

University of Colorado at Boulder, Office of Research Integrity Institutional Animal Care and Use Committee

SOP #13

Title: Restraint

This standard operating procedure (SOP) is intended to provide information on the definition of restraint, the types of restraint, and to establish procedures to be followed during restraint. (Guide, 8th edition, pages 29-30)

All restraint must be justified in the animal use protocol and approved by the IACUC; restraint devices are not considered a normal method of housing or as a convenience in handling or managing animals.

Restraint is defined as the use of manual or mechanical means to limit some or all of an animal's normal movement resulting in any significant limitation on normal spontaneous movement or postural adjustments.

Routine restraint of laboratory animals is defined as confinement manually, or in a standard species-specific restraint device, for less than 15 minutes:

- As long as this level of restraint does not cause obvious distress or discomfort to the animal, provide a brief indication of the routine restraint device and estimated time of restraint in the Protocol Application Form.
- This would be pain category A on the UCB IACUC protocol (USDA category C).
- Any restraint of conscious animals for longer than 15 minutes or use of non-standard species-specific restraining devices is considered non-routine restraint.

Non-routine restraint is defined as animal restraint for longer than 15 minutes, or which is more confining than standard restraining devices commonly used for that species, or which causes changes in the animal's behavior, or physiologic parameters, suggesting that the animal is experiencing distress or discomfort:

- Restraint that involves adverse physiological responses or is likely to induce significant physical or psychological distress to the animal will require checking Pain Category D (USDA category E) on the UCB IACUC protocol form regardless of the restraint duration or technique.
- Non-routine restraint must be fully described and scientifically justified in the Protocol Application Form.
- Each animal use protocol proposing the use of non-routine restraint will be considered and reviewed by the IACUC on a case by case basis.
- When non-routine restraint devices are used, they should be specifically designed to accomplish research goals that are impossible or impracticable to accomplish by other means.
- Non-routine restraint should be avoided unless it is essential for achieving research objectives and is approved by the IACUC.

The following are important guidelines for prolonged or non-routine restraint:

- Restraint devices should not be considered normal methods of housing.
- Restraint duration should be the minimum needed to accomplish research objectives.
- Animals should be adapted or trained to the restraint devices (species and procedure specific information defined by Investigator in IACUC protocol) if possible. Animals that fail to adapt should be removed from the study.
- Animals should be observed frequently while in restraint devices (species and procedure specific information defined by Investigator in IACUC protocol).
- Veterinary monitoring and care should be provided if lesions or illness associated with the restraint are observed.