

KID DISEASES

- Most are age dependent
- Management is critical
 - Nutrition
 - Biosecurity
 - Parasite control
 - Vaccine Strategy
 - Housing

Nutrition

- Nutrition is the foundation for a healthy kid
- Kids with poor nutrition will have poor immune systems and be more susceptible to disease
- Vaccines, medications not substitutes for good basic nutrition

Nutrition

- Colostrum
 - 10% of body weight in first 18 hours
 - 1 oz per lb at birth, 6 and 12 hours
 - Raw vs heat treated
 - Dam raised vs hand fed

Nutrition

- Growth and Maintenance
- Amount will vary based on breed and other factors
- Environment
- Ambient temperature, weather exposure
- Activity level
- Concomitant disease and/or parasites

Nutrition

- Feed enough to maintain a healthy weight
- Body condition score 5/10
 - Avoid overfeeding &/or too rapid growth
- Balanced diet
 - Mineral balance
- Feed best quality available
 - Smaller bodies unable to consume enough poor quality feed to maintain growth

Diseases

- Most kid diseases are age related
 - Birth to 1 week
 - 1-2 weeks
 - 2-6 weeks
 - 6-12 weeks
 - 12-24 weeks

• Birth to 1 week

- Failure of Passive Transfer
- Neonatal diarrhea
- Joint ill
- Clostridia
- Floppy kid

• Birth to 1 week

- Failure of Passive Transfer

- Kid's immune system entirely dependent on colostrum
- 18-24 hours maximum age for absorption
- Single most important aspect of early kid management
- Have extra on hand, and make sure it gets into kid!!!

• Birth to 1 week

• NEONATAL DIARRRHEA

- Starts as early as 18 hours
- Severe dehydration
- Painful
- Most common cause of early kid mortality

• Birth to 1 week

- NEONATAL DIARRHEA
- Causes-
 - Rota and Corona Virus
 - E. Coli
- Failure of passive transfer
- Calves, lambs
- Not due to overfeeding

• Birth to 1 week

- NEONATAL DIARRHEA
- Viruses
 - Rota typically earlier than Corona
- Bacterial
 - E. Coli
 - Enterococcus
 - Similar to viruses, may cause septicemia

• Birth to 1 week

- NEONATAL DIARRRHEA
- Treatment
 - Fluids – Most Important!
 - Oral vs IV
 - Electrolytes
 - Antidiarrheal agents
 - Pain medication
 - Antibiotics?

• Birth to 1 week

- NEONATAL DIARRHEA
- Prevention
 - Colostrum
 - Vaccination
 - Identify cause
 - Oral vaccines for kids
 - Adult vaccines

• Birth to 1 week

• JOINT ILL

- Usually due to FPT
- Rarely due to lack of iodine on navel unless facilities are unclean
- Bacteria enter via umbilicus or orally
- Can come from dams with mastitis

• Birth to 1 week

- JOINT ILL
- May be older, few days to few weeks old
- Hot, swollen joints
 - May be one or multiple joints
- Very painful
- Can be sudden onset
 - Confused with trauma
 - Fever

• Birth to 1 week

• JOINT ILL

- Need to treat aggressively
- Antibiotics
- Joint flush if valuable
- Culture

• Birth to 1 week

- CLOSTRIDIA
- Rapid, painful death
- Usually Type B???
- May follow treatment for Floppy Kid
 - pH change resulting in bacterial overgrowth?
- Vaccination
 - Dam (toxoid) vs Kid (antitoxin)

• Birth to 1 week

- FLOPPY KID
- Usually 3-10 days old
- Rapid onset
- Kids are limp, less affected may act drunken
- Acidosis
- Cause???

• Birth to 1 week

- FLOPPY KID
- Treatment
- Correct acidosis
 - Baking Soda (mix with Pepto)
 - May need to treat several times
- Antibiotics?
 - Oral Penicillin
- Probiotics?

• Birth to 1 week

- FLOPPY KID
- Treatment
- Fluids
 - Oral electrolytes w/ bicarb
- Nutrition
 - Don't overfeed
- Protect kid from hypothermia, suffocation, injury

• Birth to 1 week

- FLOPPY KID
- Concomitant disease
 - Diarrhea
 - Osmotic
 - Viral/Bacterial
 - Clostridia

1-2 Weeks

- Tetanus
- Cryptosporidia
- Floppy Kid
- Salmonella

1-2 Weeks

- TETANUS
- Unvaccinated dams
- Failure of Passive Transfer
- Antitoxin vs Toxoid (CDT)
- Any age, kids more at risk
 - Castration, Disbudding, open umbilicus
- Treatment in kids rarely successful

1-2 Weeks

- CRYPTOSPORIDIA
- Similar to other diarrheas
- Older kids, 7-10 days
- Contagious to humans
- Calves, lambs
- Bleach not effective! Dual-Quat
- FPT- not always the cause

1-2 Weeks

- CRYPTOSPORIDIA
- Treatment similar to other neonatal diarrheas
- May be very severe
- Antibiotics not effective
 - May prevent secondary overgrowth

1-2 Weeks

- SALMONELLA
- Severe diarrhea
- High mortality
- Usually from calves/dairies
- Contagious to humans
- Outbreaks can be any age
- Immune suppressed much more severe

2-6 Weeks

- Coccidiosis
- Strongyles
- Enterotoxemia (Clostridia)
- Nutrition

2-6 Weeks

- COCCIDIOSIS
- Can be as early as 12 days
 - Prepatent period
- Classic diarrhea
- Poor growth, condition
- Sudden death
 - GI bleed

2-6 Weeks

- COCCIDIOSIS
- Usual cause of 'stress' diarrhea
- Can set up kid for other diseases
 - Enterotoxemia
 - Poor health

2-6 Weeks

- COCCIDIOSIS
- Treatment
 - Sulfa (Albon, Sul-met, etc)
 - Amprolium (Corid)
 - Decoquinate (Deccox)
 - Most newer drugs not legal in US
 - Routine treatment vs individual
 - Novel treatments – yogurt, etc

2-6 Weeks

- COCCIDIOSIS
- Prevention
 - Kid management
- Control vs cure
 - Unrealistic to clear adults
 - Drug resistance
- Find a control program that works for you!

2-6 Weeks

- STRONGYLES
- As early as 21 days
- Similar signs as coccidia
- Control program
 - Includes management
 - Drug resistance

2-6 Weeks

- ENTEROTOXEMIA
- Rapid death in seemingly otherwise healthy kids
- GI overgrowth of *Clostridium perfringens*, resulting in release of toxins which kill gut
- Thought to be secondary to change in gut
 - Overfeeding (Overeating disease)
 - Predisposed by abnormal flora (Coccidia?)

2-6 Weeks

- ENTEROTOXEMIA
- Despite all the adages, can happen to well managed kids too
- Vaccines
 - Toxoid vs antitoxin
 - Age of vaccination

2-6 Weeks

- NUTRITION
- Most important factor for healthy kids
 - Poor nutrition results in increased susceptibility and decreased ability to fight disease
- Changeover from milk to solid food

2-6 Weeks

- NUTRITION
- Milk
- Weaning age?
- Milk replacer
 - Different quality
 - Must feed enough

2-6 Weeks

- NUTRITION
- Solid food must be of high enough quality so the immature digestive tract can utilize it.
- Keep kids in good, not fat, body condition
- Steady growth more desirable than too rapid

2-6 Weeks

- Angular limb deformities
- Nutritional?
 - Too rapid growth?
- Mineral imbalance?
 - Calcium:Phosphorus
 - Cu vs Se vs Zn vs ??

6-12 Weeks

- ENTEROTOXEMIA
- PNEUMONIA
- PARASITES
- NUTRITION

6-12 Weeks

- PNEUMONIA
- Waning immune system, plus high stress (weaning, shows, sale) can make kids more susceptible
- Usually starts as viral, then progresses to bacterial
- Viral phase highly contagious
- Vaccines moderately effective

6-12 Weeks

- PNEUMONIA
- Rapid treatment important
- Early recognition of sick kids
 - Observation (Coffee management)
- Antibiotics
- Anti-inflammatory
- Mycoplasma

RECAP

- Nutrition most important factor
- Prevention by management
- Treat kids early
- Biosecurity most important for early diseases
- Parasite control