

## **Guidance:** Cleaning and Sanitizing Research Animal Equipment (Non-Cagewash)

*Version 1.0, Approved 02/13/2024.*

**Purpose:** To provide investigators with clear and consistent procedures for cleaning and sanitizing research animal equipment that is not routinely processed through the cagewash system. This equipment may include items like treadmills, rotarods, operant chambers, mazes, restraint devices, and anesthesia induction chambers.

**Scope:** This guideline applies to all research groups under an approved Institutional Animal Care and Use Committee (IACUC) protocol who utilize such equipment in their laboratories or procedural rooms.

### **I. Cleaning Agents and Methods:**

- **Monitoring and Validation:** The Guide for the Care and Use of Laboratory Animals emphasizes the importance of tailoring cleaning protocols to specific equipment and materials. This guideline does not prescribe specific methods for every type of research equipment, as some materials may be sensitive to certain disinfectants. Manufacturer instructions should always be followed.
- **Protocol Approval:** All cleaning methods must be clearly described and approved within the applicable IACUC protocol.
- **Validation Requirement:** Cleaning procedures must be validated using the methods outlined in this document.

### **II. Cleaning and Sanitizing Options:**

- **Mechanical Cage Wash (Preferred):** Whenever feasible, cleaning and sanitizing research animal equipment in a dedicated cage washer using hot water (143°F - 180°F) and appropriate detergents is the recommended method. This ensures thorough and consistent cleaning.
- **Manual Cleaning:** For equipment unsuitable for the cage washer, manual cleaning with hot water (143°F - 180°F), detergents, and/or chemical disinfectants is an option.
  - Immersion is preferred: If possible, fully submerge all equipment components in the cleaning solution for optimal cleaning and disinfectant contact. Remember to thoroughly rinse afterwards to remove any residual chemicals.

#### *For items that cannot be immersed:*

- Vacuum or wipe down: Remove visible dirt, hair, and dander from all animal contact surfaces using a wet cloth/sponge or a HEPA-filtered vacuum to minimize allergen exposure.
- Disinfectant application: Spray or mist animal contact surfaces with an approved disinfectant cleaner (see list below). Follow manufacturer instructions for proper dilution and contact time to ensure effective disinfection. Always adhere to manufacturer's safety guidelines when using disinfectants.

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### **III. Frequency and Documentation:**

- Minimum Cleaning Frequency: Clean equipment at least once daily after use, or more frequently if visibly soiled or contaminated.
- Cleaning Log: Maintain a log for each equipment item, documenting the dates of use and cleaning.

### **IV. Quality Assurance/Quality Control (QA/QC):**

- Annual Testing: Conduct biological evaluations at least once per year to validate the effectiveness of each cleaning and sanitation regimen. Document the testing procedures and results on the cleaning log.
- Contact the LAR Director to schedule an evaluation.
- Revalidation: Revalidate cleaning methods if any changes are made to the process.
- Unsatisfactory Results: If biological testing reveals inadequate cleaning, re-sanitize the equipment, and re-evaluate within 14 days. If two consecutive tests fail, consult LAR Director for assistance in reevaluating the cleaning regimen.

### **V. Approved Disinfecting Agents:**

- Peroxigard: Accelerated Hydrogen Peroxide (AHP)
- Chlorine Compounds: 10% bleach (made fresh daily), MB-10, or Clidox. Caution: Chlorine compounds can be corrosive to metals.
- Alcohol: While not a true sterilant, isopropyl alcohol, Sani Cloth wipes, or 70% ethanol may be acceptable for specific applications where other options are impractical. Note: Alcohol is ineffective against non-enveloped viruses and bacterial spores. Surfaces must be saturated and allowed to air dry.

**Conclusion:** By following these guidelines and adhering to approved cleaning and sanitation protocols, researchers can ensure the welfare of their animal subjects and maintain a clean and safe research environment. Remember to document all cleaning and testing procedures for future reference and to consult LAR veterinary or supervisory personnel if you have any questions or concerns.

### **Change Table:**

<b>Version</b>	<b>Description of Change</b>	<b>Approval Date</b>
1.0	New IACUC Guidance	02/13/2024