

Veterinary Compounding

FDA permits compounding for veterinary patients. However, compounding can only occur under the requirements of the Federal Food, Drug & Cosmetic Act (FFDCA), the Extra Label Drug Use (ELDU) regulations and the Animal Medicinal Drug Use Clarification Act (AMDUCA).

These requirements include:

- 1) A valid Veterinarian-Client-Patient relationship (VCPR),
- 2) The health of the animal is threatened or suffering or death may result from failure to treat,
- 3) There is no FDA-approved, commercially available animal or human drug that, in its available dosage form and concentration, will appropriately treat the patient,
- 4) The product is made from an FDA-approved commercially available animal or human drug,
- 5) The product is compounded by a licensed veterinarian or a licensed pharmacist on the order of a veterinarian within the practice of veterinary medicine,
- 6) The compounded product is safe and effective,
- 7) For animals produced for human consumption, a withdrawal time for the compounded product has been established and observed by the veterinarian.

In addition to complying with FFDCA and AMDUCA and the extralabel use regulations, legal compounding requires compliance with the relevant State laws and acts related to compounding must be followed.

Recent inspections of compounding pharmacies by FDA have resulted in warning letters citing significant violations of the regulations governing the compounding of veterinary drugs. The most common violations cited were:

1. The use of bulk drug substance to compound veterinary drugs;
2. Compounding veterinary drugs from bulk drug substances which have been withdrawn or removed from the market for human use for safety reasons;
3. Compounding of drugs where FDA approved animal drug products as labeled will appropriately treat the diagnosed condition;
4. Compounding of veterinary drug products outside the context of a valid VCPR;
5. Compounded drug products were not labeled with adequate directions for use as specified by the veterinarian.

The Animal Health Institute (AHI), American Veterinary Medical Association (AVMA) and the Center for Veterinary Medicine (CVM) of the Food and Drug Administration (FDA) all recognize that in certain cases compounding may offer a more convenient method of dosing for individual veterinary patients.

Questions and Answers

1. What is a compounded drug?

A compounded drug is a medication that has been created by combining or altering ingredients for an individual patient in response to a licensed practitioner's prescription. Compounding can be as simple as changing the dosage form of an approved drug or adding a flavoring agent for ease of administration.

2. Who can legally compound a veterinary drug?

Only licensed veterinarians and pharmacists acting on orders of licensed veterinarians can compound veterinary drugs.

3. What US laws are applicable to compounded veterinary drugs?

- **Federal Food Drug Cosmetic Act (FFDCA):** The FFDCA provides for the examination of animal drugs to determine if they are safe and effective. Any drug not approved by the FDA, including any compounded drug whether from an approved or unapproved finished human or animal drug or a bulk drug, results in an uncertain, and possibly unsafe, new animal drug.
- **Animal Medicinal Drug Use Clarification Act of 1994 (AMDUCA):** Under AMDUCA, veterinary drug compounding (for extra-label use) is allowed if the drug is made from an FDA-approved animal or human drug and specific regulations are followed.
- **State Pharmacy Board regulations:** Each State's Pharmacy Act should include requirements for legal veterinary drug compounding.
- **State Veterinary Medicine Practice Acts:** Veterinarians are responsible for making diagnoses, prescribing appropriate drugs for animals and determining withdrawal times.

4. When is it legal to compound veterinary drugs?

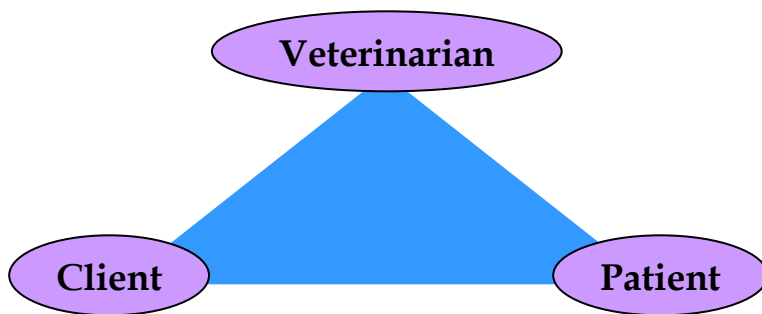
AMDUCA regulations list the conditions that must be met to legally prescribe and use drugs for extra-label use in animals in 21 Code of Federal Regulations (CFR) 530. These regulations include provisions that permit the extralabel use of compounded animal drugs. These conditions are listed below:

- no FDA approved animal or human drug is available that may be used as labeled or in an extra-label manner to treat the diagnosed condition;
- the compounding of the drug must be performed by a licensed pharmacist or veterinarian within the scope of a professional practice;

- the compounding must be carried out with the appropriate procedures to ensure the safety and effectiveness of the finished product;
- the size of the compounding pharmacy should be appropriate for the established need for the compounded product;
- the veterinarian, through the use of their knowledge and experience, must determine a withdrawal time for the meat, milk, eggs or other food products that might be used from the treated animal;
- the directions from the veterinarian must adequately identify the animal or group of animals to be treated in a way that can be maintained throughout the withdrawal period; and
- all relevant state laws relating to the compounding of drugs for use in animals must be followed.

5. Who can prescribe a compounded veterinary drug?

A veterinarian may prescribe a compounded drug as long as a valid veterinarian-client-patient relationship exists.



6. What is a Veterinarian-Client-Patient Relationship (VCPR)?

A valid VCPR is defined as follows:

1. A veterinarian has assumed the responsibility for making medical judgments regarding the health of the animal or animals and the client (owner or other caretaker) has agreed to follow the instructions of the veterinarian,
2. The veterinarian has sufficient knowledge of the animal(s) to at least generally or preliminarily diagnose the medical condition of the animal(s), and

3. The veterinarian is readily available for follow-up in case an adverse event occurs or the treatment regimen fails.

7. What types of compounding activities could result in FDA enforcement action?

- Compounding a veterinary drug if an approved veterinary or human drug exists to treat the diagnosed condition,
- Compounding drug products that are copies of commercially available FDA-approved drug products,
- Compounding when there is no valid Veterinarian-Client-Patient relationship,
- Compounding from unapproved drug products or bulk drug substances,
- Compounding veterinary drugs in anticipation of receiving prescriptions,
- Compounding of drug products in bulk using commercial scale manufacturing equipment,
- Compounding drugs for use when the health of the patient is not threatened or suffering or death may result from failure to treat,
- Compounding a veterinary drug from a human drug that has been removed from marketing due to human safety concerns. For example, cisapride, which is only available under a restricted distribution system.
- Compounding from a human drug for food-producing animals if an approved food animal drug can be used. Due to food-safety issues, the FDA prohibits the extralabel use of some drugs in food-producing animals. A list of these restricted drugs can be found in 21 CFR 530.41.
- Offering compounded drug products at wholesale to other state-licensed persons or commercial entities for resale,
- Labeling a compounded drug with a withdrawal time established by the pharmacist and not the prescribing veterinarian,
- Compounding veterinary drugs without regard to state pharmacy laws

FDA will consider enforcement action against veterinarians and pharmacists if the scope and nature of their activities are normally associated with a drug manufacturer and result in significant violations of the new animal drug, adulteration, or misbranding provisions of the FDCA.

8. What is the difference between FDA-approved New Animal Drugs and Generic Drugs and compounded veterinary drugs?

FDA has set stringent requirements for New Animal Drugs and Generic Drugs that are designed to ensure the safety, efficacy, identity, purity, potency, quality and consistency of the drug in animals. Following review to determine that these requirements are met and approval, the FDA, in concert with drug manufacturers, monitors use of the drugs under field conditions in the target animals to further ensure safety and efficacy.

The FDA does not generally review, approve or and monitor compounded drugs. The prescribing veterinarian is responsible for the safety and efficacy

of the compounded drug. The prescribing veterinarian is also responsible for monitoring of the compounded drug under field conditions to ensure safety and efficacy. For compounded products for food-producing animals, the prescribing veterinarian is responsible for establishing the withdrawal time.

9. Why is there more concern about the use of compounded drugs in animals that are produced for human consumption?

Drugs used to treat food-producing animals may remain in small amounts within the tissues that humans eat. These drug residues could be harmful to the health of humans that ingest them either due to long-term effects or short-term effects, such as allergic reactions.

10. How does a veterinarian or pharmacist assure the quality and purity of a compounded veterinary drug?

The veterinarian or pharmacist who compounds drugs must follow Good Compounding Practices defined by the National Association of Boards of Pharmacy (NABP) and by their State's Pharmacy Act. There is no requirement, however, for analytical, microbial, stability, safety, efficacy and withdrawal time testing for a compounded product.

11. Whom do I call if I have a concern or questions about a compounded veterinary drug?

Questions or concerns about compounded veterinary drugs should be and can be addressed by your local FDA district office, FDA-Center for Veterinary Medicine or your relevant State Board of Pharmacy and Veterinary Medicine.

12. How is the expiration date for a compounded product determined?

According to the U.S. Pharmacopeia, the expiration date of the compounded drug is determined from the expiration date of the approved drug from which it is compounded. The newly compounded drug's shelf-life is not more than 25% of the approved drug's remaining shelf-life, up to 6 months.

13. What is the difference between generic and compounded veterinary drugs?

Generic drugs are approved by the FDA following review of an abbreviated NADA. This review includes the manufacturer's facilities, practices, analytical methods, specifications, and quality control procedures. In addition, the generic drug product is required to have the same active ingredients and the same therapeutic effects as the approved animal product. Compounded drugs are not required to follow any of these procedures and are not subject to FDA review and approval.

14. How are adverse events reported for compounded veterinary drugs?

FDA does not require the reporting of adverse events or lack of efficacy resulting from use of compounded veterinary drugs.

15. Where can I find more information on veterinary drug compounding?

- National Association of Boards of Pharmacy – www.nabp.net
- The United States Pharmacopeia – www.usp.org
- FDA-Center for Veterinary Medicine – www.fda.gov/cvm and www.fda.gov/cvm/index/amducca/amducatoc.htm
- AVMA – www.avma.org
- 21 CFR 530 – also found at www.fda.gov/cvm
- American Association of Bovine Practitioners – www.aabp.org
- American Association of Equine Practitioners – www.aaep.org

16. Questions to ask your compounder:

- What FDA approved drug will you use to compound the product that I have prescribed?
- Do you have this prescription available for shipment now or do you formulate each prescription individually?
- What training have you received on compounding drugs for use in veterinary medicine?
- How will you determine the expiration date for my compounded prescription?
- How do you handle any reports of adverse events associated with the products you compound?