

Institutional Animal Care & Use Program - UTEP	
Title: Drug Dilution and Expired Drugs	
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In Effect ☒ Rescinded ☐	Date Rescinded:

A) RESPONSIBILITIES

It is the responsibility of all personnel using animals at The University of Texas at El Paso (UTEP) to abide by this policy. Exceptions to this policy must be approved by the Institutional Animal Care and Use Committee (IACUC).

B) APPLICATION

This policy applies to all personnel using animals in research and teaching at UTEP.

C) BACKGROUND

Per the *Guide for the Care and Use of Laboratory Animals* and the USDA Animal Welfare Act Regulations, all drugs used in conjunction with animal research must be used before their expiration dates and should be acquired, stored, their use recorded, and disposed of legally and safely. This includes any drugs that need to be diluted or compounded. Compounding is defined as combining, mixing, or altering ingredients of a pharmaceutical grade drug to create a medication tailored to the needs of an individual.

This policy outlines the steps which must be followed to regulate the use of expired medical materials in any animal research at UTEP. The use of expired medical materials is not generally acceptable veterinary practice, except as outlined below under Section E.

D) DRUG DILUTION

- 1) If you need to compound a drug for injection accuracy, aseptic techniques are to be followed. Drugs requiring dilution are to be mixed with an appropriate diluent in a separate sterile container to reach required working concentration. The compounded drugs' container must be sterile, and opaque if compounding light sensitive drugs.
- 2) Empty sterile containers with a rubber cap should be used as they allow aseptic

mixing and multi-access of your compounded drug solutions. The top of the container should be disinfected with 70% alcohol on clean gauze prior to accessing with needle and syringe. Post-compounding, containers should be stored in a dark place when not in use. Exceptions to this guideline require IACUC approval.

Eppendorf tubes or screw cap test tubes do not provide a secure aseptic access barrier for extended storage and cannot be used for this purpose.

- 3) The label on the container of the compounded drug must include:
 - a) Full name of the drug/compound with final concentration.
 - b) Preparation date and initials of preparer.
 - c) Expiration date of diluted or compounded substances is 30 days from the date of preparation or sooner per manufacturer recommendations.

E) EXPIRED MATERIALS

- 1) Each lab must identify one individual within the lab to track materials within the lab that have expiration dates and oversee the proper disposal of the expired materials.
- 2) All drugs must be discarded on or before the manufacturer's expiration date.
- 3) Bags of fluids and sterile vials are considered expired one month (30 days) after first needle puncture).
- 4) No expired drugs or fluids are allowed for use on animals for research or instruction. Expired drugs and materials must be clearly labeled as expired and stored separately from non-expired materials. An item stamped with an expiration date of "12/34" may be used through December 31, 2034. It is outdated January 1, 2035. Dispose of the outdated items appropriately.
- 5) Expired anesthetics, analgesics, and euthanasia solutions must **never** be used and must be disposed of properly.
- 6) Some expired materials **may** be used in **non-survival** procedures, but sterility of these expired materials must be maintained if they are intended for use in animals. These materials include:
 - a) Medical materials (e.g., catheters, suture, sterile gloves)
 - b) Medications (e.g., antibiotics, fluids)