

**Statement before the Ohio House
Judiciary Committee**

Alcohol Ignition Interlocks

Michele M. Fields, Esq.

March 26, 2014

**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 (DUI) 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 30 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 35 percent decline in the percentage of passenger vehicle drivers killed in crashes who had BACs at or above 0.08 percent. There also has been a substantial decline (34 percent) in the percentage of fatally injured passenger vehicle drivers with BACs at or above 0.15 percent.

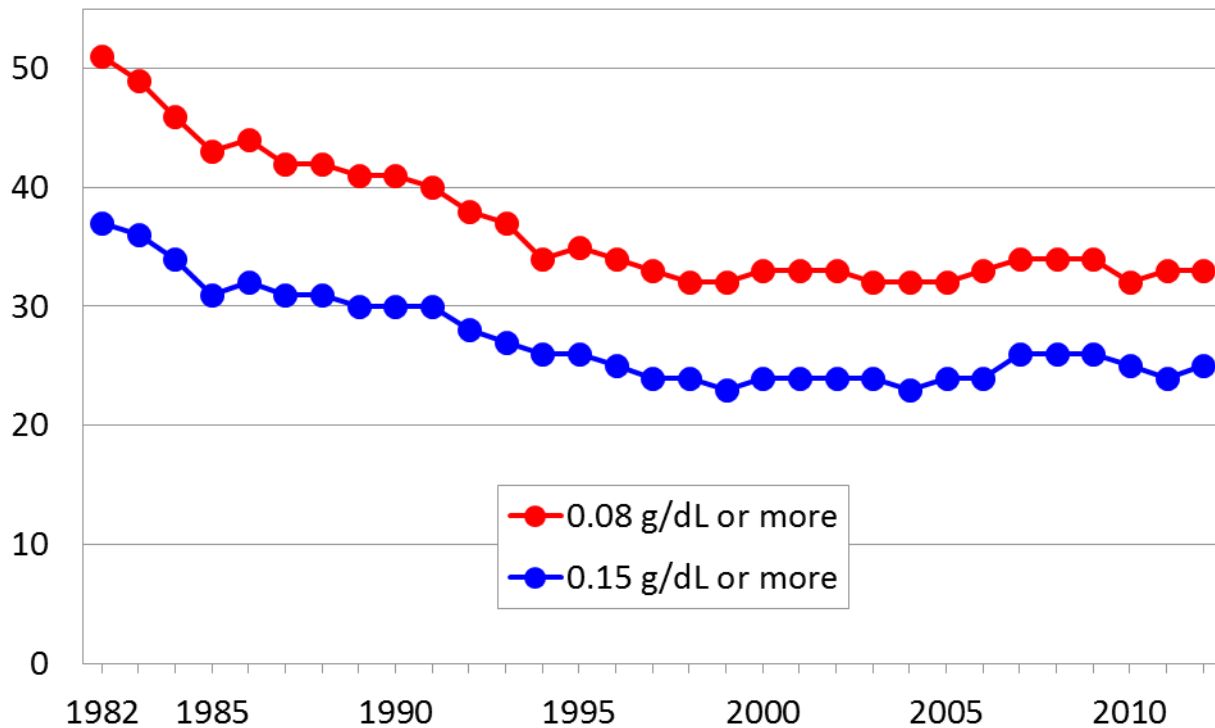
However, this progress occurred before the mid-1990s. Since then, little headway has been made, so alcohol-impaired driving still is a major problem. Consistently since the mid-1990s, about a third of crash deaths have occurred in crashes in which at least one driver had a BAC at or above 0.08 percent. Institute research estimated that 7,082 deaths would have been prevented in 2010 if all drivers with BACs 0.08 percent or higher were kept off the roads.³ Applying the same methods yields an estimate of 7,132 preventable deaths in 2012 if BACs had been below 0.08 percent.⁴

Why Deterrence is So Important

Most alcohol-impaired drivers never are stopped. Others are stopped, but police may miss signs of impairment. Estimates of the chance of arrest when driving with a BAC at or above 0.08 percent range from small (about 1 in 50) to miniscule (1 in 480).^{5,6,7,8} This means the average first-time offender is likely to have driven under the influence many 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

**Percent of Fatally Injured Passenger Vehicle Drivers
with BACs At or Above Specified Thresholds, 1982-2012**

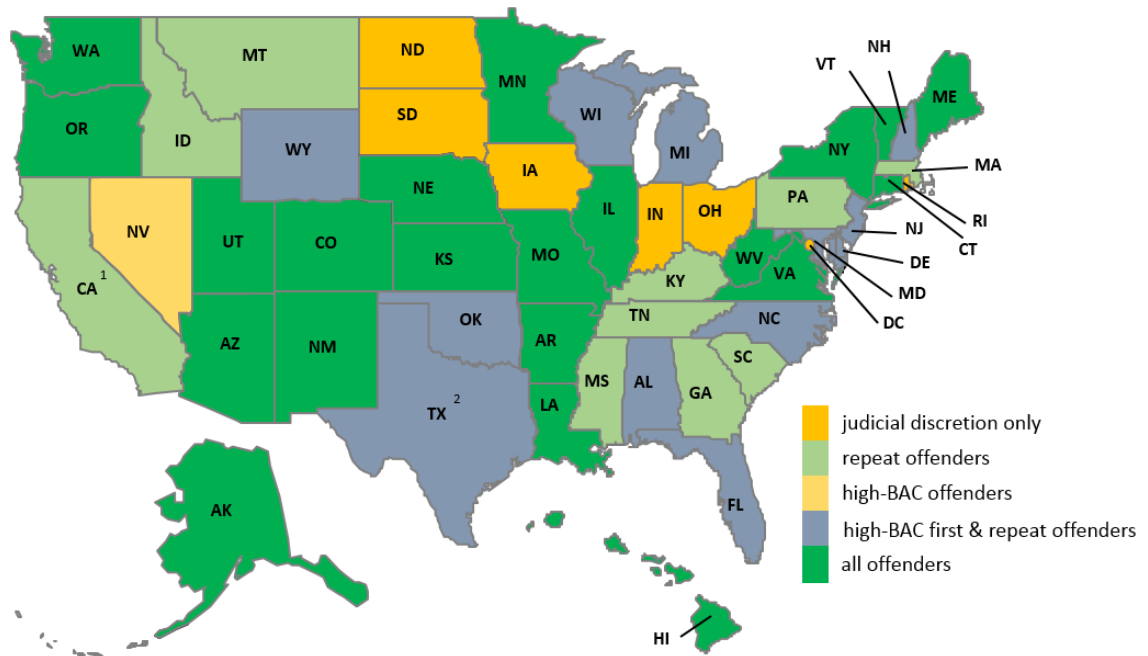


involves ignition interlocks, and almost all states permit some offenders to drive only if their vehicles have been equipped with such devices. By analyzing drivers' breath and disabling the ignition if a would-be driver has been drinking, interlocks help take some of the burden of enforcement off police and allow technology to consistently prevent drivers from operating vehicles while under the influence of alcohol.

State Laws Regarding Interlocks

All 50 states and the District of Columbia have, at a minimum, laws giving courts or driver licensing agencies the discretion to require drivers convicted of DUI to install ignition interlocks to drive during license suspension and/or for specified time periods before full relicensure. 10 states add to this minimum and make the interlock restrictions mandatory for repeat offenders. Going further, 12 states make the restrictions mandatory for repeat offenders and offenders with high BACs. And going furthest, 21 states and four California counties make the interlock restrictions mandatory for all people convicted of DUI, including first-timers. To illustrate among the states the varying triggering offense at which ignition interlocks become mandatory, please refer to the map below.

**State Law Comparison:
Laws Mandating Alcohol Ignition Interlock Orders, March 2014**



¹ California's pilot program requires interlocks for all DUI offenders in Alameda, Los Angeles, Sacramento, and Tulare counties.

² Texas requires interlocks for high-BAC offenders as a condition of suspending the prison sentence.

Interlocks Reduce Recidivism

Studies have shown that alcohol ignition interlocks are effective in reducing recidivism among people convicted of impaired driving while installed on their vehicles.^{9,10} Recent studies comparing recidivism rates among offenders who installed interlocks and those who did not install them, recidivism rates were reduced by 60-80 percent while interlocks were installed.^{11,12} Reductions have been found for both repeat and first-time offenders,^{13,14,15} but the benefits dissipate when the interlocks are removed.^{16,17,18}

In the only randomized control trial, multiple offenders assigned to an interlock program could only reinstate their licenses if they agreed to a restriction prohibiting them from operating a vehicle without an interlock device for one year.¹⁶ Offenders in the control group were eligible for the usual license reinstatement coupled with the conventional treatment program. There was 64 percent reduction in the risk of committing an alcohol-related traffic violation during the one-year interlock program among the interlock group compared with the the control group.

A 2013 Institute study examined the broad effects of an all-offender interlock requirement on all offenders covered by the law, not just the offenders who elect to install interlocks. The research found that after Washington state expanded its interlock requirement to every first-time DUI offender, the interlock installation rate among first-time DUI offenders affected by the law change increased dramatically as a result, and the two-year recidivism rate for the offenders affected by the expansion fell 12 percent.¹⁹ One-third of the offenders affected by the law change installed interlocks after the law change, compared with less than 5 percent before the law change. Researchers estimate that if all first-time DUI offenders had installed an interlock, the two-year recidivism rate would have fallen by nearly half.¹⁹

Applying an interlock requirement to all first-time offenders, not just repeat offenders or those with very high BACs, would capture a much larger population of at-risk drivers. It is estimated that about two-thirds of US drivers arrested for DUI have no prior convictions.²⁰ A study in Maryland found that 58 percent of DUI offenders during 1999-2004 were drivers with no prior violations.²¹ In the Institute's study in Washington, among people arrested for DUI and subsequently convicted, about three-quarters were first-time offenders. It is estimated that about half of drivers arrested or convicted of DUI in the United States have BACs less than 0.15 percent.²² About one-quarter of passenger vehicle drivers with illegal BACs (0.08 percent or higher) who died in crashes in 2012 had BACs lower than 0.15 percent.²³ Furthermore, Institute researchers estimate that about 785 crash deaths nationally would have been prevented in 2010 if all drivers with DUI offenses within the past three years had been restricted to zero BACs.³ Over 140 deaths would have been prevented if only drivers with more than one prior DUI offense had been restricted to zero BACs.

Public Support for Interlocks

A 2009 national telephone survey conducted by the Institute assessed attitudes toward in-vehicle alcohol detection technology.²⁴ 72 percent of respondents said they had heard about alcohol ignition interlocks for cars of convicted DUI offenders. 84 percent thought requiring interlocks for offenders is a good or very good idea.

Conclusion

Alcohol ignition interlocks are proven deterrents to repeat DUI offenses, not only for repeat or very high-BAC offenders but also for offenders convicted of their first DUI offense. 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. Voas, R.B.; Torres, P.; Romano, E.; and Lacey, J.H. 2012. Alcohol-related risk of driver fatalities: an update using 2007 data. *Journal of Studies on Alcohol and Drugs* 73(3):341-350.
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. 2012. Contribution of alcohol-impaired driving to motor vehicle crash deaths in 2010. Arlington, VA: Insurance Institute for Highway Safety.
4. Insurance Institute for Highway Safety. 2014. Unpublished analysis of data from the U.S. Department of Transportation's 2012 Fatal Analysis Reporting System. Arlington, VA.
5. Dowling, A.M.; MacDonald, R.; and Carpenter, K.H. 2011. Frequency of alcohol-impaired driving in New York State. *Accident Analysis and Prevention* 12:120-27.
6. Quinlan, K.P.; Brewer, R.D.; Siegel, P.; Sleet, D.A.; Mokdad, A.H.; Shults, R.A.; and Flowers, N. 2005. Alcohol-impaired driving among U.S. adults: 1993-2002. *American Journal of Preventive Medicine* 28:346-50.
7. Beitel, G.A.; Sharp, M.C.; and Glauz, W.D. 2000. Probability of arrest while driving under the influence of alcohol. *Injury Prevention* 6:158-61.
8. Hause, J.M.; Voas, R.B.; and Chavez, E. 1982. Conducting voluntary roadside surveys: the Stockton experience. In M.R. Valverius (Ed.), *Proceedings of the Satellite Conference to the 8th International Conference on Alcohol, Drugs and Traffic Safety, June 23-25, 1980, Umea, Sweden* (pp. 104-113). Stockholm: The Swedish Council for Information on Alcohol and Other Drugs.
9. Elder, R.W.; Voas, R.; Beirness, D.; Shults, R.A.; Sleet, D.A.; Nichols, J.L.; Compton, R.; and the Task Force on Community Preventive Services. 2011. Effectiveness of ignition interlocks for preventing alcohol-impaired driving and alcohol-related crashes, a community guide systematic review. *American Journal of Preventive Medicine* 40(3):362-376.
10. 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.
11. Bjerre, B. and Thorsson, U. 2008. Is an alcohol ignition interlock programme a useful tool for changing the alcohol and driving habits of drink-drivers? *Accident Analysis and Prevention* 40:267-273.
12. Voas, R.B.; Tippetts, S.S.; Fisher, D.; and Grosz, M. 2010. Requiring suspended drivers to install alcohol interlocks to reinstate their licenses: effective? *Addiction* 105(8):1422-8.
13. Roth, R.; Voas, R.; and Marques, P. 2007. Interlocks for first offenders: effective? *Traffic Injury Prevention* 8:346-352.
14. Vezina, L. 2002. The Quebec alcohol ignition interlock program: impact on recidivism and crashes. In: Mayhew, D. and Dussult, C., eds. *Proceedings of Alcohol, Drugs and Traffic Safety; 2002 Aug 4-9*. Vol. 1. Quebec City: Societe de L'assurance Automobile du Quebec, 9
15. Voas, R.B.; Marques, P.R.; Tippetts, A.S.; and Beirness, D.J. 1999. The Alberta interlock program: the evaluation of a province-wide program on DUI recidivism. *Addiction* 94(12):1849-1859.
16. 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.
17. 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.

18. Beirness, D.J. and Marques, P.R. 2004. Alcohol ignition interlock programs. *Traffic Injury Prevention* 5:299-308.
19. McCartt, A.T.; Leaf, W.A.; Farmer, C.M., Eichelberger, A.H. 2013. Washington state's alcohol ignition interlock law: effects of recidivism among first-time DUI offenders. *Traffic Injury Prevention* 14(3):215-229.
20. National Highway Traffic Safety Administration. 1995. Repeat DWI offenders in the United States. *Traffic Tech no. 85*. Washington, DC: US Department of Transportation.
21. 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.
22. Hedlund, J.H. and McCartt, A.T. 2002. Drunk driving: seeking additional solutions. Washington, DC: AAA Foundation for Traffic Safety.
23. Insurance Institute for Highway Safety. 2014. Q&As: Alcohol – general. Arlington, VA. Available: <http://www.iihs.org/iihs/topics/t/alcohol-impaired-driving/qanda>.
24. McCartt, A.T.; Wells, J.K.; and Teoh, E.R. 2009. Attitudes toward in-vehicle advanced alcohol detection technology. *Traffic Injury Prevention* 11:156-64