

- SOP No:** AHT 37(b)
- SUBJECT:** Euthanasia of rodent embryos (March 2015)
- DATE ISSUED:** 02.05.2012
REVISED: 04.03.2015
- REASON FOR USE:** As an aid in the study of early mammalian development
- POLICY:** Operator must be experienced and competent at this technique
- PRECAUTIONS:** Gloves, eye protection, mask, long-sleeved gown, closed in shoes.
- EQUIPMENT:** anaesthetic of choice
sharp scissors
liquid N₂ (-210°C), ice slurry (0°C), liquid CO₂ (-56.6°C) or dry ice (-78.5°C)
- PROCEDURE:** If a foetus is removed from an anaesthetized mother, and is also insensible, then it may be killed by decapitation or removal of the heart. However, when the foetus is to be removed an increased amount of anaesthetic must be administered to the dam and maintained for longer to ensure that the anaesthetic has crossed the placenta. In many cases inhalational anaesthetics will not anaesthetize a foetus. Foetuses less than 4g not anaesthetized prior to removal from the dam may be killed by either decapitation or rapid cooling in liquid nitrogen (-210°C), ice slurry (0°C), liquid CO₂ (-56.6°C) or dry ice (-78.5°C).
- RECOMMENDATIONS:** The time at which the neural tube develops into a functional brain (about 60% gestation) must be taken as the time at which the foetus may perceive pain and should therefore be killed humanely.



CHAIR OF AEC

REFERENCES

1. American Veterinary Medical Association [AVMA] Guidelines on Euthanasia [June 2007].
http://www.avma.org/issues/animal_welfare/euthanasia.pdf