

West Nile Virus in Animals: Frequently Asked Questions

Why are animals important in West Nile virus transmission?

West Nile virus is a disease of birds. Hundreds of different species of birds have been found to be infected with West Nile virus, but not all of them die. Crows and blue jays are most likely to die from infection with West Nile virus, while other birds like chickens seem to develop no symptoms at all. West Nile virus is spread to humans when a mosquito bites a bird that is carrying the virus and then bites a human. In this same way, other animals can be infected with the virus. Horses can be infected and become ill when they are bitten by a mosquito carrying the virus. Other animals such as dogs and cats can also be infected in this manner, but they are unlikely to show any symptoms of illness.

What are the symptoms of West Nile virus in horses?

Horses that are infected with West Nile virus may or may not show symptoms of illness. If they become sick, they may have depression, apprehension, weakness of limbs, partial paralysis, inability to stand, muscle twitching, or incoordination.

Will all horses that are affected by the virus die?

No. About 30% of horses that get sick with West Nile virus will die or need to be euthanized.

Will horses affected by the virus be quarantined?

No. Since infected horses are not carriers for the disease and do not infect mosquitoes, it is unlikely that quarantine would be necessary.

Is there a vaccine for horses to protect against West Nile virus?

Yes, there is a vaccine for use in horses. For the vaccine to be the most effective, it must be given in two doses, 3 to 6 weeks apart, with the last dose given 4 weeks before the beginning of the mosquito season. An annual booster is needed every year. Please contact your veterinarian for information about obtaining the vaccine for your horse.

There is currently no vaccine for animals other than horses.

Is there anything I can do to protect my horse from West Nile virus?

Yes. You should have your horse vaccinated for West Nile virus through your veterinarian. Additionally, you should limit your horse's exposure to mosquitoes. The best way to do this is by removing any potential sources of water in which mosquitoes can breed. Dispose of any water-holding containers on your property. Drill holes in the bottom of containers that are left



outdoors. Clean clogged roof gutters. Keep swimming pools and ornamental ponds properly cleaned and maintained. Routinely empty, clean, and refill livestock watering troughs. Fill in any low areas in the yard or pasture where water tends to collect. The larvicides Bti and altsosid can also be used in water to prevent mosquito breeding. These pesticides are safe to use in animal drinking water if applied according to label.

It may be advisable to keep horses inside a barn with the doors closed at night to reduce the probability of them being bitten by a mosquito. Window screens and fans may also reduce the number of mosquitoes biting in the barn.

Do not use repellants designed for humans on horses or other animals. If a repellant is required, have your veterinarian recommend a suitable product.

When I vaccinate my horse against Eastern Equine Encephalitis (EEE), Western Equine Encephalitis (WEE), or Venezuelan Equine Encephalitis (VEE), will that protect against infection with West Nile virus?

No. The equine encephalitis viruses and West Nile virus belong to different families, so the vaccines do not provide cross-protection. Ask your veterinarian about a combination vaccine to protect against WNV and EEE. In Georgia, it is important to have your horse vaccinated for both West Nile virus and Eastern Equine Encephalitis virus prior to the beginning of the mosquito season.

What animals other than birds can get West Nile virus? Do I have to worry that my pets or livestock will get West Nile virus?

Many species of wild and domestic animals (i.e. dogs, cats, squirrels, sheep, chickens, pigs, cows, bats, etc.) can become infected with West Nile virus by the bites of infected mosquitoes. However, most animals other than birds **will not become ill or die** when they are infected with the virus. Horses and farmed alligators are susceptible to WNV, and may become sick and/or die from infection. You should keep your pet birds inside to keep them from becoming infected by biting mosquitoes. Cats may also become infected with West Nile virus by eating an infected mouse, but are unlikely to become ill. Dogs and cats that become sick when infected with WNV are usually otherwise immunocompromised.

My pet is sick. Can I have him/her tested for West Nile virus infection?

Please contact a veterinarian to evaluate and treat any pets or domestic animals that become ill. The Georgia Public Health Laboratory is not testing small mammals or pets (dogs, cats, squirrels, chipmunks, etc.) for West Nile virus as part of Georgia's surveillance for the virus.



Laboratory testing of ill animals other than horses or birds might be available at commercial laboratories and arrangements should be made through local veterinarians.

If your pet becomes ill from West Nile virus infection, this is a sign that there are mosquitoes in your area that are actively transmitting the virus. Take extra precautions to protect yourself from mosquito-borne diseases by using insect repellent containing DEET and wearing protective clothing.

What is the treatment for an animal that is infected with West Nile virus? Should an infected animal be destroyed?

There is no specific treatment, medication, or cure for illnesses caused by West Nile virus in dogs, cats, horses, or other animals. However, the symptoms and complications of the disease can be treated with supportive therapy that is consistent with standard veterinary practices for animals infected with a viral agent. Full recovery from the infection is likely and there is no reason to destroy an animal that is infected. Ask your veterinarian about new experimental drugs that have been given conditional license by the USDA for use in horses that are sick with West Nile infection.

Can infected dogs or cats (or other animals) be carriers (i.e. reservoirs) for West Nile virus and transmit the virus to humans or other animals?

West Nile virus is transmitted by infected mosquitoes. You cannot get WNV through contact with an infected animal or human, including from the bite of an infected dog. In addition, animals other than birds are considered dead end hosts. This means they do not produce enough virus to infect mosquitoes that feed on them. Veterinarians should take normal infection control precautions when caring for an animal suspected to have this or any viral infection.

Do I have to worry that my poultry (chickens, turkeys) will get West Nile virus? Should I continue to eat their eggs?

Most chickens and turkeys that are infected with West Nile virus will make antibodies to the virus but will not become ill or die. There is no reason to believe that eating properly cooked chicken or turkey will transmit the virus. You may continue to eat your chickens' eggs. There is no evidence that West Nile virus or other mosquito-transmitted viruses appear in chickens' eggs. You should always cook your eggs thoroughly to prevent food-borne illnesses.

Are wild game hunters at risk for West Nile virus infection?





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Because of their outdoor exposure, hunters may be at risk if they are bitten by mosquitoes in areas where there is West Nile virus activity. Hunters should take precautions to avoid mosquito bites, such as applying mosquito repellent to clothing and skin according to label instructions. Hunters should also follow the usual precautions when handling wild animals. They should wear gloves when handling and cleaning animals to prevent blood exposure to bare hands and meat should be cooked thoroughly.



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