



THE UNIVERSITY OF TOLEDO
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

SUBJECT: Euthanasia of Neonatal Rodents

DATE: June 13, 2018

Guidelines for Euthanasia of Neonatal Rodents

Neonatal rodents (mouse, rat, and hamster pups up to 10 days of age) are extremely resistant to hypoxia resulting in a prolonged time to unconsciousness with CO₂ is used as euthanasia. For this reason, the American Veterinary Medical Association (AVMA) does not endorse CO₂ overdose as a method of euthanasia for neonatal pups. Acceptable methods include overdose with chemical anesthetics, decapitation with surgical scissors, or cervical dislocation. Fetuses and altricial neonates (less than 5 days old) may be euthanized through rapid freezing in liquid nitrogen.

References

1. AVMA Guidelines for the Euthanasia of Animals, 2013 Edition.
<https://www.avma.org/KB/Policies/Documents/euthanasia.pdf>
2. Pritchett K, et al. Euthanasia of neonatal rats with carbon dioxide. *JAALAS*, 4823-27, 2009.
3. Guidelines for the Euthanasia of Rodent Fetuses and Neonates, ARAC Guidelines 04/10/13.
http://oacu.od.nih.gov/ARAC/documents/Rodent_Euthanasia_Pup.pdf