

University Animal Care Committee

Policy on Mouse Colony Management

The University Animal Care Committee (UACC) has adopted a policy which establishes guidelines for appropriate environmental conditions and methodology for in-house breeding of mice. These guidelines follow the Canadian Council on Animal Care's standards in promoting animal health and wellbeing.

Overcrowding or mismanaged breeding practices can lead to reduced floor space per mouse and impacts on animal welfare. Impacts of high cage density can lead to elevated ammonia levels which causes stress, increased aggression, reduced breeding productivity, and litter mortality.

Techniplast GM500 ventilated mouse cages should have no more than 5 adult mice per cage. The breeding scheme must be described within the Animal Use Protocol (AUP).

The approved breeding schemes are:

- 1) Monogamous pairing: 1 male: 1 female per cage
- 2) Trio grouping: 1 male: 2 females. Breeders must be separated prior to parturition

Trio breeding is only permitted provided the breeding group is separated prior to parturition and the breeding scheme is approved in the protocol. Separation of breeding females is required to avoid multiple litters housed in one cage and reduces the risk of post-partum mating, which can occur 14-28 hours post parturition. Multiple litters in a cage may lead to overcrowding and trampling of newborn pups by pre-existing juveniles. Principal Investigators (PI) that wish to deviate from the approved breeding schemes listed above must provide justification to the UACC.

Weaning:

The weaning age of mice is typically at 21 days post parturition. Pups with reduced growth rates may be allowed to remain with the dam for a few more days. If reduced growth is characteristic of the strain, it must be described in the AUP.

If a continuous breeding scheme is approved and it appears that the older litter poses a threat to the newborn litter, the PI will be requested to wean the older litter (provided there is no evidence they cannot be separated from the dam at an age younger than d21).

Mice which are not weaned in a timely fashion (48hrs post d21) will receive written notification from Animal Care Services (ACS) and be given 24 hours to respond. If no action is taken, the mice will be weaned by ACS staff and a technical service fee of \$50 per cage will be charged to the PI.

Overcrowded Cages (Adult mice):

Principal investigators with IVC cages that contain more than 5 mice per box will receive written notification from ACS requesting that they separate their mice. If the problem is not addressed within 24 hours, ACS will separate the mice and a \$50 technical service fee will be charged to the PI.

Revision History:

Date	New Version
05/22/2012	Policy Created and Approved
06/25/2015	Triennial Review
06/28/2018	Triennial Review; Revised to align with approved SOPs
05/27/2021	Triennial Review; Minor wording updates and reference to new Techniplast caging (allowing 5 mice/cage)