

EQUINE VACCINATION GUIDELINES

Vaccinations are critical to the health of your horse. However, different horses require different vaccinations, depending on the horse's job, living environment, and exposure to other horses.

1> First there are several diseases that horses can get just from either the environment or biting insects. These diseases do not require the presence of other horses. The horse just has to be around dirt and mosquitoes. These are the vaccinations that we consider core vaccines, and should be given to every horse on an annual basis. Included in that category are the following:

Tetanus: contracted from the soil through wounds. A horse may get tetanus from a wound that you never even see.

Western and Eastern Encephalitis: carried by mosquitoes and cause neurological symptoms such as weakness, dementia, inability to stand, and death.

West Nile Virus Encephalitis: another encephalitis carried by mosquitoes. By far the most significant of the mosquito-borne viruses of this type in Utah.

Tetanus, Western encephalitis, and Eastern encephalitis vaccines are often combined in a single vaccine. These vaccines are referred to as a "3-way" ("4-way" if combined with an injectable influenza vaccination; "5-way" if combined with both a flu and a rhino vaccination). In Utah, this vaccine is given once a year in the spring prior to the start of the mosquito season.

The West Nile virus vaccine may be given either alone or in a combination vaccination that includes the tetanus, Eastern encephalitis, and Western encephalitis vaccines. Giving the West Nile Virus separately rather than in a combination is recommended since fewer horses will get sore when the vaccines are given separately. In Utah, the West Nile virus vaccination needs to be given either once or twice yearly depending on the manufacturer and when it is given.

2>The second category of equine diseases that we vaccinate for in Utah are those that can spread between horses. These diseases include the following:

Influenza: Just like in humans, this disease is caused by a virus and spread by contact between horses. Flu is not usually fatal to horses but can cause a horse to be out of work for 3-6 weeks. On very rare occasions, equine flu can progress to a serious form of pneumonia. If your horse has much contact with other horses—trail riding, pasturing, boarding, showing, etc.—then it is a good idea to get a separate influenza vaccination. There are a number of influenza vaccinations on the market. The intranasal (squirted up the nose) influenza vaccinations are often favored because in general they are more effective, less reactive, and longer lasting than the injectable influenza vaccinations. The influenza vaccination is usually given twice yearly depending on the level of exposure to other horses.

Strangles: This disease is caused by a bacterium and is extremely contagious between horses. It can be spread directly between horses or on objects such as grooming tools, tack, and even fence posts as well as through human contact between horses. It usually occurs in outbreaks where most of the horses on a premise contract it unless they have been vaccinated or have had the disease in the past few years (no, this is not a lifetime immunity). Strangles causes extreme nasal discharge, multiple abscesses (especially around the head and face), weight loss, and misery. Few horses die from strangles, but young horses can die directly from the disease. In rare cases, a horse can get internal abscesses (called bastard strangles) that can potentially be fatal. Although the bacteria do not live for more than a few weeks in the environment, about 2% of infected horses may go on to become chronic carriers where they show no signs but can intermittently shed the bacteria to other horses who will then get sick. The strangles vaccination may not completely protect a horse from getting the disease but it will make the disease much shorter and milder. Horses that are in a large or changing population of horses (showing, endurance riding, etc.) should get the strangles vaccination on an annual basis. Although there are several different strangles vaccinations available, the intranasal strangles vaccine (Pinnacle) is the only one considered to be safe and effective.

Rhinopneumonitis (rhino): This disease is very complex and can cause symptoms as varying as respiratory problems, abortion, weak foals, and neurological damage. It is usually spread by direct or indirect contact between horses.

There are two very unfortunate aspects to this disease, and they are as follows: first, the protection given by all rhino vaccines is fairly short-lived; second, the virus seems to be changing to where it can cause much more serious and potentially fatal neurological outbreaks in horse populations than we have seen in the past. There is a lot we don't understand about the rhinopneumonitis virus, and at this time there is some very important research being conducted on the disease—primarily relating to the neurological form, which has increased so dramatically in the last 5 years. This seems to be much more of a problem on premises that have large and shifting horse populations, such as at boarding and showing barns.

The recommendations for rhino vaccinations are changing all the time. The general consensus at this time seems to be that, if your horse is at very high risk, the best protection is with a separate modified-live vaccine called Rhinommune given every 3 months. All the other rhino vaccines are killed vaccines and may not offer the same level of protection as the Rhinommune. In fact, some researchers believe that use of the killed virus may increase the severity of the neurological form of rhinopneumonitis. However, these are controversial points and researchers are still collecting data.

3>The third group of vaccinations given to horses in Utah are specific vaccines given to certain groups of horses. These are as follows:

Equine Viral Arteritis (EVA): This disease is primarily a problem with breeding horses. It causes mild respiratory symptoms and other signs, but, most significantly, it causes abortions in pregnant mares. Although previously reported, 2006 was the first year that this disease became a tremendous problem in Utah. The biggest consideration with this disease is that it becomes a chronic (long lasting or lifetime)

infection in the stallion and, although the stallion will show no signs, his semen can infect any unvaccinated mare that he breeds. Fortunately, we have a good EVA vaccine (Arvac) that is effective when given once yearly. Stallions should always be tested for EVA before they are vaccinated, since the vaccine will make the blood test appear as if the stallion is infected. Some breeders will choose to vaccinate their breeding mares as well.

Pneumabort K is a rhino vaccine given to protect pregnant mares and their fetuses from the “abortion” form of rhinopneumonitis. This vaccine is usually given in the 5th, 7th, and 9th months of pregnancy.

Endovac Equi is a vaccine that protects against endotoxins. Endotoxins are dangerous toxins released by the equine intestinal tract in colic-type situations. It is a good idea to use this vaccine in horses that are prone to colic or laminitis, fed a very high-grain diet, or are unusually stressed.

All of the above recommendations are for horses living in Utah. Horses traveling to other parts of the country may also require one or more of the following vaccinations: Rabies, Potomac horse fever, EPM, and botulism.