# UNIVERSITY OF **FLORIDA**

# **Cooperative Extension Service**

Institute of Food and Agriculture Sciences

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Positive Cases of Vesicular Stomatitis Confirmed in Horses in Four States-New Mexico, Arizona, Texas and Utah

On April 27, 2005, the National Veterinary Services Laboratories (NVSL) in Ames, IA, confirmed the finding of vesicular stomatitis virus (VSV) in two horses at one premises in Grant County, New Mexico and a few days later confirmed a case in a horse in Maricopa County, Arizona. On May 20, two horses in Texas tested positive for the virus. Both Texas horses are from the same premises in Travis County and had recently traveled to Arizona. On June 20, two horses tested positive with one additional suspect case in Utah. The Utah cases were discovered on two premises in different counties.

Vesicular stomatitis is a viral disease which primarily affects horses, cattle, and swine. The agent that causes vesicular stomatitis, VSV, has a wide host range and can occasionally infect sheep and goats. In affected livestock, VSV causes blister-like lesions to form in the mouth and on the dental pad, tongue, lips, nostrils, hooves, and teats. These blisters swell and break, leaving raw tissue that is so painful that infected animals generally refuse to eat and drink and show signs of lameness.

Severe weight loss usually follows, and in dairy cows a severe drop in milk production commonly occurs. Affected dairy cattle can appear to be normal and will continue to eat about half of their feed intake.

Any livestock entering Florida originating from a VS affected state has additional importation requirements. Please review the Florida importation rule (5C-3) at <u>http://www.doacs.state.fl.us/ai/main/vs\_main.shtml</u> or call 850-410-0959 for detailed requirements necessary to enter Florida.

APHIS Veterinary Services, the New Mexico Livestock Board, the Arizona Department of Agriculture, the Texas Animal Health Commission and the Utah Department of Agriculture will continue to monitor the situation and conduct response activities in an effort to minimize trade restrictions. For additional information on vesicular stomatitis please refer to the following APHIS webpage

www.aphis.usda.gov/lpa/issues/vs/vs.html

Information for Horse Owners Regarding the National Animal Identification System (NAIS)

The USDA is sponsoring a National Animal Identification System (NAIS) to safeguard animal health in the United States. The goal of the NAIS is to facilitate tracing of a diseased animal back to its location of origin within 48 hours. This will help the USDA and the Florida Department of Agriculture and Consumer Services dramatically reduce the number of animals affected in the event of a disease emergency or other biological threat. The first phase in this program is to register any premises where livestock reside. This includes locations where horses are boarded, trained or congregate.

Florida is fortunate to have received funding from the United States Department of Agriculture to implement a premises identification system and to begin working with equine facility owners, individual horse owners and industry groups on pilot animal identification projects. The Florida Department of Agriculture and Consumer Services is implementing the NAIS, on a voluntary basis. We encourage your participation and only basic information is needed to help protect the Florida equine community.

The process of registering is easy. If you own the property where your horse resides then simply fill out NAIS Premises ID application and return it to the address listed on the form. If your horse resides at a location you do not own, such as a boarding facility, please ask the property owner to complete the application.

If you have any questions or need an application please feel free to contact our office at (850) 410-090 or email Dr. Michael A. Short, manager of equine programs for the Division of Animal Industry at shortm@doacs.state.fl.us

For additional information you can access the USDA website at <u>www.usda.gov/nais/</u>

Commonly Asked Questions Regarding Equine Premises Registration for the National Animal Identification System (NAIS)

#### What is a premises?

A Premises is any property where livestock, including horses, resides. A Premises ID is one facet of the tracking system in which will allow tracing of animal movement. In the future, movements of livestock will be recorded as the animal moves from one location to another.

#### What premises needs to be registered?

Any premises should be registered where horses or any other livestock reside. If a business or individual manage multiple locations where animals reside then the central managing location can be registered. Livestock includes animals such as a cow, horse, poultry, sheep, goat, swine, deer, elk, llama or bison.

#### When is the Premises ID needed?

Currently, the U.S. Department of Agriculture and the Florida Department of Agriculture and Consumer Service do not require a Premises ID. The program is voluntary and all livestock owners are encouraged to participate. At some point in the future, livestock owners will need to identify individual animals as another facet of the tracking system. The Premises ID will combine with the individual animal ID number to record both where the livestock are currently found and where the livestock originated. As animals change Premises, a movement history will build that will facilitate the trace back process for timely response.

#### **Registering a Premises**

- To register, the premises owner or authorized agent may:
  - Complete a Premises ID Application form and mail or fax it to the Florida Department of Agriculture and Consumer Services (FDACS).
  - Call or email FDACS and provide the information.
- FDACS processes the application.
- FDACS notifies the livestock owner of the new Premises ID.

#### What does FDACS do with the information?

- Information is housed in the USDA's Standardized Premises Registration System (SPRS).
- The information is kept in databases in Fort Collins, Colorado, and Tallahassee, Florida.
- The information can only be accessed by animal health officials with the Florida Department of Agriculture and Consumer Services.

#### **Managing a Premises**

- The Premises number does not belong to the livestock owner- it belongs to the property.
- If the property is sold, the Premises must be deactivated in the NAIS so the next owner may register it (the Premises number does not change).

FDACS ask that owners update their contact information once per year or when a change occurs (the premises is sold, etc.)

#### Instructions for Completing the NAIS Premises ID Application

#### **Business/Farm/Ranch/Stable Account Information**

Give the information where you can be contacted as a business or individual. If the primary contact for your business is different, then give the name and number of the primary contact at the bottom of this section (On-site Contact).

#### **Business name**

If you do not have a business, check the box reading individual.

## Premises Information (where animals are located or Florida management headquarters)

This is where the animals you own actually reside or where the management of the animals is located. This needs to be an actual physical address. You will need to fill out a separate premises ID application for any location you have animals unless all the livestock are managed at a central location.

#### **Primary Business function**

If you are an individual owner mark the Production Unit box, otherwise mark the appropriate box that best describes your situation.

#### **Species on Premises**

Please check the box for any other species of animals which live on the same property as your animal resides.

#### Mail or Fax to the location on the application

#### Contacts

Florida Department of Agriculture and Consumer Services Division of Animal Industry FDACS NAIS Help Desk Phone: (850) 410-0900 Fax: (850)410-0919 animalid@doacs.state.fl.us Website: www.doacs.state.fl.us/ai

Michael J. Short, DVM Florida Department of Agriculture and Consumer Services Division of Animal Industry Equine Programs Manager Phone: (850) 410-0901 shortm@doacs.state.fl.us

#### CHARLES H. BRONSON COMMISSIONER OF AGRICULTURE

#### **Encephalitis Continues to Plague Florida Horses**

Dana N. Zimmel, DVM Assistant Professor, Equine Extension University of Florida College of Veterinary Medicine

Mosquito borne diseases continue to plague Florida, underscoring the importance of vaccination and mosquito control. There have been 45 confirmed equine cases of Eastern Equine Encephalomyelitis (EEE) reported in the state of Florida as of June 13, 2005. The peak season for EEE transmission is June-August, compared to the peak season for West Nile virus which is August - October.

Eastern Equine Encephalomyelitis has been a persistent problem in Florida. The number of reported cases varies from year to year depending on the climatic conditions effecting mosquito populations. The abundance of mosquitoes depends upon the temperature and rainfall. In the dry year of 2002 there were only 25 equine cases of EEE. In 1982 and 2003 over 200 horses were infected with EEE. The majority of the horses infected this year have not been vaccinated or it has been greater than 6 months from the last vaccination. Eastern Equine Encephalomyelitis causes a deadly infection of the brain with a mortality rate between 75-95%. The number of cases this year is alarming. The disease is preventable if the horses are properly vaccinated. With so much focus on West Nile virus, many owners have not vaccinated their horses for this more deadly sister virus.

West Nile (WN) virus is now endemic in the United States with thousands of equine and human cases reported in each year. The mortality rate for WN virus in horses is approximately 33% compared to 3%-10% for humans. *Transmission* 

Birds are the primary reservoir for EEE and WN. Mosquitoes are the primary carrier of the virus. After consuming a blood meal from an infected bird, the mosquito can bite a horse or human and infect them with either virus. Horses and humans are dead-end hosts which mean they can not be a source of infection to other mammals due to a low level of virus in their bloodstream. The virus load is enough to make the individual horse sick, but not high enough to serve as a reservoir for infection for other horses or humans. *Clinical Signs* 

The symptoms of EEE and WN are subtly different. The majority of horses with EEE will develop changes in behavior, may seem somnolent or hyper-excitable and develop a high fever (104-106 °F). The signs may progress to dementia, blindness or an unsteady gait leading to seizures and death. In contrast, only 20-25% of horses with WN develop a fever and the most common clinical signs are weakness, ataxia and muscle fasciculations. If a horse becomes recumbent the prognosis for survival is dramatically decreased regardless of the etiology of the disease.

When was the last time your horse was vaccinated for Eastern Equine encephalomyelitis? Most owners will tell the vet that their horse is "up to date." The reality is if your horse lives in Florida he needs to be vaccinated every 4-6 months!

Most horses that contract the disease will not survive and it is easy to prevent!

#### Prevention

Horses in the state of Florida should be vaccinated for EEE and WN virus every 4 months due to the increased risk of exposure from the persistent mosquito population. If a horse has never been vaccinated for either virus, they require 2 vaccinations 3-4 weeks apart. The horse will not develop an appropriate immune response that will be protective until 3 weeks after the last vaccine. Foals that received colostrum from mares vaccinated 30 days prior to foaling should begin a vaccination series starting between 4-6 months of age. The exact time to start vaccination is still under investigation. The foal needs to receive 3 vaccinations to acquire adequate immunity. The time between the 1<sup>st</sup> and 2<sup>nd</sup> vaccination should be 30 days and the time between the 2<sup>nd</sup> and 3<sup>rd</sup> vaccination should be 60 days. After the series of 3 vaccinations, the weanling should be vaccinated every 4 months.

Mosquito control can minimize disease exposure. Use fly sprays frequently especially at dawn and dusk. Use fans on stabled horses to improve air movement. Remove all standing water from the premises. Consider stocking ponds with fish to consume mosquito larvae.

#### Additional Information

Animal and Plant Health Inspection Service: http://www.aphis.usda.gov/lpa/issues/wnv/wnv.html

Florida Department of Agriculture and Consumer Services: http://www.doacs.state.fl.us/~aes/westnile2001/WestNile.htm

Florida Department of Public Health: <u>http://www9.myflorida.com/Disease\_ctrl/epi/htopics/arbo/index</u>.<u>htm</u>

## Florida State Agriculture Response Team (SART)

#### **Offers Newsletter**

Florida SART, the State Agricultural Response Team, is a program being developed to coordinate the response to agricultural and animal issues after a disaster or in an emergency. The program recently completed three regional trainings and is about to publish the first issue of its monthly newsletter, The SART Sentinel. The newsletter will keep SART members informed of training events, training and information resources, and agriculture and animalrelated activities in the emergency management system.

The SART Sentinel is distributed by e-mail and it will be posted on the Florida SART Web site at: <u>www.flsart.org</u>. If you want to be added to the e-mail list, visit the Florida SART Web site and sign up! Marion County Extension Service University of Florida 2232 NE Jacksonville Road Ocala, FL 34470-3615 Auto Non-Profit Org. US POSTAGE PAID OCALA, FLORIDA PERMIT NO. 338

### "Beef Cattle Management Tips"

#### JULY

- Control weeds in summer pasture.
- Apply nitrogen to warm season pastures, if needed
- Check and fill mineral feeder.
- Inspect pastures for armyworms and mole crickets, and treat if necessary.
- ➤ Wean calves and cull cow herd.
- ➢ Observe cows for evidence of foot rot and treat.
- Consider preconditioning calves before sale including vaccination for shipping fever and IBR at least 3 weeks before sale.
- Check dust bags.
- Update market information and plans.
- Revaccinate calves at weaning for blackleg

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#### **AUGUST**

- Treat for liver flukes as close to August 15th as possible, if they are in your area
- > Cut hay
- > Apply lime for fall and winter crops.
- Harvest Bahiagrass seed
- Check pasture for evidence of mole crickets, spittlebugs, and grassloopers, treat if necessary.
- Check and fill mineral feeder.
- Inspect cattle for evidence of disease.
- If cattle grubs were found on cattle last winter or heel flies were observed in the pasture, treat for cattle grubs this month.
- ➢ Wean calves and cull cow herd.
- Pregnancy test and cull open heifers from replacement herd.
- Check bred cows for evidence of abortion.

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