



THE UNIVERSITY OF TOLEDO
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

SUBJECT: Institutional Animal Care and Use Committee (IACUC) Guillotine and Scissor Maintenance and Testing Standard Operating Procedure

DATE: July 17, 2019

This document provides the approved practice and procedures for guillotine and scissors maintenance and testing. Euthanasia techniques should result in a rapid loss of consciousness followed by cardiac or respiratory arrest and the ultimate loss of brain function. The technique should minimize distress and anxiety prior to loss of consciousness. The 2013 *AVMA Guidelines for the Euthanasia of Animals* requires that equipment for decapitation be kept clean and in good condition with sharp blades. The action must be smooth with no perceptible binding or resistance, and the blade must be rust-free, sharp, and decapitate with minimal force.

Responsibilities

- The PI must ensure that all personnel using the guillotine or scissors are properly trained and proficient in its use.
- Personnel using a guillotine or scissors for decapitation are to ensure that it is in good condition with a sharp blade prior to use.
- A sharpness test must be performed to insure proper usability. Failing guillotines or scissors must not be used and must be replaced or sharpened before use.
- Personnel using guillotines or scissors are responsible for their proper cleaning and good operation after use.
- The IACUC or its designee will inspect all guillotines and scissors and maintenance logs, as part of the semi-annual inspection.

Procedures

- Prior to use, the guillotine or scissors should be inspected for rust, smoothness of operation, and blade cleanliness.
- Before each usage the guillotine or scissors must be tested for sharpness using either a rubber band or polyethylene tubing and this must be recorded on the maintenance log.
 - If the blade does not cut the tubing or rubber band cleanly in one attempt, the blade will need to be sharpened or replaced before use.
- The use of plastic cones (e.g., Rodent Restraint Cone, Harvard Apparatus) is recommended to provide animal restraint, minimize distress, and improve positioning.
- After each decapitation, the guillotine or scissors must be rinsed and/or wiped down and surrounding area cleaned to remove all blood and tissue.
- At the end of each day/session of use, and before returning the guillotine, it should be thoroughly rinsed (if needed) and then disinfected. A final 70% alcohol rinse will assure evaporation and reduce the need to hand-dry the equipment
- Periodically the moving parts should be lubricated (a silicon spray, such as WD-40 or equivalent) for smooth movement of those parts and good maintenance.

Reference

1. *The Guide for the Care and Use of Laboratory Animals*, 8th Edition. National Research Council Committee for the Update of the Guide for the Care and Use of Laboratory Animals. Washington (DC): National Academies Press (US).