PACUC Policy

Survival Surgery and Post-Surgical Monitoring of Animals Used in Teaching, Testing and Research

Definitions
- **Major surgery:** Penetrates and exposes a body cavity or produces substantial impairment of physical or physiologic functions.
- **Minor surgery:** Does not expose a body cavity and causes little or no physical impairment.
- **Survival surgery:** The animal awakens from surgical anesthesia.
- **Non-survival surgery:** The animal is euthanized before recovery from anesthesia.

Introduction
The Animal Welfare Act, Public Health Service (PHS) Policy, the “Guide for the Care and Use of Laboratory Animals” (Guide) and the “Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching” (Ag Guide) all specifically require that the IACUC (PACUC) review and the institutional veterinarian oversee surgical procedures as well as pre- and post-operative animal care programs. The following PACUC policy statements will serve to clarify the directives from the USDA and PHS regarding this topic.

Survival Surgery Procedures and Post-Surgical Monitoring
All survival surgery will be performed using aseptic procedures, including surgical gloves, masks, sterile instruments and aseptic techniques. Major operative procedures on non-rodent mammalian species may be conducted only in facilities intended for that purpose which shall be operated and maintained under aseptic conditions. Non-major operative procedures on all species and surgery on rodents do not require a dedicated facility, but must be performed using aseptic procedures and in areas of the laboratory or facility where cleanliness can be assured and unnecessary traffic and activities can be minimized at the time of surgery.

The principal investigator is responsible for providing pre- and post-procedural care, seeking Laboratory Animal Program (LAP) veterinary care or consultation, coordinating any specialized animal care and documenting care of the animal(s) through appropriate record-keeping. Accurate records regarding surgical procedures, anesthesia, recovery and post-procedural care must be kept and be made readily available to the PACUC, LAP veterinary staff and representatives of regulatory organizations. For non-rodent mammalian species (e.g., dogs, cats, rabbits, pigs etc.), individual records must be kept. For other species, the procedural records may be entries in laboratory notebooks or other well-organized study records. Records should include appropriate procedural details, dates, personnel, and pre- and post-procedural condition of the animals. Notes during the immediate post-procedural recovery period must include frequent (at least every 15 minutes until recovery from anesthesia) written observations of the animal’s condition. Examples of surgical records, criteria that need to be monitored and recommended post-operative/procedure monitoring records are available with this document or can be obtained at [https://www.purdue.edu/research/regulatory-affairs/animal-research/forms.php](https://www.purdue.edu/research/regulatory-affairs/animal-research/forms.php)

Any animal, including rats and mice, that develops unexpected surgical or post-surgical complications should be reported to the LAP in a timely manner. Animals that die unexpectedly during or after surgery or are euthanized because of post-surgical complications must also be reported to LAP.

After general anesthesia, at least daily post-operative monitoring must be performed for a minimum of 3 days after a surgical procedure. Details as to parameters to be monitored, analgesics given, and length of time to be monitored must be included in the approved PACUC protocol.

Originally approved May 2010
Last approved by PACUC 04/17/2019
All personnel engaging in surgical procedures on animals must be appropriately trained in aseptic surgical technique and have their training documented with the PACUC prior to performing unsupervised surgeries.

Multiple major survival surgeries on a single animal may only be performed under special circumstances and must be approved by the PACUC prior to performance.

** Any exceptions to this policy must be reviewed and approved by PACUC**