

Safely Trailering and Loading Your Horse



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In order to have a successful trip with your horse, there are some safety considerations involved. It is important to know how to safely load and trailer your horse. Unsafe trailering and loading can lead to accidents and health concerns.

When trailering a horse, you want to be sure that:

- **Your trailer is modern and safe in design.** New features making trailers even safer arrive on the market every year. Some features that may increase safety and minimize stress include insulation, mats, screens, window bar guards, removable or no center post, removable hay bags, and water tanks. More expensive features include things like interior fans, air-ride suspension, closed-circuit TV cameras, and air-conditioning. This may not be affordable for the average person.
- **Your hitch is perfectly rated for your trailer.** Hitches can be weight-carrying or weight-distributing. The difference is that a weight-carrying hitch supports the weight of the tongue as it presses down on the hitch while a weight-distributing hitch (equalizing) lets more tongue weight be carried and keeps the trailer more stable and level by distributing the tongue weight to all the wheels of the tow vehicle and trailer. Using a weight-distributing hitch is especially important when driving a shorter wheelbase vehicle such as an SUV versus a full size pickup. The rating is stamped on the hitch; there will be a rating for weight-distributing capacity, tongue weight and weight-carrying capacity. The slide in ball mount and the ball will also be stamped with a rating of capacity. Remember that the actual capacity is only as great as the capacity of the weakest part: slide-in ball mount, coupler, or hitch. Also remember that you can tow a lighter load with a heavier hitch but not a heavier load with a lighter hitch.
- **Your tow vehicle is appropriate for your trailer.** Preferably you should know what type of trailer you will be towing or have in mind a specific trailer before buying your tow vehicle to be sure that you are selecting the appropriate vehicle. Read the automobile or truck manufacturer's towing vehicle guide and select according to which tow vehicle meets your needed towing capacity. You will be considering engine size, transmission, and axle ratio. Axle ratio is the gearing in the differential that multiplies torque to the rear wheels.

- **The horse is positioned in the trailer in a way that minimizes stress.** Recent studies have examined these effects and found that:
 - Heart rates were not different between horses facing forward or backward;
 - Horses shipped parallel backwards slipped more than horses shipped parallel forwards, slanted 45 degree forwards, or slanted 45 degree backwards;
 - There was a slight preference for horses to have a 45 degree orientation in trailers, but no preference for facing either away or towards the direction traveled;
 - Untied horses spent more time facing backward than forward in a moving trailer and several horses had strong preferences for the directions they faced while being transported;
 - In one study, rear facing horses were better able to maintain their balance and horses seem to be able to balance better if they can freely raise and lower their heads (i.e., no saddle compartment in the way);
 - In one study, horses on the right side of the trailer had a tendency to lose balance more often;
 - Unshod horses had more foreleg movements than shod horses but only tended to slip more than shod horses.
- **When hauling long distances, consider feed, water, rest stops and unloading a necessary part of the trip.**
 - Have enough feed and water on board for the number of days you expect to be on the road, and extra in case of emergency;
 - If hauling horses a long distance, you should feed on their regular schedule;
 - Make a rest stop at least every 3 to 4 hours and stop for at least 15-30 minutes. Offer water at the beginning and end of each rest stop. Dehydration is one of the potential side effects of trailering horses. Be sure your horse is drinking regularly. Inspect boots and wraps and reposition shifted headgear such as fly masks and head bumpers. Check the length of your horse's restraint if your horse is tied. Assess ventilation conditions and make adjustments as needed;
- Stop for 45 minutes every 7.5 hours to change hay nets and remove feces.
- If stopping overnight hand walk the horse or turn it out if you are at a place where there is a paddock available;
- It is not wise to unload your horse in any area where it may be dangerous to horses or humans. Nervous horses may spook and become free creating a dangerous situation. Use your judgment when choosing to unload and exercise a horse. Many commercial haulers do not unload horses during transport due to concerns about their ability to reload the horse and the horse's reaction to an unfamiliar situation as well as the potential danger. If horses are hauled long distances they should be given a week to recover before being strenuously exercised.
- **The trailer has enough space and light inside for your horse to feel comfortable.** Since horses are prey animals, they will be unlikely to want to go into a dark, enclosed space. They run from prey in the wild if possible and try to avoid dark, enclosed situations. Also make sure that the trailer is tall enough and wide enough for the horses you are hauling. Recent research indicates that the number of injuries is less if a floor area of 1.14 to 1.31 square meters per horse is provided. The trailer should not reach temperatures above 75 to 90° F, which is the upper critical temperature, at which the horse cannot remove heat quickly enough to avoid heat stress.
- **Humidity above 50% will interfere with their ability to remove heat.** If you do not have an air-conditioned trailer you should consider these factors and attempt to transport horses at times when heat and humidity are decreased or avoiding transporting the horse at all in these conditions.
- **The trailer has adequate windows, slats and roof vents for proper ventilation.** Proper ventilation is very important to the respiratory health of your horse. In one study:
 - ammonia and carbon monoxide were below acceptable limits for human exposure;
 - particulate matter was above safe limits for human exposure.

This is why some people do not advise feeding hay in trailers. However feeding hay can be beneficial to keep the digestive tract moving, prevent colic and keep the horse occupied while trailering.

- **The trailer has no sharp edges.** Sharp edges can cut or injure the horse or handler.
- **You do not compromise on strength and integrity of floors and underbraces.** There are many horror stories of horse's hooves puncturing the floor of an old trailer as it traveled down the highway. Regularly remove mats and check floorboard integrity. Manure and feces trap moisture under the mats if not cleaned regularly and oftentimes prematurely rot the floorboards.
- **The ramp is solid, low, non-slip and long enough.** If a horse kicks the person lifting the ramp she/he will not get kicked in the head if the ramp is long enough. Also be sure that the ramp is as wide or wider than the trailer opening, so horses do not step off the ramp.
- **Latches, butt bars, breast bars, tie rings, etc. are tough enough to withstand the wear and tear of the largest, strongest horse hauled in the trailer.**
- **Butt bars, breast bars, posts, and dividers should be removable and easy to move in case of an emergency.**
- **Tires are well inflated and in excellent condition.** Check the tires to be sure that they are inflated to the proper air pressure. Carefully check tire valves and valve stems to be sure they are not worn.
- **Rotate and have tires on trailers balanced regularly.** If you have not used the trailer in a while be sure the tires are not dry rotted.
- **Trailer construction should be durable enough for the size, weight, and strength of the horse(s) and equipment hauled in it and will maintain its integrity in a traffic accident.**

- **The suspension is the best available.** Rubber torsion suspension has been found to be far-superior to drop-leaf suspension. It decreases shock by as much as 98% and stress to the horse while having better handling and stability. Also, each axle in rubber torsion suspension is attached separately to the trailer bottom which means that if you go over a pothole with one of the wheels it does not drop into it, and the trailer is supported on the other three wheels. As the first wheel passes over the hole, it ends up on solid ground and supports the following wheel while it is pulled over the hole. This also means that the trailer could be pulled for a time without one of the wheels.
- **Check that lights, blinkers, breakaway brake and trailer brakes all are in excellent operating condition.** Turn on all of the lights and walk around the trailer making sure all lights are on. Turn on the left blinker, walk behind the trailer and make sure that it is working. Do the same with the right blinker. Test the brakes to be sure that they function by taking the trailer a short distance in a small area such as your driveway or a nearby empty parking lot and adjust the trailer break to be sure they are responsive. Keep brakes in excellent working condition through regular maintenance and have a mechanic go over them at least once a year at the same time you have your tires inflated, rotated and balanced.
- **You always carry a first aid kit on board, health papers if traveling out of state and a Coggins report.** You will need proof that your horse was in good health within the last 30 days if traveling out of state (regulations vary by state so check with the Department of Agriculture for the state-specific regulations). Proof of negative Coggins test (for Equine Infectious Anemia) is required when traveling and wherever horses gather in a group. This test should be repeated annually. Western states may also require you to carry a brand inspection certificate.

- **You always carry enough water for routine travel in addition to what may be needed in case of emergencies like breakdowns, traffic jams, cleaning wounds, etc.**
- **You always carry a roadside kit that includes serviceable spare tires for both your truck and trailer in addition to a jack, tire iron, tire change block, wheel chocks, wrenches, screwdrivers, fuses, jumper cables, flashlight, flares, and a fire extinguisher. You may also consider carrying names and phone numbers of contacts along the way and contact information for recommended layover barns for long trips.**
- **You have road service for truck AND trailer.** USRider provides 24-hour, nationwide emergency road service for noncommercial haulers.

Loading horses is another place where safety is definitely a concern. Many horses refuse to load into trailers and a major skirmish can ensue. The best bet is to practice loading horses before you need to take them somewhere. Here are some ways to safely load your horse:

- **Check the trailer over for safety prior to loading.**
- **Wrap the horse's legs or apply shipping boots.** Be sure that the leg is covered from the coronary band to the knee or hock. This will help you avoid damage to the horse's legs which may require medical treatment or result in permanent injury to the horse. Standing bandages, properly applied, are recommended for a long trip and may offer more support to the legs than shipping boots.
- **Put a head bumper on the horse.** This will protect the horse if it should inadvertently hit its head when loading, unloading or while traveling.
- **Consider a tail wrap if the horse tends to lean on the butt bar.** This will protect the tailbone from damage, but must be applied properly to avoid causing more harm than good.
- **Wear boots and consider wearing gloves when loading horses.**
- **Never put a horse into a trailer that is not hitched to a tow vehicle.**
- **Park the trailer in an area where there is solid footing when loading the horse.**

- **Make sure there are no hazards nearby such as farm equipment, fence posts, etc. when you are loading.**
- **Be sure that the doors don't stick out where they can knock a horse or handler in the head.**
- **Make sure that the door latches do not stick out the sides of the ramp when it is down.** Horses and handlers can be injured on these parts.
- **Turn on the lights and open the doors to make it light and airy when loading.**
- **Do not use tranquilizers unless you have consulted a veterinarian and have experience administering these drugs.**
- **Don't try to teach the horse to load when you are in a hurry!** Training sessions should be undertaken when you don't have to be anywhere such as a show, trail ride, or clinic.
- **Do not use unnecessary force to train a horse to load.** This will only stress the horse more and make it more unlikely to want to load.
- **Two methods to train a horse to load into the trailer include:**
 1. Have the horse work hard, then rest at the trailer.
 2. Encourage and reward each step toward the trailer.
- **Never lead a horse into the trailer if you don't have an easy escape route.**
- **Lead the horse into the trailer as if you expect it to follow you.** Any sign of hesitation on your part may make the horse hesitate as well. Don't act nervous or unsure, be confident and most likely the horse will be confident as well. Don't turn to face the horse as you load it, this may make the horse stop. Look forward and walk right up the ramp.
- **Never get into a trailer with a panicked horse.**
- **Consider getting help from a competent professional if you are having trouble getting a horse to load.** Ask for references. Watch their loading methods with other horses first. The trainer should encourage you to watch your horse being trained and teach you how to continue the training at home.

Hopefully this publication has given you some ideas on how to trailer and load your horse safely. If you are having trouble don't hesitate to consult an equine professional for ideas and help. Safety of you and your horse should be your first priority. By following these tips, you are more likely to have a safe and happy trailering experience with your horse.

Sources:

- Clark D.K., Friend T.H., Dellmeier G. 1993. The effect of orientation during trailer transport on heart rate, cortisol, and balance in horses. *Applied Animal Behaviour Science* 38: 179-189.
- Gibbs A.E., Friend T.H. 1999. Horse preference for orientation during transport and the effect of orientation on balancing ability. *Applied Animal Behaviour Science* 63: 1-9.
- Scheve N.K, Scheve T.G. 1998. *The Complete Guide to Buying, Maintaining and Servicing a Horse Trailer*. Howell Book House, NY.
- Smith B.L., Jones J.H., Carlson G.P., Pascoe J.R. 1994. Body position and direction preferences in horses during road transport. *Equine Veterinary Journal* 26(5): 374-377.
- Smith B.L., Jones J.H., Hornof W.J., Miles J.A., Longworth K.E., Willits N.H. 1996. Effects of road transport on indices of stress in horses. *Equine Veterinary Journal* 28(6): 446-454.
- Stull C.L., 1999. Responses of horses to trailer design, duration, and floor area during commercial transportation to slaughter. *Journal of Animal Science* 77(11): 2925-2933.
- Toscano M.J., Friend T.H. 2001. A note on the effects of forward and rear-facing orientation on movement of horses during transport. *Applied Animal Behaviour Science* 73: 281-287.

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