give. Without the air bag to cushion this forward movement, the chance of the occupant hitting the vehicle interior is increased.

Ask your vehicle manufacturer whether your seat belts were specially designed to work with an air bag. If they were, your dealer or repair shop will provide you information about the effects that turning off your air bag will have on the performance of the belts. Ask your dealer or repair shop to show you this information before you decide whether to have an on-off switch installed.

## HOW AIR BAGS WORK

Air bags are designed to keep your head, neck, and chest from slamming into the dash, steering wheel or windshield in a front-end crash. They are not designed to inflate in rear-end or rollover crashes or in most side crashes. Generally, air bags are designed to deploy in crashes that are equivalent to a vehicle crashing into a solid wall at 8-14 mph. Air bags most often deploy when a vehicle collides with another vehicle or with a solid object like a tree.

Air bags inflate when a sensor detects a front-end crash. The sensor sends an electric signal to start a chemical reaction that inflates the air bag with harmless nitrogen gas. All this happens faster than the blink of an eye. Air bags have vents, so they deflate immediately after cushioning you. They cannot smother you and they don't restrict your movement. The "smoke" you may have seen in a vehicle after an air bag demonstration is the nontoxic starch or talc that is used to lubricate the air bag.

**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 deployment, the size and shape of air bags, and the manner in which they unfold and inflate. That is why you should contact your vehicle manufacturer if you want specific information about the air bags in your particular car or truck.

## FUTURE AIR BAGS

**Do I need an on-off switch if I buy a vehicle with depowered air bags?**
Many manufacturers are installing depowered air bags beginning with their model year 1998 vehicles. They are called "depowered" because they deploy with less force than current air bags. They will reduce the risk of air bag-related injuries. However, even with depowered air bags, rear-facing child seats still should never be placed in the front seat and children are still safest in the back seat. Contact your vehicle manufacturer for further information.

**Will on-off switches be necessary in the future?**
Manufacturers are actively developing so-called "smart" or "advanced" air bags that may be able to tailor deployment based on crash severity, occupant size and position, or seat belt use. These bags should eliminate the risks produced by current air bag designs. It is likely that vehicle manufacturers will introduce some form of advanced air bags over the next few years.