



Curtin University Standard Operating Procedure

RABBIT EUTHANASIA

Number: HUS 22

Version: 2.1

Date: 15/03/2018

Date of Approval: 15/03/2018

Reviewed:

DATE					
REVIEWER					

Aim/Purpose: To humanely euthanase rabbits in the Building 300 Facility.

All employees have a duty of care (see Occupational Health and Safety) to ensure their own health and safety, and that of their fellow workers at all times.

ALL ANIMALS MUST BE HANDLED HUMANELY i.e. carefully and kindly.

Guidelines for Euthanasia in Rabbits

General Comments:

Required Materials

Pentobarbitone sodium (Lethabarb)

Needles and Syringes

Ethanol

Restraint- either a specifically designed restraint or a towel

Scales

Clippers

Anaesthetic chamber, isoflurane and oxygen



Recommended Method via Intravenous Pentobarbitone:

1. Weigh the rabbit if weight not known.
2. Calculate the required dose and draw up the lethabarb solution- approximately 1ml/2kg of rabbit
3. Restrain the rabbit securely, either in restraint or a towel, to avoid damage to both the rabbit and handler.
4. Ensure good access to an ear and gently grasp the ear
5. Wipe down the ear and visualise the marginal ear vein (around the edge of the ear pinnae)
6. Carefully inject the solution into the vein. If the vein appears to blow, stop immediately and put pressure over the vein to stop bleeding. Then repeat the procedure further along the vessel closer to the rabbit's head.
7. Slowly inject the calculated dose of lethabarb into the vein.
8. The rabbit will become anaesthetised first and asleep, and then the rabbit's heart will stop, and the breathing will stop.
9. Check the rabbit has dilated pupils and there is no audible heartbeat.
10. Dispose of the body as required by the facility.

Confirmation of Death:

- Absence of respiratory movement, heartbeat and pulse
- Paleness/ discolouration of mucus membranes
- Loss of corneal and palpebral reflexes
- Dilated, fixed pupils.

Table H3 Methods of humane killing and euthanasia in rabbits

Recommended	Acceptable with reservations	Not acceptable
Chemical		
<ul style="list-style-type: none"> • Inhalant: <ul style="list-style-type: none"> – none recommended • Injectable: <ul style="list-style-type: none"> – pentobarbitone sodium IV or IP 	<ul style="list-style-type: none"> • Inhalant: <ul style="list-style-type: none"> – isoflurane^{bde} – nitrous oxide (must be used with other inhalants)^b • Injectable: <ul style="list-style-type: none"> – ketamine with a premedicant such as acetylpromazine or xylazine 	<ul style="list-style-type: none"> • Inhalant: <ul style="list-style-type: none"> – chloroform^{bcd} – carbon dioxide^{cef} – hydrogen cyanide gas^{bf} – carbon monoxide^{be} • Injectable: <ul style="list-style-type: none"> – ketamine alone^c – magnesium sulphate, potassium chloride^c
Physical		
<ul style="list-style-type: none"> • None recommended 	<ul style="list-style-type: none"> • Stunning and dislocation^{af} • Captive bolt^{af} • Neck dislocation^a or decapitation^{ae} (only if anaesthetised first) 	<ul style="list-style-type: none"> • Neck dislocation^{cf} or decapitation^{cef} without anaesthesia

IP = intraperitoneal; IV = intravenous

^a Training required

^b Occupational health and safety issues

^c Inhumane

^d Expensive

^e Requires specialised equipment

^f Aesthetically unpleasant



References:

National Health and Medical Research Council (NHMRC). Australian Government. (2008). *Guidelines to promote the wellbeing of animals used for scientific purposes: The assessment and alleviation of pain and distress in research animals* (pp. 1 – 189). Australian Government. Accessed from URL:
https://www.nhmrc.gov.au/files_nhmrc/publications/attachments/ea18.pdf

Euthanasia of Animals Used for Scientific Purposes. (2017). *Australian and New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART)*. Retrieved 11 October 2017, from <https://www.adelaide.edu.au/ANZCCART/docs/euthanasia.pdf>