

## Dawson Creek Veterinary Clinic

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## Core equine vaccination

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Equine vaccines is a topic that most horse owners have at least heard of, but there may be some terminology or recommendations that are not fully understood. The goal of this article is to help clarify some vaccine terminology as well as help you as a horse owner decide which vaccines you need for your horse. These guidelines are largely based on the American Association of Equine Practioners (AAEP). Vaccines can be divided into two major categories; 1. Core Vaccines and 2. Non-core/ risk based vaccines. Core vaccines target against diseases that your horse can contract while never leaving your farm. These include West Nile Virus (WNV), Eastern and Western Encephalomyelitis (EEE & WEE), Rabies, Tetanus. The Risk based vaccines, are as their name describes, are based on your geographical location as well as your horses life style. These include Influenza (EIV), Equine Rhinopnumonitis virus (EHV) commonly called either Rhino or Herpes, Leptospirosis, Potomac horse fever (PHF), and Strangles (Streptococcus Equi).

The core vaccines are not related to travel or horse to horse contact. Tetanus is an organism found in the soil that most commonly enters through a wound or surgical site. West Nile and EEE/WEE are both mosquito born diseases. Rabies is transmitted through saliva, and is most commonly carried by bats and small mammals. Therefoer as you can imagine your equine partner doesn't have to leave their residence to be at risk!

The core vaccines (except rabies) need to be given as a 2 dose series 4-6 weeks apart, then as a yearly booster. These vaccines can be given as a 3way which includes tetanus and EEE/WEE, in combination with WNV or as separate vaccines. Most colts at the time of castration receive their first 3 way vaccine. Rabies is given as one dose and boosted yearly.

The risk based vaccines that we are going to focus on correlate to our geographical location. These include EIV, EHV, and Strangles.

Equine herpes virus has 2 main strains that we are concerned about, they are called EHV-1 and EHV-4. These viruses are spread through inhalation and direct contact of nasal secretions. These viruses can remain latent and once your horse is infected they can become infected for life. Clinical manifestations of this disease are flu like symptoms such as fever, nasal discharge, depression, poor appetite and abortions. The EHV-1 strain can also cause neurological symptoms such as urine dribbling, incontinence, and ataxia (weakness). Horses that are at risk are ones under stressful situations and ones exposed to groups of horses.

The current recommendation for vaccinated against EHV is a 3 dose series with the second and 3<sup>rd</sup> dose 4-6weeks apart, then either annual vaccination for low risk horses or a biannual (every 6 months) for horses that are under 5 years of age, horses that live with pregnant mares, and performance/show horses. The current recommendation for abortion protection is to vaccinate with a vaccine labeled against abortions (Pneumabort K) and administer it at month 5, 7, and 9 of gestation.

Influenza is a highly contagious virus that is spread though horse contact and inhaled virus. It causes depression, fever, decreased appetite, severe coughing, and often mild nasal discharge. Horses that have influenza develop large areas if deciliation on their trachea 4-6 days after infection. This is what causes the severe coughing, and puts them at risk of secondary bacterial infections. The current recommendations for vaccination by the AAEP is to vaccinate horses with a 3 booster series 4-6weeks apart followed by annual

revaccination or biannual every 6 months if high risk. For high risk horses see the above EHV paragraph. There is a combination vaccine that has EHV and EIV for the convenience of boostering high risk horses.

Strangles is a bacterial disease which commonly effects young horses. It is also very contagious with horse to horse contact. Strangles often results in significant lymph node swelling on the throat area due to abscesses. Horses usually start to shed the bacteria 2-3 days after the onset of fever, and can shed it for 2-3 weeks. There are some horses who will harbor the infection in their guttural pouch and shed it for years. Strangles can also cause a condition called bastard strangles, where abscesses form internally and can cause major health problems or even death. Strangles should be given as a 2 dose series then booster yearly. We use an intranasal strangles vaccines.

Vaccines are not necessarily meant to stop your horse from contracting the above disease BUT it will significantly reduce the amount of virus they are shedding (contagiousness) as well as reduce the severity and duration of their sickness. This is very important as horses with influenza, for example, need 4-6 weeks off from riding to give the respiratory tract time to heal. If they are taken back to work early it can lead to chronic allergic airway disease. Vaccinated horses that are only sick for a day or so can go back to work much earlier than unvaccinated horses that remain febrile for several days. Another misinterpretation is to give vaccines only in the spring. While this is good practice for the core vaccines due to mosquito season starting in the spring, your non-core/high-risk vaccines should still be boosted in late summer/fall to give your horse full coverage. Even if you are riding in the community arena you are potentially exposing your horse to disease. The Vaccines we carry are all given intramuscular except for strangles. If you are comfortable giving needles you can purchase the vaccines and give them at home, or you can book an appointment to have a veterinarian give the vaccines and discuss your horses risk level.

Hopefully this aids as a helpful reminder of why we vaccinate and what we vaccinate for. This is just a bit of information on common equine diseases and vaccines. If you have Questions or want to make a vaccine protocol tailored to your horses needs fell free to give us a call.