

# Backcountry First Aid: Prevention, Triage and Treatment

**Peter Heidmann DVM MPH**  
**Specialist: Equine Internal Medicine**

## **Montana Equine**

**Equine Medicine and Surgery**

**Board-certified Experts**

**406-388-8323**

*Dedicated to the highest quality care of horses*



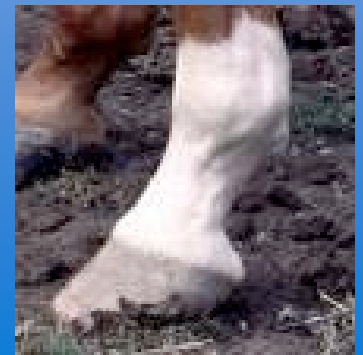
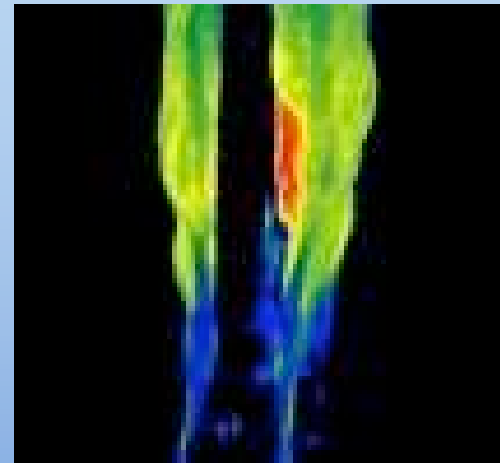
# Preparation = Prevention

- **Paperwork**
  - Health Certificate, Coggins
  - Contact Information
  - Maps
    - Know your country
- **Tack**
  - Well-fitted, well-suited
- **Fitness**
  - Fatigue promotes injury
  - Lameness and myopathy
  - Colic and lacerations



# Triage: Lameness

- **Heat? Swelling?**
- **Flexion Tests**
  - **Arthritis**
  - **Ligament Sprain**
    - (Connects bone to bone)
  - **Tendon Strain**
    - (Connects muscle to bone)
- **85% of lameness originates at/below fetlock**
  - **Digital Pulses**
    - **Stone Bruises**
    - **Sole Abscess**
    - **Fractured Coffin Bone (P3)**



# Treatment: Lameness

- **Thermal Therapy**
  - Ice Early -- Heat Late
- **Anti-inflammatory Medications**
  - Phenylbutazone
  - Surpass
- **Limb Wraps**
  - Minimize Swelling
  - Supports Soft Tissues
  - Extensive Padding is CRITICAL
- **Other Salves? Poultices? Sweats?**



# Triage: Wounds

- Location location location
- Which wound is more serious?





# Triage: Wounds

- **Infection Control**
  - **Each round removes contamination:**
    - **Dirty water is better than mud**
    - **Clean water is better than dirty water**
    - **Sterile water is better than clean water**
  - **A clean wound is considered infected after 6 hours**
    - **2 - 4 - 16 - 256 - 65,536 - 4,294,967,296!!**
  - **Antiseptic Solutions**
  - **Vaccinations**
  - **Antibiotics**
    - **Oral, Injectable, Topical**
    - **Ask your veterinarian...**



# Triage: Eye Trauma

- Use caution with “hi-line”
- Eyelid Trauma
- Corneal Trauma
  - Signs:
    - Squinting
    - Severe Tearing
    - Head-shyness



## Treatment:

- Clean any wounds w/ Saline
- Ophthalmic Antibiotics
- **NO STEROID OINTMENTS!**

# Triage: Hemorrhage

## Blood Loss: How Much is TOO Much??

**Blood Volume is 8 - 10 % of Body Weight**

**Eg 1000# horse = 450 Kg**

**= 36-45 L Total**

**Total loss of 1/10 is typically well-tolerated**

**= 3.6 - 4.5 Liters**

**= More than 1GALLON!**

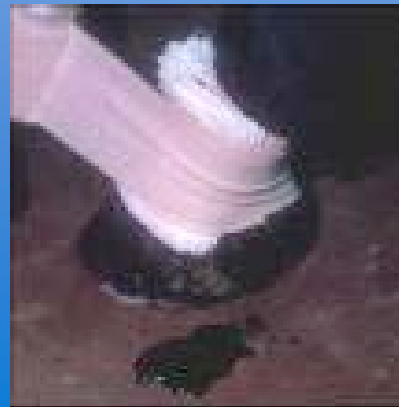




# Triage: Hemorrhage Treatment

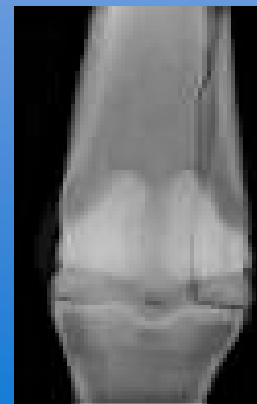
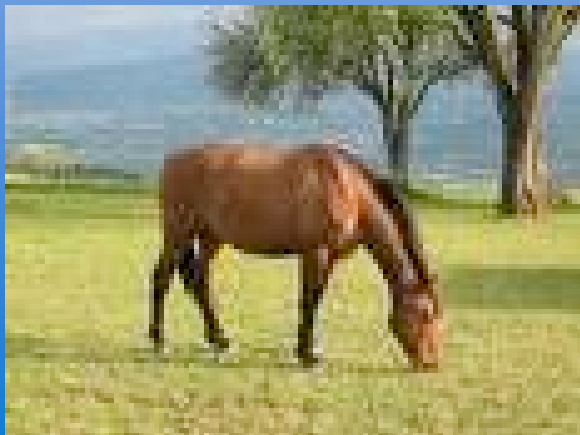


- **Most Wounds stop bleeding spontaneously**
- **Arterial vs. Venous Blood**
  - Pulse Pressure, Color, Location
- **Apply pressure to affected area**
  - Telfa over Wound
  - Cotton and Vetwrap/Polo



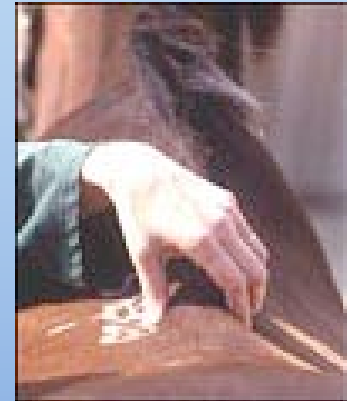
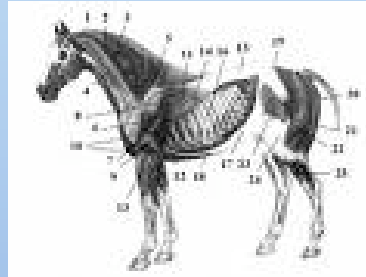
# Triage: Fracture

- **Not all fractures are fatal**
- **Phenylbutazone**
  - Up to 2 g twice daily
- **Attempt to Stabilize**
  - Splint + Cast Material
  - “Bandage Cast”



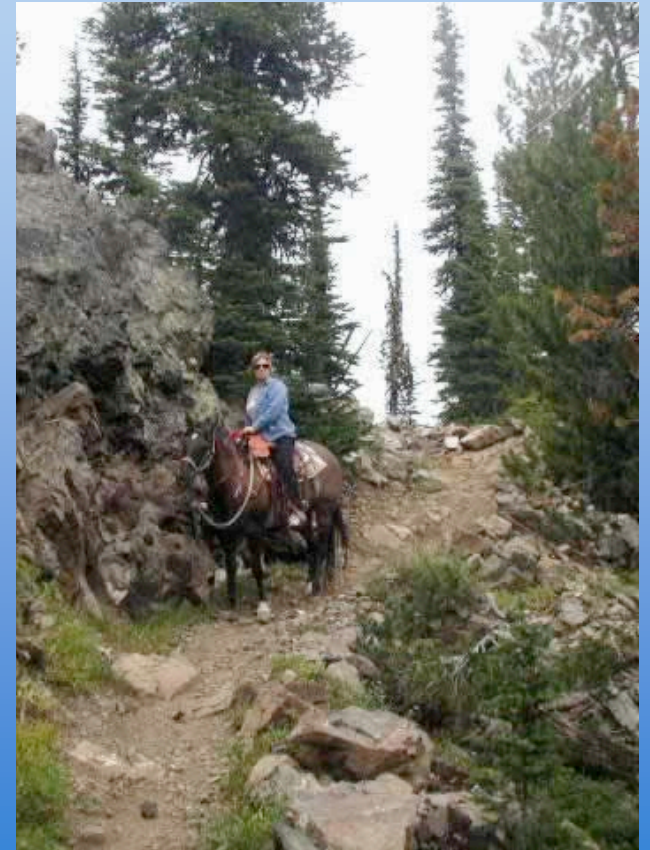
# Triage: Tying-Up

- **Myopathy**
- **Signs**
  - Lethargy, Trembling
  - Stiffness, Sweating
  - Soreness, esp along topline
  - Red-Brown Urine
- **Contributing Causes:**
  - Poor Fitness/Over-exertion
  - Dehydration
  - Excessive Carbohydrates (grain)
  - Underlying muscle disease(s)



# Treatment: Tying-Up

- **Prevention is Paramount**
  - Know your horses' limits
- **Encourage horse to drink**
- **Attempt to keep standing**
- **Do NOT force to walk**
  
- **Avoid Medications**
  - **Banamine/Bute:**
    - High Risk of kidney damage
  - **Robaxin**
    - Contributes to weakness
  - **Acepromazine:**
    - May help relax muscles but decreases blood pressure



# Triage: Colic

- **Prevention**

- Consistency of Diet
- Maintain Hydration
- De-worming Regularly
- Routine Dental Care

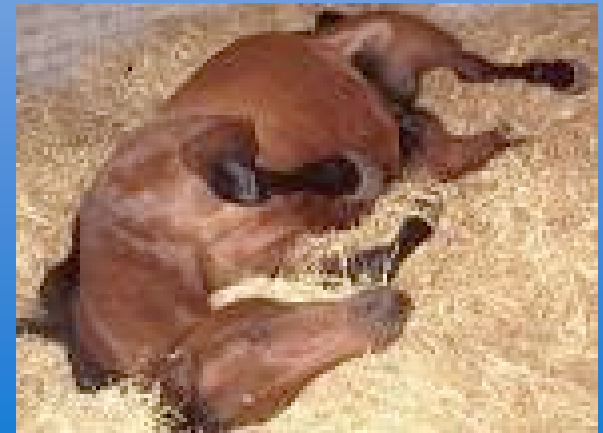
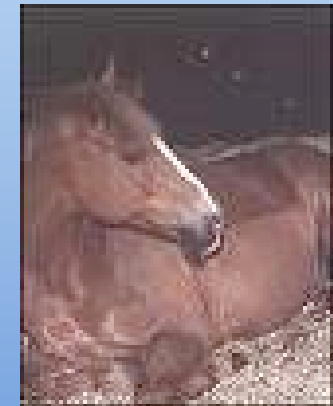


- **Treatment**

- 500 mg Banamine, 1 - 2 g Bute
  - Intravenous: 10-15 min
  - Oral: 45-60 min

- **When is it serious?**

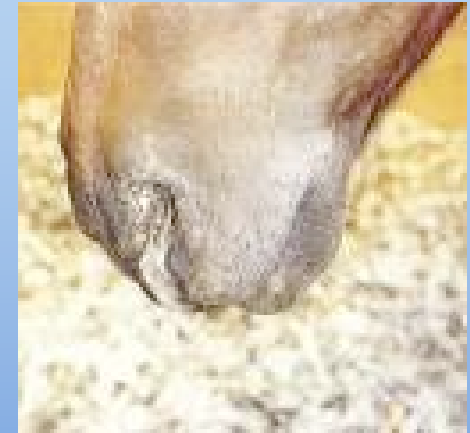
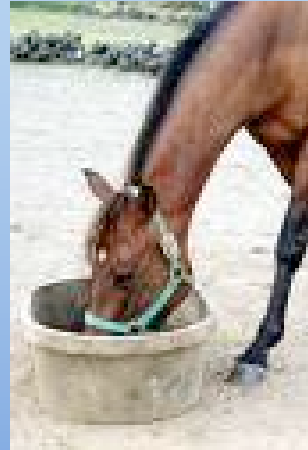
- Beyond “stretching-out” --> overt pain
  - Pawing, Lying down, Rolling
  - Sweating, Panting
  - Elevated Heart-rate
- Minimal response to Banamine or Bute





# Triage: Choke

- **Prevention:**
  - Regular Dental Care
  - Hay First, Grain Later
- **Treatment:**
  - Massage the neck
  - Encourage horse to keep head down: minimize aspiration
- **Another true emergency**



## NECESSITIES:

**Antiseptic Solutions**

**Ice Packs/Ziplock Bags**

**Bandage Scissors**

**Syringes/Needles**

**Medications:**

**Banamine, Bute, Surpass**

**Acepromazine, Robaxin**

**Antibiotics**

**Eye Ointments**

**Sheet Cottons**

**Vetrap**

**Elasticon**

**Non-Stick Pads**

**Cling Gauze**

**Antibiotic Ointment**

**Casting Material**

**Duct Tape**

**Thank you!!  
Questions?**



**406-388-8323**

**MONTANA EQUINE**

