

Safety Newsletter

March, 2013.

This Month's Topic: Motor Vehicle Safety

Safely and defensively operating a motor vehicle on the road is everyone's goal –everyday! Daily driving for work or personal business poses risks for you and everyone on the roadway.

Understanding the fundamentals of defensive driving is essential and can reduce or control risk faced by each of us on the roadway. To that end, the following motor vehicle safety issues are discussed.

Driving too fast for conditions

You are least equipped to drive safely when you are under work /home-related stress. The goal of safety-conscious driving is to avoid collisions. Driving to avoid collisions is not always the same as driving within the legal speed limit. It's possible to be driving within the speed limit and still be driving too fast for conditions.

According to California basic speed law, "you may never drive faster than is safe for current conditions. For example, if you are driving 45 mph in a 55 mph speed zone during a dense fog, you could be cited for driving too fast for conditions."

Regardless of the posted speed limit, your speed should depend on:

- ◆ Traffic conditions—the number and speed of other vehicles on the road
- ◆ Road type and condition—whether the road surface is smooth, rough, gravel, wet, dry, wide, or narrow.
- ◆ Bicyclists or pedestrians walking on the road's edge or crossing the street.
- ◆ Weather—whether it is raining, foggy, snowing, windy, or dusty.
- ◆ And how you are feeling

Consider what other drivers might be doing and give yourself enough space and time to stop or react under current driving conditions. Also, bear in mind that:

- ◆ Stopping distance equals your reaction distance plus the actual braking distance of your vehicle.
- ◆ Perception time by US DOT standards can be any time from as little as one-tenth of a second to never.
- ◆ Most drivers, after perceiving that a stop must be made, can react in 0.75 seconds.
- ◆ The distance covered in 0.75 seconds for a vehicle moving at 55 mph is 60 feet.
- ◆ At 55 mph, total stopping distance for an automobile is 224 feet. For an air braked tractor-trailer, it is 335 feet. All of the stopping distances are significantly longer on poor road surfaces or in icy/wet weather conditions.

To illustrate the correlation between speed and traffic fatalities, in 1987, Congress allowed states to raise the speed limit on certain highways to 65 MPH. By 1989, fatalities on these roads had increased by 30 percent. Take all conditions into consideration as you drive and adopt a safety-conscious attitude.

Tailgating

Rear-end collisions are the most frequent type of collision. Almost always, the driver who strikes another from behind is considered to be at fault. Tailgating or following too closely is a function of driver behavior. In an automobile, follow at least four seconds behind the car in front of you. If vehicle, road, or weather conditions are less than perfect, add an additional second for each hazard. This should leave you plenty of time and space to react without panic.

If the space in front of you is invaded by another vehicle, back off and keep the required distance. Don't conduct business while driving: don't talk on the phone (pull over if you must use the phone), write notes,



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or try to read. When stopped in traffic, make sure you can see the tires of the vehicle ahead of you touching the pavement.

If someone is tailgating you:

- ◆ Don't give the driver behind you a "back off" signal of any kind.
- ◆ Don't speed away—you may still have a tailgater following you at dangerously high speeds.
- ◆ Give the tailgater plenty of room to pass you.

Each year in the United States, "the other person" causes collisions resulting in 40,000 fatalities and more than two million disabling injuries. Don't be a statistic.

Improper Lane Changes

Improper lane changes, which greatly increase the risk of collisions, are often attributed to impatience, lack of attention or not concentrating on the surroundings while driving, and lateness.

Lane-change collisions usually involve sideswiping or running someone off the road. Looking ahead and anticipating lane changes are keys to safe driving.

- ◆ Before a lane change, use both short and long range scanning. Check your mirrors and know what is beside, behind you, and ahead of you.
- ◆ Turn your head to check blind spots and be sure to have your mirror at 15 degrees farther outward to eliminate your blind spots.
- ◆ Signal your intentions to change lanes
- ◆ Check your mirror again
- ◆ When passing assume the person you are passing does not see you, and be ready to react quickly if the driver veers into your lane.

Larger vehicles have more blind spots. When following large trucks or trailers or driving beside them, remember that if you cannot see the reflection of the driver in the side mirror, the driver cannot see you.

Driving while impaired

Six percent of all collisions involve alcohol; however, forty percent of all fatalities involve intoxicated or alcohol impaired motorists. The cost of alcohol related collision is more than \$24 billion per year.

Impaired driving is more than driving under the influence of alcohol or drugs. Stress, fatigue, even over-the-counter medications can impair a driver's abilities.

Sources of stress are:

- ◆ Work schedules, problems, and load(s)
- ◆ Family problems
- ◆ Traffic conditions
- ◆ Vehicle conditions
- ◆ Road and weather conditions

Facts

- ◆ Traffic crashes are the leading cause of on-the-job fatalities in America.
- ◆ Using seat belts cuts the risk of death by 45% for people riding in cars and by as much as 60% for those traveling in trucks or SUVs.
- ◆ In the past 10 years, the number of vehicles on our highways has increased 35 percent, while actual highway space has increased only one percent. Recipe for road rage!
- ◆ California Blood Alcohol Concentration (BAC) limit is 0.08%.
- ◆ Alcohol and/or drugs are the primary collision factor in about 9% of fatal and injury accidents in California.
- ◆ One person is killed every two and half hours in California and one person is injured every 2 minutes, as a result of a traffic collision.
- ◆ Fallings asleep is the primary collision factor in about 1% of fatal and injury collisions in California.



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Minimize Stress by:

- ◆ Planning so that you have adequate travelling time
- ◆ Doing relaxations and breathing exercises at red lights and in stop-and-go traffic
- ◆ Taking breaks at rest areas—at least one ten minute break every 2 hours
- ◆ Ignoring drivers with negative attitudes; don't let the attitudes of others determine how you will drive of you.

You can also minimize fatigue by:

- ◆ Allowing adequate time for sleep
- ◆ Not using alcohol to go to sleep.
- ◆ Avoiding heavy meals before bedtime.
- ◆ Scheduling trips so that you disturb your biological clock as little as possible; traveling during day light and sleeping at night
- ◆ Getting regular exercises but not just before sleep.

To increase your alertness:

- ◆ Scan the road ahead, along-side, and behind your vehicle
- ◆ Use safe following distances
- ◆ Use good posture while driving
- ◆ Be flexible and adjust to driving conditions
- ◆ Let offensive drivers get ahead

Overall, the goal of safety-conscious driver is to avoid collisions, regardless of who is at fault. As you commute to work or run personal errands, let safely getting to your destination be your goal.

References

1. <http://wssascon/seandhs/tailboards>
2. <https://www.dmv.ca.gov>

Safe driving tips

- ◆ Inspect the Vehicle
- ◆ Secure Cargo
- ◆ Use a Seat Belt
- ◆ Drive Defensively
- ◆ Avoid Distractions
- ◆ Avoid Impairments or Drowsy Driving
- ◆ Avoid Aggressive Driving
- ◆ Avoid using cellphones



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"Accidents only happen because they weren't prevented."

—Mark Young, PE

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