

Procedure: IACUC-58
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**UC Davis
Institutional Animal Care and Use Committee (IACUC)**

Title: Sanitization of Handwashed Equipment

I. Purpose:

Sanitation of materials that come into direct contact with laboratory animals is required. Effective sanitation generally requires both cleaning (the mechanical removal of organic debris) and disinfection (the removal or reduction of micro-organisms from surfaces) of contact surfaces and can be achieved via a variety of methods. While most of the animal caging and other reusable husbandry supplies/equipment used on campus is sanitized with automated cagewash equipment, it may be necessary for certain items (e.g., non-movable, specialized equipment, other) to be processed using alternative methods. It is important that these methods are well defined and periodically evaluated to ensure that sanitation standards are met. The purpose of this document is to provide guidance to investigators utilizing equipment that is not sanitized by a cage washer.

II. Policy:

1. Non-movable or otherwise specialized caging, behavioral equipment, induction chambers, or enrichment in indoor facilities that cannot be sanitized by a cage washer must be cleaned by hand. These items must be cleaned with soap and water to ensure removal of any visible organic debris including feces, food, and bedding. Scraping or soaking may be required to remove dried or mineralized residues.
2. Clean items must be treated with a chemical disinfectant at the appropriate concentration and contact time, as specified by the manufacturer. Examples of appropriate sporicidal disinfectants include chlorine compounds, peroxide compounds, and quaternary ammonium compounds. Alcohol is NOT a sterilant or a high-level (sporicidal) disinfectant. Disinfectants must be used according to manufacturer's guidelines to ensure appropriate dilution and contact time for disinfection. Personnel must follow the manufacturer's safety procedures when using disinfectants.

3. Validation of established sanitation procedures must be performed annually using RODAC plates or ATP testers. The most recent validation test results must be available for review when requested by the IACUC, USDA VMOs, or representatives of other authorized agencies.
4. Exception for Aquatic Animals: Sanitization of the tanks and enclosures can be done chemically, but this should be performed with caution as aquatic animals are highly susceptible to chemicals. If detergents are used, it is advisable to use products that are free of surfactants to facilitate removal after product use. Testing of primary enclosures that are broken down for sanitation is still recommended, but not required.
5. Exception: items used in outdoor enclosures/facilities require scheduled cleaning per Facility SOPs, but do not require sanitation testing.

III. Procedure:

1. For samples submitted to laboratories other than the Comparative Pathology Laboratory (CPL) or performed in-house, copies of testing results must be maintained by the animal facility, testing core, or PI laboratory.
2. When submitting RODAC plates to CPL for analysis the following information must be included with the submission: Date of test, location (building and room), type of test, and what was sampled.
3. For ATP testing, indicate what was sampled and date of sampling.
4. For all testing methods it must be indicated if the test is routine or a resample for questionable results.
5. In the case of questionable results on RODAC or ATP testing, an immediate retesting can be done if there is question regarding testing method or contamination. Otherwise, the equipment tested should be recleaned and re-sanitized in preparation for retesting. Retesting should occur within 30 days of the initial testing to verify effectiveness. For persistent failure results, a review of cleaning and sanitization methods should be performed.
6. The CPL submission sheet and more information can be obtained from CPL@ucdavis.edu or 530-752-2832 (or cpl.ucdavis.edu).
7. Results for all tests shall be available for review by the veterinarian and/or IACUC staff during visits and inspections.

IV. Resources:

1. ILAR, Guide for the Care and Use of Laboratory Animals
<http://nap.edu/12910>
2. Wayne State University "Sanitation Guidance Policy"
<https://research.wayne.edu/iacuc/sanitationguidancepolicy>
3. Lawrence, C et. al. "Management of Animal Care and Use Programs in Research, Educations, and Testing: Chapter 24 Aquatics"
<https://www.ncbi.nlm.nih.gov/books/NBK500413/>