

# BOTULISM MISCONCEPTIONS:

## **Misconception: Botulism is only a problem in Kentucky.**

Reality: The bacteria that causes botulism, *Clostridium botulinum*, is found in soil across the U.S. and around the world. Although some areas, such as Kentucky and the eastern U.S., may see more cases than others it doesn't mean that it can't happen elsewhere. Cases have been reported from Maine to Florida to California. A number of these cases are caused not by *C. botulinum* spores in local soils, but by the movement of hay grown in endemic areas to lower-risk regions. Recent drought conditions have increased the movement of hay, and increased the risk for infection.

## **Misconception: I don't feed my horses hay in round bales, so they can't get botulism.**

Reality: Horses eating hay from round bales is only one way botulism can be acquired. In these cases, forage poisoning occurs in adult horses that consume botulinum toxin from improperly dried, processed or stored forage, or if the forage is contaminated with dead animals, such as rodents.

However, horses also can acquire botulism through wounds, such as puncture wounds, castration sites, or injection site abscess. As the bacteria in the wound grow, they produce toxin that is absorbed into the bloodstream, causing botulism.

Lastly, horses can acquire toxicoinfectious botulism, or shaker

foal syndrome. This occurs when a foal consumes soil-borne *C. botulinum* spores. These spores then infect the foal's gastrointestinal tract and produce type B toxin, which is absorbed into the foal's system.

## **Misconception: I've never heard of equine botulism. That must mean it's not a problem.**

Reality: When it comes to equine botulism, many people don't know about it because it's often not discussed, either for lack of awareness or the stigma attached to the disease. Although it's true that equine botulism isn't one of the most common horse diseases, it is an extremely dangerous (often fatal) and often preventable one.

Unfortunately equine botulism is not a reportable disease, so there is no true way of knowing exactly how many horses suffer from the disease. Furthermore there is no way of knowing how many horses may die before a diagnosis of botulism can be made.

## **Misconception: Dead rodents, birds and other wildlife swept up during the hay baling process are the main cause of botulism poisoning.**

Reality: Although botulism toxin produced by *C. botulinum* in dead animals can cause illness, the majority of equine botulism cases are not associated with dead animals or type C toxin. More than 85% of equine botulism cases in the U.S. are

associated with type B toxin, which is the main cause of forage poisoning.

## **Misconception: If a horse acquires botulism, human negligence was involved.**

Reality: Botulism is considered a silent killer because it can often cause the death of an animal with no warning at all. Likewise, occurrences often are kept quiet because of the stigma attached to having a horse contract equine botulism.

Unfortunately, this stigma can be counterproductive. It means less talking about botulism and not increasing awareness, it makes it more difficult to spread information about the disease. The bacterium that produces botulism toxin is environmental, meaning it can be in the soil, in hay or in a myriad of other places. It can occur in a pasture where it had never been before or in a geographic area where outbreaks are rarely reported. It is not necessarily linked to negligence or to any particular human error.



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