



## OFFICE OF LABORATORY ANIMAL CARE

# Operating Guidelines

<b>OG Number:</b>	<b>624</b>	<b>Overcrowded Mouse Cage</b>	<b>Revision #:</b>	<b>0</b>
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## Background

1. According to the *Guide for the Care and Use of Laboratory Animals (Guide)*, up to five adult mice may be housed in either static or individually ventilated mouse cages ( $\geq 15$  square inches of floor space per animal).
2. For breeding purposes, the size of the standard mouse cage is designed to accommodate one adult female mouse, one adult male mouse, and their litter (51 square inches of floor space).
3. Mice 21 days and older are considered adults and thus each individual counts as 1 mouse.
4. Animal overcrowding is considered a non-compliance according to the *Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals*.

## Purpose

To assist OLAC staff in identifying an overcrowded mouse cage. Additionally, these guidelines will define what an overcrowded cage is and how incidents of overcrowding will be addressed by staff.

## Definitions

1. Overcrowded Cage
  1. Greater than 5 adult (post-weaning) mice of the same sex in a standard mouse cage
  2. Any cage with two litters
  3. Harem with a litter (aka-Trio breeding cages): a male and two females and a new litter

## Procedures

1. OLAC staff monitors animal health daily (e.g., food, water, health concerns) but is not responsible for the management of rodent breeding colonies.

2. When overcrowded cages are identified by OLAC staff during morning health checks, an Overcrowded "Post it" tag will be placed on those cages at the time they are identified. These "post-its" will have the date and the initials of the OLAC staff member who tagged the cage.
  1. Any tagged cages that have **not** been addressed by the lab by 8 am on the following workday will be separated by OLAC staff.
  2. A per-cage charge will be levied for each cage created to house animals at appropriate densities.
3. OLAC staff are **NOT** responsible for checking for pregnancies, births or for recording these events on the appropriate cage card(s). When a litter is born, the date of birth (DOB), number of pups and date the pups are weaned **must be documented on the card for that cage.**
  - a. OLAC personnel **ARE** required to check for this documentation by the PI.
  - b. OLAC staff **are NOT** responsible for contacting lab members to inform them of pregnant females or to separate pregnant females, new litters, or the need to wean a litter.
  - c. The date of birth for a new litter may be recorded on the cage card by OLAC staff, but this would be done as an aid to the investigator, **NOT** as a required OLAC staff duty.
4. All litters **must** be weaned by 21 days of age to be compliant with IACUC guidelines. The day of birth is counted as day zero.
  - a. OLAC staff will tag cages with 21-day-old pups during morning health rounds and the animals will be separated the following day after 8 am by OLAC staff if not done so by the PI's lab personnel.
  - b. Cages that do not have birth dates noted on the cage card may be tagged as overcrowded and animals may be weaned prematurely based on visual assessment made by OLAC staff.
  - c. OLAC facility supervisors and veterinary staff can approve an immediate separation if the litters are disparate.
5. Delayed wean **MUST** be approved in the investigators AUP and they must submit an SSR for this to take effect.
  - a. Any litter that requires weaning later than the 21-day standard **must be** described and justified in the PI's approved AUP.
  - b. Investigators will need to submit a "Request for Special Services" on the OLAC website to ensure that OLAC staff is aware of this deviation from standard mouse husbandry.
6. Delayed cage change:
  - a. A "New Litter" tag must be placed on the cage with a change date no more than 3 days after the date posted. It should include the initials of the person responsible for the cage change.
  - b. Regardless of a "Delayed Weaning" tag, the cage will be changed if:
    - The cage is flooded or heavily soiled.
    - If the OLAC area supervisor decides based on animal welfare concerns.
7. Harem breeding (aka-Trio breeding, 2 or more females and one male per cage) **must be** described and justified in the PI's approved AUP.
  - a. Lab members are **required** to check for pregnancies and litters daily (including weekends and holidays).
  - b. Any visibly pregnant dam **must** be moved to her own cage prior to giving birth.
  - c. Breeding males **must** be removed from the cage so that post-partum estrus does not result in additional pregnancies (one male and one female).

**REFERENCE DOCUMENTS**

- Bayne K and Turner PV eds. Laboratory Animal Welfare. 2013. Chapter 12, Rodent and Rabbit Welfare in the Research Environment. Pp 184-185
- Office of Laboratory Animal Welfare. (2002). [Public Health Service Policy on Humane Care and Use of Laboratory Animals](#).
- UC Berkeley ACUC Guideline on [Cage Card Notification System Guidelines](#)

REVISION HISTORY			
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