MAINTENANCE OF DECAPITATION EQUIPMENT

1. PURPOSE

1.1. The purpose of this Animal Care and Use Procedure (ACUP) is to ensure that decapitation equipment is well maintained and used properly. This ACUP is approved by the Cornell Institutional Animal Care and Use Committee (IACUC). Any deviation must be approved by the IACUC prior to its application.

2. SCOPE

2.1. This document applies to all decapitation equipment users at Cornell University.

3. INTRODUCTION

3.1. Decapitation of animals must be described in an approved IACUC protocol.
3.2. It is important that all decapitation equipment be maintained properly to provide swift and effective euthanasia and prevent injury to the operator.
3.3. Contact the Center for Animal Resources and Education (CARE) at Cornell University by emailing care@cornell.edu for more information or for assistance.

4. MATERIALS AND EQUIPMENT

4.1. Decapitation equipment (e.g., guillotine, dedicated scissors)
4.2. Log (book, sheet – can be hard copy or electronic)
4.3. Disinfectant
4.4. Alcohol
4.5. Silicone lubricant
4.6. Blade sharpness test material (e.g. ¼” felt, Sharn Inc. Scissor Sharpness Test Material)

5. PROCEDURE

NOTE: Personnel using decapitation equipment must be properly trained and proficient in its use. Contact CARE at care@cornell.edu for more information and to set-up a training session.
5.1. Prior to Use

5.1.1. Check the blades for rust, smoothness of operation, and cleanliness.
5.1.2. Test blade sharpness on either a cadaver of appropriate size or blade sharpness test material.
5.1.3. Report any problems to the maintenance person named in the log.
5.1.4. Do not use equipment until it is confirmed to be clean, in good working order, and has sharp blades.

5.2. Use and Maintenance of Guillotines

5.2.1. Label guillotine with a unique number or code for identification purposes.
5.2.2. Maintain a log in close proximity to the guillotine which includes the following information:

5.2.2.1. Identification number of the equipment
5.2.2.2. Room location
5.2.2.3. Person responsible for maintenance and repair
5.2.2.4. A column tracking usage:

5.2.2.4.1. Date
5.2.2.4.2. Species
5.2.2.4.3. Number of animals euthanized
5.2.2.4.4. Person’s initials using the equipment

5.2.2.5. A column tracking date of blade sanitization and sharpening (to be done annually, at a minimum).

5.2.3. It is preferable not to move guillotines from room to room. If you must transfer a guillotine to a different animal facility room or lab, clean and disinfect the guillotine before moving it to another location and clean and disinfect before replacing it in the original room.

5.2.4. Clean after each use:

5.2.4.1. Rinse the entire guillotine under running water to remove any blood and tissues.
5.2.4.2. Scrub the base with disinfectant to reduce gross contamination.
5.2.4.3. Optional for best practice, rinse a final time with alcohol to ensure evaporation and reduce the need to hand-dry the equipment.
5.2.4.4. Turn the guillotine upside down with the blades opened to facilitate drying.

5.2.5. Ensure that guillotines are lubricated as needed with silicone.
5.2.6. Ensure that guillotines are sharpened at a minimum of every 12 months or more often as needed. Depending on species involved and frequency of use, the blades may need to be sharpened every 6 months.
5.2.7. Dispose of old guillotine blades in a sharps container.
5.2.8. Every 12 months, or more often as needed, take the guillotine apart (only trained personnel should do this) and:
5.2.8.1. Run the blades through the tunnel washer in a basket. Contact facility staff for this service.

5.2.8.2. Test for sharpness with test material. Replace or sharpen the guillotine blade if it fails to effectively cut through the test material.

**NOTE:** Frequency of sharpening depends on both frequency of use and the species euthanized. If the action of the blade is not smooth and precise, err on the side of caution.

5.3. **Use and Maintenance of Dedicated Scissors**

5.3.1. Test scissors for sharpness via cutting of test material and document in the log prior to use.

5.3.2. Replace or sharpen scissors if they fail to effectively cut through the test material, become rusted, or become damaged.

5.3.3. Clean after each use:

5.3.3.1. Rinse the scissors under running water to remove any blood and tissues.
5.3.3.2. Scrub with disinfectant to reduce gross contamination.
5.3.3.3. Optional for best practice, rinse a final time with alcohol to ensure evaporation and reduce the need to hand-dry the equipment.

5.3.4. Dispose of old scissors in a sharps container.

6. **PERSONNEL SAFETY**

6.1. Medical Emergencies: **CALL 911.**

6.2. When working with animals wear appropriate PPE, observe proper hygiene, and be aware of allergy, zoonosis, and injury risks. Refer to the CARE Occupational Health and Safety webpage for more information.

7. **ANIMAL RELATED CONTINGENCIES**

7.1. None

8. **REFERENCES**

8.1. AVMA Guidelines on Euthanasia, 2013:
   [https://www.avma.org/KB/Policies/Documents/euthanasia.pdf](https://www.avma.org/KB/Policies/Documents/euthanasia.pdf)

8.2. ACUP 301 Rodent Euthanasia:
   [http://ras.research.cornell.edu/care/documents_/k/ACUPs/ACUP301.pdf](http://ras.research.cornell.edu/care/documents_/k/ACUPs/ACUP301.pdf)

8.3. ACUP 306 Fish and Amphibian Euthanasia:

8.4. ACUP 308 Avian Euthanasia:
   [http://ras.research.cornell.edu/care/documents/ACUPs_k/ACUP308.pdf](http://ras.research.cornell.edu/care/documents/ACUPs_k/ACUP308.pdf)

8.5. CARE Occupational Health and Safety webpage:
   [http://ras.research.cornell.edu/care/OHS.html](http://ras.research.cornell.edu/care/OHS.html)
9. APPENDIX

9.1. Sample Scissor Log

<table>
<thead>
<tr>
<th>Date the Scissors were Checked for Sharpness with the Theraband Material and Used</th>
<th>Your Initials</th>
<th>Date the Scissors Failed the Theraband Material Test and Were Sharpened Well Enough to Pass the Test</th>
<th>Your Initials</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
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10. HISTORY

<table>
<thead>
<tr>
<th>Date:</th>
<th>Event:</th>
</tr>
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<tbody>
<tr>
<td>01 FEB 18</td>
<td>Most Recent Annual Review – Reviewed by: B. Burke</td>
</tr>
<tr>
<td>10 MAR 16</td>
<td>New Format – Converted by: J. Kirby</td>
</tr>
<tr>
<td>30 SEP 07</td>
<td>Revised – Revision Author: C. Barriere</td>
</tr>
<tr>
<td>31 JUL 05</td>
<td>New Issued – Original Author: Drs. J. Gourdon &amp; M. Martin; Referee: D. Alo</td>
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