



Does My Horse Really Need Vaccines?

What is a Vaccine?

A vaccine is a biological preparation that improves immunity to a particular disease. A vaccine typically contains an agent that resembles the disease-causing microorganism. In order to keep the vaccine recipient safe and healthy, the vaccine agent is often made from weakened or killed forms of the microbe or its toxins. These altered microbes stimulate the body's immune system to produce antibodies (disease fighting cells) against the actual disease. The immune system will "remember" the disease-causing agent for a certain duration of time, thus protecting the vaccinated from the disease.

Why Should My Horse Be Vaccinated?

Your horse(s) should be vaccinated for the simple reason that vaccines prevent, or at the very least reduce the severity of, diseases. Immunization remains the most cost-effective and safe preventative measure that can be taken to protect your horse from life-threatening illnesses. Vaccines protect not only those who get immunized, but also protect neglected horses that are not immunized by reducing the prevalence of disease in the population. This decreased prevalence also can have a direct impact on you and your family. Rabies, for example, can be given to you from your infected horse. A number of other diseases are transmitted by insects, such as West Nile Virus, and can be given to you as well as your horse. Decreasing the prevalence of these diseases in general directly decreases your risk of being infected.

Why Should My Vet Vaccinate My Horse?

Vaccines need to be handled properly; specifically they must be maintained at proper temperature and humidity, in order to guarantee their efficacy. When vaccines are shipped directly from the drug company to the veterinarian, proper handling is ensured. However, when vaccines go through resale companies, the manufacturing companies no longer have any control over the handling, and therefore make no guarantee that their vaccine will work. The manufacturing companies want to ensure their products are safe and efficacious, so they are developing programs to promote veterinarian administered vaccination, such as Pfizer's Immunization Support Guarantee.

It is also important to note that rabies vaccines are not considered valid and legal unless given by your veterinarian. This means if your pet is exposed to a potentially rabid animal, they will have to go through a rigorous quarantine protocol that can be both inconvenient and expensive.



Another important reason for a vet to give all vaccinations is that there is always a risk, albeit a low one, that your horse may have an anaphylactic reaction to a vaccine. This reaction will usually occur within 15 minutes of the vaccine being administered and is life-threatening. Anaphylaxis is possible even if the vaccine has been given before with no obvious reaction. Immediate medical intervention is necessary to save the horse's life.

What Should My Horse Be Vaccinated For?

The main factor that needs to be taken into consideration when deciding what vaccines to give your horse is potential exposure. Some diseases can be acquired anywhere, including in one's own pasture and barn: rabies, tetanus, West Nile Virus, Eastern and Western Equine Encephalomyelitis (EEE and WEE). Others diseases are communicable and are transmitted by direct or indirect contact with sick or carrier animals: influenza, rhinopneumonitis (caused by Equine Herpes Virus). The rabies vaccine is a once yearly vaccine; all others should be given every 6 months according to the AAEP guidelines. Below are the general guidelines for the most common lifestyles.

Closed Herd – A closed herd is a group of horses that do not leave the property, and alternately no outside animals ever come onto the property. For these animals, only the most basic vaccines are required –West Nile Virus**, EEE**, WEE** and Tetanus*** (all of which can be given in one single vaccine), Rabies*

Show/Trail Horses – This includes any animal that will be in any contact with outside equids. These horses need to be protected from communicable diseases in addition to the basic ones – influenza and rhinopneumonitis as well as rabies, West Nile Virus, EEE, WEE, tetanus,

Horses in contact with or living within 1 mile of fresh water (lakes, rivers, streams) – These animals are at the highest risk of being infected with Potomac Horse Fever. This is an insect borne disease, but fresh water snails act as an intermediate host of the disease. Therefore, the disease is most likely acquired by horses in close vicinity to fresh water. It is important to note that this disease is life-threatening, and even if survived, 1/3 of affected horses develop laminitis (aka founder). Prevention is worth it!

Broodmares – In order to protect the mare and foal, the mare should be vaccinated at 5, 7 and 9 months of pregnancy for Rhinopneumonitis-1. At 4-6 weeks prior to foaling, the mare should be vaccinated for rabies, West Nile Virus, EEE, WEE, tetanus, influenza and rhinopneumonitis, +/- Potomac Horse Fever as necessary.



Foals – Because you are educating a naïve immune system, a 2 time series of all vaccines are required at 5 and 6 months (rabies, WNV, EEE, WEE, tetanus, influenza and rhino, +/- PHF). After this series, they can be put on the adult schedule. If the dam's vaccine status is unknown, the foal is given the above listed vaccines in a 3-times series at 3, 4 and 5 months of age.

*Rabies is a disease that can be acquired by you directly from your horse

**West Nile Virus, EEE, and WEE are all diseases that are transmitted by insects and can infect humans

***Tetanus is acquired from the environment and can infect humans, so please make sure your own vaccine is up to date!

What Are the Potential Adverse Reactions?

The risk of an adverse reaction is minimal, but definitely possible. They range from local to systemic reactions. If you suspect your horse is suffering from any of these reactions, please call the clinic immediately.

Local Reaction – This is the most common and the least severe type of reaction. Clinical signs might include heat, swelling and soreness at the injection site usually noted within the first day or two after being given the vaccine. This type of reaction may also include low-grade fever and fatigue.

Injection Site Abscess – This is a local infection at the site of the vaccine injection. Signs include local heat and swelling that may drain purulent material. These signs usually develop a few days after vaccination.

Anaphylaxis – This is less common but much more serious. It is a severe, body-wide, allergic-type reaction that is life-threatening. The horse will be weak, trembling, staggering and may collapse. Immediate medical intervention with epinephrine is absolutely necessary. This is rare, but another example of why we do not recommend that you perform your own vaccinations and why veterinarians should remain on the premises for 15 minutes after vaccinating.

Laminitis – This is a less common adverse reaction as well. The mechanism behind vaccine-triggered laminitis is unclear. Horses with Cushing's disease or insulin resistance, particularly if they have a prior history of laminitis, may be at higher risk.