



TOOLBOX TALK: SEVEN-TENTHS OF A SECOND

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Look at your watch and see how long one second really is. If you have a stop watch, try to stop the stop watch at seven-tenths of a second. Now that you know how long that is, consider what happens in the first seven-tenths of a second when an automobile traveling 55 mph hits a solid object and the driver is not wearing his/her seat belt and shoulder belt.

In the *first tenth of a second*, the front bumper and grille collapse.

In the *second tenth of a second*, the hood crumples, raises and strikes the windshield while the rear wheels are lofted from the ground, still spinning at 55 mph. Simultaneously, the fenders begin wrapping themselves around the object that was just struck by the car. The frame of the car has stopped moving, but the rest of the car is still traveling 55 mph. The driver instinctively stiffens his legs against the crash and they snap at the knee joint.

During the *third tenth of a second*, the steering wheel starts to disintegrate in the driver's hands and the steering column is aimed at the driver's chest.

The *fourth tenth of a second* finds the first two feet of the car's front end wrecked, the rear moving at 35 mph, but the driver's body still traveling at 55 mph.

In the *fifth tenth of a second*, the driver's feet are ripped out of his shoes, the brake pedal snaps off and the car frame buckles in the middle. The driver's head smashes through the windshield as the rear wheels fall back to earth.

In the *seventh tenth of a second*, doors fly open, hinges rip loose and the seats break free, striking the driver from behind. The driver does not feel the seat striking him, because he is already *dead!*

A lot has happened in less than one second. Think about how long one second is the next time you decide not to wear a seat belt. Think about how long seven-tenths of a second is.