



Cornell University Cornell Center for Animal Resources and Education

CARE532.02 Cleaning and Sanitizing Vehicles Used in the Transport of Animals

The intent of this Standard Operating Procedure (SOP) is to describe the methods used for cleaning and sanitizing vehicles used in the transportation of animals. This SOP is intended for staff responsible for vehicle cleaning. 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 must be approved by the IACUC prior to its application.

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1. Introduction

Cleaning and sanitization of transport vehicles is an important component of animal biosecurity. Control of vehicle detergent and disinfecting agents is crucial so as to avoid chemical run-off into the environment. Use of these compounds must be performed in a manner so as to allow capture of chemicals for either sanitary sewer or approved solid waste disposal.

2. Materials

- Animal transport vehicle
- Animal waste disposal items (e.g. shovel, broom, and waste collection container)
- Disinfectant (e.g. bleach @ 4 oz/gallon water or quaternary ammonium compound diluted as per manufacturer's recommendations)
- Water
- Chemical collection equipment (e.g. sanitary sewer drain ±mop/bucket, garbage collection method, etc.).

3. Procedures

A. General Considerations

- i) Organic material must be removed from the vehicles prior to disinfecting so as to allow for proper effectiveness of the disinfecting agent.
- ii) A log of all vehicle cleaning and sanitization activity must be maintained.

B. Laboratory Animal Services (LAS) Animal Delivery/Supply Vehicles

i) Vehicle use overview:

Note: The driver/handler is responsible for their assigned vehicles.

- (1) The “clean” truck handles sanitized materials/supplies only. The “dirty” truck carries non-sanitized materials/supplies.
- (2) Animals may be transported in either truck. Sanitize the vehicle after transport of any animals.
- (3) Transport supplies, materials, and animals within the cargo compartment only and not within the cab compartment.
- (4) In the event that one truck is out of service, sanitize the other truck before handling “clean” supplies or animal deliveries if it has transported “dirty” materials beforehand.
- (5) Document each sanitization in the vehicle sanitization log.
- (6) Clean the interior cargo compartment of both vehicles after each delivery that has spillage of dirt, debris, feed or bedding by vacuuming or sweeping, followed by proper disposal of the spillage.
- (7) Sanitize the interior of the cargo compartment weekly or after transport of any animals, whichever is most frequent.
- (8) If the dirty truck needs to be used for a clean function, sanitize it at least 30 minutes prior to using. If the clean truck needs to be used for a dirty function, sanitize it immediately after use.

ii) Cleaning and sanitization of the cargo compartment:

- (1) Sanitize the trucks by scrubbing and/or pressure spray washing all cargo compartment surfaces within with a suitable disinfectant (e.g. bleach/water solution (2 oz. clorox bleach per gallon of water), or quaternary ammonium compound (e.g. PV-15 @1/2 oz/gallon of water). Allow at least 5 minute contact time prior to thoroughly rinsing with clean water.

Note: Always wear protective gloves and eyewear when using disinfectant solutions.

- (2) Take care to prevent excessive amounts of the disinfectant solution from entering areas that house electrical components within the cargo compartment as it may cause damage after repeated use.
- (3) During cold weather (below 32° F) if it is not possible to pressure spray wash because of water freezing, scrub surfaces with a sponge or sponge mop frequently dipped in disinfectant solution followed by the wiping of all surfaces with another sponge or sponge mop frequently dipped in warm, clean water.
- (4) Document sanitization in a log.

iii) Cleaning of non-cargo compartment surfaces:

- (1) Clean the vehicle exterior, and the interior cab so as to maintain a neat and professional appearance.

- (2) Clean the vehicle exterior by pressure spray washing the entire exterior of both the cab and cargo compartments with a detergent/water solution mix followed by a thorough pressure spray rinsing with water.
- (3) If exterior surfaces have been contaminated with animal waste or tissues, scrub the exterior vehicle surfaces with a sponge or sponge mop soaked in a detergent/water solution so as to remove dirt and debris not dislodged by the pressure spray washing prior to rinsing.
- (4) Clean the cab compartment interior by vacuuming any dirt and debris, removing and cleaning floor mats, wiping appropriate surfaces with a regular household cleaner and shampooing of any dirty textile surfaces.

C. CARE Vehicles

- i) Transport animals in a transport container and place the container in cargo compartment.
- ii) Cover the cargo compartment surfaces with impermeable material (plastic, tarp, or cargo carrier) to allow for protection of the vehicle, particularly if carpeted.
- iii) After animal transport, clean the impermeable cover and spraying or scrub all surfaces with a disinfectant solution, allow at least 5 minute contact time prior to thoroughly rinsing with water.
- iv) Arrange for monthly cleaning by LAS or more frequently if soiled or suspect infectious agents.
- v) Log cleaning and disinfecting via the vehicle use log.

D. Horse Truck/Trailers (Equine Research Park and Annex)

- i) Clean out the manure after every use.
- ii) Wash and disinfect the trailer immediately after transport of animals at risk of carrying infectious diseases (e.g. sick horses or horses from an outside herd). At a minimum, clean and disinfect transport compartment twice yearly.
- iii) Document sanitation in a log.

E. Livestock Truck/Trailers (Teaching and Research Farms)

- i) Clean out the manure after finished transporting animals.
- ii) Wash and disinfect the trailer immediately after transport of animals at risk of carrying infectious diseases (e.g. sick animals or animals from an outside herd). At a minimum, clean and disinfect transport compartment twice yearly.
- iii) Document sanitization in a log.

F. Other Vehicles

- i) If other vehicles, either university-owned or private vehicles, are used to transport animals, the surface beneath the animal carrier must be covered in plastic or other impermeable material (e.g. plastic tarp).
- ii) After transport, either discard the material, or sanitize it with a disinfectant.
- iii) Document sanitization in a log.

4. Safety

- A. If you believe there is an immediate danger from chemicals spilled or contacted, call 911 from any phone.
- B. For questions regarding handling of chemicals, contact Cornell's Environmental Health & Safety (255-820 or 255-1111) or refer to the web chemical Hygiene Plan.
- C. Working with animals can trigger related allergies (refer to CARE Allergens web page). Check with the facility manager regarding requirement for personal protective equipment and refer to CARE SOP 715.
- D. Refer to CARE zoonosis web page for zoonotic information specific to rodents.

5. Contingencies-NA

6. References

- Cornell Chemical Hygiene Plan:
<http://people.ccmr.cornell.edu/~cober/complete.chemical.hygiene.plan.2000.pdf>.
- CARE SOP 707 Animal Related Injury
<http://www.research.cornell.edu/CARE/documents/SOPs/CARE707.pdf>
- CARE zoonoses web page
<http://www.research.cornell.edu/CARE/zoonoses.html>
- CARE Allergens Prevention web page
<http://www.research.cornell.edu/Care/documents/OHS/AllergyPreventionFactSheet.pdf>

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