



Northeast Pennsylvania Equine Clinic, L.L.C.

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EQUINE VACCINATIONS

Rabies: Rabies is a 100% fatal viral infection of the central nervous system which occurs in all warm-blooded animals. Foxes, skunks, raccoons and bats are the major sources of infection. We are strongly urging all horse owners to vaccinate their horses, because of the presence of rabies in our region and because of the possibility of transmission of this fatal disease to people. The vaccine will protect your horse for one year.

Tetanus: The bacteria that causes tetanus is prevalent in horse manure, soil, and elsewhere in the environment. It infects the body through wounds, particularly deep puncture wounds. The organism then produces a potent toxin which affects the nervous system. Horses are the most sensitive of all species to the effects of this toxin. Tetanus is fatal in about 80% of equine cases. The tetanus toxoid vaccine is highly effective and every horse should be vaccinated annually. Pregnant mares should be vaccinated one month prior to foaling. Protection will be transferred to the foal. A booster must follow the first vaccination 1 month later. Tetanus antitoxin is not a vaccine, but a product from the serum of horses vaccinated with tetanus toxoid. It should be given to injured horses and foals that have not been properly vaccinated. It provides temporary protection for the situation at hand.

West Nile Virus: Mosquitoes transmit West Nile from infected birds to horses, humans and other animals. Infected horses will show weakness, stumbling, incoordination, muscle twitching and partial paralysis. Approximately one third die or are euthanized. The initial vaccination is boosted in 3-4 weeks and then given once yearly prior to mosquito season.

Equine Encephalomyelitis: Three viruses cause sleeping sickness in horses: Eastern Encephalomyelitis (EEE), Western Equine Encephalomyelitis (WEE), and Venezuelan Equine Encephalomyelitis (VEE). VEE is currently absent in the U.S., but present in Mexico. Wild animals and birds harbor the virus which is transmitted to the horse by blood sucking insects, primarily mosquitoes. The initial vaccination is boosted in 3-4 weeks and then given once yearly prior to mosquito season.

Influenza: Influenza is a highly contagious respiratory virus. All horses that come in contact with other horses should be vaccinated. Infected horses require a three week rest period. Secondary bacterial infection is not uncommon. Following the initial two to three dose series of an intramuscular vaccine, boosters are given every 3 to 4 months. The intranasal flu vaccine has been shown to give superior, longer lasting protection. Boosters of this vaccine are recommended every 6-12 months.

Rhinopneumonitis: A herpes virus (EHV-1) causes equine rhinopneumonitis which appears in one of three forms: respiratory disease similar to influenza, abortion, and a severe neurological disease which can paralyze the horse and is difficult to treat. EHV-4 causes respiratory disease. (We have seen all three forms of this disease in this practice.) Horses at high risk are those

exposed to different horses and stressful conditions, especially younger horses, and pregnant mares. Pregnant mares should be vaccinated at the 5th, 7th and 9th month pregnancy. Following the initial two to three dose series, booster vaccinations should be given every 3 to 6 months depending upon risk factors.

Potomac Horse Fever: P.H.F. is a seasonal disease, occurring in the summer and fall, which is caused by the microorganism Ehrlichia risticii. Horses become infected while grazing by ingesting the microorganism which has been shed by snails. P.H.F. is prevalent in the St. Lawrence and Hudson River Valleys and also in the Susquehanna River Valley, but occurs sporadically everywhere. The severity of this disease varies greatly from depression and loss of appetite to severe, life-threatening diarrhea, colic and toxemia, with laminitis a common complication. Initial vaccination is with 2 doses, one month apart, followed by annual revaccination.

Strangles: Strangles is a highly contagious disease caused by the bacteria Streptococcus equi. Barns with strangles should be quarantined. Refer to our Informational Article on Strangles. (link to NPEC Informational Article on Strangles) Complications associated with strangles can be particularly dangerous. Vaccination of horses that are exposed to other horses with the disease, or to infected premises, will greatly reduce the severity and length of the disease. Initial vaccination is with 2 doses, one month apart, followed by annual revaccination.

Equine Viral Arteritis: A herpes virus causes this disease, an acute, usually severe respiratory infection with fever. Edema of the limbs is common. Affected pregnant mares have a 50% abortion rate. EVA virus may be shed in a stallion's semen. A vaccine is available which may be used to protect horses in areas of disease outbreak. Thoroughbred breeding stallions and broodmares, or any breed horse prior to international shipment, may be vaccinated after a special permit has been issued following a blood test (negative EVA titer).

Botulism: Botulism is a rapidly progressive muscular paralysis, with very high mortality rates, caused by ingestion of the bacterial toxin of Clostridium botulinum. The incidence of botulism in horses is relatively low. Decomposing animal carcasses are the most common source of infection, although the toxin can occur in spoiled feed, especially round bales, decaying vegetables, potatoes, animal feces and carcasses. An initial revaccination is protective. Booster vaccination given to pregnant mares, 2 to 4 weeks prior to foaling, will result in significant protection for the foal from Shaker Foal Syndrome caused by Clostridium botulinum.

Combination vaccines available:

EEE, WEE and Tetanus (3-way)

EEE, WEE and Tetanus and Influenza (4-way)

EEE, WEE and Tetanus, Influenza and Rhinopneumonitis (5-way)

Influenza and Rhinopneumonitis

Rabies and Potomac Horse Fever

Please call if you have any questions about these diseases, the use of these vaccines or combination of vaccines. We are happy to discuss the risk factors for disease for your particular horses, the selection of vaccines with you, and recommendations for how to start vaccinating foals. More information is also available on AAEP. (link)