PURPOSE:
To ensure proper rodent husbandry and to prevent the spread of disease between rodents housed in ventilated cages.

HOUSING AND CARE:
A. Mice/rats are generally socially housed in ventilated cages.
   1. For any animal that is individually housed, justification must be given in the animal use protocol and approved by the IACUC or AV.
B. All forms located in the room's notebook must be adequately filled out.
   1. Daily observation sheet
   2. Task sheets
   3. Temperature/humidity logs
      a. Temperature range: 68-79 degrees F
      b. Humidity range: 30-70%
C. Rooms should be checked daily for any operational deficiencies. Any deficiencies must be reported immediately to the facility manager.
D. Water bottles are filled as needed and changed out weekly.
E. Lixits for cages on automatic watering are checked twice a week to ensure proper function. Lixits are changed out as needed due to malfunction or at minimum once a month.
F. Fresh food is added to the cages as needed.
G. Cage lids, wire bars, and enrichment devices are changed out at least once a month. Cages are changed out as follows:
   a. Cages with 3 or more mice:
      i. Total change outs occur every two weeks (this includes wire bars, lids, bottoms, and enrichment)
      ii. Cage bottoms will be changed out every week (this includes new bedding and nesting material)
   b. Cages with 2 mice:
      i. Total change outs occur every two weeks (this includes wire bars, lids, bottoms, and enrichment)
   c. Cages with 1 mouse:
      i. Total change outs occur once a month (this includes wire bars, lids, bottoms, and enrichment)

ENRICHMENT:
A. Rodents are housed in groups to provide social interaction, unless otherwise justified.
   a. Strain Specific Mouse Housing:
i. CD-1: up to 3 mice per cage  
ii. Swiss Webster: up to 3 mice per cage  
iii. Balb/c: up to 5 mice per cage  
iv. C57: up to 5 mice per cage  

b. Rat Housing:  
i. Up to three small juvenile rats per cage  
ii. Up to 2 adult rats per cage  

**additional strains not mentioned above will be housed based on weight (Guide p.57)**

B. Nesting material is added to the cages to facilitate thermoregulation and provide opportunities for species-typical behavior (i.e. foraging, burrowing, nest building, etc.).

C. Enrichment tubes or huts are added to the cages to provide the rodents with shelter and also aid in thermoregulation.

ENRICHMENT IMPLEMENTATION:

A. Enrichment is provided on a rotational schedule by the technicians at change-outs. The rodents receive a different type of enrichment every two weeks (i.e. wheels, trapeze, alternative nesting material, etc.)

B. Exceptions to enrichment require adequate justification as to why environmental enrichment would interfere with the study. These exceptions must be stated in the approved institutional animal care and use protocol.

CAGE SANITATION:

A. Bedding from the cages is dumped in the trash and a scraper is used to remove bedding stuck to the bottom or corners of the cage. This is performed inside a bedding disposal station or in front of a biobubble. If neither are available, husbandry staff must wear an appropriately fitted n95 mask to dump bedding. The bedding is then removed from the facility and disposed in a designated dumpster outside the building.

B. Water bottles, cage lids, wire bar lids, enrichment devices, and cages free of bedding, are cleaned in the facilities’ cage or rack washer.

C. In facilities without access to a rack washer, racks should be cleaned and sanitized with Peroxigard every 6 months.

D. In facilities with access to a rack washer, racks are to be changed out and cleaned in the rack washer every 6 months.

ANIMAL ROOM SANITATION:

A. Floors are swept daily and mopped with disinfectant mixed according to manufacturer’s recommendations at least twice a week. Designated brooms and mops are to be used in each room.

B. All surfaces (including door frames, lights, and vents) are wiped down with disinfectant mixed according to manufacturer’s recommendations, weekly.
C. Floors, walls, and ceiling should be disinfected according to manufacturer’s recommendations, monthly.

**VENTILATED RACK MAINTENANCE:**

A. Check Daily:
   1. Power supply to rack
   2. Ensure all of the appropriate connections are capped
   3. Condensation in the cages- if present, report it to the facilities manager

B. Check Every Two Weeks:
   1. Inspect pre-filter- clean if necessary
   2. Wipe down the unit

C. Every 6 months:
   1. Change out the rack and hoses

D. Yearly:
   1. Replace the EXHAUST HEPA filter
   2. Replace the pre-filters

E. Every two years:
   1. Replace the SUPPLY HEPA filter

**ANIMAL HEALTH MONITORING:**

A. Animals are observed daily by animal care staff for evidence of illness or change in behavior.
   1. Everyone with access to the animal facility is responsible for immediately informing the facility manager or a university veterinarian when an animal becomes ill or a change in behavior is observed.
   2. Possible signs of illness are as follows:

<table>
<thead>
<tr>
<th>Species</th>
<th>Behavior</th>
<th>Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rodents</td>
<td>Decreased activity; excessive licking/scratching; self-mutilation; avoidance or aggression; abnormal locomotion (stumbling); writhing; no nest building</td>
<td>Piloerection; rough or stained haircoat; abnormal stance or hunched back; porphyrin staining (rats); rapid, shallow respirations</td>
</tr>
</tbody>
</table>
B. In the event of suspected illness:
   1. Record your observation on a sick animal card located in the ACS card system unit in the hallway of the animal facility—fill out the information on the card completely. Be sure to place the white copy behind the cage card on the rack and bring the yellow copy to the animal health technician, veterinarian or facilities manager for further examination.
   2. Contact the ACS facility manager or a university veterinarian:

   ACS Attending Veterinarian
   806-834-8588 Office
   806-239-2120 Cell Phone

   ACS Clinical Veterinarian
   806-834-7373 Office
   660-562-4425 Cell Phone

   ACS Facilities Manager
   806-834-2872 Office
   602-758-0670 Cell Phone