

POINT/COUNTERPOINT

Potential Statements and Questions by Opponents of .05 BAC Laws

POINT: How would lowering per se BAC laws to .05% reduce alcohol-involved crashes? How many lives will be saved and injuries prevented by lowering the per se BAC?

COUNTERPOINT: When states lowered the per se BAC limit from .15 BAC to .10 BAC, these laws served as a general deterrent to drunk driving. Many drivers perceived the law change as the government getting tougher on drunk driving. Consequently, fewer drivers drove drunk and alcohol-related fatal crashes decreased. The same deterrent effect took place when the BAC limits were lowered from .10 BAC to .08 BAC. Drivers at all BAC levels (.01+; .08+; .15+) got the message and reduced their impaired driving.

One study of the effects of the .08 BAC laws in the United States estimated that .08 BAC laws prevent 360 deaths per year and that lowering the BAC limit even further to .05 would prevent an additional 538 deaths per year (Wagenaar, Maldonado-Molina, Ma, Tobler, & Komro, 2007).

A meta-analysis of .08 BAC laws in 19 states indicated a 14.8% reduction in drinking drivers in fatal crashes associated with the passage of .08 BAC laws. This analysis suggested that .08 laws saved 947 lives each year. Lowering the BAC limit from .08 to .05 should have a similar effect.

A NHTSA-sponsored (50-state) study estimated that 590 lives would be saved if all states lowered their BAC limit from .10 to .08 (Voas, Tippetts, & Fell, 2000).

One study in Australia found a 7% to 14% reduction in serious injury crashes associated with the passage of .05 BAC laws. It is difficult to estimate how many serious injuries would be avoided due to .05 BAC laws in the United States, but it would be in the thousands.

A recent study conducted under a grant from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) found from a meta-analysis of studies around the world that lowering the BAC limit to .05 or lower was associated with an 11% decrease in alcohol-impaired driving fatal crashes. That study estimated that 1,790 lives could be saved each year if all states adopted a .05 BAC limit (Fell & Scherer, 2017).

An evaluation of the .05 BAC law in Utah showed a 19.8% decrease in the fatal crash rate after the adoption of the .05 law compared to 5.6% fatal crash rate reduction for the rest of the states. There were decreases in numerous measures of alcohol impaired crashes ranging from 7.8% to 22.9% reductions (Thomas et al., 2022).

POINT: .05 BAC laws will make criminals out of normal social drinkers.

COUNTERPOINT: Impairment and crash risk are the relevant issues—not how many drinks it may take to get to .05 BAC. Scores of studies have been conducted which indicate that, at .05 BAC, virtually everyone is impaired in important skills related to driving and, at that .05 level, the risk of being involved in a fatal crash is significantly greater than at .00 BAC. Drivers who are impaired by alcohol, whether they are social drinkers or problem drinkers, should not drive.

POINT: Lowering the limit from .08 BAC to .05 BAC will just distract us from the real problem—high BAC, chronic drinking drivers.

COUNTERPOINT: The studies of the effectiveness of .08 BAC laws indicate that these laws are just as effective in reducing alcohol-related fatalities involving high BAC drivers as they are in reducing fatalities involving low BAC drivers (Hingson, Heeren, & Winter, 1996; Wagenaar, et al., 2007). In the Utah study of the effects of their .05 BAC law there were reductions of 22.5% for drivers in crashes at BACs>.15 and similar reductions for drivers in crashes with BACs>.08 (22.9%) and BACs>.05 (22.5%) (Thomas et al., 2022).

Again, however, impairment and crash risk are the most relevant issues, not whether or not a person is considered a social drinker or a heavy drinker. It should be illegal for any person to operate a motor vehicle if he or she is impaired by alcohol and research has consistently shown that virtually everyone is impaired in important driving-related functions at a BAC of .05 and higher, with decrements in performance on the order of 30% to 50%. Research has also consistently shown that a person at .05 BAC and higher is many times more likely to be involved in a fatal crash than is a person at .00 BAC.

Only a small percentage of alcohol-impaired drivers are ever caught and processed through the judicial system. Thus, a small minority of alcohol-related fatal crashes involve an identified chronic offender. Therefore, to reduce alcohol-impaired driving, it is essential to pursue both a broad preventive approach (of which a .05 BAC law is but one component) as well as a more specific approach that deals primarily with those chronic, heavy drinkers who are apprehended and identified by the system. (These are really key points in this counterpoint)

POINT: .05 BAC laws will overwhelm police and clog the criminal justice system.

COUNTERPOINT: Several studies, including a NHTSA-sponsored study in Illinois (Voas, Taylor, Kelley-Baker & Tippetts, 2000), have looked at the impact of .08 BAC laws on enforcement efforts and the criminal justice system. These studies have not found any significant problems for the police or for the court systems. The same should happen when the limit is lowered from .08 to .05 BAC. There will be slight increase in DWI arrests, but not enough to overburden the criminal justice system. The same finding occurred in the Utah study of their .05 BAC law----no significant increases in DUI arrests after the law was adopted.

POINT: “I know when I’m ‘too drunk to drive’—I don’t need to be concerned about my blood alcohol concentration.”

COUNTERPOINT: Your driving skills can be seriously compromised even when you may not appear to be observably “drunk” or do not feel drunk. Alcohol causes significant impairment in reaction time, divided attention, tracking behavior, and other skills essential for safe driving. Even when attempting to drive more carefully, an impaired driver cannot compensate for those reduced abilities. In addition, alcohol affects your ability to judge whether or not you are impaired.

POINT: The American public will not support .05 BAC because most people have no idea how much alcohol it would take to put them over the legal limit.

COUNTERPOINT: According to several national surveys, most Americans would not drive after having two or three drinks in one hour, an amount that would put them at about .05 BAC. Most people know how much alcohol it takes to impair their driving ability and they accept lower limits such as .05 BAC for adults.

The average male at 170 pounds would need 4 drinks in two hours on an empty stomach to reach a BAC exceeding .05. An average female weighing 137 pounds would not reach .05 BAC until she had 3 drinks in two hours on an empty stomach. The number of drinks, how fast you drink, your gender, your weight and whether there is food in your stomach all affect what your BAC will be.

A recent probability-based survey conducted by the AAA Foundation for Traffic Safety of over 2500 licensed drivers found that almost two-thirds (63.1%) of the respondents approved of lowering the illegal BAC limit from 0.08 to 0.05 g/dL.

POINT: Lowering the illegal BAC limit from .08 BAC to .05 BAC will not affect problem drinker drivers who have high BAC levels.

COUNTERPOINT: Several studies have shown that .08 laws not only reduce the incidence of impaired driving at lower BACs, they also reduce the incidence of impaired driving at higher BACs (i.e., over .10 and over .15). A .05 law will serve as a *general* deterrent to drinking and driving. It will send a message that the state is getting tougher on impaired driving, and it will make many people think twice about getting behind the wheel after they’ve had two, three or four drinks. A .05 BAC law can serve as a key component of an overall program to reduce impaired driving in any state. While high BAC, problem drinkers, and repeat DWI offenders do account for a significant part of the problem, more than three-quarters of all drivers involved in alcohol-related fatal crashes have no prior alcohol-related offenses.

POINT: Lowering the BAC limit to .05 will make it difficult for the law enforcement community to determine impairment using the Standardized Field Sobriety Tests (SFSTs).

COUNTERPOINT: Lowering the per se limit to .05 does not place an unnecessary strain on police officers. They still must have probable cause to stop drivers and to determine if they are impaired. The horizontal gaze nystagmus (HGN) test of the three SFSTs is just as valid at .05 BAC as it is at .08 BAC and .10 BAC (McKnight, Langston, McKnight, & Lange, 2002).

POINT: Lowering the BAC limit from .08 to .05 appears to be another attempt at prohibition. Isn't it a slippery slope toward a zero-tolerance policy for all drivers?

COUNTERPOINT: The notion that safety organizations seek a return to prohibition is unfounded. Although there is strong research evidence that driving-related skills begin to deteriorate at lower BACs, numerous medical associations and public health organizations in other countries support .05 BAC as a reasonable and acceptable level that will save lives, prevent injuries and reduce costs to society. At least 63 countries around the world have adopted BAC limits for driving at .05 or lower. Only 21 countries remain at a .08 BAC limit.

POINT: What other organizations support a per se BAC level lower than .08%?

COUNTERPOINT: The World Medical Association, the American Medical Association, the British Medical Association, the European Commission, the European Transport Safety Council, the World Health Organization, the Canadian Medical Association, the Centre for Addiction and Mental Health, the National Transportation Safety Board, the National Academies of Science, Engineering and Medicine, the Association for the Advancement of Automotive Medicine, and the AB-InBev Foundation all have policies supporting a .05 BAC limit or lower.

POINT: Why shouldn't I be allowed to drive with a BAC between .05% and .08% if I don't show signs of impairment? Aren't I a better judge of my own reactions and abilities than the government?

COUNTERPOINT: You may not be the best judge of whether you are impaired or not by alcohol, especially at BACs of .05 and higher. Howat, Sleet, and Smith (1991) conducted a review of the literature from experimental and laboratory research on the impairment effects at .05 BAC. Many of the studies reviewed showed statistically significant decrements in driving performance at a BAC of .05 or lower. They recommended that setting a uniform .05 BAC statutory limit should be one measure in a comprehensive approach to reducing impaired driving including other legal, social, behavioral, and environmental strategies to deal with the problem. In addition, Ferrara, Zancaner, and Georgetti (1994) concluded in a review of the research literature that driving performance changes initially begin with any departure from a .00 BAC.

Moskowitz and Fiorentino (2000) reviewed 112 scientific articles regarding the effects of alcohol on driving-related skills published between 1981 and 1997. They concluded that, by the time subjects reach .05 BAC, the majority of experimental studies examined reported significant impairment. After testing 168 drivers in another study, Moskowitz, Burns, Fiorentino, Smiley, and Zador (2000) concluded that the majority of the driving population is impaired in at least some important measures at BACs as low as .02 BAC.

Recent epidemiological studies of the relative risk of being involved in a crash at various positive BAC levels indicate that the risk of crashing is substantially higher at .05 g/dL BAC compared to drivers at .00 g/dL BAC (Compton and Berning, 2015; Lacey et al., 2016; Voas, Torres, Romano, & Lacey, 2012). Zador, Krawchuk, and Voas (2000) estimated that the risk of being involved in a fatal crash for drivers at BACs as low as .02–.04 is anywhere from two times to five times higher than for drivers with BACs=.00, depending upon age and gender. That same study concluded that the risk of being killed as a driver in a single-vehicle crash is 6 to 17 times greater for drivers at BACs between .05 and .07 g/dL compared to drivers with BACs of .00, and that the risk of just being involved as a driver in a fatal crash is 4 to 10 times greater at BACs between .05 and .07 than drivers with BACs=.00.

POINT: As noted in the NTSB report, the per se BAC limit for noncommercial drivers over age 21 was lowered from 0.10 to 0.08 for all states by 2004, and all states have zero tolerance laws specifying per se BAC limits of 0.00-0.02 for drivers under 21, but NHTSA's own statistics show no change in the percentage of fatalities involving drivers with BACs over 0.00, 0.01-0.07, or 0.08+ since about 1997. If lowering the BAC from 0.10 to 0.08 didn't have an effect, why will lowering it to 0.05 be any better?

Also, in a similar vein, according to the information cited by NHTSA and NTSB, the most frequent BAC of drivers involved in fatal crashes was 0.16— twice the current illegal limit of .08 BAC. So how will lowering the BAC limit to 0.05 have any effect on the truly drunk drivers who are the real problem? You admit in the NTSB report that it's counterintuitive, but suggest it would somehow create a broad deterrent effect that would reduce all alcohol related crashes? If that's true, why has the percentage of drivers in fatal accidents at all BACs remained the same since 1997 despite a change in BAC limits?

COUNTERPOINT: States began lowering their BAC limit to .08 beginning in 1983. Most of those states experienced a decrease in the percentage of fatal crashes involving an impaired driving after the law was adopted. In 2000, there was a federal sanction (withholding of highway construction funds) if states did not adopt a .08 per se BAC limit. Consequently, by 2005, all states adopted .08 BAC. The biggest decreases in impaired driving fatal crashes took place between 1982 and 1997 (Dang, 2008). This was due to .08 laws being adopted, administrative license revocation (ALR) laws being adopted, increased impaired driving enforcement, and many other factors. After 1997, very little activity transpired in impaired driving countermeasures that served as general deterrence to impaired driving. The adoption of .08 laws and the infrastructure of other laws kept the percentage of fatal crashes involving impaired drivers at the same level as 1997 through 2019.

The .08 laws adopted between 1983 and 1997 were accompanied by intensive publicity and public awareness and increased enforcement. This activity waned after 1997. In order for laws to be an effective general deterrent, the public must be aware of them and the media must report them. This did not happen to any great extent with .08 laws adopted after 1997.

It is expected that .05 BAC laws will serve as a strong general deterrent to impaired driving and affect drinking drivers at all BAC levels—including .16 and higher. This is what happened when the first .08 BAC laws were adopted. Reductions were seen in fatal crashes involving drivers who were drinking (BAC>.01), who were intoxicated (BAC>.08) and who were at very high BACs (BAC>.15). Similar reductions were experienced in Utah when they adopted a .05 BAC limit.

Most drunk driving laws passed recently have been specific deterrent laws (sanctions for DWI offenders caught and convicted). A law that sends the message that the state will not tolerate impaired driving, such as lowering the limit to .05 BAC, has substantial potential to resume progress in reducing impaired driving injuries and fatalities.

POINT: According to a NHTSA research report, talking on a hands-free cell phone while driving is equivalent to driving with a .08 BAC. Distracted driving is apparently more dangerous than driving with a .05 BAC.

COUNTERPOINT: Not true. Talking or texting on a cell phone is dangerous for the brief time during the driver's trip while that behavior is occurring. The other times are at normal risk of a crash. A driver at a .05 BAC or higher is impaired the entire trip and at a crash risk significantly higher than a driver with a .00 BAC. The crash risk of distracted drivers is due to not keeping their eyes on the road ahead of them. The crash risk of a driver at a .05 BAC or higher is due to impaired decision-making, coordination, slowed reaction time, and tracking and steering ability, among other performance decrements.

POINT: A University of Utah report says that older drivers (aged 65 and older) have the same crash risk as a younger driver with a .05 BAC. Should we arrest older drivers for being impaired?

COUNTERPOINT: Of course not, unless they are exhibiting unsafe behaviors. Most older drivers are safe drivers and compensate for any infirmities in their driving. Young novice drivers also have a high crash risk—much higher than older drivers. It is proven from research that any driver at any age is impaired at .05 BAC and therefore it should be illegal. Most people say you should not drive after 2 or 3 drinks within two hours—which is .05 BAC or less for most of them.

POINT: A Rutgers University report says that police cannot detect a driver at .08 BAC because they do not exhibit typical “drunk” behavior.

COUNTERPOINT: Again, not true. A driver with a .08 BAC put through the Standardized Field Sobriety Testing (SFST) typically has numerous failures in the tests. The tests consist of a one-legged stand, a walk-and-turn and a horizontal gaze nystagmus detection. Most drivers at .08 BAC falter, do not follow directions and show nystagmus. Those signs detect alcohol impairment.

POINT: While Utah experienced a 19.8% decrease in their fatal crash rate between 2016 and 2019, three other States experienced larger decreases without a .05 BAC law. So Utah’s decrease was not necessarily due to the .05 BAC law.

COUNTERPOINT: So that means that 46 other States had fatal crash rate decreases that were smaller than Utah’s and overall that decrease was 5.6% in the 49 States other than Utah. That is very impressive.

The three States with larger decreases than Utah might have been due to a number of known effective countermeasures: an increase in traffic enforcement; an increase in seat belt use; a decrease in speeding; and other programs. The decrease in Utah was directly associated with the adoption and implementation of the .05 BAC law.

POINT: A report from the California DMV in the 1990s stated that there was no significant effect on fatal crashes when the .08 BAC law went into effect. Therefore, there will probably be no significant impact of a .05 BAC law.

COUNTERPOINT: NHTSA sponsored a study of the .08 BAC law in California in 1991. That study found that the lower BAC level (.08) and the new administrative license revocation (ALR) law combined resulted in a 12% decrease in alcohol-related fatalities (Research and Evaluation Associates, 1991). The California DMV study found a 7% reduction in nighttime fatal and serious injury crashes associated with the .08 BAC and ALR laws (Rogers, 1995). Lowering the BAC limit from .10 BAC to .08 BAC has been a proven effective strategy.

REFERENCES:

- Compton, R. P. & Berning, A. (2015, February). Drug and alcohol crash risk. (Traffic Safety Facts Research Note, Report No. DOT HS 812 117). Washington, DC: National Highway Traffic Safety Administration.
- Dang, Jennifer N. (2008). *Statistical analysis of alcohol-related driving trends, 1982-2005*. (DOT HS 810 942). Washington, DC: National Highway Traffic Safety Administration. Retrieved from <http://www-nrd.nhtsa.dot.gov/Pubs/810942.pdf>.
- Fell, James C., Voas, Robert B. (2017). Utah is First State in the United States to Set a .05 BAC Limit for Driving. Forensic Science Around the World: News and Recent Developments. *Forensic Science Review*, 29(1).
- Fell, James C., Scherer, Michael (2017). Estimation of the Potential Effectiveness of Lowering the Blood Alcohol Concentration (BAC) Limit for Driving from 0.08 to 0.05 grams per Deciliter in the United States. *Alcoholism: Clinical and Experimental Research*, 41 (12), 2128-2139.
- Ferrara, S.D., Zancaner, S., & Georgetti, R. (1994). Low blood alcohol levels and driving impairment. A review of experimental studies and international legislation. *International Journal of Legal Medicine*, 106(4), 169-177.
- Hingson, R., Heeren, T., & Winter, M. (1996). Lowering state legal blood alcohol limits to 0.08 percent: The effect on fatal motor vehicle crashes. *American Journal of Public Health*, 86(9), 1297-1299.
- Howat, P., Sleet, D., & Smith, I. (1991). Alcohol and driving: Is the 0.05% blood alcohol concentration limit justified? *Drug and Alcohol Review*, 10, 151-166.
- Lacey, J. H., Kelley-Baker, T., Berning, A., Romano, E., Ramirez, A., Yao, J., ... & Compton, R. (2016, December). Drug and alcohol crash risk: A case-control study (Report No. DOT HS 812 355). Washington, DC: National Highway Traffic Safety Administration.
- McKnight, A.J., Langston, E., McKnight, A.S., & Lange, J. (2002). Sobriety tests for low blood alcohol concentrations. *Accident Analysis and Prevention*, 34(3), 305-311.
- Moskowitz, H., Burns, M., Fiorentino, D., Smiley, A., & Zador, P. (2000). *Driver characteristics and impairment at various BACs*. (DOT HS 809 075). Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration.
- Moskowitz, H., & Fiorentino, D. (2000). *A review of the literature on the effects of low doses of alcohol on driving-related skills*. (DOT HS 809 028). Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration.
- Research and Evaluation Associates (REA). (1991). The effects following the implementation of an 0.08 BAC limit and an administrative per se law in California (Report No. DOT HS 807 777). Washington, DC: National Highway Traffic Safety Administration.
- Rogers, P. (1995). The general deterrent impact of California's 0.08% blood alcohol concentration limit and administrative per se license suspension laws. Sacramento, CA: California Department of Motor Vehicles.
- Thomas, F. D., Blomberg R., Darrah, J., Graham, L., Southcott, T., Dennert, R., Taylor, E., Treffers, R., Tippetts, S., McKnight, S., & Berning, A. (2022, February). Evaluation of Utah's .05 BAC per se law (Report No. DOT HS 813 233). National Highway Traffic Safety Administration.
- Voas, R.B., Tippetts, A.S., & Fell, J.C. (2000). The relationship of alcohol safety laws to

- drinking drivers in fatal crashes. *Accident Analysis and Prevention*, 32(4), 483-492.
- Voas, Robert B., Torres, Pedro, Romano, E., & Lacey, John H. (2012). Alcohol-related risk of driver fatalities: An update using 2007 data. *Journal of Studies on Alcohol and Drugs*, 73(3), 341-350.
- Wagenaar, A., Maldonado-Molina, M., Ma, L., Tobler, A., & Komro, K. (2007). Effects of legal BAC limits on fatal crash involvement: Analyses of 28 states from 1976 through 2002. *Journal of Safety Research*, 38, 493-499.
- Zador, Paul L., Krawchuk, Sheila A., & Voas, Robert B. (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.

For further information, contact:

James C. Fell | Principal Research Scientist, Economics, Justice, & Society
NORC at the University of Chicago
4350 East-West Highway, 8th Floor, Bethesda MD 20814
Fell-jim@norc.org office (301) 634-9576 | mobile (240) 354-2137