

Instructor Notes: Accidentally driving off the road – especially at high speeds – is scary and dangerous but you can recover safely if you ignore your instincts and remember not to panic by oversteering, also known as “overcorrecting.” Take a few minutes to discuss this problem with your staff and develop a plan before they actually need one.

Safety Meeting 2015 #2 – Overcorrecting and Rollovers



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It's a particularly common scenario – one that can be extremely frightening, even for an experienced towing operator – you suddenly realize that your passenger-side tires have drifted off the roadway. Panicking, you impulsively yank the steering wheel to the left. While this response is instinctive, it can also make matters much worse. Overcorrecting often causes a driver to run off the other side of the road, drive into oncoming traffic head-on or worse, roll your truck.

Alarming, the Insurance Information Institute has found that approximately five percent of all fatal vehicle crashes are caused by overcorrecting, so during this safety meeting we will discuss the dangers of overcorrecting and offer a few ideas to minimize your risk.

Anatomy of an Overcorrection Rollover

To identify the underlying action that causes an overcorrection rollover you have to understand that gravity forces vehicles to act in a few unique ways: roll, pitch and yaw. “Roll” is the side-to-side tilting sensation often felt in cornering. “Pitch” is the front or back tipping movement felt when you accelerate or apply your truck's brakes. “Yaw” is the rotational spinning felt during a skid. All three are relatively harmless until you apply them to a fast-moving vehicle.

In the late 1600s, Sir Isaac Newton developed three theories that helped explain objects in motion but it is his first law of motion, sometimes referred to as the law of inertia, that has particular importance in this

lesson. Newton's first law states: “An object at rest stays at rest and an object in motion stays in motion with the same speed and in the same direction unless acted upon by an unbalanced force.”

This means that when you are driving your truck in a straight line at a significant speed and you yank your steering wheel to the left (unbalanced force), Newton's law identified that your truck's mass wants to continue moving in a forward direction but your erratic steering causes it to yaw to the left, and its center of gravity causes it to pitch forward and roll to the right ... thereby flipping your truck.

Causes of an Overcorrection Rollover

- Distractions (i.e., using a cell phone, fiddling with the radio, eating or drinking, etc.) keep drivers from devoting their complete attention to the road ahead. And it only takes a moment for a vehicle to drift out of its lane or off the road.

- Fatigue. When a fatigued driver nods off only to awake to the sound of his or her tires on rumble strips, overcorrection is a common response.

- Impairment. Drivers who are under the influence of alcohol or drugs are considerably more likely to veer in and out of their lanes. They are also less able to assess dangerous situations and would likely overcorrect due to their altered mental status.

- Traveling too fast for conditions. For example, speeding along a sharp curve can cause you to drift off the road, which frequently leads to overcorrection.

Fight Your Instincts

If you find that your vehicle's passenger-side wheels have drifted off the side of the road, stay calm and resist the instinct to jerk the steering wheel to the left. Instead, firmly grasp and control the steering wheel, drive straight and reduce your speed gradually by taking your foot off the accelerator – don't slam on the brakes. According to the American Automobile Association, heavy braking on two different surfaces, such as hard pavement and soft dirt, will cause your truck to skid. Once you've slowed down, gently steer your vehicle back onto the pavement when it is safe to do so.

Wrap Up

Tow trucks with high centers of gravity are prone to roll when steering is overcorrected and loaded car carriers are even worse. Be familiar with your truck and your surroundings. You tow enough vehicles that have rolled over to learn from their unfortunate experiences. Be safe.

If you need ideas on how to prepare and present this information to your drivers, please call me at 847-894-0042 or email me at pgratz548@comcast.net.

Patrick Gratianna grew up in a towing family and has been involved in the Chicago towing industry for over 25 years. He remains active in the towing industry (www.towingexpert.com) and has been writing towing safety articles for over 14 years.