

# TEN COMMON WRECKS WITH DRIVING HORSES

## Their Causes and Prevention

By Doc Hammill, DVM

Unfortunately, trading wreck stories seems to be a common pastime of some teamsters. I'm sure those of you fortunate enough to not have experienced a wreck with horses have certainly heard stories of another teamster's misfortune.

In those few seconds when our horses are panicking and out of control they can injure or even kill themselves or us. Even if no one is hurt, those moments of panic can destroy the horse's trust and make him unsafe or psychologically unable to work any more.

One of the things I've learned over time is that the truly great teamsters rarely – if ever – have upset horses, close calls, mishaps or wrecks, while the less meticulous horsemen often do. Even though it may take a few minutes longer, the master teamsters constantly follow a series of seemingly minute, endlessly detailed, but always wise safety tips.

Here are 10 of them:

**Safety Tip #1: Always fasten breast strap snaps facing inward towards the collar, instead of facing out away from the collar. (See photo #1.)**

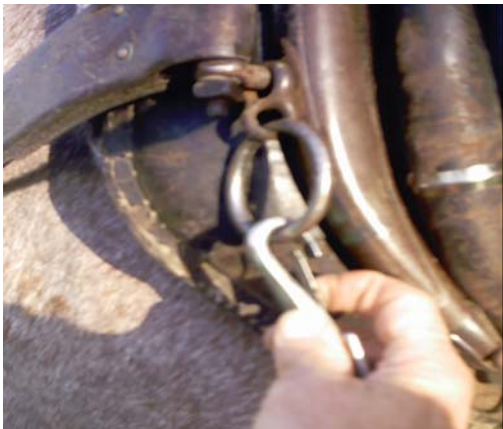


Photo 1

uncomfortable downward position. When this happens, there is a great risk of panic and a wreck resulting in physical and/or psychological damage to horses, humans or both.

If the breast strap snaps are hooked facing outward (away) from the collar, it's possible for a horse – or his team mate – to accidentally hook a bit, bridle part, halter ring or hame ring into the snap. The result is a claustrophobic animal with its head trapped in an awkward, unnatural and

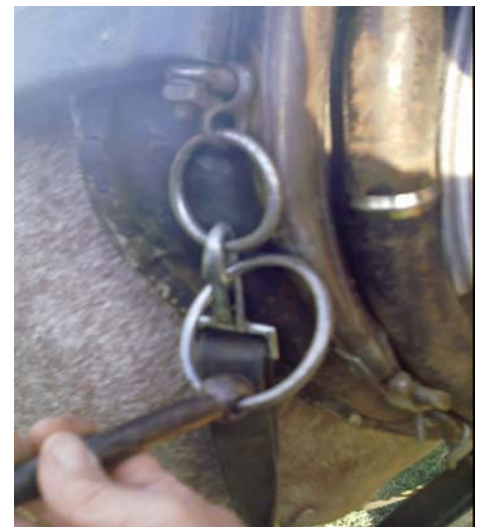


Photo 2

I once witnessed a wreck when a very well-broke, dependable horse hooked his bit ring into the breast strap snap, began fighting for his freedom, and lunged backwards dragging his team mate with him. The horse injured his mouth with the bit, and

backed the wagon into a pickup truck. The wreck certainly was not the horse's fault, and could have easily been prevented.

Unfortunately, it's very common for harness to be set up so that when the team is hitched the breast strap snaps face outward. In fact, new harness often comes from the maker that way. It's a simple matter to remove the breast straps, turn the snaps over and reassemble the straps so they snap inward. Once the breast straps are set up properly, snapping them inward is actually easier and quicker than hooking them facing out and a whole lot safer for you and your horses. (See photo #2.)

**Safety Tip #2: Always snap combination snaps and pole strap and/or breast strap snaps so they face in toward the tongue. (See photos #3 and #4.)**

This tip is similar to the first. Again, when these snaps are attached (to the neck yoke rings) facing outward, we have potential for the horses to catch their bits in the snaps when they rub their heads. Having the head trapped easily triggers claustrophobia and panic in horses, and often results in a disastrous wreck.

The paired combination snaps on a team harness usually come pointing in the same direction, so that on one horse the snap is safely facing inward and on the other horse the snap is unsafely pointed outward. Some of these snaps are riveted on; others are bolted on. If they are bolted on, you can simply take the bolt out and turn the snap around. If they are riveted, you don't have that option without cutting the rivet and replacing it with a bolt. If you use combination snaps, be sure they are modified as necessary so they both face inward toward the tongue.

Some breast straps attach to the neck yoke with their own snap, and are used with a pole strap that has its own snap as well. When using such setups, be certain that you snap both the breast strap snap and the pole strap snap facing inward on both ends of the neck yoke.



**Photo 3**



**Photo 4**



**Photo 5**

Although it's not impossible for a horse to get a bit ring caught when the breast and pole strap snaps are pointed inward, it's a lot more difficult because there's very little room on the inside. But on the outside the bit and other equipment can very easily come into contact with the snaps.

Another option which offers no chance for a snap to catch a bit ring is a breast strap and pole strap design that attaches to the neck yoke rings without any snaps. (See photo #5.)

**Safety Tip #3: Attach all lines to the bit with buckles instead of snaps. (See photo #6.)**



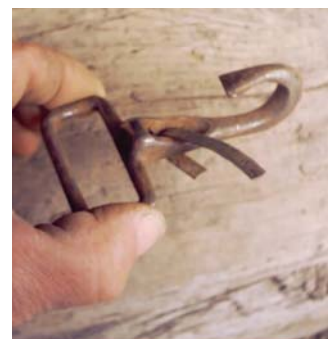
**Photo 6**

Attaching the lines to the bit with snaps was an accepted method in the old days, and unfortunately still is today.

However, using snaps to hook the lines to the bits is just not safe at all. Snaps are notorious for breaking – usually when you need them the most. (See photo # 7.) In addition, an itchy or impatient horse can unhook them when he bumps or rubs his

head on the neck yoke. He can also unhook or break line snaps when rubbing on his partner.

No matter what the scenario, when a snap is rubbed off or fails, you have completely lost control of your horse. Long ago, before I knew better, I had a couple of close calls and then a fairly serious wreck caused by line snaps breaking or coming off. And since then I've heard countless stories of near misses and serious wrecks due to line snap failures.



**Photo 7**

As with other snaps, if line snaps are facing outward, a horse can snag them and therefore his bit into a multitude of other harness parts – his or his partners. This can have potentially devastating consequences as the horse becomes trapped and panics. A vision of two horses that once got their bits snapped together comes to mind.



**Photo 8**

There are a lot of different types of snaps on the market. In my opinion, all snaps – except for one type – are dangerous on driving lines. The only snap I consider safe is a twisted line snap. (See photo #8.) It's also called a twisted wire snap. I've never heard

of them coming off and I've never had one come off myself. The downside is that they can be tricky to get on and off until you perfect the technique.

The safe way to attach lines is to buckle them on to the bit or use only the twisted line snaps. If you have other snaps on your lines, you don't need new lines; just have the ends converted to buckle type by a harness maker.

Or – as an alternative to taking or sending your lines to a harness shop – I've come up with an adapter that consists of a buckle-on line end that will easily connect to the ends of lines designed for snaps. Simply remove the snaps and use the Conway buckles on the lines to attach the adapters. (See photos #9 and #10.)



**Photo 9**



**Photo 10**

Between now and the time you get rid of any snaps on your lines, please tape the snaps with electrical tape – each and every time you drive – so they stay on and you and your horses stay safe.

**Safety Tip #4: Use equipment that prevents cross-check buckles from going through the hame or spreader rings.**

If horses get too far apart, one too far ahead of the other or if one stumbles or roots with his nose, a cross check can be pulled so far forward that the cross check buckle can be pulled into – or through – the spreader or hame ring.

Sometimes you can pull it back through the ring, but generally you can't. When this happens you completely lose control with that line. It's just the same as losing a line off the bit, and you're at risk for having the same kinds of wreck: a runaway and the potential for serious damage.

In the past I taught my driving students to watch the cross check buckles closely and not let them get close to a spreader or hame rings, especially when stopped and before starting the team. But now I insist on the use one of three simple, inexpensive pieces of equipment that prevent the buckles being pulled into or through the rings:

- If you always use spreaders you can get a little roller system called a line spreader roller to prevent the buckles from going through the spreader rings. (See photo #11.) Most harness makers should have these or be able to order these rollers. However, they don't work on the hame rings.

- You can insert a metal ring that's too big to go through the spreader or hame rings into the cross check buckle. (See photo #12.)
- Possibly the easiest method – and my personal favorite – is to simply thread a ring too large to go through the hame or spreader rings on the cross check line and slide it towards the cross-check buckle. (See photo #13.)

The ring needs to be too large to go through the spreader or hame ring but small enough that the cross check buckle cannot be pulled through it. (See photo #13.) Be sure the ring ends up between the cross check buckle and the spreader or hame ring. (See photo #14.) It may be necessary to use two different sized rings on the cross check line if the one that is large enough to not go through the spreader and hame rings is too large to stop the cross check buckle from going thru it. Put the smaller one behind the larger one, not in front of it.



**Photo 11**



**Photo 12**



**Photo 13**



**Photo 14**

**Safety Tip #5: Always secure slip-on neck yokes to the tongue with a safety chain.**

Very few teamsters secure slip-on neck yokes to the tongue, but neck yokes unexpectedly slipping off the tongue have caused countless injuries and wrecks – many of them serious and some fatal.

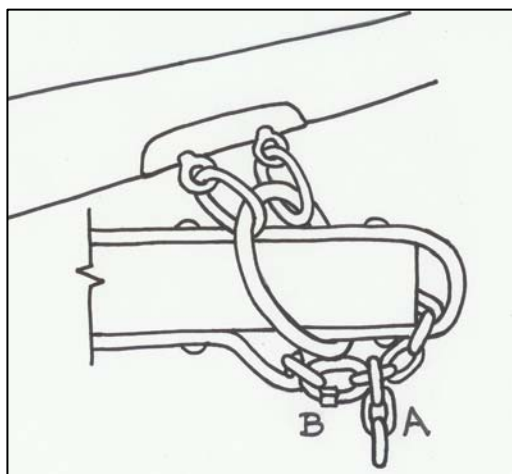
If it's not attached to the tongue with a safety chain, a neck yoke can slip off and drop to the ground if a horse steps ahead during the hitching process. The neck yoke can also slip off if the traces are hooked too long, if a trace chain accidentally comes unhooked from a single tree, or from other equipment maladjustments or failures.

Whatever the cause, the result can be disastrous. When a neck yoke accidentally slips off the tongue, the tongue drops to the ground, and we have completely lost the ability to steer, slow down or stop the vehicle. If the horses slow or stop, the vehicle can slam into the horses from behind, injuring them and/or fanning the fire of their terror.

If the horses are moving, the tongue can beat up or even break the horses' legs as it flails side to side. The team can drag the vehicle, but steering is lost so it is likely to

flip or roll. Or – the tongue can jam in the ground and catapult the vehicle, sometimes onto the horses' backs, as happened to an old-timer I knew.

Making sure the neck yoke is chained or otherwise secured to the tongue *every* time you hitch a team is a quick and easy way to completely prevent such catastrophic wrecks. (See Figure #1.)



**Figure 1**

As handy as they are, baling twine and wire are poor choices for securing neck yokes. Although fastening a neck yoke with anything is better than not attaching it at all, baling twine or wire – even heavy wire – is an emergency-only option for me because the wire or twine will wear and break before too long.

Years ago, I used to secure my neck yokes with a hame strap. A hame strap is certainly preferable to baling twine or wire in my opinion, and is very quick and easy to use. However, even a good leather or synthetic hame strap does not have the strength and durability of chain.

Today, I always use a chain fastened with a quick link. It has the necessary strength and durability, does not come undone or fail and doesn't wear. It's quick and easy to get on and off, is inexpensive and doesn't look too tacky. I keep a safety chain and quick link fastened to every neck yoke that I use. That way when I take a neck yoke out to put it on a piece of equipment, I always have a safety chain and don't have to guess whether there's one on the tongue or not.

The quick link (Figure 1 B) should be heavier than the chain (Figure 1 A), and to be completely secure always tighten it with a wrench or piers.

A safer alternative to slip-on neck yokes is the bolt-on design. They bolt permanently to the end of the tongue with interlocking eye bolts and therefore cannot accidentally come off.

### **Safety Tip #6: Always secure doubletree pins.**

When doubletree pins aren't secured, they can work themselves up and fall out. If this happens, the doubletree detaches from the tongue and it can fly forward and hit the team in the rear legs. This can quickly turn into a real wreck.

It's rather amazing that unsecured doubletree pins don't come out more often than they do, but I've seen it happen several times with resulting wrecks. Here again, it's a completely preventable problem.

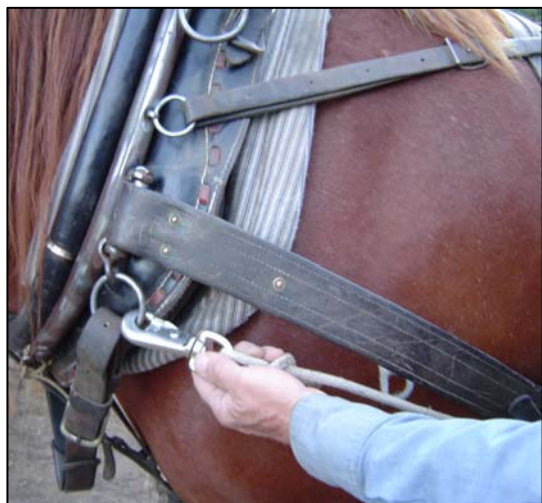
To prevent the doubletree pins from slipping out, I prefer to use a hard bolt for the double tree pin. I then place a washer and nut on the end of the bolt and insert a

cotter pin thru a hole in the bolt just below the nut. This gives me a double safety system – nut and cotter pin. The pin is important because without it, the nuts are likely to come off.

Regardless of the type of doubletree pin, at the very least secure it with a cotter pin and a washer above the pin. Bend the cotter pin ends around the double tree pin with pliers. Be sure to use what I call an old-style cotter pin, which has ends that you bend instead of a modern-type spring clip – also called a hairpin or spring hitch pin – which will snag on things and fall out.

**Safety Tip #7: Use a “butt rope” when you ground drive a team.**

An all-too-common wreck can happen when a team “turns inside out” while you are ground driving. Without the traces hooked to single trees there are no outside boundaries to encourage the horses not to spread their rear ends apart – especially when backing up.



**Photo 15**

Horses in a team tend to swing their rear ends apart when backing up, and if the rear ends get far enough apart, the lines don't work properly, or – at some point – not at all. Then, as the back ends get farther and farther apart the horses can face one another and pull back, or “turn inside out” and become tangled in the lines. They commonly tear up each others mouths with the bits, break harness and run off in a panic.

To avoid such mishaps and wrecks, it is critical that we keep our horses' rear ends appropriately close together at all times, and particularly when backing up. While there are a number of ways this can be accomplished, I prefer to use what I call a “butt rope.”

A butt rope is simply a rope of proper length with a strong, safe, snap tied on each end. One snap is hooked into the outside, bottom hame ring of the first horse with the snap facing inward just like the other snaps. (See Photo #15.) The rope is then threaded through the rear hip strap (above the breeching) on the outside of the same horse. (See Photo #16.) Pass the rope under this first horse's tail, over to the other horse and under its tail.

Working up the outside of the second horse, pass the rope inside the rear hip strap and snap into the outside, bottom hame ring with the snap facing inward. Proper adjustment of the butt rope length lets the horses spread their rear ends only about six inches to a foot more than when they are hitched and working parallel.

Once the proper rope length is established, it need not be changed unless used on horses of a significantly different size. For draft horses I use 20 feet of 3/8- or 1/2-inch soft, braided, poly rope with a total, finished snap-to-snap length of about 16-1/2 to 17 feet. Smaller horses require a proportionately shorter working length.



**Photo 16**

Although it is important to prevent the horses from swinging their rear ends out, it is also important that they not be held too close together. They need room to maneuver and work without crowding each other.

While some teamsters use methods such as tying the tails together or running the lines around on the outside of the horse's rear ends, I like the butt rope method best because it sets a clear, understandable boundary around the horse instead of putting pressure on the horse in a way that might be confusing to him. In addition it's

not pulling on parts of the harness that aren't designed to take a great deal of force.

**Safety Tip #8: Don't let go of the lines and trust horses to stand.**

A lot of people trust their horses to stand while they put down the lines and do such things as open a gate, grab a wrench from the barn or visit with a friend.

It often happens that horses do well learning to stand, and people will start trusting them more and more. But regardless of how obedient the horse is or how many years he has been trustworthy about standing unattended, there's always a chance that when least expected will leave the scene. If a saddle horse runs away with a saddle on his back, chances are he's not going to be hurt, but if a driving horse runs away with a vehicle or implement hooked behind him, the chances of injury and psychological damage are huge.

My first choice is to tie my horses or have someone else hold them if I have to let go of the lines. But I am often working with them alone so must repeatedly discipline myself to resist the urge to put the lines down and trust them to stand.

I sometimes use lead lines from a four-up on a team so when I get down to open a gate I can take the lines with me, go up and open the gate, step back behind the team, and drive them through the gate. The lines are long enough so I can keep them in hand while I go behind the vehicle or implement and close the gate without letting go of them.

Or, I'll tie the horses to a tree or post, open the gate, untie the horses and drive through the gate, and tie them on the other side to go back and shut the gate

To some, these may seem like time-consuming routines. However, for me, working horses isn't about time. I believe we shouldn't sacrifice the physical or mental well-being of our horses to save time

Do ever break this rule? Occasionally I do. I have older horses that I've been driving for over 20 years. But even with them, I trust them to stand alone only *if* by reading the horses I feel that at *that* moment on *that* day I can trust them. When I leave them, I don't go very far. I watch them like a hawk and if they even *lean* their body weight I use "whoa" to remind them to stand. I will return to them immediately if I think it prudent or necessary.

No matter how good and trustworthy our horses are, we are always taking the risk of a wreck if we let go of the lines and trust them to stand.

### **Safety Tip #9: Learn not to jerk the lines if a horse spooks.**

Human error causes a lot of wrecks. One of the most common errors is to jerk the lines to gain control or punish when a horse spooks, flinches or bolts.

When a horse spooks it often wouldn't be more than that, except for our natural reaction to jerk on the lines. When that happens, we hurt the horse's mouth. He jumps because he perceives he's in danger of being hurt or killed, and when we jerk on the lines the pain confirms his fears. After this happens a two or three times we have effectively taught the horse to try harder and faster to get away when something frightens him.

It's a real challenge, but we need to train our hands to move forward with the lines instead of jerking back on them when a horse startles, jumps or bolts.

Learning to develop this skill takes self discipline and mind-body control. It takes hours and hours of driving and practice while paying attention to the give and take on the horse's mouth. Over time, your hands become pressure sensors as you learn to give instead of resist when a horse bolts. After you give, you need to gently regain contact and control of the horse without hurting him with the bit.

You can practice this skill with a partner. The idea is for one person to drive the other like a horse. The horse holds one end of a line in each hand against the sides of their hips. The teamster is behind the horse with a line in each hand and "drives the horse." The horse's job is to drive off nicely, but periodically spook and jerk the lines without warning. Practice until your automatic reaction is to give with the lines instead of resisting or jerk back. The trickier your partner is, the better they'll teach you to not hurt your horse's mouth.

**Safety Tip #10: Always sit on or otherwise secure the lines when you're driving.**

It's easier to drop a line than you might think. A horse can stumble or root with his nose pretty hard, and it's not uncommon for us to simply fumble a line and drop it. If you don't have the lines secured as a backup one or both can be lost and you can easily lose control.

My preferred safety net is to sit on the lines. (See Photo #17.) My great mentor Addie Funk always sat on his lines, and he refused to ride with anyone who did not. I run the lines between my legs and bring them out behind me instead of tucking them under just one side of my rear end. That way the lines are less likely to pull out if I am bounced up off the seat a bit.



**Photo 17**

When you're standing up driving; for example on a wagon or a bob sled, you can tie the ends of the lines to the front rack on the wagon or sled. If there is a Jake staff, you can use half hitches to secure the lines on it.

With these backup plans, if the lines are jerked out of your hands, it's quick and easy to scoop them up again, and the lines cannot drop to the ground leaving you helpless to recover them.

I was explaining about sitting on the lines in a workhorse workshop at my ranch a few years ago, and I noticed that one student became distressed. When I was done talking he said, "Oh my God. If Mike had known that, he would be alive today." He then explained that his friend, Mike, had been driving mules for many years. Less than a year before, Mike was driving a pair of his mules on a buckboard when something caused him to lose one of the lines. With one line dragging on the ground he soon lost control and a full blown run away ensued.

Ultimately, the buckboard flipped over, dragging Mike down the gravel road beneath it. Mike explained that it was his fault – not the mule's fault – before he died in the hospital a few days later. Need I say more?

There are always risks when driving horses. But these 10 safety tips are proven ways of preventing some of the more common wrecks and keeping you and your horses safe.

**Be kind, be safe, and enjoy those horses,  
Doc Hammill D.V.M.**

*Doc lives in Montana and helps people learn about horses through his writing, workshops, demonstrations, and horsemanship video series. [www.DocHammill.com](http://www.DocHammill.com)*