Tetanus (Lockjaw): Why Vaccinate?

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Tetanus is caused by a bacterial toxin produced by the bacterium, *Clostridium tetani*, which is normally found in soil and in the feces of horses. *C. tetani* needs a decreased oxygen supply to multiply, so any area where there is a deep puncture wound or where a wound has healed over (such as the navel stump of a newborn foal) is an area where tetanus can thrive.

Once spores from *C. tetani* gain entrance to the body, they produce a powerful neurotoxin that results in tetany (muscle contraction and spasm). Symptoms of tetanus include a protruding third eyelid and a stiff neck, progressing to overall muscle stiffness that causes a "sawhorse" stance. The incubation period (the time from infection to onset of signs) is usually about 8 days (ranging from 3 to 21 days). Tetanus can be fatal, but a yearly vaccine can prevent it, and the vaccine is a good idea because small cuts can go unnoticed and become infected.

While horses of all ages are susceptible to tetanus, tetanus cannot be transmitted from horse to horse or from horse to human. In general, it is recommended that horses be vaccinated against tetanus once a year. However, if a horse has a wound, it is always best to consult your veterinarian to see if they recommend an additional booster.

The vaccine for tetanus is composed of what is called tetanus toxoid, which stimulates the horse's immune system, providing protection if the horse becomes infected with the tetanus bacterium in the future.

Tetanus toxoid differs from the agent used to treat a horse once he has tetanus. Treatment for a horse that already has tetanus involves the use of what is called "tetanus antitoxin". Tetanus antitoxin can have serious side effects and should only be administered by a veterinarian.

Protection from tetanus requires sound management and proper immunization. We recommend yearly vaccines against tetanus and core infectious diseases.

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