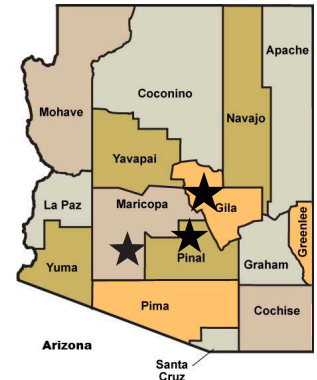


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January 2022

Horse Disease: West Nile Virus

Location: South Central Arizona [★]**Name:** West Nile Virus (WNV), West Nile Encephalitis**Type:** Virus (flavivirus)**Affected Livestock:** Horses (and Humans)**Transmission:** The vector is mosquitoes, which get infected with the virus by feeding on infected birds.

Incubation period following the bite can be 5-15 days. While birds act as a reservoir, horses and humans are not reservoir hosts, so cannot spread the virus back and forth without mosquito bites. Humans must get the virus from mosquito bites. Due to the warm weather in southern Arizona, mosquito transmission can occur all year round.

Signs (can vary from horse to horse): Most signs will be neurological and can get progressively worse. Early Signs: Depression, increased sensitivity to external stimuli, occasional fever, head drooping, incoordination, excessive chewing motions, muscle twitching (muzzle, ears, and fine muscles), and aggression. Progressive signs: Weakness in limbs, seizures, head drooping, partial paralysis, central nervous system signs (e.g., inability to stand), death.

Diagnosis: Diagnosis must be done by veterinarian which will include lab tests for serum/ELISA, and occasionally with testing of cerebrospinal fluids to determine which virus is affecting the horse.

Treatment: Initial treatment: Keep horse well hydrated. Contact veterinarian for further care since the treatments will depend on the animals' health and age. Veterinarians may use anti-inflammatory drugs to reduce swelling and neurological signs. Supportive Care: Will depend on the extent of the signs the horse is showing, but could include slings, nutrition via feeding tubes, and other treatments recommended by your veterinarian.

Prognosis: Will depend on severity of signs, with some horses recovering fully while other horses may always have some residual neurological deficient.

Prevention: While there is no vaccination for humans, there is a vaccine for horses and you should work with your veterinarian for a protocol. Management for prevention would include adapting turnout times to avoid dawn and dusk when mosquitoes are most active, or the use of fans in stables to keep mosquitos out of stalls. Use appropriate biting insect control on horses including sprays, wipes and fly sheets. Reduce all environmental mosquito attractants such as stagnant standing water



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