



Subject: Anesthesia, Surgery, and Analgesic Post-Procedure Records for Laboratory Rodents

Source: Office of Laboratory Animal Resources

Effective Date: 04/11/22

Applies to: All mice of the genus *Mus* and rats of the genus *Rattus* housed in UC Denver facilities

Reference: PHS Policy on Humane Care & Use of Laboratory Animals; Guide for the Care & Use of Lab Animals, Field et al. ILAR Journal; 48(1):37-41, 2007



Introduction

The PHS Policy on Humane Care and Use of Laboratory Animals in conjunction with the Guide for the Care and Use of Laboratory Animals states that medical records are considered crucial for documenting animal well-being as well as tracking animal care and use within facilities. It is the goal of the Animal Care and Use program at UC Denver | Anschutz Medical Campus to insure, with these records, that appropriate actions are being taken to minimize or eliminate painful/ distressful procedures by performing those procedures using sedation, analgesia, or anesthesia.

Policy Statement

Investigators are responsible for maintaining accurate records of sedation, anesthesia (with or without surgery), and surgery for survival and terminal procedures. Records for survival procedures should also address post-operative care including analgesic administration. These records serve as documentation that the procedures were conducted humanely by appropriately trained individuals. These records should be established at the time of the surgical procedure and provide sufficient information to allow the reader to determine what was done to the animal, when it was conducted, by who, and include documentation of appropriate anesthetic/analgesic administration in agreement with the IACUC Animal Protocol. This policy covers the time period during the use of anesthetic and/or analgesic drugs as administered appropriately for the procedure performed. These records should be kept until euthanasia of the animal or for the length of the 3 year IACUC protocol (whichever is longer).

Procedures/Resources

- Records should specifically include:
 - Date of procedure, IACUC protocol number, animal/cohort identification, and surgeon name(s)
 - Brief description of the procedure
 - All drugs administered, including dose, time (if group, first and last animal), and route of administration
 - Time of anesthetic induction and recovery (if group, first and last animal)
 - Any abnormalities or changes from routine procedure
 - Confirmation of post-procedural analgesics administered including dose, time and route given
 - Initials of the person administering drugs and making observations
- Records should be kept in an accessible location and filed in an organized manner by the investigator or his/her designee.
- Records shall be readily available to the Institutional Animal Care and Use Committee, veterinary staff, and representatives of accrediting organizations, when requested. The IACUC will routinely review these records during semiannual inspections and/or Post Approval Monitoring (PAM) sessions.
- If you are using USDA-covered rodents, such as guinea pigs, hamsters, gerbils, or naked mole rats, please contact a member of the veterinary staff for direction on appropriate surgical/procedural monitoring records.
- A rodent anesthetic record template will be provided in MS Word format which can be used or modified for individual investigator use. Using the provided form is not required, but maintaining records is required.

Exemption

- Documentation is not required when a gas anesthetic is used for restraint, for a procedure that is either considered non-painful or demonstrates momentary pain, and takes less than 5 minutes of anesthetic administration. Records for post procedural analgesics still may be required.

- Records are not required when anesthetics are used to perform euthanasia or lead to euthanasia within 5 minutes of the onset of anesthesia. Examples: anesthetic administered for tissue harvest, pericardial perfusion, or immediately prior to a secondary physical method of euthanasia.

Anesthetic Recovery

- Rodents must be monitored until fully recovered from anesthesia. Recovery from anesthesia is indicated by the ability to right themselves when laid on their side, maintain a sternal body position, and demonstrate spontaneous movement in response to environmental stimulation such as cage manipulation. Animals should be monitored during anesthetic recovery at least every 5-10 minutes. Frequency may depend on the procedure and animal's health condition.
 - If you need to step away from a recovering animal (maximum of 10 minutes), a note with name, date, time, and contact phone number should be left with the animal(s).

Per regulatory requirements, failure to comply with this policy may result in notification of your funding agency (e.g. NIH) and regulatory agencies (e.g. USDA) that your research has violated federal and/or local policies regarding the humane use of animals. This notification may affect continuous funding of your animal-related research. Further, depending on the violation, you may be required to take additional training and/or your privilege to conduct animal research at CU Denver | Anschutz might be temporarily suspended or even completely revoked.