

# Updates to 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 what type of liquid is being submitted if using anything other than 10% buffered formalin.

The airlines tightened enforcement of these regulations in 2021, which can cause processing delays if a biopsy submission containing liquid of any kind is sent to IDEXX Reference Laboratories without indicating what the liquid is. IDEXX must reach out to customers to confirm the formalin concentration or what type of liquid was added to the specimen jar/bag before the specimen can be further processed.

## 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 prefilled with 10% buffered formalin and include the approved formalin labeling, so no additional labeling work is needed if submitting specimens in them.
- If using a biopsy jar that is not prefilled 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 specimens in saline, write this information 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.

## 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)
- If submitting specimens in a liquid other than formalin (e.g., saline), this information must be provided on the jar/bag.

## 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.