



Cornell University
Cornell Center for Animal Resources and Education

CARE515.01 **Dog Husbandry**

The intent of this standard operating procedure (SOP) is to describe the routine husbandry procedures at Cornell University's dog facilities. This SOP is intended for all staff members who perform routine dog care. This procedure is approved by the 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

- a. The purpose of this SOP is to describe the basic procedures required for routine dog care.

2. Materials

- a. Scale
- b. Toe nail clippers
- c. Bathing and grooming supplies
- d. Feed
- e. Bedding

3. Procedures

- a. Observation of animals
 - i. Daily:
 - Observe all dogs for illness, injury, and general condition, including weekends and holidays
 - Check intact females for heat
 - Report any injuries to facility manager

- ii. Monthly:
 - Conduct more detailed observation of all dogs including, but not limited to, general condition, fur, thorax and abdomen, ears, limbs and foot pads
 - Weigh the dogs
 - Provide basic care such as ear cleaning, toenail clipping, and bath (or more often as needed)
 - Document body weight, observation and basic care in the medical record

- b. Emergency and holiday care
Observe and care for animals every day, including weekends and holidays.

Note: Emergency veterinary care is available at all times including after working hours and on weekends and holidays by paging CARE (1-800-349-2456).

- c. Records and documentation
 - i. Identify each dog held in the research facility with the official USDA tag, tattoo, or collar applied by the facility that individually identifies the dog by number (9 CFR 2.3g1).

Note: Unweaned puppies need not be individually numbered as long as they are maintained in the same primary enclosure as their dam (9 CFR 2.38g3).

 - ii. Record keeping
 - Keep a day-to-day log of events, including medical procedures, for the life of the dog.
 - Maintain records on procurement, transport and disposal of all dogs and an inventory of dogs in the facility.
 - Refer to CARE SOP 542 for record keeping requirements at Cornell animal facilities.

- d. Food and water
 - i. Feed animals to meet current National Research Council recommendations for canine nutrition.
 - ii. Food storage
 - Store feed on pallets off the floor and 4–6 inches away from walls, in a vermin-proof storeroom.
 - Store open feedbags in leak-proof containers with tightly fitting lids.

- Maintain temperature and humidity control in the storeroom. Avoid temperatures above 70° F and extremes in humidity.
 - Use feed within six months of the milling date.
 - Stack feed in a manner that allows easy reading of the milling date.
- iii. Feeding
- Design and place feeders to allow easy access to food and to minimize contamination with urine and feces. Allow enough space and feeding points for group housed animals to minimize competition for food.
 - Feed adult dogs at least once a day, unless otherwise recommended by attending veterinarian. Offer ad lib (free choice) feeding unless required by the protocol or by the veterinarian. Follow the appropriate SOP for dietary requirements of breeding bitches and puppies.
 - Minimize changes in diet and make them only according to recommendations by the veterinarian in conjunction with the Principal Investigator.
- iv. Offer fresh, clean, potable, uncontaminated water ad lib.
- v. Check automatic watering devices daily, and flush them weekly, for proper operation and cleanliness, or whenever there is a suspicion of malfunction. Monitor water quality quarterly.
- e. Social and environmental enrichment
Refer to SOP 546 “Socialization and Exercise for Research Dogs”.

Note: Group-housed dogs will benefit from but are not required to have exercise programs, as long as the total floor space of the group pen is equal to the sum of the required floor space for each dog.

- f. Quarantine procedures
- i. Dogs from approved vendors (e.g., Marshall Farms) are not required to be quarantined.
 - ii. Contact CARE for information regarding dogs from any other source.
- g. Euthanasia and disposal of dead animals
- i. Euthanize dogs by a barbiturate overdose. Euthanasia must be conducted by trained and experienced staff.
 - ii. Dispose of dead animals by incineration at the College of Veterinary Medicine.
- h. Pest control
Refer to CARE SOP 538.01 for a description of the vermin control program
- i. Maintain room temperatures between 64.4° F to 84.2° F. Maintain relative humidity between 30% and 70%, and provide 10 to 15 complete air changes per hour of 100% outside air.

j. Provide a regular diurnal lighting cycle. Lights are controlled by timers with a photoperiod of 12 to 14 hours of light. Check the timer performance regularly.

k. Space requirements

Follow the AWR (Animal Welfare Regulation) Guidelines and The Guide for space requirements

Note: These should be considered minimum requirements and should be exceeded for long term housing of dogs at Cornell University.

l. Bedding

- i. Unless dogs are housed on appropriate elevated meshed floor, provide approved bedding (e.g., wood shavings, shredded paper or cellulose). Cedar shavings are not recommended, due to the presence of aromatic hydrocarbons.
- ii. Use a sufficient quantity of bedding to keep the dogs clean and dry.
- iii. Store the bedding off the floor on pallets and in such a manner to prevent contamination.

m. Resting apparatuses

- i. Small primary enclosures (i.e. approaching AWA or Guide minimum allowance) with suspended flooring: provide a resting board or operational means to facilitate keeping the dog clean and dry.
- ii. Direct contact flooring: provide bedding or a resting apparatus to allow the dogs a comfortable place to lie and reduce body heat loss.

n. Cleaning and sanitation of cages

- i. Clean primary enclosures daily to remove excessive amounts of dirt and debris.

Note: When cleaning is done by flushing, the animals must be kept dry.

- ii. Disinfect all surfaces at least every other week to reduce or eliminate microorganisms.

Note: The animals must not be in direct contact with the disinfectant

- iii. Clean and sanitize equipment thoroughly at least every two weeks, more frequently if needed.

o. Transportation

Refer to CARE SOP 547

p. Waste management

- i. Deposit non-regulated or non-infectious Medical Waste and soiled materials in dumpsters.

- ii. Regulated (or infectious) Medical Waste is processed through the incinerator section at the Vet College, following EH&S policy.

4. Safety

- a. Working with dogs in a kennel setting can be very loud. Check with facility manager regarding requirement for hearing protection and refer to CARE SOP 715 regarding personal protective equipment.
- b. Refer to CARE zoonosis webpage for zoonotic information specific to dogs.
- c. Observe CARE SOP 707 for animal related injuries.

5. Contingencies

- a. Post contact information for emergency assistance in a conspicuous location within the animal facility.
- b. Emergency veterinary care is available at all times including after working hours and on weekends and holidays by CARE (pager 1-800-349-2456).

6. References

- a. Animals and Animal Products. *Code of Federal Regulations*, Parts 1–3, Title 9, Subchapter A, 2004.
- b. *Guide for the Care and Use of Laboratory Animals*. National Research Council; National Academy Press, Washington, DC, 1996.
- c. *Laboratory Animal Management: Dogs*. National Research Council; National Academy Press, Washington, DC, 1994.
- d. National Research Council
<http://www.nap.edu/books/0309036828/html/index.html>
- e. CARE SOP 307 Euthanasia of Non-Rodent Mammals
<http://www.research.cornell.edu/CARE/documents/SOPs/CARE307.pdf>
- f. CARE SOP 542 Maintaining Clinical Records for Animal Research Models
<http://www.research.cornell.edu/CARE/documents/SOPs/CARE542.pdf>
- g. CARE SOP 538 Vermin Program
<http://www.research.cornell.edu/CARE/documents/SOPs/CARE538.pdf>
- h. CARE SOP 546 Socialization and Exercise for Research Dogs
<http://www.research.cornell.edu/CARE/documents/SOPs/CARE546.pdf>
- i. CARE SOP 547 Animals Transported and Used Outside Animal Facilities
<http://www.research.cornell.edu/CARE/documents/SOPs/CARE547.pdf>
- j. CARE SOP 707 Animal Related injuries
<http://www.research.cornell.edu/CARE/documents/SOPs/CARE707.pdf>
- k. CARE SOP 715 Personal Protective Equipment
<http://www.research.cornell.edu/CARE/documents/SOPs/CARE715.pdf>
- l. CARE zoonoses web page
<http://www.research.cornell.edu/CARE/zoonoses.html>

7. Appendix

- a. N/A