

**Arizona State University  
Institutional Animal Care and Use Committee  
STANDARD INSTITUTIONAL GUIDELINE**

**USE AND MAINTENANCE OF EQUIPMENT USED FOR DECAPITATION**

This Standard Institutional Guideline (SIG) is intended for use by all personnel who use decapitation equipment. It is important that all decapitation equipment be maintained properly to provide swift and effective euthanasia and prevent injury to the operator.

**1. Materials**

- Decapitation equipment (e.g., guillotine, dedicated scissors)
- Log book
- Disinfectant – 70% alcohol or similarly effective product
- Silicone lubricant for guillotine blades
- Scissor blade sharpness test material (provided by IACUC)

**2. Procedures**

**NOTE:** The Principal Investigator (PI) must ensure that all personnel using decapitation equipment are properly trained in the proficient use of the equipment. This training must be documented by submitting a Level III Training Documentation Form to the IACUC. The Department of Animal Care and Technologies (DACT) can assist in training by contacting the DACT vet team (DACTrss@asu.edu).

- **Maintain a Log Book**
  - a. Maintain a log book in close proximity to the decapitation equipment which includes the following information:
    - i. Unique identifier (e.g., identification number) of the equipment if more than one piece of equipment is being used for decapitation
    - ii. Room location
    - iii. Person responsible for maintenance and repair
    - iv. A table tracking usage that includes the following columns:
      - Date
      - Species
      - Number of animals euthanized
      - Initials of the person using the equipment
      - The date of blade sharpening (guided by sharpness test results)
        - Depending on the species involved and frequency of use, the blades may need to be sharpened every 6-12 months.
        - Only trained personnel should sharpen guillotines
        - Contact the vet team (vet.team@asu.edu) for assistance with identifying a vendor for this service.
- **Prior to Use**
  - a. Check the blades for rust, smoothness of operation, and cleanliness. Do not use if equipment is rusted, dirty, or functioning poorly.

- b. Test blade sharpness. Sharpness test material for scissors is available from the IACUC. Only use equipment if sharpness is confirmed. When results are equivocal, have blades sharpened or replaced to avoid poor functioning during future uses.
  - c. Report any problems to the person responsible for the decapitation equipment (PI or designee) as identified in the log book.
  - d. Do not use equipment until it is confirmed to be clean, in good working order, and sharp.
- **Use and Maintenance of Guillotines and Dedicated Scissors**
    - a. It is preferable not to move guillotines between different animal holding rooms or labs. If you must transfer a guillotine to a different location, sanitize the guillotine before moving it and again before replacing it in the original room.
    - b. Clean after each use:
      - i. Rinse the decapitation equipment under fast-running water (cold or tepid) to remove any blood and tissues.
      - ii. Scrub the equipment with disinfectant to reduce microbial contamination.
      - iii. Rinse a final time with alcohol to expedite drying and reduce the need to hand-dry the equipment.
      - iv. Turn the guillotine upside down with the blades opened to facilitate drying.
      - v. Dry scissors in the open position, preferably hanging from a drying rack.
    - c. Ensure that guillotines are lubricated as needed with silicone.

### 3. Safety

- Do not use decapitation equipment unless properly trained.
- If the action of the blade is not smooth and precise, err on the side of caution and replace the blades.

### 4. References

- AVMA Guidelines on Euthanasia, 2020:  
<https://www.avma.org/sites/default/files/2020-01/2020-Euthanasia-Final-1-17-20.pdf>
- Florida State University, Policy for Use and Maintenance of Guillotines and other Equipment Used for Decapitation
- Tulane University IACUC Policy of Guillotine Maintenance P6. 07
- University of Arizona IACUC Guillotine Maintenance Log
- University of California, Berkeley, ACUC Policy and Guidelines for Guillotine Use and Maintenance
- University of Rochester Medical Center University, UCAR Policy on Maintenance of Guillotines
- University of Wisconsin School of Medicine and Public Health, ACUC Policy #16, Guidelines for Maintenance of Rodent Guillotines

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