

Healthy, strong back muscles allow your horse to round his back, lift his shoulders, and engage his hind end. If he shows reluctance to complete maneuvers he usually masters, he might be suffering from back pain.

A Pain in the Back

Don't let back soreness stop your horse this show season.

By Dr. Khris Crowe, With Kaycie Timm

hen your reiner starts acting out under saddle, your first response might be to assume he requires some training. However, decreased responsiveness, unprecedented resistance to performing maneuvers, and reluctance to round out his back might be more than a need for training—your horse might be experiencing back pain. The solution to combatting this common ailment starts with a focus on prevention rather than waiting for issues to arise. Instead of trying to treat the problem *after* your horse starts showing signs of pain, keep his back healthy and strong using these proven methods. \Rightarrow





While you're tacking up to ride, pay close attention to how the saddle and pad sit on your horse's back. After you ride, look for curled hair patterns and irregular sweat patterns, which can signal that pressure isn't being distributed evenly.

From the Inside Out

Feeding your horse a balanced ration formulated for his performance level will help his back stay strong from the inside out. Most feed companies employ talented nutritionists who optimize those rations, so you can trust that a packaged feed combined with good-quality hay will give your horse what he needs. (Read more about developing a feed plan for your horse on page 144 of the February NRHA Reiner).

When it comes to preventing back pain, however, it's not only what he's eating, but also how he's eating. Horses are physiologically and anatomically designed to eat from the ground. Ground-feeding stretches your horse's neck muscles, epaxial muscles (across the top of his back), and top gluteal muscles (around his loin and rump), which is key for preventing back soreness. Pulling feed from above his withers—such as from a wall-mounted bucket or hay net—places unnecessary stress on those muscles. Feed your horse in a ground bucket or feeder so he eats off the ground and his back can raise in a natural, rounded arch, simulating the posture of grazing.

If your horse spends most of his day in a stall, it's also important to look at how that stall is built.

Most stalls are solid up to about shoulder-level, so your horse—a prey animal with strong instincts telling him to watch out for predators—will likely spend most of his time with his head up, looking over the wall. That automatically hollows his back, which can be harmful in the long run, especially if he has a history of back issues. Although it may not always be possible, keeping your horse in a stall with a grate or bars all the way to the ground where he can see out without lifting his head above his withers will help prevent added daily stress that can lead to back soreness.



Experiment with different combinations of saddles and pads to find what works best for your horse before you purchase a new saddle.

Work Smarter, Not Harder

One often-overlooked element that should be included in every workout is stretching. Dedicating time to purposefully stretching your horse's muscles can make all the difference in preventing back pain and keeping your reiner strong. Ideally, every training session should start and end with about 15 to 20 minutes of stretching. Encourage your horse to walk around the arena with his head down so he can stretch all his muscles both before and after the workout.

Also consider using a freewalker where he can relax his head, neck, and back—instead of a hotwalker

Saddle-Fit Strategy

Another key factor in preventing back pain is ensuring that your horse has a properly fitted saddle. Your horse's build determines the type of saddle he needs and the kind of padding you'll want to use under it. Getting the help of a saddlemaker or an expert in saddle fitting is worth the money and time to prevent your horse from having back problems in the future. If your horse lives at a trainer's barn, it can be helpful to try on different saddles he or she has on hand to find what works for your horse's build.

"Properly fitting a saddle takes effort," says Chris Weaver of NRHA Corporate Partner Bob's Custom Saddles. "There are three parts to a properly fitting saddle: the saddle, the pad, and the horse's nutrition. All three have to work together, and a good saddlemaker pays attention to all those factors."

A properly fitted saddle distributes weight evenly across the bars of the tree, which then divides it over a larger area across the horse's skeletal structure. The forward portion of the bars affects how the saddle fits the shoulder and wither area, while the rear half of the bars control fit on the horse's back. Both areas must work together to serve your horse.

"At Bob's Custom Saddles, our goal is to fit the horse, fit the rider, and get that rider as close to the horse as possible," Weaver continues. "Most of that is accomplished with the tree. We use four different trees and three different bars, at different swell and cantle heights. But no matter how well the saddle fits, a pad that's too thick reduces the contact between horse and rider."

It's important to pay attention to how the saddle fits your horse every time you ride. When you tack up, look for signs such as if the saddle slants up or down, if it slips after a few minutes of riding, or if the pad slides out the front or back of the saddle. When you take the saddle off, warning signs of a poorly fitted saddle could include curled patterns in his coat. Irregular coat or sweat patterns can be signals pressure isn't being distributed evenly, which might lead to back soreness.

Keep in mind, dry spots don't always mean the saddle doesn't fit, so be sure to look for other signs of a problem before swapping your saddle. Evaluate your saddle, your pad, and your horse's weight, then make changes as necessary, seeking help from your trainer, a saddle-maker, or a veterinarian as needed.

Remember, there's no perfect fit, because your horse's structure will fluctuate over time. However, starting with a well-made, properly fitted saddle combined with the right pad, and staying on the lookout for signs of problems to arise, will help you prevent saddle-caused back pain.

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Encourage your horse to walk with his head down so he can stretch his back and neck muscles for 15 to 20 minutes before and after every workout.

where he's hooked by his halter and must keep his head up. When your horse is relaxed, he should drop his head to shoulder-level or a little below. If he'll stay in that position on the walker, he'll get the stretching he needs in about 20 minutes of walking, but more time moving with his nose on the ground certainly won't hurt.

An underwater treadmill can also be a good option for simultaneous exercise and stretching. Be sure the water isn't so deep that your horse is forced to keep his head up. If his head has to be above shoulder level to keep his head and neck out of the water, his back will be upside

down or "dorsi-flexed." Staying in that position for an extended period of time can harm his dorsal spinal processes, cause cramping in the epaxial muscles, and result in severe back soreness.

No matter how you choose to exercise your horse, always avoid overworking him. Working your horse to exhaustion will cause lactic acid buildup, which will make his muscles stiff and prone to cramping instead of staying soft and stretchy. After a workout, walk him until his heart rate, body temperature, and respiratory rate return to normal. Taking the simple steps of walking your

horse to stretch his muscles before exercise, not working him to exhaustion, and thoroughly cooling him down can prevent many of the most prevalent muscle, ligament, and tendon problems faced by performance horses today.

Physical Factors

Just like your bones, muscles, and ligaments are joined to form your anatomy, your horse's physical structure is connected. Soreness in one area often causes negative repercussions for other regions of his body. For example, if your horse is sore in his back legs, he'll likely trail his hocks out behind him

instead of coming up and engaging his rear end. That reaction to discomfort in his hind legs can cause him to hollow his back and lift his head, which in turn leads to back pain. Every horse at my practice showing signs of back pain immediately gets a full lameness exam where I look specifically for hind leg lameness. Since this kind of soreness is secondary to hind leg lameness, not primary back pain, treatment starts with his legs. If that's the source of his back pain, addressing his hind legs will also give him relief in his back.

'My recommendation is always to start with a complete veterinary examination to find the cause of the issue as soon as you see signs of soreness.'

However, some horses might suffer from a purely back-related problem. In that case, I suggest pulling blood to check for muscle enzymes. Those enzymes are usually inside muscle cells, so if elevated levels are found in the bloodstream, that points to inflammation, death, and rupture of the horse's muscle cells that allowed those enzymes to be released into general circulation. Other possible health-related factors that can cause primary back pain include genetic problems, such as polysaccharide storage myopathy (PSSM) and immune

mediated myositis (IMM), which cause the horse's muscle cells to have metabolic changes that result in back pain. If your horse's back pain can't be attributed to any other factors at play, a DNA genetic test of his hair could reveal underlying inherited muscle problems.

Time for Treatment

Even if you've taken all the necessary precautions and ruled out any genetically based predisposition for back pain, your reiner might still experience back soreness at some point in his career. My recommendation is always to start with a complete veterinary examination to find the cause of the issue as soon as you see signs of soreness (see box at right to help identify some of the most common tells). Once your vet finds the cause, he can lay out a specific strategy to treat the issue based on his diagnosis. Regardless, every horse can benefit from the same preventative steps discussed here: feeding a balanced diet, using a ground feeding method, stretching his muscles before and after riding, ensuring his saddle and pad are properly fitted (see the sidebar on page 121 for tips), and treating lameness issues when they arise. �

Lifelong horse owner, breeder, and exhibitor **Dr. Khris Crowe, DVM, MS, PC** owns and operates Red River Equine Veterinary Services and Reproduction Center in Gainesville, Texas, with her husband, Carlton Crowe. In addition to their business, the Crowes also compete with their horses in Western disciplines including reining, working cow horse, and ranch horse events.

KNOW THE SIGNS

Wondering if your horse might be experiencing soreness in his back? The biggest sign to watch for is if your horse stops rounding his back, lifting his shoulders, and engaging his hind end. This might manifest itself differently, depending on your horse's strengths. Specifically, you might notice:

- A low or level-headed horse suddenly wants to keep his head raised.
- A horse that's usually willing to engage his hind end doesn't want to, even when he's being driven into a large, fast circle.
- A good stopper no longer wants to initiate the stop or hits the ground and pops right back out of it.
- A horse that generally rounds well and executes smooth spins starts to flatten out, keeps his head up, and is no longer cadenced in his turnaround.
- A horse you can count on for a nice rollback keeps his head up and his back flat when you ask him to roll back.