



**Dayton Children's Hospital
One Children's Plaza Dayton Ohio 45404**

**Anatomic Pathology
Histopathology**

TISSUE PATHOLOGY ATTACHMENT

(Also Refer to SUBMISSION OF PATHOLOGY PROCESSING FORMS)

The following instruction is a condensed, physician oriented version of pertinent standard information needed by a physician to submit tissues, and coordinate special laboratory services for diagnostic purposes. A copy of this document is to be easily accessible to anyone where procedures are performed, and where Pathology Processing Forms are generated.

I. Collection and Preservation of Specimens:

- A. **FROZEN SECTIONS** – When possible, frozen sections must be scheduled with the Pathology Department at least one day in advance and 15 minutes before taking the specimen to the Pathology Department. After obtaining specimen, it should be maintained in a fresh sterile condition without fixative. To prevent drying of smaller specimens, place tissue on a saline soaked telfa pad and cover with a second soaked telfa pad.
- B. **FRESH SPECIMENS (No Fixative Added)** – The specimen will be immediately transported in a container clearly labeled “fresh specimen” to Histology, sign the Fresh Specimen Log and notify someone in the department that a fresh specimen had arrived. **Routine specimens should never be left without formalin overnight or over the weekend**
- C. **FORMALIN FIXED TISSUE** - The vast majority of specimens submitted to the Pathology Department will be placed in 10% buffered formalin with a specimen to fixative ratio of at least 1 to 10.
- D. **CYTOLOGY SPECIMENS (Body Fluids etc.)** – The specimen will be placed in a labeled container and transported immediately to the Pathology Laboratory or the Clinical Laboratory if multiple tests are required. A completed Pathology Processing Form and any necessary Clinical Laboratory paperwork must accompany the specimen. If tissue is submitted on the same patient, a separate Pathology Processing Form is needed for the Cytology specimen.
 - 1. **Body Fluids, Bronchial Washes, Sputum's** etc. – Without fixative
 - 2. **Smears, Brushings** – Spray slide(s) with cyto-spray fixative or place in 95% ethanol. Label slide with pencil, patient's last name and medical record number.
 - 3. **Tzank Smears** – Air dry and label in pencil as above.
- E. **BONE MARROW SPECIMENS** – Bone marrow specimens must be collected in B-5 fixative (obtained from Histology) if collected before 14:30. After 14:30 collect the specimen in formalin.
- F. **SPECIAL PROCEDURES** (e.g., muscle, nerve, kidney biopsies, etc.) – Contact the Pathology Department at least 24 hours in advance to coordinate handling of these specimens. Most require special technician set-up, work scheduling and are sent to outside reference labs. These procedures should not be scheduled on Fridays, evenings, or holidays due to the unavailability of the reference labs.



Tissue Pathology Attachment (pg. 2/4, Cont.)

G. SPECIMEN EXEMPT FROM EXAMINATION – The following specimens do not require examination by the hospital pathologists:

4. Orthopedic Appliances
5. Ribs/Skin (removed to enhance operative exposure or for cosmetic reasons)
6. Prosthetic Materials/Devices (Silastic, P.E. Tubes, Catheters)
7. Bone Fragments from Trauma
8. Cataracts
9. Middle Ear Ossicles
10. Ingrown Toe Nails
11. Extradigits
12. Therapeutic Radioactive Sources
13. Traumatically Injured Members (amputated limbs)
14. Foreskin (routine circumcision)
15. Teeth (if documented in medical record)
16. Foreign Bodies (splinters, coins, glass etc. and items that for legal reasons are given directly to the custody of law enforcement officials such as bullets, knives etc.)
17. Exceptions (there may be exceptions determined by the pathologist, always contact pathology at 3358 when in doubt)

B. SPECIMENS REQUIRING IMMEDIATE TRANSPORT TO PATHOLOGY – Due to the time sensitive requirements for diagnosis and/or shipping the following specimens must be brought to the pathology laboratory as soon as possible:

18. Liver
19. Lung
20. Brain
21. Any other tissue the surgeon or pathologist requests to be sent on an emergent basis.

II. Submission of Specimens:

A. Containers and Transportation – For tissue transportation, use wide mouth containers large enough as deemed necessary to avoid injury, crushing, or distortion of specimens. In the case of smaller specimens (e.g., skin, GI biopsies, tonsils, etc.), pre-filled containers with 10% buffered formalin are preferred. Do not forward specimens in pans or other open containers. All containers must be appropriately labeled with patient name, medical record number and identity of specimen. If multiple specimens are submitted per patient, each container must be numbered 1,2,3 and so on matching the Tissue Processing Form. Only specimens transported by physicians, hospital personnel or other persons authorized by law will be accepted.

B. Fixation – Be sure the specimen is placed in an adequate amount of fixative. 10% buffered formalin will be used with a specimen to fixative ratio of at least 1 to 10. Note: adequate fixation for small biopsy specimens is rarely a problem, as the specimen-to-formalin ratio in pre-filled jars usually exceeds 1 to 100. However, for large specimens the size of the specimen container limits this ratio. In these cases, insure the specimen is completely submerged.



Tissue Pathology Attachment (pg. 3/4, Cont.)

- C. Submission of Large Fresh Specimens – Due to the health hazards and subsequent regulations associated with formalin fume exposure, some departments may not have the capability to place larger specimens such as placentas or amputated limbs into formalin. In these cases, the specimen will be immediately transported in an appropriate container or leak proof bag clearly labeled “fresh specimen” to the Pathology Department. If a large specimen is obtained on weekends or after regular hours, it will be placed in the Clinical Laboratory refrigerator in an appropriately labeled container marked “fresh specimen”.