

Equine Enteritis Postmortem Sampling Protocol

1. Perform a complete postmortem examination with particular attention to the gastrointestinal tract. Note any gross abnormalities.

****Remember that the gastrointestinal tract undergoes rapid autolysis which can hinder diagnosis. The best sample is the fresh carcass (just euthanized) of an acutely affected, untreated animal or feces from live, acutely affected, untreated animal. Often multiple submissions required.**

2. Collect the following tissues for ancillary testing. Submit a separate tissue sample for each lab section!
 - a. **Histopathology and immunohistochemistry** (10% neutral buffered formalin; 10:1 formalin to tissue ratio)
 - i. Gastrointestinal tract- Esophagus, stomach, mesenteric lymph node, duodenum, several levels of jejunum, ileum with Peyer's patches, cecum, colon, including any areas with gross lesions. **Open gut to be fixed. Never tie off!!**
 - ii. Routine tissues- Lung, heart (t-section), diaphragm, liver, kidney, and spleen.
 - b. **Bacteriology** (Fresh)
 - i. Feces, jejunum, ileum and colon, mesenteric lymph node, lung, spleen and any other tissues with visible lesions.
 - ii. Tied off loops of intestine placed into separate, tightly sealed, labeled sterile containers
 - iii. Tests include salmonella culture, anaerobic culture and genotyping, and/or toxin ELISAs for *C. perfringens* and *C. difficile*. Also PCR for *Lawsonia intracellularis* and Potomac horse fever.
 - c. **Virology** (Fresh)
 - i. Feces for multiplex PCR
 - ii. Tied off loops of intestine (jejunum, ileum, colon) placed into separate, tightly sealed, labeled sterile containers
 - d. **Parasitology** (Fresh)
 - i. Submit feces in tightly sealed, labeled sterile container for routine fecal flotation