



**Division of Research
Comparative Medicine**

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SOP #	103	Title: Animal Transportation
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SCOPE: This SOP is applicable to all Comparative Medicine personnel involved in animal transportation procedures. Animal transportation procedures include steps to be taken before, during and after transportation. Transport personnel are to maintain an acceptable bio-security level for all research animals in transport from an animal housing area to any other work area.

SOP OWNER: Facility Manager (FM)

PURPOSE: To outline the procedures for transporting animals into and between vivaria as well as to and from a vivarium to a laboratory on the same campus.

LOCATION: All Vivaria and research laboratories

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1. Responsibilities

- a. Animal Care Technician (ACT):
 - i. Comparative Medicine personnel are to adhere to procedures as outlined in this SOP including recordkeeping requirements.
 - ii. Observation of non-compliance must be reported first to your supervisor, the Veterinarian or lastly a member of the IACUC.
- b. Management/Facility Manager (FM)
 - i. Ensure procedures are followed as outlined in this SOP.
 - ii. Ensure vivaria personnel are scheduled for appropriate training.
- c. Training Coordinator
 - i. Ensure appropriate training is provided to personnel.
 - ii. Schedule refresher training to maintain SOP competency.
- d. Director/Veterinarian
 - i. Evaluate animals for transportation readiness.

- ii. Review health status and approve animals for transfer between locations, buildings or rooms with different health status than the originating housing location.
- iii. Ensure appropriate transportation contracts are in place for transportation of critical to maintain animals in the event of disaster plan implementation.
- iv. Will secure adequate designated animal transportation vehicle.

2. General

- a. The Guide for the Care and Use of Laboratory Animals has specific direction regarding animal transport. Following these guidelines will reduce animal transport stress, potential health concerns and prepare personnel for strategies for animal care if transportation is disrupted.
- b. All animal transport between the animal facilities, buildings and rooms managed by Comparative Medicine personnel will be completed promptly and with as little disturbance to the animals as possible to minimize animal distress. Care will also be taken to ensure that favorable environmental conditions are maintained and methods for reducing contamination risk are implemented before, during and after transit.
- c. While researchers may transport animals from a vivarium to a laboratory, animals may not be returned to specific vivaria or particular rooms of a vivarium once removed from their housing area.
- d. Comparative Medicine personnel will transport animals between holding facilities on the same campus with 24 hour notice. Up to 48 hours' notice is required for transfer of animals between campuses.

3. Safety

- a. Animals in transport are subject to changed temperature, noise, excessive movement of transport cages and potentially unfavorable weather conditions such as rain and wind. It is important to reduce these risks to reduce stress to animals in transit.
- b. If animal transport is disrupted due to traffic accident or transportation environmental control failure between campuses, a back-up transportation plan is in place. The driver must have a mobile communication device to inform the FM immediately of a vehicle malfunction, accident or excessive delay in transport.
- c. Special handling precautions and as applicable signage are to be in place when transporting animals with known hazard exposure (ABSL2) or zoonotic disease (e.g. salmonella).

4. Materials

- a. Laminar Flow Hood or Biosafety Cabinet (BSC)
- b. Transport cage
- c. Transport container
- d. Transportation vehicle
- e. Animal Identification cage/container card
- f. Rubber band(s)

- g. Designated disinfectant
- h. Emergency Contact Information Sheet and mobile communication device

5. Procedures

5.1. Procedures for transferring animals between campuses using a vehicle

- a. Each cage with animals requested to be transported will be marked with a blue colored card behind the regular cage card by the authorized person requesting transfer. The “transport cards” are available within the animal housing room.
- b. An animal transfer request will be submitted via VSATS 24 hours prior to building or room transfer on the same campus or a minimum of 48 hours’ notice for transfer between campuses. A large number of cages to be transferred requires advanced notice and should be requested no later than 72 hours in advance. All transport/transfer requests have to be made through VSATS.
- c. After the transfer request form is completed, veterinary approval is granted, and a new cage card has been issued to the animals reflecting the destination housing location, the FM will make arrangements for the transfer (i.e. delivery time, personnel, and housing space).
- d. Preparation of the rodent cage for transport:
 - i. In most cases animals will be placed into commercially available transport cages with HEPA filters in the lid. Make sure dividers in shipping containers are secure to prevent animals from wandering to the wrong compartment. In some circumstances animals will be transported in their home cages, especially if animals stay in the same facility.
 - ii. If regular micro-isolator cages are used for transport water bottle(s) will be removed from caging and rubber bands might have to be placed around cages so that during transport the cage filter top will not become unsecured.
 - iii. For extended travel or high temperatures, hydrogel or wetted feed for rodents must be placed on the cage floor.
 - iv. If the animals are on special diet, the feed must be available at the new destination.
 - v. Any cage(s) used for transport must be safely secured in the transport vehicle to avoid sliding of the cages during driving.
- e. Preparation of other containers for animal transport:
 - i. Aquatic species should be transported either in their home tank or water from their home tank being used when a different tank or plastic bag will be utilized.
 - ii. Oxygenated water should be used and an oxygen cap provided if a sealed bag is utilized. For longer transports of aquatic species oxygen might have to be supplemented.
 - iii. Containers for aquatic species will be secured to prevent movement during transportation.
 - iv. The vehicle temperature will be adjusted per Veterinary instruction based upon the species to be transported.
- f. Preparation of the vehicle for transport:

- i. The FM or transportation driver will check the preventative maintenance log to ensure the vehicle is ready for use.
 - ii. The driver will start the vehicle and assure temperature achieves the appropriate degree per species (for rodents, 74 degrees) prior to loading animals.
 - iii. Records must reflect that the vehicle was sanitized after the last use and not to exceed one month since last sanitation.
 - iv. An Emergency Contact Information Sheet must be readily available inside the vehicle in a visible location near the animal transport containers. This reference sheet contains current contact numbers of Comparative Medicine key personnel and external vehicle service responder(s). The list also contains highway patrol contact information.
 - g. New cage card and transfer paperwork will accompany the transport container. The Per Diem Sheet will be marked to reflect census reduction.
 - h. Transport container will be placed on a cart, in a transport bag for foot traffic and/or loaded into the climate controlled transport vehicle. Care will be taken to ensure animals are not exposed to harmful environmental conditions (excessive heat or cold and/or heavy rain) and have adequate airflow during transport.
 - i. A direct route will be taken to the delivery destination and the animals will be unloaded immediately, placed onto a cart, and/or transported into the receiving area of the destination facility.
 - j. The outside of the transport container will be sprayed with the site designated disinfectant and allowed appropriate contact time before unpacking animals from the transport container.
 - k. The transport container will be unpacked within the receiving animal room or appropriate available area.
 - l. The animals will be placed in clean cages if applicable. Assure that food and water is provided. The animals will be observed for health conditions to ensure that animals were not injured or became ill during transport. If any animals are found to be injured, the laboratory animal technician must immediately notify the FM or Veterinarian. Place a health card in the cage card holder and document observation on the Progress Notes.
 - m. The Per Diem Sheet in the destination room receiving the animals will be marked to reflect the increase in census.
 - n. The non-disposable transport cage will be taken directly to dirty side cage wash to be cleaned and sanitized or brought back to the original facility if the receiving facility has no cagewash area. Disposable transport cages may be disposed of in regular trash unless ABSL2 animals were transported in the disposable cage. ABSL2 contaminated cages are to be disposed of as biohazardous waste.
- 5.2 Procedures for transferring animals between buildings and rooms within the same building:
- a. All steps are the same except for section 5 f.
- 5.3 Animals may be removed from quarantine areas only with veterinary approval.

6. Maintenance and Repairs

- a. If vehicle or animal transport equipment is in need of repair, notify the FM immediately.
- b. An emergency road repair or towing vehicle will be secured to provide emergency service should a vehicle fail during transport or a secondary conditioned vehicle will be immediately available for back-up transport upon notification of need.
- c. The transport vehicle will have regularly scheduled preventative maintenance recommended by the manufacturer to maintain optimal condition with special attention directed to environmental conditioning equipment. Although the service provider may keep maintenance records, vehicle maintenance must be logged in the Vehicle Care and Use log.
- d. The designated transport vehicle's interior surfaces are disinfected after each use using site designated chemical disinfectant.

7. Record Keeping

- a. Animal transportation request must be maintained in a log (i.e. VSATS Transfer Request Form). If a contamination were to occur, these records are essential to tracing where contaminated animals have been distributed.
- b. EH&S Signage for Biohazardous contents or animals with potential zoonosis)
- c. A vehicle preventative maintenance log (i.e. Vehicle Care and Use Log) will be maintained by the FM.
- d. An Emergency Contact Information Sheet must be readily available inside the vehicle.

Review Date	Revision Date	Revision Number	Description of Revision
	6/22/17	FAUSOP 103.2	Included insuring that food and water is available at final destination after transport