

UCAR Guideline: Euthanasia for rodent embryos, fetuses and neonates

A. Embryos and fetuses

The mother may be euthanized using an AVMA approved method. The uterus is removed, and embryos/fetuses removed from the uterine horns. Embryos/fetuses are then euthanized. Approved methods include:

- cervical dislocation
- decapitation
- removal of major organ/opening a major vessel
- opening the chest
- hypothermia followed by freezing or one of the above methods

Embryos/fetuses may also be exposed to CO₂ for euthanasia, but are relatively resistant to the effects of CO₂, so the time must be increased (at least ten minutes). A second physical method to insure death must be employed.

B. Neonates up to ten (10) days of age

1. Neonates may be euthanized using AVMA approved methods for adults with the following exception:

CO₂ may be used for euthanasia, but the time of exposure must be increased (at least ten minutes). As with adults, a second, physical method must be used to insure death. Approved methods include:

- cervical dislocation
- decapitation
- removal of major organ/opening a major vessel
- opening the chest
- hypothermia followed by freezing or one of the above methods

2. Neonates up to ten (10) days of age may also be anesthetized by hypothermia. Care must be taken to protect the animal's skin from freezing by imposing a barrier between the animal and the source of cold. A good method is to place the neonate in a glove finger and place it into ice water until the animal is unresponsive. Animals may also be placed on dry ice with paper towels or other barriers between the animal and the dry ice. A second physical method must be used to ensure death. These include those listed above, and may also include freezing.

3. Neonates older than ten (10) days must be euthanized using the same procedures approved for adults.