

Impaired Driving

The Issue:

Alcohol-impaired driving is a persistent factor in crash fatalities and injuries on our roadways, accounting for 30% of traffic deaths each year on average.¹ The National Transportation Safety Board (NTSB) notes that "[d]riving under the influence of alcohol and other drugs remains a leading cause of highway crashes."²

The Impact:

- In 2022, 42,514 people were killed in motor vehicle crashes in the United States. Early projections for 2023 and the first half of 2024 show traffic fatalities remain high.³ Of these fatalities in 2022, 33% (13,524) resulted from crashes involving alcohol-impaired drivers which is limited to crashes in which at least one driver has a minimum of .08% BAC. This averaged out to one death in an alcohol-impaired driving crash every 39 minutes.⁴
- Alcohol-impaired driving remains the largest single contributor to road fatalities. Over the last 10 years, on average, drunk drivers are responsible for approximately 30% of all traffic fatalities annually.⁵
- The fatality rate per vehicle miles traveled (VMT) for alcohol-impaired driving decreased 2.3% from 2021 to 2022. Yet, the fatality rate for alcohol-impaired driving fatalities remains 35% higher than 2019.⁶
- Drunk driving is not just deadly, it is also costly. In 2019, the total comprehensive cost of drunk driving over the .08% BAC limit was estimated at nearly \$296 billion.⁷ Adjusted for inflation only, that amounts to \$363 billion in 2024 dollars.⁸

The Facts:

- A common misconception is that most people who are convicted of their first drunk driving offense are social drinkers who made one mistake. However, studies show that the average first offender will have driven drunk 87 times before getting arrested.⁹
- According to the Centers for Disease Control and Prevention (CDC), adult drivers admitted they drove despite drinking too much approximately 127 million times in 2020, which equals over 347,000 incidents of drinking and driving each day.¹⁰ However, only about 1 million, or approximately 1% of those 127 million episodes resulted in an arrest for driving under the influence that year.¹¹

- Drivers with a BAC of .08 or higher involved in fatal crashes were three times more likely to have a prior conviction for driving while impaired (DWI) than drivers with no alcohol.¹²
- A 2022 study of seriously and fatally injured road users at several trauma centers in the U.S. found that 55.8% tested positive for one or more drugs (including alcohol).¹³

Nearly 20% tested positive for two or more categories of drugs (poly-use).
The most prevalent drug detected was cannabinoids (active THC) with 25.1% positive, followed by alcohol with 23.1% positive.

The Solutions: Laws, Technology and Road Safety Infrastructure Ignition Interlock Devices

- An alcohol ignition interlock device (IID) is a mechanism similar to a breathalyzer and is linked to a vehicle's ignition system. An IID can be used to deter an individual who has a prior drunk driving conviction from driving the vehicle with a BAC that exceeds a specified level. Before the vehicle can be started, the driver must breathe into the device, and if the analyzed result is over the specified BAC limit, the vehicle will not start. In addition, at random times after the engine has been started, the IID will require another breath sample. This process prevents cheating where another person breathes into the device to bypass the system to enable an intoxicated person to get behind the wheel and drive. If the breath sample is not provided or the sample exceeds the device's preset BAC, the device will log the event, warn the driver and then set off an alarm (such as the lights flashing or horn honking) until the ignition is turned off.¹⁴
- State laws requiring IIDs for all convicted drunk driving offenders which are supported by a compliance-based removal offer the most effective means for denying them the opportunity to get behind the wheel after consuming alcohol.
- Nationwide between 2006 and 2020, IIDs prevented 3.78 million attempts to drive drunk, according to a 2022 report from Mothers Against Drunk Driving (MADD). This figure included 390,456 attempts in 2020, which is equivalent to more than 1,000 every day.¹⁵
- The public strongly supports IIDs for all convicted drunk drivers, with surveys showing between 69 and 88% of respondents in favor of requiring IIDs for all convicted driving under the influence (DUI) offenders, even if it's their first conviction.¹⁶
- 82% of DUI offenders believe the IID was effective in preventing them from driving after drinking.¹⁷
- When IIDs are installed, they are associated with an approximately 70% reduction in repeat offenses for impaired driving.¹⁸
- Research shows that IIDs reduce recidivism among both first-time and repeat DWI offenders, with reductions in subsequent DWI arrests ranging from 50 to 90% while the IID is installed on the vehicle.¹⁹
- A University of Pennsylvania study found that requiring IIDs for all drunk-driving convictions was associated with 15% fewer alcohol-involved crash deaths,

compared with states with less stringent requirements. According to the study, "Interlocks are a life-saving technology that merit wider use."²⁰

- An Insurance Institute for Highway Safety (IIHS) study on the effects of Washington's IID requirement found that the law change was associated with an 8.3% reduction in single-vehicle late-night crash risk, suggesting a general deterrent effect of the expanded interlock requirement.²¹
- According to the American Journal of Preventative Medicine, "[i]ncreasing the spread of interlock laws that are mandatory for all offenders would have significant public health benefit."²²

.05% BAC Limit Laws

- Lowering a BAC limit law to .05% results in a broad deterrent effect that reduces the incidence of drunk driving and saves lives but does not necessarily increase arrests or lower alcohol consumption.²³
 - This broad deterrent effect applies to all BAC levels including high BAC.²⁴
- In 2017, Utah became the first state in the U.S. to enact a .05% BAC law. NHTSA's review of its impact during the first year it went into effect found:²⁵
 - Between 2016 and 2019 the fatal crash rate decreased by 19.8%; the fatality rate per vehicle miles traveled dropped by 18.3%.
 - In the first year the law went into effect, the number of drivers testing positive for any alcohol declined by 14.6%.
 - Alcohol-impaired driving arrests did not climb sharply as predicted by opponents.
 - Alcohol sales from 2012 through 2018 increased and the trend continued in fiscal year (FY) 2022. Similar patterns occurred in sales tax revenues from restaurants, rental cars, hotels and resorts, as well as air travel into the state and state and national park visits.²⁶
- Approximately 100 countries have some type of .05% or lower BAC limit. While the average alcohol consumption is the same or higher than the U.S., their alcohol-related deaths are lower.²⁷
- Twenty years of international studies have shown when a country lowers BAC limits from .08 to .05%, alcohol-related fatal and injury crashes decrease between 5% and 10%.²⁸
- An 11.1% decline in fatal alcohol-related crashes could occur and 1,790 lives could be saved annually in the U.S. if all states adopted a .05% BAC or lower law.²⁹
- Research published in the American Journal of Public Health concluded "BAC 0.05 laws are ethically desirable because they are likely to prevent substantial harm with minimal restrictions. Policymakers in other states should follow Utah's lead to reduce alcohol-related traffic deaths and Congress should incentivize these changes."³⁰

Vehicle Safety Technology and Safety Standards Can Protect Vehicle Occupants and Other Road Users

The U.S. Department of Transportation (DOT) must expeditiously advance minimum performance standards for vehicle safety technologies which can prevent or mitigate crashes and protect vehicle occupants and road users. These safety technologies should be standard, not optional, equipment in new vehicles. This action will achieve safety equity by both ensuring that the technology responds to and benefits all road users and that consumers buying new vehicles are not charged extra fees for the technology. Moreover, requiring equipment as standard can reduce the base cost of technology due to economies of scale.

Impaired Driving Prevention Systems:

- According to research from IIHS released in July 2020, Potential lives saved by invehicle alcohol detection systems, alcohol-detection systems, once widely deployed, could save more than 9,000 lives a year in the U.S., accounting for more than 25% of road fatalities.³¹ A recent update of that analysis based on data from 2018 through 2021 indicates that as many as 10,158 lives would have been saved.³²
- The European New Car Assessment Program (Euro NCAP) has started evaluating driver monitoring systems which can help to address impaired driving including from alcohol as well as distraction and drowsiness ³³ in its rating program.
- A survey by AAA found 70% support for "requiring all new cars to have a built-in technology that would not let the car start if the driver's alcohol level is over the legal limit." ³⁴
- A 2022 MADD poll³⁵ found:
 - Nine of 10 Americans support technology that is integrated into a car's electronics to prevent drunk driving.
 - 82% supported a Congressional mandate for drunk driving prevention technology in all new cars.
- The Infrastructure Investment and Jobs Act (IIJA, Pub. L. 117-58), signed into law on November 15, 2021, directs the U.S. DOT to issue standards for impaired driving prevention technology in all new vehicles, requiring the issuance of a Final Rule by Oct. 1, 2024.³⁶ In January 2024, the NHTSA issued an Advanced Notice of Proposed Rulemaking (ANPRM) posing a number of questions regarding the technology and potential rulemaking.³⁷

Advanced Driver Assistance Systems (ADAS):

- According to the AAA Foundation for Traffic Safety, equipping all cars, pickup trucks, vans, minivans and SUVs with forward collision warning (FCW)/automatic emergency braking (AEB) systems which respond to pedestrians/bicyclists as well as vehicles could prevent 1.9 million crashes, nearly 900,000 injuries, and more than 4,700 deaths annually.³⁸
- The Infrastructure Investment and Jobs Act (IIJA, Pub. L. 117-58) directs the U.S. DOT to issue Final Rules on minimum performance standards and requirements for ADAS technologies including AEB, FCW, lane departure warning (LDW) and lane keeping assist (LKA).³⁹

In May 2024, U.S. DOT issued a Final Rule to require passenger vehicles be equipped with AEB that detect pedestrians.⁴⁰ NHTSA estimates that this action will save 362 lives and mitigate over 24,000 injuries annually. It is estimated to result in yearly cost benefit of between \$5.8-\$7.2 billion.⁴¹ In July 2023, DOT issued a NPRM to require heavy vehicles weighing over 10,000 pounds to be equipped with AEB.⁴²

Road Safety Infrastructure Improvements and the Safe System Approach⁴³

The Safe System Approach (SSA) assumes that humans will make mistakes and that we must anticipate this and make accommodations to account for limited human injury tolerances through five elements: Safe Vehicles, Safe Road Users, Safe Roads, Safe Speed and Post-Crash Care. By improving the design and operation of roadways to accommodate all road users safely, the SSA seeks to avoid conflicts between road users (drivers of vehicles, motorcycle riders, pedestrians, bicyclists, micromobility riders, wheelchair users and others) and minimize impact forces when they do occur, to prevent fatalities and serious injuries.

Infrastructure improvements consistent with the SSA to limit conflicts include: *Curbing speed*:

• This can be accomplished by reducing speed limits, employing automated enforcement to augment traditional enforcement, adding speed humps, using realtime speed feedback signs, performing road diets and installing roundabouts.

Prioritizing infrastructure to promote safety:

• This includes changes such as adding lighting and sight lines, leading intervals, pedestrian hybrid beacons, curb extensions, accessible sidewalks, rumble strips, protected intersections, separated bike lanes, and road separations that consider all road users.

Localities can advance these and other infrastructure improvements systemically by requiring their adoption as appropriate in all road design and maintenance projects.

The IIJA includes multiple provisions that advance the SSA including expanded funding for safety infrastructure upgrades. It also provides support and guidance for localities planning to apply for such funding, permits use of certain federal funds for automated enforcement programs in school and work zones, directs requirements for vehicle safety improvements including crash avoidance technologies, and ensures funds are used to improve vulnerable road user safety.

October 2024

¹ Traffic Safety Facts 2021: A Compilation of Motor Vehicle Traffic Crash Data, NHTSA, DOT HS 813 527, Dec. 2023, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813527

² 2021-2023 NTSB Most Wanted List of Transportation Safety Improvement: Prevent Alcohol- and Other Drug- Impaired Driving, https://www.ntsb.gov/Advocacy/mwl/Pages/mwl-21-22/mwl-hs-03.aspx.

³ Traffic Safety Facts: Crash Stats, Early Estimate of Motor Vehicle Traffic Fatalities in 2023, NHTSA, Apr. 2024, DOT HS 813 561, available at

https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813561; Traffic Safety Facts: Crash Stats, Early Estimate of Motor Vehicle Traffic Fatalities

For the First Half (January – June) of 2024, NHTSA, Sep. 2024, DOT HS 813 633, available at

- https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813633.
- ⁴ Traffic Safety Facts, 2022 Data: Alcohol-Impaired Driving, NHTSA DOT HS 813 578, Aug. 2024 (revised), available at: <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813578</u>.
- ⁵ Traffic Safety Facts 2021: A Compilation of Motor Vehicle Traffic Crash Data, NHTSA, DOT HS 813 527, Dec. 2023, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813527.
- ⁶ Traffic Safety Facts, 2022 Data: Alcohol-Impaired Driving, NHTSA DOT HS 813 578, Aug. 2024 (revised), available at: https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813578.
- ⁷ The Economic and Societal Impact of Motor Vehicle Crashes, 2019, NHTSA, Feb. 2023, DOT HS 813 403 available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813403; [Economic Impact 2019].
- ⁸ CPI Inflation Calculator, BLS, January 2019 to January 2024 dollars, available at https://data.bls.gov/cgi-bin/cpicalc.pl_
- ⁹ Drinking and Driving Trips, Stops by the Police, and Arrests: Analyses of the 1995 Survey of Drinking and Driving Attitudes and Behavior, NHTSA, Dec. 2000, DOT HS 809 184, available at <u>https://rosap.ntl.bts.gov/view/dot/1779/dot_1779_DS1.pdf</u>.
- ¹⁰ CDC Impaired Driving Facts, Accessed Oct. 3, 2024, available at <u>https://www.cdc.gov/impaired-driving/facts/</u>.
- ¹¹ CDC Impaired Driving Facts, Accessed Oct. 3, 2024, available at <u>https://www.cdc.gov/impaired-driving/facts/</u>.
- ¹² Traffic Safety Facts, 2022 Data: Alcohol-Impaired Driving, NHTSA DOT HS 813 578, Aug. 2024 (revised), available at: https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813578.
- ¹³ Alcohol and Drug Prevalence Among Seriously or Fatally Injured Road Users, NHTSA, Dec. 2022, DOT HS 813 399; available at <u>https://www.nhtsa.gov/sites/nhtsa.gov/files/2022-12/Alcohol-Drug-Prevalence-Among-Road-Users-Report_112922-tag.pdf</u>; the data in the study is limited to only those seriously or fatally injured road users who were treated at trauma centers participating in the study; the study also does not imply impairment, but only a positive detection of the drug category in testing.
- ¹⁴ Intoxalock Ignition Interlock Device website, available at <u>https://www.intoxalock.com/ignition-interlock-device/what-is-an-ignition-interlock-device/</u>
- ¹⁵ Ignition Interlock Report, Putting an End to Drinking and Driving Attempts, MADD, January 2022; available at https://madd.org/wp-content/uploads/2023/01/2021-Ignition-Interlock-Report-FINAL-COPY.pdf.
- ¹⁶ MADD, How Technology Has Stopped 1.77 Million Drunk Drivers: A State by State Guide to Creating a Future of No More Victims, February 10, 2016; available at <u>https://online.flippingbook.com/view/57396/4/</u>.
- ¹⁷ Morse, BJ and DS Elliott; Hamilton County Drinking and Driving Study: 30 Month Report. Boulder, Colorado: University of Colorado, 1990; available at <u>https://www.ojp.gov/ncjrs/virtual-library/abstracts/hamilton-county-drinking-and-driving-study-30-month-report.</u>
- ¹⁸ Increasing Alcohol Ignition Interlock Use website, CDC, available at <u>https://www.cdc.gov/impaired-driving/ignition-interlock/index.html</u>.
- ¹⁹ Ignition Interlocks What You Need to Know: A Toolkit for Policymakers, Highway Safety Professionals, and Advocates Second Edition (updated November 2019), NHTSA, Nov. 2019, DOT HS 811 883, available at <u>https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/ignitioninterlocks_811883_112619.pdf</u>
- ²⁰ Elinore J. Kaufman, Douglas J. Wiebe, "Impact of State Ignition Interlock Laws on Alcohol-Involved Crash Deaths in the United States," American Journal of Public Health 106, no. 5 (May 1, 2016): pp. 865-871, available at https://pubmed.ncbi.nlm.nih.gov/26985604/.
- ²¹ Status Report, Vol. 47 No. 2, "Alcohol ignition interlocks: Study shows devices reduce DUI recidivism," IIHS, March 6, 2012.
- ²² McGinty EE, Tung G, Shulman-Laniel J, Hardy R, Rutkow L, Frattaroli S, Vernick JS. Ignition Interlocks: Effects on Fatal Motor Vehicle Crashes, 1982-2013, American Journal of Preventative Medicine, April 2017, available at <u>https://pubmed.ncbi.nlm.nih.gov/28065516/</u>.
- ²³ NTSB, .05 BAC Safety Briefing Facts, February 2017; available at <u>https://portal.ct.gov/-/media/DOT/documents/dvisionzero/NTSB-05-SafetyBriefing-March2019.pdf.</u>
- ²⁴ NTSB, .05 BAC Safety Briefing Facts, February 2017; available at <u>https://portal.ct.gov/-/media/DOT/documents/dvisionzero/NTSB-05-SafetyBriefing-March2019.pdf</u>.
- ²⁵ Traffic Tech: Technology Transfer Series, Evaluation of Utah's .05 BAC Per Se Law, NHTSA, Feb. 2022, DOT HS 813 234; available at https://rosap.ntl.bts.gov/view/dot/60427.
- ²⁶ Traffic Tech: Technology Transfer Series, Evaluation of Utah's .05 BAC Per Se Law, NHTSA, Feb. 2022, DOT HS 813 234; available at https://rosap.ntl.bts.gov/view/dot/60427.
- ²⁷ NTSB, .05 BAC Safety Briefing Facts, February 2017; available at <u>https://portal.ct.gov/-/media/DOT/documents/dvisionzero/NTSB-05-SafetyBriefing-March2019.pdf</u>.
- ²⁸ NTSB, .05 BAC Safety Briefing Facts, February 2017; available at <u>https://portal.ct.gov/-/media/DOT/documents/dvisionzero/NTSB-05-SafetyBriefing-March2019.pdf</u>.
- ²⁹ NORC: Fell JC & Scherer M, 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, 2017, available at <u>https://pubmed.ncbi.nlm.nih.gov/29064571/#:~:text=Backgroundpercent3Apercent20Inpercent202013percent2Othepercent20National,limitpercent20ofpercent200.05percent20orpercent20lower.</u>
- ³⁰ Morain S, Largent E., Ethical Acceptability of Reducing the Legal Blood Alcohol Concentration Limit to 0.05. Am J Public Health. 2019 May; 109(5):709-713. doi: 10.2105/AJPH.2018.304908. Epub 2019 Feb 21. PMID: 30789764; PMCID: PMC6459633, available at https://ajph.aphapublications.org/doi/10.2105/AJPH.2018.304908.
- ³¹ Potential Lives Saved By In-Vehicle Alcohol Detection Systems, IIHS, available at https://www.iihs.org/topics/bibliography/ref/2209..
- ³² Alcohol and Drugs, IIHS Website, last accessed Oct. 25, 2023, available at <u>https://www.iihs.org/topics/alcohol-and-drugs#by-the-numbers</u>.
- ³³ Euro NCAP 2025 Roadmap: In Pursuit of Vision Zero, Euro NCAP, available at <u>https://cdn.euroncap.com/media/30700/euroncap-roadmap-2025-v4.pdf</u>.

- ³⁴ 2020 Traffic Safety Culture Index, AAA Foundation for Traffic Safety, October 2021, available at: <u>https://aaafoundation.org/wp-content/uploads/2021/09/2020-Traffic-Safety-Culture-Index-October-2021.pdf</u>.
- ³⁵ Americans Overwhelmingly Support Auto Technology that Stops Drunk Drivers, New Ipsos Survey Shows, MADD, Nov. 15, 2022, available at <u>https://madd.org/press-release/americans-overwhelmingly-support-auto-technology-that-stops-drunk-drivers-new-ipsos-survey-shows/</u>.
- ³⁶ Pub. L. 117-58; available at <u>https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf</u>.
- ³⁷ Advanced Impaired Driving Prevention Technology, ANPRM, NHTSA, 89 FR 830, Jan. 5, 2024. Available at https://www.regulations.gov/document/NHTSA-2022-0079-0015.
- ³⁸ Benson, A., Tefft, B.C., Svancara, A.M. & Horrey, W.J., September 2018. Potential Reduction in Crashes, Injuries and Deaths from Large-Scale Deployment of Advanced Driver Assistance Systems (Research Brief). Washington, D.C.: AAA Foundation for Traffic Safety, available at: <u>https://aaafoundation.org/potential-reduction-in-crashes-injuries-and-deaths-from-large-scale-deploymentof-advanced-driver-assistance-systems/.</u>
- ³⁹ Infrastructure Investment and Jobs Act (IIJA, Pub. L. 117-58), November 15, 2021, Sections 24208 and 23010, available at: https://www.govinfo.gov/content/pkg/PLAW-117publ58/pdf/PLAW-117publ58.pdf.
- ⁴⁰ 89 FR 39686 (May 9, 2024); available at <u>https://www.govinfo.gov/content/pkg/FR-2024-05-09/pdf/2024-09054.pdf</u>.
- ⁴¹ 89 FR 39686 (May 9, 2024); available at <u>https://www.regulations.gov/document/NHTSA-2023-0021-1065</u>.
- ⁴² 88 FR 43174 (Jul. 6, 2023); available at <u>https://www.govinfo.gov/content/pkg/FR-2023-07-06/pdf/2023-13622.pdf</u>.
- ⁴³ "Recommendations of the Safe System Consortium," Johns Hopkins University Center for Injury Research and Prevention, May 2021. Available here: <u>https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-injury-research-and-policy/our-impact/documents/recommendations-of-the-safe-system-consortium.pdf</u>.