



THE SCIENCE OF A CAR CRASH

"Every object in a state of uniform motion tends to remain in that state of motion unless an external force is applied to it."

— Newton's first law of motion




So what happens when a car traveling 30 miles per hour hits an object standing still head on?

1 The Car Collision: The car crumples inward two feet, absorbing some of the impact force.

2 The Human Collision: On impact, the car's passengers are hurled forward at the car's original speed. The passengers then collide with the dashboard, safety belt, airbag, front window, front seat, or each other.

3 The Internal Collision: Internal organs slam into other organs or the skeleton. This often causes serious injury or death. If the brain hits the inside of the skull, the result can be a concussion or permanent brain damage.



***So what can
you do to keep
yourself safe
on the road?***

Wear Your Safety Belt!

- Over 11,000 lives are saved every year by safety belts in the United States.
- Safety belts increase the chance of survival by 45%.
- Safety belts prevent ejection from a vehicle, which is one of the most injurious events that can happen in a crash.
- Nearly 74 percent of the occupants who are ejected from passenger cars are killed.
- Every 15 seconds, someone in the U.S. is injured and every 13 minutes, someone is killed in a traffic crash.

***BUCKLE UP!
EVERY SEAT, EVERY TRIP***