Commercial Vehicle Rear-end Accident Prevention

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Rear-end accidents can be costly

Rear-end accidents are by far some of the most costly of accidents in terms of frequency and severity. This is the case because they often produce bodily injuries.

With organized commercial fleets and trucking companies being major targets for plaintiff attorneys in litigation, the driver and any passenger in the other vehicle often see opportunities to file lawsuits, which can sometimes drag on for years with high loss reserves and climbing defense fees. Many times the vehicle that is rear-ended has several occupants, multiplying the number of claims filings. Even when bodily injury claims are legitimate, the cost can be high, especially if a truck strikes the back of a smaller vehicle.

Bodily injuries

A vehicle rear-ending another can cause legitimate bodily injury, even when the impact occurs at low speed and there is minimal damage to the other vehicle.

For example, our necks aren't designed for the sudden whiplash motion that occurs in these types of accidents. A good way to think of the force that can occur is to imagine your head as a 10-pound bowling ball supported by neck muscles. At the time of impact, the neck is whipped backward then forward in a split second, which can cause serious spinal injuries.

In addition, many state laws require that vehicle occupants wear seatbelts. However, you and your organization are most often at fault when a person in a vehicle in front of you is injured, regardless of seat belt usage.

Tackle the problem

Many times the cause of rear-end accidents is a combination of speed and space management. Tools to tackle the problem may include:

1. Generate motor vehicle reports (MVRs) on an annual or semiannual basis to identify drivers with moving/speeding violations. Remember: Most people speed and don't get caught. Someone with multiple speeding violations is an aggressive driver and needs to be counseled to slow down.
2. Have drivers utilize the four-second rule to provide space between themselves and the vehicle in front.
3. Hold regular safety meetings on this topic (Risk Engineering representatives or videos are available from State Auto® and its Risk Engineering Resource Library).
4. Offer incentives/rewards for safe driving.

Summary

Educating your fleet or truck operators with training and tips is crucial for their safety, as well as for the safety of other drivers on the road. Rear-end collisions are one of the most costly and most frequent accident types in the commercial fleet and trucking industry – but they may be avoided.

We've included a sample safety meeting outline and quiz for educating your workforce on preventing rear-end accidents. While this outline is not exhaustive, you may use it as a starting point reference, or another similar format, to help address this significant national problem.

As always, we're here to help. If you have questions, please contact the State Auto Risk Control Services Department.

Sample safety meeting outline

Meeting Objective

Space management is an important concept professional fleet and truck drivers should use to avoid collisions. Your focus is to help your employees avoid rear-end accidents.

Preparation

- Review your company's policy on rear-end accident avoidance and make copies for each of the company's authorized drivers, including any owner/operators or their fleet drivers.
- Be prepared to discuss the policy in detail and include:
  - The reasons for the policy are protection of life and property.
  - The consequences for not following the policy are loss of life, injury, property damage, and ultimate disciplinary action.

Materials Checklist

- Copies of your company's written rear-end accident prevention avoidance policy
- Flip chart and marking pens
- Sign-in sheet for safety topic and attendees

Discussion Guide

Tips to avoid rear-end accidents:

1. Keep at least four-seconds following distance. Following should never be less than four seconds in normal traffic conditions.
2. Add additional time for poor weather and traffic conditions. As your speed increases and/or driving conditions change, add one or more seconds from the vehicle in front of you.
3. Look ahead to the traffic situation and ask yourself, "What if ?"
   - Stay alert for sudden traffic stops and impatient drivers around your vehicle who may decide to suddenly change lanes in front of you.
4. Avoid frequent lane changes.
   - When looking to the sides to prepare to change lanes, be aware of traffic conditions ahead to avoid rear ending a vehicle in front after you complete your lane change.
5. When stopped at a traffic light and the light turns green, wait for the vehicle in front to proceed before you begin to move. Many times at traffic lights, rear-end accidents occur because the vehicle in front has not yet moved, but the car behind has. Even tapping a bumper at very slow speed can generate bodily injury.
6. Be careful around highway construction when lanes of vehicles are merging. Vehicles can cut in front of you and come to an abrupt stop.
7. Keep a good attitude when the vehicle ahead is going slowly. Don't tailgate. Show your professionalism and defensive driving skills.
8. Avoid sudden braking. When bobtailing a tractor, sudden braking can cause loss of control.
9. Avoid distractions while driving because they can adversely impact your attention to vehicles that suddenly slow or stop ahead.

   Distractions are anything that takes your eyes and focus off the ever-changing traffic conditions around and ahead of you. Some common ones include:
   - Spilled beverages
   - Eating
   - Looking at written material
   - Texting and talking on cell phones
10. Follow posted speed limits.
11. Be aware of perception distance: the number of feet your vehicle travels from the time an event occurs, such as brake lights ahead, until you see and recognize it.
12. Be aware of reaction distance: the number of feet your vehicle travels from the time you recognize the hazard and when you brake.
13. Be aware of braking distance: the number of feet your vehicle travels from the time you brake and when your vehicle stops is braking distance.

Rear-end Collision Quiz

1. What is the four-second rule?

2. How much time should be added to the four-second rule during adverse weather and traffic conditions?

3. Why are rear-end accidents usually so costly?

4. As a professional fleet / truck operator, my top priority in operating my vehicle is

A) Any way to make money

B) Being in a hurry to get the load off and maybe get a better load

C) Operating my vehicle in a safe manner to avoid accidents

5. Why should you ask yourself the question “what if” when driving?

6. When you’re stopped at a traffic light with traffic stopped in front of you and the light turns green, do not proceed until what occurs?

7. Can tapping a bumper at a slow speed cause a legitimate bodily injury claim? ☐ Yes ☐ No

8. Why should you be particularly careful around highway construction?

9. What can sudden braking cause when bobtailing a tractor?

10. What is perception distance?

11. What is reaction distance?

12. What is braking distance?

Answer Key:

1. The minimum amount of time between your vehicle and the vehicle directly in front of you.
2. An additional second for each driving condition
3. They generate expensive bodily injury claims
4. C) Operating vehicle in a safe manner to avoid accidents
5. To determine what action should be taken to avoid a collision if traffic hazards appear.
6. The vehicle in front of you moves forward
7. Yes
8. Merging vehicles that may suddenly cut in front of you and come to an abrupt stop.
9. Loss of vehicle control
10. The number of feet your vehicle travels from the time an event occurs, such as brake lights ahead, until you spot it and recognize the hazard.
11. The number of feet your vehicle travels from the time you recognize the hazard and when you brake.
12. The number of feet your vehicle travels from the time you brake and your vehicle stops