



Cornell University
Cornell Center for Animal Resources and Education

CARE541.02 Transportation of Biomedical Animals

The intent of this SOP is to describe the recommended procedure for transporting various species of biomedical research animals over long distances (i.e., over 1 hour of traveling time) and applies to domestic shipments only. The procedure is described for the Cornell personnel who are responsible for shipping animals. This procedure is approved by the Cornell Institutional Animal Care and Use Committee (IACUC) and the Cornell Center for Animal Resources and Education (CARE). Any exemption from the whole of or a part of this procedure must be approved by the IACUC prior to its application.

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1. Introduction

The purpose of this SOP is describe recommended procedures for transporting biomedical animals domestically. Follow this SOP when transporting animals over distances that require greater than 1 hour of travel time within the contiguous United States. For example:

- When transporting animals to or from non-commercial vendors.
- When transporting animals to or from collaborating institutions.
- When transporting wild caught animals to a designated research facility for further studies.

2. Materials-NA

3. Procedures

a. Responsibilities of the Animal Shipping Personnel

- i. Take all measures to minimize stress to the animals during transport. For example:
 - Minimize transit time
 - Protect against environmental extremes
 - Provide adequate ventilation during shipment

- Avoid overcrowding the animals
 - Protect animals from physical trauma
 - Minimize the duration of time that animals are left sitting in transport cages before or after shipment.
 - vii. Ensure adequate food and water is available correlating with the anticipated length of the trip as appropriate for the species.
- ii. Refer to the Animal Welfare Regulations (9 CFR 3.13–3.19) for more specific details on:
 - Appropriate transport caging (e.g., adequate space, ventilation, strength, method of sanitation and design for safe handling)
 - Appropriate environmental conditions for transporting animals
 - Methods to reduce the risk of zoonoses
 - Methods to transport animals in a lawful and safe manner
 - iii. Before transporting the animals, coordinate with the carrier(s) and the recipient personnel to ensure that appropriate housing, equipment, feed and personnel are available at all levels of transport and at the transport destination.
 - iv. Provide animal carriers (Driver/Handler) with the name, address, and telephone number of the both recipient and the shipper and an emergency contact name and phone number accessible 24/7.

Note: Commercial animal carriers will not accept animals for transport unless the recipient information is provided.

- v. Attach all necessary documentation to the outside of the transport cage. For example; health certificates and health records, USDA forms, and special instructions.
- vi. Mark the top and one or more sides of the transport container with the words “LIVE ANIMALS”.
- vii. Use or ensure that the vehicle designated for use is an approved transport vehicle OR use an approved commercial carrier.
- viii. Sanitize or ensure the transport vehicle is sanitized before and after every shipment.
- ix. Request that the animals are observed for signs of distress a minimum of every 4 hours.

Exception: animals housed in barrier conditions (e.g., transgenic rodents).

- x. Provide or ensure that the chosen carrier has a means to provide prompt veterinary care to animals in distress.

b. Acceptable Shipping Containers

- c. Use kennels furnished by airlines or purchased for air flight for dogs and cats whenever possible.
- d. Use transport containers from recognized rodent vendors for rodent transportation.
- e. Use shipping containers with the following qualities:
 - i. Made of nontoxic material
 - ii. Structurally sound
 - iii. Free of internal protrusions or other damage that could cause injury or unnecessary stress during transport
 - iv. Large enough to allow the animal to stand, sit erect, lie in a natural position and turn around while standing
 - v. Have solid leak-proof, **and non-skid** floors
 - vi. Bedded with absorbent, nontoxic bedding or a collection tray if on raised floor cages
 - vii. Provide for safe and easy access to and evacuation of the animal(s)
 - viii. Handles, if needed, attached to the outside of the cage
 - ix. Contain all of the animal's body parts secure within the container

f. Requirements for Transporting Animals

- i. Transport animals in groups, only if they are compatible in temperature and of comparable size.
- ii. Transport animals individually if they are:
 - aggressive or fractious
 - weigh more than 20 lbs (9 kg)
 - females in heat
- iii. Avoid transporting females in heat in the same transport truck as intact male animals.
- iv. Do not ship puppies and kittens unless:
 - They are at least 8 weeks old
 - They have been weaned for at least 5 days
 - No more than 4 animals are transported in the same cage.
 - Animals less than 4 months of age are not transported in the same transport cage with adult animals other than their mothers.
- v. Transport pregnant animals only if they are accompanied by a certificate, signed by a CARE veterinarian, stating that there is no anticipated risk of birth during transit.
- vi. Prior to transport of post-operative animals:
 - Consult CARE to determine an appropriate recovery period.
 - Do not transport animals until the recommended recovery period is complete.
 - If the animal has post-operative complications, consult with CARE to assess the need to extend the recovery period.

g. Environmental Conditions During Transport

- i. Use climate-controlled transport vehicles
Refer to *The Guide* for species-specific details on appropriate temperatures for transport.
- ii. Provide protection from the elements
- iii. Provide adequate ventilation through vents, windows, air conditioning
- iv. Minimize drafts, odors, and moisture condensation
- v. Ensure adequate oxygen
- vi. Ensure that animals are shipped in clean air, free of particulate contaminants in the pressurized compartments in airlines

h. Food and Water

Note: Pack a long lasting nutritional material such as gel packs into all rodent transport boxes.

- i. For non-rodent species offer or ensure the carrier will halt transportation and offer water at a minimum interval of 12 hours beginning 12 hours after the shipper last offered water; **allow 30 minutes for water to be absorbed before travel is resumed.**
- ii. Provide or ensure the carrier will provide food at a minimum interval of 24 hours for adults and every 12 hours throughout the trip for a young animal (<16 weeks of age for dogs and cats).
- iii. Ensure that feeding and watering utensils are firmly secured inside the cage and accessible for refilling from outside the cage if necessary.
- iv. Have carrier offer food and water to the animals within 4 hours of their delivery to the carrier.
- v. Attach a feed and water record firmly to the shipping container with the following information included:
 - The date and time when feed and water was last offered
 - Specific instructions for daily feeding and watering
 - The animal identification number
 - The name, address and signature of the shipper
 - The date and time the certification was signed
 - Date and time when next food or water needs to be offered.

i. Other Requirements

- i. Refer to the following sources for guidance on airline transport of animals:
 - The International Airline Transport Association (refer to IATA manual) guidelines for the shipping of all animal species.
 - Specific airlines' regulations and policies on animal transportation.

- ii. Use the most direct flights to the recipient's airport destination in order to minimize transit time.
- iii. Avoid shipping animals during heavy traffic of holiday or weekend flights.
- iv. Take animals to the airlines 2 hours before departure time.
- v. Take to the airport, the animal health certificate (signed by a licensed CARE veterinarian within 10 days of shipping) for each animal being shipped (or per group when shipping rodents).
- vi. Ensure the health certificate states that the animal is free of any infectious disease or physical abnormality that would endanger the animal, other animals, or the public.
- vii. Accompany all U.S. interstate and international animal shipments with appropriate USDA forms (signed by a licensed CARE veterinarian within 10 days of shipping).
- viii. Inquire about special health requirements.
- ix. If cargo is accessible during the flight, request observation of animals at 4 hour intervals (**Exception:** do not open barrier containers such as those used for rodents).
- x. If cargo is not accessible during flight, request observation of animals right before loading and immediately after unloading.
- xi. Do not make animal shipments "cash on delivery" unless the shipper guarantees the return freight costs in the event that animals are refused by the recipient.

4. Safety-NA

5. Contingencies-NA

6. References

- a. Departmental Surface and Airline Transportation Forms.
- b. Shipping Forms Required by:
 - i. Land: USDA (APHIS Form 7006), U.S. Interstate
Air: USDA (APHIS Form 7006), U.S. Interstate The Guide Animal Welfare Act
IATA Manual
 - ii. DOT Guidelines

Written by/date :
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Feb. 11, 2003

Effective date :
April 15, 2004

Review date :
Oct. 2007

Referee:
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SOP :
CARE541.02