

Mosquito-Borne Diseases

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By Cindy Hale

Because a number of factors can affect the risks of falling victim to potentially deadly brain-swelling diseases carried by mosquitoes, Purdue University experts recommend that all horses be vaccinated and that people take precautions to avoid mosquito bites. The number of cases of West Nile virus, and Eastern and Western equine encephalitis, can vary due to temperatures, rainfall, regional seasonal differences and bird migratory patterns, according to veterinarians and entomologists. Encephalitic diseases are spread when mosquitoes suck blood from infected birds and then bite people, horses or other mammals. In addition, areas that don't experience insect-killing frost have a threat of these illnesses almost year-round. In the Midwest, West Nile virus is the most common mosquito-transmitted disease, but outbreaks of the other diseases are possible. "Because of these variable factors, the chance of contracting one of the mosquito-borne diseases in different parts of the country can change every year," says William Hope, Purdue equine community practice clinician. "So, we advise that all horses in North America be vaccinated against Western and Eastern equine encephalitis and for West Nile virus." Hope says horses must have inoculations early enough in the spring and fall to provide immunity throughout mosquito season. There is no indication that the West Nile shots are harmful to pregnant mares. However, it is best to vaccinate mares before breeding season, Hope says.

The disease now occurs in almost every area of North America.