

Making Responsible Choices about Antibiotic Drug Usage in Dairy Cows

Allowable Drug Usage in Dairy Cows



Background

Treatment and control of disease in your dairy herd can be confusing, especially when trying to keep up-to-date on federal drug regulation. For instance, if you wanted to treat a cow for mastitis you need to consider the classes of allowable drug usage. The simple definition of a lactating cow is not as straightforward as ‘a cow that is producing milk.’ According to federal standards, the FDA defines a lactating cow as any animal 20 months of age or older regardless of milking status. Knowing the right definitions and allowable types of drug usage on dairy farms are important to ensure your animals receive appropriate care and that food produced from those animals will be safe for human consumption. Working closely with your veterinarian is necessary to minimize the risk of drug residues in milk and meat.

Allowable Drug Usage

Over-the-Counter

One of the simplest types of allowable drug usage on dairy farms in the U.S. is ‘over-the-counter.’ These tend to be older drugs that have been around for many years and are very familiar to farmers and animal care takers. Over-the-counter drugs can be purchased without a veterinary prescription, but must be used exactly as the drug label indicates. If the drug is not used according to the label, then it is considered ‘extra-label’ usage. Extra-label drug usage requires a veterinary prescription, even if it is a common over-the-counter treatment.

For example, Procaine Penicillin G is available over-the-counter for bacterial pneumonia usage. The dosage is usually 1cc/100 lbs administered intramuscularly for no more than 10cc in one site. The label also indicates allowable treatment for no more than four days. Any deviation from any of these requirements needs a prescription for extra-label usage since special attention must be taken regarding the health of the treated animal and changes to the milk and meat withholding period.

Prescription

Prescription drugs cannot be purchased without a veterinary prescription. But just like over-the-counter drugs, prescription usage must be followed exactly as the label indicates.

If the prescription drug is not used according to its label, then that drug would require additional veterinary supervision and drug label for extra-label usage within the context of a valid veterinarian-client-patient relationship.

Extra-label

The third type of allowable, or legal, drug usage is ‘extra-label.’ Any administration of an over-the-counter or prescription drug that does not follow label indications or dosage is defined as extra-label and will need a veterinary prescription.

Extra-label drug usage is allowed only for FDA approved animal drugs. It is not allowed for non-approved compounds, including botanicals which may not be always recognized as drugs. Extra-label usage is allowed only for therapeutic purposes; not for production use. It is illegal to administer extra-label drugs in feed and if it results in a violative food residue for humans.

Drug Label and Record Requirements

Extra-label drug usage requires:

- Name and address of the prescribing veterinarian
- Established name of the drug and active ingredient
- Any directions for use including the identification of the animal or herd; condition being treated; dosage frequency; route of administration; duration of therapy
- Any cautionary statements
- Specified withdrawal, withholding, or discard time for meat, milk, eggs or any other food
- Written treatment records kept for two years

Drugs Prohibited in Dairy

Not all drugs can be used in dairy cows, even by veterinarians.

Drugs prohibited by FDA for food animals:

- DES, Chloramphenicol, Nitroimidazoles (including metronidazole), Nitrofurans (including topical use), Clenbuterol, Dipyrone, Glycopeptides, Gentian violet, Pheylbutazone in adult dairy cows

Allowable drugs prohibited from extra-label use:

- Sulfonamides in adult dairy cows, Fluoroquinolones (Baytril and A180)