West Nile Virus Guidelines for Horse Owners

Mosquitoes, like other biting flies, can cause serious annoyance and stress to horses. Mosquitoes also can transmit disease-causing organisms, such as the West Nile Virus. The following guidelines are provided to reduce mosquito habitat and limit exposure of horses to biting mosquitoes.

**Horse Protection**

Adult mosquitoes are feeders of blood. Mosquitoes require blood meals to complete their development. Generally, mosquitoes in our area feed during or between dusk and dawn. However, some species can feed during the day. Be aware of mosquito activity on your property/farm. Select the following preventative methods for protecting your horse.

- Vaccinate horses for West Nile Virus. West Nile Virus vaccination program for horses is available at your local veterinary office. Currently, this vaccination requires two treatments, three to six weeks apart with an annual booster shot. Vaccinate your horses at least three weeks prior to mosquito season to ensure that your horse will be protected.
- Bring horses inside during hours of mosquito activity. Be sure that the enclosure is screened properly to prevent mosquitoes from entering.
- Regularly check for adult mosquitoes in enclosures. To reduce adult mosquitoes in the stable, treat the area with an insecticide registered for that specific use and that is effective on adult mosquitoes. Be sure to read and follow the pesticide label. Use pesticides only when adults are present; do not use pesticides as a preventative treatment.
- Use fans to reduce mosquito feeding inside stables. Creating wind drafts can potentially reduce mosquitoes’ ability to feed on horses.
- Reduce electrical lighting during nighttime hours in horse enclosures. Mosquitoes can be attracted to light.
- Relocate domesticated fowl to areas away from horse stables. Mosquitoes that transmit WNV are attracted to birds.
- Topical repellents can be used to deter mosquitoes. Read and follow the label when using these repellents.
- Electronic repellents that emit high frequency sounds do not repel mosquitoes, or other pests. Additionally, electronic bug zappers do not control mosquitoes or other flying pests. In fact, they work indiscriminately, killing many beneficial insects that prey on pests.
- Newly developed carbon dioxide baited traps do attract and trap many adult mosquitoes. These traps can be expensive.

For More Information

Local
WSU Cooperative Extension
1000 N. Forest St., Suite 201
Bellingham, WA 98225
(360) 676-6736
http://whatcom.wsu.edu/commun/wnv.htm

Whatcom County Health Department
509 Girard Street
Bellingham, WA 98225
(360) 676-6724
http://www.co.whatcom.wa.us/Health/home.htm

State
WSU—http://www.wsu.edu/health
Health 888-586-9427
http://www.doh.wa.gov/ehp/ts/Zoo/WNV/WNV.html

Agriculture
Pesticides 877-301-4555
http://www.wa.gov/agr/PestFert/default.htm

Veterinarian 360-902-1878
http://www.wa.gov/agr/FoodAnimal/default.htm

Ecology 800-633-6193

Fish & Wildlife 360 902-2200
http://www.wa.gov/wdfw/

NW Mosquito and Vector Control Association 406-454-6920
http://www.nwmvca.org/

National
Center for Disease Control 888-246-2675
http://www.cdc.gov/ncidod/dvbid/westnile/index.htm

Cornell University
http://www.cfe.cornell.edu/erap/WNV

Cooperative Extension programs and employment are available to all without discrimination. Evidence of noncompliance may be reported through your local Cooperative Extension office.
Mosquito Habitat Reduction
Since all mosquitoes require water to complete their lifecycle, managing and eliminating standing water is key in controlling mosquito populations. The following guidelines are provided to assist in identifying potential sources of mosquito problems around the farmyard and pasture.

Eliminate water-trapping containers and landscapes:
- Properly dispose of, or recycle cans, plastic buckets or other water-trapping containers.
- Store un-mounted tires in a manner to prevent rainwater collection.
- Place tight covers or screens over cisterns, fire barrels, rain barrels, tubs, septic tanks and other water collectors.
- Fill or drain seepage ponds and puddles.
- Grade or fill low areas to prevent standing water.
- Check and repair leaky irrigation systems, pipes and faucets.
- To avoid puddles, do not over-water lawn and garden.

Regularly drain or manage water-trapping containers and bodies of water:
- Regularly drain and scrub watering troughs and animal dishes. These should be maintained at least two times per week during warmer summer months.
- Empty and scrub rain barrels every week (more frequently during summer).
- Regularly clean and repair gutters to prevent standing water inside gutters.
- Regularly check and drain plastic covers and tarps used outside.
- Store water-trapping containers such as wheelbarrows and buckets upside down or inside shelters.
- Manage weeds; keep vegetation short around water. Adult mosquitoes are attracted to dense, tall vegetation around water.
- Remove unnecessary floating structures or debris from ponds. Mosquitoes are often found around floating debris.
- Keep drains, ditches and culverts clean to allow proper drainage.
- Consider stocking ornamental or permanent, self-contained ponds or watering troughs with insect-eating fish, such as goldfish.
- Shape pond edges to a shelf or steep slope. Mosquitoes prefer shallow pond edges.

Using Pesticides to Control Mosquitoes
Insecticides registered for adult mosquito control may be used inside horse enclosures. Be sure to read and follow the label directions. Using insecticides to kill mosquito larva around the home is not recommended as the only control method. Due to concerns about pesticide contamination of surface water, many restrictions apply in Washington State. According to current Washington state law, only a few pesticides are available for use in contained water bodies by homeowners without a Washington State Department of Agriculture pesticide license. Individual landowner insecticide management of mosquitoes is rarely effective; management for mosquitoes is best achieved as a regional/municipal effort. Contact your local government for mosquito abatement information. Consult WSU Extension Bulletin "Pest Management for Prevention and Control of Mosquitoes" EB1066 (http://pubs.wsu.edu/) for more information.

*revision available soon

REV. Feb. 2003