

STANDARD OPERATING PROCEDURES
BUACC-SOP-07 Euthanasia of small mammals in the field

The present SOP has been developed to outline proper euthanasia technique for field work.

1. Materials
<ol style="list-style-type: none"> 1. Liquid Isoflurane 2. 50 ml tube for anesthesia 3. Cotton balls 4. Airtight plastic box to hold the animal with isoflurane on cotton balls 5. Use the absorbing carpet to avoid direct contact between the animal and isoflurane. The animal should never be in direct contact with isoflurane
2. Minimum Qualifications/ Training for PI and/or lab technician
Training is provided by the Université de Sherbrooke for PIs, including P. Bergeron
3. Minimum Qualifications/ Training for students
Training is provided to students by the PIs
4. Procedure
A. Pharmaceutical Methods – Non-inhalant Pharmaceutical Agents
Although possible, this procedure is not used at Bishop's University.
B. Pharmaceutical Methods – Volatile Anesthetics
<p>Put protective gloves and manipulate liquid isoflurane in an open space area.</p> <p>Empty the plastic box.</p> <p>Soak 5-6 cotton balls and soaked them with isoflurane until cotton is saturated.</p> <p>Put the cotton in the plastic box, add the cloth on top of the cotton and tightly close the lid.</p> <p>Wait 1-2 minutes for the air in the box to saturate with isoflurane.</p> <p>During that time, soak one cotton ball with a few isoflurane drops.</p> <p>Using standard field procedures to hold the small mammal still, quickly put the cotton balls in the tube and hold the head of the animal in the tube to anesthetize it (15-20 sec).</p> <p>Quickly open the plastic box and put the animal in it.</p>

<p>Quickly close the lid.</p> <p>Leave the animal for at least 30 minutes in the plastic box.</p> <p>Apply cervical dislocation when taking the animal out of the box, if the animal is fully unconscious.</p> <p>To confirm death, palp the vertebrae to ensure the neck is broken, and check vital signs.</p>
C. Inhalant Gases
<p>Although possible, this procedure is not used at Bishop's University.</p>
D. Physical Methods
<p>Cervical dislocation, see above</p>
E. Verification of death by
<p>Cervical dislocation</p>
5. Safety
<p>Precautions:</p> <p>Don't over-soak cotton balls so that they are dripping. Saturation with isoflurane is in the air only</p> <p>Never manipulate isoflurane in a closed area like a house or a car, always do the procedure outside</p> <p>Do not inhale the vapor</p> <p>Pregnant women should never manipulate isoflurane</p> <p>First aid:</p> <p>If someone inhales isoflurane, get that person outside to provide care (stay calm and comforting)</p> <p>In case of contact with the skin, rinse with water</p> <p>In case of ingestion, call the anti-poison center and bring the person to the nearest hospital</p>
6. SOP Revision History
<p>These Standard Operating Procedures were last revised and approved by Bishop's University's Animal Care Committee on February 19, 2021.</p>
References
<p>Guidelines on the care and use of wildlife. <u>Canadian Council on Animal Care</u>. 2003. https://www.ccac.ca/Documents/Standards/Guidelines/Wildlife.pdf</p>

ANNEXE

Isoflurane kit to use in the field

