



Euthanasia is derived from the Greek terms *eu* meaning *good* and *thanatos* meaning *death*. The use of humane techniques to induce the most rapid, painless, and distress-free death possible is the goal. Please carefully read and follow these instructions. If you have questions or are uncomfortable performing this task consult the facility manager for assistance.

CO₂ from compressed gas cylinders is an acceptable agent to use for euthanasia in rodents but must be performed properly to be effective and humane. In all instances, a secondary (adjunctive) method must be performed to ensure death. The procedures described below are for adult animals. Neonatal and fetal rodents are resistant to CO₂ and special procedures are required. Consult your IACUC protocol for the euthanasia method approved for your animals.

1. Animals should be euthanized in their **home cage** whenever possible. When this is not possible a clean cage of the same dimensions can be used.
2. The enclosure used for euthanasia must be **transparent** so the animals can be observed throughout the procedure.
3. Animals living in the same cage may be euthanized together. Adult rodents should not be mixed together in a cage for euthanasia. Weanlings of the same species may be euthanized in a group as long as each has sufficient space to stand on all four feet and turn around.
4. To avoid exposure pain the chamber **must** be **gradually filled** with gas at a displacement rate of **30-70% volume/minute** (instructions to achieve a 50% displacement rate are posted at CO₂ stations).
5. CO₂ flow **must** be maintained for **at least 1 (one) minute** after respiratory arrest of the animals.
6. Animals being euthanized should **not** be left alone until the procedure is completed and **death is verified**.
7. **Verification/confirmation of death must be performed on each animal before carcass disposal.** *Consult your IACUC approved protocol for secondary method details.*
8. Euthanasia equipment should be cleaned after use.

References:

- AVMA Guidelines for the Euthanasia of Animals, Edition 2020
- Guide for the Care and Use of Laboratory Animals, Edition 2011