

GETTING TO ZERO ALCOHOL-IMPAIRED DRIVING FATALITIES

ALL STATES SHOULD LOWER THE BLOOD ALCOHOL CONCENTRATION LIMIT TO .05%

Alcohol-impaired driving is the deadliest and costliest danger on roads in the United States. It's also preventable. Promising technologies and policies can be leveraged to reach a bold goal: zero deaths from drinking and driving.

The Normal Academic of SCIENCES - CHOMERON - MEDICINE

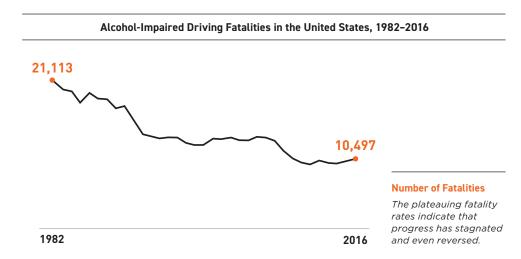
CONSENSUS STUDY REPORT

GETTING TO ZERO
ALCOHOL-IMPAIRED
DRIVING FATALITIES

A Comprehensive Approach to a Persistent Problem

Laws limiting the blood alcohol concentration (BAC) of drivers are one key intervention to reduce alcoholimpaired driving and the resulting crashes, injuries, and fatalities. With these laws, drivers 21 years of age and older are prohibited from driving with a BAC exceeding 0.08%.

Based on a large body of supporting evidence, a report by the National Academies of Sciences, Engineering, and Medicine recommends that states lower the BAC limit set by state law from 0.08% to 0.05% to reduce deaths from alcohol-impaired driving.



A PERSISTENT PROBLEM

Each day

29 people die

in the United States in an alcoholimpaired driving crash, or one person every

49 minutes.

In 2016, alcohol-impaired driving fatalities accounted for 28 percent of traffic deaths with a total of

10,497 lives lost.

The most recent available data show that in one year, the societal cost of alcohol-impaired driving crashes, including medical costs, legal expenses, property damages, productivity losses, and more was

\$121.5 billion.

RECOMMENDED ACTION

State governments should enact per se laws for alcohol-impaired driving at 0.05% BAC. The federal government should incentivize this change, and other stakeholders should assist in this process. The enactment of 0.05% per se laws should be accompanied by media campaigns and robust and visible enforcement efforts.

Key facts

Impairment from alcohol consumption begins at BAC levels well below 0.08%.

If the BAC limit across the U.S. were lowered to 0.05%, it is estimated that **more than 1,500 lives could be saved annually**.

Strong scientific evidence shows that lowering the BAC limit to 0.05% is an effective strategy to accelerate progress on reducing alcohol-impaired driving fatalities in the United States.

A change in the BAC law to 0.05 would be most effective if implemented along with high-visibility enforcement, such as frequent and widely publicized sobriety checkpoints.

WHY LOWER THE BAC LIMIT TO 0.05%?

Alcohol impairment begins at levels below 0.08%.

According to well-done laboratory and real-world crash studies, impairment begins at BAC levels well below 0.08%. Experimental motor vehicle and motorcycle simulator studies have consistently shown impairment at a BAC level of 0.05%.

The risk of a crash increases above 0.05%.

Studies around the world consistently show that drivers with BAC levels between 0.05% and 0.079% are at an increased risk of being involved in a fatal crash than are drivers with a BAC of 0.00%. In 2015, around 1,800 alcohol-impaired driving fatalities involved a driver with a BAC less than 0.08%.

Lowering the BAC limit would save lives at all BAC levels.

Research indicates that changing the law—by lowering the BAC limit to 0.05%—reduces crash and fatality risk for drivers with BAC levels across the entire BAC spectrum by reducing the number of drivers with even higher BACs. When implemented alongside well-publicized marketing campaigns, the policy change increases perceived risk of sanctions for drivers overall.

A 0.05 BAC limit has worked for our peer nations abroad.

As of 2015, laws limiting a driver's BAC to 0.05% or lower exist in 34 countries comprising 2.1 billion people. Considered a best practice by the World Health Organization (WHO), such laws exist in many comparably industrialized, high-income countries including Australia, France, Germany, and Italy. Based on the available studies, these countries have implemented and enforced this policy without placing undue burdens on the court system. WHO and the U.S. National Transportation Safety Board are among many prominent organizations that recommend a BAC limit of 0.05%.

FREQUENTLY ASKED QUESTIONS

How does drinking alcohol affect the body?

Alcohol consumption causes the human body to undergo physiological changes that can negatively affect a person's ability to drive safely. These changes include diminished inhibition, judgment, self-awareness, emotional stability, and coordination.

BAC	TYPICAL EFFECTS ON DRIVING
0.02%	 Decline in visual function Decline in ability to perform two tasks at the same time (divided attention)
0.05%	 Reduced coordination Reduced ability to track moving objects Difficulty steering Reduced response to emergency driving situations

When do these changes happen?

Blood alcohol level depends on the amount of alcohol consumed, the period of time over which it is consumed, and a person's sex and weight. People routinely underestimate their levels of impairment.

How is a BAC measurement used?

Law enforcement officials measure a driver's BAC level to estimate whether alcohol consumption has impaired his/her ability to drive. Law enforcement officials and trained professionals can measure BAC with breath-testing devices and blood tests conducted at police stations and hospitals, and results from these tests may be admissible in a court of law. If a driver's BAC is at or exceeds the limit set by state law, no further evidence is needed to show impairment.

CONCLUSION

Each alcohol-impaired driving crash represents a failure of the system, whether that is excessive alcohol service, lack of safe and affordable transportation alternatives, lack of adequate clinical services, or lack of effective policies or enforcement. A systems approach—coordinated, systematic, multi-level, and spanning multiple sectors—is needed to accelerate change. Lowering the BAC limit set by state law is an evidencebased, population-level intervention with widespread impact that could help reach a bold goal: zero deaths from drinking and driving.

To download a free copy of the full report and other resources, please visit nationalacademies.org/endDWIdeaths

The National Academies of SCIENCES ENGINEERING MEDICINE