

THE UNIVERSITY OF TOLEDO

SUBJECT: IACUC Housing Space Requirements for Laboratory Animals

DATE: February 16, 2022

IACUC Housing Space Requirements for Laboratory Animals

The <u>Guide for the Care and Use of Laboratory Animals</u> (the <u>Guide</u>) lists the minimum space recommendations for laboratory animals. Population density can affect reproduction, metabolism, immune responses and behavior. Group composition should be held as stable as possible as mixing groups or introducing new members can alter behavioral and physiological functions. Larger animals may require more space to meet the performance standards.

The following information is based on the space recommendations in the <u>Guide and performance standards set in the UToledo Department of Laboratory Animal Resources</u>. Available space in each cage will be based on inside dimensions near the floor to account for the space actually occupied by the animals. Compliance with the following guidelines is required unless written exception has been approved by the Institutional Animal Care and Use Committee (IACUC) on the grounds of accomplishing scientific objectives. Divergences from this policy should be discussed with the veterinary staff. NOTE: For animals that are not listed below, contact a veterinarian.

MICE

Cage type	Floor area	Max # of animals in cage
Ventilated mouse cage	75 in ²	5 ^a
Static mouse cage	67 in ²	4

^a Ventilated cages may house up to 5 mice weighing greater than 25 grams. However, at this density 25-30% of the ventilated cages will need to be changed more frequently creating a variable compared to the other 70-75% that are changed every 14 days. This can negatively influence your research and DLAR recommends a max of 4 mice/cage.

Breeding cages should follow the IACUC policy "Rodent Breeding and Breeding Cage Densities"

VOLE

Standard ventilated or static rat cage (141 in²)				
Weight (g)	Floor area required	Max # of animals		
	(in²)/animal	in cage ^b		
Less than 60	10	5		
Up to 80	13	4		
More than 100	>19	3		

b This is based upon a density of 35% the maximum number of animals recommended in the Guide for hamsters. This is based upon the frequent, dilute urination of voles causing high moisture levels and wet/saturated bedding in the cage. To combat this, cages are changed more frequently and maximum animal numbers per cage are decreased appropriately.

RATS

Standard ventilated or static rat cage (141 in ²)				
Weight (g)	Floor area required	Max # of animals		
	(in²)/animal	in cage		
Up to 200	23	5		
Up to 300	29	4		
Up to 400	40	3		
Up to 500	60	2		
More than 500	>70	1 or 2 ^c		
Large static rat cage (268 in ²) 18.5"x14.5"x8"				
Weight (g)	Floor area required	Max # of animals		
	(in²)/animal	in cage		
Up to 200	23	9		
Up to 300	29	9		
Up to 400	40	6		
Up to 500g	60	4		
More than 500	>70	3		

Breeding cages should follow the IACUC policy named, "Rodent Breeding and Breeding Cage Densities"

RABBITS

Standard rabbit cage (5 ft²)				
Weight (kg)	Floor area required	Max # of animals		
	(ft²)/animal	in cage		
<2	1.5	3		
Up to 4	3.0	1		
Up to 5.4	4.0	1		
More than 5.4	>5.0	1 ^d		
Doe with litter	>5.0	1 ^d		

^d 1 requires double cage (two cages with the divider removed = 10ft²)

o Only 1 female with a littler can be housed in a standard rat cage.

^{° 1} or 2 animals depending upon size of animals and performance standards such that overcrowding does not exist.