

Formalin and liquid shipping/packaging requirements for North American histology submissions

Shipping formalin is subject to commercial airline International Air Transport Association (IATA) regulations. Per IATA regulations, the formalin concentration must be clearly labeled on the jar, and concentrations > 10% buffered formalin cannot be shipped. These regulations also require indicating on the jar what type of liquid is being submitted if using anything other than 10% buffered formalin. Failure to follow these regulations can result in processing delays at IDEXX Reference Laboratories. Additionally, concentrations > 10% buffered formalin can compromise the biopsy specimen, rendering it nondiagnostic. And, processing delays can also occur if any labels are placed over important biohazard details on pre-labeled jars.

Formalin concentration preparation and jar labeling

- The formalin to specimen ratio should be 10:1, or ten parts 10% buffered formalin to one part tissue.
- The amount of formalin used should completely cover the specimen but should not exceed > 50% of the overall volume of the jar.
- IDEXX provides 60 mL and 120 mL formalin jars (free of charge) that are pre-filled with 10% buffered formalin and include the approved formalin labeling, so no additional labeling work is needed if submitting specimens in them. If adding a label or sticker to the jar, do not place where it will cover or obstruct the information on the biohazard label included.
- If using a biopsy-approved jar that is not pre-filled with formalin to submit a patient specimen, only add 10% buffered formalin, per the above instructions. The formalin concentration must also be indicated on the jar using a 10% buffered formalin sticker (if available) or by writing the formalin concentration on the jar.
- If submitting large specimens using the specimen bags included with the IDEXX-provided Large Biopsy Submission Kits, DO NOT submit the specimens in formalin. Follow the packaging instructions provided with the Large Biopsy Submission Kits. You are required to indicate "saline" on the outer submission bag using a label or marker if any excess saline is free-floating in the bag.
- Only large biopsy specimens submitted with the IDEXX-provided Large Biopsy Submission Kits should be submitted in saline. This exception to the submission process is due to saline's lack of fixation and prevention of autolysis.

What to include on biopsy submission jars/bags

- Patient's first and last names
- Collection date
- Specimen ID
- Submitting veterinarian's name
- Formalin concentration (10% buffered formalin)

Submitting a specimen too large to fit in an IDEXX-provided biopsy jar

- Wrap in saline-wetted gauze (not soaked; do not use paper towels); place in an IDEXX-provided Large Biopsy Submission Kit.
- Alternatively, triple bag the specimen in 1- to 5-gallon freezer bags or 10-gallon biohazard bags. Place absorbents and cold packs inside the middle layer. Store in the refrigerator (not freezer) until pickup. Please anticipate a longer turnaround time for large specimens.

Submitting biopsy specimens in appropriate formalin-approved biopsy jars

- Only use formalin-approved biopsy jars of adequate size.
- Use the correct amount and type of fixative (10% buffered formalin only).
- DO NOT submit needles or sharps of any kind with your specimens.
- It is recommended to place a tiny specimen in a microcassette before adding the specimen to the jar.
- DO NOT submit tiny specimens in glass tubes, as these tubes risk breaking in transit.

Do:



Don't:



Any submissions where > 10% buffered formalin is used or the type of liquid added is not clearly labeled poses risks with your submission being delayed. You can find additional information for how to prepare and submit pathology specimens at [idexx.com/submitpathology](https://www.idexx.com/submitpathology) and in the online Directory of Tests and Services. Pathology submission supplies may be ordered free of charge through IDEXX Online Orders. You can also reach out to your Field Support Representative with questions.