



Albert Einstein College of Medicine

Use of Volatile Anesthetics for Animal Policy

I. Purpose

The purpose of this policy is to ensure, as much as possible, the comfort and safekeeping of animals used in research at Albert Einstein College of Medicine (Einstein).

II. Scope

This policy applies to all research experiments and programs at Einstein.

III. Policy

All volatile anesthetics must be used and stored with full consideration of safety precautions.

Volatile anesthetics may be administered using an open-drop anesthetic chamber or nosecone or by the use of a precision vaporizer, as appropriate for the agent. A vaporizer may be used to deliver the anesthetic mixture to the animal via chamber (for induction), face mask or nose cone, or by intubation. Waste anesthetic gas must be removed from the operator area either by performing the anesthetic procedure within a fume hood, or by proper use of an anesthetic scavenging system (such as an activated charcoal system, i.e. "F/air" canister). Special care must be taken when a face mask is used, and when opening an induction chamber, to minimize the leakage of anesthetic gas into the environment.

It should be noted that most of the hoods in the rodent barrier rooms are Class 2 biosafety cabinets, which are not hard-ducted to the outside (filtered air is recirculated into the room), and therefore cannot be used as fume hoods. Volatile anesthetics may be used in these hoods only if the fumes are collected and passed through a scavenging system.

Special precautions must be taken with ether, which is explosive as well as volatile, and cannot be scavenged. Ether may not be used within animal rooms unless a fume hood is available within the room. Carcasses of animals which have been euthanized with ether remain explosive for several hours after death and must be allowed to "de-gas" in a fume hood or an explosion-proof refrigerator overnight before discarding.

In accordance with recommendations from the Environmental Health and Safety Department (EH&S), volatile anesthetics must be stored in the laboratory area, in a safe location where they are protected from breakage or spillage, and preferably in a fume hood. Bottles of volatile anesthetic may not be kept in animal rooms between procedures.

The use of any anesthetic agent must be included in the approved animal use protocol, and any change in anesthetic use (agent, method of administration, or location of use) must be approved in advance through an addendum to the protocol. In addition, the fume hood location or scavenging system used for volatile or flammable anesthetics must be approved by EH&S.

IV. Definitions

None.

V. Effective Date

Effective as of: 20 February 2018.

VI. Policy Management and Responsibilities

Einstein's Institutional Animal Care and Use Committee (IACUC) is the Responsible Office under this Policy. The Institutional Official for the IACUC is the Responsible Executive for this policy. The IACUC Chairperson is the Responsible Officer for the management of this policy.

VII. Approved (or Revised)

 _____	<u>3/30/18</u> _____
Institutional Official	Date

Revision dates: April 10, 2002, 6/15/2011, 2/3/2015, 2/20/2018