

**Statement before the Maryland
House Judiciary Committee**

Alcohol Ignition Interlocks

Michele Fields

March 9, 2011

**INSURANCE INSTITUTE
FOR HIGHWAY SAFETY**

1005 NORTH GLEBE ROAD ARLINGTON, VA 22201

PHONE 703/247-1500 FAX 703/247-1678

<http://www.highwaysafety.org>

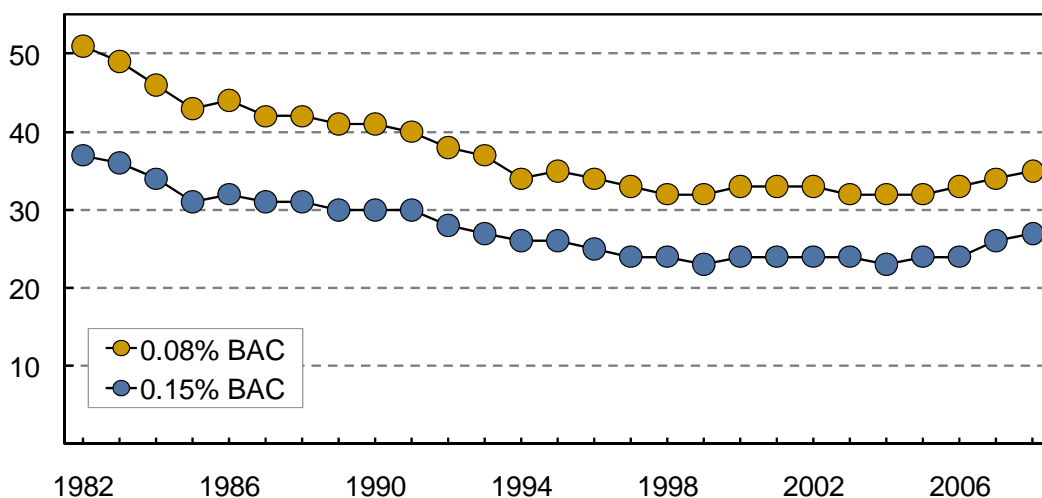
The Insurance Institute for Highway Safety is a nonprofit research and communications organization that identifies ways to reduce the deaths, injuries, and property damage on our nation's highways. We are supported by the nation's automobile insurers. I am submitting for the record Institute research on the effectiveness of ignition interlocks in reducing recidivism among people convicted of alcohol-impaired driving and results of a national telephone survey showing strong support for requiring interlocks for DUI offenders.

Risks of Driving Under the Influence

The probability of a fatal crash rises significantly after 0.05 percent blood alcohol concentration (BAC) and even more rapidly after 0.08 percent.¹ Drivers with BACs at or above 0.15 percent are at very high risk of dying in a crash or sustaining severe injury.^{1,2} Progress has been made during the past 25 years to reduce the numbers and proportions of fatally injured drivers with BACs at or above 0.08 percent. Since 1982 there has been a 37 percent decline in the number of passenger vehicle drivers killed in crashes who had BACs at or above 0.08 percent. There also has been a substantial decline in motorists with BACs at or above 0.15 percent, who often are assumed to be hard-core drinking drivers.

Most of this progress came before the mid-1990s. Since then little headway has been made, so alcohol-impaired driving still is a major problem. In 2005 Institute research estimated that 8,916 deaths would have been prevented if all drivers on the road had BACs lower than 0.08 percent.³ Applying the same methods yields an estimate of 8,104 preventable deaths in 2008 if BACs had been below 0.08 percent.

Percent of Fatally Injured Passenger Vehicle Drivers with BACs At or Above Specified Thresholds, 1982-2008



Why Deterrence is So Important

Most alcohol-impaired drivers never are stopped. Others are stopped, but police may miss signs of impairment. A 1999 study estimated the chance of arrest when driving with a BAC at or above 0.08 percent at less than 1 in 50.⁴ This means the average first-time offender is likely to have driven under the influence more than 50 times before conviction, and the arrest leading to the conviction usually is simply the first time the offender has been apprehended, not the first time the offense was committed.

There are not enough police to apprehend all drivers impaired by alcohol, so efforts are ongoing to go beyond traditional enforcement and deter potential offenders before they drive. One way involves ignition interlocks, and almost all states permit some offenders to drive only if their vehicles have been equipped with such devices. Analyzing drivers' breath and disabling the ignition if a would-be driver has been drinking, interlocks help take some of the burden of enforcement off of police and allow technology to consistently prevent drivers from operating vehicles while under the influence of alcohol.

State Laws Regarding Interlocks

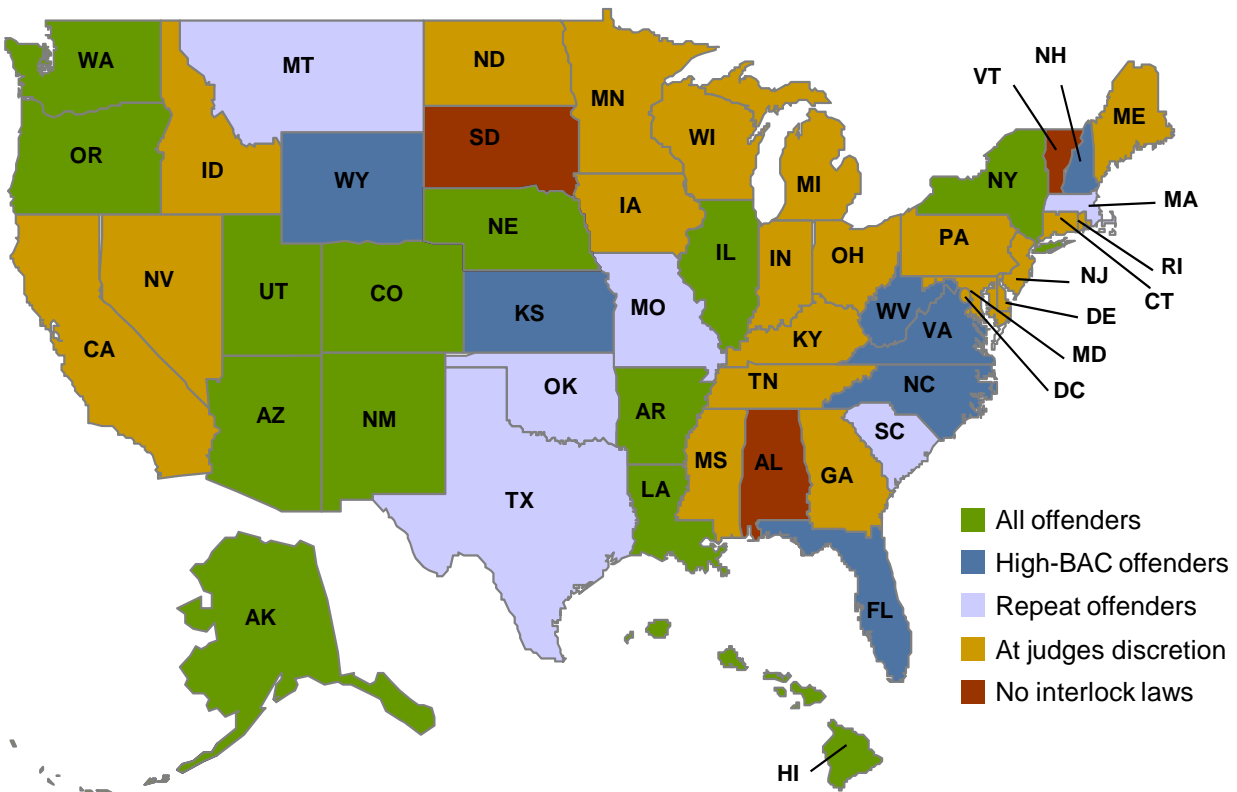
More than half of all US states require some DUI offenders to install ignition interlocks on their vehicles to drive during license suspension and/or require interlocks for specified time periods before full relicensure (see map on page 3). Thirteen states (Alaska, Arizona, Arkansas, Colorado, Hawaii, Illinois, Louisiana, Nebraska, New Mexico, New York, Oregon, Utah, and Washington) apply such restrictions to all offenders, including first-timers. An additional 9 states apply the restrictions to offenders with high BACs (usually 0.15 or higher) and to repeat offenders, while 6 other states apply the restrictions only to repeaters.

Laws in the remaining states do not require interlocks at all, though courts or DMVs in 19 states and the District of Columbia have the discretion to apply interlock requirements. Only 3 states (Alabama, South Dakota, and Vermont) have no interlock laws.

Interlocks Reduce Recidivism

Studies have shown that alcohol ignition interlocks are effective in reducing recidivism among people convicted of impaired driving.⁵ A 1999 Institute study randomly assigned multiple offenders in Maryland who were eligible for license reinstatement to an interlock program or the state's conventional post-licensing treatment program. Participation in the interlock program reduced by nearly 65 percent the risk of committing an alcohol-related traffic violation within the first year

Alcohol Interlock Laws by Triggering Offense



following conviction.⁶ Other studies also have found lower recidivism rates when interlocks are installed on vehicles,⁷⁻¹¹ but any benefits disappear when the interlocks are removed.^{6,10,12}

Applying an interlock requirement to all first-time offenders, not just repeaters or those with very high BACs, would capture a much larger population of at-risk drivers. About two-thirds of US drivers arrested for DUI have no prior convictions.¹³ A recent study in Maryland found that 58 percent of DUI violations during 1999-2004 were committed by drivers with no prior violations.¹⁴ An estimated half or so of drivers arrested or convicted of DUI in the United States have BACs less than 0.15 percent.⁴ Twenty-eight percent of the passenger vehicle drivers with illegal BACs (0.08 percent or higher) who died in crashes in 2008 had BACs lower than 0.15 percent.¹⁵

Institute researchers estimate that more than 900 crash deaths nationally would have been prevented in 2008 if all drivers with DUI offenses within the past 3 years had been restricted to zero BACs. About 100 deaths would have been prevented if only drivers with more than 1 prior DUI offense had been restricted to zero BACs.^{3,16}

Public Support for Interlocks

A 2009 national telephone survey assessed attitudes toward in-vehicle alcohol detection technology. Seventy-two percent of respondents said they had heard about alcohol ignition interlocks for cars of convicted DUI offenders. Eighty-four percent thought this is a good or very good idea. These and other results indicate that most of the US population is receptive to the idea of advanced alcohol detection devices in vehicles to prevent repeat offenses. Moreover, sixty-four percent agreed that such devices could be a good idea in all cars when the technology is proven reliable. Most people in favor of it said it would prevent alcohol-impaired driving, save lives, or prevent crashes.

It is not surprising that support for alcohol detection technology is highest among respondents who do not drink. More encouraging is that it also is favored by the majority of respondents who drink, who have driven within 2 hours of consuming alcohol, and who may have driven with BACs higher than the legal limit.

Conclusion

Alcohol ignition interlocks are proven deterrents to repeat DUI offenses. They reduce recidivism among multiple offenders by nearly two-thirds. Reductions in DUI offenses would be greater if all offenders, not just repeat offenders or those with very high BACs, were required to install interlocks. The public understands the importance of this technology to prevent deaths and injuries from DUI crashes.

References

1. Zador, P.L.; Krawchuck, S.; and Voas, R.B. 2000. Alcohol-related relative risk of driver fatalities and driver involvement in fatal crashes in relation to driver age and gender: an update using 1996 data. *Journal of Studies on Alcohol* 61:387-95.
2. Peck, R.C.; Gebers, M.A.; Voas, R.B.; and Romano, E. 2008. The relationship between blood alcohol concentration (BAC), age, and crash risk. *Journal of Safety Research* 39:311-19.
3. Lund, A.K.; McCartt, A.T.; and Farmer, C.M. 2007. Contribution of alcohol-impaired driving to motor vehicle crash deaths in 2005. *Proceedings of the 18th International Conference on Alcohol, Drugs, and Traffic Safety* (CD-ROM). Oslo, Norway: International Council on Alcohol, Drugs, and Traffic Safety.
4. Hedlund, J.H. and McCartt, A.T. 2002. Drunk driving: seeking additional solutions. Washington, DC: AAA Foundation for Traffic Safety.
5. Willis, C.; Lybrand, S. and Bellamy, N. 2004. Alcohol ignition interlock programmes for reducing drink driving recidivism. *Cochrane Database of Systematic Reviews* 2004, Issue 4. Art. no.: CD004168. Oxfordshire, England: The Cochrane Collaboration.

6. Beck, K.H.; Rauch, W.J.; Baker, E.A.; and Williams, A.F. 1999. Effects of ignition interlock license restrictions on drivers with multiple alcohol offenses: a randomized trial in Maryland. *American Journal of Public Health* 89:1696-1700.
7. Raub, R.A.; Lucke, R.E.; and Wark, R.I. 2003. Breath alcohol ignition interlock devices: controlling the recidivist. *Traffic Injury Prevention* 4:199-205.
8. Bjerre, B. 2003. An evaluation of the Swedish ignition interlock program. *Traffic Injury Prevention* 4:98-104.
9. Morse, B.J. and Elliott, D.S. 1992. Effects of ignition interlock devices on DUI recidivism: findings from a longitudinal study in Hamilton County, Ohio. *Crime and Delinquency* 38:131-57.
10. Tippetts, A.S. and Voas, R.B. 1997. The effectiveness of the West Virginia interlock program on second drunk-driving offenders. *Proceedings of the 14th International Conference on Alcohol, Drugs, and Traffic Safety* 1:185-92. Annecy, France: Centre d'Etudes et de Recherches en Medecine du Trafic.
11. Coben, J.H. and Larkin, G.L. 1998. Effectiveness of ignition interlock devices in reducing drunk driving recidivism. *American Journal of Preventive Medicine* 16:81-87.
12. Beirness, D.J. and Marques, P.R. 2004. Alcohol ignition interlock programs. *Traffic Injury Prevention* 5:299-308.
13. National Highway Traffic Safety Administration. 1995. Repeat DWI offenders in the United States. *Traffic Tech no. 85*. Washington, DC: US Department of Transportation.
14. Rauch, W.J.; Zador, P.L.; Ahlin, E.M.; Howard, J.M.; Frissell, K.C.; and Duncan, G.D. 2009. Risk of alcohol-impaired driving recidivism among first offenders and multiple offenders. *American Journal of Public Health* DOI:10.2105/AJPH.20080.154575.
15. Insurance Institute for Highway Safety. 2010. Q&As: Alcohol – general. Arlington, VA. Available: http://www.iihs.org/research/qanda/alcohol_general.html.
16. McCartt, A.T.; Wells, J.K.; and Teoh, E.R. 2009. Attitudes toward in-vehicle advanced alcohol detection technology. Arlington, VA: Insurance Institute for Highway Safety.