

Policy: SC-31-100
Date: 11/7/2022
Enabled by: IACUC/AV/
ILAR
Supersedes: 6/7/2019

Title: Husbandry Care of Non-USDA covered Rodents

I. Purpose:

The purpose of this policy is to outline the minimum standards of care for non-USDA covered rodents: mice of the genus *Mus* and rats of the genus *Rattus* purpose bred for research.

II. Policy:

All units providing animal care for non-USDA covered rodents must meet or exceed these minimum requirements based on the ILAR Guide for the Care and Use of Laboratory Animals (*Guide*). Deviations or exceptions must be approved by the Attending Veterinarian and the IACUC.

III. Procedure:

Daily (365 days a year without exception):

- Observe each animal and check for health concerns (*Guide* pg. 112).
- Ensure adequate feed and potable water is available (*Guide* pg. 65-68).
- Record sick and dead animals and report findings to Campus Veterinary Services (CVS) or designated clinical veterinarian per standard operating procedure for reporting sick or dead animals.
- Record/document minimum and maximum temperatures and humidity.
 - Temperature range for rodents is 68°F to 79°F (*Guide* pg. 44).
 - Humidity range for rodents is 30% to 70% (*Guide* pg. 44).
- Change any excessively soiled or flooded cages (*Guide* pg. 70).
- Clean and organize room, anterooms, and surrounding premises (*Guide* pg. 72).
- Record daily completion of each task, initial each task, and date the log.

Weekly:

- Provide clean static microisolator cages (*Guide* pg. 70).
- Provide clean catch pans for wire-floor caging (*Guide* pg. 70).
- Provide clean bottles and sipper tubes (*Guide* pg. 70).
- Clean automatic water delivery valves (i.e. lixits) at cage change (*Guide* pg. 72).

Biweekly:

- Provide clean individually ventilated cages (*Guide* pg. 70).
- Provide Hydropac water pouches with lixit spikes (*Guide* pg. 70).

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- Clean automatic water delivery valves (i.e. lixits) at cage change (*Guide* pg. 72).

As needed:

- Disinfect the animal room including walls, floors, and ceilings (if possible) (*Guide* pg. 72).
- Remove and replace worn or damaged equipment from primary enclosures and surrounding facility (*Guide* pg. 72).
- Chow must be discarded after 6 months of the milling date unless manufacturer guidelines recommend a shorter or longer expiration date (*Guide* pg. 66).
- Clean and sanitize feed storage containers at least every 6 months (*Guide* pg. 67).
- Each facility will develop their own best practices with sanitization typically occurring every 6 months or whenever there is a change in species but may vary with facility.

Environmental Enrichment:

- Refer to the Environmental Enrichment policy (SOC 30-102).

Facilities:

- Temperature alarms must be installed in all rooms housing rodents (*Guide* pg. 143).
- Adequate ventilation must be provided for the health and comfort of the animal at all times.
 - A minimum of 10-15 fresh room air exchanges per hour shall be provided in animal housing areas (*Guide* pg. 46). IACUC-approved PI-maintained housing within lab spaces may be exempt-
- Floors shall be moisture-resistant, non-absorbent, impact-resistant, and relatively smooth (*Guide* pg. 137). Refer to Physical Plant SOC 50-102.

Housing:

- Whenever possible, rodents should be socially housed in compatible groups (*Guide* pg. 51).
- Floor space taken up by food bowls, water containers, litter boxes, and enrichment devices (e.g., novel objects, toys, foraging devices) should not be considered part of the floor space (*Guide* pg. 56).
- Space requirements for mice of the genus *Mus*:

| Weight (g) | Floor Area/Animal (in ²) | Height (in) |
|--------------------|--------------------------------------|-------------|
| <10 | 6 | 5 |
| Up to 15 | 8 | 5 |
| Up to 25 | 12 | 5 |
| >25 | ≥15 | 5 |
| Female with litter | 51 | 5 |

(*Guide* pg. 57)

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- Space requirements for rats of the genus *Rattus*:

| Weight (g) | Floor Area/Animal (in ²) | Height (in) |
|--------------------|--------------------------------------|-------------|
| <100 | 17 | 7 |
| Up to 200 | 23 | 7 |
| Up to 300 | 29 | 7 |
| Up to 400 | 40 | 7 |
| Up to 500 | 60 | 7 |
| >500 | ≥70 | 7 |
| Female with litter | 124 | 7 |

(Guide pg. 57)