Understanding Proper Drug Use and Storage

One of the advantages of participating in a quality assurance program is the constant review of procedures for handling, using and storing drugs. There is a potential for improved profit, whether by reducing waste or improving drug effectiveness. All products purchased for your cattle have a purpose. If you do not handle them or use them properly, you may not see the benefit you are paying for.

Use Only Approved Drugs

FDA-approved drugs meet stringent requirements. They have been thoroughly tested to demonstrate that they consistently perform the way the manufacturer says, and that they will not harm the animal when administered according to label directions.

FDA-approved over-the-counter (OTC) drugs are those that can be purchased by anyone without a veterinarian’s prescription. Drugs are labeled for OTC sale when adequate instructions for a non-veterinarian can be printed on the label.

If adequate instructions for use cannot be printed on the label, the drug is a prescription (Rx) drug. All prescription drugs must carry the following statement on the label: “CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.”

Extra-label use

An exception to the rule on both OTC and prescription drugs is called “extra-label” use. This means using animal health products in ways not specified on the label — for example, at higher doses or in different species. Extra-label drug use requires a veterinarian’s prescription. In addition, these criteria set by the Food and Drug Administration must be met:

1. A valid veterinarian/client/patient relationship must be established. The veterinarian agrees to take responsibility for making judgments regarding the health of the animals; the client agrees to follow the veterinarian’s instructions.
2. A determination must be made that there is no approved drug labeled to treat the condition, or that treatment at the recommended dosage would not be effective.
3. A record of any animal given extra-label treatment must be maintained.
4. The withdrawal time prior to marketing an animal for slaughter must be significantly extended, as determined by the veterinarian.

Extra-label drug use for production purposes such as weight gain, feed efficiency or milk production is inappropriate. Extra-label use of drugs in animal feeds is not permitted.

You, as the owner of the animals, are ultimately in charge of making sure meat does not contain illegal drug residues. Your responsibilities are:
1. To make sure a careful diagnosis has been made based on your herd-health history.
2. To identify all treated animals and keep treatment records.
3. To follow veterinarian-recommended extended withdrawal times.

Understanding Drug Labels

Become familiar with requirements for drug labeling. You are ultimately responsible for any drug residues in your animals. Fortunately, you should not have to worry about labeling, because the drug manufacturer must meet all requirements to get a drug approved, and your veterinarian is responsible for all other labels on drugs that he or she prescribes for your animals. All drugs, whether OTC or prescription, must contain the following basic information on the label:
- name of drug
- active ingredients
- instructions for use
- withholding times
- quantity of contents
- name of distributor

In addition to these basic requirements, prescription drugs must contain the following information on the label:
- name and address of the dispensing veterinarian, not just the veterinary clinic
- the statement: “CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.”
- directions for use
- prescribed withholding times, even if zero
- any other cautionary statements

Drugs to be used in an “extra-label” or “off-label” manner require additional caution. They often have special instructions, because they are prescribed for a
particular animal or a particular herd by a veterinarian who is familiar with the animal or herd. Labels for drugs used in an "extra-label" manner must have these components:

- name, address and phone number of the veterinarian who prescribed the drug
- active ingredients, indications and directions for use
- prescribed withholding time before slaughter
- any cautionary statements
- exact directions for use

To be sure you reduce the chance of reactions and minimize the risk of residues, check and follow these instructions on each label:

- dosage (for example, “4 ml or cc”)
- timing (how often and how many times given) (example: 2 doses, 3 to 4 weeks apart)
- route of administration (refer to the “Administer Drugs Properly”)
- warnings or indications (“not for use in pregnant animals”)
- withdrawal times, if any (“Do not use within 28 days of slaughter”)
- storage (“store at 2 degrees – 7 degrees C”)
- disposal (“burn container and all unused contents”)
- shelf life (expiration date)

Familiarize yourself with the different label types that follow. Failure to know the labeling requirements is not a defense if meat from one of your animals is found to contain drug residues.

**Storing Drugs Correctly**

Drug performance declines if the expiration date has passed, if the storage temperature is too hot or too cold or if the drugs have been exposed to air or light. All the information you need to meet these requirements should be on the label of the drug container.

1. Check the expiration date on the label.
2. Do not save vaccines. They will not be effective for later use and may be contaminated.
3. Some drugs, and most vaccines, need to be refrigerated at 40° F to 50° F and must not be frozen. Keep an accurate thermometer in your refrigerator to monitor the temperature.
4. Use disposable syringes. Use clean needles to draw contents from multidose bottles. Change needles every 10 to 15 animals to minimize disease spread and drug contamination. Do not store medication in syringes. They cannot be labeled easily.
5. Avoid exposing vaccines and other medicines to direct sunlight. This may degrade the product. Use an insulated cooler for storing syringes and
drugs while working on cattle to avoid sunlight and maintain the proper temperature.

6. Collect used needles in a rigid plastic container. Dispose of them by returning them to your veterinarian. Destroy disposable syringes so they cannot be reused or misused. **Read labels.** Some drugs and vaccine containers require incineration before disposal. Used needles, scalpels, etc. are considered medical waste and must be handled and disposed of in accordance with laws which govern them.

7. Consult your local veterinarian regarding any questions on proper use of medications.