



# EQUINE NEWSLETTER

*Promoting Health and Management Awareness in the Michigan Horse Industry*

Michigan State University Department of Animal Science & Department of Large Animal Clinical Sciences

## Production & Management



### UPDATE - RABIES IN HORSES

Ken Gallagher, DVM, MS  
Equine Extension Veterinarian

There have been numerous reports in the media concerning outbreaks of rabies in several states in the eastern United States. Most of these reports involved humans exposed to a rabid animal or animals suspected of being rabid. These animals include domestic pets or wild species. Rabid bats are also a source of exposure. A strain of rabies virus found in raccoons is becoming more troublesome. In 1995, New York state had three confirmed rabies cases and Pennsylvania had two confirmed rabies cases, in equine. It was strongly suspected the horses became rabid after exposure to raccoons carrying the rabies virus. In the Spring of 1996 two cases of rabies in raccoons were discovered in north-

ern Ohio. It has been confirmed at least one case had the strain of virus similar to cases in the other states. The second case is suspect. Now 40 new cases of raccoon rabies have been identified in Ohio. Disease control scientists are convinced that this form of rabies will spread throughout the midwestern states over the next several years. Rabies in horses is relatively rare, but horse owners should not ignore the disease for the following important reasons:

- 1 Horses as a species are very sensitive and susceptible to rabies if exposed.
- 2 The disease is usually fatal to horses and there is no effective treatment once infected. Vaccinations given after the horse has symptoms will not stop the virus agent.
- 3 There is small risk of transmission from a rabid horse to humans. There have been no documented cases of horse to human transmission but the remote possibility exists.

Rabies is caused by a virus germ from the rhabdovirus family. It is primarily a disease of wild animals (raccoons, skunks, foxes and bats). The disease can spread from these animals to people, unvaccinated domestic pets or livestock including horses. The virus is typically passed in the saliva from a bite wound. The incubation period (the time from exposure to manifestation of clinical symptoms) varies from 2-10 weeks depending

on what part of the body is bitten.

It can be difficult even for a veterinarian to diagnose rabies in the living animal because the clinical signs are similar to other diseases which affect the horse's nervous system. The affected horse might exhibit some or most of these signs:

- Depression
- Anorexia (going off feed)
- Excessive salivation
- Difficulty swallowing
- Colic
- Incoordination
- Paralysis
- Convulsions
- Hyperexcitability
- Aggressive behavior

Death usually occurs from 3-5 days after the onset of signs. The veterinarian will consider other differential neurological diseases in arriving at a diagnosis such as:

- Tetanus
- Botulism

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- Equine encephalomyelitis (EEE, WEE)
- Equine protozoal myeloencephalitis (EPM)
- Plant poisonings

There currently are no laboratory tests which can confirm rabies in the live animal. A postmortem test is required to give a definitive diagnosis. **NOTE:** *It is important for a horse owner to contact their veterinarian if a horse exhibits neurological signs especially if there are behavioral changes.* Some of the diseases listed as differentials can be treated, but if the horse is rabid or suspected of being rabid certain precautions in handling and confinement should be followed. Confirmed or even suspicious cases must be reported to respective state veterinarian offices and public health officials. Unfortunately if a horse is found to be rabid it is usually euthanized to avoid further injuries to itself and prevent any transmission to humans.

There are vaccines available which a veterinarian can give prior to exposure in horses as young as three months of age. It does not usually help the horse to vaccinate after being bitten by a rabid animal. As far as we know these vaccines are effective if used prior to exposure. Often rabies vaccination is not a priority for horse owners but they should at least consult with their veterinarian to discuss their overall management program. Certain factors can increase or decrease risk of exposure:

- Confinement vs. pasture
- Presence of wild animals in the area
- Presence of a known rabid animal in the area
- Horse traveling to endemic areas (areas with frequent rabies cases)

Public health offices and animal disease officials in the states around Ohio are in close contact with public health officials and regulatory veterinarians in that state to monitor this disease in raccoons. Ohio is attempting to control the disease. Past experience

indicates spread of the virus can be slowed but not stopped.

The epidemiology (the study of the frequency and distribution of disease) of raccoon rabies tells us that the potential for exposure is increasing. Although the risk for horses is not high outside of Ohio, horse people should be forewarned to consider vaccinations when they plan their preventive health programs.



## UPDATE ON VESICULAR STOMATITIS IN HORSES

Ken Gallagher, DVM, MS  
Equine Extension Veterinarian

Numerous cases of vesicular stomatitis in horses have occurred in the southwestern and western United States in the last two years. Currently, the majority of cases are found in New Mexico, Colorado, and Utah. Recently in Iowa and Michigan, horses suspected of having a vesicular disease were investigated by federal veterinary officials. *Note: Vesicular stomatitis is a disease which is reportable at the federal level.* All cases in both states were found to be negative for vesicular stomatitis. This information was contained in a United States Department of Agriculture (USDA) weekly disease report dated November 14, 1997. Iowa and Michigan each had two premises where suspicious cases were checked. All investigations had negative results and were closed.

The disease is caused by a virus which affects horses as well as other livestock species. Humans can become infected with the virus from handling horses with the disease. Previous out-

breaks in the United States did not spread significantly, but in this situation at least ten states have had cases. It is not known exactly how the disease is spread but insect vectors are suspected in the transmission of the viral agent. Horse to horse contact or equipment and tack contaminated with the virus could also transmit the virus germ.

## Clinical Signs

1. Excessive salivation is usually the first sign
2. Increased temperature
3. Vesicles (blisters) on the inner lips in the mouth and on the tongue and sometimes on the coronary band
4. Difficulty eating and drinking
5. Weight loss

## Differential Diagnosis

Horses can have blisters or ulcers (sores) in their mouths for other reasons, so if those signs are seen, a veterinarian should examine the animal. Lesions that mimic those of vesicular stomatitis can be caused by:

1. Certain herpes viruses that can cause blisters in the mouth area.
2. Bits that sometimes create sores on the lips and tongue.
3. Migrating bot larvae have been known to cause ulcers on the tongue instead of being swallowed into the stomach.
4. Some pasture plants such as nettles can cause temporary blister formations in the mouth.
5. Improper dental care leaving sharp edges on molar teeth can cause sores to form on the tongue and inner mucosal lining of the mouth.

Death from the disease is very rare in horses but they often become debilitated because they do not eat or drink normally. There also might be secondary infections as the blisters break and leave exposed tissues in the oral cavity. The disease usually runs its course in 2-3 weeks. Humans get flu-like symptoms and some blisters on the hands or in the mouth.

## Treatment

There is no effective treatment against the virus itself but the horse might need supportive therapy if they are not eating or drinking properly. A mash might be fed if the horse cannot eat roughages or grain. If a horse is not drinking enough water they might need fluids either by stomach tube or in extreme cases by the intravenous route.

Infected horses should be separated from normal horses and people should use protective measures (such as rubber gloves) when handling infected horses.

It is unlikely this disease will spread east as far as Iowa or Michigan. Dr. Michael

Chaddock, State Veterinarian for Michigan, has issued the following memorandum to other states in order to protect Michigan horses and other livestock.

### Subject: Vesicular Stomatitis Virus

*Effective immediately and until further notice, the following statement must be included by accredited veterinarians on any official interstate health certificate or official certificate of veterinary inspection for importation of equidae, cattle, sheep, goats, bison, new world camelids, swine, or*

*captive cervidae into Michigan:*

*Vesicular stomatitis has not been diagnosed within a ten mile radius of the premises of origin within the last 30 days. I have examined the animals listed on this certificate and have found no clinical signs of vesicular stomatitis nor, to the best of my best knowledge, have these animals been exposed to vesicular stomatitis within the last 30 days.*

*\*Current Status - The United States Department of Agriculture reports that no new cases of Vesicular Stomatitis (VS) have appeared in the country since November 1997, and all quarantines have been removed as of January 1998.*

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## The Equine Athlete



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### WINTER RIDING

Kari Hoekstra  
Molly Nicodemus, MS  
Animal Science Graduate Program

Don't neglect your horse this winter! Often riders discontinue their horse's training when the first snow blows in. However, after the spring thaw, both horse and rider frantically try to catch up on their conditioning before the first horse show. Instead of hanging up your riding helmet and breeches this winter, why not try a winter training regimen? Here are a few tips to keep your horse safe and healthy while enjoying some winter riding:

- Avoid boots and leg wraps, if possible. Boots and leg wraps attract snow and mud underneath, irritating the skin.

- Rub Vaseline or baby oil on your horse's heels and legs to waterproof them, also soothing any skin irritation.
- Spend extra time warming up (walking and trotting) and cooling down (trotting and walking, plus walking by hand or on an automatic walker until respiratory rate is back to resting level and the coat has dried).
- Ride on familiar ground/trails to avoid injuries due to hidden holes and ice. Maintain caution, taking your time to prevent unwarranted mishaps.
- Avoid sharp turns and maneuvers on frozen, muddy, or snow-covered ground.
- Avoid training battles with your horse during inclement weather as the risk of accidents may increase.
- If possible, remove your horse's shoes to prevent slipping and snow packing up under the hoof.
- During temperatures in the teens, avoid high speed exercise as the cold air may shock the horse's airways making it difficult to breathe.
- To avoid muscle strains and tying-up while riding, keep your horse conditioned over the winter months. Exercise your horse daily by either riding, longeing, or pasture turn out.
- Keep your horse moving during the ride (muscles may cramp if the horse is allowed to stand still during intense exercise).
- Avoid long periods of riding in deep snow as this can cause muscle strain or overexertion.
- When cooling down, do not allow the horse to drink large quantities of cold water. Encourage your horse to drink small amounts of warm water periodically as the horse cools.
- After riding, clean off any sweat or mud to avoid the spread of disease or parasites.
- Instead of the traditional shampoo and bath that can leave the horse chilled, try a soapless shampoo that does not require rinsing.
- Remove excess water and sweat in order to avoid a chill. A cooler rug will keep the horse from getting cold while the horse is drying.

Maintaining your horse's conditioning over the winter months will keep you one stride ahead of the competition next show season!

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## Industry Updates

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### SPARTAN SPECTACULAR ARABIAN HORSE SALE

Bridjet Nothstine  
Animal Science Undergraduate Program

The Michigan State University Horse Teaching and Research Center will present the Spartan Spectacular on April 26 at 2:00p.m. This year's sale will be held at the new MSU Pavilion for Agricultural and Livestock Education located on Mt. Hope and Farm Lane. The sale is sure to follow in the Spartan Spectacular tradition

of excellence.

So much has changed over the years. The sale began as a way for MSU students to learn how to market sale horses. The first horses were taken to the Bohrama sales. Presenting the horses with class and professionalism earned the students high marks for their sale horses. As the Horse Teaching and Research program grew through its breeding and training program the decision was made to hold an exclusive sale. The sales would become known as the Next Generation and Spartan Spectacular auctions. The first sale was held at the old MSU Horse Center arena. The atmosphere was tight but the sale still went on. The auction was then moved into the new horse barn. The new arena added to the excitement of the sale, but this year the sale becomes even bigger. For the first time the sale will be held in the new Agriculture and Livestock Education Pavilion. This will only enhance an already electrifying event!

The students are the basis behind this event. Students in the marketing class are responsible for publicizing the sale and setting up the facilities. The

Horse Teaching and Research students are assigned to a horse at the beginning of the semester. Their job is to use the knowledge they have obtained and apply it to the training of each horse. Students will decide what event their project horse is best suited for -- huntseat, western or saddleseat. Then the training begins from the ground up. The horses are trained as if they are on the way to the show arena. The day of the event the excitement begins and months of training are about to pay off. Horses are prepped and ridden through the sales arena by the students. At the final drop of the auctioneer's gavel, all of the students' work has been done and success is ascertained.

This year the students will present nineteen horses. The horses come from lines such as Pask, MSU Acclaim, Hucklebey Berry and GF Sand Dollar. There are five mares and fourteen geldings being auctioned. These horses will prove to be a pleasure to ride. On April 18<sup>th</sup> the Horse Teaching and Research Center will give a sneak peak at the sales horses at the Open House -- the farm is located on Collins Rd. The Spartan Spectacular will take place on April 26<sup>th</sup> at the New Agriculture and Livestock Pavilion. Make sure to join in the MSU tradition!

## 1992 Spartan Spectacular



*MSU Student showing horse saddle seat*



*MSU Student showing in-hand*

# THE SPARTAN SPECTACULAR

MSU Pavilion for Agriculture & Livestock Education

April 26

2:00 p.m.

*In the tradition of the Horse Teaching and Research Center, MSU is proud to present this years fine group of sale horses. Nineteen horses will be auctioned coming from sires such as Pask, MSU Acclaim and Hucklebey Berry. These horses have been handled and cared for by the students. The students have trained these horses to be a pleasure to ride. Come and view these spectacular horses that are sure to follow in the MSU tradition of excellence!*



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## OPEN HOUSE

April 18

Horse Teaching and Research Center

Collins Rd., East Lansing 48824

517/355-7484



*Michigan State University  
Horse Teaching & Research Center*

# YOUTH CORNER



## 4-H HORSE JUDGING CLINICS AVAILABLE FOR YOUR COUNTY!

Laura Callendar  
Senior Animal Science Student

4-H horse judging clinics are now being offered to educate youth judging teams, coaches and horse enthusiasts. These clinics are geared for 4-H members in all stages of horse judging in individual counties or county groups. This is also an ideal clinic for coaches as well. All 4-H members, not only those participating on a 4-H judging team, can benefit from the material and presentations.

Beginner, Intermediate and Advanced levels are being offered, covering the following materials: Structure, quality, balance, muscling and travel of the horse, evaluation of an individual animal, judging classes, including a critique by the presenters, and how to organize and recite oral reasons. Intermediate and Advanced levels will also include performance horse evaluation.

If you are interested in scheduling a clinic, please contact your county extension office for registration information. For more details on the clinics, call or email:

MSU Horse Extension Programs  
Office (517) 353-4893  
or Laura Callendar:  
callend3@pilot.msu.edu

## 1998 4-H HORSE JUDGES & SUPERINTENDENTS CONFERENCE INFORMATIVE & A SUCCESS!

The 1998 4-H Horse Judges & Superintendents Conference was held at the Michigan 4-H Kettunen Center in Tustin, Michigan the weekend of January 17 & 18. Over 100 judges and county superintendents listened to Dr. John Shelle, MSU Animal Science professor, discuss form to function of the horse. Form to function links the conformation and evaluation of a horse to how it performs. Michigan judges and superintendents provided information on organizing gymkhana classes and preparing for a horse show. TWHBEA (Tennessee Walking Horse Breeders' & Exhibitors' Association) judge Jud Branam presented information on judging gaited horses and Roger Eitel discussed judging Draft horses and Miniature horses. An interesting and educational seminar was presented on equine liability issues from Julie Fershtman, nationally known equine attorney. If you are active in your county's youth horse program, look for this conference next year!

## 4-H STANDARDBRED PROJECT PARTICIPANTS ENJOY "A DAY AT THE RACES"

Michigan's 4-H Standardbred Project participants and their families

enjoyed a "Day at the Races" on February 22 at the Sports Creek Harness Raceway in Swartz Creek. Larry Mallar, Michigan Harness Horsemen's Association General Manager and 4-H Standardbred Advisory Committee member, coordinated the activity at the track. Participants enjoyed a tour of the track facilities, from observing track officials in action to seeing what takes place in the paddock area before a race. Participants also learned how to read a race program correctly - from previous track times to past winnings information. A great day and wonderful luncheon added to the enjoyment of the day for participants and their families.



## CAPITALIZE ON A GREAT OPPORTUNITY AND EXPOSURE TO A POTENTIAL CAREER - APPLICATIONS AVAILABLE FOR THE MICHIGAN 4-H STANDARDBRED PROJECT

The Michigan 4-H Standardbred Project is a great project for youth interested in horses. Owning a horse is not a requirement. Information and applications for the 1998-99 project year are now available at your County Extension Office. Consider applying - it's a great opportunity to learn about one of the strongest equine industries in Michigan!



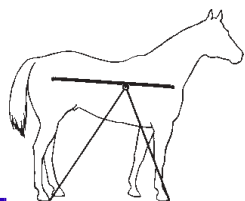
*MSU Horse Farm Tour*

# 4-H HORSE JUDGING CLINICS

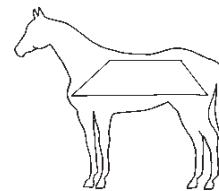
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**MSU Horse Extension Programs Office (517) 353-4893  
or Laura Callendar: callend3@pilot.msu.edu**



# 1998 MSU ADULT RIDING CLINIC

**“Promoting safe teaching skills for horsemanship instruction of MI youth”**

**One day Sessions Available on  
June 12 and 13  
MSU Pavilion**

MSU Horse Extension and Teaching will provide one day riding sessions for adults (18 years and over) who are interested in working with youth and horses. The one day sessions will be offered on three dates, June 12 and 13 th and limited to 20 horses/riders per day and open to auditors.

## **The objectives of the Adult Riding Clinic are to:**

1. Promote safe teaching and handling techniques to adults working with youth
2. Increase horsemanship skills and knowledge of adults working with youth.



## **Clinic Focus**

Dressage and Gymkhana -- Finding a Common Ground  
*Evaluating basic dressage skills and applying them to gymkhana events.*



**Editor**

Dr. Christine Corn, Ph.D.  
Equine Extension Specialist  
Department of Animal Science

**Editorial Board**

Stacey Doumit, M.S.  
Equine Extension Youth Specialist  
Department of Animal Science

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Equine Extension Veterinarian  
Department of Animal Science and  
College of Veterinary Medicine

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Equine Clinician  
College of Veterinary Medicine

Dr. John Shelle, Ph.D.  
Professor  
Department of Animal Science

**Michigan Horse Programs  
1998 Calendar of Events**

March 14	MSU ANR Week Horse Program	MSU Campus
March 13-15	Michigan Horse Expo	MSU Pavilion
March 28	Southeast Region Horse Bowl Contest	Hartland, MI
April 4	North Region Horse Bowl Contest	Kincheloe, MI
April 18	MSU Horse Center Open House	MSU Horse Center
April 18	Vet-A-Visit	MSU Veterinary Clinic
April 24, 25	Small Animal Day	MSU Pavilion
April 26	Spartan Spectacular Horse Sale	MSU Pavilion
May 1	State FFA Ag. Skills Test	MSU Campus
May 2-3	MI 4-H Horse Jamboree	MSU Campus
July 12, 13	MSU Adult Riding Clinic	MSU Pavilion

*For more information call the MSU Horse Extension Office at 517/353-4893*



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