



## Short Safety Subject

Short Safety Subjects are provided by the Public Safety Business Center, Fort Bragg, NC. Our intent is to provide safety topics for the purpose of increasing safety awareness and improving safety performance. Additional Short Safety Subjects are available on the PSBC Business Management Web Site at:

[www.bragg.army.mil/psbc-bm/PubsAndForms/ShortSafetySubjects.htm](http://www.bragg.army.mil/psbc-bm/PubsAndForms/ShortSafetySubjects.htm)

### Proper Braking



To survive on the road in winter, proper braking is essential. Stopping on slippery surfaces means motorists must increase sight lines, following and stopping distances. Beware of shaded spots, bridges, overpasses and intersections. These are areas where ice is likely to form first or be the most slippery.

#### **Braking if you don't have anti-lock brakes:**

If you don't have anti-lock brakes, the most efficient technique for braking under these conditions is to use threshold braking together with de-clutching (manual shift) or shifting to neutral (automatic transmission). The best way to threshold brake (to make a controlled stop) is the heel-and-toe method. Keep the heel of your foot on the floor and use your toes to apply firm, steady pressure on the brake pedal just short of lockup to the point at which the wheels stop turning.

Under the stress of trying to stop quickly, drivers almost inevitably overreact and lock the wheels. If this happens, use toe-and-heel action to release brake pressure one or two degrees, then immediately reapply it with slightly less pressure.

#### **Braking with anti-lock brakes:**

Surveys indicate that 50% of people are unaware of how anti-lock brakes and traditional brakes differ. If you have an anti-lock brake system (ABS), use the heel-and-toe method, but do not remove your foot from the brake. When you put on the brakes hard enough to make the wheels lock momentarily, you will typically feel the brake pedal pulse back against your foot. Don't let up!

#### **How ABS works:**

A sensor located at each wheel detects when the wheel stops turning and starts to skid. As soon as the skid is detected, the anti-lock system relieves the pressure just enough to allow the wheel to turn again. This allows you to steer while you continue to bring the vehicle to a stop.