Tri County EMS Association Safety Guides

Vehicle Safety

What To Do When You Are Involved In A Car Crash:

At the Scene

One in every eight drivers will be involved in a motor vehicle crash this year, according to the National Safety Council. That may mean you! Are you prepared? Would you know what to do and what questions to ask? Since most people are reasonably upset after a crash, the National Safety Council offers this list of 11 easy steps to remember.

-- Stop your vehicle if it is clear, safe and legal.
-- Move the vehicle out of the traveled roadway, if it is clear, safe and legal. (In some states it is against the law to move the vehicle from the place where the crash occurred. Know the ordinance in your area.)
-- Turn off the ignitions of the cars involved.
-- Make a first aid check of all persons involved in the crash.
-- Call 911 for police and, if necessary, emergency medical services.
-- Mark the scene of the crash with retro reflective triangles.
-- Gather the names of all persons in the motor vehicles and people who witnessed the crash.
-- Make a quick diagram of where the vehicle occupants were seated and indicate the vehicles' direction of travel and lane. Also note the date, time and weather conditions.
-- Ask to see the other driver's license and write down the number.
-- Exchange insurance company information. Do not discuss "fault" or make statements about the crash to anyone but the police.
-- Get a copy of the police report of the crash from the local precinct.

What To Do If Your Car Breaks down on the highway

You are driving down the highway when suddenly you have car trouble. The National Safety Council suggests the following measures when your car breaks down or has a flat tire on the highway.

At the first sign of car trouble, gently and smoothly take your foot off the accelerator. Do not brake hard or suddenly. Carefully work your vehicle toward the breakdown lane or the side of the road. If you are on an interstate, try to reach an exit. Signal your intentions to drivers behind you. If it is necessary to change lanes, watch your mirrors and the traffic around you closely.

Once off the road, make your car visible. Put reflectorized triangles behind your vehicle to alert other drivers; use your emergency flashers. If it is dark, turn on the interior dome light.
When you have a flat tire, be certain that you can change it safely without being close to traffic. If that is possible, change the tire as you normally would. Remember, safety must take precedence over your schedule or whatever other concerns you may have.

However, when the car is beyond repair, it is best to get professional help. Do not try to flag down other vehicles. Raise your hood and tie something white to the radio antenna or hang it out a window so police officers or tow truck operators will know help is needed. Don't stand behind or next to your vehicle. If the car is in the roadway, stand away from the vehicle and wait for help to arrive.

If your car is safely out of traffic, wait inside the vehicle with the doors locked. Use your cellular phone to call for help. If someone stops and offers to help, open the window slightly and ask them to call the police.
Watch for a uniformed police officer or other emergency personnel. All interstate highways and major roads are patrolled regularly. Also, some highways have special "call-for-help" phones.

It is inadvisable to walk on an interstate, especially during inclement weather. However, if you can reach a source of help on foot, without jeopardizing your physical or personal safety, try the direct approach by walking. Keep as far from traffic as possible and walk on the right side of the roadway. Never attempt to cross a multi-lane, high speed roadway.

Winter, Your Car, and You. Be Prepared!

Driving in the winter means snow, sleet, and ice that can lead to slower traffic, hazardous road conditions, hot tempers and unforseen dangers. To help you make it safely through winter, here are some suggestions from the National Safety Council to make sure that you and your vehicle are prepared.

Weather

At any temperature -- 20 degrees Fahrenheit below zero or 90 degrees Fahrenheit above -- weather affects road and driving conditions and can pose serious problems.

It is important to listen to forecasts on radio, TV, cable weather channel, or forecasts in the daily papers.

Your Car

Prepare your car for winter. Start with a checkup that includes:

- Checking the ignition, brakes, wiring, hoses and fan belts.
- Changing and adjusting the spark plugs.
- Checking the air, fuel and emission filters, and the PCV valve.
- Inspecting the distributor.
- Checking the battery.
- Checking the tires for air, sidewall wear and tread depth.
- Checking antifreeze level and the freeze line.

Your car should have a tune-up (check the owner's manual for the recommended interval) to ensure better gas mileage, quicker starts and faster response on pick-up and passing power.

Necessary Equipment

An emergency situation on the road can arise at any time and you must be prepared. Following the tuneup, a full tank of gas, and fresh anti-freeze, your trunk should carry:

- A properly inflated spare tire, wheel wrench and tripod-type jack
- A shovel
- Jumper cables
- Tow and tire chains
- A bag of salt or cat litter
- Tool kit

Essential Supplies

Be prepared with a "survival kit" that should always remain in the car. Replenish after use. Essential supplies include:

- Working flashlight and extra batteries
- Reflective triangles and brightly-colored cloth
- Compass
- First aid kit
- Exterior windshield cleaner
- Ice scraper and snow brush
- Wooden stick matches in a waterproof container
- Scissors and string/cord
- Non-perishable, high energy foods like unsalted canned nuts, dried fruits, and hard candy.

In addition, if you are driving long distances under cold, snowy, and icy conditions, you should also carry supplies to keep you warm such as:

- Heavy woolen mittens, socks, cap, blankets

If You Become Stranded:

- Do not leave your car unless you know exactly where you are, how far it is to possible help, and are certain you will improve your situation.
- To attract attention, light two flares and place one at each end of the car a safe distance away. Hang a brightly colored cloth from your antenna.
- If you are sure the car's exhaust pipe is not blocked, run the engine and heater for about 10 minutes every hour or so depending upon the amount of gas in the tank.
- To protect yourself from frostbite and hypothermia use the woolen items and blankets to keep warm.
- Keep at least one window open slightly. Heavy snow and ice can seal a car shut.
- Eat a hard candy to keep your mouth moist.

Drunk Driving

Every 33 minutes someone dies in an alcohol-related crash. Alcohol-related motor vehicle crashes killed nearly 16,000 people in 1998 alone (latest figures available). Alcohol is a factor in well over 1/3 of all traffic crashes.

- If you are drinking, do not drive. If you plan to drink, designate a non-drinking driver.
- Support the strengthening and vigorous enforcement of impaired-driving laws. These laws save lives.
- Young drivers are at particular risk to be involved in alcohol-related crashes.If there is a young driver in your family, strictly enforce a zero tolerance policy with alcohol. All states have a 21-year-old drinking age law.
- Your best defense against a drunk driver is wearing your safety belt.

Driving At Night

Traffic death rates are three times greater at night than during the day, according to the National Safety Council. Yet many of us are unaware of night driving's special hazards or don't know effective ways to deal with them.

Driving at night is more of a challenge than many people think. It's also more dangerous.

Why is night driving so dangerous? One obvious answer is darkness. Ninety percent of a driver's reaction depends on vision, and vision is severely limited at night. Depth perception, color recognition, and peripheral vision are compromised after sundown.

Older drivers have even greater difficulties seeing at night. A 50-year-old driver may need twice as much light to see as well as a 30-year old.

Another factor adding danger to night driving is fatigue. Drowsiness makes driving more difficult by dulling concentration and slowing reaction time.

Alcohol is a leading factor in fatal traffic crashes, playing a part in about half of all motor vehicle-related deaths. That makes weekend nights more dangerous. More fatal crashes take place on weekend nights than at any other time in the week.

Fortunately, you can take several effective measures to minimize these after-dark dangers by preparing your car and following special guidelines while you drive.

The National Safety Council recommends these steps:

- Prepare your car for night driving. Clean headlights, taillights, signal lights and windows (inside and out) once a week, more often if necessary.
- Have your headlights properly aimed. Misaimed headlights blind other drivers and reduce your ability to see the road.
- Don't drink and drive. Not only does alcohol severely impair your driving ability, it also acts as a depressant. Just one drink can induce fatigue.
- Avoid smoking when you drive. Smoke's nicotine and carbon monoxide hamper night vision.
- If there is any doubt, turn your headlights on. Lights will not help you see better in early twilight, but they'll make it easier for other drivers to see you. Being seen is as important as seeing.
- Reduce your speed and increase your following distances. It is more difficult to judge other vehicle's speeds and distances at night.
- Don't overdrive your headlights. You should be able to stop inside the illuminated area. If you're not, you are creating a blind crash area in front of your vehicle.
- When following another vehicle, keep your headlights on low beams so you don't blind the driver ahead of you.
- If an oncoming vehicle doesn't lower beams from high to low, avoid glare by watching the right edge of the road and using it as a steering guide.
- Make frequent stops for light snacks and exercise. If you're too tired to drive, stop and get rest.
- If you have car trouble, pull off the road as far as possible. Warn approaching traffic at once by setting up reflecting triangles near your vehicle and 300 feet behind it. Turn on flashers and the dome light. Stay off the roadway and get passengers away from the area.

Observe night driving safety as soon as the sun goes down. Twilight is one of the most difficult times to drive, because your eyes are constantly changing to adapt to the growing darkness.

Driver Fatigue

It's one of the most unnerving experiences in driving: You've been on the road a while. The highway seems endless -- long, smooth, monotonous. The car interior is warm. You're tired. The radio isn't holding your attention, and neither is the driving. You stare straight ahead, at miles and miles of road, as you start to feel your shoulders sag, and your eyes slowly ... start to ... close.

Abruptly, you open your eyes, jerk up in your seat. You've started to drift out of your lane, or maybe even off the road. You steer your car back into the lane, take a few deep breaths, and realize, fearfully, what just happened. You were asleep.

Fatigue on the road can be a killer. It happens frequently on long drives, especially long night drives. You may have recognized some warning signs of fatigue in the foregoing scenario. Other signs of fatigue include back tension, burning eyes, shallow breathing, inattentiveness, and any kind of erratic driving, such as drifting, abnormal speed, tailgating, or failure to obey traffic signs.

One cause of fatigue is alcohol consumption. Alcohol is a depressant, and a driver doesn't have to be drunk to fall asleep at the wheel. Even one drink can be enough to induce fatigue.

Another culprit is the nature of modern highway driving. Most car interiors have comfortable, cushioned seats in quiet, carpeted, temperature-regulated environments. Many vehicles have "cruise control." Most major roads have been engineered to eliminate sharp curves, hills and bumps. Ironically, these designs for comfort contribute to falling asleep at the wheel.

Additionally, dull landscapes, the droning of tires and engines, and the repetitive patterns of oncoming headlights, trees, poles and highway center lines can lead to a dangerous, trance-like state known as "highway hypnosis," which deadens drivers' senses and slows their reaction time.

Fatigue behind the wheel is a very real danger, even if you've never experienced it firsthand. The National Safety Council offers these tips for staying awake while you're driving:

- An obvious cause of fatigue is lack of sleep. If you haven't received seven or eight hours of sleep the night before a trip, you're courting fatigue. Get enough rest. And don't start a trip late in the day. Long-distance driving is hard work, and you need to be fresh and alert.
- If possible, don't drive alone. Passengers can take turns driving and also serve as conversation partners to keep you awake.
- Avoid long drives at night. The glare of lights, both on your dashboard and outside your car, increases the danger of highway hypnosis.
- Adjust your car's environment so that it helps keep you awake and alert. Keep the temperature cool, with open windows or air conditioning in the summer and frugal amounts of heat in the winter. Turn the radio volume up, and switch stations frequently, but avoid soft, sleep-inducing music. Do not use cruise control; keep your body involved with the driving.
- Watch your posture. Drive with your head up and your shoulders back. Tuck your buttocks against the seat back. Legs should not be fully extended, but flexed at about a 45 degree angle.
- Take frequent breaks. At least every two hours, stop at a gas station, restaurant or rest stop. Get out of the car, walk around, even jog or do calisthenics. Exercise fights fatigue.
- In addition to exercise breaks, stop for light meals and snacks. Avoid alcohol entirely.
- Don't allow your eyes to become fatigued or hypnotized. Wear sunglasses to fight glare (but never wear sunglasses at night).
- If anti-fatigue measures fail and you start noticing the danger signs of fatigue then there is only one solution. Sleep. Find a safe, guarded rest area, truck stop, or service station. Even a 20-minute nap may refresh you enough to get to a hotel or motel. (This is an emergency maneuver. Do not try it as a common driving technique.)

Safe driving demands your full attention. If you feel your eyelids getting heavy, then your next actions may not simply determine whether you'll stay awake. They might determine whether you'll stay alive.

Questions & Answers Regarding Air Bags

Q: Do all new vehicles (1997 or 1998 models) have air bags? Can I buy a new vehicle without air bags?

A: Starting in model year 1998, all new passenger cars must have dual air bags (driver and passenger side). Starting in model year 1999, all new light trucks must have dual air bags.

Q: What do I do if a dealer does not honor a waiver for disabling an air bag issued by NHTSA to an individual?

A: NHTSA does not have authority to require any dealer to disable an air bag. If a dealer will not disable an air bag for a vehicle owner that has obtained a waiver to disable, the owner should seek another dealer. If other dealers will not disable the air bag the owner could contact an independent service garage. An owner should **never** attempt to disable the air bag themselves. An air bag system is highly sophisticated and the air bag deploys with great force. Tampering with an air bag system could put the owner at risk of physical harm due to an inadvertent deployment.

Q: I read that NHTSA issued new rules allowing manufacturers to depower the air bags in new vehicles. The car I now own has an air bag. Can I have a depowered air bag retrofitted in my car?

A: In March 1997, NHTSA issued a final rule to permit manufacturer's to use lower powered air bags. This rule will permit air bags to be depowered by 20 to 35 percent. Manufacturers are not required by the new rule to install depowered air bags in older cars. Each manufacturer will decide how to design and manufacturer new air bags for its vehicles to meet the new rule.

Q: Should I put a rear-facing infant seat in the front seat of a vehicle with a passenger side air bag?

A: No. Unless the vehicle is equipped with a cut-off switch for the air bag and the air bag is shut off, under absolutely no circumstances should a parent place a rear-facing infant seat in front of an air bag. There is an extremely high risk of severe injury or fatality in this situation, and a child should never be subjected to this risk. Even if the air bag is shut off or there is no air bag, the safest place for all children 12 and under is in the rear seat.
Many parents are concerned about having an infant rear-facing in the rear seat. However, the American Academy of Pediatrics stresses that a healthy baby buckled correctly in a rear-facing infant seat is as safe as a baby placed in a crib for a nap or overnight sleep. The risk of serious injury in a crash is much greater than the risk of a healthy baby having a life threatening health problem during a car ride. If no rear seat is available in which to place a rear-facing infant seat, and another mode of transportation is available, use of that alternative should be considered.

Q: Should I put a forward-facing child safety seat in the right front seat with an air bag? Will the child be safe if the air bag deploys?

A: NHTSA recommends placing all children 12 and under in the rear seat. That is the safest place. If no option exists other than seating a young child in the front seat, several steps must be taken. First, the child needs to be properly restrained in the child seat. Second, the vehicle seat needs to be pushed all the way back, to maximize the distance between the child and the air bag.

Q: My child is too old for a child seat. Should I allow my child to ride in the front seat with an air bag? Will the child be safe if the air bag deploys?

A: NHTSA recommends placing all children 12 and under in the rear seat. That is the safest place. If no option exists other than seating them in the front seat, several steps need to be taken. First, the child needs to be properly restrained. This means, depending on the size of the child, you should use a booster seat plus a lap/shoulder belt, or a lap/shoulder belt alone (for larger children). Second, the vehicle seat needs to be pushed all the way back, to maximize the distance between the child and the air bag. Third, the child needs to be sitting with his/her back against the seat back, not wiggling around or leaning forward, with as little slack as possible in the belt in order to minimize forward movement in a crash.

Q: How did the agency determine that age 12 was the appropriate age below which children must be seated in the rear for maximum protection? Wouldn't height and weight be better determinants than age?

A: All children are safest in the rear of a vehicle, regardless of their age or size. In recommending that children 12 and under **never** sit in the front seat of a vehicle which is equipped with a passenger air bag, the agency reviewed all crashes in which children were killed due to impacts from the air bag. While height and weight could be useful determinants of a child's safety in air bag-equipped vehicles, there are no known precise measurements that can be used that will guarantee that no injuries or fatalities will occur. Each vehicle is equipped with a unique air bag which will deploy with a different force. Thus, generalizations as to height and weight cannot be made. We do, however, know that children are safest in the rear of vehicles. If no option exists other than seating them in the front seat, several steps need to be taken. First, the child needs to be properly restrained. This means, depending on the size of the child, using a booster seat plus a lap/shoulder belt, or a lap/shoulder belt alone (for larger children). Second, the vehicle seat needs to be pushed all the way back, to maximize the distance between the child and the air bag. Third, the child needs to be sitting with his/her back against the seat back, not wiggling around or leaning forward, with as little slack as possible in the belt in order to minimize forward movement in a crash.

Q: Is it safe for short adults to be seated in the front passenger seat of a vehicle equipped with a passenger-side air bag?

A: Yes. However, all passengers should be properly restrained, regardless of size. All front seat passengers (adults and children) should move the seat as far rearward as possible, and may tilt the seat back slightly to help maximize the distance between the passenger's chest and the instrument panel (to 10 inches or more). In order to allow the air bag to deploy safely, front seat passengers should avoid leaning or reaching forward and should remain seated against the vehicle seat back, with as little slack in the belt as possible to minimize forward movement in a crash.

Q: Is it safe for elderly people to be seated in front of an air bag?

A: Elderly people, like all other drivers and front seat passengers, should be properly restrained and should move the seat as far rearward as possible, being careful to remain seated against the vehicle seat back and keeping the arms away from the area in which the air bag will deploy.

Q: What is the government currently doing and going to do to prevent child and small driver fatalities caused by air bags? When will the decisions and changes be made?

A: NHTSA has announced four new finalized rules to reduce the risk to children and small drivers. NHTSA issued a final rule requiring that all new cars have labels placed conspicuously on the sun visors, dashboards, and child restraints in

order to alert occupants to the dangers of placing children in the front seat of vehicles with air bags. NHTSA issued a final rule extending the period of time manufacturers can offer passenger air bag cut-off switches in vehicles with no rear seats or small rear seats. NHTSA issued a final rule to permit manufacturer's to use lower powered air bags. This proposal will permit air bags to be depowered by 20 to 35 percent. And most recently, NHTSA issued a final rule to allow any vehicle owner to request authorization for a dealer to connect the air bag (driver side, passenger side, or both) to an on-off switch. If you would like a copy of any of these final rules, please call our AutoSafety HotLine (800-424-9393) or contact our web site (http://www.nhtsa.dot.gov) and leave your name and address and a copy will be mailed to you.

Finally, NHTSA will issue another proposal concerning the development of smart air bags. More details on this proposal will be available in a couple of months. Please call back to check on the status of that rulemaking.

NHTSA reminds consumers that air bags have saved over 2600 lives as of October 1997. The agency continues to recommend that everyone be properly restrained and that children ride in the rear seat of the vehicle.

Q: What is a safety belt pretensioner/tensioner and will it help protect me in a crash?

A: A pretensioner/tensioner is a device which automatically tightens the safety belt in the event of a crash. It is offered only as original equipment on a limited number of vehicles and once it deploys, it must be replaced. If you are interested in purchasing a new vehicle with this device, you should contact your local dealer for information on which vehicles are equipped with it.

Q: I have a tilt steering wheel. In what position should I place it in order for the air bag to provide the greatest protection with the least chance of injury?

A: A tilt steering wheel should be tilted down so that the air bag will deploy toward the chest and not the head. Pregnant women should make sure the steering wheel is also tilted toward the chest, not the abdomen or the head.

Q: I have a telescoping steering wheel. In what position should I place it in order for the air bag to provide the greatest protection with the least chance of injury?

A: A telescoping steering wheel should be positioned so that it extends toward the driver as little as possible, ensuring that the air bag has plenty of room to deploy

Q: To what address should written questions/comments be submitted?

A: All written comments/questions concerning air bags should be addressed to the Administrator (NAO-10), NHTSA, 400 Seventh St., SW, Washington, DC 20590.

Q: I am planning to sell my air bag-equipped vehicle. What disclaimer should I put on the bill of sale to protect myself from injuries which might occur to a subsequent owner?

A: Most used vehicles are sold in "as is" condition and no disclaimers are necessary. However, if you have received permission to disable the air bag and have done so, or if the air bag deployed and you have not replaced it, but have replaced the cover such that it appears you have a functioning air bag, you should provide that information on the bill of sale so that a purchaser is not misled into believing that he/she has a functioning air bag. You should consult an attorney for the precise wording.

Information provided by the National Safety Council