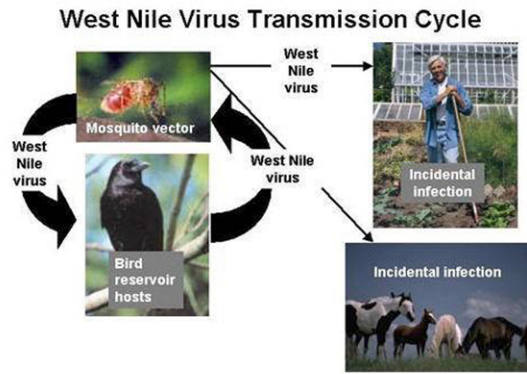


History of West Nile Virus

West Nile Virus (WNV) is a recognized worldwide infectious disease and since its arrival to the United States in 1999, has created an ever increasing health threat to horses and people throughout the entire country. The virus, classified as an arbovirus, is transmitted by the bite from an infected mosquito. Mosquitoes acquire the virus by feeding on infected wild birds which are the host species for WNV.



Occasionally infections can occur in humans and horses that are bitten by infected mosquitoes. People and horses are considered a “dead-end” host in that they cannot give the infection to others. At this time there has been no documented evidence of horse -to- people or horse -to- horse transmission of this disease.

Frequently Asked Questions:

Should I vaccinate my Horse for WNV? Yes, work with your Veterinarian for the optimal plan for your horse(s) & check the vaccination guidelines in this brochure.

My horses are in a pasture with a lake. How can I reduce the risk of exposure to WNV? Follow the guidelines for reducing exposure in this brochure and vaccinate your horses.

My mare is in foal. Can I vaccinate her? Yes, follow the vaccination guidelines in this brochure.

My horses drink out of a large water trough. What can I do to reduce mosquito breeding? Regular cleaning and Biological agents are available to reduce mosquito larva, follow the reducing exposure guidelines in this brochure.

Current information available at the following web sites:

www.mosquito.org

American Mosquito Control Association

www.cdc.gov/

Centers for Disease Control and Prevention, use the CDC search engine & type, “WNV”

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West Nile Virus & Your Horse

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**Colorado
State**
University
Cooperative
Extension

Clinical Signs of West Nile Virus

West Nile Virus (WNV) causes encephalitis, an inflammatory condition that affects the brain and central nervous system. The most common signs are stumbling or weakness. Sometimes this disease is accompanied by muscular twitching, typically on the face, neck and forelimbs. Other signs include fever, depression, reduced appetite, paralysis and acute death. Horses showing any suspicious signs previously described should be evaluated by a veterinarian for an accurate diagnosis.

Diagnosis & Treatment of WNV

Diagnosis of WNV is based upon clinical signs and the results of blood tests. There is no specific treatment for West Nile Virus. Providing good

supportive care is a critical part of treatment. Most horses are administered an anti-inflammatory medication aimed at reducing the effects of encephalitis, and in some cases intravenous fluids are administered to maintain adequate hydration. Some horses

may require hospitalization and may need to be assisted with a sling in order to remain standing. In 2002 approximately 30% of horses clinically affected with WNV died. Most horses surviving this disease have been observed to recover completely, but can take a long period of time for complete recovery. Much research is being done in this area to better understand the consequences of WNV infection.



Methods for reducing exposure of West Nile Virus infection in the horse

- (1) Reducing exposure to mosquitoes.
- (2) WNV vaccination program.

The following guidelines are recommendations for reducing exposure to mosquitoes. They will not guarantee prevention of West Nile Virus:



- Reduce mosquito breeding sites by eliminating sources of stagnant water (e.g. old tires, gutters, wells, ditches etc.) and cleaning of water tanks weekly.
- Biologic agents can be used in some areas of standing water (e.g. water troughs, ornamental ponds etc.) to **reduce mosquito larva**. For example a “dunk” is a donut sized object that releases bacteria into the water specifically **killing mosquito larva** that feed upon the bacteria. These biologic agents are environmentally safe and not harmful to people, animals, birds and other wildlife.
- Consider screened housing and using blowing fans on stabled horses.
- Use florescent light bulbs in barns and turn off all lights at night.
- For turnout, mosquito blankets and hoods will reduce exposure; avoid turnout during mosquito feeding time.
- Use insect repellents which contain permethrins or 35% DEET to use on horses and/or people.

General vaccination guidelines for West Nile Virus, consult your veterinarian for what is best for your horse(s).

The Adult Horse:

- A killed virus vaccine is presently available for use in horses only.
- Two intramuscular doses of WNV vaccine should be administered 3-6 weeks apart.
- Annual revaccination prior to the onset of mosquito season is recommended routinely.
- In certain regions of the country observing prolonged mosquito seasons, WNV vaccinations may be required every 4 months.

The Pregnant Mare and Foal:

- Mares with established pregnancies (> 40 days in foal) can be vaccinated with WNV and should receive a booster vaccination 4-6 weeks prior to foaling.



- Young foals born to vaccinated mares should receive WNV vaccines at approximately 4 months of age followed by two more boosters at 5 & 6 months of age.
- Foals born from non-vaccinated mares can receive the WNV vaccine as early as 2 months of age followed by two successive boosters at 3 & 4 months of age.