

# Lambing/Kidding Health: Preventive Health Strategies

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# Outline

- Prepartum Period
- Parturition
- Postpartum Period
  
- In each period we will discuss:
  - Possible problems and complications
  - Potential Solutions
  - Preventive Measures

# Disease Prevention or Health Promotion?

## Disease Prevention

- Focus tends to be on preparing animals for diseases
- My experience: What can you **GIVE** my livestock to keep them healthy
  - Focuses on solutions delivered through a needle

## Health Promotion

- Focus tends to be on maintaining a resilient, productive group of livestock
- My experience: What can I do **FOR** my animals to keep them healthy
  - Focus is on animal husbandry

# Nutrition for Health

- Adequate
  - Energy
  - Fiber
  - Protein
  - Micronutrients
  - Clean, Fresh Water
- Low BCS is a leading risk factor for most diseases



# Prepartum-Pregnancy Toxemia

- Pregnancy Toxemia (ketosis, hepatic lipidosis)
  - Occurs in late gestation in ewes/does that are:
    - Too fat early in gestation
    - Too thin
    - Fed low quality feedstuffs
    - Sick for other reasons
  - Females carrying multiples are at much higher risk due to increased energy demands
- Prevention is key
- Treatment can include diet changes, glucose therapy, and induction of parturition

# Prepartum-Hypocalcemia

- Females with pregnancy toxemia are also very likely to have clinical or subclinical hypocalcemia
- Signs include bloat, hyperactivity followed by lethargy/going down, body temps that move toward ambient temp
- Treated with calcium (oral or IV)
- Should treat pregnancy toxemias with calcium as a standard practice
- Prevention
  - Feed high calcium feeds/minerals late in gestation (e.g. alfalfa hay)

# Prepartum-Abortions

- Enzootic Abortion (*Chlamydophila abortus*)
- Q Fever (*Coxiella burnettii*)
- Vibriosis (*Campylobacter* spp)
- Listeriosis (*Listeria monocytogenes*)
- Leptospirosis
- Toxoplasmosis
- Many Viruses

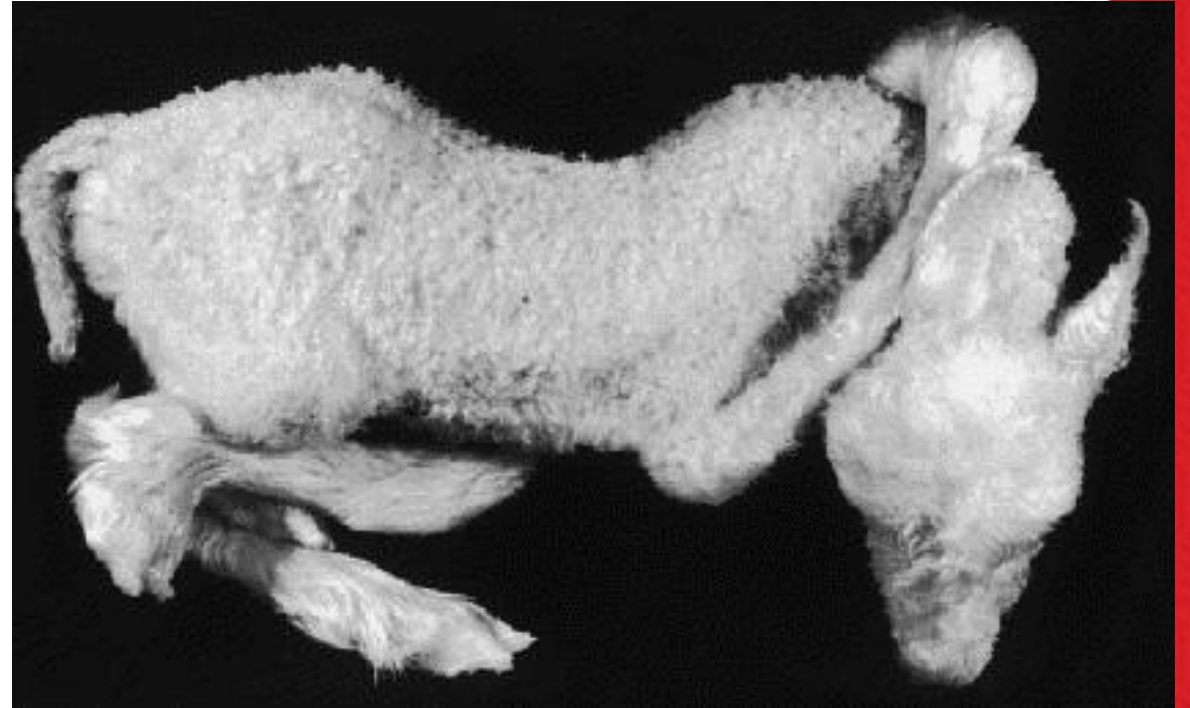
# Steps to Figuring Out an Abortion Outbreak

- Record
  - Date aborting ewe/doe is noticed
  - Condition of the ewe/doe (sick, apparently normal)
  - Condition of the aborted fetus (rotten, deformed, normal except for small)
- Collect (or have your veterinarian collect)
  - Aborted fetus
  - Placenta
  - Possibly blood from ewe
- Submit continuing cases until you have an answer
  - Approximately 50% success on any particular case in cattle, less in small ruminants



# Example-Cache Valley Fever Virus

- Transmitted by Mosquitos
- Causes Fetal Malformations
  - Only if ewe is infected before 45 days of gestation
  - After 45 days-normal lamb



# Abortion-Biosecurity

- BioExclusion

- Do not add new animals, especially pregnant females, during gestation for the resident flock/herd.
- Do allow any cats in the vicinity of pregnant sheep/goats if they have not been there before, especially kittens.

- BioContainment

- If not submitted for diagnostics, immediately destroy (burn, bury, landfill) any aborted fetuses and placentas.
- Isolate aborting ewes/does away from pregnant animals
- If cats are desired on your farm, spay and neuter them to prevent kittens and create a stable population that discourages strays.

# Abortion-Vaccination

- Vaccines availability is limited
  - Enzootic abortion
  - Vibriosis
- Vaccination during pregnancy can cause abortions
- Vaccination does not guarantee protection



# Abortion-Treatment

- Tetracycline has been useful in stopping/preventing ongoing abortions associated with Enzootic abortion and vibriosis
  - Injections can be used
  - Feed grade CTC can also be used (80 mg/head/day allowed, 300 mg/head/day needed, ILLEGAL to do)
- Feeding decoquinate (legal for sheep coccidia prevention), monensin (legal for goat coccidia prevention), and less so with lasalocid (legal for sheep coccidia prevention) has been associated with reduced toxoplasmosis abortion

# Feed Grade Antimicrobials in Small Ruminants

- Many can now be used only with a valid Veterinary Feed Directive
  - VFDs must be obtained from a veterinarian but require cooperation of the owner, vet, and feed supplier
  - VFDs can only be written by a veterinarian with a valid Veterinary, Client, Patient relationship
    - Veterinarian assumes responsibility for making medical judgements about the need for treatment and has sufficient knowledge to make a diagnosis. Veterinarian also agrees to be available for follow-up in case of adverse events or treatment failure.
    - Client agrees to follow veterinarians instructions.
- Extra-label use of feed-grade medications is strictly prohibited

# Parturition-Ringwomb

- Failure of the cervix to fully dilate during parturition
- Treatment
  - In some cases, manual dilation will allow birth to progress
  - C-section
- Ringwomb is hereditary and ewes with ringwomb and their offspring should not be retained as breeding stock

# Parturition-Dystocia

- Fetal mispresentation
- Large offspring

# Postpartum-lamb/kid

- Temperature
  - Small ruminant young have high surface area to body weight ratio; they are good radiators
  - Will lose 2-4 °F in the first 15 minutes after birth, this will continue rapidly if weather conditions are cold and windy
  - Maternal care removes fluid-slows cooling
  - Brown fat metabolism and shivering warm lamb but deplete energy reserves rapidly
- Colostrum
  - Provides essential antibodies, energy, and protein to newborn offspring
  - Lambs should nurse within 30 minutes and intervention should occur by 2 hours, less if adverse conditions are present



# Postpartum-Ewe/Doe

- Always do the “extra lamb/kid” check-make sure parturition is complete
- Pregnancy toxemia/hypocalcemia can occur after lambing/kidding

# Questions

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