



# SAFETY BRIEF

## UNDERSTANDING THE STOPPING DISTANCE FORMULA

It takes at least two seconds to recognize a hazard on the road and stop your vehicle. If you don't allow enough space between you and the vehicle in front of you, you could cause a rear-end collision. The stopping distance formula can help you calculate how many feet it will take for your vehicle to come to a complete stop.

### EQUATION ELEMENTS

- **Speed:** How many miles per hour your vehicle is traveling
- **First Digit:** The first digit of your vehicle's speed
- **Stopping Distance:** How many feet your vehicle will travel before coming to a complete stop

### UNDERSTANDING THE EQUATION

To determine your stopping distance, take your speed, add the first digit of your speed and then double it. Here's an example:

- $\text{Speed} + \text{First Digit} \times 2 = \text{Stopping Distance}$
- $20 \text{ mph (Speed)} + 2 \text{ (First Digit)} \times 2 = 44 \text{ feet (Stopping Distance)}$

### FACTORS THAT CAN AFFECT STOPPING DISTANCE

Your stopping distance is determined by your brake application and braking distance, but other factors and conditions can increase your stopping distance:

- Pavement texture
- Temperature
- Tire condition
- Weather
- Brake condition



Corporate Office: 717 Mulberry St. | Des Moines, IA 50309 | 800-447-2295 | [www.emcins.com](http://www.emcins.com) |

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