August 26, 2024

# Equine Owners and Veterinarians Reminded to Prevent Mosquito-Borne Diseases

Eastern Equine Encephalitis Confirmed in Houston County Horses

The Texas Animal Health Commission (TAHC) received confirmation of eastern equine encephalitis (EEE) in two Houston County horses. These are the first reported cases of the mosquito-borne illness in Texas.

As a protective measure, veterinarians and equine owners are encouraged to consider vaccinating their horses against mosquito-borne illnesses such as EEE, western equine encephalitis (WEE), Venezuelan equine encephalitis (VEE), and West Nile Virus (WNV).

EEE, WEE, and VEE are reportable diseases to the TAHC. While WNV is not a reportable disease to the TAHC, it is recommended that horse owners consult with their veterinarian about protecting their horses against this illness. General disease information and how to protect horses from these mosquito-borne diseases of equine species can be found on the TAHC website and below.

## What is EEE, WEE and VEE?

EEE, WEE and VEE are caused by alphaviruses and can cause severe brain inflammation in equine. The viruses are prevalent in birds and rodents, and unvaccinated horses are particularly susceptible. EEE is commonly found in the eastern United States and Canada, while WEE has not been detected in the United States since the late 1990s. VEE is found in Central and South America and occasionally in Mexico.

## **Clinical Signs**

Infection causes non-specific clinical signs and often affects the central nervous system. Clinical signs may include:

- Moderate to high fever 102.5-104.5°F
- Severe depression, known as "sleeping sickness"
- Behavior changes
- Impaired vision
- Circling or head pressing
- Muscle twitches
- Inability to swallow
- Paralysis
- Convulsions
- Death

#### **Diagnosis**

Equine owners or producers who suspect EEE, WEE, or VEE should contact their private veterinarian for evaluation. All confirmed diagnosis or suspected cases must be reported to the TAHC at 1-800-550-8242.

# **Transmission**

EEE, WEE and VEE are most often transmitted by mosquitos after the insects have acquired the virus from birds and rodents. Humans are also susceptible when bitten by an infected mosquito, but direct horse-to-horse or horse-to-human transmission is very rare.



#### **Treatment**

Affected equine should be given supportive care based on the severity of their symptoms.

## **Prevention**

The EEE, WEE and VEE vaccination, repeated at least annually, is very effective at preventing clinical disease. Private veterinarians should be consulted if equine are located or traveling to higher-risk areas, including near the border of Mexico. Higher-risk areas have year-round mosquito populations or have previously reported cases.

Owners and producers should reduce mosquito attractants, such as standing water, place fans inside where horses rest, limit equine's outdoor activities at dawn and dusk, and use equine approved mosquito repellent.

# **Additional Vector-Borne Equine Encephalitides Information**

United States Department of Agriculture Animal and Plant Health Inspection Service: <a href="https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/equine/eee-wee-vee/equine-encephalitis">https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/equine/eee-wee-vee/equine-encephalitis</a>

# **Veterinarian Information**

American Association of Equine Practitioners: https://aaep.org/resource/adult-horse-vaccination-chart/

## **Human Health Information**

Texas Health and Human Services: https://www.dshs.texas.gov/mosquito-borne-diseases/arboviral-encephalitides