



## Understanding S.A.F.E. Driving

The tanker driver was making a right turn on a road he traveled every day. This time, however, he could feel his load shift, his tank lift, and suddenly the entire transport was lying on its side. The truck and tank were totaled, and leaking fuel required environmental clean-up. The driver was not injured, but he was cited for excessive speed for the conditions. One moment of unsafe driving resulted in a \$250,000 insurance claim.

Rollover accidents like this one happen far too often in the petroleum industry. The tractor, tank, and load are usually total losses. Oftentimes, the driver is seriously injured or killed.

### What causes rollovers to happen?

Some causes show up frequently in accident investigations. There are four common reasons for tanker accidents: Speed, Attention, Fatigue, and Emotion (S.A.F.E.). Individually, these factors can cause a rollover; in combination, an accident becomes almost a certainty.

- Excessive **Speed** requires quicker reaction and makes it difficult to recover from shifting loads.
- Lack of **Attention** takes the driver's eyes and mind off the road.
- Driver **Fatigue** slows reaction times, while equipment **Fatigue** adds to the rollover potential.
- **Emotion** can influence a driver's response to his or her environment.

### How can petroleum haulers prevent rollovers?

First and foremost, companies need to hire qualified drivers. At a minimum, review potential drivers' motor vehicle records, and consider including drug tests and background and reference checks as part of your hiring practices.

Next, train drivers on the effects Speed, Attention, Fatigue, and Emotion can have on their driving. Explain the consequences of taking corners too fast, answering phone calls, driving while fatigued, lack of proper vehicle maintenance, or being overly emotional behind the wheel. Stress the importance of being completely focused on driving.

Specific driver training can also include these points:

**Load surge dynamics.** Discuss how the make-up and distribution of the load impact stability: In general, a fully loaded tank is more stable under normal driving conditions and handles much differently than a partial load. Since partial loads are also impacted by load location—front, middle, or back compartment—filling and emptying tanks also factors into stability. As deliveries are made, tank stability changes. Drivers should know their route and fill their tank compartments accordingly. Unloading compartments in a specific sequence can help stability.

**Off-tracking and Emergency Situations.** Speed management can help the driver maintain control in emergency situations, such as sudden stops or swerving to avoid a collision. Proper speed also keeps the wheels on the road during turns, and reduces the effects of off-tracking (i.e., tank tires running over a curb, median, or roundabout).

**Distractions.** Distracted driving is becoming an epidemic on the nation's roads. Not only must petroleum haulers stay focused on driving, they must also stay alert for other motorists who may be distracted. Large trucks don't have the maneuverability or stopping ability of smaller vehicles, so maintaining focus behind the wheel can help drivers avoid situations in which emergency maneuvers may be necessary.

New tanker rollover awareness training materials (which can also help businesses comply with DOT special training requirements for cargo tank drivers) is now available to Federated Insurance clients. To learn more, contact your [local Federated Insurance representative](#).

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