Purpose:
Describe the proper handling and collection of Anatomic specimens.

Procedure:
1) A specimen is defined as:
   a) Any tissue or foreign body removed surgically or by minimally invasive procedure (FNA).
   
   b) Any body fluid/effusion aspirated or collected for cytologic examination (ex. pleural fluid, sputum, ascites).
   
   c) Any material scraped and smeared directly on glass slides for cytologic examination (GYN smears, buccal smears, etc.).

2) All specimens must be collected by qualified medical personnel in the usual and accepted manner. Refer to specific specimen collection protocol below for proper collection guidelines.

3) All specimens submitted to pathology for examination and diagnosis must have at least two of the following identifiers: patient name, date specimen procured, specimen site, physician, date of birth, social security number or chart number.

4) All specimens must be accompanied with a requisition for each specimen or group of specimens from same procedure and patient. This requisition must contain patient identification to include date of birth, physician, pre/post-op diagnosis, special testing requests if different from routine histology examination (i.e. cultures, electron microscopy) and specimen identification. Clinical history, if available, should be included for completeness and assistance in diagnosis.

5) All tissue specimens, if indicated, must have adequate fixative added directly to container at a volumetric ratio of approximately 1:10 within one hour of collection and placed in a biohazard bag for transport.

6) All specimens must be hand delivered to the laboratory personnel or placed in the area
7) All specimens need time received in the laboratory recorded and appropriate fixatives added. The following is a list of specimen requirements:

   a) **Routine tissues** must have 10% buffered formalin added directly at a wt./vol. ratio of approximately 1:10. The tissue must be placed in fixative within one hour of collection. The fixative prevents putrefaction and autolysis and maintains the proper relationship between cells and extracellular substances.

   b) **Bone Marrow biopsies** are placed in working Formalin for approximately 1-2 hours. Please indicate time on the labels provided. Detailed procedure ANP 91 Bone Marrow Collection and Preparation.

   c) **Specimens with cultures** requested. If the Microbiology department sets up cultures on site, place representative specimens for pathology at the designated pick-up site. NOTE: If specimens are received and/or processed after the scheduled pick-up by couriers, notify the pathologist or The Pathology Laboratory for a possible unscheduled pick-up. If specimens are received and/or processed after normal day shift hours (evening/night shifts), place specimens in designated area for routine courier pick-up. Prompt handling of these specimens is imperative to assure and maintain the viability for cytologic and histologic examination.

   d) **GYN slides and Non-GYN smears** may be sprayed with a cytology fixative or allowed to air dry.

   e) **Kidney biopsies** must be placed in the two fixatives (Michel’s fixative for immunofluorescence studies and Karnofsky’s fixative for electron microscopy) provided to radiology and accompanied with the proper requisition slip.

   f) **Muscle biopsies** must be refrigerated immediately and notify The Pathology Laboratory for STAT pick-up. Due to shipping constraints we cannot accept these on a Friday.

   g) **Body fluids** should be refrigerated.

   h) **FNA** – The FNA is scheduled with the pathologist, front office and cytotechnologists on duty. Detailed procedures are ANP 87 Radiology Guided FNA and ANP 88 Pathologist performed FNA.

   i) **Stones** – sent in dry state for send-out analysis.

   j) **Surgical Hardware** – sent in dry state for identification and documentation.

   k) **Fresh Lymph Nodes** – Sterile collection procedure. The specimen should be submitted fresh. Do not put formalin on the tissue if it is for flow cytometry and cultures. Please notify the laboratory for courier and a stat lymph node pick-up.

   l) **Flow Cytometry** –
      i. Bone marrow aspirate or peripheral blood: 1-2 ml EDTA preferred. 1-2 ml minimum in sodium heparin tube or ACD (pale yellow/no gel separator) is acceptable. Please provide most current CBC report.
      ii. Bone marrow core: 1-2 cm minimum core length in RPMI
      iii. Fresh, unfixed tissue: 0.2 cm³ minimum in RPMI
      iv. Fluids and FNAs: Equal parts RPMI and specimen

   m) **Chromosome Analysis** – DUE TO INSURANCE RE-EMBURSEMENT ISSUES, these specimens must be sent by the hospital to a reference lab of their choice.

   n) **Urine for FISH** – Clean catch mid-stream urine specimen of at least 15 ml.

   o) **Immunohistochemical and Histochemical Interpretation** – In addition to the block or slide, an H&E slide is required for interpretation. If sending a tissue block, the H&E can be prepared onsite. If sending slides, at least one extra slide should be sent for H&E staining.
8) Secure all container lids tightly and correctly to avoid leakage and place in sealed plastic bag. Dispose of all collection material according to proper biohazardous waste disposal.

9) Place all specimens in the designated courier pick-up site prior to the scheduled rounds to facilitate prompt processing and results.

10) Upon receipt of specimen, The Pathology Laboratory will accession the specimen through the Anatomic Pathology Information System.

11) If there are any questions, concerns, or special requests, contact the Anatomic Pathology Department at (337) 312-1262 from the hours of 7:00 a.m. – 5:00 p.m., Monday through Friday. Voice mail is available after hours or you may contact the pathologist on call.

Reference:
CAP Standards, The Pathology Laboratory