

Preparing for Winter Shorter Days and Longer Nights

Shorter days mean falling temperatures and everything changes when they reach +32°F. Rain or water that collects on the road surface will turn into snow and ice at +32°F. Those conditions place every driver at a disadvantage. Vehicle control is difficult for everyone but it becomes even more challenging for a trucker.

The number of days per year of +32°F or colder will depend on where you drive. For example, www.cityrating.com says that Des Moines will have about 134 days per year and Denver has 156 days per year. Most of these +32°F or colder days will fall between November 1st and April 15th for the cold weather states in the lower 48. It isn't a coincidence that snowfall occurs during that date range too, and that's when vehicle control needs special care and attention.

Winter Driving Tips

Safety Meetings. The best drivers never stop learning. Safety meetings are a great opportunity to brush up on skills and share the experiences and the knowledge of other professionals who know your business.

Getting Rolling. Make sure all tires are turning and that the trailer brakes have not frozen. Never drag tires to free frozen brakes. And never let air out of your drive tires to gain traction – it's a myth that reducing air pressure improves traction since an under-inflated tire actually loses traction. If too much air is lost the inner sidewalls can rub and create the danger of a fire. Using kitty litter or sand will provide better traction than removing air from the tires. Very cold tires will have a flat spot after extended parking – stay at low speed to let the tires flex and become round before reaching higher speeds.

Anticipation. Safe drivers anticipate and adjust for the mistakes of others. The first winter storm of the season is more risky than the last storm of the season simply because most drivers are not ready.

Bridges and Overpasses. Not every driver will remember that bridges and overpasses will ice up before the roadway surface. You can sometimes see a coat of frost on bridges – this is going to be very slick. Also, snow and ice can build up *under* the bridge reducing clearance, increasing the risk of topping the trailer.

Bobtailing. Avoid it in winter if you can. Period. If you must bobtail, safety requires travel at much slower speeds than normal with extra room between you and other vehicles.

Bobtailing. Avoid it if you can . Period.
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Momentum Rules. It's going to be more difficult to change directions or stop if the roads are slick. When traveling on snow, your tires are just barely grabbing the road but when traveling on ice, your tires may not be grabbing the road at all. When you want to change direction or speed, momentum wants the truck to keep moving in the same direction and speed. Slow and gentle moves are the keys – accelerating, turning, braking, and stopping – all must be done slowly and gently when the roads are slick. To do this, the driver has to anticipate turns and stops to avoid sudden changes. When the road is slick, momentum means that sudden changes of any sort are risky and dangerous.

Jackknife. This isn't as common as it once was but it still happens. A jackknife begins when the rig has momentum and the angle between the tractor and trailer reaches a critical point. That angle is only 15 degrees. Once that point is reached almost any action of the driver to correct the jackknife is futile so the key is prevention. Most likely causes of jackknifing are: driving too fast for conditions is at the top of everyone's list; over-braking and locking up the wheels; (the engine retarder can cause a jackknife on slick roads too so turn it off) over-steering such as turning the steering more sharply than momentum and tire grip will allow; over-accelerating and applying too much power to the drive making the tires spin.

Owner Operator Newsletter



Blind spots. If you can't see, you can't drive. If you can't see well, you can't drive well. Please make sure mirrors and windows are clean and clear and that all lights are working properly including marker lights. Remember, a four-wheeler could be inside that cloud of snow next to your trailer. Lean and look – lean forward when looking in the mirrors for better visibility.

Chains. Knowing state chain laws will help you, especially for mountain states. Not every state has a chain law but each state publishes useful information on their state website. Twenty-five miles per hour with chains is considered the maximum speed by many experts. It might be a good policy to decide that if you must chain-up to drive, maybe you shouldn't drive. Every driver has different skills and just because one driver makes it through a difficult trip does not mean every driver can make it, or should even attempt it.

Mountains. That's where you'll find less oxygen and steeper roadways. Gravity rules so save your brakes – no overheating and no burning odor. Use your engine and transmission as the principle braking effect. Be in the correct gear at the top of the grade because if you want to be moving slowly at the bottom of the grade, be sure you are going slowly at the top. More weight means the brakes work harder so match the gear you are in with the weight of your rig. Melting snow runoff across the road will quickly turn to ice after sundown. U-Haul or other rental trucks are often driven by someone with little knowledge and experience of handling anything bigger than a sedan. Plan and rehearse your reactions if wildlife suddenly materializes on the road in front of your rig and remember the danger in sudden actions for swerving or braking.

Mountains – less oxygen, steeper roads, where gravity rules.
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Speed. Slick roads combined with speed are a killer combination. Steering, starting, stopping all require friction and friction is reduced on snow and vastly reduced on ice. In perfect conditions a cushion of space all around your truck is needed – that cushion of space must be much larger on slick roads. Always look for a way out. Remember, more reaction time is needed and a greater following distance is required for safety. The normal six seconds of following time may not be enough when the roads are slick.

Wind. Don't be surprised by a strong side wind when coming out from behind a hill or from under an overpass. It's a good time to park if the wind is especially strong and there is ice on the roadway – even patch ice when driving in windy conditions can cause loss of control.

Weight. When roads are slick, weight is your friend. You will add to traction for accelerating, braking, and turning when you have as much legal weight as possible. But remember, a spinning wheel has little traction and zero cornering ability regardless of weight. Be careful of ice and snow buildup because this can cause the rig to gain weight and then become gradually overweight and subject to a fine.

Parking. A dropped trailer will be easy to get rolling again by dragging trailer brakes lightly for a few blocks before parking. This will dry out moisture that's collected on the shoes or the drums. Park where you won't get easily plowed in and there will be jumper cable access. If possible, park at a maintenance facility or an operating center. After the tires have cooled, move forward or backward a couple of feet to prevent ground freezing.

Post-trip inspection. A pre-trip inspection is required by law but a post-trip inspection can reveal problems that might be fixed while in the sleeper berth or off-duty. Finding that problem on the next pre-trip inspection instead could cause an expensive delay.

Then next issue will cover personal safety, engine starting, and equipment winterization, and more.

Safe Wintertime Travels!