

UC Davis Office of the Attending Veterinarian Standards of Care

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Title: *Husbandry Care for Non-Human Primates*

I. Purpose:

The purpose of this policy is to outline the minimum standards of care for non-human primates.

II. Policy:

All units providing animal care for non-human primates must meet or exceed these minimum requirements based on the Animal Welfare Act (AWA), the Public Health Service Policy, and the ILAR *Guide for the Care and Use of Laboratory Animals (The Guide)* (8th Edition and all subsequent revisions).

III. Procedures:

Daily:

(365 days a year without exception)

- Observe each animal and check for health concerns
- Record sick and dead animals and report to TRACS Veterinary Service, California National Primate Regional Center (CNPRC) Primate Medicine or designated clinical veterinarian per Attending Veterinarian Standard of Care (AV SOC) Policy.*
- Feed each animal (feed must be appropriate for the individual species, the individual's age and condition (AWA Subpart D footnote 2 and AWA 3.82)
 - Exemptions must be approved in animal care and use protocols
 - Expiration dates for food must be readily available per AV SOC Food Storage Policy*
 - Food requiring refrigeration must be labeled with date opened and date of expiration if available
 - Adults must be fed at least once daily except as otherwise might be required for adequate veterinary care
 - Infants and juveniles must be fed as often as is necessary, based on the animal's age and condition, and in accordance with accepted professional and husbandry practices, and established SOPs
 - Food and food receptacles must be readily accessible
 - Food and food receptacles must be located so as to minimize contamination
- Provide sufficient potable water (AWA Subpart D footnote 2, AWA 3.83)
 - Must be provided in sufficient quantity and accessible to every non-

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- human primate
 - If not continually available, must be offered as often as necessary to ensure animal's health and well-being, but no less than twice daily for minimum of 1 hour, or as required by the AV or designate or IACUC approved animal care and use protocol
 - Unless restricted for clinical reasons, daily fluid access of less than 80 ml/kg per animal is considered fluid regulation and must be IACUC approved in individual animal care and use protocols (IACUC-27 "Fluid Regulation Policy for Non-human Primates")
- Remove excreta and food waste to prevent soiling of animals housed indoors (AWA 3.84)
- (Indoor and Sheltered housing) Monitor Minimum and Maximum Temperatures
- Clean and organize room (indoor/sheltered housing)
- Record completion of room (or enclosure) tasks, initial and date

Biweekly (at least every 14 days):

- Clean and sanitize cages/enclosures/accessories per AV SOC Cleaning and Disinfection of Animals Cages and Accessories Policy*
- Primary enclosure hard surfaces must be sanitized at least once **at least every 14 days** and as often as necessary to prevent excessive accumulation of dirt, debris, waste, food waste, excreta, or disease hazard
- If steam or water is used, animals must be removed from enclosures unless enclosure is large enough to ensure animals will not get wet, be harmed, or become distressed
- Clean and sanitize or change environmental enrichment
 - Disposable items should be discarded as soon as they are worn or soiled
- Used food and water receptacles must be sanitized between use for individual non-human primates or social grouping

Quarterly:

- Clean and disinfect the animal room/secondary enclosure

Identification:

- Non-human primates (weaned and older) must be individually identified (e.g., tattoo) and indoor animals must have an appropriately labeled cage (refer to AV SOC Identification of Animals Policy*)

Environment Enhancement to Promote Psychological Well-being (AWA 3.81)

- Single housing should be the exception and justified based on experimental requirements or veterinary-related concerns about animal well-being (*Guide* pg. 64)
- An appropriate plan for environment enhancement adequate to promote the psychological well-being of non-human primates must be developed, documented, and followed
- Refer to the AV SOC Environmental Enrichment for Animals Policy* and the AV SOC Environmental Enrichment for NHP policy for details

Euthanasia:

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Facility managers and other related personnel may euthanize animals following methods approved in the AVMA Guidelines on Euthanasia: pdf

- <https://www.avma.org/KB/Policies/Documents/euthanasia> and as approved in the animal care and use protocol

Facilities:

- Structure: All housing/caging must be designed and constructed such that it is structurally sound for the species of non-human primate housed. (AWA 3.75)
- Any surface coming into contact with non-human primates must be free of excessive rust that prevents cleaning and sanitizing or alters structural surface strength
- All surfaces must be maintained on a regular basis and all surfaces that cannot be readily cleaned and sanitized must be replaced when worn or soiled

Indoor Housing: (AWA, 3.76)

- Temperature alarms must be installed in all rooms housing non-human primates
 - Room temperature range for non-human primates is 64-84 °F (*Guide pg.44*)
 - If the temperature falls outside this range for longer than a brief period O&M must be contacted
 - Ambient temperature must be maintained at a level that ensures the health and well-being of the species being housed
- Minimum of 10-15 fresh room air exchanges (*Guide, pg. 46*)
- Ventilation must be sufficient to provide for health and well-being, and to minimize odors, drafts, and moisture condensation (AWA, 3.76)
- Ventilation must be provided by windows, doors, vents, fans, and/or air conditioning (AWA, 3.76)
- Lighting must be uniformly diffused and provide sufficient illumination (AWA, 3.76)
- Regular diurnal lighting must be provided (AWA, 3.76)
- "Floors should be moisture-resistant, nonabsorbent, impact-resistant, and relatively smooth..." (*Guide, pg. 137-138*)
- Refer to AV SOC Sanitation Policy*
- Refer to AV SOC Physical Plant and Facilities Maintenance policy*

Outdoor housing: (AWA 3.78)

- Only acclimated animals may be kept in outdoor facilities
- Shelter from the elements must be provided at all times
 - Must safely provide heat to prevent ambient temperatures within the shelters from falling below 45 °F
 - Capacity must be such that all animals in outdoor enclosures can be comfortably provided protection
 - Multiple shelters must be provided if aggressive or dominant animals are housed with other animals
- Contaminated material such as sand, gravel, dirt, grass, etc. in primary enclosures that cannot be sanitized with live steam or water/detergent must be removed as often as necessary to prevent odors, diseases, pests, insects, and

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vermin infestation

- Perimeter fencing required (AWA 3.77 and 3.78) must:
 - Be of sufficient height to keep unwanted species from entering
 - Be of sufficient distance from enclosure to prevent physical contact between animals inside and outside of fence
 - Protect non-human primates from unauthorized humans
 - Protect non-human primates from animals such as dogs, skunks, or raccoons from contact

Caging

- All caging must be in good condition and free of damage that may cause injury
- Both AWA and *Guide* requirements for floor space and height per non-human primate must be followed. When a discrepancy between the referenced space requirements occurs, the more generous minimum requirement should be applied unless the caging qualifies as innovative housing and is approved by the Committee (AWA 3.80(c))

Non-human primate space requirements based on the AWA.3.80

Group	Weight of Animal (kg)	Floor Area/Animal (sq ft)	Height (in)
1	<1	1.6	20
2	1 - 3	3.0	30
3	3 - 10	4.3	30
4	10 - 15	6.0	32
5	15 - 25	8.0	36
6	>25	25.1	84

Non-human primate space requirements based on the AWA, 3.8. Examples of the species of Non-human primate typically included in each age group are:

- Group 1 - marmosets, tamarins, and infants less than 6 months of age, of various species.
- Group 2 - capuchins, squirrel monkeys and similar size species, and juveniles 6 months to three years of age of various species.
- Group 3 – macaques and African species
- Group 4 – male macaques and large African species
- Group 5 – baboons and nonbrachiating species larger than 25 kg
- Group 6 – great apes and brachiating species

Non-human primate space requirements based on the *Guide*.pg. 61, Table 3.5

Group	Weight of Animal (kg)	Floor Area/Animal (sq ft)	Height (in)
1	Up to 1.5	2.1	30
2	Up to 3	3.0	30
3	Up to 10	4.3	30
4	Up to 15	6.0	32
5	Up to 20	8.0	36
6	Up to 25	10	46
7	Up to 30	15	46
8	>30	>25	60

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The interpretation of table 3.5 should take into consideration the performance indices described in the text beginning on page 55 (*Guide* pg.61)

*All AV SOC policies referenced in this document can be found on the TRACS website under standards of care.