

# PARASITES



Protecting Your Horse

# Review – The Drugs



- ❧ Fenbendazole
  - ❧ SafeGuard, Panacur
    - ❧ Treatment of choice for *Parascaris equorum* (ascarids) in young animals
  
- ❧ Ivermectin / Moxidectin
  - ❧ Eqvalan, Panomec, Bimectin, Equimax / Quest
    - ❧ Treatment of choice for small and large strongyles
    - ❧ Also treats for bots, external parasites (lice, mites) and summer sores (habronema, drashcia)
    - ❧ Moxidectin is labeled for encysted larva
  
- ❧ Praziquantel
  - ❧ Quest Plus, Eqvalan Gold, Equimax (come as a combination with ivermectin or moxidectin)
  - ❧ Treatment for tapeworms

# Out with the old...



- ❧ Why do we need to leave rotational deworming behind?
  1. Growing resistance of parasites to available dewormers
  2. Change in parasitic fauna
  3. Improved understanding of individual susceptibility

# ...in with the new!

## Selective deworming



- ❧ How to design a parasite programs for the modern horse?
  - ❧ No “one size fits all” programs – need to tailor to specific needs of each farm
  - ❧ New monitoring techniques
    - ❧ FEC (fecal egg count)
      - ❧ identify which horses need to be dewormed
    - ❧ FECRT (fecal egg count reduction test)
      - ❧ monitor for the presence of resistance
    - ❧ ERP (egg reappearance period)
      - ❧ Monitor for the development of resistance

# The FEC



- ❧ Why?
  - ❧ Identify which horses need to be dewormed
  
- ❧ What?
  - ❧ A quantitative evaluation by centrifugation is needed for equine fecal egg counts. Be informed about the type of test being performed to ensure accuracy of results
  
- ❧ When?
  - ❧ All horses should be done at least once yearly in July/August
  - ❧ New horses should be done on arrival
  - ❧ High shedders or horses of unclear shedding status should be done spring, summer and fall to test before deworming
  
- ❧ How?
  - ❧ Sample must be fresh (still steaming is best!)
  - ❧ Collect a small handful of fecal material in a small ziplock bag and seal tightly.
  - ❧ Refrigerate immediately upon collect and keep refrigerated until brought to the clinic for analysis

# Adult Horses



- ❧ 1-2 yearly treatments (spring and late fall) for all horses
  - ❧ For control of large strongyles, tapeworms, bots and summer sores (*Habronema*)
  - ❧ Fall deworming should contain praziquantel to cover for tapeworms and should be done after the first good frost
  
- ❧ Targeted treatment for high shedding horses
  - ❧ For small strongyles
  - ❧ FEC – identify and treat only high shedding horses

# Young Horses



- Targeted treatment not appropriate. These horse require frequent deworming.
- Dose appropriately – need to get an accurate weight and provide appropriate amount of dewormer
  - Under-dosing can result in failure to reduce parasitic infection and promotes development of resistance

# Young Horses



- œ Deworming protocol
  - œ 2-3 months old
    - œ Target: ascarids
    - œ Drug: fenbendazole
  - œ 5-6 months old
    - œ Target: Ascarids
    - œ Drug: Fenbendazole
  - œ Around 6 months old
    - œ FEC - need to assess ascarid versus strongyle load to determine which dewormers to use next
  - œ 9 months
    - œ Target: Strongyles OR Ascarids
    - œ Drug: Ivermectin/Moxidectin OR fenbendazole
  - œ 12 months
    - œ Target: Strongyles, tapeworms
    - œ Drug: Ivermectin/Moxidectin and praziquantel
  - œ Yearlings and 2 - Year olds
    - œ Deworm 3-4 times through the year
    - œ Use FEC to determine ascarid versus strongyle burden for appropriate drug selection



# Additional methods of control



## ☞ Pasture management

- ☞ Stocking density

- ☞ Regular removal of feces from pens/pasture

- ☞ Pasture rotation

- ☞ Manure composting

  - ☞ Note about harrowing

## ☞ Stall management

- ☞ Important for foals!