

Spring Vaccines

In general, we recommend administering spring vaccines between March 1st and May 15th. The following are the vaccines we currently recommend for adult horses.

When vaccinating pregnant mares, weanlings, and yearlings, special rules apply. All recommendations that follow are based on the current AAEP (American Association of Equine Practitioners) vaccination guidelines.

We feel that it is most often best to split up a 'full series' of vaccines into two smaller sets to reduce the risk of your horse having a vaccination reaction and to improve the horses' immunologic response to the vaccine. The first half of the vaccine series is then given on one visit and the other half approximately two weeks later. Vaccine reactions are not common today, as the adjuvants (the part of the vaccine that stimulates the immune system) used today are both much better at stimulating the immune response and much less likely to cause undesired side effects. Ironically, the adjuvants used in killed animal vaccines are one to two generations ahead of those used in human medicine (likely because of the expense of FDA approval, legal exposure on the part of the vaccine manufacturers, etc). Vaccine reactions, however, still occur, and commonly consist of muscle soreness, lethargy and possibly a low grade fever. These most often pass within 2-3 days with a little help from a non-steroidal, like Bute or Banamine. If your horse has had a previous vaccination reaction, we often will try to determine if there is one particular vaccine or brand of vaccine that he or she reacts to and, depending on your preference, either discontinue giving that vaccine or try using a different brand of vaccine. In many cases, we find that the best solution is to pre-treat horses that react to vaccines with a non-steroidal (Bute or Banamine) and an antihistamine.

If you choose to vaccinate your own horse please order or purchase vaccines from reputable companies. Vaccines that are not properly handled (i.e. not refrigerated) are not effective. Understand that many 'catalog suppliers', by the nature of their business handle these products as commodities. Some are conscientious about keeping them cold and some are not. If you order vaccines that are mailed to you, they should arrive by express delivery on ice. If they do not, I would not recommend using them. When using vaccines that protect against many diseases in a single 'shot', (i.e. "5-way", "7-way" or "8-way" combinations) there is a higher risk of vaccination reaction.

EWT - This intramuscular vaccine prevents Eastern Equine Encephalitis (EEE), Western Equine Encephalitis

(WEE) and Tetanus. Eastern and Western Encephalitis (also referred to as "Sleeping Sickness") are viral diseases transmitted by biting insects, especially mosquitoes. Tetanus is caused by a toxin produced by type of bacteria (*Clostridium tetanii*) very common in horses' environment. Horses can be exposed to the bacteria through puncture wounds (even tiny, unnoticeable ones), lacerations, surgical incisions or even a foal's umbilicus. EEE, WEE and tetanus are all potentially fatal diseases in the horse. We recommend that horses be vaccinated for EEE, WEE at least once yearly (in the spring prior to mosquito season). Your horse should be vaccinated against tetanus at least yearly (and after an injury depending on how recently your horse was last boosted).

West Nile – West Nile Virus is transmitted by mosquitoes and most frequently causes neurological disease in horses. The symptoms include fever, incoordination or stumbling, depression, weakness, paralysis, muscle twitching, convulsions or death. Many unvaccinated horses that contract the disease become so ill that they must be either euthanized or suffer lifelong consequences of the disease. Recent studies suggest that this vaccine is quite good at preventing infection when horses are exposed to the virus. We recommend at least once yearly (in the spring) vaccination. If your horse travels south in the cooler months or if we have an abundance of mosquitoes late in the year, we may recommend more frequent vaccination.

Rabies – Although many people may not realize it, horses are susceptible to rabies, and horses are frequently exposed to animals likely to carry the disease (bats, skunks, fox and raccoons). Symptoms of rabies are quite variable and include fever, lethargy, behavior changes, weakness, colic, inability to swallow and convulsions. This vaccine is very good at preventing the disease and we recommend once yearly vaccination. If at all possible, this vaccine would be preferably given in the fall to lighten the load of spring vaccinations required. We can discuss options to switch to this schedule.

PHF – Potomac Horse Fever is a disease that can cause life-threatening diarrhea and laminitis (founder). The disease is most often seen in low-lying areas around creeks, rivers or ponds. Current research on the value of this vaccine is somewhat contradictory. "Challenge" studies involving the attempted infection of vaccinated horses with the disease causing organism have shown a considerable benefit. In these studies, many vaccinated horses did not get sick, and those that did show signs of disease did not get as sick as unvaccinated individuals. In "retrospective" studies involving the review of medical records at university veterinary hospitals, vaccinated

horses got just as sick as unvaccinated horses. It may or may not be worth it to consider that all of the horses in these studies were sick enough to go to a university clinic. In our (unscientific) experience, vaccinated horses are more easily treated and recover more quickly than unvaccinated counter-parts. We currently recommend at least once yearly vaccination in the spring.

Flu/Rhino – This vaccine protects your horse against the equine influenza virus and the equine rhinopneumonitis virus. **Equine influenza** is highly contagious and is spread through coughing and through contaminated objects such as buckets, grooming supplies and tack. Infected horses have symptoms similar to people with the flu, including nasal discharge, cough, fever, lethargy, and muscle pain. Young horses and horses that travel extensively and/or are exposed frequently to different horses (i.e. shows) are most susceptible. All horses should be vaccinated a minimum of once yearly. Depending on your horse’s risk we may recommend vaccination as frequently as 4 times per year. The influenza vaccine is available in an intranasal form, as well as an intramuscular form combined with “rhino”. We would be happy to discuss with you which form of the flu vaccine is best for your horse and how frequently he should be boosted.

The **rhinopneumonitis** vaccine protects your horse against equine herpes virus type 1 (EHV-1) and equine herpes virus type 4 (EHV-4). EHV-1 and EHV-4 can both cause respiratory illness similar to flu, including fever, nasal discharge, cough, and lethargy. EHV-1 also causes abortion in pregnant mares and can cause neurological disease. Young horses and horses that travel and/or are exposed frequently to different horses are most susceptible to the respiratory disease caused by EHV-1 and EHV-4. While intramuscular vaccines are available for EHV-4 and EHV-1 combined, as well as EHV-1 alone (the “Pneumabort” vaccine). All horses should be vaccinated against EHV-1/EHV-4 a minimum of once yearly. Depending on your horse’s individual risk for the respiratory disease we may recommend vaccination as frequently as 4 times per year. We recommend that all pregnant mares be vaccinated against EHV-1 at the 5th, 7th and 9th months of pregnancy. None of the available vaccines claim to be effective at preventing the neurological form of the disease.

Additional vaccines:

Strangles – Strangles is a very contagious disease caused by a bacteria (*Streptococcus equi subspecies equi*). Infected horses classically first display a thick, copious nasal discharge, and respiratory discomfort, or discomfort eating. Enlarged lymph nodes quickly develop (within a few days) around the head, jaw and throat that eventually abscess and drain pus. This disease is transmitted by di-

rect contact with an infected horse (even one that doesn’t show clinical signs of the disease), or indirectly through buckets, pastures, stalls, trailers, tack or grooming supplies. This vaccine is available in intramuscular and intranasal forms. Vaccination against strangles is only recommended for horses that are at high risk for exposure. We would be happy to discuss the need for your particular horse to be vaccinated against strangles.

Equine Viral Arteritis – EVA is a disease that is generally non-life threatening (except to some young foals), however it can cause abortions in pregnant mares. It is spread by direct horse to horse contact and venereally through infected semen (including cooled, transported semen). Some stud farms require a negative blood test prior to accepting a mare for breeding. In this case, a negative test result means that the mare has never been exposed to the virus and it is therefore impossible for her to be a ‘carrier’ of the disease-causing virus. If your horse requires vaccination (as might be the case for mares to be bred to EVA positive stallions), there are specific requirements for pre-testing and isolation after vaccination. We can discuss these if the need arises to test or vaccinate your horse.

Other rarely used vaccines exist for **Botulism**, **Rotaviral diarrhea** and **Anthrax**. These vaccines are only used when either required (for breeding or horse movement) or the disease process associated with them has created a problem in a particular region or on a specific farm. If concerned about any of the diseases, please contact our office and we can discuss if they are necessary for your horse.
-Dr. Zac King

