

Purdue University Laboratory Animal Program Standards of Care

Title: Husbandry Care of USDA Covered Rodents

I. Purpose:

The purpose of this policy is to outline the minimum standards of care for USDA covered rodents, including, but not limited to, guinea pigs, hamsters, chinchillas, and gerbils.

II. Policy:

All units providing animal care for USDA covered rodents must meet or exceed these minimum requirements based on the USDA Animal Welfare Regulations (*AWR*) and 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 (*AWR* 2.33).
- Ensure adequate feed and potable water is available (*Guide* pg. 65-68).
- Record sick and dead animals to LAP veterinary staff or designated clinical veterinarian per standard operating procedure for reporting sick or dead animals.
- Record/document minimum and maximum temperatures and humidity on the daily log
 - Temperature range for rodents is 68°F to 79°F (*Guide* pg. 44).
 - Chinchillas should not exceed 70°F
 - Humidity range for rodents is 30% to 70% (*Guide* pg. 44).
 - Chinchillas should not exceed 50%
- 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 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).

Biweekly:

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

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).
- 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 SOP # 305 - Social and Environmental Enrichment Program for Research and Teaching Animals

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).

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 covered rodents should provide sufficient space to allow each animal to make normal postural and social adjustments with adequate freedom of movement.

Space requirements for hamsters (*Mesocricetus auratus*), recommended for gerbils:

Weight (g)	Floor Area/Animal (in ²)	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 guinea pigs (<i>Cavia porcellus</i>):		
Weight (g)	Floor Area/Animal (in ²)	Height (in)
Up to 350	60	7
>350	101	7
Female with litter	101	7
(AWR 3.28)		