

Automobile Safety

Why is automobile safety important?

Motor vehicles are the leading cause of accidental death in the US. They account for almost 50,000 deaths and over 4 million injuries every year. Older drivers have a higher accident rate per mile driven and are more likely to be killed or injured in an accident than younger drivers. (Teenagers are the age group most likely to be killed in a collision.) Most collisions occur because of human error rather than mechanical failure of the car.

Seat belts

Whether you are driving or riding as a passenger, the chance of death and serious injury can be reduced by more than 50% simply by wearing a seat belt. A seat belt pulls you back against the seat when a vehicle stops suddenly. Otherwise, you would continue to move forward and hit the steering wheel, dashboard, or windshield. You might even be thrown out of the vehicle. The seat belt distributes the force of the impact across the strongest parts of the body. The head is protected from striking the windows or dashboard and the chest is protected from the steering wheel. The belt holds the driver in position behind the wheel, which can help in regaining control of the vehicle. Seat belts keep the passengers in position, too, so they aren't thrown around or out of the vehicle.

Many cars have automatic shoulder belts (passive restraints) in the front seats, and leave you to fasten your own lap belt. Always wear the lap belt as well as the shoulder belt.

In spite of all the well-publicized evidence in favor of wearing seat belts, less than half of all people wear them all the time. It is not uncommon for people to say they are not necessary for short trips or when they are driving slowly. Others feel they are not needed if they are a back-seat passenger. Some people say they feel too restricted by seat belts or that they would prefer to be thrown out of the vehicle rather than trapped inside a burning vehicle or underwater. A few people feel they are such good drivers they will never be involved in an accident.

These arguments do not make sense when the following facts are considered:

- Three out of 4 crashes occur within 25 miles of home.
- Four out of 5 automobile accidents happen at speeds less than 40 miles per hour.
- People not wearing seat belts have been killed at speeds less than 12 miles per hour.
- Unrestrained back-seat passengers can be thrown around or out of the vehicle, too.
- You are much more likely to be killed if you are thrown out of your vehicle.
- The average person can expect to be in a crash once in 10 years.
- Even though you may be a good driver, you can't control other vehicles.

Air bags

Air bags are available in newer cars. Air bags inflate automatically in front-end collisions, placing a cushion between the steering wheel and driver or dashboard and passenger. Some cars offer side air bags. The chemicals in an inflated air bag can cause sore eyes, but they have prevented many serious chest injuries and have certainly saved some lives.

However, children and small adults traveling in the front seat of a car have been injured, sometimes fatally, by an air bag during a crash. This problem is under review by carmakers, and air bags that inflate less forcefully may be installed in the future. Weight sensors in the passenger seat can also determine if the person in that seat is likely to be big enough to not be injured by the airbag. Some newer cars have an on/off switch for the passenger airbag.

Safety guidelines regarding air bags include:

- Always wear your seatbelt, and see that your passengers wear their seat belts, too. Air bags give added protection in a crash but should be used in addition to a seat belt.
- Position your driver's seat and front passenger seat as far back as practicable.
- If you transport children in your car, put them in the rear seat wearing their seat belts. Small children should always be in approved car seats in the rear seat.

Car maintenance

The chance of mechanical failure can be reduced by taking care of your car in the following ways:

- Have it serviced regularly.
- Maintain the recommended tire pressure and replace worn tires.
- Check your brakes and lights regularly.

Road emergency kits

Keep your trunk stocked with a road emergency kit that includes a flashlight, flares, a spare tire, a jack, and a first aid kit. For longer trips, keep a blanket, a gallon of water, and some granola bars stowed, in case you break down.

If your car doesn't already have one, first aid kits can be bought or easily made. Packaged bandages and dressings that stay clean until used can be bought. They should be kept in a clearly marked container with a well-fitting lid. The kit can be very simple, and may include just a few large bandages and pressure dressings to slow bleeding and keep wounds clean until they can be treated. Although you may think you will never use your kit, don't borrow from it for other purposes. You never know when it may be needed.

Safe driving

Never drive a vehicle after drinking alcohol, or when you have taken drugs that can impair judgment or cause drowsiness or lightheadedness. If you plan to drink, pick a nondrinking designated driver, or use a cab.

Many car crashes are caused by drivers who follow too close to the car in front of them and cannot stop in time when that car suddenly slows down or stops. Allow at least 1 car length for every 10 miles per hour of your speed.

When approaching an intersection, stop when a traffic signal turns yellow, rather than speeding up to make it through the intersection before the light turns red.

Driving faster than the speed limit makes it more difficult to react and causes a greater impact if there is a crash.

Do not drive slowly in the fast lane. Stay in the slow lane or use side roads if you prefer a slower speed.

Do not drive when you are sleepy. If you are tired, pull off the road to a safe spot and take a nap, or trade drivers. Sleepy drivers cause many serious accidents.

The use of cell phones while driving is distracting. It greatly increases your chance of being in a car accident. Do not use a cell phone while you are driving. If you feel you must make or take a call, pull over to a safe place and stop driving. If this is not possible, be sure to use a hands-free device in order to keep both hands on the steering wheel.

Giving up driving

One of the hardest things for an older adult to do is to give up his or her driver's license. It means giving up freedom and independence. However, driving requires concentration, quick reflexes, and alert senses. As you get older, your eyesight and hearing are often not as good as they used to be, your reflexes are slower, and your coordination and muscle strength decrease. Each is important for avoiding accidents. Medicines may cause lightheadedness or impair judgment. Many people drive less and less as they get older and find that it costs more to maintain a car for occasional use than to give up their car and use a taxi or bus instead. Others drive until they are a danger to themselves and others. It's always hard to admit you can no longer drive safely, but the price of not doing so, in terms of automobile safety, can be terribly high.

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