August 15, 2022

Dear Veterinarian:

With another summer season underway, the New York State (NYS) Department of Agriculture and Markets and the NYS Department of Health remind you that arboviruses, including eastern equine encephalitis (EEE) virus, continue to circulate in New York State, posing a potential risk to people, horses, and other animals.

Please include EEE as a differential diagnosis for horses with neurologic signs. Public health relies on EEE cases being promptly reported. EEE mimics a variety of encephalitides including rabies, West Nile virus (WNV), botulism, hepatic encephalopathy, equine protozoal myeloencephalitis (EPM), tetanus, equine herpesvirus 1 (EHV-1), lead poisoning, and others. Most equine cases of EEE in NYS occur between mid-August and mid-September, although the earliest onset reported in the past has been July 14 and the latest October 21. The increasingly mild winter seasons are good reason to consider recommending that your clients vaccinate their horses against equine encephalitis viruses every 6 months, or twice a year.

Equine EEE cases have been detected in NYS since 1970, primarily from the four Oneida Lake Basin counties (Madison, Oneida, Onondaga and Oswego). However, EEE has been confirmed sporadically in other areas of the state including Chautauqua, Franklin, Ulster and Wayne Counties in recent years. EEE has also caused fatal infections in pheasants, quail, captive whooping cranes, emus, and, rarely, dogs. There have been twelve human cases of EEE in NYS since 1971.

EEE should be included in the differential diagnosis when evaluating any equid with acute neurologic illness. Because EEE clinically resembles rabies, which is much more common in NYS, horses suspected of having EEE must be promptly evaluated for rabies due to the potential for human and other animal exposure. For postmortem testing of horses with clinically compatible illness, please contact your county health department. Your county health department will arrange for rabies testing at the New York State Department of Health Wadsworth Center Rabies Laboratory. Definitive diagnosis of rabies or EEE requires laboratory testing of brain tissue. After rabies is ruled out, brain specimens will be tested for EEE and other viruses at the Wadsworth Center Arbovirus Laboratory. Additional testing for other diseases can also be arranged through the New York State Veterinary Diagnostic Laboratory at Cornell (NYSVDL). Reporting and testing of neurologic horses helps to ensure timely administration of rabies postexposure treatment when needed and advances our understanding of the distribution and spread of EEE.
To obtain the most rapid testing for other potential causes of neurologic disease, it is recommended that veterinarians send specimens to NYSVDL at the same time as the Wadsworth Center. Please contact NYSVDL at 607-253-3900; see http://diaglab.vet.cornell.edu/ for additional information. It is essential that collection of neurologic tissue for testing at NYSVDL does not interfere with the collection of a full cross-section specimen of fresh brainstem and adequate samples of cerebellum required for rabies diagnosis at the Wadsworth Center (see https://www.wadsworth.org/programs/id/rabies/animal-specimen-testing). When it is not feasible to take a brain specimen (i.e., in ill horses with neurologic signs), please report the case and discuss submission of serum and/or cerebrospinal fluid for viral testing with NYSVDL.

We greatly appreciate your efforts as partners in human and animal health.

Sincerely,

Joy Bennett, DVM, MPH, DACVPM
Andie Newman, DVM, MPH, DACVPM

Director, Division of Animal Industry
NYS Department of Agriculture and Markets

State Public Health Veterinarian
NYS Department of Health

Cc: Local health departments and NYSDOH regional offices