1. Purpose

To ensure optimal survival surgery results in laboratory rodents to promote good science and animal welfare.

1. Scope

This policy applies to all personnel performing survival surgery on rodents and providing post-operative care.

1. Definitions
   1. Survival Surgery:

Survival surgery is a surgical intervention in which the animal is anticipated to recover from anesthesia, regardless of the survival time. Survival surgery is further defined as either major or minor.

* 1. Major Survival Surgery:

Major survival surgery penetrates and exposes a body cavity, produces substantial impairment of physical or physiological functions, or involves extensive tissue dissection or transection (e.g., laparotomy, thoracotomy, joint replacement, and limb amputation).

* 1. Minor Survival Surgery:

Minor survival surgery does not expose a body cavity and causes little or no physical impairment (e.g., jugular, or femoral cannulation, subcutaneous osmotic pump placement, wound suturing).

1. General Guidance
2. The National Research Council Guide states that aseptic technique must be used for all survival surgery. Aseptic technique is used to reduce microbial contamination to the lowest possible practical level. Components of aseptic technique include preparation of the animal, preparation of the surgeon, sterilization of surgical instruments and implanted materials, and good tissue handling technique.
3. Presurgical planning should identify personnel, their roles and training needs, and the equipment and supplies required for the procedures planned. Presurgical planning should specify the requirements for post-surgical monitoring, care, and record keeping, including the person who will perform these duties.
4. Aseptic surgery should be conducted in dedicated spaces if an exception is justified as an essential component of the research protocol and approved by the IACUC.
5. Careful intraoperative monitoring increases the likelihood of a successful surgical outcome. Monitoring includes routine evaluation of anesthetic depth and physiological functions, including maintenance of body temperature. See IACUC Guidelines for Rodent Anesthesia Monitoring.
6. A written survival surgery/post-operative care log must be maintained. See IACUC Guideline “[Post-Operative Care of Rodents](https://www.montana.edu/orc/iacuc/policies/post-operative-care-of-rodents.html)”.