



Institutional Animal Care and Use Committee Guidelines and Policies

May 16, 2007

GUIDELINES FOR GAS ANESTHESIA VAPORIZERS

According to the Association for the Assessment and Accreditation of Laboratory Animal Care International (AAALAC) anesthetic vaporizers used in animal research must be calibrated and maintained according to manufacturer specifications. The manufacturer recommendations for recalibration windows can range from one to three years depending on the model. The investigator must maintain and be able to produce evidence of calibration for such units in their laboratory. The Biological Resource Facility (BRF) staff can assist investigators with sending vaporizers out for calibration as needed; the cost involved for vaporizer calibration will be billed to the investigator. If the PI is setting up a new unit, the veterinary staff is available to help with training as needed.

1) Documentation:

- The vaporizer must have the most recent date of calibration affixed.
- Documents showing the manufacturer's recommendations must be available in the laboratory for inspection.

2) Proper Use of Laboratory Owned Gas Anesthesia Machines:

- Check that the oxygen source, vaporizer and scavenging system are appropriately hooked up.
- If the oxygen source is from a tank supply, the tank must be secured to a cylinder cart, wall or table.
- An appropriate scavenging system must be in place. This can entail hooking the unit to a charcoal canister scavenging system or to the building exhaust supply.

3) Maintenance of Charcoal Canisters Used for Scavenging

- Any anesthesia machine utilizing a charcoal filter for scavenging should be checked at least quarterly.
- Each charcoal canister should be weighed on a gram scale when first put into use and the weight recorded on the canister.
- Once the canister reaches 50 grams over initial weight it should be disposed of and replaced with a new canister.