## The Benefits of Lowering the BAC Limit for Driving from .08 to 0.05

Lowering the per se blood alcohol concentration (BAC) level to 0.05 BAC has been a proven strategy supported by numerous studies that show 1) drivers are significantly impaired at a 0.05 BAC with regard to driving performance, and 2) lowering the BAC limit to 0.05 reduces drinking and driving and the related injuries and fatalities. Over 100 countries worldwide, including most industrialized countries, have already lowered their per se BAC levels to 0.05 or lower.

## Why Lower the BAC Limit for Driving from 0.08 to 0.05?

Lowering the BAC from 0.08 to 0.05 is a general deterrent to impaired driving and affects all would-be-drinking drivers. Research is clear that lowering the BAC limit from 0.08 to 0.05 is a deterrent to ALL those who drink and drive because it sends a message that the government is getting tougher on impaired driving, and society will not tolerate impaired drivers (Fell & Voas, 2014). Such legislation reduces the number of drinking drivers involved in fatal crashes at all BAC levels (BACs>0.01; BACs>0.05; BACs>0.08; BACs>0.15) (Voas et al., 2000; Wagenaar et al., 2007; Hingson et al., 1996; Thomas et al., 2022).

Lowering the illegal per se limit to 0.05 BAC is a proven effective countermeasure that has reduced alcohol-related traffic fatalities in several countries, most notably Australia and Japan (Brooks & Zaal, 1993; Homel, 1994; Nagata et al., 2008). A meta-analysis of international studies on lowering the BAC limit, in general, found an 11.1% decline in fatal alcohol-related crashes from lowering the BAC to 0.05 or lower and estimated that 1,790 lives would be saved each year if all states in the United States adopted a 0.05 BAC limit (Fell & Scherer, 2017).

Virtually all drivers are impaired concerning driving performance at 0.05 BAC. Laboratory and test track research show that the vast majority of drivers, even experienced drinkers who typically reach BACs of 0.15 or greater, are impaired at 0.05 BAC and higher concerning critical driving tasks (e.g., Ferrara et al., 1994; Howat et al., 1991; Moskowitz et al., 2000; Moskowitz & Fiorentino, 2000).

The risk of being involved in a crash increases significantly at 0.05 BAC. The risk of being involved in a crash increases at each positive BAC level. However, it rises rapidly after a driver reaches or exceeds 0.05 BAC compared to drivers with no alcohol in their blood systems (Compton & Berning, 2015, February). Studies indicate that the relative risk of being killed in a single-vehicle crash for drivers with BACs of 0.05 to 0.079 is at least seven times that of drivers at .00 BAC (Voas et al., 2012; Zador et al., 2000).

*The success of Utah's 0.05 BAC limit.* Utah's fatal crash rate declined by 19.8% in 2019, the first year under the 0.05 BAC limit, compared to the rest of the United States, which had a 5.6% fatal crash reduction in 2019. More than 22% of Utah drivers who drank alcohol reported changing their drinking and driving behavior once the 0.05 law went into effect. The study also

showed that there were no economic declines in alcohol consumption, tourism, and revenues at restaurants and bars in the State (i.e., no economic declines with the change from 0.08 to 0.05 BAC (Berning, 2022, February; Thomas et al., 2022, February). While the Nation experienced an increase in the percent of traffic fatalities involving a driver with a BAC  $\geq$  .15 between 2018 (19%) and 2021 (21%), Utah showed a decrease in that percent from 2018 (17%) to 2021 (16%).

0.05 BAC is a reasonable standard to set. A 0.05 BAC is not typically reached with a couple of beers after work, a glass of wine, or two with dinner. It takes at least four drinks for the average 170 lb. male to exceed 0.05 BAC in two hours on an empty stomach (3 drinks for the 137 lb. female) (NHTSA, 1994). Surveys show that the public believes one should not drive after having 2 or 3 drinks within 2 hours (Royal, 2000). That is lower than a 0.05 BAC for most people.

A 0.05 BAC limit will significantly reduce the number of non-fatal crashes and related consequences. Alcohol-related traffic incidents do not always result in fatalities. However, they create numerous other significant consequences and harms affecting drivers, passengers, pedestrians, cyclists, and others sharing the roadways. Non-fatal injuries can require significant medical treatment and hospitalization, temporary and permanent disabilities, loss of work and income to individuals and families, and trauma and mental health problems for crash victims and their families. A meta-analysis of prior studies of the effects of lowering the BAC limit indicated that non-fatal alcohol-related crashes were reduced by 5%, which was significant (Fell & Scherer, 2017).

A 0.05 BAC limit would reduce the economic burden of alcohol-impaired driving to the State, including first responders. A 0.05 BAC would reduce alcohol-impaired driving and crash rates, resulting in lower economic costs and resources for the State. Economic costs include first responder and hospital ER resources to respond to the incidents, associated medical costs, court costs, damages and repairs to roadways, and the loss of work production.

*Most industrialized nations have set BAC limits at 0.05 BAC or lower*. All states in Australia have had a 0.05 BAC limit for over 30 years. France, Austria, Italy, Spain, and Germany lowered their limit to 0.05 BAC, while Sweden, Norway, Japan, and Russia have set their limit at .02 BAC (WHO, 2013).

The following National and International Organizations recommend a BAC Limit of .05 World Medical Association; American Medical Association; British Medical Association; European Commission; European Transport Safety Council; World Health Organization; Canadian Medical Association; Centre for Addiction and Mental Health; Centers for Disease Control and Prevention; National Transportation Safety Board; National Academies of Science, Engineering and Medicine; Association for the Advancement of Automotive Medicine; AB-InBev Foundation

## Support from the alcohol industry

https://www.ab-inbev.com/what-we-do/road-safety.html
AB InBEV Foundation
Making Road Safety a Priority
From the AB-InBEV Foundation website:

"Traditional designated driver programs, ride services, and mass media campaigns are useful to create awareness, but they're not enough. Effective change also requires legislation and enforcement. That's why we support measures that have been proven to reduce impaired driving, such as high-visibility enforcement patrols, public education and awareness campaigns, and the use of technologies such as ignition interlocks and alcohol detection systems. We also support the enactment of mandatory BAC limits in every country. We agree with the World Health Organization that a 0.05 BAC limit is generally considered to be the best practice at this time; however, we defer to governments to determine the appropriate mandatory BAC limits in their respective jurisdictions."

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