



# U of M Horse Newsletter

Providing research-based information to Minnesota Horse Owners

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## Fall Regional Horse Owner Programs

The University of Minnesota Horse Team is offering three fall regional horse owner education programs. Each program offers researched based information and knowledgeable speakers. The dates, locations and topics include:

**Saturday, Oct 3** at the Leatherdale Equine in St. Paul. This program is sponsored by a USDA NRI Integrated Research Grant and will focus on Equine Metabolic Syndrome (EMS) and genetics. The program begins at 9:30 am (door open at 9:00 am) and ends at 4:00 pm. Topics include: lameness evaluation and gait analysis, equine genetics, truck and trailer DOT regulations, identifying and managing EMS, EMS and genetics research update, and managing carbohydrates in feeds and forages. An optional tour of the Equine Center is available from 4:00 to 4:30 pm. Lunch is included for this program. Pre-registration is required. Registration deadline is Sept 30 and attendance is limited.

**Saturday, Oct 24** at Red Horse Ranch Arena in Fergus Falls. The program begins

at 1:00 pm (doors open at 12:30 pm). Topics include: winter care, manure management and composting, vitamin and mineral nutrition, equine dentistry, poisonous plants, and truck and trailer DOT regulations. Pre-registration is required. Registration deadline is Oct 21.

**Saturday, Nov 14** at the Middle School in Howard Lake. This program is co-hosted by HLWW Community Ed. The program begins at 1:00 pm (doors open at 12:30 pm). Topics include: equine economics and options for unwanted horses, equine dentistry, horse behavior, vitamin and mineral nutrition, fly and pest control, and truck and trailer DOT regulations. Pre-registration is required. Registration deadline is Nov 11.

Participants can select between multiple topics at most locations. The cost to attend each program is \$20/person and includes a printed proceeding and light refreshments. Secure online registration, program agendas, and additional information is available at [www.extension.umn.edu/horse](http://www.extension.umn.edu/horse).

## Ask the Expert

**Q:** Our 31 year old horse was found alive, but with his intestines hanging out. He was euthanized. What may have caused this? We had put out free salt with selenium just before the injury. Could the selenium have something to do with the horse's bowels protruding?

**A:** I am sorry to hear about your horse. I do not think it was due to the selenium. I can think of two scenarios. I suspect his intestines were coming out of his rectum. This is called a rectal prolapse and is usually due to straining. Various things can cause straining, including parasites, small colon impactions, rectal trauma, uroliths, neurologic disease, and tumors

By: Erin Malone, DVM, Univ. of Minn.

(very possible at his age). If horses push enough of their intestines out, they lose the blood supply to the intestines and the intestines die off. There is no easy fix for this and sometimes no possible fix.

The other scenario would be intestines coming out a hole in his body wall and skin. That is almost always due to trauma (wound). If it was a rectal prolapse, I would recommend getting manure samples from the other horses and have them checked for parasites, even if they are on a good deworming program. If it was trauma and a wound in the horse's body wall, I would recommend you check the pasture/paddock for sharp objects.

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## Upcoming Events

### 2009 Fall Regional Horse Owner Programs

Saturday, October 3rd  
9:30 am to 4:00 pm  
U of M Equine Center  
St. Paul, MN

### *Focus on Equine Metabolic Syndrome and Genetics*

Saturday, October 24th  
1:00 to 4:00 pm  
Red Horse Ranch Arena  
Fergus Falls, MN

Saturday, November 14th  
1:00 to 4:00 pm  
Howard Lake Middle School  
Howard Lake, MN

*Pre-registration required three days before each program and attendance is limited.*

*Each program costs \$20 per person and the registration fee include a meeting proceeding and light refreshments.*

*Register now at [www.extension.umn.edu/horse](http://www.extension.umn.edu/horse)*

### Lunch and Learn Webinar

Wed Oct 21 at noon  
"Applications of Equine Genetics"



## Salmonella Infection in Horses

By: A. Beaudoin, DVM & S. Valberg, DVM, Univ. of MN

Salmonellosis is a bacterial infection that affects humans, horses, most mammals, birds and reptiles. Though there are multiple types of the *Salmonella* bacteria, and while all can cause disease in horses, most equine infections are caused by *S. Typhimurium*. In adult horses, Salmonellosis is usually a gastrointestinal disease and may cause severe diarrhea. In some cases, usually foals, it can cause systemic disease (septicemia) as a result of movement of the bacteria throughout the body. Salmonellosis can cause abortion, though this is rare in horses.

*Salmonella* is transmitted via oral ingestion of contaminated fecal material. The bacteria are shed in the manure of infected horses, and then ingested by other horses as a result of environmental contamination. A horse can become infected with *Salmonella* by ingesting grass, hay, and other feeds that are contaminated with the bacteria. In addition, things such as boots, water buckets, tack, shared grooming tools, and unwashed hands can carry the bacteria from an infected horse to a susceptible one.

Most adult horses that are

infected with *Salmonella* develop a fever and severe watery diarrhea. There is often a foul smell associated with the diarrhea, and it can sometimes be bloody. The horse is typically weak and lethargic and may stop eating. Foals that are septicemic with a *Salmonella* infection are usually dull and depressed and have a high fever. Such foals may also display signs of lameness and joint swelling.

Many horses may have Salmonella in their systems but do not shed it, and most of the time they are not ill. A United States Department of Ag study documented that 1% of US horses were found to be shedding *Salmonella* on farm. A study at a large veterinary hospital in the United States found that 13% of horses admitted for colic were shedding *Salmonella*. Other studies have showed lower prevalence (3-9%), especially among horses admitted for reasons other than colic. At the Univ of Minn College of Vet Med, 1 to 5 horses are documented annually with *Salmonella* infections.

An infected horse sheds more bacteria when it is showing clinical signs of diarrhea. A horse is more

likely to develop illness if it ingests a large amount of *Salmonella* organisms at once, or if the horse is already sick or stressed. There are some horses which shed *Salmonella* without showing the typical signs of infection. This usually occurs when the animal has a small amount of *Salmonella* present within its intestines and is then exposed to a stressful situation, such as trailering, movement to a new facility, illness, or surgery. Shedding decreases over time and many horses will cease shedding altogether.

People can, and do, become infected with *Salmonella* from horses. Salmonellosis is a zoonotic disease, meaning that it can be transmitted between animals and people. If a horse is shedding *Salmonella*, it can cause illness in people by the same oral ingestion of contaminated feces. Signs of *Salmonella* infection in people can include diarrhea, abdominal cramps, and fever. It is important to always use good hygiene practices, including hand-washing before eating and not touching objects with manure-contaminated hands.

Next month, options for reducing salmonella outbreaks will be discussed.

## Import Requirements for Horses Going to WI

By: MBHA

The Minnesota Board of Animal Health (MBHA) was recently contacted by Wisconsin's state veterinarian regarding certificates of veterinary inspection (CVI) issued by Minnesota veterinarians. Some CVI's have failed to meet Wisconsin's import requirements for horses.

Along with a CVI issued by an accredited veterinarian, individual identification must be listed on the

CVI and is required for all ages of equine animals going into Wisconsin.

Acceptable forms of identification for equines are:

- Registration number
- Lip tattoo number
- Radio frequency identification chip number
- Complete description of the animal including breed, coloration, and distinguishing markings, all

listed on the CVI

- If the animal has no markings, "No Markings" should be written after the color.

Accredited veterinarians who issue CVI's for horses and other types of livestock must be sure that all requirements are met before the animal leaves the state of Minnesota. For Wisconsin import information available 24 hours a day, call 608-224-4879.