Euthanasia Guidelines

Euthanasia is the act of humanely killing animals by methods that induce rapid unconsciousness and death without pain or distress. Unless a deviation is justified for scientific or medical reasons, methods should be consistent with the current AVMA Guidelines on Euthanasia.

In evaluating the appropriateness of methods, some of the criteria that should be considered are:

- Ability to induce loss of consciousness and death with no or only momentary pain, distress, or anxiety
- Reliability
- Irreversibility
- Time required to induce unconsciousness
- Appropriateness for the species and age of the animal
- Compatibility with research objectives
- The safety of and emotional effect on personnel

Euthanasia may be planned and necessary at the end of a protocol or as a means to relieve pain or distress that cannot be alleviated by analgesia, sedatives, or other treatments. Criteria for euthanasia include:

- Protocol-specific endpoints that will enable a prompt decision by the veterinarian and the investigator to ensure that the endpoint is humane and, whenever possible, the scientific objective of the protocol is achieved.
- Euthanasia should be carried out in a manner that avoids animal distress.
- If possible, euthanasia should be performed in another room, away from the other animals.
- The selection of specific agents and methods for euthanasia will depend on the species involved, the animal’s age, and the objectives of the protocol.

It is essential that euthanasia be performed by properly trained personnel skilled in methods for the species in question and in a professional and compassionate manner.

- **All training on euthanasia methods should be documented in personnel training files.**

All methods of euthanasia should be reviewed and approved by the veterinarian and IACUC.

Additional Guidance on the Use of Inhalant Gas for Euthanasia of Rodents

When an inhalant gas (e.g., CO2, isoflurane, sevoflurane) is used to euthanize animals, this must be followed by a physical method to confirm death. Examples of confirmatory physical methods include decapitation, cervical dislocation and creation of bilateral pneumothorax. For additional information regarding CO2 Euthanasia in rodents, including euthanasia of pregnant animals and neonates, please refer to ULAR SOP “Rodent Euthanasia using Carbon Dioxide”.

**Guidance on the Use of CO2 in Poultry and Mink** (Contact the appropriate Farm Manager for methods of euthanasia)

Please refer to the following SOPs for detail regarding the use of CO2 as a means of euthanasia in these species:

- Poultry Teaching and Research Center
- Fur Animal Research Farm
- MSU Student Organic Laying and Meat Poultry

**NOTE:** Euthanasia should be done with regard for the welfare of the animals