Guidelines for Performing a Field Necropsy

The American Endurance Ride Conference (AERC) is interested in acquiring as much information as possible when the unfortunate event of an equine fatality occurs. To aid in this, limited funding is provided for necropsy exams.

- If possible, the horse should be sent to a pathology lab for the necropsy. However, if due to the location of the ride and the difficulty in transporting the horse, a necropsy performed by the attending veterinarian may be necessary.

- Please use the attached form to aid in performing the necropsy and providing the data necessary to determine the cause of death.

- Prior to beginning the necropsy exam the appropriate area and disposal of the animal should be considered. Areas away from public view and an adequate way to dispose of the body should be determined. AERC understands this may not always be possible and therefore a necropsy may not be performed.

Field Necropsy:

- A systematic approach should be used beginning with the suspected area of interest.
  - ✓ If an obvious cause of death is identified, document this.
  - ✓ If a spinal cord injury is suspected referral to a facility that can remove the spinal column is recommended.

- Abdomen:
  - ✓ A curved flank incision from the tuber coxae to the xyphoid cartilage will allow adequate exposure of the abdomen and permit closure of the abdomen.
  - ✓ Identify the positioning of the GI tract.
  - ✗ Ante-mortem rupture of bowel will result in peritonitis and the presence of fibrin and fibrin tags on the bowel surface. If ingesta is identified in the GI tract without peritonitis this is likely post-mortem rupture.
  - ✓ Identify any intestinal compromise and cause (ie strangulation)
  - ✗ If no obvious cause is seen full thickness samples of small intestine, stomach, large intestine and cecum should be taken.
  - ✗ At least one kidney should be removed and submitted for histo. If renal failure or rhabdomyolysis is suspected then both kidneys should be examined and submitted.

- Thorax:
  - ✓ From the abdominal incision the chest cavity may be entered by removing the rib cage.
  - ✓ The presence of blood in the pleural space should be investigated for either aortic or pulmonary ruptures.
  - ✓ Submit lung and heart tissue for histo.

- Musculoskeletal:
  - ✓ If rhabdomyolysis is suspected or confirmed then the muscles can be examined for evidence of necrosis and samples submitted.

- Any other system that appeared to be involved.

These are only guidelines. All information that can be obtained will be helpful towards the efforts to educate riders and veterinarians as to the possible causes of deaths in endurance horses and possible preventative measures.

Notes

1. This form is to be completed when a field or in hospital necropsy is performed.
2. Please submit to the AERC office along with the fatality report. If tissues have been sent for histopathology this form may be returned prior to those results and the pathologists report forwarded when available.
3. This form may be used as a guideline for the necropsy information. Please include those areas of clinical relevance to the cause of death. If a definitive cause of death is not apparent please perform as thorough a necropsy evaluation as the conditions will allow.
Gross Post-Mortem Examination Form

Identification
Owner Name__________________________________ Animal Name____________________________________ Age_____
Gender_____________ Breed_______________________ Color_____________ Markings___________________________
Brief History __________________________________________________________
___________________________________________________________________________
Time of Death________ Cause of Death_________________________________________ Euthanized (Y/N) ________

Gross Necropsy Findings

1. Musculoskeletal: External_____________________________________________________
Bones__________________________________________ Joints__________________________________________
Describe specific injuries if they were the cause of death _____________________________
___________________________________________________________________________

2. Respiratory System: Pharynx__________________________________________ Larynx________
Trachea__________________ Bronchi__________________ Lungs______________
___________________________________________________________________________

3. Circulatory System: Thoracic Fluid___________________________________________
Heart__________________________________________ Weight (if available)_______________
Great Vessels____________________________________ Vena Cava_____________________
___________________________________________________________________________

4. Digestive System: Abdominal Cavity Fluid_______________________________ Serosal Surface___________
Contents_________________________________________ Esophagus_____________________
Stomach________________________________________ Small Intestine__________________
Cecum__________________________________________ Large Colon_____________________
Small Colon_____________________________________ Specific Comments______________
___________________________________________________________________________

5. Urogenital System: Urine (color)__________________________________ Ureters________
Urethra________________________________________ Kidneys________________________
Testicles_______________________________________ Ovaries_______________________

6. Nervous System: CNS (Brain)
Note gross findings if evaluated or clinical signs if brain case not opened_________________________
Pituitary________________________________________
Spinal Cord (if evaluated, or clinical signs if suspected lesion site)___________________________
___________________________________________________________________________

Gross Diagnosis _____________________________________________________________
Tissues collected for histopathology _________________________________________________

Laboratory ______________________________________________________ (attach pathologist’s report)

* If an organ or system is not examined indicate with a N/E.

Veterinarian performing exam____________________________ Signature________________
Address___________________________________________ City/State/Zip________________
Phone Number____________________________________ E-mail address________________