



The Power of Your Seatbelt

Use the website:

<http://www.safeprogram.com/videos.php?action=1>
if you need to view the videos again or if you were absent.

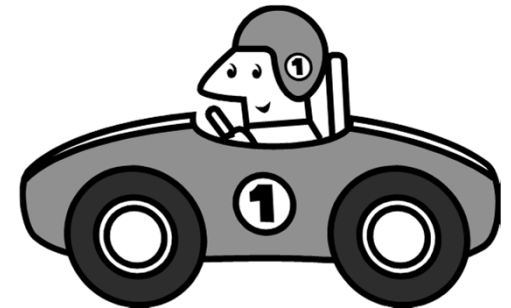
Notice that the driver seems to be very sleepy...



Consider the following...

Do you wear your seat belt when...

- going on a road trip?
- you are going down the street/staying in the neighborhood?
- on an airplane, even if the “seatbelt” sign has been turned off?
- you are in the car with your friends who aren’t wearing a seatbelt?



What factors in to your decision on whether or not to wear your seatbelt?

- driver?
- distance you are traveling?
- just how you feel that day?
- not forced to wear it?



hmmmm.....
should I wear
my seatbelt
today?

A Little Bit of History

- **1930's** Several U.S. physicians equip their own cars with lap belts and begin urging manufacturers to provide them in all new cars
- **1953** Colorado State Medical Society publishes policy supporting installation of lap belts in all automobiles
- **1954** Sports Car Club of America requires competing drivers to wear lap belts
- **American Medical Association House of Delegates** votes to support installation of lap belts in all automobiles
- **1955** California Vehicle Code is amended to require State approval of seat belts before their sale or use
- **1956** Ford and Chrysler offer lap belts in front as option on some models
- **Ford** begins 2-year ad campaign based on safety, focusing heavily on belts
- **1958** Nils Bohlin, a design engineer with Volvo, patents the "Basics of Proper Restraint Systems for Car Occupants," better known as a three-point safety belt.
- **Volvo** provides anchors for 2-point diagonal belts in rear
- **1959** New York considers and rejects bill to require seat belts in new cars sold in State

1961

- **SAE issues standard for U.S. seat belts**
- **New York requires seat belt anchors at front outboard seat positions**
- **Wisconsin requires seat belts in front outboard seat positions**

1962

- **Six U.S. States require front outboard seat belt anchors**
- **U.S. manufacturers provide seat belt anchors in front outboard as standard**

1963

- **Volvo introduces 3-point belt in front as standard, in USA**
- **U.S. Congress passes P.L. 88-201 to allow Commerce Department to issue mandatory standards for seat belts sold in interstate commerce**

1964

- **About half the U.S. States require seat belt anchorages at front outboard**
- **Most U.S. manufactures provide lap belts at front outboard seat positions**

1965

- **U.S. Commerce Dept. issues first seat belt standard**
- **Some U.S. manufacturers provide automatic locking retractors (ALRs) in front seat belts**

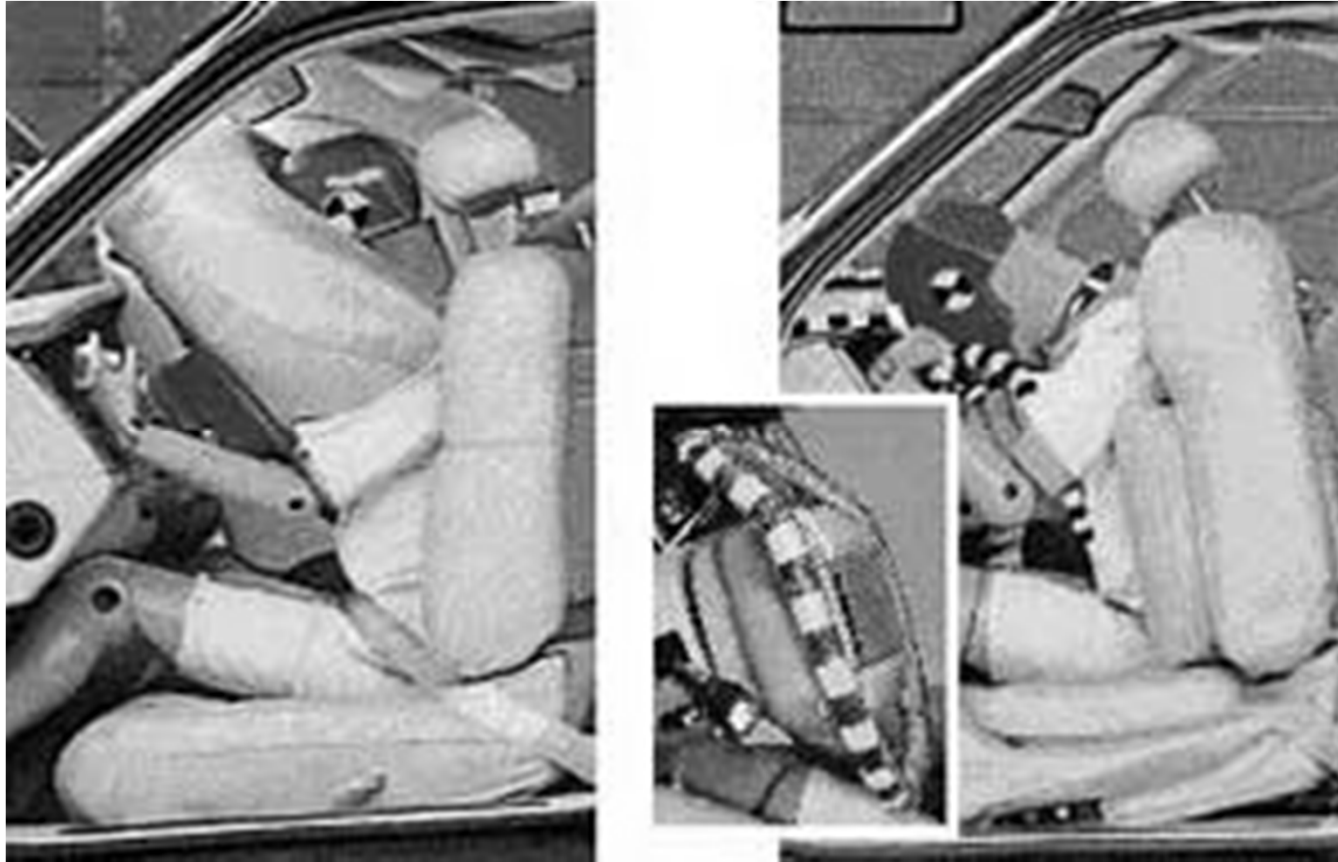
1966

- **Sports Car Club of America requires competing drivers to wear a shoulder harness as well as a lap belt**

1969

- **Volvo provides 3-point belt in rear as standard, all markets**
- **Mercedes-Benz adds 3-point belt in rear outboard seats as standard, all markets**
- **Japan requires seat belts, front and rear**

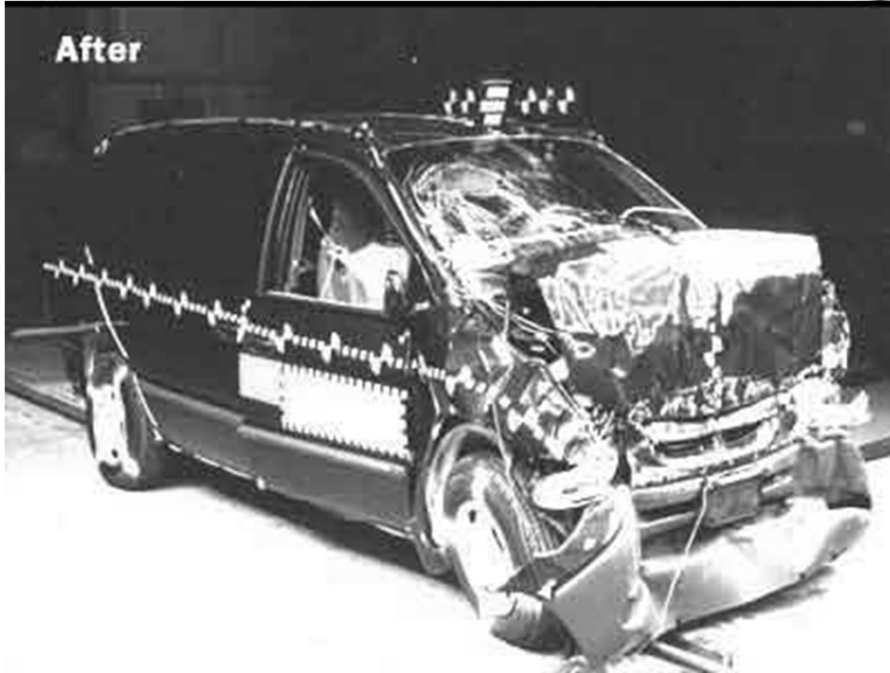
Crash Test Dummies



Crash-test dummies are used by auto makers to determine the safety rating & effectiveness of seatbelts & airbags. The dummy is painted with different colors to represent different body parts. After the crash, scientists can determine exactly what body part hit different areas of the vehicle. Notice the smashed steering wheel in the center photo... OUCH!



Before



After

**Accident
@ 35mph**



BELT UP OR SUFFER!

While watching the following video, consider the following questions~

- What made the male passenger decide to not wear his seatbelt?
- What injuries may he (or did he) receive?
- What injuries may he (or did he) cause the female driver?

Unrestrained Damage

At your table, compare the injuries of the two drivers involved in this accident.

Buckle Up!

THIS VIDEO IS GRAPHIC

School Bus Scare

- What would happen if schools required students to wear seatbelts while riding the school bus?
- Would this be beneficial?
- Would students refuse to wear the seatbelts?
- Could consequences be given to those who do not wear their seatbelt?

**You are 25 times more likely to die if
you are ejected from the vehicle.**



**Do you think the driver was wearing
his/her seatbelt?**

CLICK IT OR TICKET!

What is the law in Arizona regarding seatbelts?

Each front seat occupant of a motor vehicle that is designed for carrying ten or fewer passengers shall either:

1. Have the lap and shoulder belt properly adjusted and fastened while the vehicle is in motion.
2. If only a lap belt is installed where the occupant is sitting, have the lap belt properly adjusted and fastened while the vehicle is in motion.



What do you think?

- ❖ Should drivers be responsible for the passengers in their vehicle? Should they get a ticket/fine if passengers are not wearing seatbelts?
- ❖ Should seatbelts be required by law?
- ❖ Should children be required to be in car seats until a specific age/weight?

1st Law of Motion

Objects in motion will stay in motion and objects at rest will stay at rest until acted on by an unbalanced force.

How do seatbelts help demonstrate the 1st Law of Motion?

Unrestrained driver or passenger will continue to move forward in an accident until something (seatbelt or windshield) stops them.

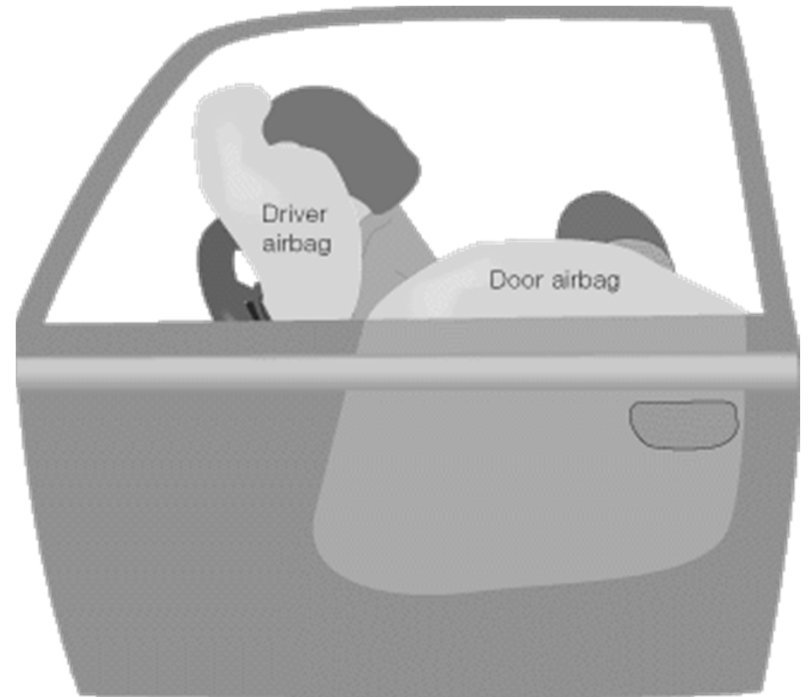
AIR BAGS...

Since model year 1998, all new cars sold in the United States have been required to have airbags on both driver and passenger sides. (Light trucks came under the rule in 1999.) To date, statistics show that airbags reduce the risk of dying in a direct frontal crash by about **30 percent**. Then came seat-mounted and door-mounted side airbags. Today, some cars go far beyond having dual airbags to having six or even eight airbags. Having evoked some of the same controversy that surrounded seat-belt use in its early years, airbags are the subject of serious government and industry research and tests.



Future of Airbags

- Until recently, most of the strides made in auto safety were in front and rear impacts, even though **40 percent** of all serious injuries from accidents are the result of side impacts, and 30 percent of all accidents are side-impact collisions.
- Cars that currently offer **side airbags** represent the new wave of occupant protection. Engineers say that designing effective side airbags is much more difficult than designing front airbags. This is because much of the energy from a front-impact collision is absorbed by the bumper, hood and engine, and it takes almost 30 to 40 milliseconds before it reaches the car's occupant. In a side impact, only a relatively thin door and a few inches separate the occupant from another vehicle. This means that door-mounted side airbags must begin deploying in a mere **five or six milliseconds!**



AIRBAGS

DO NOT TRY THIS AT HOME!

Your Task

Write a letter to...

- A friend or family member who doesn't wear their seatbelt
- A friend or family member who reminds you to wear your seatbelt
- ... other suggestions?

LETTER CONTENTS

- Why are you writing? (Introduction)
- Importance of Seatbelts/Airbags
- Details about the 1st Law of Motion and how seatbelts/airbags relate to the 1st Law
- Reason you care (Conclusion)

4 Paragraphs- friendly letter form is ok

EXPECTATIONS

- 4 paragraphs
- Typed or in ink (on a fresh sheet of paper!)
- Correct spelling, grammar, etc (no text language)
- DUE: _____

