

IACUC Policy on Mouse Cage Density

Purpose

This policy is based on guidelines given in the National Research Council's Guide for the Care and Use of Laboratory Animals (2011 Guide) and has been designed to ensure that mice are housed in a manner that promotes their health and well-being and avoids overcrowding. Cage overcrowding usually occurs in mouse breeding colonies when litters are not weaned on time, excessive number of breeder animals are housed in a small cage, or weanling mice are not separated as they get older.

Breeding cages exceeding the listed limits are considered to be overcrowded cages. Preventive measures can be taken to avoid an overcrowded cage by weaning animals in a timely manner and by removing dams prior to giving birth. The capacity is also set to reduce the incidence of morbidity and mortality due to trampling by older animals in the cage. Because of the health concern, overcrowded cages are considered to be an animal welfare issue.

Density recommendations in the 2011 Guide for the 75-square-inch cages in use at IACUC would allow up to 5 adult mice or one female with a single litter.

Policy

1. The 2011 Guide recommendations of 15 square inches floor space per adult mouse (<25 grams) will be followed for all mouse cages housing adult animals.
2. Mouse breeding schemes which can be utilized include:
 - a. Continuous breeding of monogamous pairs. Prompt weaning of offspring is required to preclude overcrowding. Only one litter may be present in the cage.
 - b. If harem breeding schemes are used (1 male with multiple females), then each pregnant female must be removed to a separate cage prior to parturition (i.e., no pups are allowed to be born into the adult only cage).
3. Exceptions to this policy must:
 - a. Be described in the Animal Use Protocol. This includes a description and justification of the exception and provision of performance criteria for monitoring the exception to ensure animal welfare.
 - b. Be approved by the IACUC

Implementation

1. Exceptions to this policy require a written scientific justification in the Animal Use Protocol.
2. Husbandry personnel will monitor cage density as part of their routine duties, and DLAR will attempt to notify researchers and/or their designated contact person via email, by phone, or in person, if overcrowded cages are discovered.
3. If there is no response from the investigator within 48 working hours, husbandry personnel will take appropriate action to correct the problem (i.e., remove post-parturient females and their newborn pups from adult only or overcrowded breeding cages, wean animals, etc.). A per-cage charge will be levied for each cage set up. DLAR will not be responsible for errors in separated and weaned cages.
4. If three instances of non-response by a single investigator and/or their staff occur within a three-month period, DLAR personnel will promptly notify the IACUC of the researcher's regulatory noncompliance.
5. DLAR reserves the right to separate immediately or change the cage of any animals when animal welfare concerns exist. DLAR will not be responsible for errors in separated and weaned cages.