

Policy: SC-30-100
Date: 8/26/2015
Enabled by: *Guide*
AWA
PHS
Supersedes: all previous

Title: *Non-USDA Rodent Husbandry*

I. Purpose:

The purpose of this policy is to outline the minimum standards of care for non-USDA rodents based on 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 non-USDA rodents must meet or exceed these minimum requirements.

III. Procedure:

Daily Tasks (365 days a year without exception):

Provide nutritionally adequate ad libitum feed, unless approved otherwise in animal care and use protocol. Food must be uncontaminated and fresh

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

Provide sufficient potable water *Guide*, pg. 67

Observe each animal and check for health concerns

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

Keep room clean and organized

Record minimum and maximum temperatures, (ideal room temperature range for rodents= 68-79 F *Guide*, pg. 44)

Record completion of daily room tasks, initial and date

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Weekly Tasks

Provide clean static micro-isolator cages at least weekly

Provide clean open, solid bottom cages at least weekly not to exceed 10 days

Provide clean drop pans with clean bedding for wired hanging cages at least once per week with additional changes as needed depending on the age, size and strain of rodent.

Provide clean water bottles and sipper tubes at least with every cage change (7-14 days).
Replace Hydropac water pouches as needed to insure animals always have adequate water supply (no maximum change interval required).

Clean/disinfect cage change stations and check pre-filters

Biweekly:

Provide clean cages to individually housed mice (individually housed rats must follow group housed change schedule)

Provide clean individually ventilated cages (IVC)

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

Clean automatic water delivery valves (i.e. lixits) during the primary enclosure cleaning (*Guide* 72)

Housing rodents in wire hanging cages is subject to IACUC approval and must be justified in the animal care and use protocol as a husbandry deviation

Disinfect racks with automatic watering systems

Provide clean feeders or wire lids

Provide clean or new environmental enrichment

Monthly (at least once monthly):

Clean micro-isolator tops

Provide clean filters as needed

Disinfect shelf racks

Quarterly:

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

Clean outside surfaces of IVC racks

Infrequent or Intermittently Scheduled Tasks

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

Filters must be changed following manufactures guidelines

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

Alarms are required in all indoor animal housing rooms per IACUC policy 16 "Environmental Alarms in Animal Facilities

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. 46

Mouse space requirements:

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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

Rat space requirements:

Weight of Animal	Floor Area/Animal (inches squared)	Height (inches)
<100 grams	17	7
Up to 200 grams	23	7
Up to 300 grams	29	7
Up to 400 grams	40	7
Up to 500 grams	60	7
>500 grams	≥ 70	7
Female + litter	124	7

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)

Mice	Ear tag, ear notch, tail/toe tattoo, microchip, non-toxic marker, toe clipping*
Rats	Ear tag, ear notch, tail/toe tattoo, microchip, non-toxic marker toe clipping*

*toe clipping must be justified in the animal care and use protocol

Environmental Enrichment:

Refer to Standard of Care on Environmental Enrichment.

Examples of rodent enrichments that promote species-typical behaviors include pair or group housing, shelters (tubes, tunnels, igloos, and houses), nesting materials, gnawing and foraging materials, and running wheels or other structures to increase locomotion

Rodents should be pair or group housed (maximum number of animals per cage is based on cage size and animal weight) unless protocol has IACUC approval for an exemption (Guide, pg.51)

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Rodents that are approved to be singly housed must be provided with another form of enrichment

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