

OUR THINKING ABOUT DRINKING

The Issues Forum

DRUNK DRIVING

DEFINITION

Impaired driving that involves alcohol consumption is sometimes referred to as “driving under the influence” (DUI), “driving while impaired” (DWI), “drink-driving” (more common in Europe), or “drunk driving.” For the purposes of this discussion, The Issues Forum will refer to drunk driving.

From a legal perspective, impaired or drunk driving is considered to be driving by an individual whose Blood Alcohol Concentration (BAC) is above the legal limit. For a complete table of BAC limits worldwide, see Appendix I.

In addition, for the purposes of this discussion, the phrase “repeat offenders” will be understood to mean individuals convicted twice or more of drunk driving offenses.

BACKGROUND & THE ISSUE

According to World Health Organization (WHO) statistics, road traffic crashes are one of the main causes of morbidity and mortality worldwide; moreover, alcohol-impaired driving is one of the world’s leading causes of road traffic casualties.

From a policy perspective, issues related to drunk driving tend to focus on disparities amongst legal BAC limits, inconsistent or ineffective enforcement of limits, drivers’ awareness and understanding of their level of intoxication when they make the decision to drive after drinking, and the relationship of BAC limits to harmful behaviors associated with alcohol abuse—chief among them, impaired driving and its often tragic consequences.

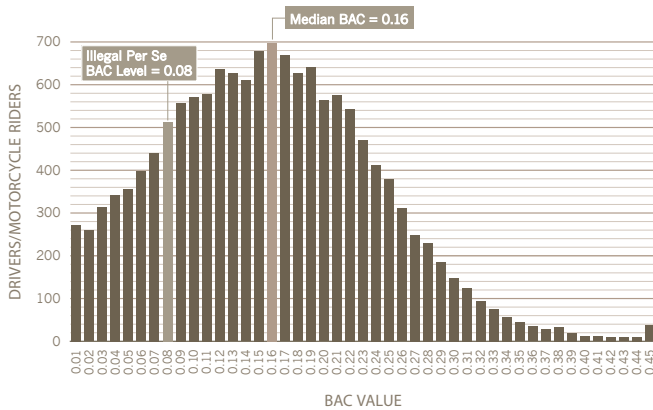
THE RESEARCH

INTOXICATION & IMPAIRMENT

It is well-documented that alcohol’s effects on the central nervous system impact behavioral and cognitive capabilities.^{1,2} The impairments exhibited by drivers who are intoxicated include slowed reflexes, blurred vision, impaired reasoning, and poor judgment of distance, speed, and possible hazards. The reaction time of a drunk driver, compared to a sober driver, can be reduced by up to 30 percent.³

A driver’s risk of being involved in a fatal traffic accident increases with the amount of alcohol consumed. Traffic accident statistics show a clearly escalating level of risk as BAC levels increase.⁴ Sound scientific research consistently shows that .08 g/dl is the level at which virtually every driver is impaired – affecting all of the critical driving skills including braking, steering, judgment, and response time.

TABLE 1 DISTRIBUTION OF BAC VALUES AMONG DRIVERS AND MOTORCYCLE RIDERS WITH POSITIVE BAC VALUES IN FATAL CRASHES IN U.S.

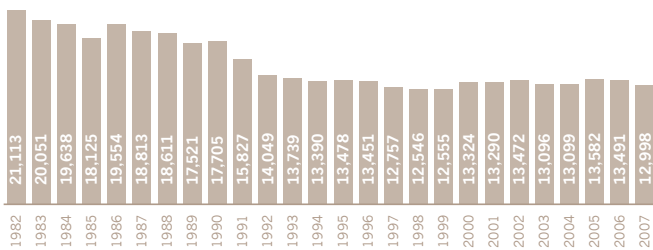


Data Source: NHTSA/FARS/DOT HS 811 016

FATAL TRAFFIC CRASHES

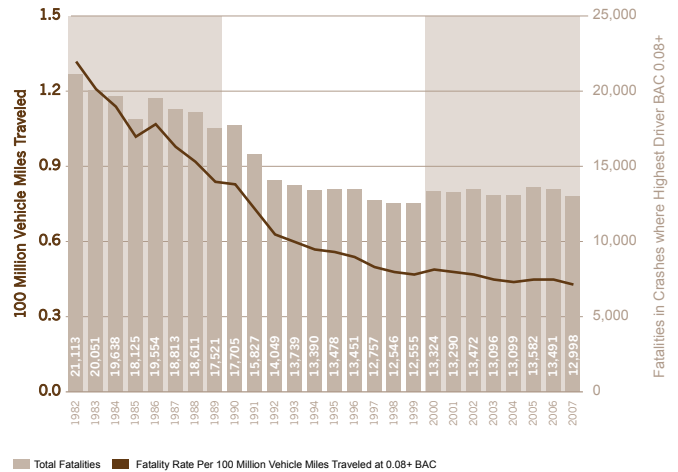
In the United States, alcohol-impaired traffic fatalities account for 31.7 percent of all traffic fatalities. Although alcohol-impaired traffic fatalities declined during the two decades spanning from 1986 to 2006 in the U.S.,⁵ on average, someone is killed in an alcohol-impaired traffic accident approximately every 30 minutes. In 2007, 12,998 people died in alcohol-impaired traffic crashes in the United States.⁶

TABLE 2 U.S. ALCOHOL-IMPAIRED DRIVING FATALITIES: 1982-2007



While the losses remain too high, alcohol-impaired driving fatalities in the U.S. have declined 38% from 1982 to 2007. While Americans have driven more during this period, the fatality rate per vehicle mile travelled (VMT) has declined steadily as well.

3 U.S. ALCOHOL-IMPAIRED DRIVING FATALITIES AND FATALITY RATE PER 100 MILLION VMT: 1982 TO 2007



In the European Union (EU), alcohol-related deaths on the road totaled nearly 10,000 in 2007.⁷ Although car crash fatalities linked to alcohol dropped in some countries between 1997 and 2005 (e.g., the Czech Republic and Germany), drunk driving-related deaths in countries such as the United Kingdom and Spain rose between one and two percent during the same time frame.⁸ Overall, more than one in four traffic deaths in EU countries is alcohol-related.⁹

DRUNK DRIVING LAWS WORLDWIDE

All but seven percent of the world’s nations have maximum permissible BAC levels in place, with maximum legal BAC levels ranging from .00 g/dl to .08 g/dl.

According to a WHO survey published in 2004:

- 28 percent of countries set the legal BAC limits between .00 and .03 g/dl;
- 39 percent of countries set the legal BAC limits between .04 and .06 g/dl; and
- 26 percent of countries have adopted limits of greater than .06 g/dl.¹⁰

Countries also vary in terms of the penalties they impose for violations of legal BAC limits, and the extent to which such limits are communicated and enforced. In addition, some countries impose lower legal BAC limits for younger or less experienced drivers.

This is in part in response to research which shows that for younger and less experienced drivers, smaller increases in

BAC levels can raise the risk of tragic consequences such as fatal traffic accidents (more so than for older, more experienced drivers). The countries which impose lower legal BAC limits for younger or less experienced drivers include Australia, Austria, Canada, Macedonia, New Zealand, Russia, Slovenia, Spain, and the United States.¹¹

More stringent BAC limits are also set by some jurisdictions for people who operate commercial vehicles, airline pilots, captains of ships, and people who drive vehicles such as taxis, trucks, and buses. In addition, in some countries, BAC limits extend beyond drivers of automobiles to operators of various types of other vehicles, including personal aircraft, snowmobiles, and even bicycles.¹²

In the United States, all 50 states and the District of Columbia have passed legislation establishing that a driver with a BAC of .08 g/dl is considered legally intoxicated. In addition, 39 states and the District of Columbia have laws and penalties targeted at those who drive with elevated or “high” BAC levels, generally .15 g/dl or higher.

HARDCORE DRUNK DRIVERS

There is a body of research which identifies repeat drunk driving offenders and “hardcore” drunk drivers as a large and disproportionate source of highway crashes. Drivers with very high BAC levels (at or above .15 g/dl) have a very high risk of dying in a crash or getting severely injured.¹³

As defined by The Century Council and the National Hardcore Drunk Driver project in the United States as well as other organizations and government entities, a hardcore drunk driver is someone who (1) drives with a BAC level of .15 g/dl or above and/or (2) drives repeatedly while intoxicated (e.g., as demonstrated by having more than one arrest for doing so).¹⁴ For example, in the United States, each year, as many as 40 percent of fatally injured drinking drivers were previously convicted of drunk driving offenses—and out of those 40 percent, as many as 80 percent had BAC levels of .15 g/dl or more.¹⁵

“BUZZED” DRIVING

Drivers who are at or just above the legal BAC limit present a distinct concern because these individuals may mistakenly perceive that they are not impaired or do not appear to be overtly intoxicated.

Current advocacy campaigns such as the Ad Council’s “Buzzed Driving is Drunk Driving” initiative address this issue and aim to increase public education about the dangers of driving when in a so-called “buzzed” state.¹⁶

POLICY CONSIDERATIONS

Governments and communities have adopted various types of measures in an attempt to reduce the incidence of alcohol-impaired traffic accidents, and to prevent those who are intoxicated from driving in the first place. Although some of the leading examples are from the U.S., these newer approaches with promising results can be customized and adapted for jurisdictions around the world.

ADMINISTRATIVE LICENSE REVOCATION

In addition to penalties which involve the revocation of driving privileges following a conviction for driving while intoxicated, Administrative License Revocation (ALR) involves the immediate revocation of a driver’s license when he or she is arrested for driving while intoxicated. Typically, this type of license suspension is implemented if (1) the driver refuses a BAC breath test but the law enforcement officer on hand deems there is cause for arrest based on impairment; or (2) if a breath test is administered and reflects a BAC level above the legal limit. Advocates of ALR promote the practice as a swift and effective response which helps to keep the roads safe for other drivers. Currently in the U.S., 41 states and the District of Columbia have laws allowing for ALR.¹⁷

IGNITION INTERLOCK DEVICES

Ignition Interlock devices—BAC breath testing devices linked to a vehicle’s ignition system—require that a driver take a breath test before being allowed to start the vehicle’s engine. The vehicle will not start unless the driver’s BAC is below a pre-set level, and the interlock system tracks each attempt to start the vehicle. In addition, interlock devices can be calibrated for “rolling re-tests” which require a driver to provide breath tests at regular intervals—thus preventing drivers from circumventing the device by asking a sober friend to start the car, drinking while driving, leaving the car idling while going into a bar to drink, etc.¹⁸

TARGETED EDUCATION & INFORMATION INITIATIVES

Research also shows that individuals may not always have sound awareness of their individual level of impairment—and hence may mistakenly believe they are not intoxicated when in fact they have a BAC level above the legal limit. Recent advocacy campaigns addressing this phenomenon include the Ad Council’s “Buzzed Driving is Drunk Driving” initiative in the U.S., developed to promote public education about the dangers of driving after drinking when in a so-called “buzzed” state—versus being overtly drunk.¹⁹ In addition to the “Buzzed Driving is Drunk Driving” campaign, the U.S. National Highway Traffic Safety Administration runs awareness campaigns such as “Friends Don’t Let Friends Drive Drunk” and enforcement campaigns such as “Drunk Driving: Over the Limit. Under Arrest.”

Similarly, some community and college initiatives have used breathalyzers as an educational tool, helping individuals understand the difference between how intoxicated they may feel and their actual BAC levels.²⁰ Other examples of such targeted initiatives include The Century Council’s B4UDrink program and an interactive tool—B4UDrink.Mobi—which individuals can use to better understand the effect their alcohol consumption will have on their BAC level by entering key factors such as their gender, weight, the number and type of drinks they intend to consume, etc.

In Australia, the DrinkMeter program offers an easy-to-use, online interactive tool that allows individuals to learn about BAC levels during a simulated drinking exercise, thus better understanding how their BAC levels and risk levels increase as they drink.²¹ In addition, the 100% Cool program in Portugal, the Arrive Alive! Program in South Africa, and the Euro Bob campaigns in Europe have been developed to support public education about the dangers of drunk driving, and to encourage the use of designated drivers.²²

ENFORCEMENT AND PUNISHMENT

Consistent and visible enforcement has been shown to be a powerful deterrent to impaired driving. Enforcement methods which have proven effective include breath testing (random or where impairment of a driver is suspected), sobriety checkpoints, police patrols, and officer training.²³ However, 30 percent of countries do not use random breath tests to enforce BAC limits. Of the countries that report using random

breath tests, only 23 percent rely on this enforcement method frequently, 32 percent use it only sometimes, and 16 percent employ it rarely.²⁴ In addition, studies show that greater enforcement can occur effectively in hospital emergency rooms, where relatively few drivers with BAC levels testing over the legal limit are arrested or punished.²⁵

Punishment for convicted drunk drivers also varies a great deal from country to country, and in some jurisdictions, is linked to the extent to which an offender’s BAC level exceeds the legal limit. Generally speaking, the consequences for exceeding legally imposed BAC limits range from mandatory educational programs and monetary fines to more severe measures such as automatic license suspension and prison sentences.²⁶

DUI COURTS

DUI Courts (sometimes called DWI Courts) deal with hardcore drunk driving offenders by providing long-term accountability and rehabilitation in addition to conviction. The DUI Court model was first implemented on a trial basis in the U.S. in the 1990s, and is designed to protect public safety by addressing the root causes of repeat DUI offenders/hardcore drunk drivers. This entails a cooperative approach involving all criminal justice stakeholders (prosecutors, defense attorneys, judges, probation officers, law enforcement). In addition to being convicted, offenders typically enter into court-ordered treatment, undergo frequent alcohol testing, and are under close community supervision. Recent research demonstrating the effectiveness of this approach includes results from a Wisconsin program which cut recidivism by nearly 50 percent, and results from a Maryland program which reported an eight percent recidivism rate after five years, compared to a 35 percent rate for other programs.²⁷

PUBLIC EDUCATION

Research suggests that factors such as increased public education about BAC limits and the dangers of driving while impaired can play a key role in enhancing the effectiveness of legislation which targets drunk driving.²⁸ Levels of public awareness about legal BAC limits tend to vary greatly, and public education campaigns to promote and enhance understanding of BAC limits have demonstrated positive results—whether implemented through governments, local communities, advocacy groups, and/or the beverage alcohol industry.²⁹

DESIGNATED DRIVER & SAFE RIDE PROGRAMS

As described by the U.S. Department of Transportation, Designated Driver programs, combined with visible law enforcement, are “a key component of community-based comprehensive impaired-driving prevention efforts.” Designated Driver programs typically promote the concept of designating a sober driver, but there are also variations on this concept such as “Safe Ride” programs which offer alternative methods of transportation for people who have been drinking and don’t want to risk the negative consequences of drunk driving.³⁰

BROWN-FORMAN COMMENTARY & POSITIONS

We see drunk driving as literally a life-and-death policy issue which warrants the strongest possible public policy approaches, consistent and effective prevention and enforcement activity, and significant punishments and sentences for drivers whose BAC levels are found to be above the legal limit.

Research consistently shows that compliance with—and enforcement of—drunk driving laws helps to reduce the number of accidents caused by impaired drivers. A key factor in making such legislation effective is the commitment of governments and communities to public education, compliance and enforcement.

In addition to education and prevention efforts, certain approaches have demonstrated sufficient levels of success for broad legislative adoption in the United States—namely, Administrative License Revocation and stiffer penalties for repeat offenders and offenders with higher BAC levels.

BASED ON THESE FINDINGS AND OBSERVATIONS, BROWN-FORMAN SUPPORTS AND ENCOURAGES A COMPREHENSIVE APPROACH TO DRUNK DRIVING PREVENTION, INCLUDING:

In all jurisdictions, the establishment of clearly defined legal BAC levels of at least .08 g/dl

Sound scientific research shows that .08 g/dl is the level at which virtually every driver is impaired – affecting all of the critical driving skills including braking, steering, judgment, and response time.

The establishment of zero-tolerance BAC limits for drivers who are below the legal drinking age

DUI Courts with an approach that combines conviction with court-ordered treatment, frequent alcohol testing, and close community supervision

This cooperative approach involves all criminal justice stakeholders (prosecutors, defense attorneys, judges, probation officers, law enforcement) and is designed to protect public safety by addressing the root causes of hardcore drunk driving.

Court-ordered Ignition Interlock devices for hardcore drunk drivers (repeat impaired-driving offenders and/or drivers with a BAC of .15 g/dl or higher)

More specifically, we support Ignition Interlock ordered at a judge’s discretion for the first impaired-driving offense, and as a mandatory consequence for second-time offenders.

For third-time offenders found guilty of driving while intoxicated, a mandatory felony trial—and felony sentencing if the offender is found guilty

In addition, for repeat offenders, we support court-ordered treatment for alcohol abuse (not as a substitute for penalties, but in addition to other sanctions).

The implementation of Administrative License Revocation (immediate revocation of a driver’s license upon arrest for drunk driving) in all jurisdictions.

We endorse ALR as a swift and highly effective means of getting drunk drivers off the roads.

Consistent enforcement of BAC limits

We encourage the use of a range of measures, including BAC testing in hospital emergency rooms following accidents in which alcohol may be involved.

We also support robust police training with regard to BAC enforcement, and the reallocation of adequate resources to effectively enforce BAC legislation.

Improved judicial training

Impaired-driving offenses involve a distinct set of concerns with regard to law enforcement procedures, BAC levels, the details of BAC testing, etc. Officers of local courts should be provided with training which addresses these details.

Realistic alternatives to driving home

We encourage and support the establishment and promotion of designated drivers and alternative options for getting home safely.

Increased promotion of public education about BAC limits and the dangers of drunk driving

We encourage a coordination of initiatives to promote education about legal BAC limits through the engagement of a broad range of partners, including government authorities, police, the hospitality industry, advocacy groups, industry groups, community groups, and schools.

Such initiatives should address what certain BAC levels mean for individuals in terms of the number of drinks consumed, the dangers of drunk driving, and the penalties for drivers whose BAC levels exceed legal limits.

APPENDIX I: BLOOD ALCOHOL CONCENTRATION (BAC) LIMITS WORLDWIDE

COUNTRY	STANDARD BAC (in mg/ml)	COUNTRY	STANDARD BAC (in mg/ml)	COUNTRY	STANDARD BAC (in mg/ml)
Albania	0.01	Georgia	0.03	Norway	0.02
Algeria	0.01	Germany	0.05	Panama	0
Argentina	0.05	Greece	0.05	Paraguay	0.08
Armenia	0	Guatemala	0.08	Peru	0.05
Australia	0.05	Honduras	0.07	Philippines	0.05
Austria	0.05	Hungary	0	Poland	0.02
Azerbaijan	0	Iceland	0.05	Portugal	0.05
Belarus	0.05	India	0.03	Romania	0
Belgium	0.05	Ireland	0.08	Russia	0.03
Bolivia	0.07	Israel	0.05	Singapore	0.08
Bosnia & Herzegovina	0.05	Italy	0.05	Slovak Republic	0.02
Botswana	0.08	Japan	0.03	Slovenia	0.05
Brazil	0.0	Kenya	0.08	South Africa	0.05
Bulgaria	0.05	Kyrgystan	0.05	South Korea, Rep. of	0.052
Cambodia	0.05	Latvia	0.049	Spain	0.05
Canada	0.08	Lithuania	0.04	Sweden	0.02
Colombia	0	Luxembourg	0.08	Switzerland	0.05
Costa Rica	0.049	Macedonia	0.05	Thailand	0.05
China	0.05	Malaysia	0.08	Turkey	0.05
Croatia	0.05*	Malta	0.08	Turkmenistan	0.03
Czech Republic	0	Mauritius	0.05	Uganda	0.05
Denmark	0.05	Mexico	0.08	United Kingdom	0.08
Ecuador	0.07	Moldova	0.03	United States	0.08
El Salvador	0.05	Mongolia	0.02	Uruguay	0.03
Estonia	0.02	Nepal	0	Venezuela	0.05
Ethiopia	0	The Netherlands	0.05	Zimbabwe	0.08
Finland	0.05	New Zealand	0.08		
France	0.05	Nicaragua	0.08		

Source: International Center for Alcohol Policies, updated January 2009

*BAC for professional drivers and drivers under 24 years of age is .00 g/dl.

**BAC for bus and truck drivers is .00 g/dl.

***BAC for professional drivers is .02 g/dl.

See: <http://www.icap.org/PolicyIssues/DrinkingandDriving/>.

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- ³ Davis, A., Quimby, A., Odero, W., Gururaj, G., & Hajar, M. (2003). *Improving safety by reducing impaired driving in developing countries: A scoping study*. Crowthorne, UK: Transport Research Laboratory.
- ⁴ Insurance Institute for Highway Safety. See: http://www.iihs.org/research/fatality_facts_2007/alcohol.html.
- ⁵ See: <http://www.centurycouncil.org/learn-the-facts/drunk-driving-stats>.
- ⁶ See: <http://www.centurycouncil.org/learn-the-facts>.
- ⁷ European Commission, Road Safety the European Policy (March 2009) See: <http://www.asecap.com/english/documents/1-ANNIECA-NEL.pdf>.
- ⁸ European Transport Safety Council. See <http://www.etsc.be/home.php>.
- ⁹ European Commission. See: http://ec.europa.eu/health/ph_determinants/life_style/alcohol/documents/alcohol_factsheet_en.pdf.
- ¹⁰ World Health Organization (WHO). (2004). *Global status report: Alcohol policy*.
- ¹¹ International Center for Alcohol Policies. (2002). *Blood alcohol concentration limits worldwide. ICAP Report 11*. Österberg, E., & Karlsson, T. (2003). *Alcohol policies in EU Member States and Norway. A collection of country reports*. Helsinki, Finland: National Research and Development Centre for Welfare and Health (STAKES). See: <http://www.stakes.fi/verkkojulk/pdf/AlcoholPoliciesInEUetc.pdf>.
- ¹² International Center for Alcohol Policies. (2002). *Blood alcohol concentration limits worldwide. ICAP Report 11*.
- ¹³ Insurance Institute for Highway Safety. See http://www.iihs.org/research/fatality_facts_2007/alcohol.html.
- ¹⁴ See: <http://www.centurycouncil.org/fight-drunk-driving/initiatives/hardcoredrunkdriving>.
- ¹⁵ See: www.dwidata.org.
- ¹⁶ See: <http://www.adcouncil.org/default.aspx?id=49>.
- ¹⁷ Mothers Against Drunk Driving (MADD), See: <http://www.madd.org/Professionals/Law-Enforcement/Research/View-Research.aspx?research=19>. See also: <http://www.centurycouncil.org/content/state-federal-policy-agenda-0>.
- ¹⁸ MADD, Alcohol Ignition Interlock Fact Sheet. See: www.madd.org/getattachment/f3b10778-9a12-4176-adba-3644f153ee7e/Alcohol-Ignition-Interlock-Fact-Sheet.aspx.
- ¹⁹ See: <http://www.adcouncil.org/default.aspx?id=49>.
- ²⁰ For example, see: http://www.servicelearning.org/library/lib_cat/index.php?library_id=6869.
- ²¹ See: <http://www.dasc.sa.gov.au/site/page.cfm?u=180>.
- ²² International Center for Alcohol Policies, Blue Book. See: http://icap.org/PolicyTools/ICAPBlueBook/ExamplesofTargetedInterventions/tabid/113/Default.aspx#Alcohol_Education.
- ²³ British Medical Association. (1996). *Driving impairment through alcohol and other drugs*. Stewart, K., & Sweedler, B. M. (1997). *Driving under the influence of alcohol*. In M. Plant, E. Single & T. Stockwell (Eds.), *Alcohol: Minimizing the harm. What works?* (pp. 126–142). New York: Free Association Books.
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- ²⁶ International Center for Alcohol Policies. (2002). *Blood alcohol concentration limits worldwide. ICAP Report 11*. See: www.icap.org.
- ²⁷ National Highway Traffic Safety Administration (NHTSA). See: <http://www.nhtsa.dot.gov/staticfiles/DOT/NHTSA/Communication%20&%20Consumer%20Information/Articles/Associated%20Files/810879.pdf>.
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29 Stewart, K., & Sweedler, B. M. (1997). *Driving under the influence of alcohol*. In M. Plant, E. Single & T. Stockwell (Eds.), *Alcohol: Minimizing the harm. What works?* (pp. 126–142). New York: Free Association Books. The Century Council. (1998). *Public awareness of blood alcohol concentration levels*. Washington, DC.

30 U.S. Department of Transportation. See: <http://www.nhtsa.dot.gov/people/injury/alcohol/DesignatedDriver/>.