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### Equine Disease Information

- Eastern and Western Encephalomyelitis (EEE and WEE) – These two diseases are viral diseases that are extremely deadly, and are spread by biting insects, usually mosquitoes. The equine can develop disease once bitten by an infected insect. The main causes for illness and death are inflammation of the brain and spinal cord. The best forms of treatment are: preventative treatment through vaccination, and supportive care of the symptoms after infection. Although supportive care can help in some cases, approximately 50% of equines infected with WEE, and 70-90% infected with EEE die. The incidence of EEE/WEE is relatively low, due mostly to preventative vaccination. It is recommended that equines be vaccinated yearly for EEE/WEE, usually in March or April. If equines will be traveling to areas without major season changes (ex. Florida) then it is recommended that they receive the EEE/WEE vaccine every 6 months. Venezuelan Encephalomyelitis does not occur in this part of the U.S, but may be required in other parts of the country.
  
- West Nile Virus – Similar to EEE/WEE, WNV is a viral disease that is potentially lethal. WNV is also spread by biting insects, and the virus similarly attacks the brain and spinal cord. West Nile Virus is lethal in approximately 40% of the equines that come down with the disease. The best treatment is vaccination. This virus is a very real disease, and it is strongly recommended that all equines be vaccinated for WNV. Equines are currently the only species that has a vaccine available, developed quickly due to the high mortality rate in equines. It is recommended that WNV vaccine be administered before insect season (again, March or April), and equines may require another dose in 6 months, depending on incidence of the disease that season. Foals should be vaccinated earlier than usual if the mare was unvaccinated.
  
- Tetanus - Lockjaw (another term for Tetanus) is caused by a bacterium found in the soil, as well as in the intestinal tracts of most animals. This bacteria produces a toxin that is released when the bacteria enters the animal through an umbilicus, laceration or other sort of wound. The mortality rate of tetanus is approximately 80% in equines. The best prevention is through vaccination. The tetanus vaccine is usually combined in a single vaccine with EEE/WEE. The vaccination for tetanus should occur yearly, and may be boosted if the equine suffers a wound that penetrates the skin. With vaccination, the disease almost never occurs.
  
- Rabies – This disease is 100% fatal in equines. Rabies is a viral disease that causes inflammation of the brain, and it is transmitted through saliva (most common transfer is a bite wound) from an animal infected with the disease. Not only does this disease threaten equines, but it poses a serious threat to humans as well. Because of this risk, all large animals should be vaccinated for rabies once a year.

- Influenza – This disease is one of the most common viral respiratory diseases in equines. It is very contagious and is air-borne (aerosol transmission occurs). Some signs of “flu” infection include depression, anorexia, fever, lack of energy and sometimes coughing. Death can rarely occur as well. This disease is usually present in equines that travel frequently, or are on properties that have equines that were recently brought onto the farm. To try to decrease the risk to the entire farm, traveling equines, as well as those that are already ill, should be isolated and rested for at least 2 weeks. Some equines can also develop pneumonia secondary to the influenza infection, furthering the complications and illness for the animal. Signs that influenza has developed into pneumonia would be labored breathing, nasal discharge and an increase in coughing episodes. If pneumonia develops, the patient must be treated very aggressively, and very quickly. To help fend off influenza infection, one important step is to vaccinate. It is highly recommended that equines be vaccinated in the spring and fall. If there are equines that are traveling regularly (showing, sales, etc.) they should be vaccinated more frequently to keep the equine’s immunity level high.
  
- Rhinopneumonitis – “Rhino” is a basic term that actually encompasses two viral diseases: equine herpesvirus type I (EHV-I) and equine herpesvirus type 4 (EHV-4). These two viral diseases show similar signs to influenza including respiratory disease, depression, fever and anorexia. EHV-I can also cause abortion of pregnant mares, early death of foals, the births of sickly foals, and spinal cord and brain inflammation. Younger equines are particularly susceptible to infection, but it should be noted that any equine of any age can contract the disease. As in the case with influenza, equines that travel or are with a large group of equines are more prone to infection. The immunity and vaccine protection against herpes virus is short-lived so it is important to vaccinate for Rhino twice yearly (it is usually incorporated with the influenza vaccine). Pregnant equines in particular need to be boosted for the disease at months 5, 7, and 9 of pregnancy to help prevent abortion. It is also wise to vaccinate any equines that are intended to be rebred after foaling.
  
- Potomac Horse Fever – PHF is a bacterial infection, generally believed to be caused by a bacterium that lives inside fresh water snails and other aquatic insects. The disease can produce fever, swelling of the legs and abdomen, severe diarrhea, inappetence, founder, and depression in affected equines. It is important to note that there are varying degrees of signs that can be exhibited. Some may simply be depressed and have a fever, while others may colic or founder, and develop diarrhea. Death can result in some cases. Equines that are in proximity to creeks, ponds, etc. are at an increased risk, but the wetness of the season is also a large factor in the number of cases that occur. Equines that are vaccinated are much less likely to die from PHF, which is why it is important that every equine be vaccinated for Potomac Horse Fever. The number of PHF cases occurring in Vermont are on the increase, and vaccination is a good step to take in protecting the life of equines. It is recommended to vaccinate for PHF in the early spring, mid-summer, and again in the fall.