

*The following information is provided by Wyoming Downs for your information with regard to the EHV-1 Vaccine. This information was received from the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS). For additional information, please contact APHIS directly.*

## **Equine Herpesvirus Type 1 (EHV-1) Vaccine Update**

Equine Herpes Virus Type 1 (EHV-1) causes a serious disease of horses, equine rhinopneumonitis. Typically it causes acute, contagious respiratory disease with fever; it can also cause abortion, neurologic disease, and death. The virus can spread via an infected animal, through the air, or via contaminated equipment, clothing and hands. An infected animal can be latently infected, sporadically shedding, or show only mild clinical signs. EHV-1 is endemic to the United States and is usually handled by the states involved.

An outbreak of neurologic disease caused by EHV-1 occurred in late 2006 and involved a group of 15 horses shipped from Germany. The horses were subsequently shipped to 8 states. Five of the horses went to Florida; this resulted in 13 horses identified as infected, with neurologic signs in 7 cases and 6 associated deaths. Ten Florida premises were quarantined. One horse was shipped to California and died shortly after arrival from neurologic disease typical of EHV-1 infection. The exposed horses were identified, and the horses that were shipped to the remaining 6 states were quarantined and monitored for signs of EHV-1 infection; none were observed. The Florida outbreak was confirmed as due to neuropathogenic EHV-1 through laboratory confirmation of the presence of neuropathogenic strains of EHV-1 together with observation of clinical signs consistent with the neurologic form of equine rhinopneumonitis.

The U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) has been working closely with states in assisting involved parties by tracing the animals' path from entry to end point. Most recently, APHIS has been asked to provide information on EHV-1 vaccines. APHIS would like to take this opportunity to address specific questions received on EHV-1 vaccines:

### **Why is there a concern about EHV-1?**

EHV-1, in its neuropathogenic form, is emerging with a higher incidence and virulence (i.e., higher morbidity and mortality) than previously seen in the United States. USDA's Animal and Plant Health Inspection Service (APHIS) understands the importance of responding quickly to EHV-1 and is addressing vaccine issues.

### **Are there vaccine products available?**

There are currently 35 vaccine products licensed by APHIS' Center for Veterinary Biologics (CVB) that contain EHV. These products are labeled as "Equine Rhinopneumonitis" vaccines. Two products contain only EHV and others are licensed as combination products with additional equine antigens. There are both modified live virus (MLV) and killed virus products licensed. All have demonstrated safety, including field safety. All have demonstrated efficacy in support of the claim on the label (e.g., as an aid in the control of respiratory disease due to EHV-1, as an aid in the prevention of abortion associated with EHV-1, aids in the reduction of shedding). Label wording is carefully reviewed, must comply with requirements established by APHIS, and be derived from very specific efficacy study observations and results. Currently, no licensed product has a label claim for the neurologic form of disease caused by EHV-1.

### **Have there been cases of the neurologic form of disease caused by EHV-1 associated with vaccination with a MLV EHV-1 vaccine?**

To date, the CVB has not received a report of an adverse event involving the appearance of neurologic symptoms following vaccination with a licensed EHV MLV vaccine. However, APHIS remains vigilant on responding to any possible effects. Reporting of adverse events is encouraged and adverse events may be reported by telephone at (800) 752-6255, on-line using the Adverse Event Electronic Report Form

available at the CVB website (<http://www.aphis.usda.gov/vs/cvb>), or by fax or mail using the posted form and the provided CVB fax number or address.

**Should owners get their horses vaccinated?**

To date, not much is known about the pathogenesis of the neurologic form of equine rhinopneumonitis (EHV-1). As additional information comes forward, educational outreach to practitioners and horse-owners will be extremely important. Decisions regarding the use of vaccine containing EHV in individual horses should be made based on the local situation in consultation with your veterinarian. APHIS will continue to work with the United States Animal Health Association, industry groups, and the National Assembly in formulating further recommendations and plans related to EHV-1.

For more information on EHV-1 please visit: <http://www.aphis.usda.gov/vs/nahss/equine/ehv/>