

Guidelines for Decapitation Use and Instrument Maintenance

Last Review: 4/2022
Revision History:

General Considerations:

- The AVMA *Guidelines on Euthanasia* states that decapitation is conditionally acceptable if performed correctly and that it may be used when required by experimental design and approved by the IACUC. Decapitation can be performed on anesthetized animals without further justification; however, decapitation without anesthesia must be scientifically justified and approved in advance by the IACUC.
- Decapitation may be accomplished by use of a commercial guillotine, dedicated scissors, or razor/scalpel blades. Scissors and razor/scalpel blades may only be used for neonatal rodents and small amphibians and fish. Use of decapitation is restricted to amphibians, fish, reptiles and rodents (note: amphibians and reptiles should also be pithed following decapitation). The equipment used to perform decapitation should be maintained in good working order and serviced on a regular basis to ensure sharpness of blades. The use of plastic restraint cones (e.g. [Decapicones®](#)) is recommended to restrain animals as it appears to reduce distress from handling, minimizes the chance of injury to personnel, and improves positioning of the animal in the guillotine.
- **The IACUC will inspect guillotine maintenance records during semi-annual tours.**

Setting Up for Decapitation

- a) Equipment used for decapitation should be inspected prior to use. Laboratory personnel and the investigator are responsible for ensuring that the equipment is always in good working condition prior to any use.
- b) Good working condition means that guillotines and dedicated scissors are clean, in good condition, sharp and move freely. The actions

should be smooth with no perceptible binding or resistance, and the blades must be rust-free, sharp, and decapitate with minimal force.

- c) Razor or scalpel blades should be new.
- d) Maintain a record book in close proximity to the equipment which includes the following information:
 - a. Room location/guillotine identification or number (for rooms with multiple guillotines)
 - b. Date of blade sharpening.

Guillotine Maintenance:

Personnel using a guillotine are responsible for proper cleaning after use. Scissors should be cared for in a similar fashion. Razors and scalpel blades should be discarded following use.

- a) Following removal of debris the guillotine/scissors should be thoroughly disinfected by rinsing with 70% alcohol. The final rinse with 70% alcohol will also promote drying. Also, guillotines should be periodically lubricated (a silicone spray product is suggested for lubrication), then worked to distribute the lubrication.
- b) Ensure that guillotines are sharpened at a minimum of every 24 months or more often as needed. **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.
- c) A log of guillotine maintenance should be kept and inspected as a part of the IACUC semi-annual inspection.