



Horse Trailer Safety

Pulling a trailer, particularly a large, heavy trailer which contains animals that can affect the behavior of the trailer, is a challenge. Read on to learn more about equipment, techniques, and tips that will make your experience safer and more enjoyable.

Towing:

Driving a vehicle while towing and maneuvering a trailer is totally different than driving without a trailer. All of the usual driving challenges are magnified by the trailer behind you. A few of the differences are maneuvering becomes more difficult, stopping distances increase, tow vehicle performance changes, and much more space is taken up on the road.

Trailers can be categorized by the method of connection to the towing vehicle. The two most common connection methods for small and medium horse trailers are "bumper pull", connected to the tow vehicle at the rear end of the frame, and "gooseneck" attached to the frame over the rear axle of the tow vehicle.

All trailers can substantially change how the tow vehicle will respond, particularly during emergency maneuvers. In addition, unlike static load trailers, horses can, and do, move around inside a trailer, which can change the handling characteristics of the trailer.

The Right Rig:

Vehicle manufacturers carefully design and test their vehicles to perform under certain conditions. Vehicles designed for towing are usually modified to handle the extra load and stresses caused by towing a trailer. Manufacturers often add additional features such as engine and transmission coolers, heavier brakes, and different drive gear ratios.

Just because a certain vehicle can move a trailer on a flat, paved, empty road does not mean that it is capable of safely handling the trailer at speed, with other traffic around, or while bad things are happening. Pay attention to what the the vehicle manufacturer recommends, and adding at least a 10% margin is strongly encouraged. If the manufacturer lists the towing capacity as 8,000 pounds, limit your **total load** to 7,200 pounds. The vehicle manufacturer will also specify the maximum downward weight that can be applied to the trailer hitch, known as "tongue weight". Too much weight will cause handling problems and can bend the frame of the tow vehicle.

Any trailer suitable for carrying horses should have its own brakes. Brakes on small trailers are usually electric and the tow vehicle should be equipped with a trailer brake controller, which applies the trailer brakes in concert with your tow vehicle brakes. The controller should also provide a manual means of applying the trailer brakes - a critical feature when dealing with certain emergency situations.

Tires:

Tire condition for both tow vehicle and trailer is critical. Tires must be properly rated for the load and conditions of expected use. Tires with insufficient tread depth or physical damage should not be used. Tires also deteriorate due to age, which is why all tires sold in the U.S. have a date code on the sidewall. Both vehicle and trailer manufacturers specify the proper inflation pressure for tires in order to assure proper performance. The pressure listed on the tire sidewall is the maximum inflation pressure, not the recommended inflation pressure. Tires, including spare(s), should be inspected for proper inflation and condition before every trip. Valves and valve stems should be inspected and should not leak. If in doubt, have a professional conduct an inspection.

Extensive testing has demonstrated that tire failures do not necessarily cause loss of control of the vehicle so long as the driver does not induce a loss of control due to panic.

If you experience a flat tire, slow down smoothly, making no sudden or extreme direction changes, and as the speed decreases move off the road (if possible) to a place where you can safely change the tire.

Your Trailer:

Trailer floors should be inspected regularly for rot and/or rust, and replaced if necessary. The trailer should be tall enough for the animals being hauled and should have proper lighting and ventilation. Latches, butt bars, breast bars, and tie rings should be strong enough for the animals being hauled as well. If they are removable in case of an emergency, that is a plus. Lights, blinkers, break-away brake and trailer brake should all be operational. In addition, reflective tape can be added to the rear and sides of your trailer to make it more visible at night. Ramps should be non-slip and long enough. If you have a smaller tow vehicle, the addition of stabilizer or equalizer bars may help prevent sway. When towing, safety chains should be properly secured every time. Don't let the chains drag, as sparks could be a fire danger, and this will also weaken the chains.

Regular Maintenance:

Regular maintenance is an essential part of trailer safety. Inspect welds, hitch, safety chains, and brakes, including emergency brakes, brake-away cable, pin and control box. Inspect the floor, and apply wood sealer to wood floors annually. Remove mats and pressure wash at least once a year. Inspect the underside of the trailer for rust and rot. Check the entire trailer for sharp edges, rust and corrosion. Check for cracks in hinges and springs. Check windows and roof for leakage. Grease the hinges and springs. Unless sealed by the factory, pull, check and repack the wheels annually. Check all latches, and make sure doors and windows properly latch. If you are not comfortable performing these inspections yourself, almost any trailer dealer can perform them for you. Always remove manure after each use.

Before You Go:

Now that your rig has been properly maintained and has passed any safety inspections, here are a few tips on getting ready to go. Plan your route, and check on availability of overnight stabling, if necessary.

Make sure to bring any necessary health papers for your horse, feeding and handling instructions, emergency contacts and contacts for roadside assistance.

Always carry more feed and water for your horses than you think you will need. Include any other gear your horse might need, such as shipping boots, leg wraps, blankets or head bumpers. Bring at least one extra halter and lead rope.

Your roadside kit should include spare tires (two for the trailer), a jack and lug nut wrench for both the tow vehicle and the trailer, wheel chocks, flares, flashlight, fire extinguisher, and jumper cables. Be sure your roadside kit is accessible in the event of an emergency.

Make sure to walk around your trailer before leaving for an additional check of tires, safety chains, hitch, and to ensure that all trailer doors and windows are secure.

Loading And Unloading:

First of all, practice this until your horse is good at it **before** your trip. Pick an area with solid footing and no nearby hazards. Have your trailer hitched to your tow vehicle. Be mindful of your position at all times when loading or unloading a horse. Also, never enter a trailer with a panicked horse – no matter what!

If you choose to secure the horse's lead rope to a point in the trailer, use a safety release knot or breakaway restraint. However, don't secure the horse's head until either the divider or the door behind him is latched, nor should you open the doors or dividers while the horse is still tied. Never travel down the road with your horse's head outside the trailer. Consult the trailer manufacturer for recommendations as to where a single horse should be positioned, and how to distribute the weight of multiple horses when hauling.

On The Road:

Remember, your horse does not have hands to hold on with and can't see what's coming. Therefore, stop, start, and turn gradually, giving your horse time to adjust and brace. Take it easy over bumpy dirt roads. Remember, with all of the additional weight, you will require a lot of extra time to stop, so make sure to maintain adequate following distance, which is much greater than for a passenger car.

Open outer windows, slats and roof vents to ensure proper ventilation. This is essential for the horse's respiratory health and to disperse heat. Temperatures over 90 degrees or humidity greater than 50 percent can be both uncomfortable and dangerous for your horse. Proper circulation disperses particulate matter and heat, circulates ammonia and carbon dioxide out, and provides fresh air. Poor ventilation combined with the stress of hauling can contribute to serious health problems for your horse, such as shipping sickness (pleuropneumonia).

It is also important to tie your horse properly. He should be able to lower his head to clear his airways, but not be able to reach down to the trailer floor, or reach other horses.

Avoid stopping for long periods of time, especially in hot weather. Make sure your horse is well hydrated before you go, and offer water regularly during your trip. Maintain your horse's regular feeding schedule. Keep hay bags full as this will keep your horse occupied, but make sure that they are properly secured and tied high enough so that your horse can't get a leg through them. It is recommended that you stop and rest for about 30 minutes every three to four hours. This is a good time to fill hay bags, remove manure and inspect your rig. Trailering for longer than twelve hours is not recommended.

If unloading overnight, it is recommended to either hand walk your horse or turn it out for a little while before putting him or her away for the night. If possible, avoid unloading your horse in an unsafe area, such as along a busy highway. Considering your horse's comfort while on the road may help ensure that he will load up willingly next time.

Remember:

Following too closely, excessive speed, inattention, fatigue or alcohol all contribute to accidents.

If You Are In An Accident:

Call 911 immediately, let the dispatcher know that there are horses involved, and ask that large animal rescue be involved, if necessary. Use extreme caution if you must go into the trailer with an injured horse. A panicked horse may try to escape through an open door or window and may bolt once out of the trailer.

Proper and complete training on how to hook up, maneuver, tow and respond to emergency situations is essential to safe trailer operations.

~~~~~  
*All information, opinions and recommendations contained herein are offered solely as suggested guidelines. Readers are solely responsible for determining which guidelines to follow, and the safe and proper application of any guideline(s) followed. Neither the authors, nor the State of Arizona, assume liability for any issue(s) arising out of any information, opinions or recommendations presented in this guide.*

This brochure was made possible by a grant through the Arizona State Parks & Trails.  
Designed/Printed by the AHC Foundation,  
and the Arizona Horse Council.  
Certain information reproduced herein by permission of AERO.

