



July 20, 2021

## Equine Owners and Veterinarians Reminded to Take Steps to Prevent Venezuelan Equine Encephalitis

On July 8, 2021, the United States Department of Agriculture's Animal and Plant Health Inspection Services (APHIS) Veterinary Services (VS) reported active cases of Venezuelan Equine Encephalitis (VEE) in Mexico. At this time, the confirmations are not close to the Texas-Mexico border. However, due to abundant rainfall across the state, mosquito activity is expected to increase which could facilitate the transport of this disease across Mexico into the United States.

The Texas Animal Health Commission (TAHC) would like to remind veterinarians and encourage equine owners to consider vaccinating their horses against mosquito-borne illnesses such as Eastern Equine Encephalitis (EEE), Western Equine Encephalitis (WEE), VEE and West Nile Virus as a protective measure.

Below please find general information about the clinical signs, diagnosis, treatment, and prevention of the three equine encephalitis viruses.

### What is EEE, WEE and VEE?

EEE, WEE and VEE are caused by Alphaviruses. EEE is the most common of the three and is found widely in several regions of the United States (especially in areas of high mosquito populations). WEE occurs infrequently but circulates in wildlife. VEE is a Foreign Animal Disease and therefore reportable at both the Federal and State level. VEE occurs in cycles in Central and South America; there were incursions into the United States decades ago.

### Clinical Signs

Infection causes non-specific clinical signs and often affects the central nervous system.

- Moderate to high fever 102.5-104.5°F
- Lack of appetite
- Diarrhea (VEE only)
- Difficulty swallowing
- Head pressing
- Circling
- Blindness
- Dementia
- Seizures
- Rapid behavioral changes: somnolence, hyperexcitability, mania, self-mutilation
- Cranial neuropathy: nystagmus, facial nerve paralysis, and weakness of tongue and pharynx
- Coma
- Death

### Diagnosis

If a horse owner suspects EEE, WEE or VEE, a private veterinarian should be contacted for confirmation.



### **Transmission**

EEE, WEE and VEE are transmitted only by the bite of infected mosquitoes; direct transmission between horses and people does not occur. However, should there be an incursion of VEE, equine infections do present some risk to people.

### **Treatment**

Treatment of equine consists of supportive care. Survival rates for horses infected with EEE or VEE is low. However, WEE survival can be as high as 70-80%.

### **Prevention**

The EEE, WEE and VEE vaccination is very effective at preventing clinical disease. Vaccination needs to be repeated, at minimum, on an annual basis. Consult a veterinarian regarding boosters if you live or are travelling to an area with year round mosquito populations or an area that has previously reported cases of EEE/WEE.

Reduce your horse's exposure to mosquitoes: eliminate any standing water (mosquito habitat) and place fans inside where the horses rest, limit outdoor activities at dawn and dusk, and use equine approved mosquito repellent.

### **Information for Veterinarians**

AAEP Infectious Disease Guidelines for Arboviruses:

[https://aaep.org/sites/default/files/Documents/ARBOVIRUSES\\_Final.pdf](https://aaep.org/sites/default/files/Documents/ARBOVIRUSES_Final.pdf)

### **Equine Movement Restrictions**

At this time, TAHC has not implemented any equine movement restrictions related to VEE. However, USDA has placed restrictions on the importation of equine from Mexico. Learn more here:

<https://content.govdelivery.com/accounts/USDAAPHIS/bulletins/2e72768>.

### **TAHC Rules**

Eastern, Western, and Venezuelan Equine Encephalitis are reportable to the TAHC. Upon diagnosis, the TAHC must be notified.

For more information on Equine Encephalitis, visit

<https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/equine/eee-wee-vee/equine-encephalitis>.