

Common Hoof Problems

Bruises, abscesses, quarter cracks, and more can plague your horse's hooves

Healthy hooves are paramount to a horse's soundness and well-being. And regardless of your horse's use, he's likely going to encounter a few foot issues in his lifetime. Below are some of the more common hoof problems you might see and how to identify, manage, and prevent them.

Hoof Imbalance & Underrun Heels

Hoof imbalances create unnatural stresses throughout the limb, potentially leading to lameness.¹ Some imbalances are tied to conformational problems such as toeing in or out, while others might be due to poor trimming and shoeing techniques.

To evaluate your horse's hoof balance, stand him squarely on a flat surface to examine each hoof from the front, back, and sides. Look at the slope of the toe and its relationship to the pastern. Ideally, the toe should be parallel to the pastern (when seen from the side). If this axis is broken back, (the pastern is more upright than the toe), it places significant stress on the rearmost structures of the feet, including the navicular apparatus.³ Often, a broken-back hoof-pastern axis is accompanied by under-run heels and long toes—termed long-toe/low heel (LTLH). Such hooves are prone to chronic heel bruising, navicular disease, and/or deep digital flexor tendinitis.³

Other imbalances such as club feet (high heels and perhaps dished toes) or sheared heels (one heel higher than the other on the same foot) might not be entirely correctable if they result from poor conformation. Your veterinarian and farrier can distinguish between correctable imbalances and those that can only be minimized and trim/shoe to correct what they can and manage others so the horse can stay sound and serviceable despite suboptimal conformation.

Quarter Cracks

A quarter crack or other hoof cracks can occur at any time, are usually minor, and



Hoof abscesses occur when bacteria get trapped between the laminae and the hoof wall or sole.

will grow out with time. However, a crack often reflects underlying hoof imbalances and is painful if it reaches deep into the hoof wall's underlying sensitive tissues. To prevent quarter cracks from forming, work with your farrier to ensure that a horse's toes are not left too long, that the hoof is balanced and shod (if needed) with ample heel support, and that the pastern and hoof axis are in similar alignment.

Heel Soreness & Navicular Syndrome

Many horses diagnosed with heel soreness or navicular disease have an LTLH hoof configuration.⁴ Horses with certain conformation flaws, such as upright pasterns and small feet, are predisposed to this syndrome. However, incorrect trimming and shoeing practices can cause even horses with excellent feet to develop sore heels.

Prevention is critical; all attempts should be made to avoid an LTLH configuration or a broken-back hoof-pastern axis. Treatment often includes heel support and backing up or rolling the toes to ease hoof breakover, which is the duration of time between heel lift off and toe lift off from the ground.

Bruises, Abscesses, and Corns

Hoof bruising occurs for many reasons:

thin soles, hoof imbalances that create abnormal impact on one side of the hoof, inadvertent horseshoe contact on the sole, or from riding over rocky terrain. Trimming/shoeing changes and hoof pads might help protect your horse's feet from bruising.

Hoof abscesses can occur following bruising or from penetrating wounds; these occur when bacteria get trapped beneath the hoof wall or sole and multiply. The bacteria create exudate (pus), which builds up and creates focal pressure. This can be quite painful, and a horse is often reluctant to bear any weight on the affected foot. Abscesses remain painful until the pus pocket drains and the pressure is relieved.

The abscess might follow a path of least resistance to drain at the heel bulb or along the coronary band, or it might rupture through the sole. Check for a smoldering abscess by pressing your finger on each heel bulb—feel for tissue softening and note your horse's pain response. Have your veterinarian open an abscess at the white line or under the sole from the bottom of the foot to establish drainage. Owners can sometimes draw out an abscess by soaking the affected foot twice daily in warm Epsom salts and applying poultice packs.

Another manifestation of deep tissue bruising within the hoof is a corn, which develops where the heel and bars (extensions of the hoof horn that wrap around onto the sole) meet, often due to tightly pinching horseshoes¹ or persistent pressure from a loose or twisted shoe. Lameness often lingers for weeks or months until a corn grows out.

A Close or Hot Nail

A horseshoe nail driven too close to the horse's sensitive laminae can incite inflammation and pain. A horse with a close nail (often said to have been "nail-quickened") might show immediate discomfort and a day or two later begin pointing the foot or

shifting weight from limb to limb to relieve building pressure.

Nails driven high up or too close to the center of the foot might create a hot nail condition. Horses with thin hoof walls are more at risk of a hot nail.

Hot nails are treated by removing the offending nail immediately. The shoe might also be removed, after which a farrier or vet might dig out the nail hole to allow drainage and apply antiseptic medication.

Thrush, White Line Disease, Gravel, and Canker

Wet environments or poor hygiene can lead to anaerobic (grows in the absence of oxygen) bacterial growth within the frog tissues and/or clefts of the frog. The blackened decay of degenerating frog material is called thrush and is accompanied by a foul smell. If infection penetrates into deeper hoof layers, a horse can become lame.³

Owners can help prevent thrush by exercising daily hoof care and working with a farrier to correct any underlying hoof imbalances. For more information on treating and managing thrush, see www.TheHorse.com/pdf/factsheets/thrush/thrush.pdf.

Other microbial invasions of the foot include white line disease or gravel—bacteria, fungi, or yeast invade areas of white line separation or a crack to create a smelly, painful infection within the sensitive hoof laminae. Canker is another hoof infection (of the foot's horn-producing tissues) and invasive growth that requires aggressive surgical correction.⁵ It's often confused with thrush, and affected horses might be sound even when it's growing deep into the foot's structures.

Pay diligent attention to hoof integrity and practice good hygiene to help prevent microbial hoof disease from occurring in your horse's feet. Also ensure your horse receives regular exercise and turnout to allow for natural hoof wear and to stimulate blood circulation in the hooves.

Laminitis

Laminitis results from mechanical impact and diffuse bruising; subsequent to metabolic conditions such as obesity, carbohydrate overload; or unique events such as gastrointestinal disease, colic, or retained fetal membranes. See www.TheHorse.com/pdf/factsheets/laminitis/laminitis.pdf for more details about laminitis.

Take-Home Message

The bottom line for ensuring your horse has healthy hooves is to work with your farrier to provide regular, proper trimming and shoeing, practice daily hoof cleaning and provide a clean environment for your horse to live in, and offer your horse routine exercise. Cooperative efforts between horse owner, veterinarian, and farrier will help your horse's feet stay healthy. 🐾

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Further reading and free horse health e-newsletters: www.TheHorse.com/Lameness-hoof

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