Why 0.05 BAC Laws Save Lives

Preventing excessive drinking is key

According to the National Transportation Safety Board, drivers with a Blood Alcohol Content between 0.05 and 0.079 are seven times more likely to be in a fatal crash than non-drinkers.[1] Nebraska ranks as the second-worst state for self-reported drinking and driving.[2]

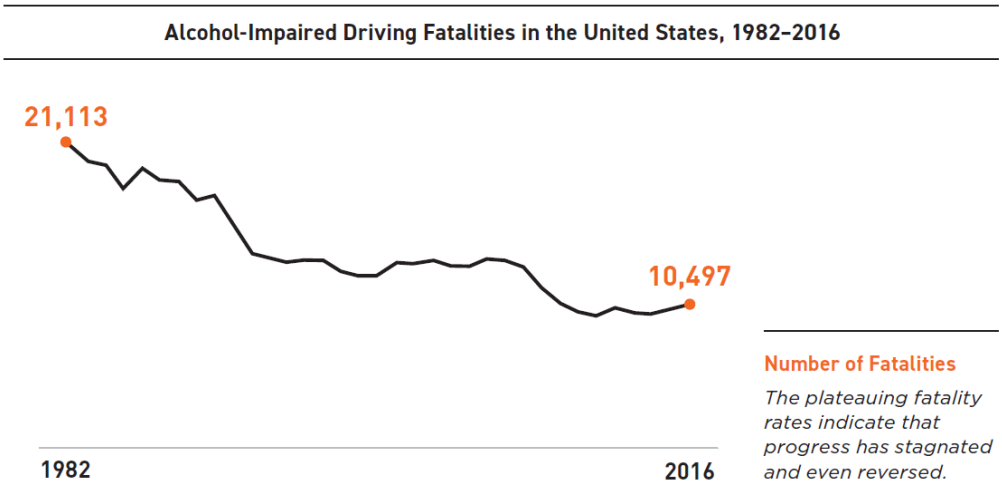
Excessive drinking is a serious and ever-growing problem across the country, but particularly in Nebraska. Excessive consumption is a broad category that includes many types of risky drinking behaviors including:

- Binge drinking – 4+ drinks within one occasion for females, 5+ for males
- Heavy drinking – 8+ drinks per week on average for females, 15+ for males
- Underage drinking – Any drinking by those under the legal drinking age of 21
- Drinking by pregnant women – Consuming any alcohol while pregnant.[3]

Excessive drinking is a dangerous behavior that is associated with numerous health and social consequences, including but not limited to alcohol-impaired driving, violence, reproductive risks, chronic diseases, and seven types of cancer.[4]

The Facts About Driving Impaired

Progress in reducing alcohol-impaired driving has stalled over the past 15 years (see graph below courtesy of the National Academies of Science, Engineering, & Medicine), so it is time to once again consider lowering the legal Blood Alcohol Content (BAC) limits.[5] Countries around the world have enacted lower BAC laws because the risk of being in a crash increases significantly starting at 0.05 BAC.[6] Those drivers involved in a fatal crash with a BAC over 0.08 are 4.5 times more likely to have a prior conviction for driving while impaired.[7] Studies have also shown that someone can drive impaired between 200-2,000 times before being arrested.[8]



[1] NTSB, 2019
[2] Jewett et al., 2015
[3] CDC, 2019
[4] CDC, 2019
[5] Fell & Voas, 2014
[6] Fell, 2016
[7] NHTSA, 2016
[8] White & Gasperin, 2007
[9] NASEM, 2018

It is important to remember that driving while impaired affects not only the impaired driver's safety, but also that of innocent motorists and pedestrians. Indeed, nearly 40% of alcohol-impaired driving fatalities are victims other than the drinking driver.[10]

.02 BAC*	About 2 alcoholic drinks**	• Decline in visual functions • Decline in ability to perform two tasks at same time
.05 BAC*	About 3 alcoholic drinks**	• Reduced coordination • Reduced ability to track moving objects • Difficulty steering • Reduced response to emergency driving situations
.08 BAC*	About 4 alcoholic drinks**	• Reduced ability to concentrate • Short-term memory loss • Difficulty controlling speed • Reduced information processing capability • Impaired perception

**Blood Alcohol Concentration measurement. **The number of drinks represents the approximate amount of alcohol that a 160-pound man would need to drink in one hour to reach the listed BAC in each category.* [11]

The Nebraska Experience

BAC limits in Nebraska:

0.02 BAC – "zero tolerance" laws for individuals under the legal drinking age of 21
0.04 BAC – commercial drivers
0.08 BAC – "per se" laws for all adult drivers on Nebraska roads

Crashes involving a driver with a BAC under 0.08 have increased from 8% in 2008 to 21% in 2018.[12, 13] Nebraska ranks as the second-worst drinking and driving state with 955 episodes per 1,000 population. Nebraska and Hawaii were the only two states called out by the CDC as having significantly higher rates than the national average.[14]

Between 2008 and 2017, the Nebraska Department of Transportation-Highway Safety Office (NDOT-HSO) reports that 721 people were killed in an alcohol-involved crash in Nebraska.[15] Over the past six years, an annual average of 71 alcohol-related traffic fatalities occurred due to an alcohol-impaired driver.[16, 17]

Impacts of 0.05 BAC Laws

When the BAC laws were decreased from 0.1 to 0.08, a 10.4% reduction was seen in alcohol-related fatalities. Reducing the BAC again is estimated to reduce fatal alcohol crashes by another 11% and save at least 1,700 lives annually.[18]

According to a 2018 World Health Organization Report, 97 countries around the world had an established BAC limit at or below 0.05%.[19] Some of these countries include Australia, France, Germany, Italy, South Africa, and Turkey. Some countries, including Japan, Norway, Russia, and Sweden, have a BAC limit of 0.02.[20]

Implementing 0.05 BAC laws is widely supported by national and international organizations including, but not limited to, the National Transportation Safety Board; National Safety Council; Advocates for Auto and Highway Safety; National Academies of Science, Engineering, and Medicine; World Health

[10] NASEM, 2018
[11] NTSB, 2019
[12] NDOT, 2009
[13] NDOT, 2019
[14] Jewett et al., 2015
[15] NDOT-HSO, 2019
[16] NDOT-HSO, 2018
[17] NDOT, 2019
[18] NTSB, 2019
[19] WHO, 2018
[20] Fell & Voas, 2014

Organization; European Transport Safety Council; Canadian Medical Association; 63% of American citizens; and many other national and international bodies.[21, 22]

Reducing Alcohol-related Crashes: What Else Works?

In addition to urging states to adopt 0.05% BAC per se laws, a 2018 National Academies of Sciences, Engineering, and Medicine report made the following recommendations for reducing alcohol-related crashes and fatalities:

- Significant **increases in alcohol taxes**;
- **Reduction in availability**, including the number of on- and off-premises alcohol outlets and the days and hours of alcohol sales;
- Adoption and/or strengthening of laws and dedication of enforcement resources to **stop illegal alcohol sales**, including sales to already-intoxicated adults and sales to those under 21;
- **Frequent sobriety checkpoints** with widespread publicity to promote awareness of these efforts;
- Health care systems and health insurers covering and facilitating effective evaluation, prevention, and treatment strategies for binge drinking and alcohol use disorders, including **Screening, Brief Intervention, and Referral to Treatment** (SBIRT).[23]

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[21] NTSB, 2019
[22] Fell & Voas, 2006
[23] NASEM, 2018