travel safety expert Sheldon Jacobson

Tens of millions of drivers will take to the nation’s highways in the 14 weeks between Memorial Day and Labor Day weekend. With driver distraction thought to be the cause of nearly 80 percent of all automobile accidents in the U.S., resulting in about 2,600 deaths, 330,000 injuries and 1.5 million instances of property damage annually, would banning hand-held cell phone use while driving reduce those numbers? Sheldon H. Jacobson, a U. of I. computer science professor, has published research on the impact of hand-held cell phone legislation on driving safety. He was interviewed by News Bureau news editor Phil Ciciora about the dangers of distracted driving.

What are the key conclusions from your research about the impact of hand-held cell phone legislation on driving safety?

In New York state, after hand-held cell phone use was banned while driving, 46 counties
experienced lower fatal accident rates, 10 of which did so at a statistically significant level, while all 62 counties experienced lower personal injury accident rates.

Although the drop was less conclusive in lower-density areas, high-density driving areas tended to have a precipitous drop in the number of accidents involving fatalities and personal injury after the ban was implemented. Moreover, the drop was more pronounced for personal injury accidents than it was for fatality accidents.

An insurance industry-backed report studied pre- and post-ban insurance claims from accidents in California, Connecticut, New York and Washington, D.C. It contended that state laws banning the use of cell phones while driving didn’t reduce the number of vehicle crashes. Your research all but refutes those claims. Who’s right?

There are numerous differences in the two studies, chief among them that our study used publicly available data while the insurance industry study used their own data based on insurance claims. In some circumstances, obviously, accidents occur that do not result in an insurance claim.
Second, the methodologies used in each study were different. Our study compared the pre-law and post-law time periods for New York state, the first state to enact a hand-held cell phone ban while driving.

The insurance industry compared California, Connecticut, New York and Washington, D.C., each individually with a few neighboring states and cities to discern whether the laws reduced insurance accident claims.

Lastly, and most important, our study used the number of licensed drivers as a proxy for accident prediction. This provides a convenient method to standardize the statistics and weed out any possible differences in the pre-law and post-law periods.

**Would national distracted driving legislation save money and, more important, lives?**

Our research suggests that in some environments, such laws have the potential to make a real difference in reducing personal injury accident rates. In particular, licensed driver density – the number of licensed drivers per square mile – is a good predictor of where such laws will have the greatest positive impact.

**Is there any way to voluntarily get drivers to stop using their cell phones while driving?**
Most people realize that driver distraction is a major cause of automobile accidents. Laboratory studies have established that when drivers use their cell phone, they are significantly more distracted than when they are not using such devices. Unfortunately, most people don’t think that distraction translates into safety issues, particularly for themselves. Therefore, education campaigns and stricter enforcement of existing and proposed cell phone ban laws are two routes to reduce cell phone use while driving.

Are there any applications that can prevent drivers from calling, texting or e-mailing while driving?

Several devices have been proposed to physically prevent a driver from using their cell phone while driving. No matter how sophisticated such technologies are, there are always people who will find clever ways to circumvent such devices. Technological gimmicks are not the solution.

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