

## **DID YOU KNOW???**

### **BELT REMINDERS AS EFFECTIVE AS INTERLOCKS**

The most important safety device available to drivers and passengers in a vehicle is the seatbelt. Our nation's goal is 100 % compliance – currently, we are at about 90 % for drivers and front seat passengers. But that's not 100 %, so, how do we close the gap?

You might think the last 10 % doesn't matter that much, but statistics show that seat belts reduce the risk of death among front seat occupants in crashes by 45 %, and nearly half of front-seat occupants killed in crashes weren't belted.

There are several ways to increase seatbelt compliance. One is a gear-shift interlock – you cannot put your vehicle in gear until all front seat persons are belted. A second method is utilizing a longer audible signal if someone is unbuckled. A third method, is a continuous audible reminder, and fourth is a speed-limiting interlock, which restricts the vehicle's speed to 15 mph until all front seat persons are buckled.

In the latest round of data collection by the Insurance Institute for Highway Safety (IIHS), some participants first drove a Chevrolet with the same fairly minimal belt reminder as used in the first study. They then drove either a BMW with a 100-second audible reminder or a Subaru with an audible reminder that lasted indefinitely, until the person buckled. A third group drove BMWs with the 100-second reminder first and then a BMW equipped with a prototype speed-limiting interlock. This interlock restricted vehicle speed to 15 mph if either the driver or front passenger was unbelted.

Comparing belt use with these four different technologies, the researchers found that the speed-limiting interlock, the indefinite reminder from Subaru and the 100-second constant reminder from BMW all increased belt use by 30-34 percent compared with the intermittent reminder from Chevrolet. The gear-shift interlock increased belt use 16 percent relative to the intermittent reminder.

Increasing belt use by 34 percent in all vehicles on U.S. roads would save 1,489 lives each year, the researchers calculated. “We expected the interlocks to be more effective than any type of belt reminder, but that didn't turn out to be the case,” says HLDI Senior Research Scientist David Kidd, the study's lead author. “Many people simply forget to buckle up, so a persistent reminder works well for them. For those who are really averse to using the seat belt, an interlock doesn't always help because they can find a way to get around it, for example by buckling the belt behind their back or sitting on top of it.”

Surprisingly, when asked how acceptable each technology would be to them in their personal vehicle, interlocks were no less acceptable than belt reminders. “Attitudes toward belt interlocks seem to have softened as the culture surrounding seat belts has evolved,” Kidd says. “However, participants in the study raised safety concerns about interlocks that were not expressed for reminders.”

The main concerns people voiced were that interlocks could prevent someone from operating a vehicle in an emergency or that limited vehicle function could increase crash risk. Meanwhile, until all this is sorted out and becomes the norm, always use your seatbelt – it's the safest thing you can do while driving or riding.