

Research Animal Standard Operating Procedures (SOP) must meet the following criteria:

1. Describe procedures or activities involving research animal(s) common to more than one research project.
2. Support the handling and or performance or undertaking of a procedure(s), involving an animal, in the same way on each occasion it is performed.
3. Describe a procedure or activity involving a research animal(s) undertaken by more than one person; and
4. Describe a procedure or activity involving a research animal(s) that will be undertaken in more than one location.

Name of Procedure	Euthanasia by decapitation	
Species	Neonatal rats and mice	
ACEC	Reference	SOP#143- April 22 - Euthanasia by decapitation- neonatal rats and mice
	Author	Neil Spratt
	Version	1.1
	Date approved	22 April 2022
	Date for review	21 April 2025
	Procedure classification	2
Ethical considerations	<ol style="list-style-type: none"> 1. Respect for animals must underpin all decisions and actions involving the care and use of animals for scientific purposes. 2. The procedure must be performed according to current best practice to support the wellbeing of the animal. 3. Persons performing this procedure must be competent in the procedure or be under the direct supervision of someone who is competent. 	

Details

Purpose

To describe the euthanasia of neonatal rats and mice via decapitation in such a way as to ensure rapid death with minimal distress.

Description of procedure

EQUIPMENT

1. Heavy pair of sharp scissors, or rodent guillotine

PROCEDURE

1. Euthanasia must be carried out in a quiet place away from other animals.
2. Ensure that only one animal is dealt with at a time. Any other animals must be kept in a separate room and the cage covered with a sheet.
3. The scissor or guillotine must be checked before proceeding to ensure the blades are sharp and operation is smooth.
4. The scissors or guillotine must be rinsed clean between animals to remove all traces of blood and tissue.
5. Pick up the neonatal animal and hold it gently around the body, between the finger and thumb of the non-dominant hand. Keep fingers and thumb away from the neck area.
6. If using scissors:
 - a. Using the dominant hand, open the scissors and place the blades either side of the neck of the neonate
 - b. Close the scissors in a quick, smooth action.
7. If using a guillotine:
 - a. Place the head of the neonate between the guillotine blades
 - b. Close the blades quickly and firmly.
 - c. Ensure that the guillotine blades are serviced/sharpened on a regular basis.
8. In all cases do not proceed with the decapitation unless it is certain that the neonate's head and neck are in a suitable position to perform the decapitation cleanly and with a single stroke, without injuring the operator.



Rodent Guillotine



Sharp Scissors

NOTES:

- This procedure must only be performed by people who are experienced, or under the supervision of an experienced person. If the procedure is done incorrectly, it can lead to the animal suffering severely.
- Less experienced personnel should be supervised by a person experienced in the procedure and should first anaesthetise the animal following the appropriate ACEC approved SOP before performing decapitation.
- Decapitation using scissors is only suitable for neonatal rats and mice up to 10 days of age.
- Personnel carrying out this procedure should take care not to injure themselves.

References

AVMA Guidelines for the Euthanasia of Animals: 2020 Edition

www.avma.org/sites/default/files/2020-02/Guidelines-on-Euthanasia-2020.pdf

ACEC Chair

