

Zero Tolerance Driving Initiative

Statistics & Resources

To what scope is underage drinking and driving a problem in West Virginia?⁵

- In 2010, underage drinking cost West Virginians \$400 million, comprised of categories that include medical costs, pain and suffering costs, and work lost costs.
- In 2009, 25% of the alcohol sold in West Virginia was consumed by underage drinkers—this is more than double the national percentage of alcohol consumed by minors in 2002.
- During 2009, 18 traffic fatalities and 915 traffic injuries were attributable to underage drinkers who chose to drive while impaired.

Is alcohol a significant factor in teenagers' crashes?¹²

- Drivers aged 16 to 20 with BACs of 0.05–0.08 g/dL (grams per deciliter) are far more likely than sober teenage drivers to be killed in single-vehicle crashes—17 times more likely for males, 7 times more likely for females.
- At BACs of 0.08–0.10 g/dL, fatality risks are even higher—52 times for males and 15 times for females.

Is there really a need for passive sensors at checkpoints?¹⁰

- A study showed that more than 50% of drivers with BACs in excess of 0.08 g/dL and almost 90% of drivers with BACs in excess of 0.05 g/dl were not detained by officers at DUI checkpoints.
- Drivers with BACs of 0.05% or higher, female drivers, and drivers aged 35 or younger were more likely to be missed than were men and older drivers.
- Drivers without passengers were more likely to be missed than those with passengers.
- Drivers were also more likely to be missed during weekend checkpoints.
- Passive alcohol sensors can help to detect intoxicated drivers when they display no overt signs of intoxication but pose a threat to community roadways.

Are media and enforcement campaigns effective?^{8,13}

- Studies show that the effectiveness of media-based campaigns is affected by various factors including variables such as reinforcement (law enforcement efforts, other media messages, etc.), message, and delivery.
- If done correctly, these campaigns can reduce the number of drinking-and-driving accidents by increasing the perceived risk associated with breaking the law.
- In a recent study using this type of campaign regarding drinking and driving, decreases in drinking-and-driving prevalence were all significant, but greatest for 16- to 20-year-olds, followed by 21- to 24-year-olds, and then drivers 25 and older. The study concluded that a college and community-focused campaign with a strong enforcement component produced substantial reductions in drinking and driving among teenagers and young adults and smaller reductions among older adults.

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Statistics & Resources (continued)

Description of Enclosed Articles:

Article by the Insurance Institute for Highway Safety:

A study at Marshall University in Huntington, West Virginia, evaluated a program of intensive and highly publicized enforcement efforts of the minimum legal drinking age law and drinking-and-driving laws targeted towards 16- to 24-year-olds in a college community. The program produced significant reductions in drinking and driving among teenagers and young adults; there were also significant increases in the percentage of respondents who reported having read, seen, or heard about enforcement efforts, and who believed they were somewhat or very likely/almost certain to be stopped by an officer if driving under the influence.

Using a passive alcohol sensor to detect legally intoxicated drivers:

“The use of passive alcohol sensors at sobriety checkpoints should allow motorists to be processed very quickly with minimal inconvenience. At the same time, detection of legally intoxicated motorists will probably be substantially increased and the general deterrent value of *per se* alcohol-impaired driving laws enhanced.”

Sobriety Checkpoints: An Effective Tool to Reduce DWI Fatalities:

This article discusses passive alcohol sensors and their use, along with deterrence factors of DUI checkpoints. The article also explores the dynamics of driving under the influence and its effects over time and why DUI checkpoints are not used more often.

Resources:

1. Voas, R. B., Tippetts, A. S., & Fell, J. C. (2003). Assessing the effectiveness of minimum legal drinking age and zero-tolerance laws in the United States. *Accident Analysis and Prevention*, 35(4), 579-587. doi: 10.1016/s0001-4575(02)00038-6
2. Centers for Disease Control and Prevention. (2010). Fact Sheet: Underage Drinking. Alcohol and Public Health Retrieved 10/25/11, from <http://www.cdc.gov/alcohol/fact-sheets/underage-drinking.htm#>
3. Zador PL, K. S., & Voas RB.,. (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(3), 387-395.
4. West Virginia Legislature: Driving under influence of alcohol, controlled substances or drugs; penalties. §17C-5-2(i) (2005).
5. Pacific Institute for Research and Evaluation. (2011). Underage Drinking in West Virginia: The Facts. Office of Juvenile Justice and Delinquency Prevention. Retrieved from <http://www.udetc.org/factsheets/WV.pdf>
6. Insurance Institute for Highway Safety. (2008). Status Report.
7. Princeton Review. (2012). Princeton Review: WVU beats Ohio U. for top party school, from http://www.cbsnews.com/8301-201_162-57496759/princeton-review-wvu-beats-ohio-u-for-top-party-school/
8. Elder, R. W., Shults, R. A., Sleet, D. A., Nichols, J. L., Thompson, R. S., & Rajab, W. (2004). Effectiveness of mass media campaigns for reducing drinking and driving and alcohol-involved crashes: A systematic review. *American Journal of Preventive Medicine*, 27(1), 57-65. doi: 10.1016/j.amepre.2004.03.002
9. PAS Systems International. (2012). Passive Alcohol Sensors, from <http://www.pasintl.com/>
10. Wells, J.K., Greene, M.A., Foss, R.D., Ferguson, S.A., & Williams, A.F. (1997). Drinking drivers missed at sobriety checkpoints. *Journal of Studies on Alcohol*, 58(5), 513-517.
11. Hartunian, J. (2002). To breathe, or not to breathe: Passive alcohol sensors and the fourth amendment. *San Diego Law Review*(39).
12. Insurance Institute for Highway Safety. (March 2011). Q&A: Teenagers- Underage Drinking Retrieved 06/14/2012, from <http://www.iihs.org/research/qanda/underage.html>
13. McCart, A. T., Hellinga, L. A., & Wells, J. K. (2009). Effects of a college community campaign on drinking and driving with a strong enforcement component. *Traffic Injury Prevention*, 10(2), 141-147. doi: 10.1080/15389580802701284