

Policy Brief on: *DUI Policy*

Authored by: Alexander C. Wagenaar, PhD and Amy L. Tobler, MPH, University of Florida, College of Medicine, Dept of Epidemiology & Health Policy Research

Reviewed By: C. Raymond Bingham, Ph.D., University of Michigan Transportation Research Institute; Kevin Quinlan, National Transportation Safety Board; Robert Voas, Ph.D., Pacific Institute of Research and Evaluation

Introduction:

Driving under the influence of alcohol (DUI) is a major contributor to traffic crashes and fatalities, with nearly 17,000 lives lost in the U.S. each year due to alcohol-related crashes. Traffic crashes are the leading cause of death for those between 4-34 years of age, and rank third overall in terms of years of life lost, after cancer and heart disease (Subramanian, 2006). Over the last four decades the U.S. has joined the rest of the industrialized world in implementing a modern DUI enforcement system based on the well-established relationship of driving impairment to the level of alcohol in the blood. This has resulted in hundreds of specific changes in laws across the 50 U.S. states designed to deter DUI, including reductions in legal blood alcohol content (BAC) limit for driving, mandatory minimum jail and fine penalties for those convicted of DUI, administrative license revocation at the time of arrest for DUI and implementation of sobriety checkpoints. Teen drivers are at particular risk. Although they drink and drive less often than older drivers, when they do drink and drive they are at greater risk of being involved in a crash (Mayhew et al., 1986; Williams, 2003). As a result, minimum legal drinking age, zero BAC limits and graduated drivers licensing laws which lengthen the driving learning period and limit high risk nighttime driving until the novice driver has gained experience have been implemented to reduce risk among drivers under age 21.

Policy Implications:

The laws a state chooses to implement or chooses not to implement can have large effects on the health and safety of its residents. Despite good intentions, some laws are ineffective. Careful, controlled scientific research is needed to determine effectiveness.

Several laws designed to reduce driving-after-drinking and the crashes that often result have been consistently found to have substantial beneficial effects. States without these laws should move expeditiously to enact them. States with these laws in place should ensure they are being optimally implemented and enforced to further enhance their effectiveness.

Results from studies of DUI policies also have broader implications. Deterrence policies do not require extremely severe penalties for effect. In fact, modest penalties often are more effective, provided they are implemented immediately and consistently after the offending behavior. Sure and swift penalties are more effective than the possibility of a much larger penalty later.

Finally, results from DUI research suggest that laws which change the normative environment concerning acceptable behavior have larger long-term effects than laws that only impose a penalty on an individual who creates an excessive risk for the community. Thus, lowering the legal BAC limit, raising the drinking age and using graduated driver's licensing programs all shape expectations among the general public about appropriate behaviors for teens and adults. Thus the public health benefits of DUI laws extend beyond reducing alcohol-related crashes. To the extent that they reduce high risk drinking, particularly by youths under 21, they affect other negative consequences of drinking such as fights and unsafe sex which are associated with heavy drinking. Results have been quite astounding, in terms of the tens of thousands of lives that have been already saved by these few policy changes in recent decades.

Policy Brief on: *DUI Policy*

The policies described below target the general population of drivers. That is they focus on deterring all who drive from driving after drinking. Deterrence is hypothesized to depend on three factors; the probability of being apprehended, the severity of the sanction and the speed with which the penalty follows apprehension. This is known as “general deterrence.” Many of those laws such as license suspension also help prevent further impaired driving by individuals convicted of a DUI offense who are at an increased risk of causing an alcohol related crash. This is known as “specific deterrence” because it is directed at a specific individual who has demonstrated that they are likely to drive under the influence. Such laws can be effective in reducing crash involvement of DUI offenders but because there are relatively few such previously arrested offenders compared to the large number of drivers on the road, it is more difficult to measure the impact of specific deterrence on the overall alcohol related crash problem in a state. Thus, specific deterrence effects of the laws described below are not reviewed in this summary.

RESULTS

Policies Targeting the General Population

Blood Alcohol Concentration (BAC) Limits

- Lowering the illegal BAC limit from .10 to .08 has resulted in 5-16% reductions in alcohol-related crashes, fatalities, or injuries in the United States, and saves about 400 lives each year. (Fell and Voas, 2006) (Shults et al., 2001) (Tippetts et al., 2005) (Wagenaar et al., 2007a)

Mandatory Minimum Jail Penalties

- Mandatory jail penalties do not have clearly demonstrable general deterrent or preventive effects. (Chaloupka et al., 1993) (Legge and Park, 1994) (Ruhm, 1996) (Sloan and Reilly, 1994) (Villaceces et al., 2003) (Wagenaar et al., 2007b) (Whetten-Goldstein et al., 2000).

Mandatory Minimum Fine Penalties

- Mandatory fine penalties might have some effects in some jurisdictions, but the evidence is quite weak and equivocal. (Chaloupka et al., 1993) (Sloan et al., 1994) (Wagenaar et al., 2007b) (Whetten-Goldstein et al., 2000) (Young and Likens, 2000)

Administrative License Revocation

- Pre-conviction immediate administrative drivers' license suspension policies have clearly shown significant effects on alcohol-related fatal crash involvement among drivers at all BAC levels, saving at least 800 lives per year in the United States. Policies that only implement license suspensions post-conviction have no discernable effects. (Chaloupka et al., 1993) (Legge and Park, 1994) (Ruhm, 1996) (Voas et al., 2000) (Wagenaar and Maldonado-Molina, 2007) (Whetten-Goldstein et al., 2000) (Young and Likens, 2000)

Sobriety checkpoints

- Frequent statewide sobriety checkpoints reduce alcohol-related fatal, injury and property damage crashes by approximately 20 percent. (Elder et al., 2002) (Shults et al., 2001)

Policies Targeting Teens

Minimum Legal Drinking Age

- Raising the minimum legal drinking age from 18 to 21 years has reduced alcohol-related traffic crash fatalities from 6 to 30%, despite inconsistent state laws, limited implementation and modest enforcement. (Fell et al., 2007) (Shults et al., 2001) (Wagenaar, 1983) (Wagenaar & Toomey, 2002)

Zero BAC Limits for Teens

Policy Brief on: *DUI Policy*

- So called “zero-tolerance” laws which specify very low or zero legal BAC limits for drivers under age 21 have resulted in declines in driving after drinking and fatal and non-fatal traffic crashes of 4 to 24%. (Shults et al., 2001) (Wagenaar et al., 2001)

Graduated Drivers Licensing

- Graduated driver’s licensing programs reduce young drivers’ crash risk by 20 to 40%. (Shope, 2007)

Key Results

- Lowering the illegal BAC limit from .10 to .08 has resulted in 5-16% reductions in alcohol-related crashes, fatalities, or injuries in the United States, and save some 400 lives each year. (Fell and Voas, 2006) (Shults et al., 2001) (Tippetts et al., 2005) (Wagenaar et al., 2007a)
- Mandatory jail penalties do not have clearly demonstrable general deterrent or preventive effects. (Chaloupka et al., 1993) (Legge and Park, 1994) (Ruhm, 1996) (Sloan and Reilly, 1994) (Villaceces et al., 2003) (Wagenaar et al., 2007b) (Whetten-Goldstein et al., 2000)
- Mandatory fine penalties do not have clearly demonstrable general deterrent or preventive effects. (Chaloupka et al., 1993) (Sloan et al., 1994) (Wagenaar et al., 2007) (Whetten-Goldstein et al., 2000) (Young and Likens, 2000)
- Pre-conviction (i.e., administrative) drivers’ license suspension policies have significant effects on alcohol-related fatal crash involvement among drivers at all drinking levels, saving at least 800 lives per year in the United States. Post-conviction license suspension policies have no discernable effects. (Chaloupka et al., 1993) (Legge and Park, 1994) (Ruhm, 1996) (Voas et al., 2000) (Wagenaar and Maldonado-Molina, 2007) (Whetten-Goldstein et al., 2000) (Young and Likens, 2000)
- Frequent statewide sobriety checkpoints reduce alcohol-related fatal, injury and property damage crashes by approximately 20 percent. (Elder et al., 2002) (Shults et al., 2001)
- Raising the minimum legal drinking age from 18 to 21 years has reduced alcohol-related traffic crash fatalities from 6-30%, despite variability in state laws, modest implementation and enforcement. (Fell et al., 2007) (Shults et al., 2001) (Wagenaar, 1983) (Wagenaar & Toomey, 2002)
- Zero BAC laws for drivers under age 21 have resulted in declines in fatal and non-fatal traffic crashes of 4-24%. (Shults et al., 2001) (Wagenaar et al., 2001)
- Graduated driver licensing laws reduce young drivers’ crash risk by 20-40%. (Shope, 2007)

Wagenaar, A.C. and Tobler, A.L.; DUI Policy Knowledge Asset, Web site created by the Robert Wood Johnson Foundation's Substance Abuse Policy Research Program; May 2008.

http://saprp.org/knowledgeassets/knowledge_detail.cfm?KAID=8