

<b>Title: Transportation of Animals</b>	Policy No.
	<b>IACUC-012</b>
	Effective Date:
	<b>8-11-2014</b>

## 1. Reference(s):

*Guide for the Care and Use of Laboratory Animals* 8<sup>th</sup> Edition

*Guide for the Care and Use of Agricultural Animals in Research and Teaching*

## 2. Policy:

**2.1.** Animal transportation may be intrainstitutional, interinstitutional, or between a commercial or non-commercial source and a research facility. Careful planning for all types of transportation should occur to ensure animal safety and well-being, as well as minimize any occupational health risks and public exposure to allergens and/or zoonotic agents.

**2.1.1.** Transportation between animal facilities requires the approval of the facility managers and PI(s).

**2.1.2.** Movement of animals within or between sites or institutions should be planned and coordinated by responsible and well-trained persons at both the sending and receiving site to minimize animal transit time or delays in receipt.

**2.1.3.** To ensure animal comfort and safety, all plans for animal shipments must include instructions for emergency responses in accordance with the mode of transportation used.

**2.1.4.** Transportation of animals in private vehicles is discouraged because of potential animal biosecurity, safety, health, and liability risks for the animals, personnel, and institution.

**2.2.** The process of transportation should provide an appropriate level of animal biosecurity while minimizing zoonotic risks, protecting against environmental extremes, avoiding overcrowding, providing for animal physical, physiologic, or behavioral needs and comfort, and protecting the animals and personnel from physical trauma.

**2.2.1.** Transportation of animals is to be done in a timely manner. Efforts to minimize excessive stress should be implemented from the time animals are removed from their home in the shipping location to the time they are delivered to their new site in the receiving location. The most direct route should be taken when transporting animals in order to minimize the time spent in transit and in areas where the public may be present (i.e. common hallways or lobbies).

**2.2.2.** All animals must be transported in species-appropriate containers or vehicles. Such containers or vehicles must be sanitizable or disposable, provide a secure environment that is escape-proof, have a solid floor, and be free of floor openings or sharp edges that could possibly injure the animal. An animal must be transported in an environment in which it can maintain its body temperature, becoming neither hyperthermic nor hypothermic.

**2.2.3.** Ideally, all animals should be transported in environmentally controlled vehicles. When animals cannot be transported in environmentally controlled vehicles, it is recommended that frequent visual inspections of the animals are done when practical, as signs of thermogenesis or heat loss may indicate that the animal's thermal environment should be adjusted.

**2.2.4.** Determining the appropriate density of animals in a transportation cage or vehicle must take into account weather conditions, the physical characteristics of the species (such as horns, pilage condition), and the preferred posture, if any, adopted during transportation.

**2.2.5.** Animals can be transported in individual or group enclosures (caging or vehicles). If social groups are transported, it is recommended that the groups be established before transportation where appropriate so that dominance orders will not need to be established during or after transportation.

**2.2.6.** Animals (primarily rodents) that are transported from housing areas to laboratories in micro-isolator cages must be covered and lids secured during the transportation of animals between locations and shielded from public view. Filter tops must be on rodent cages and cages must not be stacked on top of each other if stacking cages compromises ventilation.

**2.2.7.** For aquatic species and amphibians, special considerations are required for the transportation in an aqueous or sufficiently moist environment, and special attention should be given to avoiding temperature extremes for poikilotherms.

**2.2.8.** For wildlife, transportation may occur between the capture site and field holding facilities. Animals may be transported on the ground, by water or by air depending on the circumstances and distance needing to be travelled. The most suitable containment method will depend on the species being held and the duration of containment. In general, mammals and reptiles are best temporarily contained in cloth bags, frogs in plastic bags or containers with some water, and birds in either cloth bags or holding cages. Soft containment methods (i.e. bags) are generally used for short to medium duration trips and hard containment (i.e. cage traps or transportation boxes) methods are used for longer duration trips where greater security of animals required.

**2.2.9.** Please report cage spills and escapees immediately to the University Attending Veterinarian at 405-744-8967.

**2.3.** The transport of livestock involves a complex of operations including handling, loading and unloading, unfamiliar environments, and - in some cases- isolation, social disruption, confinement, loss of balance, fluctuations in environmental temperature and humidity, exposure to pollutants (e.g. truck exhaust, etc.), feed and water deprivation, and other factors. The safety and comfort of the animal should be the primary concerns in the transportation of any animal.

**2.3.1.** Nonambulatory, weak, and unhealthy animals must not be loaded or transported unless necessary for medical attention.

**2.3.2.** If animals become injured or non-ambulatory during the course of transport, appropriate steps should be taken immediately to segregate such animals and care for their special needs. Animals must not be dragged, hoisted, or dropped from transport vehicles. If the animal cannot be removed, then the animal should be euthanized prior to removal.

**2.3.3.** When animals are transported, they should be provided with proper ventilation, floor space that minimizes slipping and injury. Vehicles should be of adequate size and strength for the animals carried. Livestock should not be transported on trucks that do not have sufficient clearance to accommodate their height. The type of transport vehicle is important with regard to differences between and within species of livestock. Truck beds or trailers for livestock transport should be clean, dry, and equipped with a well-bedded, non-slippery floor. The inside walls and lining of vehicles should have no sharp edges or protrusions that would be likely to cause injury.

**2.3.4.** When possible, animals should be shipped in groups of uniform weight, sex, and species. The animals should be transported at appropriate densities to reduce injuries. Appropriate stocking densities (area allowance) for transportation accommodations can be found in Table 5-2 (page 53) in the *Guide for the Care and Use of Agricultural Animals in Research and Teaching*.

**2.3.5.** Animals may be transported either loose in vehicles or may be haltered and tied in the case of cattle, sheep, and horses. Only animals that have been previously trained to a halter and that are of a quiet disposition can be tied when transported. Animals should be tied with a quick release knot to the sides of the vehicle at a height that is approximately even with the top of the shoulder (withers). The tie should be short enough so that the animals cannot step over the lead.

**2.3.6.** Animals should be protected from heat or cold stress. Means of protection from heat stress include shading, wetting, and bedding with wet sand or shavings when livestock are at high density (e.g. on a truck) and air speed is low (e.g. the truck is parked). Means of protection from cold stress include wind protection (when the effective temperature in the animal's microenvironment is expected to drop below the lower critical level), adequate ventilation, and provide bedding material with high insulative properties (such as chopped straw) if the time the animals spend in the transport vehicle will exceed a few minutes.

**2.3.7.** The condition of the animals should be checked periodically during transit. Drivers should start and stop the vehicle smoothly and slow down for curves and corners.

**2.3.8.** As poultry are typically caught manually and loaded into transport crates that are stacked on an open bed truck, special attention to developing skilled staff for the catching, loading, and transport of poultry is important. The following factors should be minimized: Poor catching and loading techniques; increased time in transit; feed and water deprivation; transport with low air movement and high humidity that lead to environmental conditions resulting in bird body temperatures outside the thermal neutral zone ranges for poultry (8-18°C and 24-28°C for well-feathered chickens and poorly feathered chickens, respectively).

**2.3.9.** Animals should be loaded and unloaded easily and promptly.

### **3. Approval/Authentication:**

IACUC Chair Signature:	Date:	Attending Veterinarian Signature:	Date:
------------------------	-------	-----------------------------------	-------