



**JOB AID**

# **Safe Vehicle Operations**

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As you know, driving trucks can put you in many dangerous situations. More truck drivers die on the job than anyone in any other occupation. Three factors that have the potential to cause accidents include speeding, following too closely and executing turns incorrectly.

## Speeding

Exceeding the speed limit is the leading cause of all motor-vehicle accidents. It is important for each driver to understand how speed can contribute to an accident. Speed can affect how your vehicle performs, and the distance required for vehicles to stop. These are the stopping distances required with perfect road conditions and full loads.

## Stopping Distances

Stopping distances only start after you recognize a situation in which you need to stop. Driver inattention can contribute to how long it takes your vehicle to come to a stop.

The weight of your load can also impact stopping distances. Because of inertia, the heavier your load, the greater the stopping distance.

When carrying a liquid load, be aware that each time you stop, the liquid moves to the front of the tank. If stopping abruptly, the liquid will surge to the front rapidly and will affect your stopping distance.

Other factors that can increase the distance required for your vehicle to come to a stop are weather, temperature, tire conditions and road type.

## Speed Limits and Rollovers

On U.S. interstates, highways and roads, posted speed limits are intended for private passenger automobiles. Large trucks should reduce their speed even further.

The rate of speed and angle of your turn can cause vehicle rollovers. Rollovers usually occur on straight roadways. The **four major factors** involved in most rollovers are vehicle speed, turn sharpness, turn banking and center of gravity.

When a truck is making a turn, the truck's center of gravity shifts to the outside of the turn. If the truck contains a liquid load, the liquid in the tank moves from side to side, causing what might be called "sloshing." If sloshing happens too suddenly, it can roll the vehicle.

**Remember, no job or schedule is so important that it is worth endangering the lives of yourself and other motorists.**

## Following Too Closely

As a professional representing your organization, you are essentially driving your company billboard on roadways. To most other drivers, following too closely is viewed as aggressive and may even be misconstrued as a form of road rage. Following too closely can also trigger road rage in other drivers. Your organization expects all drivers to operate their vehicles in a safe and professional manner.

According to the U.S. Department of Transportation's Federal Motor Carrier Safety Administration (FMCSA), following too closely is defined as a "situation in which one vehicle is following another vehicle so closely that even if the driver is attentive to the actions of the vehicle ahead, he/she could not avoid a collision in the circumstance when the driver in front brakes suddenly."

When on the road, it is imperative that you maintain space around your vehicle that will allow you time to think and take action if a hazard should arise. One way you can do that is to use the **"five-second rule."** To use the rule:

1. Look at the vehicle in front of you
2. Mentally plot a point of where that car is located using an object such as a sign, pole or other roadside object near the car
3. It should take you a minimum of five seconds to reach that point or object
4. If it takes you less than five seconds, slow down until the five-second distance is reached
5. Add two seconds for reduced visibility during inclement weather such as fog, rain or snow

Even if you are keeping a safe distance from the car in front of you, another vehicle might be following your vehicle too closely. To **maintain space behind you**:

- Stay in the right lane to allow faster traffic to pass
- Use the right lane in heavy traffic
- Stay in the right lane when traveling uphill
- Avoid any quick lane changes, sudden moves or fast stops
- Use your signals early and reduce your speed gradually
- Increase the following distance in front to allow the vehicle behind you enough room to pass
- NEVER flash your taillights, pump your brakes quickly or react in other ways that could aggravate the tailgater

## Turning

Turns are the third-leading cause of trucking accidents. Making left or right turns with long vehicles presents problems of which automobile drivers may not be aware. The vehicle length forces drivers to make wide turns, encroaching upon adjacent lanes of traffic. Turning also takes longer, increasing exposure time to hazards.

Most right-turning accidents occur because blind spots make it difficult for the driver to see other vehicles. When turning, you risk cutting off the flow of cross traffic or hitting a vehicle that may be in the blind areas on your sides. Always look for potential problems. Pay particular attention to the turn itself. If you question whether you can make the turn safely, chances are you can't. Therefore, find an alternative route.

Use your vehicle position to block off any traffic that could interfere with your turn. Always signal your intentions. Signaling alone will not make the turn safe but will warn other drivers of your intention to turn.

Some experienced drivers approach turns too fast and don't check their mirrors before they begin to pivot. By that time, if there is a vehicle in the way, it's too late to avoid a collision. Be sure to slow down to give yourself time to check the mirrors.

In some instances, other vehicles may be too far forward at intersections. You should wait for the vehicles to either back up or clear the intersection or find an alternative route if your path is not clear.

When you make **left turns**, you should:

1. Signal.
2. Scan the intersection.
3. Approach slowly in the left lane.
4. Enter the intersection.
5. Just before you turn, scan right to check cross traffic.
6. Glance forward left, guiding your trailer through the turn.

Make wider turns, when possible. Don't turn right before turning left. Remember that the nearest approaching vehicle often hides a second one approaching too quickly.

To make a safe **right turn**:

1. Approach slowly.
2. Signal your intentions well in advance.
3. Check mirrors before, into and through the turn.
4. Position the vehicle to block traffic from passing on the right.
5. Turn at a slow speed in second gear.

Identify parked vehicles. Watch for doors opening and pedestrians stepping out. Never back up once you have started turning. Don't turn left before turning right. Again, the nearest approaching vehicle can hide a second one approaching too quickly.

**REMEMBER:** If you are uncomfortable with making a turn and feel that it is too risky, chances are that it is! Re-evaluate and, if necessary, find another route. In most instances, a safer alternative might be a little farther up the road.