

EUTHANASIA OF NEONATAL RODENTS

Neonatal rodents are unusually resistant to hypoxia and to the inhalant anesthetics often used as euthanizing agents in adult rodents (i.e., CO₂). Inhalant agents alone should not be used in neonatal rodents. Inhalants may be used to induce unconsciousness, followed by some other method of euthanasia. The IACUC recommends the following euthanasia methods for neonatal rodents:

- The neonate is euthanized by an overdose of injectable anesthetic, given IP.
- The neonate is euthanized by exposure to hypothermia (not direct exposure to ice) for approximately 5 minutes until there is no response to noxious stimuli (i.e., foot pinch). Once there is no response to noxious stimuli, the neonate is rapidly and humanely euthanized by decapitation.
- The neonate is euthanized by exposure to 100% CO₂ for a minimum of 30 minutes. Pure CO₂ can be combined with mild hypothermia.
- Cervical dislocation by trained personnel.

Any deviation from this guideline concerning euthanasia of neonatal rodents will be considered and reviewed by the IACUC on a case by case basis.