

UCAR Guideline: Euthanasia for Rodent Embryos, Fetuses and Neonates

A. Embryos and fetuses from mice, rats, gerbils and hamsters (greater than E 15) or guinea pigs (greater than E 35)

1. If you have a pregnant dam in which you do not need to harvest the embryos/fetuses then the dam may be euthanized using an AVMA approved method. According to the 2013 AVMA Guidelines for the Euthanasia of Animals S2.2.4.1, "Rodent fetuses along with other mammals are unconscious in utero and hypoxia does not evoke a response. Therefore, it is unnecessary to remove fetuses for euthanasia after the dam is euthanized".

Viable embryos/fetuses (i.e. those which have been removed or harvested from a live dam for experiments) and allowed to breathe must be euthanized by cervical dislocation or decapitation. If you need the intact fetus preserved in fixative, it must be rendered unconscious by deep anesthesia or euthanasia first.

Neonates up to seven (7) days of age may also be anesthetized by hypothermia (see below). Care must be taken to protect the animal's skin from freezing by imposing a barrier between the animal

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B. Neonates up to seven (7) days of age

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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

Neonates older than seven (7) days must be euthanized using the same procedures approved for adults.

References:

- AVMA Guidelines for
- <https://www.aaalac.org/accreditation/RefResources/ReportofACLAMTaskForceonRodentEuthanasia.pdf>