

Institutional Animal Care and Use Committee

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER

POLICY STATEMENT

Aseptic Technique for Animal Surgery

To assure appropriate patient care and compliance with the Office of Laboratory Animal Welfare (OLAW), the United States Department of Agriculture – Animal and Plant Health Inspection Service (USDA – APHIS), and the 8th Edition of the Guide for the Care and Use of Laboratory Animals, the IACUC requires the use of aseptic technique for all survival surgeries, unless scientific justification is provided.

Aseptic technique is a set of specific practices and procedures performed under carefully controlled conditions with the goal of minimizing microbial contamination to the lowest possible practical level. The goals of aseptic technique are to protect the patient from infection and to prevent the spread of pathogens.

Standard aseptic technique for non-rodent **USDA-covered species** includes:

- Preparation of the patient:
 - Removal of hair/fur over the surgical site
 - Preparation of the site by scrubbing with the skin with a disinfectant followed by appropriate rinse (e.g., chlorhexidine/sterile water, betadine/alcohol). This process is repeated 3 times.
 - Draping of the surgical site.
- Preparation of the surgeon:
 - Hand scrubbing and rinsing of all hand surfaces
 - Sterile gloves
 - Face mask
 - Head cover
 - Surgical gown
- Preparation of instruments and supplies:
 - All instruments, supplies, and implants must be appropriately sterilized prior to use in the surgery (autoclave, gas sterilization, chemical sterilization).
 - Liquid sterilants may be used with adequate contact times (per manufacturer's instructions) and assured activity of sterilant (fresh solution). Instruments and supplies must also be rinsed with sterile water or saline before use.
- Survival surgeries in non-rodent species must be conducted in a dedicated surgical facility, unless an exception is approved by the IACUC.

Standard aseptic technique for **rodents** includes:

- Preparation of the patient:
 - Removal of hair/fur over the surgical site
 - Preparation of the site by scrubbing with the skin with a disinfectant followed by appropriate rinse (e.g., chlorhexidine/sterile water, betadine/alcohol). This process is repeated 3 times.
 - Draping of the surgical site (preferred if possible).
- Preparation of the surgeon:
 - Hand scrubbing and rinsing of all hand surfaces
 - Sterile gloves
 - Face mask
 - Scrub shirt/Lab coat (recommended)
- Preparation of instruments and supplies:
 - All instruments, supplies, and implants must be appropriately sterilized prior to use in the surgery (autoclave, gas sterilization, chemical sterilization, hot bead sterilization).
 - Liquid sterilants may be used with adequate contact times (per manufacturer's instructions) and assured activity of sterilant (fresh solution). Instruments and supplies must also be rinsed with sterile water or saline before use.

Rodent survival surgery must be conducted in an area that is dedicated for that use during the time that the procedures are being prepared and performed. It is acceptable to use instruments on successive rodents provided that the tips of the instruments are sterilized between animals appropriately (e.g. hot bead sterilizer). For more information on rodent survival surgery, please refer the [IACUC Guidelines for Rodent Survival Surgery](#).

Modifications in standard aseptic technique may be approved by the IACUC if scientifically justified. Each request for the use of non-standard aseptic techniques will be considered and reviewed by the IACUC on a case-by-case basis.

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