

AUP Section: Animal Disposition

Species: mammals other than mice and rats

Species: Fill in with relevant species

Methods of euthanasia: (select all that apply)

Primary methods:

Agent/Method Name	Dosage (in mg/kg if possible)	Route
pentobarbital euthanasia solution	200-300 mg/L (0.2%)	IV
Inhalant anesthetic overdose	Not applicable	Inhalation

Physical methods to ensure euthanasia:

Agent/Method Name	Dosage (in mg/kg if possible)	Route
Exsanguination	Not applicable	Not applicable
Bilateral pneumothorax	Not applicable	Not applicable

Description of Euthanasia Procedure: (select all that apply):

Procedure	Description
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<p><u>Euthanasia Solution</u></p>	<p>For all species, euthanasia will be carried out as described in the most current AVMA guidelines for the euthanasia of animals</p> <p><u>Procedural steps:</u></p> <ol style="list-style-type: none"> 1. Load a syringe with the 1 ml euthanasia solution (390 mg pentobarbital sodium, 50 mg phenytoin sodium per ml) per 5 kg body weight. 2. Slowly inject solution intravenously. 3. Wait 10-20 seconds for effect. 4. Observe for respiratory arrest, auscultate for cardiac arrest. 5. Perform secondary physical method to ensure euthanasia as described below.
<p><u>Inhalant Anesthetic Overdose</u></p>	<p>For all species, euthanasia will be carried out as described in the most current AVMA guidelines for the euthanasia of animals</p> <p><u>Procedural steps:</u></p> <ol style="list-style-type: none"> 1. Use of this method assumes animals are already anesthetized using isoflurane or equivalent inhalant anesthetic, using either an endotracheal tube (preferred) or nose cone. 2. Turn anesthetic vaporizer to maximum. 3. Exposure to anesthetic must continue until cessation of respiration and cardiac function (heartbeat). This will require several minutes. 4. Perform physical method to ensure euthanasia as described below.
<p><u>Bilateral pneumothorax</u></p>	<p><u>Procedural Steps:</u></p> <ol style="list-style-type: none"> 1. Using a scalpel blade, make an incision between mid-thorax ribs, parallel to the ribs. Ensure the incision perforates the thorax. 2. Extend the incision to at least ¼ of the space between the spine and sternum. 3. Alternatively, if the abdomen is opened post-mortem, incise the diaphragm, ensuring both sides of the thorax are exposed to ensure animal cannot inflate lungs

<u>Exsanguination for Perfusion (Abdominal)</u>	<u>Procedural Steps:</u> <ol style="list-style-type: none"><li>1. Incise the abdomen. Expose the abdominal aorta and cannulate the aorta using an 18g or larger needle. Incise the vena cava.<li>2. Slowly perfuse the animal with saline until vena cava flow is saline rather than blood.
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Details for Carcass Disposal:

Carcasses will be bagged and placed in an approved necropsy cooler or designated refrigerator or freezer. They will then be disposed of by an OLAC approved manner.

References:

American Veterinary Medical Association. 2020. AVMA Guidelines on Euthanasia, 2020 update.

Updated/ACUC approved:
Jan. 2022