

Title: IACUC Policy on Euthanasia (CMU – 0028 – 01)

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Authorized by: Institutional Animal Care & Use Committee

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I. BACKGROUND

The Central Michigan University Animal Welfare Assurance to Public Health Service A4076-01 ("PHS Assurance") states that Central Michigan University (CMU) will comply with the Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals. PHS Policy requires compliance with The Animal Welfare Act and Animal Welfare Regulations (AWARs) as well as the Guide for the Care and Use of Laboratory Animals ("The Guide"). Public Health Policy (PHS) requires Institutional Animal Care and Use Committees (IACUC) to determine that methods of euthanasia proposed in protocols meet criteria consistent with the recommendations of the American Veterinary Medical Association (AVMA).

II. PURPOSE

Animals being euthanized should not experience pain, fear, or other significant stress prior to their death. The term euthanasia is derived from the Greek terms "eu" meaning "good" and "thanatos" meaning "death". The term is usually used to describe ending the life of an individual animal in a way that minimizes or eliminates pain and distress. The PHS Policy requires that euthanasia be conducted according to the American Veterinarian Medical Association (AVMA) Guidelines for Euthanasia of Animals (2020 Edition). The AVMA Guidelines set criteria for euthanasia and specify appropriate euthanasia methods and agents based upon the best literature and empirical evidence that minimizes pain and distress to animals during euthanasia.

III. POLICY

Methods not covered in approved IACUC standard operating procedures need to be approved by the IACUC. The Principal Investigator should confer with the attending or clinical veterinarian prior to submitting the protocol to the IACUC. The IACUC committee must grant an exemption to any deviation from approved policies and procedures.

All individuals responsible for euthanasia of research animals must be qualified and trained to perform euthanasia humanely, per the IACUC training policy (P-003-02). The Principal Investigator is responsible for ensuring appropriate documentation. Documentation of personnel training may be reviewed by the IACUC.

Unintended recovery of animals after apparent death constitutes serious noncompliance with PHS Policy and serious deviation from the provisions of the Guide for the Care and Use of Laboratory Animals.

IV. DEFINITIONS



Euthanasia – In the context of this policy, euthanasia is the act of inducing humane death in an animal with rapid unconsciousness and death with a minimum of pain, discomfort, or distress.

V. PROCEDURES

- A. Investigators will perform euthanasia following approved IACUC standard operating procedures. In the absence of an approved IACUC standard operating procedure, the euthanasia procedures must be detailed in an approved IACUC protocol.
- B. Deviation to those procedures must be detailed in an approved IACUC protocol.
- C. Central Michigan University Institutional Animal Care and Use Committee has adopted standard operating procedures to:
 - 1. The euthanasia method must be appropriate to the research goals, species and age of the animal, approved in the animal study proposal and must conform to the most recent AVMA guidelines on euthanasia.
 - 2. Assist the research community by clarifying the specific procedures relating to euthanasia.
 - 3. Promote best practices and ensure that pain and distress are minimized during euthanasia.
- D. Euthanasia techniques should result in rapid unconsciousness followed by cardiac or respiratory arrest and ultimately loss of brain function.
- E. The techniques should minimize stress and anxiety experienced by the animal prior to unconsciousness. Stress can be further minimized by technical proficiency and humane handling of the animals to be euthanized.

VI. REFERENCES

American Veterinary Medical Association, Panel on Euthanasia. (2020). AVMA guidelines for the euthanasia of animals: 2020 edition. American Veterinary Medical Association. https://www.avma.org/sites/default/files/2020-01/2020-Euthanasia-Final-1-17-20.pdf

National Institutes of Health, Office of Laboratory Animal Welfare. (2015). *PHS policy on humane care and use of laboratory animals*. U.S. Department of Health and Human Services. https://olaw.nih.gov/policies-laws/phs-policy.htm

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