

Shipping of samples- All specimens fall within the definition of a patient specimen and are subject to special shipping requirements.

All responsibility for shipping compliance and charges rest with the individual or clinic submitting test samples. Complete the appropriate laboratory submission form, print form and place in a clean plastic sealable bag separate from the sample. The form may go into the second of a double bagging system. Please note the appropriate shipping address. Samples must be labeled with the name of the animal, owner and veterinarian to ensure proper identification.

SHIPPING REQUIREMENTS

The shipping requirements are based on the contents being shipped:

Exempt: [49CFR § 173.134 Class 6, Division 6.2\(b\)](#) provides multiple specific examples of materials and samples that are exemptions to the shipping regulations of Categories A and B. An exempt material is one *"that does not contain an infectious substance or that is unlikely to cause disease in humans or animals."* This includes: Samples collected for *"routine testing not related to the diagnosis of an infectious disease, such as..."* blood chemistries *"... or ... for diagnosis of non-infectious diseases, such as cancer biopsies, and for which there is a low probability the sample is infectious."*

For patient specimens for which there is **minimal likelihood that pathogens are present**, the material must be shipped in a box that is marked with the words **"Exempt Animal Specimen"** and packaged as follows:

The packaging must consist of 3 components:

***A leak-proof primary receptacle(s)**, e.g. vacutainer, serum tube, etc. (Note: A whirlpack bag is not leakproof.)

***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) primary receptacles are included in one secondary package, the primary receptacles should be wrapped or separated to prevent contact between them. Items must have a watertight (leak-proof) primary container, e.g., vacutainer tube, urine cup, serum tube, approved formalin container, 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.

***An outside package** (box) of adequate strength for its capacity and intended use.

Category B [[49CFR § 173.134 Class 6, Division 6.2\(a\)\(1\)\(ii\)](#)]: *"An infectious substance that is not in a form generally capable of causing permanent disability or life-threatening or fatal disease in otherwise healthy humans or animals when exposure to it occurs. This includes Category B infectious substances transported for diagnostic or investigational purposes. Category B includes substances that may be or are known to be infectious.* Most potentially infectious diagnostic specimens submitted for veterinary diagnostics would fall into this category, such as fecal samples, other tissues, fluids and excreta, and post-mortem tissue samples for bacteriological, parasitological or viral work-up. If samples are 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.

1. These samples should be packaged in DOT rated, leak-proof, triple layer packaging. Absorbent material capable of absorbing the entire liquid contents must be included in the secondary container. If sent by air, specimens must be put in a primary or secondary container capable of withstanding aircraft cargo hold pressure changes. These containers are rated to an internal pressure of 95 kPa, and are available in a variety of sizes of rigid containers and also as rated, leak-proof pouches.
2. **The package must be labeled "Biological Substance, Category B" and also bear a UN 3373 diamond label.** These labels are available through a variety of sources including our shipping supplies service (607-253-3935); ask for UN3373, Biological Specimen, Category B labels. A printable version is included on page 6. There is a maximum size

and weight limit for these packages which includes 1Liter or 4 kg (solids) maximum per primary container, and 4 Liters or 4 kg total maximum for the package. The sender and recipient's name, address and phone number must be legibly printed on the package. This information should provide access to knowledgeable person who can provide detail regarding the contents of the package, if needed. The proper answer when asked by couriers "What is in the box?": **animal diagnostic specimens, Biological Substance Category B, UN3373.**

Cytology Slides

Clinical Samples that Are dried and noninfectious: Dried samples such as dried blood, tissue, aspirates, saliva, hair. While noninfectious samples of dried blood are not dangerous goods and are not required to meet dangerous-goods regulations, they do require special packaging. Dried-blood samples on absorbent pads or cards for diagnostic testing must be enclosed in watertight plastic bags and shipped in a sturdy outer container or commercial envelope. Samples on glass or plastic slides must be adequately cushioned and may be shipped inside a sturdy outer container or flexible envelope packaging.

Cytology specimens that are potentially infectious should be handled as a Biological Substance, Category B.

Surgical Pathology Specimens:

How do I ship samples in 10 percent formalin?

Formalin-fixed tissues are generally considered **Exempt Animal Specimens** not category B specimens because they have been biologically inactivated and the possibility for these materials to pose an infectious disease risk is extremely low. Even so, these materials must be packaged in a manner that will prevent any possibility for release of liquids while in transit.

*Use non-breakable primary containers with a leak-proof seal and reinforce the seal with Parafilm or sealing tape.

* Package primary containers and enough absorbent material to absorb all liquids (in the event of a leak) in a secondary container (e.g sturdy Zip Lock™ bags, double bag).

*Use a sturdy outside container to contain the samples.

Local Veterinarians have the option of delivering samples and submission forms directly to NC State College of Veterinary Medicine.

Please follow the guidelines for packing of samples (above) with the exception of the outer shipping container. These may be dropped off at the Emergency Clinic or the Wellness Center. We check for drop off samples Monday – Friday several times a day.