## KRM Consulting

## HOW FAST CAN YOU DIE?

Have you ever wondered what happens when a car, traveling at 55 miles per hour, crashes into a solid, immovable object such as a tree?

1/10th OF A SECOND: The front bumper and chrome frosting of the grillwork collapse. Slivers of steel penetrate the tree to a depth of $11 / 2$ inches.

2/10th OF A SECOND: The hood rises, crumples, smashes into the windshield. Spinning rear wheels leave the ground. The fenders come into contact with the tree, forcing the rear parts out over the front doors. The driver's body continues to move forward at the vehicle's original speed ( 20 times the Normal force of gravity, his body weight 3,200 pounds). His legs ramrod straight, snap at the knee joints.

3/10th OF A SECOND: The driver's body is now off the seat, torso upright, broken knees pressed against the dashboard. The plastic and steel frame of the steering wheel begins to bend under his terrible death grip. His head is now near the sun-visor, his chest above the steering column.

4/10th OF A SECOND: The car's front 24 inches have been demolished, but the rear end is still traveling at about 33 miles per hour. The driver's body is still traveling at 33 miles per hour.

5/10th OF A SECOND: The driver's fear frozen hands bend the steering column into an almost vertical position. The force of gravity impales him on the steering shaft. Jagged steel punctures lungs and intercostal arteries.
Blood spurts into his lungs.
6/10th OF A SECOND: The driver's feet are ripped from his tightly laced shoes. The brake pedal shears off at the floor board. The chassis bends in the middle, shearing off at the body bolts. The driver's head smashes into the windshield. The rear of the car begins its downward fall spinning wheels digging into the ground.

7/10th OF A SECOND: The entire, writhing body of the car is forced out of shape. Hinges tear, doors spring open. In one last convulsion, the seat rams forward, pinning the driver against the cruel steel of the steering shaft. Blood leaps from his mouth, shock has frozen his heart. He is now dead.

