Air Bags FAQ

Revised May 2016

1) Why does my car have an airbag?

Since 2003, the Federal Government has mandated that all new cars built in 2003 and beyond need to have smart frontal airbags. Even though side airbags are not mandated, many automakers put them in their cars anyway or you can perhaps buy additional side airbags as an option. Click here to read about the history of airbags.

2) Are airbags safe?

Airbags were created to be a supplement to seatbelts and to protect those people who are not wearing a seatbelt at the time of the crash. Airbags can kill and hurt people but generally if used properly, airbags help cushion people in a crash.

3) How does an airbag work?

Most airbags come in four parts. The airbag module, one or more crash sensors, the seat sensors and a diagnostic unit.

The airbag module contains an inflator and the lightweight fabric air bag. The driver side airbag sits inside the hub of the steering wheel and the passenger side airbag sits in the dashboard.

In the front of the vehicle, crash sensor(s) measure deceleration. When the sensors detect a rapid deceleration that indicates a crash, they signal the inflator to deploy the airbag(s).

Whenever you sit in your car seats, the seat sensors are already working, calculating if someone is sitting in the seat.

Whenever the vehicle is turned on and running, the diagnostic unit monitors the readiness of the air bag system. A light on the dash should flash if an air bag has a problem.

Basically an airbag deploys in less than one second and inflates one-twentieth of a second after impact. One-fifth of a second following impact, a deployed air bag begins to deflate rapidly as the gas escapes through vent holes. When the airbag deflates, this

enhances the cushioning effect of the air bag on a person and allows for the bag to maintain the same internal pressure. Rapid deflation also allows for the driver to maintain control of the vehicle if needed.

Not required by the government, side and curtain airbags are also available in certain car models but not all and work generally on the same principal.

When airbags are deployed, dust particles present themselves and can cause minor throat and/or eye irritation.

Click here to see how airbags works.

4) *What are some precautions to take if my car has airbags?*

Airbags are meant to supplement seat belts and not replace them. Sit 10 inches away from the airbag cover and make sure your steering wheel is tilted towards your chest—not your head or stomach. This is particularly important for short drivers, pregnant drivers and heavy set drivers. Don't allow small children under the age of 12 to sit in the front passenger seat since they are generally too short for airbag safety.

Drivers who have been fatally injured by airbags when deployed in a crash were those who were believed to have sat too close to the airbag. Make sure that you and your passengers sit correctly in your car seats.

The biggest danger is at the initial instant of deployment.

For example, drivers should never allow passengers to wear a backpack on their back and then a seatbelt because they are too close to the airbag. Passenger seats need to be set as far as back as possible from the dashboard. Passengers should avoid leaning or reaching forward and remain seated against the seat with very little slack in the seatbelt. Passengers may need to adjust the tilt of the seat so the airbag when deployed would confront the passenger in the chest position.

Never place infants in car seats and small children in the front seat of a car. In the front seat, a rear-facing infant car seat places an infant in critical danger because their head is too close to the dashboard. Do not allow older children to sit in the front seat either until they are as tall as an adult. Remember, the passenger side front air bags should aim towards the chest and not the head.

If your car has side airbags, read carefully your owner's manual to see recommendations if it is safe for children to set next to the side airbags.

The conventional wisdom of gripping the steering wheel at the 10 o'clock and 2 o'clock positions no longer applies. The 9 o'clock/3 o'clock hand positions are recommended. The higher the driver's hands are on the wheel, the greater the chances of injury to the hands or face if the airbag deploys blowing the plastic cover open.

5) *Does an airbag work in every kind of crash?*

Airbags generally deploy in a crash but they are really meant to protect people in head-on collisions. Some unfortunate people have died from airbag deployment because the airbag hits them in the chin and breaks their neck or hits them in the stomach and causes internal bleeding.

Sometimes crash victims are hurt by airbags. If your arm or hand is in front of the airbag when it deploys, you might receive a forearm fracture. Facial burns and lacerations can also occur. Other crash victims have reported hearing damage (the .1 second sound of deployment can overwhelm the hearing system), eyesight damage, spine and spinal cord injuries, ribcage fractures, and the exasperation of already existing conditions.

Sometimes (perhaps up to 30%) airbags don't deploy after a crash and then deploy while victims are rescued. This puts the crash victim and the rescue worker in danger.

6) *Are airbags only meant to protect large men?*

Airbags were made to fit an average sized man and a non-petite sized woman and certainly not babies nor small children.

7) *Why have so many airbags been recalled?*

Good question. There are several possibilities why airbags fail. Here is a link to http://www.safercar.gov/CheckForRecalls to find out if your car's airbags have recently been recalled. Consumer Reports also has an excellent report on the Takata Airbag Recall that will affect up to 65 million cars beginning in May 2016.

8) *Why can't I disable my airbags since I own my car?*

The federal government mandates that you have working airbags in vehicles manufactured after 2003. Sometimes there are reasons to disconnect an airbag and the Government allows that but you must document and petition the government to gain permission at http://www.safercar.gov/Vehicle+Shoppers/Air+Bags/Deactivation+FAQ. Guidelines for deactivation are fairly stringent.

If you deactivate an airbag by yourself, you may disable other functions in your vehicle. Auto mechanics are not allowed to deactivate an airbag unless he or she receives a permission letter from the federal government. If you somehow manage to deactivate an airbag on your own and become involved in a car crash, you will likely have insurance problems as well as the prospect of prosecution.

To learn more about all the issues that the National Motorists Association advocates for on the behalf of the North American Driver, contact us at www.motorists.org and join us in the effort!