



## Histopathology

### Specimen Collection Guidelines

- The submitted specimen should include the lesion and some adjoining lateral and deep "normal" tissue.
- To ensure proper fixation of tissue samples larger than 2 centimeters in thickness, make multiple partial cuts (bread loaf), approximately 1 cm apart.
- When making incisions into cutaneous masses, cut from the skin surface downward; leave the partially hemisectioned tissues attached to each other at the deep border in order to retain orientation and to allow microscopic evaluation of completeness of surgical excision.
- Immediately fix the tissue by immersion in a volume of 10% neutral, buffered formalin that is at least 10 times the volume of the tissue sample (20 X for eyes); allow 24 hours for complete tissue fixation. After 24 hours, replace the original formalin with fresh formalin, and fix for an additional 24 hours.

### Specimen Shipment Guidelines

Plastic pathology submission jars are superior to urine cups. If using urine cups, seal them with Parafilm™ to prevent leakage, and then double wrap the specimen cup in a sealable plastic bag. Wrap specimens in a small amount of gauze that has been soaked in formalin; **avoid sending specimens in liquid formalin.**

- Ship specimens in a sturdy cardboard box (not in paperboard boxes or envelopes) to protect the samples. Place padding around the tissue containers to prevent excessive agitation and to absorb any formalin that may leak..
- Submissions of multiple biopsies from an individual animal from **different anatomic sites should be packaged and labeled separately**, unless the gross appearance and contributor's description of the tissues allow for sample differentiation. Sutures can be used to identify or distinguish some specimens.
- Tissue sections of multiple organs from animal necropsies should be shipped together, using one or multiple containers when needed. Again, wrap each specimen with a small amount of gauze that has been soaked in formalin; avoid sending specimens in liquid formalin.
- Small tissue sections of important lesions that might be overlooked should be packed separately and properly labeled; tissue cassettes or red top vacutainer tubes containing a **small amount** of formalin work well for this function.
- Commercially prepared formalin is inexpensive (\$15 / gal) and widely available. Five-gallon carboys (\$75) with a dispensing valve are ideal. If you need a source, contact VLE.