

Oops! My Horse Stumbles!

FROM
**PRACTICAL
HORSEMAN**

Stumbling in horses is serious business. Here's advice from a veterinarian and a trainer on dealing with this dangerous problem.

By [Elaine Pascoe](#) | Oct 26, 2011



Your horse suddenly pitches forward and drops out from under you. For a split second, his balance and yours teeter on the brink. Few things are more alarming than a horse stumbling, even for an experienced rider: Will he go down and take you with him?

Horses usually manage to stay upright when they trip, and (after you catch your breath) it's tempting to quickly laugh these incidents off. Even when a horse stumbles repeatedly, you'll hear people dismiss it: "He's just lazy," or "That's just him."

Yet it takes only one misstep for Twinkletoes to go down and flip over, with results that we'd all rather not contemplate. But let's, briefly, contemplate them: You could be killed. So could your horse.

This is a problem you can't ignore.

Stumbling in horses can be a training issue, but it can also have physical causes. We asked equine veterinarian Duncan Peters of Lexington, Kentucky, to explain those causes and what you can do to correct them. For the training angle, we went to longtime Massachusetts eventer Mark Weissbecker; you'll find his advice in "Riding a Stumble" on the next page.

Anatomy of a Stumble

When your horse takes a good step forward, he brings his foreleg out in front of his body and sets his foot down squarely, the heel landing a split second before the toe sets down. He shifts his weight onto the bony column of the leg as his body passes over it, stabilizing the limb with ligaments, tendons, and muscles. Then the heel lifts, and the foot breaks over at the toe to come up and move forward again.

When he trips, it's usually because he catches a toe. This can happen if he takes a short stride, puts his foot down toe first, or just fails to clear a tree root or some other obstacle in his path. The leg knuckles over instead of landing squarely, and suddenly it isn't there to support his weight. He tips forward. Maybe it's a momentary bobble and he quickly regains his footing. Maybe he scrambles to get his feet back under himself. Or maybe he goes down.

Fatigue, speed, and deep or uneven footing increase the risk of stumbling. In fact, given the right circumstances, any horse can stumble: He's distracted?he looks off to the side to check out his buddies in the pasture or a person standing at the rail?and forgets to think about how and where he's putting his feet down.

Inattentiveness is probably the most common cause of stumbling, especially for young horses, Dr. Peters says. This is a training and riding issue; it's up to you, the rider, to keep your horse balanced, attentive to your aids, and thinking about where he's going.

When do you know you have a more serious problem? Here are two red flags:

- Your horse stumbles or trips frequently or predictably. "When you begin to anticipate that your horse will trip in a given situation, such as going downhill or landing from a fence," says Dr. Peters, "you need to find out what's going on."
- Your horse has trouble recovering his balance. He catches a toe, a problem that should be minor, but then scrambles to get his feet back under himself?or even goes down on his knees.

In many cases, getting to the bottom of a stumbling problem calls for a team effort, involving

your vet, your farrier, and your trainer. Whoever you're working with has to want to *figure out* the problem, not brush it off. Here, we'll cover five common causes.

It's His Build

Some conformation faults increase the risk of stumbling. The most common, Dr. Peters says, is a "downhill" build.

What happens: Horses typically carry 60 percent of their weight on their forelimbs. A horse that's built downhill, with his hindquarters higher than his withers, carries extra weight on his forehead. The additional weight can make it harder for him to get his legs out in front of himself. He takes choppy strides as he puts his front feet down to catch himself, and thus is more likely to hook a toe and stumble?especially at speed.

Many young horses go through phases in which their hindquarters briefly outgrow their withers. In most of these cases, the horses' withers eventually catch up. But some horses mature with this conformation, which a low head carriage will exacerbate.

On the other hand, some conformation faults that would seem most likely to cause stumbling may not, Dr. Peters says. In his experience, a horse that is over at the knee (knees cocked forward) is not more likely to stumble?as long as the lower-leg conformation is normal. But if the same horse also has very steep pasterns, he could be in trouble.

Clues: You should be able to spot downhill conformation if you stand your horse up and take an unbiased look at him from the side. You may feel it when you ride, too?this build tends to push your weight forward in the saddle, and the horse may tend to hang on the reins.

What to do: You may be able to improve a downhill horse's balance through training and conditioning, strengthening his hindquarters and teaching him to carry more of his weight with his hind end. But unless he grows out of his unbalanced build, the deck will always be somewhat stacked against you, Dr. Peters says. Ultimately, you may not be able to significantly change his way of going?and so may need to limit what he does: He may be fine for light pleasure riding, but eventing, jumping, or other jobs that are tiring or call for speed may be too dangerous. Likewise, you may need to avoid deep footing or rough ground.

It's His Feet

Long toes catch the ground easily and break over with difficulty, increasing the chance of a stumble.

What happens: Long toes commonly occur along with underrun heels?as the hoof capsule grows out, the toe tends to lengthen and the heels begin to curl forward, so that they no longer support the foot. That encourages the horse to stab his toe and trip.

A horse's foot may be predisposed to long toes, but this problem can also be man-made?the result of inadequate shoeing or of letting too much time pass between visits from the farrier.

Clues: In addition to underrun heels, a broken-back hoof axis (in which the angle of the pastern

is steeper than the angle of the hoof wall) can develop with long toes. And although there's no set rule for shoeing intervals, you could be waiting too long if your horse goes more than six weeks between shoeings.

What to do: Consult with your farrier and your veterinarian, and have them work as a team to manage your horse's feet. You may need to have him shod more often, or the farrier may need to take a new approach that will shorten your horse's toes and give him more support at the heels.

He's In Pain

Even before discomfort leads to obvious lameness, it can make a horse unwilling to extend his leg fully or put his foot down normally. As a result, he takes short, choppy strides and stabs his feet into the ground quickly, making it likely that he'll catch a toe and trip.

What happens: Pain originating from a bruise or a developing abscess anywhere in the foot can cause a horse to stumble. But *caudal* heel pain—soreness at the back of the foot—is perhaps the most common cause of stumbling, Dr. Peters says.

In many cases, the problem involves key weight-bearing structures in the foot. Those structures include the coffin joint (where the coffin bone, small pastern bone, and wedge-shaped navicular bone meet) and the deep digital flexor tendon, which passes over the navicular bone at the heel before it attaches to the lower surface of the coffin bone. When the horse puts weight on his foot, these structures and related ligaments and soft tissues come under intense pressure; the navicular area, especially, is squeezed from above and below. If inflammation develops here, in the bone or surrounding tissues, each step the horse takes is painful. The horse then strides short and puts his foot down toe-first to avoid discomfort.

Problems in the pastern area can also cause a horse to trip. Ringbone is a form of osteoarthritis in which new bone is laid down around the coffin joint (low ringbone) or the pastern joint (high ringbone). The changes can limit range of motion and cause pain, leading the horse to shorten his stride and stab a toe. Pain from sprains or strains in this area can have the same result.

Pain from problems higher in the leg can also lead to stumbling. For example, a bone chip in the fetlock, the knee, or even the shoulder can make a horse unwilling to fully extend and weight a leg, leading to a shortened, stabby stride. Low-grade pain from subtle ligament or tendon problems can cause a stumbling gait.

Clues: As a horse with caudal heel pain jabs his foot down toe-first, he'll often kick out a telltale puff of dust in front. He may also rest one or the other front foot by parking it out in front of his body. Although pain in both front feet is not unusual, many pain-related causes of stumbling affect just one leg, so the horse is most apt to trip with that leg. Look for swelling around joints or tendons by comparing one front leg to the other.

What to do: Call your vet, who can help track down the source of the problem through a physical exam, nerve blocks, and other diagnostic tools. By finding the problem and taking appropriate action, you may not only cure the horse's stumbling but also stave off a more severe lameness.

The fix depends on the problem. Bruises and abscesses heal with rest, soaks, and poultices. Joint problems may respond to a combination of medication, joint supplements or injections, and shoeing changes. For instance, heel-sore horses may be helped by rolled or rockered toes or square-toe "natural balance" shoes, which allow the foot to break over more easily. Shock-absorbing pads may also help. Horses with low ringbone may be more comfortable in half-round shoes, in which the entire outer rim is rolled.

It's Neurologic

Coordinated movement depends on nerve signals that flow from the brain to the muscles and back from the muscles to the brain, signaling where the limbs are. If the lines of communication are broken, the horse may not have full control of his legs or even a clear idea of where his feet are. That, of course, makes him more likely to trip.

What happens: A number of conditions can play havoc with a horse's balance and limb control. Spinal trauma, arthritis of the neck, wobblers syndrome (or cervical instability, a developmental defect of the neck bones that puts pressure on the spinal cord), and diseases such as equine protozoal myeloencephalitis (EPM), Lyme disease, herpes-virus infection, inner-ear bacterial infections—all these can produce weakness or an altered gait. So can some neuromuscular conditions, such as forms of tying up (myositis).

Clues: Many neurologic conditions appear first as weakness in the hind legs or an abnormality in balance, Dr. Peters notes. A horse with neurologic problems may scramble and have trouble regaining his footing, or even fall down, as the result of what would be a minor stumble for another horse.

What to do: Call your vet, who can do a neurological exam—a series of simple tests designed to measure reflexes and make sure your horse can control his limbs and knows where his feet are. If the exam shows a problem, the vet will suggest further diagnostic work to find out what's going on.

Some neurological problems respond better to treatment than others, so the outlook will depend on what the veterinarian finds. There's good medication for EPM; but if the disease has caused too much nerve damage, the horse may not recover fully. Wobblers syndrome is difficult to treat. If the problem is arthritis, the horse may improve with some combination of medication, chiropractic treatment, and muscle stretching and careful warm-ups before work.

Diagnosing neuromuscular conditions such as tying up involves bloodwork and other tests. A lot of these problems can be managed with changes in the horse's diet as well as his workload.

It's, Um, His Rider

The weight and the position of a rider can be factors in a horse that stumbles, Dr. Peters says.

What happens: A heavy load tires the horse and makes it harder for him to balance, two factors that increase the risk of stumbling. Although some people use 20 percent of the horse's body weight as a yardstick for the maximum weight he can carry, there is no absolute rule; the true number may be more or less, depending on the horse's build and level of fitness.

How the weight is carried also makes a difference. The area of the back over the heartgirth is considered the horse's center of balance. The more the rider's weight is ahead of this point, the bigger the load on the forehand. The horse is already carrying 60 percent of his body weight on his forehand; adding another 10 percent or so makes his balance less stable, especially as he tires during exercise.

Clues: The horse stumbles with one rider, but not with another who's lighter or more balanced.

What to do: Ask a trainer whose opinion you respect to watch you ride, to see if your riding style or your weight is contributing to your horse's stumbling. Although recognizing that you're part of the problem may be difficult, doing so could help you avoid a disastrous fall.

Riding a Stumble

"A horse that stumbles repeatedly would probably not be in my barn," says international-level event rider and trainer Mark Weissbecker. In a sport such as eventing, stumbling is just too dangerous. But because any horse can trip or take a bad step on occasion, here's his advice for handling the problem.

Prevent it: Rule out physical causes. Then, if a horse trips because he's inattentive, Mark says, "Energize his gait. Concentrate on getting him more engaged and active behind to improve his balance and make him less nonchalant." Use your legs, and a tap with a stick if necessary, to get him focused on you and moving forward. "Your horse is off duty twenty-three hours a day. He needs to understand that during the short time that you're riding, he's working," Mark says.

Ride through it: What if he trips anyway? Things

happen fast when a horse stumbles. But if you stay cool and in control, you can make the best of a bad situation. "Plan A is not to bail out," Mark says. "Often you can help a horse recover from a stumble." Here's how:

- **Get into the rumble seat:** Lean back, with your legs pushed out in front of you, to get your weight off the horse's forehead. This will give him the best chance of regaining his footing. If you tip forward, you'll overload his front legs and may be pitched off over his head.
- **Give him a lift:** From your "back-seat" position, lift up the reins to encourage your horse to raise his head. You'll help him recover his balance.
- **Give him a pop:** Reach back and give a pop with your stick behind the saddle to energize his hind legs and get him to spring forward. As he does, he'll regain his balance.

Protect yourself: If Plan A fails and your horse is going down, quickly kick your feet free of the stirrups. As you land, Mark says, tuck and roll clear so the horse won't fall on you.

*An FEI-certified veterinarian, **Duncan Peters, DVM, MS**, heads the Sporthorse Program at Hagyard Equine Medical Center in Lexington, Kentucky.*

*Eventer **Mark Weissbecker** of Richmond, Massachusetts, and Southern Pines, North Carolina, has competed numerous horses at international levels, among them the 1990s stars Best Seller and Brevity and, more recently, Decordova. In 2004 he also rode Top Gallant to several preliminary-level wins.*

This article originally appeared in the November 2004 issue of Practical Horseman magazine. To read more about neurological causes of stumbling, see "Is He Neurologic?" in the [November 2011 issue](#).
