

Policy: SC-31-900  
Date: 6/7/2019  
Enabled by: IACUC/AV/  
ILAR/APHIS  
Supersedes: 3/16/2016

**Title: Husbandry Care of USDA Rodents**

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I. Purpose:

The purpose of this policy is to outline the minimum standards of care for USDA rodents, including, but not limited to, guinea pigs (*Cavia porcellus*), hamsters (*Mesocricetus auratus*), deer mice (*Peromyscus* spp.), and voles (*Microtus* spp.).

II. Policy:

All units providing animal care for USDA rodents must meet or exceed these minimum requirements based on the USDA Animal Welfare Regulations (AWR), the ILAR Guide for the Care and Use of Laboratory Animals (*Guide*), and Public Health Service Policy (PHS). 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 (AWR 2.33).
- Ensure adequate feed and potable water is available (*Guide* pg. 65-68).
- Record sick and dead animals, and report them to Campus Veterinary Services (CVS) or designated clinical veterinarian per standard operating procedure for reporting sick or dead animals.
- Record 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 tasks, initial, and date log sheet.

**Weekly:**

- Provide clean static caging (AWR 3.31 & 3.131).
- 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 (not to exceed every 14 days):**

- Provide clean individually ventilated cages (AWR 3.31 & 3.131).

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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 (*Guide* pg. 67).

### **Environmental Enrichment:**

- Refer to the Environmental Enrichment policy.
- Rodents should be provided the opportunity to demonstrate species typical behavior. Examples of enrichment for guinea pigs include shelters (*Guide* pg. 53).
- Devices must be checked regularly for wear and discarded when safety hazards are observed.

### **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).
- Floors shall be moisture-resistant, non-absorbent, impact-resistant, and relatively smooth (*Guide* pg. 137). Refer to Physical Plant and Facilities Maintenance policy.

### **Housing:**

- Whenever possible, and as appropriate based on species, rodents should be socially housed in compatible groups (*Guide* pg. 51).
- Floor space taken up by food bowls, water containers, and enrichment devices should not be considered part of the floor space (*Guide* pg. 56).
- Space requirements for USDA rodents should provide sufficient space to allow each animal to make normal postural and social adjustments with adequate freedom of movement.
- Space requirements for mice, recommended for deer mice (*Peromyscus* spp.) and voles (*Microtus* spp.):

Weight (g)	Floor Area/Animal (in <sup>2</sup> )	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 hamsters (*Mesocricetus auratus*):

Weight (g)	Floor Area/Animal (in <sup>2</sup> )	Height (in)
<60	10	6
60-80	13	6
80-100	16	6
>100	19	6
Female with litter	121	6
(AWR 3.28)		

- Space requirements for rats, recommended for rice rats (*Oryzomys palustris*):

Weight (g)	Floor Area/Animal (in <sup>2</sup> )	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)		

- Space requirements for guinea pigs (*Cavia porcellus*):

Weight (g)	Floor Area/Animal (in <sup>2</sup> )	Height (in)
Up to 350	60	7
>350	101	7
Female with litter	101	7
(AWR 3.28)		

**When housing this species, please also refer to the Animal Care Program's Standards of Care Policy on Pest Control, Identification and Labeling of Cages, Environmental Enrichment, Food Storage, House-Keeping in Facilities Housing Biomedical Research Animals, Physical Plant Facilities Maintenance, as well as the IACUC's Policy on Social Housing of Social Species.**