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.

Laws limiting the blood alcohol concentration (BAC) of drivers are one key intervention to reduce alcohol-impaired 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 alcohol-impaired 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.

All report references and sources can be found in report chapters at nationalacademies.org/stopDWideaths.
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.

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

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

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 evidence-based, population-level intervention with widespread impact that could help reach a bold goal: zero deaths from drinking and driving.