

Monty McInturff, DVM  
Matt Povlovich, DVM  
Bob McCullough, DVM  
Nathaniel Wright, DVM



Matthew Nimmo, DVM  
Matthew DeLisle, DVM  
Jessica DeLisle, DVM  
Kelly Wentz, DVM

# TENNESSEE

## *Equine Hospital*

Experience. Innovation. Excellence.

**What is botulism?** A disease caused by *Clostridium botulinum*, a Gram positive, anaerobic, spore forming bacteria found in soil. The bacteria produce seven different types of neurotoxin. Type B is the most common neurotoxin affecting horses in North America and less commonly type A and C.

**How do equids get botulism?** Adult equids most commonly get botulism by consuming the toxin through spoiled hay or silage. Less common routes of infection are hay or water that is contaminated with animal carcass, or through an open wound.

**What are the clinical signs of the disease?** The neurotoxin irreversibly binds to the presynaptic membrane of a neuromuscular junction inhibiting the release of the neurotransmitter Acetylcholine. The amount of toxin ingested is proportional to the degree of clinical signs exhibited. Most severely affected animals will have flaccid paralysis and respiratory distress. Other clinical signs include extreme lethargy, hanging head low to ground, loss of tongue, eyelid, and tail tone. Horses also may exhibit hypersalivation secondary to the loss of the ability to swallow. The disease can be fatal.

**What should I do if I suspect botulism?** The incidence of clinical cases of Botulism in middle Tennessee has historically been relatively low. Symptoms of the disease are acute and usually observed within 12 hours of intoxication. If your donkey or horse is exhibiting the clinical signs mentioned then call your veterinarian immediately as early intervention is paramount to recovery.

**Can I do anything to prevent my horse from getting botulism?** Yes. A type B toxoid vaccine is available. This vaccine protects against botulism caused by type B neurotoxin, which is the most common agent affecting equids in North America. For previously unvaccinated adults and foals an initial series of 3 vaccinations a month apart followed by annual boosters is recommended. In addition do not feed silage, haylage or other fermented feeds to equids due to the inherent risk of botulism.

P.O. Box 189 // 1508 Thompson's Station Road West // Thompson's Station, TN 37179  
Telephone: 615-591-1232 // Fax: 615-591-1235 // Toll-free: 1-877-HORSE-90  
[www.TnEquineHospital.com](http://www.TnEquineHospital.com)