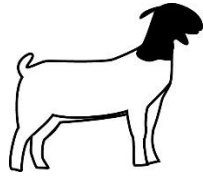


Meat Goat Project



Health

Develop a preventative health program

- Know your breeder's health program
- Daily observation
- Clean, cool, fresh water
- Regular feeding schedule
- Vaccinate for CDT/7-8way clostridial
- Regular de-worm/external parasite control
- Fly control program
- Insure safe pen environment
- Exercise essential
- Blanketed? Washing? Clipping?
- Mineral program?
- Internal parasite management
 - Immediately after purchase
 - 3 weeks later and periodic
 - Thiabendazole
 - Safeguard
 - Valbazen
 - Morantel tartrate
 - Rumatel

*Your veterinarian can give you more options
Ivomec, Prohibit, Cydectin?*

- External parasite management (lice)
 - Biting and sucking
 - Lots of options
 - Pour on
 - Spray/dip
 - Powders
 - Treat twice, 14 days apart

Hoof trimming

- Prevents disease and lameness
- Trim hooves every 4-6 weeks
- Trim hooves 1-2 weeks before show to provide time for healing if quicked.

Signs of a sick goat

- Normal rectal Temp 102-104
- Does not eat as quickly
- May not clean up feed
- Head hanging down
- Dull appearing eyes
- Walk abnormally
- Look for signs of scours:
 - Changed feed too quickly
 - Too much high energy feed
 - Internal parasites
 - Respiratory/Metabolic disorder
- Signs of specific diseases
- *Treat sick animals immediately*
- Limited over the counter drugs available
- Consult your veterinarian for more options and better treatment
 - Restricted drugs will not mention goats on the label
 - Drug label: Species/class of animal, route of admin, approved dose rate, specific conditions for treatment, withdrawal times

Show Box - Must Haves

Rectal Thermometer
Syringe/Needles
Drench Gun
Fly Control (Bait and Spray)
De-wormer (Anthelmintic)
External Parasite Control (pour-on, spray, dust)
Hoof Trimmers
Probiotic Therapy Paste
Disinfectant

Consult with Veterinarian for Show Box meds!

Common Health Issues

Barn Cough

- Goats have tendency to cough due to dust contact; picking ground, running, etc.
- Can be sign of allergies, clearing throat, etc.
- Caution should be taken to ensure cough is not symptom of primary respiratory infection

Coccidiosis

- Scours, bloody scours, dehydration, weakness and weight loss
- Separate & consider mass treatment
- Consult veterinarian for advice/treatment
Corid, sulfadimethoxine (Albon)
- Most show goat rations are medicated with a coccidiostat

E.coli

- Watery scours, yellow scours
dehydration, weakness
- Separate & consider mass treatment
 - Neomycin (Rx) only approved
- Consult veterinarian for treatment

Enterotoxaemia (overeating disease)

- Clostridium organism normally present in small intestine
- Stress induced
- Abrupt change in feeding
- Consume large amount of grain/alfalfa
- Organism colonizes rapidly and releases toxin causing death with little symptoms, usually just off feed or orts
- Vaccinate and boost

Pinkeye

- Very contagious (watch all livestock/humans)
- Excessive tearing of eye and clouding of pupil
- Dry, dusty pens and constant exposure to sunlight

- Flies are a vector
- Most goats recover without treatment, however daily cleaning and antibiotic therapy will quicken healing

Polioencephalomalacia (Polio)

- Caused by disruption of the action of thiamine production in the rumen
- Thiamine produced by rumen microflora
- Can be induced by high Sulphur diet
- Depressed, head pushers, star gazing, act/are blind, and can progress to convulsions/death
- Treat with thiamine therapy
- Investigate cause with your veterinarian

Respiratory disease (Pneumonia)

- Inflammation of lung tissue (pulmonary parenchyma then bronchioles)
- Occurs when infectious and non-infectious agents cause lungs to become inflamed
- Usually Pasteurella multocida or Mannheimia haemolytica
- Both cause outbreak of acute pneumonia of all ages
- Usually associated as secondary infection due to management practices or severe stress
- Causes:
 - Transportation stress
 - Viral infection
 - Lung parasites
 - Prior bacterial infection
 - Overcrowding
 - Poor housing conditions
 - Sudden environmental changes
 - Other stressful conditions
- Infections break down tissue defense barriers
- Loss of natural protection allows secondary
- Can cause death without overt signs of sickness

Symptoms:

- Fever with 104 – 106 temp
- Increased respiration rate
- Moist, painful cough, difficulty breathing
- Crackling sounds, nasal and ocular discharge
- Loss of appetite
- Depression

Treatment

- Ceftiofur (Naxel) (*Prescription Only*) is only FDA approved treatment for goat pneumonia
- Consult veterinarian for options

Vaccination available

- Contact veterinarian for options
- Mannhaemia/Pasteurella
- Inforce 3? (BRSV, IBR, PI3)

Ringworm/show fungus

- Transmitted animal to animal, animal to human or infected equipment
- Use prevention program
- Fly management
- Blankets
- Necessary clipping only
- Over the counter topicals
 - Fungicides
 - Bleach
 - Oils
- Consult veterinarian for other treatment options
 - Treat both external and internal

Soremouth

- Contagious disease that causes scabs on lips and around mouth
- Caused by a virus that is zoonotic
- Iodine rubbed on lesions after scabs are removed will help dry up area and reduce infection
- Live-virus vaccine available to prevent soremouth
- Once they get it they are immune

Tetanus (lock jaw)

- Cause Tetanus organism in open wound
- Common with banding or injury
- Stiff, sawhorse stance
- No treatment, seldom recover
- Vaccinate and boost with CDT combo with clostridials

Urinary calculi (Water Belly)

- Metabolic disease of mainly male goats caused by formation of stones in urinary tract
- Cannot urinate, restless, kicks at belly, stretch, and attempt to urinate
- Cause: high Phosphorus, Ca:P imbalance, alfalfa, water quality, silica, dehydration
- Most reputable show feeds account for Ca:P ratio, and add ammonium chloride
- If issues, add additional ammonium chloride, test water and water management
- Consult veterinarian for treatment
 - Pain relief, palpation, removal

Less Common Health Issues

Blue tongue

- Be aware, can travel north during summer, usually along river systems
- Vector is gnats, no see ums.
- Lethargic, swollen tongues, off feed
- Vaccine available
- Consult veterinarian

Caseous Lymphadenitis

- Infected lymph nodes, external and internal
- Consult veterinarian for treatment options
 - Formaldehyde injection
 - Removal of abscess node

Meat Goat Quality Assurance Principles

Adapted from: *Introduction to a Meat Goat Quality Assurance Program and HACCP*, Roger Merkel, Langston University

Key Principles

- Consistently producing a safe meat product demanded by consumers and mandated by law
- Responsible production of high quality, high value, edible products belongs to the producer
- An effective quality assurance program focuses on the total production environment

Preferred Production Practices in Herd Health

1. Establish and follow a herd health program
2. Establish a valid veterinarian-client-patient relationship
 - i. Use any off-label drugs in accordance with guidelines for their use within such relationship
3. Store and administer drugs according to labeled use or veterinarian authorized off-label use and follow all withdrawal periods
4. Use proper injection technique, including preferred injection site
 - i. Subcutaneous (SC) administration is preferred to intramuscular (IM) or intravenous (IV) injections.
 - ii. When administering drugs SC, use proper tenting technique to avoid entering the muscle.
 - iii. If IM injections must be given, ensure that all injections are given in front of the point of shoulder
 - iv. When giving IM injections, proper technique calls for pulling back slightly on plunger to ensure vein or artery is not penetrated
 - v. Proper injection technique also includes needle selection depending on viscosity of drug, injection method and age of animal
 - vi. Generally 18 and 20 gauge needles are sufficient for most injections
 - vii. Needle length of 1 to 1 ½ inches should be used for IM or IV, while ½ to ¾ inch needles are suitable for SC
 - viii. Avoid using dull needles because of animal discomfort and lesion formation
 - ix. Dispose of needles in appropriate sharps container
 - x. Provide training to all person treating animals

Preferred Production Practices in Nutrition/Feed

1. Provide proper nutrition to all animals
2. Ensure feed and water are contaminant free
3. Comply with FDA regulations regarding ruminant protein
4. Take proper care with fed medications and other feed additives
5. Record use of chemicals on pasture to prevent contaminated harvested feeds

Preferred Production Practices in Management and Care

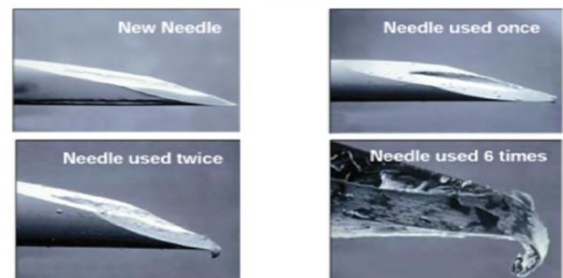
1. Provide proper care to all animals
2. Use proper gathering and handling techniques to reduce animal stress
3. Provide training in proper goat care and handling techniques to all caretakers
4. Inspect facilities periodically to maintain good working condition

Preferred Practices in Record Keeping

1. Identify each animal
2. Keep and maintain records on all animals
3. Periodically review records for completeness and accuracy

Preferred Practice in Biosecurity

1. Establish a biosecurity plan for your farm
2. Minimize or avoid contact between your animals and animals not on your farm
3. Establish a quarantine protocol for animal entering your farm
4. Establish a protocol for visitors to your farm
5. Do not allow persons who have had contact with livestock in foreign countries on your farm for a period of 5 days



- **Hypodermic needles are disposable and inexpensive**
- **Reuse no more 10 times during multi-dose event**
- **Consider tissue damage caused by re-used needle and lesion possibility on prized goat project**
- **Never save a needle for later use, dispose of properly**
- **When treating sick animals consider new needle each animal to avoid contamination**