



ROLLOVERS

A Situation to Avoid

Rollovers, especially with a liquid product, can occur quickly from a variety of situations:

- Taking curves/turns too quickly
- Changing lanes too suddenly
- Veering off the road and over-correcting
- Veering off the road that has a mild to deep drop off
- Veering off the road with soft shoulders
- Swerving to avoid objects or animals in the roadway

Going downhill with a curve or winding road can be dangerous for any vehicle. However, for a cargo tank vehicle at heavy weights with a liquid product, the situation going downhill becomes even more hazardous. The liquid product is already surging towards the front of the vehicle, so if you are going too fast, braking too hard and/or suddenly, this can cause the liquid product to surge more and turn the truck over.

Keys to Success:

Preparation is important for any driving adventure. There are some keys to success to handling downhill grades and curves.

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1. Training

Training is one of the most vital keys to success. You can never be over-prepared for any driving situation. Handling vehicles with cargo tanks transporting a liquid product downhill and around curves can be very dangerous. Driver training should address the handling characteristics of vehicles in these situations whether the driver is a fairly new commercial vehicle driver or even an experienced driver that may not have driven with liquid cargo tanks. For managers hiring and training drivers, ***do not*** assume the driver knows how to operate a commercial vehicle transporting a liquid cargo. ***As a reminder, the Federal Motor Carrier Safety Administration requires a road test to be performed and documented upon hiring for any driver who will be operating a cargo tank.***

Below are two videos available to share with your new and existing drivers addressing rollover prevention with cargo tank vehicles:

FMCSA - Cargo Tank Rollover Prevention Video

<https://www.fmcsa.dot.gov/rolloverprevention>

Propane Education & Research Council (PERC) - Rollover Prevention

<https://training.propane.com/#/catalog/f5722c4c-0dd3-4ab9-96df-7e80e085c464>

2. Maintenance

A well maintained vehicle will also help to ensure positive results. Good tires and brakes that are properly adjusted are obvious keys to handling downhill grades and curves. Never ride your brakes down the hill. This causes excessive wear and can overheat the brakes leading to fires and brake failures. The Federal Motor Carrier Safety Administration requires post and pre-trip inspections to be performed. Do not take these inspections lightly as they can be the difference between a catastrophic accident and a successful trip.

3. Observations

Be aware of signs that warn of downhill grades and curves. Maintain proper distance from other vehicles. Observe the road and weather conditions. These will affect how you handle and adjust the speed of your vehicle.

SIGNS

Usually significant declines or downgrades are identified in advance to alert drivers of what is ahead. Take these warning signs seriously. They are posted for a reason.



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4. Driving

Putting your truck into a proper gear is one of the best ways to maneuver safely down a steep hill or sizable downgrade. The gear you select will depend on your training, experience, load, and comfort level.

To safely maneuver going downhill and around a curve, slow and steady wins. In a recent trucking blog a rookie driver stated, ***"You can go too slow as many times as you want, but can only go too fast once."*** Posted speed limits are general safe guidelines; but, they may not be safe for all types of vehicles, vehicle loads, road or weather conditions. It is best to be on the safe side and go slower than the posted speed limits going downhill and for any curve, even ramps.

The result of these accidents tend to be severe with high damage to the vehicle, injuries to the driver, and usually an environmental impact. The incident you see in the beginning photo could have ended up so much worse than it did; but you cannot control the outcome when you are out of control. You can never be too careful. Take the time in your company to discuss maneuvering safely down hills and curves and in general, preventing rollovers.

Safe Reminders:

- Address driving on hills and around curves for road tests and other driver training meetings.
- Maintain braking systems and check every day during the vehicle inspections. Your life and others depend on them. DO NOT RIDE YOUR BRAKES. Whenever possible, AVOID BRAKING HARD OR SUDDENLY.
- Shift into a lower gear before descending down a hill. NEVER PUT YOUR VEHICLE IN NEUTRAL.
- Watch for signs that alert you to downhill grades and curves.
- Drive slower than the posted speed limits.
- Maintain proper space from other vehicles.
- Do not pass other vehicles.

Safe Travels!

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