

August 14, 2002

MEMORANDUM

Subject: West Nile Virus (WNV)
To: All South Carolina Veterinarians
From: Dr. Tony Caver, Interim State Veterinarian

West Nile Virus (WNV) is a mosquito-borne virus recognized in the United States for the first time in 1999. Mosquitoes circulate the virus among wild birds.

Small Animals

- Because West Nile Virus (WNV) is transmitted by infectious mosquitoes, dogs or cats could be exposed to the virus in the same way humans become infected.
- WNV does not appear to cause extensive illness in dogs or cats. A sero-survey in New York City indicated dogs are infected. However, disease from WNV infection in dogs has yet to be documented.
- Veterinarians should take normal infection control precautions when caring for an animal suspected to have WNV or any viral infection.
- Full recovery from the infection is likely. Treatment would be supportive and consistent with standard veterinary practices for animals infected with a viral agent.
- Any animal displaying central nervous signs should be reported to the State Veterinarian's Office (Tel: 803/788-2260). Rabies should be considered on the list of rule outs.

Horses

- Horses become infected with West Nile Virus in the same way humans become infected, by the bite of infectious mosquitoes.
- Cases of WNV disease in horses have been well documented.
- Horses are considered a dead-in host of the WNV and pose no threat to other horses or humans.
- Approximately 40% of equine West Nile Virus cases results in the death of the horse.
- The most common signs of WNV infection in U. S. horses have been stumbling, incoordination, weakness of limbs, partial paralysis, muscle twitches and death. Fever is not always present.
- On August 1, 2001, a conditional license was issued by the USDA-APHIS Center for Veterinary Biologics for an equine WNV vaccine.
- Conditional licensing means that the product has been shown to be safe, pure, and have a reasonable expectation of efficacy in preventing illness.
- The State Veterinarian has approved the use of the WNV vaccine for equine in South Carolina.
- The manufacturer of the vaccine recommends giving two (2) intra-muscular (IM) doses of 1 ml each, three (3) to six (6) weeks apart. Boosters are recommended twice a year in South Carolina.

Prevention

- The key to preventing or controlling WNV is to control mosquito populations.
- The following recommendations apply to all species:
 - eliminate stagnant water in which mosquitoes breed.
 - discard tires and water-holding containers.
 - clean gutters, birdbaths, and water troughs.
 - apply insect repellants according to label instructions.
 - avoid exposure at dusk and dawn when mosquitoes feed.
 - keep screens well maintained.
 - use of fans may reduce the potential ability of mosquitoes to feed.
 - keeping horses and animals in stalls at night may be helpful.

Livestock and Poultry

- Other domestic livestock and poultry do not commonly show illness if infected with WNV.

Other Animals

- The Center for Disease Control (CDC) has also received a small number of reports of WNV infections in bats, a chipmunk, a skunk, a squirrel, and a domestic rabbit.
(Source: CDC; USDA)