

## University of Missouri Extension

G2851, Reviewed March 1993

# Health Hints for Your Horse

**James R. Coffman**  
Kansas State University

**Melvin Bradley (emeritus) and Wayne Loch**  
Department of Animal Sciences

One of the real disappointments of horse ownership is planning a number of horse activities, then finding that your animal is physically incapable or mentally unwilling to engage in them. Horse owners who don't practice "preventive maintenance" may find themselves in this situation.

As spring approaches, the urge to get out and ride increases. If horses have been well cared for through the winter, they will be in condition to ride. Without an adequate feeding and exercise program, they may be either too fat or too thin, or too soft to ride very much.

If their feet have been neglected, they may be too long from lack of trimming or from leaving shoes on too long. They may be too short from being broken or worn on rocks, or too contracted at the heels from standing in dry stalls.

If the stalls have not been cleaned or if they have been in muddy lots, they may have thrush. Thrush is a foul-smelling, degenerating condition involving the frog in the sole of the horse's foot. In any case, they will not be in good physical condition when needed.

## Laminitis

Laminitis, or founder, is becoming more prevalent. It can result from a number of causes such as overeating of grain, hard work on hard surfaces, colic, or foaling. In the spring, many horses founder on grass. Perhaps the latter cause is the most common in riding horses.

Symptoms of laminitis include lameness (usually in both front feet), stiffness, settling back on the hind feet to get weight off the forefeet, heat in the hooves, and bounding pulse in the arteries at the back of the pastern. The wall of the hoof separates from the sensitive laminae (inner portion), allowing the coffin bone to rotate within the hoof wall. Because the hoof can no longer grow normally at the toe, the heel outgrows the toe. In long-standing chronic cases, the hooves will turn up.

In serious cases, the third phalanx or coffin bone may tilt downward or rotate and penetrate the sole of the foot. This type of acute case must be treated immediately. A delay of 24 hours may cause irreparable damage regardless of the treatment given. However, most cases of laminitis can be

corrected with proper veterinary attention.

Therapeutic trimming and shoeing can greatly improve chronic cases where founder has caused separation of the hoof wall and curling of the toes. In such cases the affected hoof wall can be trimmed away and a replacement made with acrylic. The filled and built-up hoof can then function as normal, and growth of the hoof will continue.

Obese horses with heavy crests turned on lush pastures run a high risk of laminitis. This is particularly true of Shetland ponies. Keep these horses in proper physical condition with routine exercise and by restricting the feed intake. If your horse is becoming obese on good spring pasture, move him or her to an area with less pasture growth. Horses that have developed laminitis will probably do so each year. Therefore, keep them off grass during seasons of lush growth.

Horses kept stalled year-round develop dry hooves and contracted heels. These horses are also predisposed to laminitis as well as other lamenesses, such as navicular disease.

## **Navicular disease**

Navicular disease is quite common to Western stock horses with small feet. An 1,100- or 1,200-pound horse on 0- or 00-sized feet has an increased chance of developing this condition.

Navicular disease is an inflammation of the small navicular bone and bursa inside the hoof between the coffin bone and the tendon that flexes or bends back the coffin joint. Symptoms include pointing; a short, stubby, painful stride; and lameness that is barely perceptible in the early stages.

This disease is incurable once bone changes develop, but may be helped by therapeutic shoeing or by several new drugs now available. In advanced cases with severe lameness, surgically removing the nerves leading to the diseased portion of the foot is frequently quite helpful.

Most navicular disease is caused by small, narrow heels that do not expand and absorb shock while the horse is working.

Allowing the hoof to grow long without frog pressure and working on hard surfaces increase the incidence of navicular disease. Horses shod with a narrow shoe, and with the hoof rasped off where it overhangs, suffer dryness and contraction of the walls of the hoof. This eliminates expansion for shock absorption. Such horses are in danger of developing navicular disease.

Small-footed horses can be helped by keeping the walls short so they have frog pressure that will increase circulation through the foot and spread the heels with each step, dissipating some of the concussion. They can be shod with plates or lightweight shoes to keep the frog as nearly on the ground as possible. In some cases, bar shoes with pads and tar-oakum packs, or raw rubber frog supports are recommended.

Reduce the risk of navicular disease by selecting horses with larger feet, maintaining frog pressure, and working with caution on hard surfaces. Although the condition is not heritable, the small feet with which it is associated are heritable.

## Nail punctures and related injuries of the sole

Horses are very susceptible to nail punctures. When fighting across a board fence, one horse may kick off a board and another step on the nail. Numbers of horses are incapacitated each year in this way. Some are permanently injured.

At the first sign of lameness, raise the foot, clean it out, and inspect for nail puncture. If the hoof is shod, remove the shoe. Trim the hoof with a farrier's knife until all parts of it show new tissue. You may find a nail in the foot or see where the puncture has entered.

If you remove a nail, cover the hoof with a burlap sack or other wrap before putting it down, so the hole will not become packed with dirt and manure. The puncture should be cleaned out, packed and treated by a veterinarian, who will also provide protection against tetanus. Preventing such injuries requires caution. Be sure no boards with nails are left in areas where horses are likely to be.

Many evils of the foot are brought about by improper shoeing. If a horse is quicked and shows signs of it, the nail can be withdrawn and tincture of iodine or other disinfectant put in the puncture. These usually are not serious. Blind quicking, however, may be serious because the farrier doesn't know about it. This happens when a nail bends inward after it enters the foot, therefore exerting painful pressure on sensitive tissues.

It may be difficult for the nail to surface in hard feet, causing a small bend that exerts pressure inwardly. In such cases a horse may become lame from four to ten days after being shod. Appropriate treatment should be given quickly.

Many horses have shoes left on much too long. The maximum time to leave shoes on a horse is approximately six weeks. Horses wearing shoes much longer than this are likely to overgrow the shoe at the heel and walk over the outer branches. This causes pressure on the sole, leading to bruises called corns; or, it can wedge the wall away from the sole, causing separation. Long toes exert great pressure on tendons. Correct this by removing the shoes and trimming the hoof properly.

## Colic, abrasion and first aid

Colic is pain in the abdomen, usually involving the stomach or intestines. Although some horses are more susceptible to colic than others, it is frequently a result of mismanagement. Sudden changes in the feeding or watering procedure, or insidious changes, such as buildup of parasites, high-fiber roughage, or moldy grain and hay, all can cause colic.

The most common causes are moldy feeds, overfeeding grain to fatigued horses, letting overheated horses gorge on feed or cold water, or riding horses immediately after a full feeding.

In winter, many horses develop intestinal impaction because they do not get enough water.

Frequently an owner will first notice that the horse has been pawing and rolling. Symptoms of colic also include turning the head to the side, stomping with the back feet, kicking at the flanks, sweating profusely and showing a repeated desire to lie down. A veterinarian should be called immediately to identify the problem and treat accordingly.

The horse must be kept standing while the veterinarian is coming. Otherwise it may roll and twist an intestine, or actually injure itself from thrashing around in the stall. If the horse can be walked slowly with a leader and someone to follow to keep it on its feet, the likelihood of complications is reduced.

Wire cuts are the most common causes of injury to horses. Their skin is extremely thin and abrades easily. This fact, combined with the great activity of young horses and their tendency to panic, makes them vulnerable to such injuries.

Check your fences for loose wires. Avoid square corners where horses can hem in and kick one another. Don't use barbed wire fences near the barn and low enough that horses will paw through them as they await their feed. Consider using boards or tine-meshed wire to prevent hanging a foot. Electric fences in some locations are useful.

Some breeds are discriminated against in the show ring if they have scars. It is especially important to keep blemishes off these animals. For this reason, barbed wire should not be used around small enclosures where horses run. If the area is quite large, the chance of getting into barbed wire is reduced.

Keep horses away from machinery and other blunt objects they are likely to run into. This is particularly important in small lots and areas where they spend a great deal of time. If horses share a shed with machinery, they should be separated by a sturdy fence to prevent a hazardous situation.

Keep some simple first-aid medicines and bandages on hand and use these on small abrasions. Have larger injuries sutured and treated by a veterinarian. All injury cases must be protected against tetanus. Avoid using irritating, sticky medicine on wounds that require the attention of a veterinarian. Such medication makes cleansing a wound difficult, and certainly prevents suturing of some wounds that would have healed better with stitches. Profuse hemorrhaging is best controlled temporarily by a heavy cotton pressure bandage while a veterinarian is called.

## Your horse's teeth

An adult male horse has 40 teeth: 24 molars or grinders, 12 incisors or biters, and four canine or tushes. A mature mare usually has 36 teeth. She probably will have no tushes.

The upper jaw is wider than the lower jaw. Therefore, the upper jaw teeth extend over the lower ones on the outside. Conversely, lower jaw teeth extend on the inside of upper ones. This causes wear that creates sharp points on the outside of the upper teeth and the inside of the lower ones. A horse should be checked annually to see if its teeth need floating or filing to make it easier for to eat grain or hard feeds.

If a horse chews with its head sideways or spills very much grain from its mouth, its teeth should be examined. Floating is a relatively simple operation and is done without much restraint on most horses.

Young horses replace their baby jaw teeth by growing others under them. Therefore, they have small caps on the top that shed off normally in the growth process. Sometimes these caps fail to come off and cause a high spot that makes chewing difficult. These can usually be removed without difficulty.

Young horses also shed incisor or front teeth as adult teeth emerge. This process ends at five years of age. These may make eating grain and hay difficult for awhile. They also may be shy around the mouth when being bitted.

Small teeth in front of the upper jaw teeth are called "wolf teeth." They may be directly in the way of the bit, particularly a snaffle bit. They are painful and cause head slinging if the horse is agitated. They can be removed easily because they are not attached to the jawbone in 2- and 3-year-old horses.

Some horses have a genetic defect that prevents their front incisors from matching. This is called "parrot mouth." A horse with extreme parrot mouth has difficulty grazing. Such horses may be good work horses, but it may be necessary to supplement their pasture diet with grain or other feed during most of their lifetime. When parrot mouth appears in a foal, the sire and dam are both carriers of this genetic fault. Using such horses as breeding stock is questionable.

## **Nutrition and internal parasites**

Since horses make their living in motion, they should have an athletic look. Indeed, hardworking horses are athletes supreme. Idle horses can do well on good pasture without supplemental feeding, although they usually need additional grain or hay in winter.

Hardworking horses, however, must be fed grain to maintain condition. Usually an idle horse, confined without supplemental grazing, can be maintained on 15 pounds of good hay and four to five pounds of a grain mixture. For a hardworking one, increase the grain and decrease the hay. Well-fed horses are much more resistant to disease and can withstand cold climates and inclement weather better than thin horses.

Obese horses, like obese people, are not in a good state of health for performance or reproduction. Therefore, regulate feed intake for correct condition of each horse. Horses vary widely in nutrient need, depending on activity, age, amount of work or growth that may be taking place.

More than 150 internal parasites are known to affect horses. Four of these are rather serious in most horse operations. They are, in order of importance: strongyles or bloodworms, ascarids or roundworms, bots, and pinworms. Young horses or thin horses are very susceptible to these parasites. Some resistance develops, especially to ascarids, when horses reach two or three years of age. Horses have insufficient resistance to strongyles and must be treated throughout life for this parasite.

A parasite management program is important for reducing ingestion of larvae or immature worms of these parasites. Larvae migrate through tissues, in some cases up to 11 months, where they are safe from routine worm treatment. Most treatments rid the horse of adults in the digestive tract, but do little to the migrating larvae that are doing the greatest tissue damage.

Most horse owners find it necessary, therefore, to treat twice a year as a minimum, and every two months where horses are heavily concentrated.

A statement often heard is, "I have never treated for internal parasites in my horses and they get along in good shape." This may be true, but these horses likely have lost enough in feed efficiency from parasitic infestation to have paid for treatment many times. Remember, however, that while medication for worms is necessary, medicine is never a replacement for management.

Immunizing all horses annually should be standard procedure for tetanus and Eastern and Western encephalomyelitis, or sleeping sickness. There may be other diseases that call for immunization in your area. In some southern states, Venezuelan encephalomyelitis could be a real threat. There are many other diseases that can affect the health of a horse, but these are the most common.

Horses are usually used intermittently by their owners. It is, therefore, important for them to be in good health and ready to go when their services are needed. Such horses will be well-shod, well-fed, exercised regularly, immunized against the major diseases, and physically fit when called upon for services.

G2851, reviewed March 1993

## Related MU Extension publications

- G2743, Navicular Disease in Horses  
<http://extension.missouri.edu/publications/DisplayPub.aspx?P=G2743>
- G2806, Feeds for Light Horses  
<http://extension.missouri.edu/publications/DisplayPub.aspx?P=G2806>
- G2807, Feeding Horses  
<http://extension.missouri.edu/publications/DisplayPub.aspx?P=G2807>
- G2825, Illustrated Hoof Care for Horses  
<http://extension.missouri.edu/publications/DisplayPub.aspx?P=G2825>
- G2839, Care of Your Horse's Feet  
<http://extension.missouri.edu/publications/DisplayPub.aspx?P=G2839>
- G2854, Controlling Internal Parasites of Horses  
<http://extension.missouri.edu/publications/DisplayPub.aspx?P=G2854>

Order publications online at <http://extension.missouri.edu/explore/shop/> or call toll-free 800-292-0969.



■ Issued in furtherance of the Cooperative Extension Work Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. Director, Cooperative Extension, University of Missouri, Columbia, MO 65211  
■ an equal opportunity/ADA institution ■ 573-882-7216 ■ [extension.missouri.edu](http://extension.missouri.edu)