

FDA and Drug Use in Food Producing Animals
Mel Pence DVM, MS, PAS, Diplomate ABVP (beef cattle)
University of Georgia, College of Veterinary Medicine

The Food and Drug Administration (FDA) is tightening up the regulations on the use of most drugs in food producing animals to prevent the contamination of our food supply. We can look at this type of action as some infringement on our ability to raise livestock or as a way to validate that we are doing the best job possible to protect the consumers of our products. In the wake of 9/11 the public is demanding that the government take more action to protect the food supply, therefore we can expect to have more regulation in the future. In the near future, we may be required to be able to source verify our cattle from the calf to the carcass, so we may see a requirement for some type of individually unique identification on each calf. This will allow trace back of any problem cattle for disease control, antibiotic or chemical residue, improve our ability to export, and improve biosecurity. As producers we need to be aware of the changing drug regulations.

The most current change is to prohibit the use of nitrofurans (yellow powdered pinkeye and wound sprays) in food producing animals. "Effective May 7, 2002 the Food and Drug Administration (FDA) **will prohibit the use of topical nitrofurans-containing drugs in food-producing animals.** Historically nitrofurazone and furazolidone were approved for a variety of protozoal and other infections in poultry and swine. In 1991, based on demonstrated carcinogenicity in laboratory animals and the absence of a reliable detection method, the FDA withdrew approval for systemic animal nitrofurans products. A limited number of topical nitrofurazone products however, labeled for "pinkeye in cattle, sheep and goats" and "surface wounds, cuts and abrasions on all livestock" remained available. **These included furazolidone aerosol powder (examples: Topazone and Furox) and nitrofurazone topical powder (examples: NFZ Puffer and P.E. 7).** As a result of a FDA-sponsored study demonstrating meat and milk residues following label topical use, manufacturers of these products agreed to remove remaining food animal indications from their product labels. Topical products with "old" labels, already in distribution, were allowed to be depleted through normal commercial channels. ***With this present action the use of any nitrofurans product (regardless of its label) in a food animal becomes a violation of the Food Drug and Cosmetic Act and one of FDA's highest regulatory priorities.*** A number of nitrofurans-containing products are still currently available for topical or ophthalmic use in dogs, cats, and horses. These products may continue to be used in those species but may not be used in (or on) food animals."

You do not want to be the producer that the FDA decides to make an example of, so be very careful what you use for pinkeye treatment this year. If it has a yellow color it is probably a prohibited drug.

The FDA has a list of drugs definitely prohibited for any use in food-producing animals:

- (a) Chloramphenicol
- (b) Clenbuterol
- (c) Diethylstilbestrol (DES)
- (d) Dimetridazole
- (e) Ipronidazole
- (f) Other nitroimidazoles
- (g) Furazolidone
- (h) Nitrofurazone
- (i) Sulfonamide drugs in lactating dairy cattle (except approved use of sulfadimethoxine).

In addition to this list the FDA is actively testing for meat and tissue residues of gentamicin (Gentacin). This drug was used to treat calf scours years ago. It was always prohibited from use in food producing animals because of its long withdrawal times. If you treat a young calf with gentacin, the antibiotic will be detected in the tissues for about 18 months after the treatment. To avoid any residue problems **you would need to keep that calf on your farm for 18 months** after you treat it with gentacin. For that reason the American Association of Bovine Practitioners, National Beef Cattle Association, and the Academy of Veterinary Consultants all recommend that **gentacin should not be used in cattle.**

It is a violation of the Food Drug and Cosmetic Act and the Animal Medicinal Drug Use Clarification Act (AMDUCA) of 1996 to use any drug extra-label in food producing animals. Extra label is defined as any use not specified on the label. Examples of extra label use in food producing animals are; using a drug in animals not specifically noted on the label, increasing the amount of drug given in excess of the label dosage, and using a drug to treat a condition not specified on the label. There are three classes of drugs that we must consider, 1) drugs labeled for the species and condition we are treating that can be purchased over the counter, 2) prescription drugs that need a veterinarian/client/patient relationship to be available, 3) extra label drugs that are prescribed by your veterinarian and 4) drugs that are prohibited for use in food producing animals under any circumstance. A veterinarian can prescribe extra label use to prevent pain and suffering of a food producing animal only under specific circumstances; 1) if no labeled drug is available, 2) if a veterinarian/client/patient relationship is in place, 3) if the veterinarian keeps a record of the date, drug name, owner, condition, dosage, animal ID, and the scientifically determined withdrawal time for the drug and 4) when available drugs are shown to be ineffective. **By prescribing this extra label use of drugs, the veterinarian and the producer are both responsible for any drug residues in food producing animals.**

The bottom line is that all of us want a safe, unadulterated food supply. The FDA is under some added pressure from the food consuming public to insure a continued supply of safe food. **We all need to be aware of the products we are using and know what is not allowed for use in food production.**