

STANDARD OPERATING PROCEDURES
DIVISION OF COMPARATIVE MEDICINE
UNIVERSITY OF SOUTH FLORIDA

SOP#: 003.12

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TITLE:	Facilities for Aseptic Surgery for Non-rodent USDA Species
SCOPE:	All Animal Program Personnel
RESPONSIBILITY:	Facility Manager, All Animal Program Personnel
PURPOSE:	To Identify the Available Surgical Resources, and Outline the Proper Management and Maintenance of the Surgical Facilities used for USDA Regulated Species.

I. PURPOSE

1. To ensure the availability of high quality aseptic surgical facilities for research purposes.

II. RESPONSIBILITY

1. The Facility Manager is responsible for scheduling and coordinating all support and technical services required of the surgical facilities.

III. PROCEDURES

1. Non-rodent mammalian survival surgical procedures must be conducted within accredited facilities for non-rodent surgery, where separate areas are provided for pre-operative animal preparation, surgeon's pre-operative scrub, the operating room, and for post-operative monitoring and care of the involved animal(s). Accredited non-rodent surgical facilities are available at the College of Medicine (COM), the Heart Institute (MDD), and Center for Advanced Medical Learning and Simulation (CAMLs).
2. Ideally, walls are masonry block with epoxy paint, ceilings of plaster lathe with epoxy paint, floors of monolithic epoxy aggregate. Ceiling-mounted operating lights are present in the operating rooms, ventilation is 100% fresh air conditioned and heated, and all anesthetic gases are scavenged.
3. Surgical support areas are constructed of block masonry walls, plaster and lathe ceilings, both of which are painted with epoxy paint, and seamless epoxy aggregate. Autoclaves are available for instrument and pack preparation and sterilization.
4. Postoperative recovery areas are constructed of block masonry walls, plaster and lathe ceilings, both of which are painted with epoxy paint, and seamless epoxy aggregate.

5. Surgical areas are physically separated from corridors and animal housing areas. Procedural and surgical area air flows and pressure gradients are adjusted so that they are positive and airflow is toward the adjoining corridors.
6. Operating rooms and support areas used for aseptic (i.e., survival) surgery are cleaned and decontaminated prior to each use. The operating table, operating light, utility boom and anesthetic/monitoring equipment are wiped clean with an appropriate disinfectant as described in **Item #7** below. The floor in the vicinity of the operating station is swept and mopped with a disinfectant (e.g., Decon-Spore 200 Plus, or Oxivir). Ceilings, HVAC ducts and exposed fixtures are kept free of dust and debris. Adequacy of cleaning and decontamination of the operating room and support areas prior to aseptic survival surgical procedures involving non-rodent USDA regulated species is documented per **SOP #1010** entitled “**Microbiological Monitoring of Sanitation Procedures.**”
7. Disinfectants approved for use include:
 - a. **Decon-Spore 200 Plus-**
 - Active ingredient** - peroxyacetic and hydrogen peroxide solution
 - Preparation** – 6.0 ml/gal water
 - Safety** - strong oxidizer and corrosive-use in a well-ventilated area
 - PPE** - gloves and eye protection when handling/mixing concentrate
 - Uses** - sanitizing floors throughout the animal facility and sanitizing water bottle stoppers and sipper tubes by soaking for 10 minutes prior to washing.
 - Specific uses-** Mopping floors and floor machine
 - Efficacy** - Staphylococcus aureus, Enterobacter aerogenes, Escherichia coli, Listeria monocytogenes, Salmonella typhimurium, Psuedomonas aeruginosa, and Saccharomyces cerevisiae
 - Contact time** - 5 minutes at ambient temperature.
 - b. **Sporicidin**
 - Active ingredient** - phenol solution
 - Preparation** -used undiluted
 - Safety** – may cause eye irritation; avoid contact with skin or clothing
 - PPE** – gloves and eye protection recommended
 - Uses** - general disinfectant and deodorizer for hard non-porous **surfaces that do not come in contact with animals.** If used on surfaces that come in contact with animals, surface must be rinsed with alcohol and allowed to dry prior to animal contact.
 - Specific Uses-** medical equipment, countertops, carts, and walls
 - Efficacy** - germicidal including vegetative organisms, passes AOAC efficacy standards for institutional and hospital disinfection
 - Contact time** – 5 minutes for viruses, 10 minutes for bacteria
 - c. **Clidox S**
 - Active ingredient** -chlorine dioxide solution
 - Preparation** - diluted 1 part base: 18 parts water: 1 part activator
 - Safety** – corrosive, avoid contact with eyes and skin
 - PPE** – gloves and eye protection when handling/mixing concentrate
 - Uses** -general disinfectant for hard non-porous surfaces in laboratory animal procedural areas and for **surfaces that come in contact**

with animals. Corrosive however rinsing will reduce the possibility of corrosion

Specific uses- hard surfaces, countertops, carts, and walls

Efficacy -germicidal including vegetative organisms

Contact time - 5 minutes

d. **Chlorhexidine**

Active ingredient –chlorhexidine gluconate solution

Preparation - diluted 1 oz:1 gallon water

Safety – corrosive, avoid contact with eyes and skin

PPE – gloves and eye protection when handling/mixing concentrate

Uses - bacteriostatic and bactericidal, general disinfectant for use on rubber and surgical equipment.

Specific uses- anesthesia breathing hoses, bellows, flutter valves and hard non-porous surfaces of surgical monitoring equipment.

Efficacy - broad-spectrum biocide effective against Gram-positive bacteria, Gram-negative bacteria and fungi. Effective against many viruses.

Contact time - 1 minute

e. **Oxivir**

Active ingredient –accelerated hydrogen peroxide solution

Preparation – Oxivir Tb and Oxivir wipes are ready to use. Oxivir Five 16 concentrate is diluted 1 part concentrate: 16 parts water

Safety – excellent safety, avoid contact with eyes and skin

PPE – gloves and eye protection when handling/mixing concentrate

Uses -general disinfectant for hard non-porous surfaces in laboratory animal procedural areas and for **surfaces that come in contact with animals.**

Specific uses- forceps or gloved hand-dipping between handling animals, biosafety cabinet chambers, animal restrainers/containers used in imaging (e.g., irradiator pie cages, anesthetic chambers/nose cones, MRI/Xenogen chambers, behavioral equipment)

Efficacy – virucide, bactericide, fungicide, mildewcide.

Contact time – Disinfects in 1 minute; Tuberculocidal in 5 minutes

8. Sporidicin use can be followed by an alcohol rinse/wipe to remove surface residue after the required three minute contact time. Clidox use must be followed with an alcohol rinse/wipe after the required five minute contact time, when used on surfaces that will corrode. Do not use alcohol and/or products containing alcohol on Plexiglas as they may craze/damage this material.
9. Corridors and support areas are swept and cleaned using Decon-Spore 200 Plus and/or an automatic floor washer. Counter tops are wiped clean using a suitable disinfectant solution such as Sporidicin.
10. Mop heads and buckets are cleaned after each use and then sanitized in the rack washer at the COM. At the CAMLS mop-heads are washed, rinsed, and sanitized by hand.
11. A ***Decontamination of Common Procedural Area Log*** is maintained to indicate:
 - a. Room number of area being cleaned/sanitized

- b. Items/equipment cleaned/sanitized
- c. Date cleaning/sanitation took place
- d. Initials of the individual responsible for performing the cleaning/sanitation

Approved:

Date: