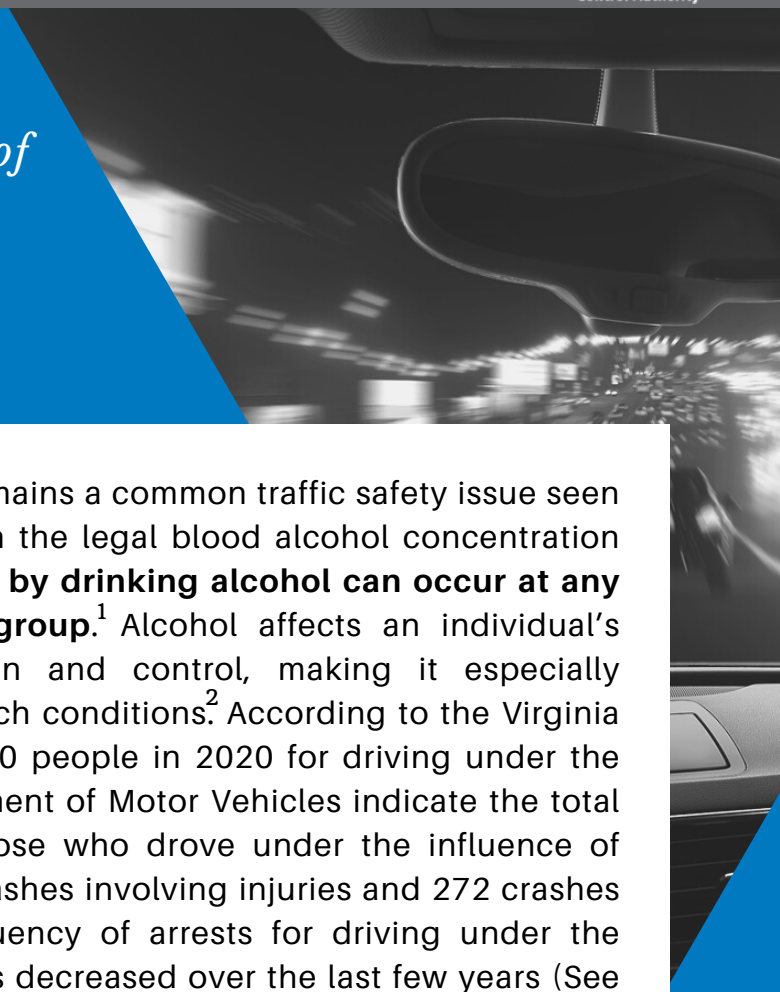

Understanding the Effectiveness of

DRUNK GOGGLES

Driving under the influence of alcohol remains a common traffic safety issue seen by law enforcement in Virginia. Although the legal blood alcohol concentration (BAC) level is 0.08, **impairments caused by drinking alcohol can occur at any BAC level and to any demographic group.**[1] Alcohol affects an individual's attitude, judgment, perception, reaction and control, making it especially dangerous to operate a vehicle under such conditions.[2] According to the Virginia State Police, officers arrested over 17,000 people in 2020 for driving under the influence.[3] Data from the Virginia Department of Motor Vehicles indicate the total number of vehicle crashes involving those who drove under the influence of alcohol in 2020 was 6,624, with 3,986 crashes involving injuries and 272 crashes leading to fatalities.[4] Although the frequency of arrests for driving under the influence and alcohol-related crashes has decreased over the last few years (See Table 1.), much work remains in preventing and educating drivers on the impacts of alcohol on the ability to drive safely.

Table 1: Frequency of Driving Under the Influence in Virginia

	2018	2019	2020
Arrests for driving under the influence	21,362	21,272	17,028
Number of alcohol-related vehicle crashes	7,181	7,048	6,624
Number of alcohol-related vehicle fatalities	278	264	272
Number of alcohol-related vehicle injuries	4,475	4,402	3,986

One popular tactic used by alcohol education and prevention professionals to address the frequency of drinking and driving is incorporating **drunk goggles** into education activities. Drunk goggles, also known as **beer goggles**, are intended to educate users on the harmful consequences of alcohol impairment. The goggles are typically worn by a handful of people who then participate in activities that simulate drinking and driving while an audience observes to see how alcohol

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affects participants' movements. Observers are asked to draw conclusions on how alcohol can affect driving abilities.[5] Activities involving drunk goggles are often used with middle school, high school and college student audiences, as professionals often wish to aim traffic safety messages at younger populations.

The few studies that have explored the use of drunk goggles on prevention have shown some short-term attitude changes yet no effects on behavior changes. Although immediate **changes in attitudes** toward drinking and driving are significant between those participating in the use of drunk goggles and onlookers, **this difference fades after four weeks and is not accompanied by a decrease in drinking and driving**.[6] Changes in attitudes toward drinking and driving are more significant with groups of college students that experience wearing drunk goggles compared to groups overseeing the use of drunk goggles, as **onlooker effects are no more impactful than watching a five-minute educational video**.[7] Those who tend to drink more in social settings, those that believe there is an increased risk of crashing when drinking and driving and those less likely to drive as a means of independence or autonomy show reduced intentions of drinking and driving after participating in a traffic simulator activity using drunk goggles.[8] When inventions using drunk goggles are implemented with middle school populations, middle school students **do not show significant changes in attitudes** towards drinking and driving, suggesting attitude change more likely happens when the intervention is aimed at an older target audience.[9,10]

CONCLUSION & REFERENCES

Although evidence exists to support the effectiveness of using drunk goggles to create attitude change regarding drinking and driving, attitude changes are not significant beyond immediate effects and do not lead to a behavior change. **No supportive evidence exists** regarding the impact of drunk goggles on various audiences longitudinally and whether there is a difference in effectiveness regarding the type of activity participants complete while using the drunk goggles. Because there is no evidence to support behavior change and little evidence exists to support a significant attitude change, **Virginia ABC does not recommend the use of drunk goggles as an effective prevention strategy**. However, if drunk goggles are used, they should be utilized in an environment in which every member of the audience can experience wearing the goggles to ensure the best chance at creating an attitude change for everyone involved.

For ideas on effective, evidence-based prevention strategies, check out the recommendations provided by the **Community Preventive Services Task Force**: https://www.thecommunityguide.org/topic/excessive-alcohol-consumption.

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