

<b>Institutional Animal Care and Use Committee</b>		<b>UNTHSC</b>
Title: Minimum Housing Space Requirements for Mice used for Breeding Purposes		
Document #: 001	Version #: 03	
Approved by IACUC Date: February 25, 2020		

**A. BACKGROUND INFORMATION:**

- a. This policy establishes minimum space requirements for laboratory mice used for breeding at the University of North Texas Health Science Center, in order to remain in compliance with the *Guide for the Care and Use of Laboratory Animals* (8<sup>th</sup> Edition).

**B. RESPONSIBILITIES**

- a. It is the responsibility of the Principal Investigator (PI) and research personnel to follow the guidelines and procedures outlined below regarding housing density for breeding mice.
- b. All investigators or other animal users are required to adhere strictly to the minimum space recommendations as promulgated for all common species in the Guide, unless a specific request for an exception to these rules has been included in the approved IACUC protocol.
- c. Any request for a deviation from the established rules must be accompanied by a sound scientific justification for the practice and must be acceptable to the Committee.

**C. PROCEDURES**

- a. The acceptable cage density for mice in standard shoebox cages is 4 non-breeding mice 25 grams or less per cage. For ventilated cages (75 sq. in.), maximum is 5 non-breeding mice per cage.
- b. Acceptable cage density for Breeding animals:
  - i. **Pair Breeding** (one female and one male mouse per cage), entire litter may remain with parents until weaning age or birth of next litter whichever is sooner.
  - ii. **Trio Breeding** (1 male and 2 females per cage), upon the birth of a litter, one other adult must be removed (either the male or the second female). The second female must be removed prior to giving birth. At no time is it acceptable to have two litters in the same cage. The maximum density for 75 sq. in. cages is one female and her litter, plus one other adult. Investigators must observe closely to remove the second female before she has her litter. Failure to do so will put the cage in violation of the space requirements of the *Guide*.
  - iii. **Harem Breeding** (one male and 3 or 4 females), the females must be watched closely and separated before giving birth. The maximum density for 75 sq. in. cages is one female and her litter, plus one other adult. Investigators must observe closely to remove the additional adults prior to the other females giving

birth. Failure to do so will put the cage in violation of the space requirements of the *Guide*.

- c. Weaning age is at approximately 21 days. If a litter is deemed too small to wean at 21 days, they may stay in the cage for up to one more week (28 days) provided no other litter has been born in the cage. If another litter is born, the previous litter must be weaned.
- d. When a cage is found to be overcrowded per this policy, and no waiver has been approved by the IACUC, an “Overcrowded” card will be completed and placed on the cage. An email will be sent to the PI as further notification. If after expiration of the 48 hour grace period (which includes holidays and weekends) the cage overcrowding has not been relieved, the DLAM staff will proceed with the separation and will identify the cages into which the animals have been placed in such a way as to permit the investigator to reconstruct the composition of the original cage. The technical time required to perform this service will be charged to the investigator.
- e. In cases where the observed overcrowding exceeds 200% of the allowable minimum space requirements, DLAM staff may proceed with the separation without notification of the investigator or the provision of a grace period. This service will be fully chargeable to the investigator. An attempt to contact the investigator will be made but animals in these cages will ALWAYS be separated on the same day.
- f. Where more than one pregnant rodent is housed in a cage, the DLAM staff may place and “Anticipated Overcrowding” notice on the cage and attempt to contact the investigator. The DLAM staff may separate the animals after 48 hours have passed or at the birth of the litters whichever is later without further notice to the investigator.

#### **D. REFERENCES**

- a. Animal Welfare Act, Public Law 89-544 as amended; codified at 7 U.S.C. 2131-2159.
- b. Institute of Laboratory Animal Resources (2011). *Guide for the Care and Use of Laboratory Animals*. National Academy Press, Washington, D.C.
- c. PHS Policy on Humane Care and Use of Laboratory Animals. NIH, Office of the Director. Revised September, 1986, and reprinted October, 2000.
- d. USDA Animal Welfare Act Regulations and Standards, 9 CFR Parts 1, 2, 3 and 4.