

IACUC Policy on the Use of Volatile Anesthetics

Calibration:

An anesthetic system is defined as the entirety of an anesthesia delivery apparatus, including but not limited to the vaporizer, gas monitors, tubing and charcoal scavenging apparatus. Anesthetic systems must be inspected and calibrated at least once every three years at a minimum.

Scavenging:

All waste volatile anesthetic gases must be scavenged. This can be accomplished by the use of a commercial scavenging system or by performing procedures under a chemical fume hood. Charcoal scavenging systems are specifically designed to remove waste anesthetic gases such as isoflurane and enflurane from the operating environment. These canisters have a finite usable life span and investigators must be aware of the total use of a canister to assure that it is still functional. The canisters should be weighed before and after each use and the weights must be written on the canister. It should be disposed of when it increases to the weight recommended by the manufacturer, usually 50 grams.

Use of Bell Jars:

In certain circumstances, it is acceptable to administer volatile anesthetics in a bell jar or similar apparatus. The animal must be partitioned from the anesthetic and must not come into physical contact with it. The procedure must be performed under a chemical fume hood.

Use of Ether:

Di-ethyl ether may not be used under any circumstances as an anesthetic for laboratory animals.