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G97-1314 Medication Withdrawal in Beef Cattle

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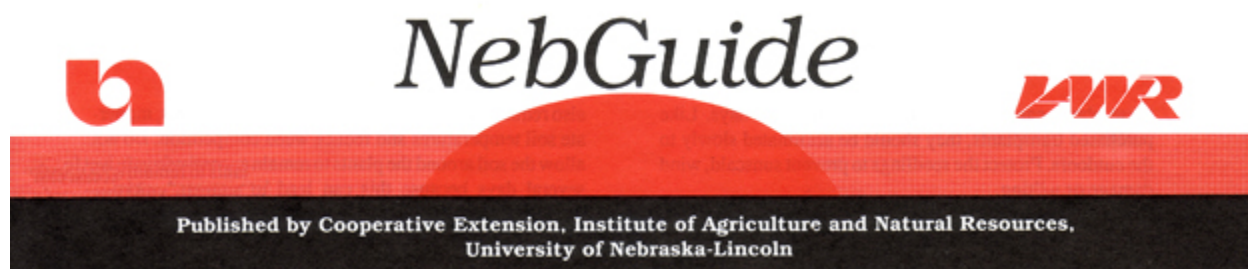
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Medication Withdrawal in Beef Cattle

This NebGuide lists the current withdrawal times for medications used in beef cattle.

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Using proper livestock medications is very important. Proper use not only ensures maximal benefits from the medication but minimizes the chances of an unwanted residue. The National Cattlemen's Beef Association has worked hard to develop a premiere quality assurance program. In conjunction with other national and state beef and veterinary associations, the Beef Quality Assurance program now extends to almost every state in the nation. As a result, the safety and quality of beef has never been better. The outstanding record includes having an extremely low rate of residue violations.

Livestock medications may be categorized as follows: 1) feed additives and 2) medications used on individual animals.

Feed Additives

It is very important that both veterinarians and producers are responsible in the use and handling of feed additives. Use only government approved products and use them as directed on the approved label. Feed additives have very structured claims. If a salesperson for an approved product is irresponsible in their recommendation, they should be reported to the company. If the company does not take disciplinary action, report the company to the Food and Drug Administration Center for Veterinary Medicine and consider terminating future business with the company.

NO ONE has the right to prescribe the use of any feed additive other than as directed on the product label. Extra Label Drug Use (ELDU) does not apply to feed additives or feed medications. It is appropriate to estimate feed intake and calculate the medication addition rate which will allow the intended animals to be medicated.

Producers need to keep good records and regularly check the accuracy of scales. They should set up a daily weigh back auditing system of all feed additives. This will allow improvement of inventory control and improve the ability to catch any mistakes early. Good records will also improve nutritionists' ability to evaluate cattle performance.

Individual Animal Treatments

All calves, backgrounded cattle, stocker cattle, feedlot cattle, cows, and bulls treated individually for illness represent a potential source for a residue violation. In the industry's efforts to control violative drug residues, identification, records, and handling of individually treated cattle is important. This includes identifying each animal treated and accurately recording the treatment, treatment date, and treatment dosage. A good start is to identify every animal in the herd with a unique number. The number should include a number that connects the identification of the animal to its group and if possible, an individual three-digit number unique only to that animal. The smallest number should be at least 3/4 inch in height. All medications used on a group of cattle such as vaccines, dewormers, etc. should be recorded, including serial numbers, and the information should be kept in a file for the group of animals.

A treatment protocol book that is regularly updated by the producer's veterinarian should be kept on file and at the treatment chute. As the treatment protocol book is updated the old book should be kept on file in the office. Updating does not require that the book be reproduced, but it must have the veterinarian's signature and date on which the treatment protocol was reviewed.

Find and use a veterinarian that is willing to be involved with the beef quality assurance program. The veterinarian must understand that the industry and the survival of the producer's business is dependent on each animal. The veterinarian must be willing to be a team player. Allowing anyone to jeopardize a business or an industry for a single animal is very questionable.

Any medications which require use other than as directed on the labels should have revised labels attached to the bottles or the revised instructions included in the treatment protocol book. These should include the veterinarian's name, address, phone number, and revised directions for use and withdrawal time.

Medications should never be given in the rump or back leg. Intra-muscular medications should never exceed 10 ccs. If 24 ccs is the calculated dose, use three sites, each receiving 8ccs instead of two sites each receiving 12 ccs per site. Use the smallest possible needle. Keep a supply of 0.75, 1, and 1.5 inch needles in sizes of 18 - 14 gauge. Ask that all medications be given Sub-Q, I.V. or orally if possible. Try to find vaccines and medications that can be given Sub-Q. It is very important to NEVER give injections in the back leg or rump.

Unfortunately, there will be animals that will not have normal growth performance after treatment. Often these animals are chronically ill or have been injured. These nonperforming animals are a HIGH RISK for causing a violative residue problem. These animals should have all of their records reviewed by both the veterinarian and manager before being released for salvage.

The veterinarian should establish a minimum withdrawal time for all newly processed cattle or cattle that are recovering from illness. A 60-day withdrawal time will allow a small safety buffer for animals that may have some organ damage and may not be clearing medications normally. Consider establishing a residue testing program for nonperforming animals before releasing them for salvage. These cattle could have been treated before entering the producers premises and still pose a potential residue hazard.

Extra Label Drug Usage

There are two classes of drugs: RESTRICTED DRUGS and OVER THE COUNTER (OTC), (*Figure 1*). Restricted drugs have the following statement on the label: *CAUTION: Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian*. Restricted medications may only be obtained and used under the supervision of a veterinarian. Over-the-counter drugs can be purchased and used following the label directions by cattlemen without establishing a relationship with a veterinarian. For example, penicillin G is an OTC medication. The label on penicillin G directs 1 cc/cwt be given IM. A 600-pound calf would receive six cc's IM. Federal law does not permit cattlemen to adjust the dose. The dose of OTC medications can be adjusted if the producer has an established relationship with a veterinarian. Medications used in this fashion should have an additional label attached to the medication which contains the veterinarian's instructions and withdrawal time.

Figure 1. Examples of Over the Counter and Restricted Medications	
Over the Counter	Restricted
Penicillin G Procaine	Micotil
LA-200 / Biomycin 200	Naxcel
Tylan 200	Nuflor

The extra label drug usage policy of the FDA-CVM specifies the following criteria must be met:

1. A careful diagnosis is made by an attending veterinarian within the context of a valid veterinarian-client-patient relationship.
2. A determination is made that a) there is no marketable drug specifically labeled to treat the condition diagnosed, or b) treatment at the dosage recommended by the labeling was found clinically ineffective.
3. Procedures are instituted to assure that the identity of the treated animal is carefully maintained.
4. A significantly extended period is assigned for drug withdrawal prior to marketing the treated animal, and steps are taken to assure the assigned time frames are met and no violative residue occurs.

Veterinarian-Client-Patient relationships exist when:

1. The veterinarian has assumed the responsibility for making clinical judgments regarding the health of the animal and the need for medical treatment, and the client has agreed to follow the veterinarian's instructions.
2. The veterinarian has sufficient knowledge of the animal to initiate at least a general or preliminary diagnosis of the medical condition of the animal. This means the veterinarian has recently seen and is personally acquainted with the keeping and care of the animal by virtue of an examination of the animal or the medically appropriate and timely visits to the premises where the animal is kept.
3. The veterinarian is readily available for follow-up evaluation in the event of adverse reactions or failure of the treatment regimen.

Medication withdrawal:

Figure 2 of this NebGuide can be used as a poster to hang in treatment areas.

Figure 2.

A Quality Assurance, Critical Management Point (QA, CMP) is Proper Medication Withdrawal



Injectable Therapies	Minimal Days Withdrawal	Implants	Minimal Days Withdrawal
Gallimycin®/Erythromycin	14	Compudose®	0
LA-200® (IM or SQ)	28	Ralgro® / Magnum®	0
Bio-Mycin® 200/AnchorOxy...200 (SQ)	36	Synovex® (S,H,C)	0
Micotil®	28	Implus® (S, H)	0
Naxcel®	0	Finaplix® (S,H)	0
Nuflor®	28	Revalor® (S,H,G)	0
Oxytetracycline Inj.	18-22	Synovex-Plus® (S)	0
Penicillin G Procaine (Check with your vet)	varies	Biologicals	
Pen BP-48®	30	Killed Virus	21
Polyflex®	6	Bacterins	21
ReCovr®	4	Modified Live	21
Tylan®200	21	Vaccine with Oil	60
Feed Additives		Anthelmintics	
AS-700® (0.35g Aureo + 0.35g Sulmet)	7	Levasole®/Tramisol® Inj.	7
Bovatec® (legal clearance with)*	0	Tramisol® Oblet	2
---* MGA® / OTC (Oxytetracycline)	0	Levasole® Bolus	2
Cattlyst®	0	Levasole®/Tramisol® Drench	2
Aureomycin® (Chlortetracycline)		Ivomec® 1% Injection	49
---(350 mg/head/day or less)	0	Ivomec® F	49
---(more than 350 mg/head/day)	2	Ivomec® Pour on	48
---(10 mg/lb/day up 5 days)	10	Safe-Guard/Panacur® Suspension	8
Corid®	1	Safe-Guard® Block	11
Deccox®	0	Synanthic®	7
Rabon®	0	Totalon®	9
Rumensin® (legal clearance with)*	0	Valbazen®	27
---* MGA® / Tylan® / Rabon®	0	Dectomax®	35
TM® (Oxytetracycline) 2 gm/hd/day	5	Sulfas	
TM® (less than 2 gm/hd/day)	0	Albon® SR Bolus	21
TM® (2 gm/hd) + Neomycin (1.4 gm/hd)	7	Albon® 15 gm Bolus	7
Vit. E for Shelf life (50K divided)	0	Albon® 40% Injection	5
Zinpro®	0	Albon® 12.5% Drinking Water	7
Insecticides		Sustain III® Bolus	7
Lysoff® or Neguvon®	21	Sulfa Span®	8
Spotton®	45	Sulmet®	10
Tiguvon®	35	Sulfadimethoxine® Oral or Powder	7
Warbex®	35		

Recheck ALL Withdrawal Times With Your Veterinarian.

Extended withdrawal 2 to 3 times for ALL medications that are used in a manner other than labeled and for animals that have extended treatments or culled for nongrowth performance.

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