



# Univ. of Minn. Horse Newsletter

Providing research-based information to Minnesota Horse Owners

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## Hereditary Equine Regional Dermal Asthenia

Hereditary equine regional dermal asthenia (HERDA) is a genetic skin disease found in the Quarter Horse. The disease is characterized by hyperextensible, elastic skin, severe dermatologic lesions, and often scarring along the back and withers of affected horses. Horses usually present between 1-3 years of age, often when the horse is first being introduced to a saddle.

There is no cure or effective treatment, and these individuals are unusable as performance animals, therefore the majority of diagnosed horses are euthanized.



Photo Credit: Dannika Bannasch, UC Davis

HERDA is inherited in a recessive fashion (two copies of the mutation are necessary to produce disease). A mutation in the gene which codes for a protein thought to be integral in collagen folding is present in horses with HERDA. Screening of the general Quarter Horse population resulted in an estimated 3.5% carrier frequency.

A genetic test is now available for HERDA that can identify normal, affected, and carrier individuals. Information about this test, as well as submission information and pricing is available through the Veterinary Genetics Laboratory at the University of California, Davis ([www.vgl.ucdavis.com](http://www.vgl.ucdavis.com)).

Breeders should be encouraged to test and identify carriers of HERDA to reduce further propagation of this genetic mutation in the Quarter Horse population.

*Authors: Nichol Schultz, DVM and Molly McCue, DVM, PhD, University of Minnesota*

## Winter 2011 Extension Programs

Hands-on Winter Horse Owner Programs are being planned for 2011 in Winona and St. Paul, MN.

On Saturday, February 19<sup>th</sup> from 1:00 to 4:30 pm, a program will be held at Town and Country Veterinary Hospital in Winona, MN. The hospital setting allows for hands-on sessions including Identifying and Treating Lameness, Prepurchase Exams: How to Buy Smart, and Understanding a Feed Tag. Three classroom sessions will also be offered including Reducing Hay Waste, How Do You Roll: Regulations for Horse Rigs, and Equine Facilities Management. Registration is required by Wednesday, February 16 at midnight. Cost to attend

the program is \$20 and includes a meeting proceeding and light refreshments. Registration is available online at [www.regonline.com/WinterHorse](http://www.regonline.com/WinterHorse).

On Tuesdays in March (1<sup>st</sup>, 8<sup>th</sup>, and 22<sup>nd</sup>) from 6:00 to 8:30 pm, advanced hands-on sessions will be offered at the Equine Center on the St. Paul Campus. Session topics include reading a feed tag and understanding feed ingredients (3/1); body condition scoring and weight estimation (3/8); and basic first aid and bandaging (3/22). Advanced hands-on sessions will be limited to 30 participants and the cost will be \$20 per session or \$50 for all three. Registration information available at [www.extension.umn.edu/horse](http://www.extension.umn.edu/horse).

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## Upcoming Events

### Lunch & Learn Webinar

Wed., January 26 at noon  
Is Your Truck and Trailer a Commercial Vehicle?

To join this free webinar go to:

<https://umconnect.umn.edu/commercial/>

### Winter Regional Horse Owner Program

Saturday, February 19<sup>th</sup>  
1:00 to 4:30 pm  
Town and County  
Veterinary Hospital  
Winona, MN

To register:

[www.regonline.com/WinterHorse](http://www.regonline.com/WinterHorse)

### Advanced Hands-on Series

Mar 1: Feed Tags

Mar 8: BSC and Weight

Mar 22: First Aid

6:00 to 8:30 pm

U of M Equine Center

St. Paul, MN

\$20 each or \$50 for 3

Registration available at:

[www.extension.umn.edu/horse](http://www.extension.umn.edu/horse)

### 2011 MN Horse Expo

April 29 to May 1

St. Paul, MN



## Lyme Disease and Horses

By: Julie Wilson, DVM

Lyme disease, caused by the bacterium *Borrelia burgdorferi*, is much less frequently a source of illness in horses. Many horses are exposed to this organism through tick bites and very few develop clinical illness, usually months post tick bite.

Research to experimentally recreate the disease in horses has so far failed to demonstrate significant clinical problems. As in dogs and people, the possible diagnosis of Lyme disease often arises when more common causes of lameness, joint swelling, kidney disease, moon blindness or incoordination have been ruled out.

Typically, two blood samples are taken 2 to 3 weeks apart to see if anti-Borrelia antibody levels have changed significantly to indicate active infection. The two samples are important because many normal horses may carry high antibody levels. The disease can also be diagnosed by finding the organism in tissue taken by biopsy from an affected joint or lymph node. The SNAP test kits utilized for testing dogs for Lyme disease, likely are valid for use in the horse, but so far are not licensed for that purpose.

If evidence of Lyme disease is found, the veterinarian may try a course of the same antibiotics as for

anaplasmosis (see December 2010 newsletter), to see if this will improve the horse's clinical abnormalities. There are currently no Lyme vaccines approved for use in the horse.

Horse owners need to be tick-vigilant and manage their horses' environment to reduce tick habitat. Clearing brush out of pastures and along both sides of fence lines is recommended. Keeping pastures mowed may also be helpful. Before riding through long grass or brush, use of topical insecticides is highly recommended.

## Stall Rest: How to Stay Sane?

Erin Malone, DVM, University of Minnesota

Your vet has prescribed stall rest. You know it is needed; however, you can only envision the worst: a restless unhappy horse, a destroyed stall, dangerous hand walking, angry looks from the barn manager, and lost sleep. Is the cure worse than the disease? For some horses, it definitely seems that way.

**Stall rest is a necessary evil.** Horses are not great at self-protection. They aren't even good at self-protection. The tendon may be healing nicely during the summer months when everyone is too hot to do more than mosey to the next patch of grass. But when a nice cool autumn afternoon arrives, off they go; galloping, cart wheeling, bucking and kicking. Unfortunately the tendon isn't ready for more than a gentle walk and you are back to the beginning. Optimum healing requires controlled exercise to minimize re-injury. To get your horse back to work, you are often facing a combination of stall rest and hand walking. The following

suggestions may help you both survive.

**Natural lighting and fresh air makes us all feel better.** Stalls come in many shapes and sizes. In general, stall rest means limited movement or no trotting. It will be important to know the exact limitations required for your horse. If he is wearing a cast, movement is discouraged. For most conditions, walking would be acceptable and the stall rest is designed to keep them at a quieter pace. Consider outdoor stalls or pens the size of stalls. Can you add windows to an indoor stall? Can your horse have a stall near a low traffic door instead of the back corner of the barn? Near the wash stalls or farrier area so there is always something to watch? Keep in mind your horse's needs. Some need more activity while others prefer some down time. If traffic means all the horses pass by on their way outside while leaving your horse behind, that might be more damaging to your horses morale

than helpful.

**Misery loves company.** Visitors are allowed. Can another horse stay inside as well? If need be, the companion horse can be a different one each day. No other horses? How about a pet? Horses can do well with a friend, like chickens and goats to share the stall. People work as pets too. Can the other people in the barn stop by and say hi as often as possible? Is there a girl scout troop that wants to get their horsemanship badge by practicing grooming your horse? Or a 4-H group that can practice taking vital signs using the "patient"?

**Fly feeding frenzy.** Bugs like barns. Without a nice breeze or a companion's tail, they can be more bothersome than usual. Add boredom to that and they can quickly drive your patient crazy. Fans, fly sheets and repellants can help minimize the annoyance.

In the February newsletter, we will continue discussing stall rest.