Drug Residue Avoidance Program

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Objectives

- Understand that surveillance of food animal production practices protects the food supply
- Understand that proper administration of approved drugs and chemicals prevents drug residues in milk and meat
- Understand that following withdrawal times for drugs and chemicals prevents drug residues in milk and meat
Regulatory Agencies

- Food and Drug Administration (FDA)
- Food Safety and Inspection Service (USDA-FSIS)
- Department of State Health Services (DSHS)
Laws

- Food, Drug and Cosmetic Act (FDC Act)
- Animal Medicinal Drug Use Clarification Act (AMDUCA)
- Pasteurized Milk Ordinance (PMO)
Definition of a Drug: Based on Usage

- Any compound administered or applied with the intent:
  - To prevent
  - To treat
  - To make a change in body function
Proper Usage
- Read the label!
- Follow the label!
- Think residues!

Drug Usages
- Prevent diseases
- Prevent conditions
- Treat diseases
- Treat conditions
- Change functions
Approved Drug Types

- Vaccines
- Antibiotics/Antibacterials
- Chemicals
- Hormones/Steroids

Food Animal Residue Avoidance Databank
http://www.farad.org
1-888-USFARAD
usfarad@gmail.com
Within-Label Drug Usage

- Approved drug for animal species on label
- Correct route on label
- Correct dosage on label
- Usage on label
- Withdrawal time on label
Drug Withdrawal Time

- Drug elimination time for safe level in body
  - Drug below tolerant level in tissues
- Published on label
  - Time more than 24 hrs, unless drug considered safe
- Total drug elimination time longer than WT
  - Drug in urine
- Do not enter show until WT and ET expired
  - Drug in urine
  - Urine must be drug negative
- Do not slaughter until WT expired
  - Drug above tolerant level in tissues
Drug Elimination Time

- Time to be eliminated from body
- Do not enter show until expired
  - Drug in urine
  - Urine must be drug negative

- WT not published on label
  - Time less than 24 hrs
  - Time more than 24 hrs – considered safe
Prescription Drugs

- **Caution**: Federal law restricts this drug to use by or on the order of a licensed veterinarian
- Dispensed: Veterinarian Label
Unapproved Drug Types

- Tranquilizers (ace, thorazine)
- Natural tranquilizers (vitamin B6, tryptophan, herbs)
- Local anesthetics (procaine, lidocaine)
- Diuretics (except Lasix®, Diuril® for udder edema)
- Natural dewormers (tobacco, garlic, DE)
- Caffeine diuretics (coffee, tea, chocolate, soda)
- Alcohol tranquilizers (beer, whiskey)
- Human drugs (topical, oral, parenteral)
Prohibited Drug Types

- Diethylsilbestrol
- Chloramphenicol
- Nitroimidazoles
- Clenbuterol
- Dipyrrone
- Fluoroquinolines
- Glycopeptides
- Nitrofurans (oral, topical, parenteral)
- Gentian Violet
- Sulfonamide (adult dairy cattle)
- Phenylbutazone (adult dairy cattle)
Extra-Label Drug Usage

- Approved animal drugs and human drugs
  - Federal law restricts extra-label drug use by or on the order of a licensed veterinarian
- Dispensed: Veterinarian Label
- Prescribed: Veterinarian Prescription
- Not permitted in feed and water
  - Examples:
    - Coccidiostats
    - Antibacterials, Antibiotics
    - Dewormers
    - Ractopamines (Paylean®, Optaflexx®, Topmax®)
    - Zilpaterol (Showmaxx®)
Medicated Feed
Coccidiostats

- Goats
  - Decoquinate (Deccox®)
  - Monensin (Rumensin®)

- Sheep
  - Decoquinate (Deccox®)
  - Monensin (Rumensin®)
  - Lasalocid (Bovatec®, Avatec®)
Medicated Feed Antibacterials

- Goats
  - None

- Sheep
  - Chlortetracycline (Aureomycin®)
  - Oxytetracycline (Terramycin®)
  - Neomycin (Neomix®)
Antibiotics

- Goats
  - Neomycin Oral Solution®
  - Naxcel®
- Sheep
  - Neomycin Oral Solution®
  - Naxcel®
  - Micotil®
  - Penicillin
Dewormers

- **Goats**
  - Fenbendazole Oral Suspension
    - Safe-Guard®, Panacur®

- **Sheep**
  - Ivermectin Oral Suspension
    - Ivomec Drench®
  - Levamisole Oral Powder/Bolus
    - Tramisol®, Levasole®
  - Albendazole Oral Suspension
    - Valbazen®
  - Moxidectin Oral Solution
    - Cydectin®
Approved Drugs for Rabbits

- Medicated feed coccidiostats
  - Lasalocid (Bovatec®, Avatec®)
  - Sulfadimethoxine (S.Q.®)

- No medicated feed antibacterials
- No antibiotics
- No dewormers