Risk-based Vaccines: Does Your Horse Need Them?

Determining which vaccines your horse should have is not always simple, particularly when talking about risk-based vaccines. It is important to work with your veterinarian to determine the vaccines needed for each individual horse.

Creating and implementing vaccination programs is one way horse owners can help keep their horses healthy. Vaccines allow the horse’s body to develop antibodies for specific diseases to reduce the risk of contracting the disease or reduce the severity of the disease. There are many equine vaccines available, but determining which ones your horse might need can be challenging, as one vaccination plan does not work for all horses. In fact, many factors influence which vaccines your horse should receive, including where it lives, what you do with it, and its current age and health status. Vaccine programs for horses must be individualized and may change throughout the horse’s life.

There are two main categories of equine vaccines as defined by the American Association of Equine Practitioners (AAEP) — core vaccines and risk-based vaccines. All adult horses should receive the core vaccines, no matter where the horse lives in the United States or what the horse is used for. These vaccines are given once or twice annually depending on the disease the vaccination is for. Keep in mind that there are recommendations on what time of year these core vaccines should be given, as some diseases are more prevalent during certain seasons when biting insects are out.

Deciding which risk-based vaccines your horse should receive is a bit more complex. Risk-based vaccines are only given to horses that have a higher risk of being impacted by a specific disease. Risk for a certain disease depends on how the disease is transmitted, how it affects the horse, and the horse’s chance of contracting it. The horse may be at a higher risk of getting the disease based on its location, health status, age, and use. Determining “risk” can be difficult, as it requires a lot of knowledge about the disease itself and can vary case-by-case. This is why you should work with your veterinarian when deciding which ones your horse should receive.

What risk-based vaccines are available?

There are currently nine risk-based vaccines available for horses:

- Equine influenza
- Equine herpesvirus (rhinopneumonitis)
- Strangles
- Equine viral arteritis
- Leptospirosis
- Botulism
- Anthrax
- Potomac horse fever
- Rotaviral diarrhea
- Snake bite

Since risk-based vaccines are only given to horses at higher risk, it is possible your horse may not need any of these vaccines. Or it may benefit from a few of them! It depends on the horse.

For example, if you share with your veterinarian that you plan to attend a lot of horse shows over the next six months, they may recommend the equine influenza, equine herpesvirus, and strangles vaccines since these diseases often spread at events. Similarly, your veterinarian may tell you that your horse needs the anthrax vaccine if you live in an area where spores are known to thrive in the soil. Pregnant mares during specific months of pregnancy are advised to get certain risk-based vaccines. Each horse is a unique situation when it comes to determining which risk-based vaccines to give!
Risk for contracting a disease is not always well known or easy to assess, so your veterinarian’s expertise is needed. Only give your horse the risk-based vaccines they need. Extra vaccinations can be costly and cause unnecessary stress to your horse.

**How does my vet determine which ones my horse should get?**

Your veterinarian will perform a risk-benefit analysis to determine if your horse should receive a particular risk-based vaccine. A risk-benefit analysis looks at known risk factors and the benefits of vaccination to determine if giving the vaccination is the best option for that horse. Many factors are considered during this analysis and your veterinarian may ask you a lot of questions. Common questions during a risk-benefit analysis include:

- Is the horse located in an area where a particular disease is common?
- Does the farm have new horses coming on the farm regularly that may be carrying diseases?
- Do some of the horses on the farm travel regularly?
- Will the horse be traveling to other locations/states? Will the horse be in an area where a disease is prominent?
- Is the horse competing at shows?
- Will the horse be interacting with other horses? (Particularly with those from different farms)
- How old is the horse? Is the under 2? Is the horse geriatric (over 20)? (Note: If the horse is a foal or weanling, there are specific guidelines for both core and risk-based vaccines that can be found on the AAEP website.)
- Is the horse in good health? Is it immunocompromised?
- Will this horse be used for breeding or is it currently in foal (pregnant)?

If the answer is yes to any of these questions, your veterinarian may suggest one or more risk-based vaccines. Your veterinarian may also have additional questions for you to consider based on current, known information about diseases in your area.

**Conclusion**

Risk-based vaccines are important to consider when developing your vaccination program. It can be hard to identify which ones your horse should receive, but with the help of your veterinarian, you can determine which vaccines to give and when they should be given.

For more information on why we vaccinate horses, core vaccines that are available, and season-specific considerations, visit our article on Vaccines for Your Horse.

Current vaccine recommendations can be found in the AAEP Vaccination Guidelines.