How Do Air Bags Work?
Air bags provide extra protection for belted occupants. They are designed to help keep your head, neck and chest safe in a front-end crash. Most often, an air bag will deploy when a vehicle hits another vehicle or a solid object (like a tree).

An air bag is not a soft, billowy pillow. It comes out of the dashboard at up to 200 miles per hour, faster than the blink of an eye. Because of this great force, an air bag can injure those who are too close to it.

Ways to Reduce Air Bag Risk
• Drivers should sit with at least a ten inch clearance between the center of the steering wheel, or dashboard and their chest. The steering wheel should be tilted upward, not straight across the torso. Passengers in the front seat should double the distance due to the increased size of the passenger air bag.
• Drivers are responsible for making sure that everyone is buckled up.
• Infants in rear-facing child safety seats should never be placed in front of passenger air bags.
• Children under age 13 should always be restrained in a child safety seat or seat belt in the back seat. Even if there isn’t a passenger air bag in the vehicle, the safest place for infants and children is properly secured and buckled up in the back seat.
• Check the vehicle owner’s manual and the instructions provided with your child safety seat for correct use information.

Air Bag On-Off Switch Rule
• Air bags are supplemental safety devices – they must be used with a seat belt to be most effective. Air bags have been credited for saving thousands of lives and reducing the risk of serious head injuries. In a small percentage of cases, there may be reasons why an air bag should not be used. These are addressed by the Air bag On-Off Switch Rule.

What is an On-Off Switch?
• The switch allows an air bag to be turned on and off. It can be installed for the driver, the passenger or both front-seat positions. To limit misuse, a key must be used to operate the on-off switch. When the air bag is turned off, a light comes on; the air bag will remain off until the key is used to turn it back on.

Who Should Consider Installing an On-Off Switch?
• Drivers who have a medical condition that places them at specific risk.
• People who cannot adjust their driver’s seat position to keep ten inches between the center of the steering wheel and their chest.
• Drivers who must transport children under age 13 in the front passenger seat.
• If you cannot certify that you or any user of your vehicle is in one of these risk groups, you are not eligible for an on-off switch.

Be aware that turning off your air bag if you are not in a risk group will NOT benefit you or the other users of your vehicle. Instead, it will increase the risk that someone may suffer a head, neck or chest injury.

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Air Bag Safety

How Do I Get An On-Off Switch?

• If you are eligible, you must fill out a form and return it to the National Highway Traffic Safety Administration (NHTSA). On the form, you must indicate which air bags you want equipped with an on-off switch, certify that you have read the information brochure, and certify that you are, or a user of your vehicle is, a member of a risk group listed above.

• After your request is approved, you will receive a letter authorizing an automobile dealer or repair shop to install an on-off switch in your vehicle.

Are all air bags the same?

• No, air bags differ in design and performance. There are differences in the crash speeds that trigger air bag deployment, the speed and force of the deployment, the size and shape of the air bag, and the manner in which they unfold and inflate. Contact your vehicle manufacturer for specific information.

Do I need an on-off switch if I buy a vehicle with depowered air bags?

• Many manufacturers are installing depowered air bags with their 1998 vehicles. Depowered air bags deploy with less force than current air bags. However, with depowered air bags, rear-facing child seats should never be placed in the front seat. Children are safest in the back seat.

Will on-off switches be necessary in the future?

• Manufacturers are developing “advanced” air bags that may be able to tailor deployment based on crash severity, occupant size and position or seat belt use. These air bags should eliminate the risks produced by current air bag designs.

If I turn off my air bag, will my seat belts provide enough protection?

• Air bags increase the protection you get from seat belts alone. If the air bag is turned off, you lose this extra protection.

Should a pregnant woman get an on-off switch?

• No, not unless she meets one of the risk profiles. Pregnant women should buckle up and remain as far back from the air bag as possible.

Source: National Highway Traffic Safety Administration

Check out our course list online for a variety of safety trainings provided across the state at www.ndsc.org

The North Dakota Safety Council is a private non-profit organization supported through grants, donations, memberships and training.