

Policy: SC-32-400
Date: 9/1/2015
Enabled by: *Guide*
AWA
PHS
Supersedes: New

Title: Husbandry Care for Short-tailed Opossum (*Monodelphis domestica*)

I. Purpose:

The purpose of this policy is to outline the minimum standards of care for Short-tailed opossums (*Monodelphis domestica*) based on the Animal Welfare Act, the Public Health Service Policy, and the ILAR Guide for the Care and Use of Laboratory Animals.

II. Policy:

All units providing animal care for opossum must meet or exceed these minimum requirements.

III. Procedure:

Daily Tasks (365 days a year without exception):

Provide wholesome, palatable feed free of contamination and of sufficient quantity and nutritive value to maintain animals in good health (i.e., Purina Cat Chow). Animals must be fed at least once daily unless dictated by hibernation, veterinary treatment, other professionally accepted practices (*AWA 3.129(a)*) or approved in an Animal Care and Use Protocol.

Chow must be used within 6 months of the milling date (*Guide*, pg. 66) unless manufacturer guidelines document a shorter or longer expiration date

Food receptacles must be kept clean and sanitary at all times.

Opossums generally are supplied water bottles with sipper tubes. Make certain animals can reach the tube. Sipper tubes must be checked to make certain they are flowing.

Provide sufficient potable water. If potable water is not accessible to the animal at all times, it must be provided as often as necessary for the health and comfort of the animal. Frequency of watering must consider age, species, condition, size and type of animal (*AWA 3.129(b)*).

Observe each animal and check for health concerns.

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Record and report sick or dead animals in accordance with facility SOP for sick animal and mortality reporting.

Change heavily soiled or flooded cages when discovered.

Record minimum and maximum temperatures. Temperatures must be sufficiently regulated to protect the animals from the extremes of temperature. The ambient temperature shall not be allowed to fall below or rise above temperatures compatible with the health and comfort of the animal.

Keep room clean and organized.

Record completion of daily room tasks, initial and date.

Weekly Tasks

Change open, solid bottom cages at least weekly not to exceed 10 days.

Provide clean water bottles and sipper tubes at least with every cage change (7-14 days).

Clean/disinfect cage change stations and check pre-filters.

Biweekly (Not to exceed 14 days):

Change nesting materials and provide a clean "hiding/house" (plastic cup) or as needed if dirty.

Provide clean wire bottom cages and racks (*Guide*, pg. 51).

Disinfect racks with automatic watering systems.

Provide clean feeders or wire lids.

Clean and/or change environmental enrichment.

Monthly (at least once monthly):

Change cage change station filters as needed (or following manufactures guidelines).

Disinfect shelf racks.

Quarterly (at least every 3 months):

Disinfect the animal room (includes walls, floors and ceilings) at least quarterly or when species housed in room changes.

Infrequent or Intermittently Scheduled Tasks:

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Follow manufacturer's guidelines for complete breakdown of rack for cleaning.

Cage changing stations should have their airflow checked in accordance with manufacturer's specifications/recommendations, it is recommended not to exceed every 3 years.

Facilities:

Refer to Standard of Care on Facilities Maintenance.

Temperature alarms must be installed in all indoor animal areas per IACUC -16 *Environmental Alarms in Animal Facilities*. Exceptions to this policy must be on file with the IACUC.

Minimum of 10-15 fresh room air exchanges (*Guide*, pg. 46).

"Floors should be moisture-resistant, nonabsorbent, impact-resistant, and relatively smooth..." (*Guide*, pg. 137).

Caging:

Recommended floor space per rodent (see chart below *Guide*, pg. 57).

Facilities will have specific density guidelines that pertain to their caging.

Cages must be in good condition and escape-proof.

Cages with cracks which may cause injury to the animals must be discarded.

Caging and water bottles designed to be seen through should be transparent enough to allow for observation of the animal and or water level. Caging/water bottles that are cloudy (for example: covered with hard water residue) must be cleaned or discarded when they are no longer able to be seen through.

Cage Size Requirements (*Guide* pg. 57):

Mouse space requirements:

Weight of Animal	Floor Area/Animal (inches squared)	Height (inches)
<10 grams	6	5
Up to 15 grams	8	5
Up to 25 grams	12	5
>25 grams	≥15	5
Female + litter	51	5

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Hamster space requirements:

Weight of Animal	Floor Area/Animal (inches squared)	Height (inches)
<60 grams	10	6
Up to 80 grams	13	6
Up to 100 grams	16	6
>100 grams	19	6

Identification:

Rodents can be individually identified in addition to having an appropriately labeled cage card (Refer to Standard of Care for Identification of Animals and the IACUC Policy on Rodent Genotyping and Sample Collection).

The use of toe clipping must be justified in the Animal Care and Use Protocol

Environmental Enrichment:

Refer to Standard of Care on Environmental Enrichment.

Examples of enrichments that promote species-typical behaviors (i.e., tubes, tunnels, igloos, plastic glasses and houses), nesting materials, gnawing and foraging materials, and running wheels or other structures to increase locomotion.

Opossums are generally a solitary species in the wild, therefore most animals are housed individually, except breeder pairs, babies, weanlings and young adult siblings.

Opossums that are approved to be singly housed must be provided with another form of enrichment unless an exception has been approved on the Animal Care and Use Protocol.

Devices used for environmental enrichment must be easily sanitized or disposed of when cages are changed.

Devices must be checked regularly for wear and discarded if they pose a safety hazard or are no longer functional.