



Research Office Laboratory Animal Resources Center	Subject: General Anesthesia Guidelines - Rodent	Date: IACUC Approved: 8/24/ 2011 Page 1 of 2
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GENERAL ANESTHESIA GUIDELINES – RODENTS

- Animals should receive a pre-anesthesia health observation. This involves reviewing their general appearance, respiration, and activity, and where indicated, their body weight.
- A 48-hour or greater acclimation period is generally recommended before major survival surgery or general survival anesthesia.
- Rodents are generally not fasted before anesthesia. Water is not withheld.
- Anesthetized animals of all species must be attended continuously from onset of anesthesia until anesthetic recovery (typically, return of righting reflexes).
- Balanced rodent anesthesia typically combines injectable and inhalant agents, though rodents may also be anesthetized through sole use of inhalants or injectable agents. An adequate, even depth of anesthesia is maintained by adjusting the vaporizer as necessary or administering supplemental doses of the anesthetic agent. Anesthetic doses must follow the approved protocol, including commitments for intra-operative analgesic drugs.
- Anesthetic monitoring always includes responsiveness to painful stimuli, character of respiration, and skin or mucous membrane color as seen by observing the ears, tail, and oral mucosa or foot pads. Lack of pedal withdrawal reflex (toe or footpad-pinch, on two feet) is recommended for assuring adequate depth of anesthesia prior to first incision. Depending on the procedure, other monitoring may be indicated such as heart rate, blood pressure, body temperature, and tissue oxygenation.
- Group records may be utilized for documentation purposes especially when all animals in a cage are treated similarly. Often however, individual anesthesia records may be indicated. All documentation of procedures should be followed as approved in the protocol. Records should extend through the period of anesthetic recovery, and should document post-operative care and analgesia that is provided. Minimum required documentation includes: date of procedure, individual animal or cage ID, procedure performed and all drugs administered. Surgical or anesthetic problems must be documented.
- Hypothermia must be prevented. Examples of thermal support may include warm water blanket or heat pack. Hyperthermia and thermal burns may occur with other thermal support and must be prevented by careful monitoring and use of proper equipment. Depending upon the species and procedure, monitoring body temperature may be indicated.
- Dehydration and volume depletion should be prevented during longer procedures by subcutaneous, intravenous or intraperitoneal administration of warmed isotonic fluids.
- Do not leave animals that have just undergone a procedure unattended with unanesthetized animals. Animals must be attended and observed no less than once every 15 minutes (or as approved in your protocol) until all animals are recovered and able to ambulate prior to returning to standard housing.
- For information on specific anesthetics and analgesics for experimental animals, including recommended doses, routes of administration and conditions for use, refer to the LARC Formulary or the CVM-VTH Anesthesia Formulary.
- You may also consult with the veterinary staff of the Laboratory Animal Resources Center for advice about the suitability of anesthetic agents.

