

## OVERCROWDED CAGE POLICY/SOP

First Issue 5/12/08

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| <b>IACUC Approved:</b> 6/18/09, 11/1/10, 1/20/11, 5/17/12, 1/17/13, 7/28/15, 12/2/21 | <b>Revised:</b> 5/21/08, 2/19/09, 5/29/09, 9/30/10, 10/22/10, 12/27/10(2), 8/26/11, 10/25/11, 12/14/11, 5/17/12, 12/21/12, 1/5/13, 1/1/14(formatting), 7/15/15MW, 8/6/15, 3/22/16, 10/29/18, 1/18/19, 8/31/21 |
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## MICE

### RECOMMENDED MINIMUM SPACE FOR MICE IN TECNIPLAST MOUSE IVC CAGE (84 SQ. IN, 5 INCH HEIGHT)

| WEIGHT, GRAMS               | MAXIMUM NUMBER MICE |
|-----------------------------|---------------------|
| Less than 25 (post weaning) | 7                   |
| More than 25 (post weaning) | 5                   |
| Breeders                    | 2 adults + 1 litter |

#### REQUIREMENT FOR MICE CAGES:

1. Researchers MUST check their breeding colonies on at least three non-consecutive days each week and it is the researcher's responsibility to separate their cages to avoid overcrowding and to avoid being charged an overcrowded fee if AVS has to separate the cages. AVS will not be responsible for sexing the mice that are separated by them.
2. 21 day old pups which exceed minimum space requirements, must be weaned (separated from their nursing mother).
  - *\* Unless there is an IACUC approval allowing smaller pups to be weaned at 28 days.*

ACTION: If mice exceed the maximum allowed per cage and are not separated by their weaning date: Cages will be tagged and an email will be sent to the PI and their staff. The PI has 3 consecutive day to separate the pups to avoid being charged an overcrowded fee if separated by AVS.

EMERGENCY ACTION: Litters with an IACUC exception to be weaned at 28 days must be separated by 29 days if the number of mice exceed the minimum space requirement. AVS will contact the PI and their staff for an emergency separation. Emergency separations must be separated that day. AVS will contact research staff to separate mice. If there is no reply or waiting is not possible, cages will be separated immediately.

3. If trio-breeding (2 females to one male). One of the females must be separated before giving birth (ideally 10-14 days post breeding) to avoid 2 litters being born in the same cage.
  - *\*Unless there is an IACUC approval a protocol specific exception to this policy allowing the PI to keep 2 litters together for a time specified in their IACUC protocols.*
  - *\* Unless there is an IACUC approval to allow more than 2 adults in a cage with a litter.*

ACTION: If two litters are found in the same cage: Cages will be tagged and an email will be sent to the PI and their staff. The PI has 3 consecutive day to separate the pups to avoid being charged an overcrowded fee if separated by AVS.

EMERGENCY ACTION: If pups are found dead, being trampled, or outcompeted for resources by the older mice (regardless of exemptions), AVS will contact the PI and their staff for an emergency separation. Emergency separations must be separated that day. AVS will contact research staff to separate mice. If there is no reply or waiting is not possible, cages will be separated immediately.

4. More than 5 mice over 25 grams in a cage: Cages will be tagged and an email will be sent to the PI and their staff. The PI has 3 consecutive days to separate the animals to avoid being charged an overcrowded fee if separated by AVS.

## RATS

RECOMMENDED MINIMUM SPACE FOR RATS IN TECNIPLAST RAT IVC CAGE (124 SQ. IN, 7 INCH HEIGHT)

| WEIGHT, GRAMS          | MAXIMUM NUMBER RATS |
|------------------------|---------------------|
| 100-200 (post weaning) | 5                   |
| 200-300 (post weaning) | 4                   |
| 300-400 (post weaning) | 3                   |
| 400-500 (post weaning) | 2                   |
| >500                   | 1                   |
| Adults and litter      | 1 female + litter   |

RECOMMENDED MINIMUM SPACE FOR RATS IN TECNIPLAST RAT IVC CAGE (232 SQ. IN, 7 INCH HEIGHT)

|                        |                                    |
|------------------------|------------------------------------|
| 100-200 (post weaning) | 10                                 |
| 200-300 (post weaning) | 8                                  |
| 300-400 (post weaning) | 5                                  |
| 400-500 (post weaning) | 3                                  |
| >500                   | 2-3 (> or = to 70 sq. in. per rat) |
| Adults and litter      | 1                                  |

Larger animals may require more space to meet the performance standards.

Other breeding configurations may require more space and will depend upon considerations such as number of adults and litters, and size and age of litters.

REQUIREMENTS FOR RAT CAGES:

1. No harem breeding is allowed with rats.
2. Adult rats, other than nursing mothers, must be removed from the cage before parturition.
3. Rat pups, if they exceed minimum space requirements, must be weaned by 21 days of age.

**ACTION:** Any overcrowded rat cages will be tagged and an email will be sent to the PI and their staff. The PI has 3 consecutive days to separate the pups to avoid being charged an overcrowded fee if separated by AVS.

**EMERGENCY ACTION:** If pups are found dead, being trampled, or outcompeted for resources by the older mice (regardless of exemptions), AVS will contact the PI and their staff and an emergency separation will be done by 4:30 that same day to avoid further injury or death.

**IMPORTANT FOR OVERCROWDED ISSUES FOR MICE AND RAT CAGES:**

1. If a PI receives five billable non-emergency cage separations by AVS within one month, access to the facility for the PIs entire staff will be suspended pending a meeting with AVS management to discuss the issue. A husbandry check sheet will be required for the research group to keep track of how often they are checking their colonies. The UH IACUC will also be made aware of the issue.
2. Emergency separations are billed by staff time required, rounded to the quarter hour. Non-Emergency separations are billed by the separation fee. Please see <https://research.hawaii.edu/orc/wp-content/uploads/sites/6/2019/07/Animal-and-Veterinary-Services-Fees.pdf> for rates and fees.

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3. Tag information left on the original cage that was observed to be overcrowded, will include date of notice, initials, Granite cage card number, investigator, and number of animals.
4. If AVS must separate a cage, the staff will not be responsible for sexing the animals separated.
5. The PI must notify AVS of any UH IACUC exceptions which will be posted in the animal housing room.

Reference: The Guide for the Care and Use of Laboratory Animal, 8<sup>th</sup> edition