Laboratory Animal Resources Guidelines

**Guidelines for the Transportation of Research Animals**

1. **Purpose**-

Transportation of research or teaching animals within or between campus buildings or between institutions is an essential component of the research enterprise. The integrity and well-being of the animals being transported are necessary for the quality of the research and welfare of the animals. The IACUC oversees and assures the well-being of research and teaching animals during transportation between study areas on campus or between institutions. The transport of regulated species must comply with the Animal Welfare Regulations enforced by the USDA. General standards for safe transport of research animals are available in *The Guide for the Care and Use of Laboratory Animals,* 8th edition. The primary principles for safeguarding animals during transport include maintenance of health, avoidance of exposure to potential pathogens, prevention of escape, prevention of injury, and reduction of stressors such as temperature extremes, aversive odors, excessive noises, and confrontations with other animals. Appropriate animal transport must also minimize risks to animal care and research personnel. In addition, when animals must be transported through public areas, the safety of the general public must be considered. Because field researchers are often more familiar with the species they are studying and often have “best practices” for the transportation of wild animals already in place, this policy will specifically exclude transportation of field or wild animals.

IUB personnel must comply with the following guidelines unless specific exemptions are granted by the IACUC or deemed clinically necessary by IUB veterinarians. Any exceptions must be detailed in an approved animal use protocol. **Animals transported between buildings on campus and between campuses should be transported using LAR services and transportation vehicles. If transportation needs to occur in a personal vehicle, this will be considered an exception and must be documented and approved through the IACUC protocol.** **Contact LAR at** [lar@indiana.edu](mailto:lar@indiana.edu) **for information on the transportation of animals within or between campuses, or importation or exportation of animals within the country or internationally.**

1. **Procedures for Transportation**
2. **General Guidelines**
3. PI’s should work with the veterinarian to contact appropriate authorities to ensure compliance with any relevant satutes and other animal transportation requirements that must be met for animals to cross international boundaries.
4. The process of transportation should provide an appropriate level of animal biosecurity and provide for the health and welfare of animals while minimizing zoonotic risks, protecting against environmental extremes, avoiding overcrowding, providing for the animal’s physical and physiologic or behavioral needs and comfort, and protecting the animals and personnel from physical trauma. (Guide 2011).
5. Transportation of animals must be done in a direct and timely manner, avoiding public areas as much as possible.
6. Animals (other than rodents) should not be transported with any other animal, substance or device that may potentially cause injury to the animal being transported.
7. Animals and animal caging must be secured in a secondary container with adequate ventilation during transport to protect the animals, minimize risk of escape, and to protect personnel along the transport route from potential exposure to hazards. When transporting animals a shorter distance within the same building, cages should be transported on a cart with the cages covered so as not to be visible by the general public.
8. Transportation methods must minimize stress to the animals. Thus, these methods must maintain appropriate ventilation, avoid extremes in temperature and humidity, minimize noise and odors, prevent exposure to pathogens, and minimize interactions with people or other animals.
9. Temperature extremes must be avoided when animals are transported. When temperatures fall below 40oF (4.4oC) or above 85oF (29.4oC), special precautions (in addition to environmentally controlled vehicles) may need to be taken. Consult IUB veterinarians for additional information regarding these precautions.
10. The cage, carrier, container, or vehicle must prevent escape of the animals through locking mechanisms or latches that cannot be dislodged by movement. Animal enclosures should be appropriately secured to the transport vehicle or cart, and should not be needlessly jostled, tilted, or unsafely stacked. Rubber bands are recommended around rodent cages to keep the lid attached to the bottom housing chamber.
11. Transport animals in covered or opaque cages, carriers or containers. Enclosures must be constructed of materials that can be appropriately cleaned and sanitized to prevent the spread of pathogenic organisms, animal allergens, and animal wastes. Animal cargo areas should be clean and decontaminated as needed to protect the health of humans and other animals.
12. All animals in transit between institutions or jurisdictions should be accompanied by appropriate documentation to minimize delays in shipping and receipt (health certificates, addresses and contact information, emergency procedures, permits, etc.)
13. The health status of the animals must be evaluated along with their housing and husbandry requirements to ensure appropriate quarantine and testing procedures by the receiving institution.
14. **Information For Transporting Rodents**
15. Transport containers must be escape proof, provide adequate ventilation, provide food and a source of water if rodents are to be held within the transport container for longer than 4 hours, use the same density requirements for normal housing, and be cleaned and sanitized after use.
16. When transporting rodents out-of-doors, a secondary enclosure is usually required (e.g., a reusable container, disposable box, etc.). A secondary enclosure or drape over the cage should be considered when rodents are transported between connected areas or through public corridors. If animals must be transported during an active portion of the protocol (surgery, drug administration, etc.) they should be cleared by an IUB veterinarian for transportation.
17. Individuals transporting the animals should be aware of the risks to themselves and others. Those risks include potential exposure to allergens as well as potentially negative reactions by those opposed to animal research. Avoid public areas when possible. When it is necessary to transport rodents through public areas, the animals should be obscured from view by drapes, shrouds, opaque secondary enclosures, a specialized transport cart or carrier, etc.
18. Appropriate personal protective equipment (PPE) must be used to prevent cross-contamination among animals and between humans and animals (e.g. pathogenic organisms and other biological materials, chemicals, fomites, etc.). During transportation, gloves should only be worn on one hand so that the other hand can open doors or another person can accompany the transportation to open doors.
19. Release of animal dander, airborne animal allergens, and animal bedding into the environment must be minimized. Personnel should ensure that filter tops or other effective covers are used on rodent cages. Cages/carriers should be covered during transport. Empty, soiled cages or carriers should also be covered during transport.
20. Animals must be either housed or euthanized within 4 hours of transportation. If housing in another location, transfer the animal(s) to clean cages making sure to **provide food in the wirebar lid and put a full water bottle in the wirebar lid with the sipper pointed into the cage so it is accessible by the animals.**
21. Reusable primary or secondary enclosures must be sanitized between use to prevent the spread of pathogenic microorganisms, animal wastes, and allergens. When any bodily fluids (e.g., blood, urine, salvia, mucus), feces, or dirty bedding comes into contact with a surface area outside a primary enclosure, it should be removed and the area appropriately disinfected as soon as possible.
22. Cargo areas of vehicles used to transport animals should be cleaned and disinfected after transportation to prevent contamination of future animal deliveries.
23. **Guidelines for Use of Personal Vehicles to Transport Animals**
24. Transportation of animals by personal vehicle is highly discouraged and considered an exception allowable only under extenuating circumstances with appropriate justification. Whenever possible a University-owned vehicle should be used to transport animals. When transport by a university vehicle is not available by prior arrangement, after consulting with the AV, private vehicles may be used in an urgent situation in accordance with the policy.
25. Use of personal vehicles increase concerns about potential biosecurity of animals, as they may create safety, health, and liability risks for the animals, personnel, and Institution. IF a personal vehicle is necessary for transportation, it should be outlined, reviewed and approved by the IACUC.
26. If it requested to transport animals in a personal vehicle, the following conditions must be met:
    1. The use of a personal vehicle for transport of animals must be described in the protocol and approved by the IACUC.
    2. The animal enclosures must be appropriately secured in the vehicle to prevent spillage.
    3. Traditional laboratory animals (rodents, rabbits, etc.) should be protected from direct sunlight.
    4. Closed vehicles used for animal transport must be environmentally controlled (e.g., they must have functional heating, ventilation, and air conditioning).
    5. Plastic or a similarly impermeable material that can be sanitized should be placed under the transport cages or carriers.
27. **References**
28. NRC Guide for the Care and Use of Laboratory Animals. 2011.
29. NRC Guidelines for the Humane Transportation of Research Animals. *Laboratory Animals* (2005) 39, 1-39.
30. University of Michigan. University Committee on the Use and Care of Animals. “Procedures for transportation of animals.” 2016.