of Christiana Care Health Services, Christiana and Wilmington Hospital Medical/Dental Staff (Item 608.0), “all tissues and other materials removed at operation, whether from an inpatient or an outpatient, shall be sent to Pathology with a complete and signed pathology request, except for certain specimens that need not be sent to the pathologist”:

- Bone fragment
• Bone from ostectomy site
• Bunion
• Cataract
• Certain foreign bodies, in particular, bullets and other foreign bodies needed by the police for use as legal evidence
• Debrided tissue following trauma
• Fingernail and toenail
• Foreskin
• Gingival fragment
• Hernia and hydrocele sac
• Intrauterine device
• Lipomas of the spermatic cord
• Metallic or other implanted prosthetic device
• Normal iris in iridectomies
• Normal muscle removed in the course of muscle shortening operations of the eye
• Placenta removed at the time of Cesarean section
• Scars
• Teeth
• Tissue removed in plastic repairs such as ectropion
• Vaginal mucous membrane removed incidental to vaginal repair
• Varices

If it is elected not to send one of the above specimens, the physician who elects to discard that specimen may do so only after recording his evaluation of the nature of the specimen on the official hospital record. In addition to the physician’s documentation, the nurse in charge of the operating room should record this disposal on any flow sheet that is being kept.

**Preservation of Specimens, Paraffin Blocks and Slides**
Specimens received in the Histology Laboratory will be kept by Histology for 2 weeks after the initial surgical sign-out date. Paraffin blocks are kept for 10 years. Glass slides are kept for a 13 years.

**Specimens Requiring Special Handling**

**Prosthetic Breast Implants**
At the surgeon's discretion breast implants removed in the operating rooms at Christiana Care may be sent to Pathology for examination and are to be retained in the Pathology Department for two years. Breast implants may be removed from the Pathology Department by the patient or patient's designated representative after signing the appropriate form verifying receipt of the specimen. Breast implants may be sent to the manufacturer with signed patient release indicating manufacturer name and provision of all appropriate shipping materials.

**Breast Specimens**
Diagnostic breast specimens, including both biopsies and resection specimens, should be sent to the Department of Pathology as soon as possible. Specimens can be sent fresh or
in formalin. If specimens are sent fresh, the Histology laboratory should be notified by telephone at 302-733-3659 at Christiana Hospital or 302-428-2477 at Wilmington Hospital. The goal in handling breast specimens is to minimize the cold ischemia time, i.e. the time between resection and fixation, so that any possible assays for prognostic markers in cases of breast carcinoma will be optimized.

**Gallbladder**
Gallbladder specimens should be opened in the operating room and covered with 10% buffered formalin in a proper sized container. Stones should be sent to Histology and not given to the patient.

**Lymph Node Biopsy**
Elective lymph node biopsies should be performed Monday through Friday between the hours of 8 a.m. and 4:30 p.m.. All lymph node biopsies (including those obtained by procedures such as mediastinoscopy) should be clearly stated as such on the major and minor operating room schedules. If there is a lymph node specimen for which lymphoid marker studies or touch preparations are needed, the laboratory should be notified by telephone when the specimen is ready to be sent from the operating room. The biopsy specimen should be on a sterile saline-moistened gauze sponge, fresh, without prior fixation, and in a sterile container. See “Specimens for Microbiological Study” for cases requiring culture. Specimens to be sent for lymphoid markers should be scheduled Monday through Friday between the hours of 8 a.m. and 4 p.m.. The laboratory should be notified at 302-733-3659 at Christiana Care Health Services and at 302-428-2477 at Wilmington Hospital and the specimen sent immediately to the laboratory.

**Specimens for Microbiological Study**
Whenever microbiological study of a tissue sample is indicated, appropriate cultures should be obtained in the operating room under sterile conditions prior to submission of the specimen to the Histology Laboratory. For information regarding proper collection techniques, call the Microbiology Laboratory at 302-733-3675 at Christiana Care Health Services and at 302-428-2482 at Wilmington Hospital. In unusual circumstances, when cultures cannot be obtained in the operating room, they can be taken by the examining surgical pathologists. Specimens, which cannot be cultured in the operating room, must be sent to the laboratory without fixative.

**Muscle Biopsy**
Physicians desiring histochemical stains on muscle biopsies must notify the Histology Laboratory at least 1 day in advance so that preparations can be made for processing the specimen. Muscle biopsy procedures are best performed Monday through Friday between the hours of 8 a.m. and 4 p.m. Muscle biopsies are sent to Therapath Pathology.

**Nerve Biopsy**
Nerve biopsies are currently sent to Therapath Neuropathology. The specimen should be sent to the Histology Laboratory on saline-soaked gauze. It should be sent FRESH to histology as soon as possible.
Products of Conception (POC)
At the request of the Department of Obstetrics and Gynecology, some POC cases will be sent to the Histology Laboratory so that they may be sampled for cytogenetic studies. Fetal remains weighing >350 g require an autopsy permit for examination. If no autopsy consent is submitted, skin/tissue from the fetus cannot be obtained for genetics studies. Fetal remains weighting <350 g may be examined as a surgical specimen.

Renal Biopsy
Biopsies of the kidney require specialized methods of fixation and processing if immunofluorescent or electron microscopy examinations are to be performed. The need for such studies should be anticipated and the laboratory notified in advance at 302-733-3659 so that a technologist may be present to assist in specimen collection.

Research Specimens
The section of Surgical Pathology supports research from all of Christiana Care Health Services departments. It is requested that research proposals meet the following guidelines:

• Research protocol requiring collection of tissue removed at surgery or taken from patients having autopsy at Christiana Care Health Services must be approved by the section chief of surgical or autopsy pathology.
• If tissue from a Christiana Care Health Services patient, living or dead, is needed for scientific research, the appropriate Christiana Care Health Services permit for performing surgery or performing the autopsy must have been signed by the appropriate person. These forms state that tissue may be used for research purposes.
• All research requires a research protocol by Christiana Care Health Services Institutional Review Board. Copies of the research protocol must be given to the section chief of surgical pathology or autopsy pathology, to the supervisor of Histopathology and to Laboratory Administration.
• Tissue that is received in histology will be examined by a pathologist for selection of material to be used for research. No material will be given if, in the opinion of the examining pathologist, the removal of the material would jeopardize the normal examination of the tissue in any way.
• Tissue leaving the Histology Laboratory for research purposes will not be labeled with the patient’s name or other identifying marks which could directly reveal the patient’s identity unless the patient has specifically given permission for this.

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