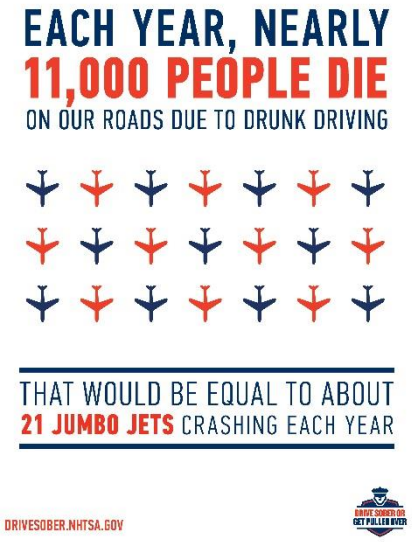
Safety Priority Statement
Alcohol-Impaired Driving

Proposed Position: All drivers are sober behind the wheel

Potential Lives Saved if no drivers BACs exceed 0.08%: more than 7,000 per year[1]



Current Situation: In 2016 alone, there were 10,497 fatalities from alcohol-impaired driving in the U.S, representing 28% of all motor vehicle traffic fatalities.[2] There are approximately 29 alcohol-impaired driving deaths each day – one every 50 minutes. Of those fatalities, 214 were children 14-years-old and younger, 17% of all fatalities in that age group. According to NHTSA, while alcohol-impaired driving fatalities have fallen from 50% of fatalities to approximately 30% of US roadway fatalities in the last 30 years, the preventable deaths and injuries that result from alcohol-impaired driving continue to cost society an estimated $44 billion annually.[3]

Background: Since the 1980s, many changes have resulted in reducing alcohol-impaired fatalities. The drinking age was increased to 21 nationwide, all states established a 0.08% BAC requirement, and organizations such as Mothers Against Drunk Driving (MADD) brought national attention to the staggering death toll on the roadways. Public education campaigns, new laws and strong enforcement were effective in reducing alcohol-impaired driving deaths, though they still remain a pressing traffic safety issue today. On average, over the 10-year period from 2006-2016, more than 10,000 people died every year in alcohol-impaired driving crashes. However, the number of alcohol-related crash deaths has plateaued, and the persisting rate of fatalities is unacceptable. A 2017 study by the AAA Foundation for Traffic Safety found that an estimated 14% of drivers had driven with a BAC either close to or over the legal limit of 0.08% in the past year[4].

Opportunity: There are many strategies that have been proven effective for preventing and reducing alcohol-impaired driving. Strategies that work have included: mandatory ignition interlock devices for first-time convicted offenders, license revocation or suspension for offenders, sobriety checkpoints, lowering the BAC requirement, and mass media campaigns in support of enforcement, such as "Drive Sober or Get Pulled Over." While these strategies have lowered the incidence of alcohol-impaired driving drastically since the 1980s, progress has stalled over the past decades. It is time to double down on those strategies that have been proven to

[1] IIHS: Impaired driving: topic overview
[2] NHTSA: Alcohol-Impaired Driving Traffic Safety Facts
[3] NHTSA: The Economic and Societal Impact of Motor Vehicle Crashes, 2010
[4] AAA: 2017 Traffic Safety Culture Index

work and consider new approaches in order to significantly reduce and eventually put an end alcohol-impaired driving.

Supporters of Road to Zero Coalition Priority Statement on Alcohol-Impaired Driving

Organization	Organization URL
AAA	aaa.org
Advocates for Highway and Auto Safety	saferoads.org
American Association of Motor Vehicle Administrators	aamva.org
American Association of State Highway and Transportation Officials	transportation.org
Commercial Vehicle Safety Alliance	cvsa.org
Global Automakers	globalautomakers.org
Governors Highway Safety Association	ghsa.org
Institute of Transportation Engineers	ite.org
Insurance Institute for Highway Safety	iihs.org
Intelligent Car Coalition	intelligentcarcoalition.org
International Association of Chiefs of Police	theiacp.org
MADD	madd.org
National Association of City Transportation Officials	nacto.org
National Association of County Engineers	naco.org
National Association of State Emergency Medical Service Officials	nasemso.org
National Safety Council	nsc.org
Vision Zero Network	visionzeronetwork.org

Safety Priority Statement
Alcohol-Impaired Driving

Federal Sources of Data with Links

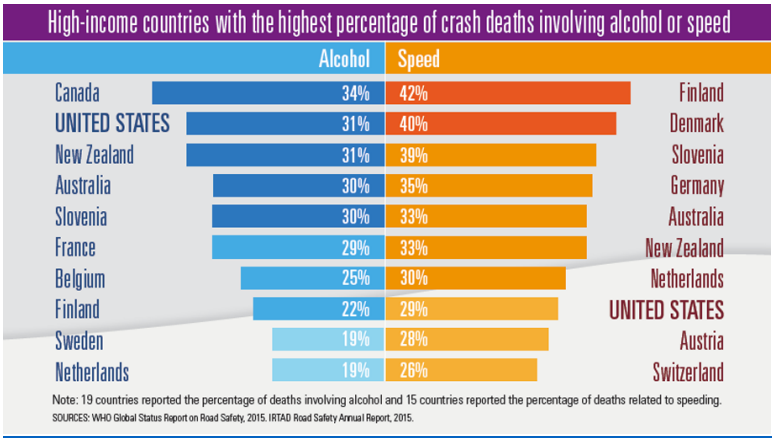
- National Highway Traffic Safety Administration Drunk Driving

Fatalities, by Role, in Crashes Involving at Least One Driver With a BAC of .08 g/dL or Higher, 2016

Role	Number	Percent of Total Fatalities
Driver With BAC=.08+ g/dL	6,479	62%
Passenger Riding With Driver With BAC=.08+ g/dL	1,550	15%
Subtotal	**8,029**	**76%**
Occupants of Other Vehicles	1,520	14%
Nonoccupants (pedestrians/ pedalcyclists/other)	948	9%
Total Alcohol-Impaired-Driving Fatalities	**10,497**	**100%**

Source: FARS 2016 Annual Report File (ARF).
Note: Percentages may not equal sum of components due to independent rounding.

- Centers for Disease Control Motor Vehicle Crash Deaths - Vital Signs



- NTSB Most Wanted List of Transportation Safety Improvements

The following strategies are being pursued by selected members of the Coalition:

Strategy #1: Strengthen Alcohol-Impaired Driving Legislation at the State Level

Goal #1: Enact State Laws Requiring Ignition Interlocks for All People Convicted of Alcohol-Impaired Driving

Current Situation: Ignition interlock devices keep a vehicle from starting unless the driver has a BAC below a pre-set, low limit, usually 0.02%. Research by IIHS indicates the effectiveness of these devices[5], and over 300,000 are in use in North America[6]. However, ignition interlock devices haven't been more widely used in part due to their intrusive nature. A driver with such a device in their car essentially has to take a breathalyzer to start the vehicle each and every time they need to drive. Therefore, interlock devices may be reserved for repeat offenders who represent only a small fraction of all alcohol-impaired drivers. Currently, 30 states and D.C. require interlocks for all alcohol-impaired driving offenders.[7]

Opportunity: States that do not already require ignition interlock devices for all convicted alcohol-impaired drivers, including first-time offenders, should do so. Mandating these systems to detect driver alcohol use for all alcohol-impaired driving offenders has been shown to reduce the number of impaired drivers involved in fatal crashes by 16% according to a recent study by IIHS[8]. Many states including Arizona, Louisiana, New Mexico, and West Virginia have already passed all-offender interlock laws and subsequently seen alcohol-impaired crash fatalities decrease.[9] According to the IIHS study, if all states currently without all alcohol-impaired driving offender interlock laws adopted them, more than 500 lives could be saved each year. A 2009 study provided evidence that the public would be in favor of such laws. The study found that 84% of people supported requiring alcohol ignition interlocks in the vehicles of all convicted alcohol-impaired driving offenders.[10]

Member Actions: The Road to Zero Coalition members should encourage all states to require ignition interlocks for everyone convicted of alcohol-impaired driving.

Resources:
Locking Out Impaired Driving
2017 Drunk Driving State Ratings
Attitudes toward In-Vehicle Advanced Alcohol Detection Technology

[5] IIHS: Locking out impaired driving
[6] Traffic Injury Research Foundation USA, INC: 2016 Annual Ignition Interlock Survey: USA
[7] MADD: Drunk Driving Rating, How does your state rate?
[8] IIHS: Locking Out Impaired Driving
[9] MADD: Ignition Interlocks
[10] Attitudes Toward In-Vehicle Advanced Alcohol Detection Technology

Strategy #1: Strengthen Alcohol-Impaired Driving Legislation at the State Level

Goal #2: Conduct Highly Visible, Publicized, and Regular Sobriety Checkpoints

Current Situation: Sobriety checkpoints first became common in the U.S. in the early 1980s, and in 1990, the Supreme Court ruled in favor of their constitutionality. However, some individual state courts have deemed them illegal for violating state constitutions. Today checkpoints are authorized in 37 states and D.C. According to GHSA, only 13 states conduct checkpoints on a weekly basis.[11] Lack of law enforcement staff and funding have been cited by states as the main reasons why checkpoints are not used more frequently.

Opportunity: Systematic research reviews of checkpoint programs implemented in a variety of settings have found that that sobriety checkpoints consistently reduce alcohol-related fatal and injury crashes each by about 20%.[12] Similarly, a meta-analysis showed that checkpoints reduce alcohol-related crashes by a minimum of 17% and all crashes by 10-15%.[13] In this meta-analysis, the largest crash reductions were seen during the first six months of a checkpoint program. Overall, the most effective programs involved highly visible checkpoints where most drivers were pulled and tested. Specifically in the U.S., a 2011 study conducted in Indianapolis found that the number of impaired collisions in post-checkpoint time periods was 19% less than in pre-checkpoint periods[14]. Another study examining programs in 7 states found reductions in alcohol-related fatalities between 11-20% in states that operated many checkpoints or other highly visible impaired driving enforcement exercises in addition to abundant publicity of the enforcement activities[15]. States with lower levels of enforcement and publicity did not see decreases in fatalities relative to neighboring states. These findings show that to effectively deter driving after drinking by using checkpoints, they need to be highly visible, publicized extensively, and conducted regularly.

Member Actions: The Road to Zero Coalition members should encourage states that authorize checkpoints to either begin using or use more highly visible, publicized sobriety checkpoints on a regular basis.

Resources:
CDC – Sobriety Checkpoints
GHSA – Sobriety Checkpoints (state laws)
Effectiveness of Sobriety Checkpoints for Reducing Alcohol-Involved Crashes
The effects of drink-driving checkpoints on crashes--a meta-analysis
Exploring the small area effects of sobriety checkpoints on alcohol-impaired collision rates within a city
Evaluation of Seven Publicized Enforcement Demonstration Programs to Reduce Impaired Driving

[11] GHSA: Sobriety Checkpoints
[12] Effectiveness of Sobriety Checkpoints for Reducing Alcohol-Involved Crashes
[13] The effects of drink-driving checkpoints on crashes--a meta-analysis
[14] Exploring the small area effects of sobriety checkpoints on alcohol-impaired collision rates within a city
[15] Evaluation of Seven Publicized Enforcement Demonstration Programs to Reduce Impaired Driving

Strategy #1: Strengthen Alcohol-Impaired Driving Legislation at the State Level

Goal #3: Reduce Legal BAC Levels to 0.05% or Lower

Current Situation: The U.S., most of Canada, and the U.K. define alcohol-impaired driving as BAC levels at 0.08% or above, while almost all (over 100) other comparable, high-income countries (including a few Canadian provinces) use lower BAC levels ranging from 0.02-0.05%. Research has shown that impairment begins well before a person's BAC reaches 0.08%. In fact, by the time a driver's BAC reaches this level, their risk of being in a crash has tripled and their risk of a fatal crash has more than doubled in comparison to a sober driver.[16] The reality is that impairment from alcohol begins with the first drink although most drivers don't realize that even low levels of alcohol can increase their crash risk.

Opportunity: In the U.S., Utah became the first state to lower the BAC limit to 0.05% in early 2017. Research indicates that all drivers are impaired with regards to at least one driving performance measure at a 0.05% BAC, and the risk of being involved in a crash has increased significantly in comparison to being sober.[17] In numerous countries around the world, lowering the BAC limit to 0.05% has been a proven effective countermeasure to alcohol-impaired driving. A 2018 study from the National Academies of Sciences, Engineering, and Medicine estimates that reducing the legal limit to 0.05% BAC in the U.S. could reduce the number of deaths each year by about 10%[18]. What's more, the general public is increasingly on-board with the proposed reduction. According to a 2017 AAA survey, 64% of drivers supported reducing the legal BAC level to drive[19]. Lowering the BAC limit for driving from the current 0.08% to 0.05% has substantial potential to reduce the number of people who drink and drive and get involved in fatal crashes.

Member Actions: The Road to Zero Coalition members should encourage states to lower legal BAC levels to 0.05% or lower.

Resources:
NSC Position/Policy Statement: Low Alcohol Concentration National Culture Change
NTSB calls for lowering blood alcohol limit, but is that the answer?
The effectiveness of a 0.05 BAC limit for driving in the United States
NASEM – Lowering Legal Blood Alcohol Level to 0.05 Could Save Lives
AAA –2017 Traffic Safety Culture Index

[16] NTSB calls for lowering blood alcohol limit, but is that the answer?
[17] The effectiveness of a 0.05 BAC limit for driving in the United States
[18] NASEM Study: Lowering Legal Blood Alcohol Level to 0.05 Could Save Lives
[19] AAA: 2017 traffic Safety Culture Index

Strategy #1: Strengthen Alcohol-Impaired Driving Legislation at the State Level

Goal #4: Increase the number of DWI Courts across the country

Current situation: DWI Courts are specialized, post-conviction court programs that provide a structure of appropriate treatment, supervision, and accountability. These treatment courts follow the well-established Drug Court model and are based on the premise that alcohol impaired driving can be prevented if the underlying causes of the DWI offending (e.g., substance dependence and mental health issues) are identified and addressed. Unlike the Drug Court model, offenders who participate in DWI Courts do not have their convictions expunged upon successful completion of the program. The population that these courts are developed for are DWI offenders who are not deterred by traditional sanctions and are most resistant to behavior change (demonstrated by their multiple convictions). These offenders are classified as high risk/high need. Each DWI Court participant has an individualized supervision and treatment plan that is designed to address both their risk level and their needs. To ensure accountability, DWI Court participants are subject to intense supervision. More specifically, offenders are subject to scheduled and unscheduled visits to their home and place of employment; required to adhere to both regular and random alcohol and drug testing requirements; appear regularly before the judge to review their progress; and, complete treatment that addresses underlying issues. In the event of violations, DWI Courts can respond swiftly to the offender behavior with graduated sanctions. Practitioners also use positive reinforcements to encourage positive behavior and motivate offenders to seek long-term change.

Opportunity: Research has consistently shown that DWI Court are effective in reducing recidivism and carry significant cost-benefits. A meta-analysis published by the Campbell Collaboration concluded that these courts reduce DWI recidivism and general criminal recidivism by an average of approximately 12% with the best DWI courts reducing recidivism by 50% to 60%.[20] At least three studies with long follow-up windows determined that reductions in recidivism persisted for at least four years, long after participants had been discharged from the programs.[21,22,23] Two studies also found that DWI court participants had significantly fewer alcohol or drug-related car crashes than matched DWI probationers over follow periods of 18 months.[24,25] A multisite evaluation of nine DUI courts in Minnesota determined that the DWI courts produced an average of $2.06 in cost benefits for every $1 invested in the programs.[26] Other evaluations have reported that DWI Courts produced net cost-benefits of approximately $1,500 to $8,000 per participant compared to traditional adjudication.[27,28,29] These courts have consistently demonstrated favorable outcomes despite eligibility being reserved for high-risk offenders. An increase in the number of DWI Courts established throughout the country could lead to reduced recidivism and subsequent lives and cost savings.

Member Actions: The Road to Zero Coalition members should encourage states to authorize the use of DWI Courts and provide grant funding for the establishment of DWI Courts to serve high-risk, repeat impaired drivers and achieve long-term reductions in recidivism.

Resources:
www.dwicourts.org

[20] Mitchell et al., 2012
[21] Fell et al., 2011
[22] Kierkus & Johnson, 2015
[23] Ronan et al., 2009
[24] Carey et al., 2012;
[25] Carey et al., 2015
[26] NPC Research, 2014
[27] Mackin et al., 2009a
[28] Mackin et al., 2009b
[29] Zil et al., 2014

National Center for DWI Courts. (2006). The ten guiding principles of DWI Courts. Alexandria, VA:
Carey, S. M., Allen, T. H., & Einspruch, E. L. (2012). San Joaquin DUI monitoring court process and outcome evaluation (Final report). Portland, OR: NPC Research.

Carey, S. M., Herrera Allen, T., Einspruch, E. L., Mackin, J. R., & Marlowe, D. (2015). Using behavioral triage in court-supervised treatment of DUI offenders. *Alcoholism Treatment Quarterly*, *33*(1), 44–63.

Fell, J. C., Tippetts, A. S., & Langston, E. A. (2011). An evaluation of the three Georgia DUI Courts (DOT HS 811 450). Washington, DC: National Highway Traffic Safety Administration, U.S. Department of Transportation.

Kierkus, C. A., & Johnson, B. R. (2015). Michigan DWI/Sobriety Court Ignition Interlock evaluation: 2015 report. Lansing: Michigan State Court Administrative Office.

Mackin, J. R., Lucas, L. M., Lambarth, C. H., Waller, M. S., Allen, T. H., Carey, S. M., & Finigan, M. W. (2009a). Anne Arundel County DUI court program outcome and cost evaluation. Portland, OR: NPC Research.

Mackin, J. R., Lucas, L. M., Lambarth, C. H., Waller, M. S., Allen, T. H., Carey, S. M., & Finigan, M. W. (2009b). Howard County District Court DUI court program: Outcome and cost evaluation. Portland, OR: NPC Research.

Mitchell, O., Wilson, D. B., Eggers, A., & MacKenzie, D. L. (2012). Assessing the effectiveness of drug courts on recidivism: A meta-analytic review of traditional and non-traditional drug courts. *Journal of Criminal Justice, 40*(1), 60–71.

NPC Research. (2014). Minnesota DWI Courts: A summary of evaluation findings in nine DWI court programs. Portland, OR:

Ronan, S. M., Collins, P. A., & Rosky, J. W. (2009). The effectiveness of Idaho DUI and misdemeanor/DUI courts: Outcome evaluation. *Journal of Offender Rehabilitation, 48*(2), 154–165.

Sloan, F. A., Chepke, L. M., Davis, D. V., Acquah, K., & Zold-Kilbourn, P. (2013). Effects of admission and treatment strategies of DWI Courts on offender outcomes. *Accident Analysis and Prevention, 53*, 112–120.

Zil, C. E., Waller, M. S., Johnson, A. J., Harrison, P. M., & Carey, S. M. (2014). Cass County/Leech Lake Band of Ojibwe Wellness Court, Walker, MN: Process, outcome, and cost evaluation report. Portland, OR: NPC Research.

Strategy #1: Strengthen Alcohol-Impaired Driving Legislation at the State Level

Goal #5: Screen and Assess All Impaired Drivers for Substance Use and Mental Health Disorders

Current situation: The use of comprehensive screening and assessment in the criminal justice setting is necessary to identify DUI offenders who have substance use and/or mental health disorders that require further intervention to achieve long-term reductions in recidivism. Without the accurate identification of the presence of these disorders, practitioners miss an opportunity to address an underlying cause of offending and, subsequently, reduce future recidivism. Approximately 25-30% of those arrested and convicted of DUI are repeat offenders who are not deterred by traditional sanctions. Research has shown that approximately two-thirds of convicted DUI offenders are alcohol dependent[30] and repeat offenders have higher rates of lifetime prevalence of alcohol abuse and dependence, drug abuse and dependence, and psychiatric co-morbidity.[31] In a study of repeat DUI offenders, it was found that 44% had a lifelong major mental disorder in addition to a substance use disorder (Shaffer et al, 2007). In order to have better long-term outcomes, these high-risk individuals require intensive supervision and treatment interventions that address their individual criminogenic needs.

Opportunity: To prevent future instances of drunk driving, and subsequently, save lives, the underlying causes of DUI offending must be addressed. Screening is the first step in the process of determining whether a DUI offender should be referred for treatment. At this stage, offenders who do not have substance or mental health issues are identified and those who may have issues can be sent for a more in-depth assessment. Essentially, screening is a way to strategically target limited resources by separating offenders into different categories - i.e., those who do not have a substance or mental health problem and those who likely do have a substance or mental health problem. After the screening process is completed, offenders who show signs of substance use disorders or mental health issues can be referred for an assessment. An assessment tends to be more formal than screening and these instruments are standardized, comprehensive, and explore individual issues in-depth. In contrast with screening, a formal assessment process takes longer to complete (it can take several hours) and is typically administered by a trained clinician or professional. This second step is meant to evaluate not only the presence of a substance use disorder (alcohol and/or drugs), but its extent and severity. Ideally, screening and assessment would occur early in the adjudication process—in healthcare settings for offenders injured in crashes, or during the pre-trial stage, for example. The results can then be used to inform sentencing decisions, case management plans, supervision levels, and treatment referrals/plans. It is important to note that assessments can be repeated at multiple junctures throughout an offender's involvement in the criminal justice system to identify progress and to inform changes to existing plans as needed.

Member Actions: The Road to Zero Coalition members should encourage states to adopt robust screening and assessment practices to ensure that every individual convicted of impaired driving is screened for the possible substance abuse issues, and for those who screen positive, assessment should be used to determine risk level and treatment needs to improve sentencing, supervision, and treatment decisions.

Resources:
Computerized Assessment and Referral System (CARS) -
Screening for Risk and Needs Using the Impaired Driving Assessment (IDA)

[30] Lapham et al., 2001
[31] Nelson and Tao, 2012

Strategy #2: Strengthen Alcohol-Impaired Driving Research and Technology Development at All Levels

Goal #6: Advocate to Accelerate the Development and Implementation of In-vehicle Systems to Detect Driver Alcohol Use, Such as the Driver Alcohol Detection System for Safety (DADSS)

Current Situation: An emerging in-vehicle technology is the Driver Alcohol Detection System for Safety (DADSS), which uses touch-based and/or breath-based systems to detect driver alcohol use. Unlike ignition interlocks, DADSS is a voluntary, non-regulatory countermeasure to reduce alcohol-impaired driving, as the ultimate goal is for the technology to be introduced as a safety feature in all vehicles. The DADSS research program began in 2008, and the technology continues to be developed today. Strict performance requirements have been established for DADSS requiring very high levels of accuracy and precision, as well as a rapid measurement time to guarantee that the technologies remain unobtrusive and do not inconvenience sober drivers.[32]

Opportunity: While the in-vehicle technologies such as DADSS are not yet car-ready (though they will be in the next few years), advocating for the universal implementation of these systems to detect driver alcohol use could have a great impact on safety[33]. The public generally seems receptive to the idea of having advanced alcohol detection devices in all vehicles. A 2009 study found that 64% of people thought having advanced alcohol detection technology – assuming it is reliable – in all vehicles is a good idea[34]. Further, if advanced alcohol detection devices were available as an option at a reasonable price, 42% of respondents who drive said they would want the device in their next vehicles.

Member Actions: The Road to Zero Coalition members should advocate for the continued development and eventual implementation of in-vehicle systems to detect driver alcohol use, such as DADSS.

Resources:
Driver Alcohol Detection System for Safety (DADSS)
New car tech could stop drunken drivers
Attitudes toward In-Vehicle Advanced Alcohol Detection Technology

[32] NHTSA: DADSS
[33] New car tech could stop drunken drivers
[34] Attitudes Toward In-Vehicle Advanced Alcohol Detection Technology