

Title: Transportation of Animals	Policy No.
	IACUC-012
	Effective Date: 8-11-2014 Updated: 6/11/2024

1. Reference(s):

Guide for the Care and Use of Laboratory Animals (Guide), 8th Edition

Guide for the Care and Use of Agricultural Animals in Research and Teaching (Ag Guide), 4th Edition

Animal Welfare Act (AWA)

Animal Welfare Regulations (AWAR)

Policy:

This policy will address the transportation requirements for all research animals under a current, approved Animal Care and Use Protocol (ACUP) at Oklahoma State University (OSU). Transportation of Institutional Animal Care and Use (IACUC)-covered animals must follow all requirements set forth in this policy. As the standards for biomedical research/teaching animals, wildlife animals, and agricultural animals differ, the transportation requirements for each also differ.

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.

Vehicle accidents when transporting animals, cage spills, and all animal escapees must be reported immediately to the University Attending Veterinarian at 405-744-8967.

This policy does not address any biosafety, chemical, or radiological aspects that may be inherent in the ACUP. If the animals are involved in an approved protocol that includes these or any other components that may warrant restrictions on transportation, those elements must also be factored into the transportation plan or, if applicable, transportation may be prohibited.

1.1. Planned/Approved Transportation

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).

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.

1.1.1. Transportation between animal facilities requires the approval of the facility managers and principal investigators (PI). All facilities involved must be approved spaces in a current, up-to-date ACUP in place for the animals being relocated.

- 1.1.2.** Inexplicably ill, non-ambulatory, weak, and unhealthy animals must not be loaded or transported unless necessary for medical attention.
- 2.1.2.A.** If animals become injured or non-ambulatory during the course of transport, appropriate steps should be taken immediately to segregate these animals and care for their needs. Livestock must not be dragged, hoisted, or dropped from transport vehicles. If the animal cannot be removed, then the animal should be euthanized as per ACUP prior to removal.
- 1.1.3.** 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.
- 1.1.4.** All persons relocating animals in a vehicle must have valid driver's license.
- 1.1.5.** 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. These instructions must include emergency contact phone numbers for the Institutional Animal Care and Use Committee (IACUC) Manager, OSU's Attending Veterinarian, and PI for the ACUP.
- 1.1.6. Containment of Animals**
- 2.1.6.A.** Determination of the appropriate density of animals housed together during transportation must account for weather conditions (e.g., extreme heat and cold), the physical characteristics of the species (such as horns, pelage condition), and the preferred posture of the animal, if any, adopted during transportation. Appropriate stocking densities (area allowance) for livestock can be found in Table 5-2 (page 64) in the *Ag Guide*.
- 2.1.6.B.** All animals must be transported in species-appropriate containers. Containers for biomedical research/teaching animals 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 animals. Trailers, stock racks, and cages for livestock must be able to be cleaned, provide a secure environment that is escape proof, have a nonslip surface/floor, have adequate ventilation, have sufficient clearance to accommodate the height of the animals, and be free of sharp edges that could possibly injure the animals.
- 2.1.6.C.** Animals must be transported in an environment in which it can maintain its body temperature, becoming neither hyperthermic nor hypothermic. For biomedical research/teaching animals, transportation must occur in environmentally controlled vehicles with the exception of short distance transportation (see 2.1.8 below). Means of protection for livestock from heat stress include shading, wetting, and providing wet sand or shavings for bedding. Means of protection for livestock from cold stress include wind protection, adequate ventilation, and the use of bedding material with high insulative properties (such as chopped straw). More information about the specific requirements for each species of livestock can be found in Chapter 5 (Animal Handling and Transport) in the *Ag Guide*.
- 2.1.6.D** Animals can be transported in individual or group enclosures. In biomedical research/teaching animals, if social groups are transported, groupings must be established before transportation when practical so that dominance orders will not need to be established during or after transportation. Livestock should be shipped in groups of uniform weight, sex, and species if possible.
- 2.1.6.E.** Biomedical research/ Teaching animals (primarily rodents) that are transported from housing areas to laboratories in micro-isolator/individually ventilated cages must be covered and lids secured during the transportation of animals between locations and shielded from public view. Water bottles should be flipped up to prevent cage flooding.

Filter tops must be on rodent cages and cages should not be stacked on top of each other for transportation outside of accepted campus radius as this compromises ventilation.

2.1.6.F. 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.

2.1.6.G. 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.

2.1.6.G.1. Livestock may be transported either loose in trailers, stock racks, or cages 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.

2.1.6.G.2. 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.

2.1.6.G.3. As mature 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).

2.1.6.G.4. Animals should be loaded and unloaded easily and promptly.

2.1.6.H. 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 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 is required.

1.1.7. Motor Vehicle Requirements:

- 2.1.7.A.** Animals, other than livestock animals which require a trailer, stock racks, or cages, must be transported in environmentally controlled vehicles and in the environmentally controlled area of the vehicle. In extreme heat/cold conditions, the vehicle interior must be allowed to cool or heat to appropriate temperatures before animals are loaded.
- 2.1.7.B.** Animals maintained in Animal Resources (AR) facilities should be transported in AR vehicles by AR personnel. This will require planning and scheduling with AR by the PI.
- 2.1.7.C.** Livestock and wildlife may be transported in OSU owned trailers, stock racks, or cages, etc. designed for livestock or wildlife transportation and towed by OSU owned or OSU Motor Pool vehicles without IACUC inspection/approval of the vehicle.
- 2.1.7.D.** The use of personal/private vehicles, including trailers, stock racks, or cages, for animal transportation is discouraged due to potential animal biosecurity, safety, health, and liability risks for the animals, personnel, and the institution. If use of these personal means are requested, the Principal Investigator must request an exemption via a written request to the IACUC. The IACUC will consider the written request and can approve or deny the exemption. The vehicle or other transport means must be inspected by and have documented approval from the IACUC Manager prior to being used for transportation. Such approvals will only be granted for a 6-month period between the date of approval and date of transportation. If this means of transport is going to continue to be used, the inspection must be performed every 6-months. Transportation by this means must only occur within the borders of the state of origin, and not for interstate animal transportation under any circumstance.
- 2.1.7.E.** For livestock transportation, vehicles should be of adequate size and strength for the trailer being pulled and animals being carried.

1.1.8. Short Distance Transportation

Biomedical research/teaching animals being relocated short distances from an on-campus building to another adjacent on-campus building may be transported by walking, so long as the following conditions are met:

- 2.1.8.A.** Bicycle, scooter, and motorcycle transportation are prohibited.
- 2.1.8.B.** Animals are protected from public view.
- 2.1.5.C.** Stress and health of animals are not affected by extreme weather conditions.
- 2.1.5.D.** Animals should be double contained in containers that meet the requirements of Section 2.1.6. of this policy.

2.2. Emergency/Unplanned Transportation

2.2.1. Emergency Medical

Appropriate loading and transportation will be determined by the veterinarian caring for the animal(s) or the University Attending Veterinarian.

2.2.2. Emergency/Disaster

Follow area specific disaster plans for animals at the specified facility.