



Recommended Shipping Instructions

Federal Regulations pertaining to shipping of biological samples change on a regular basis. The following guidelines will assist you in meeting the requirements, and we will update this information as changes to the regulations occur. The submitter is responsible for compliance with the shipping regulations.

Ship ALL specimens to: **VITALS/ Lab Central; 245 Duckpond Drive; Blacksburg, VA 24061**

Overnight using UPS or FEDEX shipping is recommended. US Postal Service is not recommended due to delivery delays caused by campus routing of USPS mail. Do not ship samples to arrive on Saturday or Sunday, the laboratory is closed. Contact the VITALS concerning holiday shipping/receiving schedules.

Pre-paid, flat-rate FEDEX mailer labels are available. Fees are charged only after use. Contact VITALS for more information.

Courier Services are available to the New River Valley area for general lab samples and small carcass necropsy, contact VITALS to see if you qualify!

General Submissions

Shipping requirements are based on the contents being shipped:

For patient specimens for which there is minimal likelihood that pathogens are present, e.g. nutrition samples, endocrinology samples, serology, etc., the material must be shipped in a box that is marked with the words "Exempt Animal Specimens" and packaged as follows:

The packaging must consist of 3 components:

1. A leak-proof primary receptacle(s), e.g. vacutainer, serum tube, etc. (Note: A whirlpack bag is not leak-proof.)
2. A leak-proof secondary package. For liquid samples, the secondary packaging must contain absorbent material in sufficient quantity to absorb the contents should the primary receptacles be damaged in transport. When multiple fragile (e.g. glass tubes) primary receptacles are included in one secondary package, the primary receptacles should be wrapped or separated to prevent contact between them.
3. An outer package (box) of adequate strength for its capacity and intended use.



If samples are being shipped for the purposes of diagnosis of an infectious disease or the samples may contain infectious agents, e.g. bacteriology or virology samples, tissues from horses suspected of having West Nile virus, etc., they must be shipped in boxes marked with the words, “Biological Substance, Category B” and a UN3373 label.

Inner packaging must:

- Have a watertight (leak-proof) primary container, e.g., vacutainer tube, urine cup, serum tube, etc.
- Have a watertight secondary package containing the primary sample container and appropriate absorbent materials. The absorbent material must be sufficient in quantity to absorb the liquid in the primary container. If the secondary container (e.g., an approved biohazard bag) contains multiple primary containers, such as several blood tubes, the primary containers must be wrapped or separated to prevent contact between them.
- Be certified to withstand—without leakage—an internal pressure of 95kPa at a temperature range of -40°F to 130°F. Special biohazard bags, vacutainer tubes, urine cups, etc. are available that meet these requirements. All packaging available for purchase through DCPAH meets or exceeds these standards.

Outer Packaging must:

- Contain an itemized list of the package contents in the box—a fully completed submittal form will meet this requirement.
- Have at least one side with minimum dimensions of 4 inches x 4 inches.
- Be certified to pass a drop test at 4 feet.

Shipping samples in 10% Formalin:

Formalin-fixed tissues are not generally considered diagnostic specimens because they have been biologically inactivated. Thus, the possibility for these materials to pose an infectious disease risk is extremely low. Even so, these materials should be packaged in a manner that will prevent any possibility for release of liquids while in transit. This can be achieved through the following actions:

- Use non-breakable primary containers with a leak-proof seal and reinforce the seal with Parafilm or sealing tape. (Note: never send formalin in food containers, zip lock bags or whirl paks, prescription pill bottles, etc.- these containers consistently leak.) **HAZARD FEES may be assessed for leaking samples.**
- Package primary containers and enough absorbent material to absorb all liquids (in the event of a leak) in a secondary container (e.g., larger plastic container or sturdy Zip Lock™ bags, etc.).
- Use a sturdy outside container to mail/ship the samples.
- **DO NOT SHIP IN SAME BOX WITH CYTOLOGY SAMPLES**- this may ruin your cytology sample.



Packaging for slides for hematology or cytology:

1. Place slides in slide mailers (special containers, specifically designed to mail slides) to prevent breakage during transit. Please ship separately from formalin-fixed tissue samples, formalin fumes will adversely affect stain intensity and can result in non-diagnostic specimens.
2. Tape slide mailer closed. Wrap slide mailer in bubble wrap. Place in a zip top bag with submission form.
3. Mail in a padded mailer or sturdy box with bubble wrap or packing peanuts.
4. **DO NOT SHIP IN SAME BOX AS FORMALIN FIXED SAMPLES**- this may ruin your cytology sample.

Necropsy Submissions- small, intact carcasses only:

Contact the laboratory **prior** to shipping carcasses so we can expect their arrival.

Necropsy Phone Number: 540-231-4619

Chill carcass to refrigeration temperatures prior to packaging - *Avoid freezing temperatures, if possible.*
The carcass should be wrapped within three plastic bags:

1. The inner plastic bag should be leak---proof (i.e. large zipper lock bag) and sealed with plastic packing tape.
2. Middle plastic bag --- the bagged carcass should be placed within a second---leak proof plastic bag. Add absorbent material (e.g. disposable diapers) and freezer packs to this bag. Avoid using ice cubes which increases the likelihood of package leakage.
3. Outermost bag --- Place the above in a third plastic bag and securely tape this bag closed --- PLEASE NOTE: Packages that are identified to be leaking can be confiscated and destroyed, and the sender may be fined.

Include relevant paperwork (i.e. submission form) --- enclose paperwork within a separately, sealed plastic bag.

Place all of the above in a crush-proof shipping cooler or sturdy carton.

Label outside package with UN3373 label, Biological Substance Category B (see below) --- this label should be taped onto the outside of the package.

If you need to define contents, list as 'Animal Diagnostic Specimens' to comply with above category --- avoid describing the contents as 'dead animal' or 'carcass.'

Ship via UPS or FEDEX using overnight shipping. **DO NOT SHIP REMAINS ON FRIDAY or SATURDAY**, staff are not available to receive packages on weekends. Call necropsy laboratory during holidays for any additional shipping instructions or cautions.

Note: *It is strictly prohibited to ship live or sick animals via commercial couriers or the US postal service.*

VIRGINIA TECH
ANIMAL LABORATORY SERVICES



245 Duck Pond Drive
Blacksburg, VA 24061
540-231-4320
540-231-2657 fax
email: vitalslcr@vt.edu
<https://vitals.vetmed.vt.edu/>

UN3373

The hazard label consists of a large black diamond shape with a thick border. Inside the diamond, the text "UN3373" is written in a bold, black, sans-serif font.

**BIOLOGICAL SUBSTANCE
CATEGORY B**