**Equine Herpesvirus Myeloencephalopathy (EHM) & EHV-1**

**Frequently Asked Questions**

1. **How do we handle horses returning from events where they may have been exposed to EHV-1?**

For horses that may have been exposed to the risk of infection, there are some steps to take to mitigate the risk at their home facility. Even if these horses are returning home from events at which no disease was reported, and even if these horses appear healthy, precautions are needed as these horses could bring a contagious pathogen home and spread it at their home farm – this is the classic way EHV-1 spreads:

- These horses should be isolated from any other horses when they return to their home facility. Isolation requires housing them away from other horses, using different equipment to feed, clean and work with them than is used with any other horses, and rigorous hygiene procedures for horse handlers (hand hygiene, wearing separate clothes when coming in contact with isolated horses, etc.). Please discuss this with your veterinarian.
- We strongly advise owners to call their veterinarians to discuss how long to keep the horses isolated at home, but even if they don't develop fevers this should be at least 21 days.
- These horses should have their temperature taken twice a day, as elevated temperature is typically the first and most common sign of infection – horses with elevated rectal temperatures (101.5 F or greater) should be swabbed by your veterinarian to find out whether they are shedding EHV-1.
- If a horse develops a fever and is found to be shedding EHV-1, then the level of risk to other horses on the premises increases significantly. Affected farms should work closely with their veterinarian to manage that situation, if it develops.
- The American Association of Equine Practitioners (AAEP) has an extensive set of Equine Herpesvirus (EHV) Control Guidelines that serve well as a resource for practitioners.

2. **What do we do if we already have a potentially exposed horse on a farm?**

- It still makes sense to isolate the exposed horse from other horses; even though it may have already been in contact with other horses, start isolation procedures to stop further exposure. It is very important to not mix horses from different groups to accomplish this. Try and isolate the suspect horse without moving other horses from one group to another – segregation of horse groups is the key, because this will help you reduce spread if an outbreak starts.
- Check temperatures of all horses on the farm twice daily (fever spikes can be missed if you check once daily). If fevers are detected, then isolate the horse and test for EHV-1. The value of starting healthy horses on anti-viral treatment when there is no evidence of disease on the farm is questionable. The treatment is expensive, the drug (Valtrex™ - valacyclovir) may have limited availability, and prophylactic therapy against EHM will only work while drug is being administered. Therefore, it is more likely to be effective if administered when fever is first detected (see below).
3. What anti-viral treatments can I use against EHM on a farm?

- If EHM is present on a farm, then the risk of developing EHM to other horses at that farm is greatly increased. Stringent quarantine and biosecurity procedures must be implemented immediately.
- Treatment of horses with clinical neurological disease (EHM) is largely supportive – the use of anti-viral drugs is not known to be of value at this stage. Use of anti-inflammatory drugs is recommended: flunixin meglumine (0.5 to 1 mg/kg, IV, q 24 hours).
- For horses on the farm that develop fever, test EHV-1 positive, or have a high risk of exposure, anti-viral drugs may decrease the chance of developing EHM.
- Currently, the treatment of choice in a febrile EHV-1 infected horse to prevent the development of EHM is Valacyclovir (Valtrex™), given orally. The use of oral acyclovir is unlikely to be of any value, as it is poorly absorbed from the GI tract.
- We currently recommend Valacyclovir (Valtrex™) for prophylactic therapy at a dose of 30 mg/kg q 8 hr for two days, then 20 mg/kg q 12 hr for 1-2 weeks. Maintain on higher dose rate if the horse is still febrile.
- The use of Valacyclovir in horses that have already developed signs of EHM is questionable at this time. In that circumstance the use of intravenous Ganciclovir is preferable as it may have greater potency against the disease. The dose of Ganciclovir is 2.5 mg/kg q 8 hr IV for one day then 2.5 mg/kg q 12 hr IV for one week.
- Administration of a zinc-containing supplement may be beneficial based on a recent epidemiologic study that found a decreased risk of EHM associated with owner-reported dietary zinc supplementation.

4. Is there any value to using booster vaccination against EHV-1 at this time?

- Unfortunately, there is not a licensed EHV-1 vaccination product with a label claim for prevention or control of EHM.
- EHV-1 vaccines have been shown to reduce nasal shedding and, in some cases, reduce viremia. These products may therefore have some theoretical value against EHM by reducing viremia, and certainly against spread of the virus by reducing viral shedding in the environment.
- If horses on the farm are previously vaccinated against EHV-1 then booster vaccination should quickly increase immunity, and perhaps reduce spread of EHV-1, if it is present.
- Vaccination in these circumstances is controversial, as some authorities speculate that immunity to EHV-1 may play a role in the development of EHM. While this is unproven, it remains a possibility. The use of vaccination is therefore a risk-based decision.
- Vaccination has no value as a treatment in affected horses.

**Protect your Practice & Facility**
During an outbreak, caution is recommended at all times to reduce spread of infection. Movement of horses on and off farms should be limited whenever possible. Reducing stressful activity of the at-risk horse can assist control methods as well. Protect your own practice and hospital from becoming part of the problem. Heighten your biosecurity, as mentioned in the [AAEP EHV Control Guidelines](https://www.aaep.org/). Additional sources of information can be found [online here](https://www.aaep.org/).