As more consumers fill their veterinary prescriptions at community and mail-order pharmacies, pharmacists are playing an increasingly important role in animal health care. Given this new role, pharmacists should consider the following when filling and dispensing animal prescriptions:

- **Contact the veterinarian directly with any questions or concerns.** While many human drugs are used in veterinary applications, dosing can vary greatly for humans and animals. If you think an error has been made in the prescribed dosage, do not provide the human dose without first calling the veterinarian to verify the instructions. The prescribing veterinarian must authorize any changes to the prescription before it is filled.

- **Take caution in substituting a drug.** As medical professionals authorized to prescribe drugs, veterinarians should be afforded the same respect as human prescribers when “No Substitution” or “DAW” is written next to the prescribed product. While a substitution might be viewed as acceptable for cost reasons, some substituted drugs might have negative implications for animals.

- **The Drug Enforcement Agency (DEA) advises veterinarians not to provide their DEA license number for non-controlled substance prescriptions.** Pharmacies that dispense from a veterinarian’s prescription should instead request the practitioner’s state veterinary license number.

- **The federal government has clarified that veterinarians are not eligible for a National Provider Identifier (NPI) number.** The Centers for Medicare and Medicaid Services issues this unique 10-digit number only to human healthcare providers.

- **A pharmacist should not provide the client with an equivalent product or generic drug without first receiving permission from the veterinarian.**

- **Veterinarians were taught in veterinary school to use “SID” to denote medications dosed for once-daily administration.** Every effort is being made to discourage veterinarians from using this unfamiliar abbreviation and instead use the commonly accepted “q24h.”

- **Pay attention to any written directions a veterinarian provides for a prescription medication.** Simply including “Use as Directed” on a prescription bottle or package is not sufficient, as the dosing may differ for animals. Including the veterinarian’s complete directions helps ensure the client administers the drug properly.

If a pharmacist has any questions or concerns about an animal prescription, please call the prescribing veterinarian directly. Changing a drug or altering dosing quantities can be harmful to the animal’s health.
Important Differences Between Common Human and Animal Medications

- **Acetaminophen**—A product containing acetaminophen should never be given to cats. The drug interferes with oxygenation in the blood and can result in death if not treated promptly. Acetaminophen is also unsafe for dogs and can cause irreversible liver damage.

- **Antihistamines**—Some over-the-counter antihistamines can be useful for treating itching and other allergic reactions in dogs. However, be sure the product does not contain pseudoephedrine, which can cause hyperactivity and other serious reactions, including death. Recommend to anyone seeking an antihistamine for a dog that they purchase an antihistamine that does not contain a decongestant, which is generally denoted by the “–D” after the name. (Products such as Claritin-D, Allegra-D, etc. should not be used in dogs)

- **Ibuprofen**—This NSAID should not be given to dogs or cats, as it can result in severe gastric ulcers or acute kidney failure. Drugs like carprofen, deracoxib and meloxicam are NSAIDs approved by the FDA for use in animals.

- **Insulin**—While there are various forms of insulin, not all can be used to treat animals. Although an alternative form of insulin may be less expensive for the veterinary client, substitution should not be made without consulting the prescribing veterinarian. For example, although glargine has a higher cost, NPH can be less effective in treating cats.

- **Latanoprost Eye Drops**—To treat glaucoma in humans, drops are used once daily. For dogs with glaucoma, the typical treatment is twice or three times daily.

- **Minoxidal (Rogaine)**—While this product is used to help hair growth in humans, it is not an acceptable treatment for alopecia in pets. It can cause cardiomyopathy in dogs.

- **Phenobarbital**—This drug is the most commonly prescribed medication for treating seizure disorders in dogs and is usually the first medication given to dogs with epilepsy. Phenobarbital is 60 percent to 80 percent effective in dogs with idiopathic epilepsy. This barbiturate is prescribed for dogs at a much higher dose than humans.

- **Prednisolone vs. Prednisone**—These two drugs are interchangeable in humans but not in animals.

- **Psychotropic Medications**—In general, the dose of serotonin reuptake inhibitors (SSRIs) and other psychotropic medications is higher in dogs and cats than in people.

- **Thyroid hormone**—Thyroid disease is common in both dogs and cats. It is almost uniformly hypothyroidism for dogs and hyperthyroidism for cats. For dogs with thyroid conditions, veterinarians may prescribe the same thyroid supplement that many humans take: Soloxine or Levothyroxine. One important difference for these medications when prescribed by a veterinarian is dogs are prescribed a much higher dose than humans. A change in dosage without authorization can result in sub-therapeutic treatment for the animal and additional diagnostic tests and expenses to re-stabilize the patient’s hormone level.

- **Xylitol**—While the natural, sugar-free sweetener is safe for humans, it can be harmful for dogs. When ingested in even small amounts, it can cause life-threatening hypoglycemia within 15 minutes. Larger ingestions can result in liver failure.

**NOTE**

If a pharmacist has any questions or concerns about an animal prescription, please call the prescribing veterinarian directly. Changing a drug or altering dosing quantities can be harmful to the animal’s health.