Failure to maintain healthy livestock could result in...
- Animal suffering
- Decreased productivity
- Could pose as a threat to human health

Animal Health

What are diseases caused by?
Disease may be caused by infectious agents.

Examples:
- Bacteria
- Viruses
- Fungi
- Prions
- Protozoa
- Parasites
Animal Health

*Transmission of disease can occur through direct or indirect contact

Q: What are some examples of direct and indirect contact?

**INDIRECT TRANSMISSION**
- Contaminated feeder
- Waterers
- Shoes
- Clothing
- Farm equipment
- Wild animals

**DIRECT TRANSMISSION**
- Saliva
- Nasal Discharge
- Sexual contact
- Air borne
- Pus
- Feces
- Blood

How do you know if your livestock are healthy?

**FIRST YOU NEED TO RECOGNIZE WHAT IS NORMAL TO KNOW ABNORMAL.**

- Behavior
- Posture
- Activity level
- Coat or fleece
- Normal vital signs

**NORMAL VITAL SIGNS:**
- Temperature: 100.9-103.8
- Heart rate: 60-90 bpm
- Respiration rate: 15 breath/minute
- Check for dehydration
- Pink mucous membranes
Preventing Illness

1. Purchase healthy animals
2. Quarantine new animals
3. Isolate sick animals
4. Work with your veterinarian to develop a herd health program
5. Stress free environment
6. Maintain good sanitation, provide clean water, and proper stocking rates
7. Provide appropriate nutrition for age and stage of production
8. Maintain good record keeping!

Selecting a healthy animal

Make sure the animal you are buying and herd look healthy

Ask the producer Questions?????

• What diseases have been a problem in the source herd?
• What are the management practices?
  • Vaccination
  • Deworming
  • Feeding
  • Selection/Culling of stock

Quarantine your new animals for 30 days

In many cases, animals from a sale barn are a poor choice
• Usually culled because of disease, defects, or poor performance
• Animals are exposed to many other animals and possible diseases at the sale barn

Common Disease of Goats and Sheep

- Parasites
- Parasites
- Haemonchus contortus
- Coccidiosis
- Overeating disease
- Tetanus
- Urinary stones
- Caseous Lymphadenitis
- Soremouth
Common Disease of Goats and Sheep

- Pinkeye
- Ringworm
- White Muscle Disease
- Footrot
- Pregnancy Toxemia
- Caprine Arthritis and Encephalitis
- Brucellosis
- Cooper Toxicity
- Scrapie
- Johne’s Disease

Haemonchus contortus

- Barber’s pole worm
- Worm can replicate very rapidly and has the ability to suck blood from its host
- Worm lives 25-50 days and can produce 250,000 eggs during its life cycle
- H. contortus thrives under Florida weather conditions and is a potential threat all year round
- Symptoms include: reduced growth, reduced milk production, anemia, and death
- FAMACHA
- Fecal egg count

Coccidiosis

- Protozoan parasite
- When the animal is stressed or is young it will over power the immune system
- Usually seen in young animals 2-4 months of age (usually when you are weaning them)
- Symptoms include: diarrhea, decreased appetite, dehydration, poor weight gain, and sometimes death
- Contact your veterinarian for fecal testing
- Keep area clean and have proper stocking rates

CD/T Toxoid

- Combination vaccine called CD/T
- Most important vaccine in goats and sheep!
- Booster 3 weeks after initial shot
- Adults: vaccinate once a year
- 4 weeks pre-partum

https://www.sheepandgoat.com/cdt
**Overeating Disease - Enterotoxemia**

- **Bacteria**: Clostridium perfringens Type C & D
- **Symptoms include**: muscular tremors, colic, depression, foaming at the mouth, grinding of the teeth, incoordination, and sudden death
- **Largest or fastest growing lamb/kid**
- **Organism undergoes rapid growth and releases a toxin in intestine**
- **Similar to blackleg in cattle**
- **Prevention**: regulate feeding and avoid sudden change in diet.

**Tetanus**

- **Clostridium tetani**
- **Organism found frequently in soil**
- **Puncture wounds without oxygen and dirt = tetanus (debudding and banding)**
- **Symptoms include**: Joint stiffness, muscle pain, locking up, problems breathing, and death
- **Vaccine is to prevent not treat**
- **Vaccine takes about two weeks to become effective**

---

**Urinary Stones**

- **Symptoms include**: Urinary stones stuck in the urethra and the animal can not urinate
- **Seen most commonly in wethers**
- **Offer plenty of roughage**
- **Don’t over feed grain, treats, and avoid supplements**
- **Fresh clean water is important**
- **Salt will help increase water intake**
- **Ammonium chloride .5% in the food (prevention only) to increase acidity of urine**
**Caseous Lymphadenitis (CL)**

- **Symptoms include**: abscess in the lymph node area (under jaw and shoulder)
- Can also cause internal abscesses
- Lance abscess and collect pus and dispose of properly
- **Zoonotic** direct contact with the pus
- Bacteria can live in the ground for a long time
- Extremely contagious and resistant organism (isolate animal)
- Antibiotic will not cure CL
- Cull infected animals
- Vaccines: can cause bad reactions

---

**Soremouth- Orf, Contagious Ecthyma**

- Parapox virus similar to chicken pox in children
- **Symptoms include**: Scabs around the mouth, ears, teats, and coronary band
- Offspring may have trouble nursing
- Resolves on its own within 1-4 weeks
- Lives in the ground
- Vaccines can be given but must be given before an outbreak
- Vaccine is a live virus

---

**Zoonotic**
- Human will get blisters on fingers and hands, blisters will turn black
- Blisters can last up to two months
- Wear gloves and have good sanitation
**Pinkeye**
- Caused by many different organisms: Moraxella and Chlamydia
- Can be zoonotic
- Isolation: Very contagious
- Gloves and good sanitation is important

**Ringworm Cutaneous Fungal Lesions**
- Skin infection caused by a fungus
- Symptoms include: ring-shaped, crusty patches on the skin where there is hair or wool loss
- Zoonotic
- Spread by direct and indirect contact
  - Examples:
  - Clippers
  - Grooming tools

**White Muscle Disease**
- Selenium and vitamin E deficient in the soil and forages
- Vitamin E and/or selenium deficient
- Symptoms include: arched or hunched back, stiff gait, breathing difficulty, fever, nasal discharge (foamy or bloody), and sudden death
- Often seen in newborn and fast-growing animals
- Mineral block or free choice mineral
- BO-SE, MULTIMIN
Foot Rot

- Bacterial infection
- Organism that causes foot rot lives in wet muddy conditions
- Very contagious in herd
- Same organism that causes foot rot in cattle
- Symptoms include: lameness, intense pain, smell foul odor, and reduced weight gain

Treatment:
- Keep a clean dry area
- Regular trimming
- Debride necrotic tissue
- Foot baths

Pregnancy Toxemia- ketosis

- Affects ewes or does during late gestation
- Occurs in fat or thin animals that carry two or more feti
- Develops when does or ewes can not ingest enough nutrients to meet glucose requirements for herself and fetus
- Prevention: proper nutrition with high energy concentrates for late term mothers
- Treatment: Contact your veterinarian

CAE-Caprine Arthritis and Encephalitis

- Slow virus that is a lifelong infection
- Spreads form mother to offspring through milk
- Adult Symptoms include: painful swollen joints and mastitis
- Lambs/kids (2-6 months) symptoms include: Encephalitis (neurologic)
- Prevention: regular testing and culling must be practiced if disease eradication is the goal
**Brucellosis**

- Also known as Bangs Disease
- *Brucella melitensis* (goats), *Brucella ovis* (sheep)
- Florida is a Brucellosis free state
- Reportable
- Symptoms include: late term abortions, retained placentas, udder inflammation, testicular inflammation, fever, depression, diarrhea, and weight loss.
- Zoonotic: people can get this from drinking contaminated dairy products, direct contact with open wounds with contaminated tissue or fluids.

**Copper Toxicity**

- Sheep are sensitive to copper poisoning
- Sheep can’t excrete copper from their body as efficiently as other species
- May occur in acute and chronic form
- Provide only feed that is formulated for sheep
- Be careful with the amount of copper in mineral mixes or incorrectly balanced grain rations
- Treatment should be done by a veterinarian

**Scrapie**

- Scrapie is caused by a prion
- Reportable
- Affects central nervous system
- Symptoms include: weight loss with out loss of appetite, itching, biting at the legs, bunny hopping in rear legs, increase sensitivity to noise and sudden movement, tremors, lip smacking, high stepping with front legs, blindness, and swaying of back end.
- Prevention: flock certification

**Johne’s Disease- MAP**

- Mycobacterium avium subsp. paratuberculosis (MAP)
- Bacteria is spread in feces, milk, and placenta
- Symptoms include: weight loss, lower pregnancy rates, reduced milk production, and diarrhea
- Animal can carry the disease with out clinical signs
- Prevention: testing and a management plan must be used to improve herd
Questions?