

Over the last several years, there have been several confirmed (and some suspected) outbreaks of EHV-1 and the neurological manifestation of that disease. EHV-1 has several manifestations: respiratory, abortions, neurologic and weak foal syndrome. EHV-1 is a virus that is included in many combination type vaccines; it may be listed as Rhinopneumonitis on some vaccines. However, these vaccines are only labeled to control the respiratory and abortive forms of EHV-1. There are no vaccines on the market currently labeled to prevent the neurologic manifestation of EHV-1. To further complicate this matter, it is highly suspected that the EHV-1 virus that is causing the current outbreaks may be a highly virulent strain that has a genetic mutation allowing it to be very pathogenic. A similar event occurred in 2008 in some racehorse barns in Kentucky; a mutated strain of EHV-1 was found in those horses. This mutated strain of EHV-1 exhibits the neurologic manifestation more aggressively. This manifestation is known as Equine Herpes virus 1 Myeloencephalopathy (EHM). Currently, there are no vaccines on the market for this mutated strain. While EHM is not 100% fatal, there is no specific treatment and care is purely supportive. Anti-viral drugs may be somewhat successful if used after infection with EHV-1 but before neurological symptoms develop. The best defense against this particular virus is stringent biosecurity. Genetic mapping is currently incomplete but is under way to determine if the current outbreak is caused by a mutated strain.

Biosecurity is simply the process of being especially careful to do the necessary steps to prevent an infection and/or stop the spread of an infection. While biosecurity is always important, it is critical during times of outbreaks of diseases. Though the steps in biosecurity can sometimes seem tedious and somewhat unnecessary, doing them is what breaks the cycle of the disease. There are several steps that can be practiced in order to prevent the spread of EHV-1.

The good news is that this virus is easily killed by disinfectants. Most infections of EHV-1 occur by either direct contact between infected horses (nose to nose contact) or indirect contact that allows for the virus particles to be transferred between an infected horse and a healthy horse. While indirect transmission via the air is possible, it is not as common as transference via contact. Since indirect contact via a physical object that "carries" the virus is a significant means of transmission, it is important to be very careful about any items that are used on or around the horse. This includes any feeding items, grooming tools, and tack. It is generally a good idea to not share these items with horses that are not from the same premise but especially so when there is concern of an EHV-1 outbreak. During times of concern of an outbreak, special vigilance to disinfecting these items is highly recommended. Several disinfectants are effective against the virus. Nolvasan and Roccal-D are highly effective disinfectants that are commercially available and are extremely effective against the virus. Clorox is also highly effective at killing the virus; it can be mixed at one part bleach to ten parts water and used to disinfect everything from tack to grooming items to stalls and feeding/water buckets. Gloves should be worn when handling disinfectants. It is extremely important to remember that disinfectants are not effective in the face of large amounts of organic debris (dirt or manure). Items must be cleaned thoroughly with a soapy solution, rinsed, and then disinfected. Trailers should also be considered during the disinfectant process.

Sound animal husbandry procedures also apply to preventing the spread of EHV-1. Since the virus is easily spread on physical items that have the virus on them, it is important to remember to be careful about clothing and hands between horses. It is a good idea to change clothes and wash hands thoroughly between horses if there is a suspect case of EHV-1. Also, any horses that are suspected or have been diagnosed with EHV-1 should be handled last. Handling sick horses first and then taking care of other horses is an ideal way to spread the virus.

