"being in actual physical control of a motor vehicle." In this respect, HB 4 appears to be in conflict with the federal requirement and Alaska could not be certified as in compliance with the federal requirement.

If the definition of "operate a motor vehicle" were deleted or amended from HB 4, I believe that the bill would satisfy federal requirements and would avoid loss of federal highway funding.

Please contact me if you have further questions.

MFF:glc
01-111.glc

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

OFFICE OF THE COMMISSIONER

TONY KNOWLES, GOVERNOR

3132 CHANNEL DRIVE
JUNEAU, ALASKA 99801-7898

TEXT: (907) 465-3652
FAX: (907) 586-8365
PHONE: (907) 465-3900

February 8, 2001

Honorable Norman Rokeberg
Chair, House Judiciary
State Capitol, Room 118
Juneau, AK 99801

Dear Chairman Rokeberg:

Thank you for hearing the .08 BAC issue in your committee. As we stated, the Department supports implementation of .08 BAC as the state standard for driving while intoxicated for the following reasons:

With the passage of .08 BAC the State of Alaska will:

1. Avoid federal sanctions that take effect on October 1, 2003 at which time the federal government will withhold an estimated $3.58 million in federal highway funds for the first year, $7.1 million for the second year, $10.7 million for the third year, and $14.3 million for the fourth year that the state is out of compliance,

2. Qualify for additional federal funding for highway safety programs, and

3. For the reasons listed below:

THE MERITS OF A .08 BAC PER SE LAW FOR ADULT DRIVERS

The National Highway Traffic Safety Administration (NHTSA) recommends that all states and the District of Columbia establish .08 BAC as the illegal limit per se for drivers aged 21 and older for the following reasons:

(1) Virtually all drivers are substantially impaired at .08 BAC. Laboratory and test track research shows that the vast majority of drivers, even experienced drinkers, are impaired at .08 with regard to critical driving tasks. There are significant decrements in performance in areas such as braking, steering, lane changing, judgement, and divided attention at .08 BAC. Studies report that performance decrements in some of these tasks are as high as 60%-70% at .08 BAC.

(2) The risk of being involved in a crash increases substantially by .08 BAC. The risk of being in a crash gradually increases at each BAC level, but rises very rapidly after a driver reaches or exceeds .08 BAC compared to drivers with no alcohol in their blood systems. Research by the Insurance Institute for Highway Safety indicates that the relative risk of being killed in a single vehicle crash for drivers at BACs between .05 and .09 is 11 times that of drivers at .00 BAC (no alcohol).

(3) Lowering the per se limit is a proven effective countermeasure which will reduce alcohol-related traffic fatalities. There is evidence from California that significant reductions in alcohol-related fatalities occurred in 1990 (a 12% reduction), the year .08 and an administrative license revocation law went into effect. A study by Boston University compared five states that lowered their illegal limit from .10 to .08 with five states that did not do so. They found a 16% reduction in the proportion of fatal crashes involving fatally injured drivers whose BACs were .08 or higher in the five .08 states. That same study showed an 18% reduction in the proportion of fatal crashes involving fatally injured drivers at very high BACs (.15 or higher) in those .08 states. A 1995 NHTSA study found significant decreases in four states that adopted .08 on nine measures of alcohol-related fatalities. Decreases in alcohol-related fatalities ranged from 4% to 40% in those states analyzed.

(4) .08 is a reasonable level to set the limit. A .08 BAC is not typically reached with a couple of beers after work or a glass or two of wine with dinner. The average 170 pound male would have to consume more than four 12oz. cans of beer within 1 hour on an empty stomach to reach .08 BAC. The average 137 pound female would need at least three cans of beer in one hour on an empty stomach to reach that level. That female driver would need 4 equivalent drinks over a 2 hour period to get above .08 BAC and the male would need 5 equivalent drinks.

(5) The public supports levels below .10 BAC. NHTSA surveys show that most people would not drive after consuming 2 or 3 drinks in an hour and believe the limit should be no higher than that. Recent polls show that 2 out of every 3 Americans favor lowering the limit to .08 when they are aware of how much alcohol it takes to reach that level.

(6) Most other industrialized nations have set BAC limits at .08 or lower and have had these laws in place for many years. For example, Canada and Great Britain set their limits at .08--as do Austria and Switzerland. All States in Australia now have a .05 limit. France and Germany recently lowered their limit to .05, while Sweden's illegal limit is .02 BAC.

Please find attached information that we hope will clear up any confusion regarding federal highway safety incentive and sanction programs. We have also the requested fiscal year timelines for your use. Please call if you have any questions.

Sincerely,

Joseph L. Perkins, P.E.
Commissioner

Enclosures

Alaska Highway Safety Office
Alaska Department of Transportation & Public Facilities

SAFETY-RELATED SANCTIONS AND FEDERAL FUNDING PROGRAMS FOR SAFETY

The most recent reauthorization of the federal surface transportation act established sanctions as well as the prospect of additional funding to encourage states to adopt more stringent highway safety-related laws. Funding for the Alaska Highway Safety Office (AHSO) is received through a series of grant programs established by Congress and administered by the National Highway Traffic Safety Administration (NHTSA), US DOT. The rules and requirements for each source vary from program to program. Most funding is directed toward specific traffic safety related issues such as occupant protection, injury prevention, drunk driving, and other areas. The agency in turn awards one-year grants for highway safety projects based on preset criteria. The sanctions and the federal highway safety-related alcohol programs are described below.

- **Section 163(a) - .08 BAC Sanction legislation 23 USC 163(a)**

Legislation passed by Congress now requires that states pass .08 BAC legislation in order to avoid the withholding of federal highway funds. Beginning in FY 2004, 2 percent of federal highway funds will be withheld if a state has enacted and is not enforcing a .08 BAC. In FY 2005, 4 percent of federal highway funds will be withheld, in FY 2006, 6 percent of federal highway funds will be withheld, and in FY 2007, and each year thereafter, 8 percent of federal highway funds will be withheld.

Current Status: Sanctions are scheduled to begin in FY 2004 if .08 BAC is not enacted and implemented. ***During the first year, FY 2004, $3,580,967 would be withheld, based on estimated FY 2003 highway program apportionments.***

- **Section 154 – Open Container Requirements (23 USC 154)**

TEA-21 established a program to encourage states to enact Open Container laws. A state that does not have a conforming Open Container law by the beginning of a federal fiscal year, starting with FY 2001, will have certain Federal – aid highway funds transferred to the state's Section 402 State and Community Highway Safety grant program during that fiscal year. These funds can be used for alcohol-impaired driving programs and hazard elimination programs.

Current Status: For FY 2001, $750,000 of Federal Highway program funds were transferred to the Section 402 State and Community Highway Safety Programs. The remainder of the penalty funds ($1,493,065) were transferred to the hazard elimination (Section 152) program.

- **Section 164 – Minimum Penalties for Repeat Offenders for DWI or DUI (23 USC 164)**

TEA-21 established a program to encourage states to establish minimum penalties for repeat drunken driving offenders. A state that does not have a conforming law by the beginning of a federal fiscal year, starting with FY 2001, will have certain Federal – aid highway funds transferred to the state's Section 402 State and Community Highway Safety grant program during that fiscal year. These funds can be used for alcohol-impaired driving programs and hazard elimination programs.

Current Status: For FY 2001, $2,243,065 of these funds were transferred to the hazard elimination program. None is being used for alcohol-related projects this year.

SAFETY-RELATED SANCTIONS AND FEDERAL FUNDING PROGRAMS FOR SAFETY
(continued)

➢ **Section 402 – State and Community Highway Safety Programs (23 USC 402)**

Section 402 funds are to be used for the implementation of a program that addresses a wide range of highway safety problems that are related to human factors and the roadway environment and that contribute to the reduction of crashes, deaths, and injuries resulting therefrom. Section 402 enhances the state's program by providing resources to start up new, more effective projects; by catalyzing or accelerating state programs to address major safety issues with well-planned strategies; and by leveraging additional state and local investment in highway safety.

Current Status: Alaska Highway Safety Office base funding source. The amount is formula-based and is used is for an array of traffic safety-related projects for state, local, and non-profit agencies. Some of these projects are alcohol-related. The amount varies each year depending upon projects submitted for funding. $736,250 received for FY 2001.

➢ **Section 163 – Safety Incentives To Prevent the Operation of Motor Vehicles by Intoxicated Persons (23 USC 163)**

TEA-21 established a program of incentive grants to encourage states to establish .08 percent blood alcohol concentration (BAC) as the legal limit for drunk driving offenses. A state may use these grant funds for any project eligible for assistance under Title 23. Funds allocated to highway safety can be used for most highway safety education, enforcement, and traffic data activities and take on the characteristics of the program in which they are used.

Current Status: Alaska does not qualify for this funding at this time. ***With the passing of .08 BAC, the Alaska Highway Safety Office would receive approximately $800,000 a year in additional funding.*** *The actual amount would depend upon the number of other qualifying states.*

➢ **Section 410 – Alcohol Impaired Driving Countermeasures (23 USC 410)**

TEA-21 amended the alcohol-impaired driving countermeasures incentive grant program to encourage states to adopt and implement effective programs to reduce traffic safety problems resulting from individuals driving while under the influence of alcohol. A state may use these grant funds only to implement and enforce impaired driving programs. New matching criteria for Section 410 began in 1998 with the passage of TEA-21. Therefore, Section 410 funds received prior to FY98 (pre-TEA-21) are treated differently.

Current Status: Due to changes in TEA-21 program requirements, Alaska does not qualify for 410 funding. The state did qualify prior to FY 98 under the previous transportation authorization (ISTEA).

Federal Highway Safety Incentive Grant Timeline

DATE	ACTION	NOTE
Jul 1, 00	State FY 01 begins	
Oct 1, 00	Federal FY 01 begins	
Jan - May 01	Alaska Legislative Session	Passage of .08 BAC & increase in federal authority for receipt & expenditure of FFY 01 funds in state FY 02 budget. Sec. 163 funds require no state match – 100% federal funding.
Jul 1, 01	.08 BAC program	.08 BAC program must be in effect and application for FFY 02 incentive grant funds must be submitted to NHTSA to qualify for FFY 01 incentive grant funding.
Sep 30, 01	FFY 01 Section 163	Grant funds available no later than this date.
Oct 1, 01		Applications for FFY 02 Section 163 funding may be submitted to NHTSA with AHSO's annual Highway Safety Plan.

Federal Highway Funds Sanction Timeline

Jul 1, 00	State FY 01 begins	
Oct 1, 00	Federal FY 01 begins	
Jan - May 01	Alaska Legislative Session	
Jul 1, 01	State FY 02 begins	
Oct 1, 01	Federal FY 02 begins	
Jan - May 02	Alaska Legislative Session	
Jul 1, 02	State FY 03 begins	
Oct 1, 02	Federal FY 03 begins	
Jan – May 03	Alaska Legislative Session	➢ Legislature must pass .08 BAC this session in order to avoid sanction.
Jul 1, 03	State FY 04 begins	
Oct 1, 03	Federal FY 04 begins	Sanction takes effect $3.58 million in federal highway funds is withheld.

Subject: Re: Federal .08 penalties
Date: Thu, 08 Feb 2001 09:45:37 -0900
From: Dennis Poshard <Dennis_Poshard@dot.state.ak.us>
To: Heather Nobrega <Heather_Nobrega@legis.state.ak.us>

Yes. This is a true statement.

Heather Nobrega wrote:

> Someone has told Rep. Rokeberg that if a state implements a .08 legal limit by Federal Fiscal Year 2007, the state will receive all of the federal highway funds withheld from FFY 2004-2007. Is this a true statement? Thanks.
>
> Heather Nobrega

Poshard, Dennis <dennis_poshard@dot.state.ak.us>
Special Assistant
Department of Transportation and Public Facilities

Kenai Peninsula Online

Powered By

Web posted **Friday, September 15, 2000**

Man gets nine years imprisonment in drunken driving fatal

ANCHORAGE (AP) -- An Anchorage man has been sentenced to nine years in prison for a drunken driving incident that killed one person and injured another.

Ray Fine lost control of his truck in May of last year while fumbling for a dropped cigarette, killing Lyman Reese Smith, who was riding a motorcycle with his 10-year-old grandson.

Prosecutors said **Fine** had consumed at least a six-pack of beer and had a blood alcohol level of .08.

Fine had pleaded no contest to criminally negligent homicide for the death of Smith and third-degree assault for injuries to the grandson. He also was convicted of drunken driving.

Superior Court judge Larry Card sentenced the 30-year-old **Fine** to consecutive terms of five years for negligent homicide and four years for assault.

He ordered **Fine** to serve a one-year sentence for drunken driving, concurrently with the other charges.

Fine was ordered to pay almost $58,000 in restitution, and his license was revoked for life.

Sentencing came Thursday, in the midst of a rash of drunken driving accidents that have angered many around the region.

"I cannot be insulated from the fact that the community cries out for greater punishment for these offenses," Card said.

"It's a horrible thing that happened, and it's also a horrible thing to live with," said Rex Butler, **Fine**'s attorney, who had asked that his client be

given probation for five years and no more than four years in jail.

"That is **Ray Fine**'s reality for the rest of his life," Butler said.

Before Card handed down the sentence, **Fine** unfolded a piece of paper from his pocket and read statements to the judge and all those present in the courtroom.

He apologized, through tears, to the friends and relatives of Smith. He also apologized to his own wife and son and asked for forgiveness.

"I will accept any punishment that is handed down to me," he said.

Card said he believed **Fine** felt bad and accepted responsibility but that alcohol had been present in **Fine**'s life for 15 years and he made no attempt to get treatment.

"In this case it caused harm, serious harm," the judge said.

Discuss this story in our Discussion Forum

E-mail this story to a friend

Comments or questions? Contact the web master at Peninsula Clarion

Copyrighted by Peninsula Clarion, a Division of Morris Communications
Privacy and terms of use.

Kenai Peninsula Online

Powered By

Web posted **Tuesday, April 18, 2000**

Anchorage man pleads no contest in roadway death

ANCHORAGE (AP) -- An Anchorage man will be sentenced in September after pleading no contest to criminally negligent homicide.

Ray William **Fine** 29, lost control of his truck and killed a motorcyclist while fumbling for a dropped cigarette last May, authorities said. He also was convicted of drunken driving in the death of Lyman Smith.

Fine also pleaded to third-degree assault for injuring Smith's 10-year-old grandson, who was riding on the motorcycle with his grandfather at the time of the collision.

He had consumed at least a six-pack of beer and had a blood alcohol level of .08, investigators said.

Fine swerved into the oncoming lane and tried to stop when he saw Smith but couldn't do so in time, authorities said.

Fine originally had been indicted for manslaughter and first-degree assault, but prosecutors reduced the charges in return for **Fine**'s plea.

Discuss this story in our Discussion Forum

E-mail this story to a friend

Comments or questions? Contact the web master at Peninsula Clarion

Copyrighted by Peninsula Clarion, a Division of Morris Communications
Privacy and terms of use.

Impaired Driving in Alaska

Incidence of Impaired Driving

For one of every 150 miles driven in Alaska in 1998, a legally intoxicated person (BAC $.10) sat behind the wheel. Alaska police report 1,115 crashes involving a driver or pedestrian with a positive blood alcohol concentration (BAC). Formulas developed by NHTSA were used to estimate the number of alcohol-related crashes where alcohol involvement is not reported by the police. An estimated total of 2,850 crashes in Alaska involved alcohol. These crashes killed 31 and injured an estimated 1,700 people.

Impaired Driving by Blood Alcohol Concentration (BAC)

In 1998, Alaska drivers with:

- BACs of .10 and above were involved in an estimated 2,700 crashes that killed 28 and injured 1,500
- BACs between .08-.09 were involved in an estimated 50 crashes that killed 1 and injured 100
- Positive BACs below .08 were involved in an estimated 100 crashes that killed 2 and injured 100

Costs

Alcohol is a factor in 37% of Alaska crash costs. Alcohol-related crashes in Alaska cost the public more than $0.3 billion in 1998, including nearly $0.1 billion in monetary costs and over $0.2 billion in quality of life losses. (For definitions of the cost categories, see the definitions fact sheet.) Alcohol-related crashes are deadlier and more serious than other crashes. People other than the drinking driver paid $0.2 billion of the alcohol-related crash bill.

Costs Per Alcohol-related Injury

The average alcohol-related fatality in Alaska cost $5.1 million:

- $1.7 million in monetary costs
- $3.4 million in quality of life losses

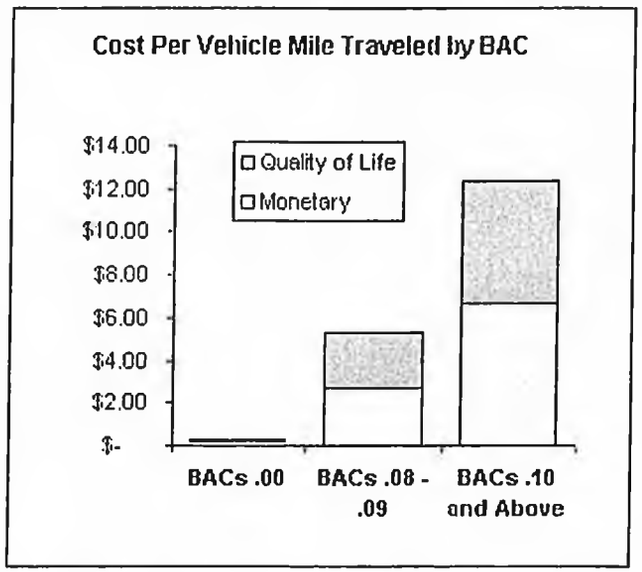
The estimated cost per injured survivor of an alcohol-related crash averaged $126,000

- $52,000 in monetary costs
- $74,000 in quality of life losses

Costs Per Mile Driven

Crash costs in Alaska averaged:

- $12.40 per mile driven at BACs of .10 and above
- $5.30 per mile driven at BACs between .08-.09
- $0.20 per mile driven at BACs of .00



Costs Per Drink

The societal costs of alcohol-related crashes in Alaska averaged $0.90 per drink consumed. People other than the drinking driver paid $0.50 per drink.

Impact on Auto Insurance Rates

Alcohol-related crashes accounted for an estimated 14% of Alaska's auto insurance payments. Reducing alcohol-related crashes by 10% would save $6 million in claims payments and loss adjustment expenses.

Prevention Savings

Alaska already has many important impaired driving laws. However, a number of additional strategies can be used to mitigate the harm from impaired driving.

- **Enforcing Serving Intoxicated Patrons Law:** Using undercover police officers to enforce Alaska's law against serving alcohol to intoxicated bar and restaurant patrons would reduce alcohol-related crash fatalities by an estimated 11%. It would cost $0.50 per licensed driver and save $50 per licensed driver.
- **.08 BAC Law:** Lowering Alaska's BAC limit to .08 would reduce alcohol-related fatalities by 8% and save an estimated $5 per licensed driver. The value of mobility losses and alcohol sales reductions resulting from the law are the large majority of the $0.30 cost per licensed driver.
- **Graduated Licensing:** Graduated licensing would impose a nighttime driving restriction or passenger limits for young novice drivers in Alaska. Graduated licensing with a midnight curfew would reduce youth fatalities by 5%-8% and total alcohol-related fatalities by 2%. It would save an estimated $1,200 per youthful driver. The value of the mobility lost by youth is the large majority of the $110 cost per youthful driver.
- **Sobriety Checkpoint Program**: Intensive enforcement of Alaska's BAC limit with highly visible sobriety checkpoints would reduce alcohol-related fatalities by at least 15% and save $95,400 per checkpoint. Including costs of travel delay and the value of mobility losses

by impaired drivers apprehended and sanctioned, the costs of conduction a checkpoint would average $14,300 including police resources.

- **Primary Belt Law:** Primary belt laws allow law enforcement to stop and ticket a driver for non-use of a safety belt without requiring the driver to be cited for or have committed another offense. Unbelted drivers account for 75% of impaired driving fatalities. A primary belt law can reduce alcohol-related fatalities in Alaska by 10%. The law would save $300 per licensed driver. If enforced with frequent belt-use checkpoints, the value of temporary discomfort experienced by some new belt wearers and travel delay costs at checkpoints would be the large majority of the law's $6.30 cost per licensed driver.

Public Services Research Institute
8201 Corporate Drive, Suite 220
Landover, MD 20785
(301) 731-9891

The estimates reported here were produced under National Highway Traffic Safety Administration Partners in Progress Cooperative Agreement No. DTNH22-97-H-55072.

MADD

Mothers Against Drunk Driving • Juneau Chapter

211 Fourth St. Suite 102 • Juneau, AK 99801

.08 Drunk Driving Limit Makes Sense

By: Millie I. Webb
Mothers Against Drunk Driving(MADD) National President

If you think drunk driving and the carnage it creates is something that happens to other people, think again.

About thirty percent of Americans will be involved in an alcohol-related crash at some time in their lives. Last year, alcohol-related crashes killed more than 15,000 people and injured more than 600,000 others – many of them disfigured and/or disabled for life.

The facts are simple. It takes a 170-pound man about four drinks in one hour, on an empty stomach to get to a .08 BAC. This is hardly social drinking. Research shows that virtually everyone, no matter the number of drinks it takes to get to that level, is impaired at .08. Critical driving skills – breaking, steering and reaction time – are affected at .08 BAC, putting everyone risk.

My daughter, Lori, and nephew, Mitchell, died as a result of a drinking driver with a .08 BAC. My husband and I were severely burned in the crash that also caused my daughter Kara to be born premature and legally blind.

About 500 other lives would be saved every year if .08 laws were passed in every state. Last year, the U.S. Congress passed a law that requires all states to pass .08 BAC laws by Oct. 1, 2003 or face the loss of federal highway funding. States that pass .08 BAC laws this year will be rewarded with unrestricted federal highway funding.

I hope that state legislators will see the wisdom in passing .08 BAC laws this year. It will bring additional funds to states, but more importantly, it will save hundreds of lives and prevent thousands of injuries. Time lost equals lives lost. Let's focus on saving lives.

###

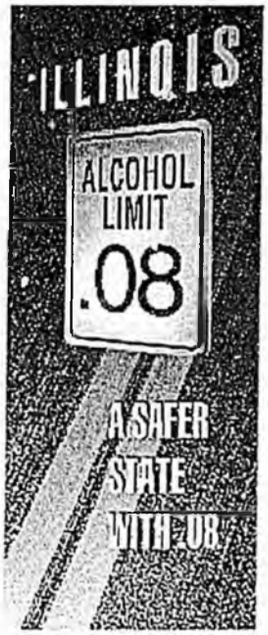
Phone: (907) 463-2562 • Fax: (907) 463-2540 • E-mail: jnumadd@ptialaska.net

THE
FOLLOWING
DOCUMENT(S)
ARE
POOR
ORIGINAL
COPIES

ILLINOIS GATEWAY
Secretary of State's Office
JESSE WHITE • SECRETARY OF STATE

This brochure is also available in PDF format
click here to skip to the download area.

A Safer State With .08



Dear motorist,
The creation of Illinois' new .08 law marks an important milestone in our state's efforts to end drunk driving and improve safety on our roadways.
With this law, Illinois joins a growing number of states that now recognize a blood-alcohol content (BAC) of .08 percent as the level at which all motorists are too impaired to drive. Any person who now drives in Illinois with a BAC of .08 or more risks being charged with Driving Under the Influence (DUI).
Unfortunately, alcohol involvement is still the most common factor in highway deaths and injuries. Only 7 percent of all crashes involve alcohol use, but 41 percent of fatal crashes do.
I pushed for passage of a .08 law because research shows that states with this BAC limit experience a significant decline in alcohol-related crashes, injuries and deaths. They do so primarily because .08 laws make all motorists - even habitual drunk drivers - far more reluctant to drink and drive.
By setting a more sensible limit on the amount of alcohol motorists can consume before driving, I hope we in Illinois also can save lives and spare more families from heartbreaking, needless tragedies.
I encourage you to read this brochure about the .08 law and share this information with your family and friends.

What is .08?

In Illinois, it's the law — the blood-alcohol content at which a person is considered legally drunk. A driver's BAC is determined by the ratio of alcohol to breath or blood and may be measured by a breathalyzer or blood test.
Any person found operating a motor vehicle in Illinois with a BAC of .08 percent or more can be charged with Driving Under the Influence. A DUI arrest triggers an automatic driver's license suspension.
Studies show that .08 laws are a general deterrent to impaired driving and result in a significant decrease in alcohol-related crashes and fatalities.
Experts estimate that as many as 65 lives could be saved each year in Illinois — and thousands of injuries prevented — due to the .08 law.

Is a person really impaired at .08 BAC?

Research shows that critical driving skills are impaired for anyone with a .08 BAC. A driver's attention, comprehension and re-action time are substantially

diminished at .08. Specific skills, such as lane changing, braking and acceleration, also are significantly affected.
At .08, a motorist is 11 times more likely to be killed in a single vehicle crash than a non-drinking driver.

How does the law affect you?

While all drivers have a responsibility to avoid intoxication, .08 does not target the social drinker who may have a couple of drinks after work or a glass or two of wine with dinner.
The new .08 limit encourages people to think twice about getting behind the wheel after they have had too much to drink. Drivers must make responsible decisions about transportation — before they drink — such as using a designated driver or calling a cab.

What are the consequences of a DUI?

Driving Under the Influence is a serious criminal offense with devastating consequences.

- A person caught driving with a BAC of .08 percent or more can be arrested and charged with DUI and will face an automatic driver's license suspension. DUI offenders are handcuffed, booked, finger printed and put in jail.
- Getting a DUI is costly, embarrassing and leaves a permanent blemish on a person's driving record. Bail bond, fines, attorney fees, court costs, increased insurance premiums and alcohol education programs all contribute to the $9,000 average cost to a DUI offender.
- By far, the most devastating con-sequences of DUI are thousands of needless, senseless injuries and deaths. Nationally, more than 17,000 people die each year in alcohol-related crashes, and about 1 million people are injured.

What can you do?

- Think before you drink. Before you begin drinking, choose a designated driver — a person who voluntarily abstains from drinking alcohol and pledges to take everyone home safely.
- If you or someone you know has been drinking, arrange for a taxi or other means of safe transportation home.
- Keep in mind that alcohol impairs judgment. After several drinks you may convince yourself that you can drive safely. Statistics prove otherwise.

Remember...

.08 is a limit at which all motorists are too impaired to drive safely!

Forms/Brochures are provided in PDF (Portable Document Format) files,

which can be viewed or printed using your Web browser and Adobe's Acrobat Reader software. Macintosh and Windows versions of Acrobat Reader may be downloaded free of charge from Adobe.

Get Acrobat Reader Click here to find out how to obtain the Adobe Acrobat Reader.

brochure **"A Safer State With .08" (Being Updated)**

For more information on A Safer State With .08
please call (217) 785-7548
(800) 252-2904(Voice or TTY)

or write
Office of the Secretary of State
Driver Services Department
2701 S. Dirksen Parkway
Springfield, IL 62723

CyberDrive Illinois home page

CyberDrive Illinois ()

State Drunk Driving Laws

The .08 BAC Standard

As of October 2000, 19 states and the District of Columbia have adopted .08 BAC illegal *per se* laws, as the legal level of intoxication in their state. All other states have established .10 BAC as the legal level for drunk driving, with the exception of Massachusetts and South Carolina, which have not adopted illegal *per se* laws.

Illegal *per se* means that a BAC level above the set limit is a violation in and of itself-impairment need not be demonstrated. Note that while Massachusetts has no illegal per se law, it has adopted a .08 administrative *per se* law for the purposes of administrative license revocation.

States with .08 BAC

- **Alabama**
- **California**
- **District of Columbia**
- **Florida**
- **Hawaii**
- **Idaho**
- **Illinois**
- **Kansas**
- **Kentucky**
- **Maine**
- **New Hampshire**
- **New Mexico**
- **North Carolina**
- **Oregon**
- **Rhode Island**
- **Texas**
- **Utah**
- **Vermont**
- **Virginia**
- **Washington**

Sources: Digest of State Alcohol-Highway Safety Related Legislation, US Dept. of Transportation, National Highway Traffic Safety Administration; and Westlaw bill tracking database searches.

.08 BAC Studies

Highway Safety: Effectiveness of State .08 Blood Alcohol Laws
U.S. General Accounting Office
http://www.gao.gov/

.08 BAC: Setting Limits, Saving Lives
National Highway Traffic Safety Administration
US Dept. of Transportation

Evaluation of the Effects of North Carolina's .08 BAC Law (PDF Download)
Highway Safety Research Center

University of North Carolina

Visitor counts for this page.

National Conference of State Legislatures
INFO@NCSL.ORG (autoresponse directory)

Denver Office:
1560 Broadway, Suite 700
Denver, CO 80202
Tel: 303-830-2200
Fax: 303-863-8003

Washington Office:
444 North Capitol Street, N.W., Suite 515
Washington, D.C. 20001
Tel: 202-624-5400
Fax: 202-737-1069

Traffic Tech

NHTSA People Saving People www.nhtsa.dot.gov

Technology Transfer Series

Number 232 September 2000

AN EVALUATION OF THE .08 PER SE LAW IN ILLINOIS FINDS 13.7 PERCENT FEWER FATAL CRASHES WITH POSITIVE BACS

As of August 2000, 19 states plus the District of Columbia and Puerto Rico have enacted .08 *per se* laws. These laws make it illegal to drive with a blood alcohol concentration (BAC) at or above .08 percent. Several studies have been conducted evaluating the effectiveness of .08 laws. The preponderance of the evidence has demonstrated that .08 leads to a reduction in alcohol-related fatalities, especially when implemented in concert with a strong publicity campaign and highly visible enforcement.

One concern that has been voiced about the legislation is that it would lead to more DWI arrests (since now people with BACs in the .08 to .10 range are more likely to be arrested), and that additional arrests would overburden the criminal justice system.

As several states are considering legislation to lower their current .10 *per se* limit to .08, more information is needed on both the effectiveness of .08 legislation and the impact of the law on the enforcement and court systems.

The Pacific Institute for Research and Evaluation conducted a study for the National Highway Traffic Safety Administration (NHTSA) to examine Illinois' .08 *per se* law. The law became effective on July 2, 1997.

Evaluation of the Law

To determine the impact on alcohol-related crashes, the researchers conducted time series analyses using NHTSA's Fatality Analysis Reporting System (FARS) data. The FARS contains data about every reported motor vehicle traffic crash in the United States that involves a fatality.

Alcohol positive drivers involved in fatal crashes in the years 1988 through 1998 were analyzed. For comparison, the same time series analytic approach was used with data from five adjacent states (Indiana, Iowa, Kentucky, Missouri, and Wisconsin), all of which have .10 laws. In each case, the trend for nondrinking drivers involved in fatal crashes in the same period was entered as a covariate to reduce the influence of factors

that are unrelated to drinking and driving (such as the number of vehicle miles driven).

Site visits were made to three communities to learn whether the .08 law caused any problems for local agencies. Police officers, prosecutors, judges, licensing agency representatives, and others were interviewed in Chicago, Peoria, and Springfield.

Alcohol-Related Fatalities Decline 13.7 Percent

The number of drivers with positive BACs (BAC>.00) in fatal crashes decreased 13.7 percent in Illinois after implementation of the .08 law. This is a statistically significant reduction, and included drivers at both low and high BACs. There were no significant changes in alcohol-related fatalities in the surrounding states during this time. The researchers estimated that the .08 law may have saved 47 lives in Illinois in 1998. The 13.7 percent reduction in Illinois is higher than typically has been found in other studies of the effects of .08 laws. It is likely, however, that the greatest effects of a new law are realized when it is first implemented. The effects may decrease in later years. This question will be addressed with additional analyses of the Illinois data in 2001.

Between 1996, the last full year before the .08 law, and 1998, Driving Under the Influence (DUI) arrests increased 11 percent in Illinois. The percentage of arrests involving drivers with BACs in the .08 to .09 range also increased, from less than 1 percent of all DUIs to 8 percent of DUI arrests.

Law Enforcement Officers' Perspective

Law enforcement officers did not express any major concerns about the new law, other than saying that arrest forms need to be revised and breath testing machines need to be recalibrated. Some officers expressed confusion over whether the Standardized Field Sobriety Test (SFST) is valid at .08, since it had originally been validated at the higher .10 level. The SFST is valid at .08 BAC, and NHTSA validated it for this BAC level (see *Traffic Tech* 196, March 1999). Law enforcement agencies were not overwhelmed with new arrests, and many officers said they felt more confident making arrests that used to be considered borderline at the .10 to .12 BAC levels.

Interestingly, officers said they thought that the number of persons who refused to submit to chemical testing increased, but the number of refusers actually decreased slightly.

Prosecutors' and Judges' Perspectives

Prosecutors and judges did not report any change in policies or procedures related to the .08 law. Like the police, they also reported a *"lowering of the bar"* with .10 cases no longer seen as being borderline. These cases are now challenged less often by defense attorneys.

BAC at Time of Arrest Averages .16

Persons in the sanctioning system (jail, probation, licensing office, treatment programs) reported no significant changes due to the new law. As

the average BAC at time of arrest is .16 BAC (it was .18 prior to the .08 law). the number of administrative license hearings has been relatively unaffected by the .08 law.

Conclusions

Based on only a year and a half of experience, alcohol-related fatalities decreased 13.7 percent after implementation of the .08 *per se* law in Illinois. These data suggest that the law has had an impact in the state and has saved a significant number of lives. No major problems were reported by the local law enforcement or sanctioning systems. NHTSA will analyze the fatality data again in a year to determine the longer term impact of the .08 law.

HOW TO ORDER

For a copy of ***Effectiveness of the Illinois .08 Law*** (39 pages), write to the Office of Research and Traffic Records, NHTSA, NTS-31, 400 Seventh Street, S.W., Washington, DC 20590 or send a fax to (202) 366-7096, or download from *www.nhtsa.dot.gov* Amy Berning was the contract manager for this project.

U.S. Department
of Transportation
National Highway
Traffic Safety
Administration
400 Seventh Street, S.W. NTS-31
Washington, DC 20590

Traffic Tech is a publication to disseminate information about traffic safety programs, including evaluations, innovative programs, and new publications. Feel free to copy it as you wish. If you would like to receive a copy contact:
Linda Cosgrove, Ph.D., Editor, Evaluation Staff
Traffic Safety Programs
(202) 366-2759, fax (202) 366-7096
E-MAIL: lcosgrove@nhtsa.dot.gov

Subject: .08 DWI Legislation
Date: Wed, 28 Feb 2001 16:11:16 -0900
From: "Mann, Don" <DMann@ci.anchorage.ak.us>
To: "'Janet_Seitz@legis.state.ak.us'" <Janet_Seitz@legis.state.ak.us>

Janet -

I do not have all the legislators e-mail addresses and would ask your assistance: Please pass this message on to all legislators.

There seems to be continuing ignorance on the part of the legislature regarding the impairment effects of alcohol, how much (or how little) alcohol causes impairment, how alcohol impairment really interacts with a driver's ability to safely drive a car, just what .08 or .10 really means, and how effective our laws really are. These facts or perceptions have been made very clear by the idea that DWI violators who are between .08 and .10 would be considered as somehow less of a threat or hazard to the rest of the driving population and therefore, if convicted, should have a sentencing diversion eliminating the mandatory 3 day jail sentence (which really isn't jail if served in a halfway house or Palmer Bed & Breakfast!).

I am an APD officer with 18 years experience, currently assigned as a full time staff instructor at the APD Training Center. I have been qualified as an expert witness in the physiological effects of alcohol, DWI Detection and Standardized Field Sobriety Tests, Breath Alcohol Testing, and Police Officers' training. I have testified as an expert witness in the courts of Alaska in these areas in DWI Trials 200-300 times over the last 14 years.

I will be conducting DWI Detection and Standardized Field Sobriety Test training and Breath Alcohol Test training at the APD Academy the week of March 12-16, 2001. There will be two drinking clinics like the one I did in November for the legislators at Rep. Rokeberg's request, on Wednesday, March 14 and Friday, March 16. I invite any and all legislators (or anyone else) who truly are interested in learning more about the effects of alcohol and who want to be able to make informed decisions about DWI laws, which will have significant ramifications on our society, to attend either session, either as an observer or as a drinker. Please contact me with any questions regarding the training or the real and practical matters and facts about the effects of alcohol on drivers.

Officer Donald Mann
Anchorage Police Department Training Center
3760 W. Dimond Blvd.
Anchorage, Alaska 99515
343-6407
762-0829 pager

> ----------
> *From:* *James Gay*
> *Reply To:* *james_gay@correct.state.ak.us*
> *Sent:* *Tuesday, February 27, 2001 6:02 PM*
> *To:* *Tom McGrath; Susan Niman; Sam O'Connor; Ronald F Taylor; Ron Greene;*
> *Ralph/Mae Robateau; Ralph Robateau; Marti Greeson; Marcia Rom; Judith G*
> *Kalles; Jim Crary; Jessie Kullberg; Donald Mann; Don Mann; Diana Hudson;*
> *Colleen Ackerman; Bruce Roberts; Brandy L Warnock; Robert Lane*
> *Cc:* *Lori J. Taylor; Beth A Imig; Timothy M Astle; Jason J Allen; Howard*
> *S Graves; Christy L Flintoff; Billy L Houser; Precyous P Council; Roger B*
> *Rom; Andy Brennen; Bob Bailey; Caralyn Holmes; Carrie Longoria; Colleen C*
> *Tafs; David Paperman; Garry Gilliam; John (J.R.) Richard; Kathy Shanti;*
> *Ken Cole; Lori Varick; Michael D Gimm; Pete Potter; Rhonda J Lundborg;*
> *Robert Young; Timothy Sullivan; walt monegan*
> *Subject:* *FW: .08 Legislation*

> FYI info, to all those watching alcohol legislation. j.g.
>
> -----Original Message-----
> From: MADD Anchorage Chapter [mailto:madd@corecom.net]
> Sent: Friday, February 23, 2001 1:33 PM
> To: James_Gay@correct.state.ak.us; Ronald_Taylor@health.state.ak.us
> Subject: Fw: .08 Legislation
>
>
>
> Passing on information.
>
> Marti
> ----------
> From: David W. Rochford <rochfor@concentric.net>
> To: MADD Anchorage Chapter <madd@corecom.net>
> Subject: Fw: .08 Legislation
> Date: Friday, February 23, 2001 10:32 AM
>
> Marti,
> FYI here's Pete Kott's response to my letter.
> Dave
> ----- Original Message -----
> From: Pete Kott
> To: David W. Rochford
> Sent: Friday, February 23, 2001 9:54 AM
> Subject: Re: .08 Legislation
>
>
> Dave,
> Thanks for the email regarding .08. The diversion idea is part of Rep.
> Rokeberg's bill that deals with DWI.s. I have also introduced a bill that
> reduces the blood alcohol level to .08 without the d version. I will
> bring
> your concerns to the attention of others. Appreciate you taking the time
> to bring this matter to my attention.
>
> Sincerely,
>
>
> Pete
>
> "David W. Rochford" wrote:
>
> Pete,I'm a constituent, APD officer with 29 years of law enforcement
> experience, 19 year Eagle River resident, and very concerned citizen when
> it comes to DWI enforcement, having seen the devastating results of
> impaired drivers over the years.I'm writing now concerning the bill to
> lower the presumptive level of intoxication to .08. I understand that the
> bill has been worded so DWI drivers between .08 and .10 will have a
> sentencing diversion which eliminates the mandatory 3 day jail sentence.
> This would be a serious mistake. Eliminating the jail sentence would in
> effect make the new law weaker than the current law. As the law reads
> today, we can convict (and do convict) .08 to .10 drivers of DWI if we can
> show impairment. The bill would lower the penalties for this group of
> violators. It's also worth noting that the class of DWI's between .08 and
> .12 are the most dangerous drivers because they are mentally impaired, but
> not so drunk that they understand that they are impaired. This is the
> group that runs red lights at 20 mph over the speed limit.I can assure you
> that nearly every DWI driver on the road thinks he's either sober or under
> .10 when they start to drive. I commonly see in custody DWI's confident
> that they'll be under .10 and show a state of disbelief when they see the

> breath test result of say .15 or whatever the result is. If this law
> passes as worded, it will send a signal to every impaired driver that it's
> safe to drive because even if caught, there will only be a fine or
> whatever
> the bill states the punishment will be. I urge the legislature, in the
> strongest terms, to reconsider this part of the bill. This bill will
> increase the danger on our streets and make the job of law enforcement
> much
> more difficult. Alaska has one of the worst (2nd in the nation according
> to one study I been informed of) alcohol problems in the country. We need
> serious and strict laws to stop the carnage on our streets. It would be
> better for the community to leave the law as is rather than have the
> proposed bill passed into law. Eliminating the jail sentence for some
> offenders will make our bad situation worse.Dave Rochford
> Anchorage P.D.
>

DRIVEN
Fall 1998

Table of Contents

How May Bites of the Apple Do We Give Convicted Drunk Driving Offenders?

By Brandy Anderson
MADD National Assistant Director of Public Policy

PUBLIC POLICY

New Study Proves Effectiveness of Maine's .05 Blood Alcohol Limit For Convicted Drunk Driving Offenders

Related links

- Personal, memorial or honorary donations to MADD
- MADD's corporate sponsors

Julian Ptacin was only 14 years old in October 1997 when a hard-core drunk driver with a persistent disregard for human life barreled into the family car and killed him. Julian's father, Phillip, a physician, held him at the side of the road as his life slipped away.

The drunk driver was a three-time convicted, repeat offender. He was convicted of second-degree murder in Julian's death and sentenced to serve at least eight years in prison.

Today, the Ptacins are MADD members. Julian's mother, Maria, a restaurant owner, is the Public Policy Liaison for MADD, Michigan. She's leading the charge in Michigan to pass bills that crack down on repeat offenders and lower the illegal blood alcohol content (BAC) limit to .08 percent.

Julian's death is one of 16,189 such tragedies that shattered families nationwide in 1997 when their loved ones were killed in alcohol-related traffic crashes. Drunk drivers also injured more than one million others last year.

A 1994 study found that fatally-injured drivers in alcohol-related crashes were eight times more likely to have had DUI/DWI convictions in the previous five years than drivers randomly selected from the general population of licensed drivers. However, a study published in the September/October 1998 issue of Public Health Reports suggests a promising new approach for controlling the menace of convicted drunk driving offenders. The study shows the effectiveness of a Maine law lowering the illegal BAC limit from .10 percent to .05 for people previously convicted of drunk driving.

Repeat drunk driving offenders are among the most stubborn, persistent, and deadly threats on U.S. roads. They continue to commit the violent crime of drunk driving despite punishment and efforts to rehabilitate them. Whatever sanctions the court system imposed upon them the first time didn't work, yet the law continues to apply the same illegal BAC limit to them that applies to drivers without drunk driving convictions. Repeat drunk driving offenders get another bite from the same apple, which repeatedly has produced fatal consequences.

Repeat drunk drivers account for about one-third of DUI arrests annually and

10 to 20 percent of drinking drivers in fatal crashes. They're over-represented in fatal alcohol-related crashes, although not responsible for the majority of them. Their behavior is difficult to affect. Many have alcohol problems. They tend to be more aggressive and hostile than other drivers, they don't view drunk driving as a serious issue, and they rarely feel too impaired to drive.

It's a daunting challenge to reduce recidivism among repeat drunk driving offenders while also deterring all drivers from drinking and driving. No single law is the "silver bullet" solution to America's drunk driving problem. The nation needs a comprehensive legislative strategy consisting of innovative and scientifically proven solutions that target each segment of the population. Effective enforcement of all drunk driving laws is also critical.

Over the last two years, the fight to lower the illegal BAC limit to .08 in every state has generated tremendous debate, publicity and public support. A 1996 study conducted by Dr. Ralph Hingson of Boston University's School of Public Health and published by the American Journal of Public Health, proved that .08 BAC laws reduced by 16 percent the proportion of crashes with a fatally injured driver whose BAC level was .08 or higher.

The 1996 Hingson study also shows that .08 BAC limits are even more effective at deterring drivers at high BAC levels. The study revealed an 18 percent reduction in the proportion of crashes involving fatally injured drivers with BAC levels of .15 and higher.

Now, a new study on the Maine law shows that lower-BAC laws for convicted drunk driving offenders may substantially reduce their involvement in alcohol-related fatal traffic crashes. This research supports lowering BAC levels to combat repeat offenders.

In 1988, Maine adopted a .05 BAC limit for convicted DUI offenders. Under the law, drivers with a previous drunk driving conviction who are subsequently arrested for violating the lower BAC limit will have their licenses suspended immediately. To assess the effectiveness of the Maine law, Ralph Hingson, Sc.D., conducted a study with Timothy Hereen, Ph.D., and Michael Winter, MPH of the Boston University School of Public Health.

In the six years after Maine reduced the illegal BAC limit from .10 to .05 for convicted offenders, the proportion of fatal car crashes involving such drivers dropped by 25 percent. Meanwhile, the rest of New England experienced a whopping 46 percent increase in the proportion of fatal crashes involving this type of offender.

Maine was the first state to adopt the .05 BAC limit for drivers with previous convictions and the benefits appear to be substantial. The law was associated with reductions in fatal crash involvement not only among drivers with BAC levels in the .05 to .14 range but particularly among those with BAC levels at or above .15. The researchers who conducted this new study recommend that all states consider .05 BAC limits for convicted DUI offenders.

Maine has continued cracking down on repeat DUI offenders. With the .05 BAC law producing great results, in 1995 Maine become the first state to pass a zero tolerance law for convicted offenders, making it illegal for them to drive after drinking any alcohol.

More than one million people are arrested annually for drunk driving. It's estimated that DUI offenders drove drunk 200 to 2,000 times before they were arrested the first time.

MADD has long supported a .08 BAC illegal limit for adult drivers. In the past, this illegal BAC level has applied to first offenders and repeat offenders. But

the Maine law suggests that a lower illegal blood alcohol level should be applied to offenders with a prior conviction than to drivers who haven't previously violated drunk driving laws. Why should we give repeat offenders "more bites of the apple" when they've shown that they couldn't handle the first, second, third or fourth bites and more?

Last year in this country, there were two alcohol-related traffic deaths per hour, 45 per day and 315 per week. That's the equivalent of two jetliners crashing with no survivors weekly. The public outcry for action to prevent this violent crime should be deafening.

Lawmakers must pass progressive sanctions to stop people who continually drink and drive. We must target specific populations - such as convicted and repeat offenders - with specific deterrent legislation while also focusing on general deterrent measures such as .08 BAC. The newest study on Maine's .05 law points to one important element of the comprehensive solution to drunk driving in America.

For a copy of the Maine study, "Effects of Maine's 0.05% Legal Blood Alcohol Level for Drivers with DWI Convictions," *Public Health Reports*, September/October 1998, Volume 113, 440-446, contact MADD's National Public Policy Department.

Volunteers: the Heart and Soul of MADD | Volunteer Profiles | President's Letter | Repeat Offenders | Zero Tolerance laws | MADD's Youth In Action on Zero Tolerance | Grassroots: Hula Hoops | Youth Awareness: Brain 101 | wwweb Watchers | Guidant's Light | Business Sense | An Honorable Cause | star-appeal.shtml | Victims Issues: Panel Discussions | Ways to Support MADD
DRIVEN homepage

Teaching Drivers About the Costs of Drinking

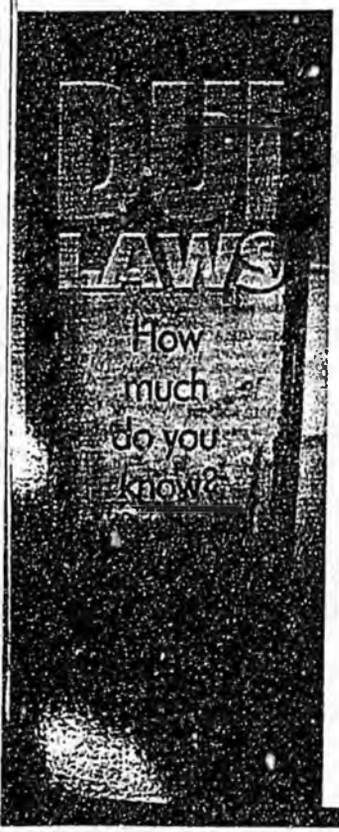
A recent national survey by The Century Council revealed that 70 percent of Americans don't know the legal blood alcohol content (BAC) limit for their state.

The Century Council is a national not-for-profit organization funded by leading alcohol beverage distillers. The goal of the survey was to raise public awareness of BAC laws and alcohol's effect on drivers.

States have traditionally relied on public service campaigns to increase driver awareness of the dangers of drinking and driving. The National Highway Traffic Safety Administration, Mothers Against Drunk Driving and other traffic safety advocates have provided public service advertisements for print media and television aimed at reducing drunk driving, and such campaigns are considered successful.

But the results of The Century Council's survey show that more needs to be done to educate the driving public.

A number of states are using innovative means to inform drivers about drunk driving laws and penalties.



The New Hampshire legislature passed a law in 1997 that requires first-time applicants for a driver's license be told about the state's BAC limits, the penalties for violating the laws or refusing a breath test, the fees to have a license reinstated and the sanctions for unlawful possession or consumption by minors. To make sure the word gets out, New Hampshire has developed several brochures, including one called "What's the Cost for You?" which is available online and also in booklet form. The brochure is geared toward younger drivers, but covers the basics of drunk driving laws for all drivers. Few states currently provide any drunk driving information at the time of licensing.

Illinois has also issued a booklet through the secretary of state's office describing the state's drunk driving laws and penalties. "Sobering DUI Laws: How Much Do You Know?" is a comprehensive overview of the basic laws and describes related DUI offenses, such as aggravated DUI, child endangerment, driving on a revoked or suspended license, and vehicle impoundment and seizures. The booklet also covers the criminal penalties that may result, including fines and prison sentences.

States are also using the Internet to educate the public. Although most states have basic driver's licensing information online, a few are using their Web sites to spread the word about drunk driving laws and penalties.

New Jersey's Motor Vehicle Services office has developed an on-line overview of the state's point system and includes the penalties for violating drunk driving laws. As a state with some of the most severe penalties for drunk driving and related offenses, New Jersey has found advertising those penalties an effective means of reducing drunk driving.

Michigan's Department of State has also used its Web site to cover the state's new drunk driving laws and provide consumers with easy-to-understand overviews of the vehicle, traffic and licensing laws. Michigan enacted a major reform of its drunk driving laws during 1999, and the state has devoted much effort to informing citizens of the new requirements and penalties.

For more information about The Century Council survey, visit its Web site at http://www.centurycouncil.org.

Alligators in West Virginia?

What do dead chickens and hungry alligators have in common?

Well, at least in West Virginia, both may become lucrative.

The West Virginia Legislature gave the state Department of Agriculture $60,000 this spring to develop an experimental alligator farm in the Eastern Panhandle of the state—near the area's largest cluster of poultry farms.

Since the large, scaly reptiles relish chickens and avian parts, they can help dispose of the dead ones. Add to this that alligator skins bring in revenue. The skin from a four-foot alligator is worth between $75 and $80, although it takes about 18 months for a 'gator to grow to that size. The 65 alligator farms in Louisiana produce about 200,000 hides a year.

The giant lizards also produce a bland, white meat considered a delicacy that can bring from $5.50 to $6 a pound, according to alligator specialist Mark Shirley.

Delegate Harold Michael, chairman of the finance committee, was a legislative supporter of the pilot program. He represents an area that has a number of large poultry farms. "I certainly support the idea. We're always looking for innovative ways to solve the problems associated with farm operations, whether it's livestock or poultry."

At the moment, dead chickens in the area where the farm is planned are put through a processing machine that uses microbes to break the carcasses down into fertilizer. Although the machine is useful, points out Agriculture Commissioner Gus Douglass, it doesn't bring in the potential revenue alligator farming will.

"It's a project we need to get started on right away," he said.

Home
News
Supporting MADD
Find Your Chapter
Links
DRIVEN magazine

Search site:
Submit

About MADD
Victim's Assistance
Under 21
Programs
Public Policy
Store
Calendar
Hot Issues

hot issues

.08 BAC: The Facts

.08 Means Dangerous Impairment

- An average 170-pound man must have four drinks in one hour on an empty stomach to reach a .08 percent blood alcohol concentration (BAC) level. A 137-pound woman would reach .08 BAC after about three drinks in an hour on an empty stomach (National Highway Traffic Safety Administration) - a level that exceeds what is commonly accepted as social drinking.

- Regardless of how much alcohol it takes to get to this level, at .08 BAC any driver is a dangerous threat on the road. .08 BAC is the level at which the fatal crash risk significantly increases and virtually everyone is seriously impaired, affecting all of the basic critical driving skills including: braking, steering, lane changing, judgment and response time (NHTSA).

- The risk of a driver being killed in a crash at .08 BAC is at least 11 times that of drivers without alcohol in their system. At .10 BAC the risk is at least 29 times higher (Zador).

- More than 20 percent of alcohol-related traffic deaths involve BAC levels below .10 percent (NHTSA).

.08 Saves Lives

- If every state passed a .08 BAC law, about 500 lives would be saved each year (Hingson, et al).

- .08 BAC is a proven effective measure to reduce alcohol-related traffic deaths. Studies have shown a 6 to 8 percent reduction in alcohol-related traffic deaths in states following the passage of .08 BAC (MADD).

A Sanctions Approach Needed for a Uniform .08 Law

- 32 states still define intoxicated driving as .10 BAC -- the most lenient definition of drunk driving in the industrialized world. Currently, only 18 states and the District of Columbia comply with the law (AL, CA, FL, HI, ID, IL, KS, KY, ME, NH, NM, NC, OR, TX, UT, VT, VA and WA). The BAC level is .08 in Canada, Austria, Great Britain and Switzerland.

- The .08 BAC provision in the Senate passed version of the transportation appropriations bill mirrors the same approach taken by "states rights" leader President Reagan and Congress in 1984 to establish the national uniform 21 minimum drinking age law. This law saves about 1,000 lives each year (NHTSA).

- Since 1998, only two states have passed .08 BAC laws under the current incentive grants approach. With heavy opposition from the alcohol industry, MADD, Advocates for Highway and Auto Safety and insurance, auto, medical, consumer and safety groups stress that a sanctions approach is needed to make .08 the law of the land.

- Seventy percent of Americans support lowering the illegal drunk driving limit to .08 BAC (independent public opinion poll released in 1998 by Allstate Insurance and MADD)

policy@madd.org

About MADD | Victims' Assistance | Under 21 | Programs | Public Policy | MADD's Guide to Congress | Store | Calendar | Hot Issues | News | Become a Member | Find Your Chapter | Statistics | MADD Chat | Donate to MADD | MADD Homepage

MADD.
Mothers Against Drunk Driving

© Mothers Against Drunk Driving. All rights reserved.

STATE LEGISLATIVE
FACT SHEETS

January 2001

State Legislative Fact Sheets Menu: Bicycle Helmet Use Laws

US Department of Transportation
National Highway Traffic Safety Administration

NHTSA
People Saving People
http://www.nhtsa.dot.gov

.08 BAC Illegal *Per Se* Level

It is illegal *per se* to drive a motor vehicle with a blood alcohol concentration (BAC) at or above a specified level in all but one state in the U.S. The customary level in most states has been .10 BAC for drivers aged 21 and above, although 19 states, the District of Colombia and Puerto Rico now have set a lower level of .08 BAC. In a 1992 Report to Congress, NHTSA recommended that all states lower their illegal *per se* level to .08 for all drivers 21 years of age and above.

In 1998, as part of the Transportation Equity Act for the 21st Century (TEA-21), a new Federal incentive grant program was created to encourage states to adopt a .08 BAC illegal *per se* level.

Most recently, Congress passed .08 BAC as the national standard for impaired driving as part law providing appropriations to the U.S. Department of Transportation's for Fiscal Year 2001 (Public Law 106-346 which incorporated HR 5394). States that do not adopt .08 BAC by October 1, 2003, would have 2% of certain highway construction funds withheld each year, with the penalty increasing to 8% by FY 2007. States adopting the standard by 2007 would be reimbursed for any lost funds. The bill was signed it into law on October 23, 2000.

Key Facts

- In 1999, 38 percent of the 41,611 motor vehicle deaths were alcohol-related. This

translates to 15,736 alcohol-related motor vehicle deaths in that year and represents an average of one alcohol-related fatality every 33 minutes.

- Over 80 percent of drivers involved in fatal crashes with positive tests for alcohol had levels exceeding .08 BAC.

- n A new, comprehensive NHTSA laboratory study provides what is perhaps the clearest laboratory evidence to date of the significant impairment that exists in driving-related skills at .08 BAC. In addition, this study finds that impairment exists in relative equal level among all age groups, sexes, and drinker types.

- Another reason for supporting .08 BAC laws is because these laws are effective in reducing alcohol-related fatal crashes. At least nine independent studies have been conducted, covering nearly all of the states that have enacted .08 BAC laws. These studies have consistently shown that .08 BAC laws are associated with reductions in alcohol-related fatalities, particularly in conjunction with administrative license revocation (ALR) laws, already in place in 40 states.

- NHTSA released four new comprehensive studies of the effectiveness of .08 BAC laws. These studies found consistent and persuasive evidence that .08 BAC laws are associated with alcohol-related fatal crashes. The most recent, a study of the effectiveness of a .08 BAC law implemented in Illinois in 1997, found that the .08 law was associated with a 13.7 percent decline in the number of drinking drivers involved in fatal crashes. The reduction included drivers at both high and low BAC levels. This is significant because critics of .08 BAC laws have often claimed that they do nothing to affect high BAC drivers. The study also found that there were no major problems reported by local law enforcement or court systems.

- A 1999 report by the U.S. General Accounting Office (GAO) reviewed the studies available at that time and found *strong indications that .08 BAC laws, in combination with other drunk driving laws (particularly license revocation laws), sustained public education and information efforts, and vigorous and consistent enforcement, can save lives.* The GAO report also concluded that a .08 (BAC) law can be *an important component of a state's overall highway safety program.*

- Recently (2000), another study was released by a Boston University research group. This study found an overall 6 percent impact of the law in six states with enacted .08

BAC laws in 1993 and 1994.

- The .08 BAC limit is reasonable and has the potential for saving hundreds of lives and reducing thousands of serious injuries each year on the highways if implemented by all states.

Why .08?

The research is clear. Virtually all drivers, even experienced drinkers, are significantly impaired at .08 BAC. As early as 1988, a NHTSA review of 177 studies clearly documented this impairment. NHTSA has recently released a review of 112 more recent studies. This review provided additional evidence of impairment at .08 BAC. The results of the nearly 300 studies reviewed have shown that, at .08 BAC, virtually all drivers are impaired with regard to critical driving tasks such as divided attention, complex reaction time, steering, lane changing, and judgment.

The risk of being involved in a crash increases substantially by .08 BAC. The risk of being in a crash gradually increases at each BAC level, but rises very rapidly once a driver reaches or exceeds .08 BAC compared to drivers with no alcohol in their blood systems. Recent research by NHTSA indicates that between .08 and .10, the relative risk of a fatal single vehicle crash varied between 11% (for drivers 35 and older) and 52% (male drivers age 16-20).

Lowering the per se limit is a proven effective countermeasure which will reduce alcohol-related traffic fatalities, especially when combined with an administrative license revocation (ALR) law. There was a 12 percent reduction in alcohol-related fatalities in California in 1990, the year .08 and an administrative license revocation law went into effect. The decrease in alcohol-related fatalities occurred at both high and low BAC levels, including even drivers with BACs of .20 or greater. A 1996 study at Boston University showed that states adopting .08 laws experienced 16 percent and 18 percent post-law declines in the proportions of fatal crashes involving fatally injured drivers whose BAC levels were .08 or higher and .15 or higher, respectively. Two recent national analyses concluded that .08 laws have reduced alcohol- related fatalities in several states that have adopted them. One of the studies estimated that 275 lives were saved in 1997 in states with .08 laws. It was estimated that an additional 590 lives could have been saved in 1997 if all states had adopted .08 laws.

The public supports a .08 BAC level. Surveys conducted by NHTSA show that most people would not drive after consuming two or three drinks in an hour. Recent polls show that 2 out of every 3 Americans favor lowering the limit to .08 when they are aware of how much alcohol it takes to reach that level.

Most other industrialized nations have set BAC limits at .08 or lower and have had these laws in effect for many years. For example, Canada, Great Britain, Austria, and Switzerland have .08 illegal per se laws. Norway, France and Australia have .05 BAC illegal per se laws, and Sweden's BAC level is at .02.

Point-Counterpoint

States considering .08 legislation should review all the facts, including the rationale behind .08 and the potential impact on alcohol-related deaths. Opposition to .08 legislation generally includes the following claims:

- ***Point:*** The U.S. General Accounting Office (GAO) has recently conducted a crital review of the .08 studies and has concluded that these laws are not effective in reducing alcohol-related fatalities.

- ***Counterpoint:*** This statement is not correct! The GAO report stated that there are *"strong indications that .08 BAC laws in combination with other drunk driving laws (particularly license revocation laws), sustained public education and information efforts, and vigorous and consistent enforcement can save lives"* (p2).

- ***Point:*** ".08 BAC legislation will not affect problem drinker drivers who have high BAC levels."

- ***Counterpoint:***. The latest research shows that .08 laws not only reduce the incidence of impaired driving at lower BACs, they also reduce the incidence of impaired driving at higher BACs (i.e., over .10). A .08 law serves as a general deterrent to all drinking and driving. It sends a message that the state is getting tougher on impaired driving, and it makes many people think twice about getting behind the wheel after they've had too much to drink. A .08 law is a key component of an overall program to reduce impaired driving. While problem drinkers do account for a significant part of the problem, most fatally injured drinking drivers (70-80%) have no prior alcohol-related offenses.

- ***Point:*** .08 BAC laws make criminals out of normal social drinkers.

- ***Counterpoint:*** Impairment and crash risk are the issues - not how many drinks it may take to get to .08 BAC. Scores of studies have been conducted which indicate that at .08 BAC, virtually everyone is impaired in important skills related to driving and that the risk of being involved in a fatal crash is many times greater that at .00 BAC.

- ***Point:*** ".08 is just the first step toward even lower BACs and eventually another attempt at prohibition."

- ***Counterpoint:*** The notion that safety organizations seek a return to prohibition is unfounded. Although there is strong research evidence that driving-related skills begin to deteriorate below .08 BAC, most safety advocates have adopted .08 BAC as a reasonable and acceptable compromise that will save lives, prevent injuries and reduce costs to society.

- ***Point:*** .08 BAC laws will overwhelm police and clog the criminal justice system.

- ***Counterpoint:*** Two studies have looked at the impact of .08 BAC laws on enforcement efforts and the criminal justice system. These studies have not found any significant problems for the police or for the court systems.

Section 163 of 23 U.S.C.

Section 163 of the Transportation Equity Act for the 21st Century (TEA-21) created incentive grants for states enacting and enforcing a qualifying .08 BAC illegal per se law.

To be eligible for a grant under 23 U.S.C. Section 163, a state's law must meet six basic elements:

- It must apply to all drivers.

- It must set a BAC level of no more than .08.

- It must establish driving at .08 BAC as an illegal per se offense.

- It must provide for primary enforcement of the law (rather than requiring probable cause that another violation had been committed before allowing enforcement of the .08 BAC law).

- It must apply to the criminal code and, in states with administrative license revocation (ALR) laws, to the ALR law as well.

- It must be deemed to be equivalent to the state's standard "driving while intoxicated" offense.

Section 163 Incentive Grant Terms

Grant funds can be used for highway safety and highway construction projects. No state matching funds are required for these grants.

A total of $500 million has been authorized for this grant program: $55 million in FY 1998, $65 million in FY 1999, $80 million in FY 2000, $90 million in FY 2001, $100 million in FY 2002, and $110 million in FY 2003.

New Penalty Program

As mentioned previously, Congress passed .08 BAC as the national standard for impaired driving as part of the Transportation spending bill (October 2000). States that do not adopt .08 BAC by October 1, 2003, would have 2% of certain highway construction funds withheld each year, with the penalty increasing to 8% by FY 2007. States adopting the standard by 2007 would be reimbursed for any lost funds. The bill was signed it into law on October 23, 2000.

Information Sources

Effectiveness of the Illinois .08 Law, Robert Voas et.al., September 2000, (in press, available on NHTSA website www.nhtsa.dot.gov/people/injury/reserach).

On DWI Laws in Other Counties, Kathryn Stewart, March 2000, DOT HS 809 037.

Relative Risk of Fatal Crash Involvement by BAC, Age, and Gender, Paul Zador and Sheila Krawchuk of Westat, Inc., and Robert B. Voas of Pacific Institute for Research and

Evaluation, April 2000, DOT HS 809 050.

A Review of the Literature on the Effects of Low Doses of Alcohol on Driving-Related Skills, Herbert Moskowitz and Dary Fiorentino, April 2000 DOT HS 809 028

Driver Characteristics and Impairment at Various BACs, Herbert Moskowitz et al., Southern California Research Institute, April 2000, DOT HS 809 075

The Relationship of Alcohol Safety Laws to Drinking Driver in Fatal Crashes, Robert Voas and A. Scott Tippetts, September 1999, DOT HS 808 980.

The Effects of .08 BAC Laws, Robert Apsler, A.R. Char, and Wayne M. Harding, Rainbow Technology, and Terry M. Klein, NHTSA, March 1999, DOT HS 808 892.

Evaluation of the Effects of North Carolina's .08% BAC Law, Robert Foss, J.Richard Stewart, and Dadd W. Reinfurt, UNC Highway Safety Research Center, March 1999, DOT HS 808 893.

Effectiveness of State .08 Blood Alcohol Laws, General Accounting Office (GAO) Report to Congressional Committees, June 1999, GAO/RCED-99-179.

Presidential Initiative for Making .08 BAC the National Limit: A Progress Report, NHTSA, November 1999, DOT HS 808 000.

Presidential Initiative for Making .08 BAC the National Limit, Recommendations from the Secretary of Transportation. NHTSA, August 1998, DOT HS 808-756.

Setting Limits, Saving Lives: The Case for .08 BAC Laws. National Safety Council and NHTSA, revised December 1999, DOT HS 808 524.

Validation of the Standardized Field Sobriety Test Battery at BACs Below 0.10 Percent, Jack W. Stuster and Marcelline Burns, Anacapa Sciences, Santa Barbara, CA, August 1998, DOT HS 808 839.

Detection of DWI at BACs Below 0.10 Percent, Anacapa Sciences, September 1997, DOT HS 808 654.

"Lowering State Legal Blood Alcohol Limits to .08%: The Effect on Fatal Motor Vehicle

Crashes." Hingson, Ralph, Timothy Heeren, and Michael Winter, *American Journal of Public Health*, Vol. 86, No. 9., September 1996.

The Impact of Lowering Illegal BAC Limit to .08 in Five States in the U.S., Delmas Johnson and James Fell, NHTSA, 39th AAAM Proceedings, 1995.

Driving Under the Influence: A Report to Congress on Alcohol Limits. NHTSA, October 1992, DOT HS 807 879.

Alcohol Limits for Drivers: A Report on the Effects of Alcohol and Expected Institutional Responses to New Limits. NHTSA, April 1991, DOT HS 807 692.

"Alcohol-Related Relative Risk of Fatal Driver Injuries in Relation to Driver Age and Sex." Paul Zador, Insurance Institute for Highway Safety, *Journal of Studies on Alcohol*, 52, 4, 1991.

The Effects Following the Implementation of an .08 BAC Limit and an Administrative Per Se Law in California. NHTSA, August 1991, DOT HS 807 777.

The Effects of Low Doses of Alcohol on Driving Skills: A Review of the Evidence. Moscowitz, Herbert and Christopher D. Robinson, National Technical Information Service, Springfield, VA, July 1988, DOT HS 807 280.

The reports and additional information are available from your State Highway Safety Office, the NHTSA Regional Office serving your State, or from NHTSA Headquarters, Traffic Safety Programs, ATTN: NTS-11, 400 Seventh Street, S.W., Washington, DC 20590; 202-366-9588; or NHTSA's website at www.nhtsa.dot.gov.

.08 BAC-Federal Agency Activity Update

November 1, 2000

Much has happened since the Presidential directive [to promote a national legal limit, under which it would be illegal *per se* to operate a motor vehicle with a blood alcohol concentration (BAC) of .08 or higher, across the country, including on Federal property] was issued to the Secretary of Transportation in March 1998. Most recently, and most importantly, Congress passed .08 BAC as the national standard for impaired driving as part of the Transportation Appropriations Bill (October 2000). States that do not enact .08 BAC laws by 2004 would have 2% of certain highway construction funds withheld, with the penalty increasing to 8% by 2007. States adopting the standard by 2007 would be reimbursed for any lost funds. The President, a strong supporter of this legislation, signed it into law on October 23, 2000.

These Federal agencies have made the following accomplishments in addressing .08 BAC:

U.S. Department of Transportation,

National Highway Traffic Safety Administration (NHTSA)

- NHTSA research *(Driver Characteristics and Impairment at Various BACs, April 2000)* shows that virtually all drivers, even experienced drinkers, are substantially impaired at .08 BAC with regard to critical driving tasks. There are significant decrements in performance in areas such as braking, steering, lane changing, judgement, and divided attention at .08 BAC.

- NHTSA released a literature review *(A Review of the Literature on the Effects of Low Doses of Alcohol on Driving-Related Skills, April 2000)* that provides strong evidence of impairment in a variety of driving-related tasks at BACs as low as .02.

- NHTSA research *(Relative Risk of Fatal Crash Involvement by BAC, Age, and Gender, April 2000)* has shown that the risk of being in a motor vehicle crash increases substantially by .08 BAC. The risk of being in a crash gradually increases at each BAC level, but rises very rapidly after a driver reaches or exceeds .08 BAC, compared to drivers with no alcohol in their system. The new research shows that between .08 and .10 BAC, the relative risk of a fatal single vehicle injury varied from 11% (for drivers 35 and older) and 52% (for male drivers, age 16-20).

- NHTSA completed four studies in 1999-2000 examining the effects of states with .08 BAC per se laws. The most comprehensive study (*The Relationship of Alcohol Safety Laws to Drinking Drivers in Fatal Crashes*, March 1999), covering all 50 states, analyzed the effects of both .08 and .10 per se laws, as well as administrative license revocation (ALR) laws. This study found that .08 laws had an 8% effect in reducing fatal crashes involving drivers at both high BACs and lower BACs, and resulted in 275 fewer fatalities in the 15 states where they were in effect in 1997. If all states had .08 laws in 1997, this report estimated that an additional 590 lives would have been saved.

An 11-state study (*The Effects of 0.08 BAC Laws*, March 1999) also examined the effects of .08 and administrative license revocation (ALR)

laws. It found that .08 BAC legislation was associated with reductions in alcohol-related fatalities, alone or in conjunction with ALR laws, in seven of the eleven states studied. In five of these states, implementation of the .08 law by itself was associated with significantly lower rates of alcohol-related fatalities.

The third study *(Evaluation of the Effects of North Carolina's 0.08% BAC Law*, March 1999) analyzed the effects of .08 in North Carolina, a state which had already been experiencing a sharp decline in alcohol-related fatalities since 1987. This study concluded that there was little clear effect of the lower BAC limit. Results from various analyses suggested that some portion of the reductions may have been associated with the law, but the magnitude of these effects was not sufficient to make this conclusion.

The fourth study *(Effectiveness of the Illinois .08 Law)* examined the effectiveness of a .08 BAC law implemented in Illinois in 1997 (in press, available at www.nhtsa.dot.gov). This study found that the .08 law was associated with a 13.7 percent decline in the number of drinking drivers involved in fatal crashes. The reduction included drivers at both high and low BAC levels. This is significant because critics of .08 BAC laws have often claimed that these laws do nothing to affect high BAC drivers. The study also found that there were no major problems reported by law enforcement of sanctions systems.

Nearly all the findings of these and previous studies show changes that suggest that .08 BAC laws have contributed to the trend toward reduced alcohol-related fatalities that have been experienced across the nation.

- NHTSA completed studies to validate the driving cues (*Detection of DWI at BACs Below 0.10*, Sept. 1997) and the Standardized Field Sobriety Tests (SFSTs) (*Validation of the Standardized Field Sobriety Test Battery at BACs Below 0.10 Percent,* Aug. 1998) for people with a BAC of below .10. A brochure, video and report on the validated driving cues were distributed to law enforcement agencies across the country. The report on the validation of the SFSTs was also be distributed to law enforcement agencies.

- NHTSA has partnered with law enforcement across the country to increase enforcement of impaired driving laws, including .08 BAC. NHTSA has worked to provide law enforcement agencies with the latest training programs on standardized field sobriety testing and drug recognition, the use of sobriety checkpoints and saturation patrols to apprehend impaired drivers, and enforcement of underage drinking and driving. NHTSA has partnered with law enforcement and our safety partners such as MADD to conduct high visibility sobriety checkpoints and saturation patrols as the *You Drink & Drive. You Lose.* national public information campaign is implemented. The campaign includes two major enforcement mobilization periods (July 4th holiday weekend and the December holiday periods). It has garnered the support of law enforcement in all 50 states and approximately 70 national organizations to help get the word out, if you drive impaired - you will be caught by law enforcement.

- NHTSA conducted a research study for in-house use to learn what people know about .08 laws, and to determine education strategies for better informing the public about .08 per se. The study's results are used in fine-tuning messages and in developing strategies for reaching the public, as well as in materials that are developed for the public.

- NHTSA conducted a research study for in-house use to learn what people know about .08 laws, and to determine education strategies for

better informing the public about .08 per se. The study's results are used in fine-tuning messages and in developing strategies for reaching the public, as well as in materials that are developed for the public.

- NHTSA conducted a study to examine the legislative history of .08 per se laws (*Legislative History of .08 Per Se Laws*). The project developed historical case studies of four states that lowered their per se law from .10 to .08 BAC and two states that were unsuccessful in their attempts to pass .08 per se. The objective of the research is to learn from past experience strategies that bolstered support for the laws, and barriers that were encountered in attempting to get the laws passed. The report also provided factual responses to the criticisms of .08. The draft report is now under NHTSA review.

U.S. Department of Transportation,

U.S. Coast Guard

- The U.S. Coast Guard has published in the Federal Register its intent to amend its regulations to establish .08 BAC as the legal limit for the public to operate a recreational boat. In July, comments were received and are being incorporated into a final rule. The rule is expected to be final by April 2001.

- Policy guidance was issued that supports expanding use of .08 BAC by the states. Currently, 22 states have a .08 BAC standard for recreational boating.

- The Coast Guard launched a multi-year national anti-Boating Under the Influence campaign, "It's a Different World on the Water," that encourages boaters to boat safe and sober. The campaign is being carried out in partnership with the National Association of State Boating Law Administrators and the National Safe Boating Council which consists of over 200 U.S. and Canadian organizations with an interest in boating safety and education. The goal of this major campaign is to educate boat operators and passengers about the dangers involved when using alcohol while boating.

- The Coast Guard continuously promotes improved collection of alcohol data, and this is reinforced through courses provided to state officers and accident investigators.

- Coast Guard boarding officer training includes administering field sobriety test batteries and identifying indicators of intoxication in accordance with the Field Sobriety Test Performance Report. Reports on results of Coast Guard field sobriety test research were previously disseminated to states to improve alcohol enforcement techniques.

Department of Defense (DoD)

- The Department of Defense Legislative Proposal for Fiscal Year 2000 contained a provision to amend the Uniform Code of Military Justice, to reduce, from 0.10 grams to 0.08 grams, the blood and breath alcohol levels for the offense of drunken operation of a vehicle,

aircraft, or vessel on military installations. It became Section 562 of S 1059. The House Bill of the FY 2000 National Defense Authorization Act contained no similar provision. The Senate receded and the Conference report states:

"The conferees note that a recent General Accounting Office study (GAO/RCED-99-179) could not conclude that merely lowering the statutory blood alcohol level resulted in lowering the number and severity of alcohol-related traffic accidents. However, the report did find strong indications that a comprehensive approach, including license revocation and lowered blood alcohol statutes, public education campaigns, and increased enforcement would have that effect. The conferees directed the Secretary of Defense to submit a report to The Committee on Armed Services of the Senate and the House of Representatives before April 1, 2000, on the Department's efforts to reduce alcohol-related disciplinary infractions, traffic accidents, and other such incidents. The report should include the Secretary's recommendations for any appropriate legislative changes."

In May 2000, the Department of Defense completed a study about .08 BAC and sent a report to Congress recommending that the UCMJ be amended to .08 BAC the criminal standard on military installations. Discussions are taking place to further propose this amendment as part of the FY 2002 DoD legislative package.

- A proposed change to the secretarial level directive will automatically incorporate any legislative action to reduce the blood alcohol level under the Uniform Code of Military Justice (UCMJ). Thus, if legislation reducing the UCMJ standard to .08 BAC is enacted, .08 would become the standard for all purposes on military installations. This means that anyone driving on a military installation would be subject to the .08 BAC standard.

- Eliminating impaired driving is a high priority for DoD. In addition to the legislative proposal, the Secretary of Defense has established a Prevention, Safety and Health Promotion Council (PSHPC). The Council membership consists of Senior DoD policymakers from DoD and Service secretariat offices and includes the Service Surgeons General. The Council has three proposed action plans addressing Alcohol Abuse, Tobacco Use, and Injury/Occupational Illness Prevention. The Council has oversight and responsibility for six committees including the Alcohol Abuse Tobacco Use Reduction Committee (AATURC). The proposed Alcohol Abuse plans address the specific areas of: 1) Ongoing Surveillance, 2) Education and Training, 3) Identification of high risk groups, and 4) Assessment and Development of Best Practices Guidelines.

- The individual Services track statistics for alcohol-related incidents, alcohol-related deaths, and DUIs. Each of the Services also has an ongoing program of alcohol education and there are research efforts to identify the efficacy of targeted interventions.

- The DoD conducts, on a triennial basis, a study of Health Related Behaviors of Active Duty Personnel. The latest study identified three major areas of concern to them including an unchanged rate of heavy drinking. This is an area of special interest to the PSHPC.

Department of Interior, National Park Service

- In November 2000, the National Park Service will begin development of a proposed rule to establish .08 BAC as the legal limit for anyone

driving in national parks. They anticipate completion of a final rule by the Summer 2001 tourist season.

Indian Health Service (IHS)

- Passing .08 BAC laws on Indian Reservations is among the highest priorities for the IHS. Educational, enforcement and other efforts are continuing, such as the "None for the Road" campaign.
- IHS published an article entitled, "Advocating Impaired Driver Laws: The Adoption of .08 BAC in Indian Country" in the November 1998 issue of the IHS Provider Magazine, a journal for health professionals working with American Indians and Alaska Natives.
- The Indian Health Service, in partnership with NHTSA, produced the video "Cry the Eagle," which addresses benefits of .08 laws; alcohol and drunk driving issues in Indian Country; and movements in education, enforcement and treatment.
- In conjunction with NHTSA's *You Drink & Drive. You Lose.* campaign, the IHS supplied information to the American Indian and Alaska Native media [200+ media outlets] supporting the campaign and particularly the benefits of .08 BAC. Area IHS Injury Prevention Specialists receive and distribute *You Drink & Drive. You Lose* campaign updates to Tribal program representatives.
- The IHS conducted an updated inventory of Tribal Traffic Safety Laws. Of the approximately 200 tribes which have the ability to pass their own legislation, 37 Tribal Nations (out of 104 Tribes reporting) reported having adopted either a separate Tribal law or the state's .08 BAC law.

INDIAN TRIBES WITH .08 BAC LAWS

TRIBE	STATE	STATE/TRIBAL LAW	ZERO TOLERANCE <21	IMPLIED CONSENT
Andarko Agency Oles	Oklahoma	Tribal/State	yes	yes
Bay Mills Indian Community	Minnesota	Tribal	yes	yes
Burns Paiute Tribe	Oregon	State		
Cabazon Band of Mission Indians	California	Tribal		
Chemawa Indian School	Oregon	State		
Coquille Indian Tribe	Oregon	State		
Ely Shoshone Tribe	Nevada	State	no	yes
Grand Traverse Band	Michigan	*.07-.08		
Hoopa Valley Tribe	California	State		
Iowa Tribe	Kansas	State		

Jamestown S'Klallam	Washington	State/Tribal		
Kalispel Tribe	Washington	State	yes	yes
Klamath Tribe	Oregon	State	yes	yes
Lac Vieux Desert Band of Lake Superior Chippewa	Michigan	Tribal/State	yes	yes
Lower Elwha Klallam	Washington	Tribal/ no .08		yes
Miccosukee Tribe	Florida	Tribal		
Nambe/San Ildefonso	New Mexico	Tribal	yes	yes
Northern Ute Indian Tribe	Utah	State/Tribal	yes	yes
Osage Nation	Oklahoma	*Tribal law passed, awaiting BIA approval		
Passamoquoddy Tribe	Maine	State		
Penobscot Nation	Maine	State		yes
Poarch Creek Indians	Alabama	Tribal		
Pueblo of San Ildefonso	New Mexico	Tribal	yes	yes
Pueblo of Laguna	New Mexico	State/Tribal		yes
Pueblo of Nambe	New Mexico	Tribal	yes	yes
Pueblo of Sandia	New Mexico	State/Tribal		
Quileute Tribe	Washington	State	yes	yes
***Sac & Fox Tribe	Kansas	Tribal		yes
Santa Ana Pueblo	New Mexico	State		
Santa Clara Tribe	New Mexico	State/Tribal	yes	yes
Spokane Tribe	Washington	State		yes
Swinomish Tribe	Washington	Tribal	yes	yes
Taos Pueblo Indian Tribe	New Mexico	Tribal	yes	yes
Tulalip Tribes	Washington	State		
Ute Mountain Ute	Colorado	Tribal * .05 considered "driving while ability impaired"		
Yakama Nation	Washington	Tribal	yes	yes
Zuni Pueblo	New Mexico	Tribal	yes	yes

- In addition, The Turtle Mountain Chippewa tribe of North Dakota has been very pro-active in passing legislation to reduce injury on their reservation. The Turtle Mountain Chippewa has been considering .08 as the legal limit for impaired driving.

Evaluation of the Effects of North Carolina's 0.08% BAC Law

Robert D. Foss, Ph.D.
J. Richard Stewart, Ph.D.
Donald W. Reinfurt, Ph.D.

Highway Safety Research Center
University of North Carolina

November, 1998

List of Tables

List of Figures

Executive Summary

Sixteen states have reduced the *per se* illegal blood alcohol concentration (BAC) limit for drivers to 0.08%. There is a substantial amount of evidence from experimental studies to indicate that a variety of individual skills are impaired at BACs well below 0.08%. Epidemiologic studies indicate that the risk of a crash increases sharply for drivers with BACs above 0.08%. To date, however, few studies have been done to determine whether reducing the legal BAC limit translates into reduced numbers of alcohol-related motor vehicle crashes.

Four previous studies of the effects of 0.08% laws on motor vehicle crashes have found equivocal and somewhat conflicting results. In California, a 1991 study reported a 12% decrease in alcohol-related fatalities following implementation of an 0.08% BAC limit. However, California also enacted an Administrative License Revocation (ALR) law six months after lowering the BAC limit, and it was not possible to determine whether the ALR law , the 0.08% law, or the combination of the two was responsible for the decrease. A later study of the California law, looking at longer time periods, found no significant decrease in alcohol-involved crashes as a result of the lower BAC limit.

Two studies examined the first five states to reduce their BAC limit to 0.08%. One study found decreases in at least one indicator of drinking-driving in four of the five states. A second study, using a somewhat different research design, found a decrease in high BACs among fatally injured drivers in three of the five states. Again, however, it was not possible to disentangle effects of ALR laws from those of the lower BAC limit in three of the states studied. Further clouding the issue is the fact that the two states that showed no decrease in the second study were among those in which the earlier study had found an apparent decline in drivers with high BACs.

The present study was conducted in an effort to clarify the effect of reducing the BAC limit to 0.08%. North Carolina enacted an 0.08% BAC limit on October 1, 1993. No other legislation that would significantly affect drinking-driving was enacted in close proximity to the 0.08% law.

Using telephone survey data, we were able to gauge public knowledge and awareness of the 0.08% BAC limit in North Carolina. Interviews with 802 randomly sampled persons in four counties found that about two-thirds believed the BAC limit had changed in the past two years. Just over one-third were able to report the limit correctly as 0.08%. A substantial proportion of the sample did not drink and, as would be expected, drinkers were more aware that the limit had changed (73%) than non-drinkers (56%). They also were twice as likely to know the new limit (50% vs. 26%). Those who reported drinking at least once a week were even more likely to know the new limit (67%). Respondents overwhelmingly (85%) believed that lowering the BAC limit increased the likelihood that individuals would be arrested for drinking-driving.

To determine whether the 0.08% law produced a decrease in alcohol-related crashes, we examined several indicators. Alcohol involvement in all crashes in North Carolina between 1991 and 1995, as well as fatal and serious injury crashes only were examined. In addition, surrogate measures of alcohol-related crashes (nighttime crashes; nighttime fatal and serious injury crashes) were also examined. All these measures have been declining, almost continuously, in North Carolina since the early 1980s. To control for the effects of this general trend, as well as seasonal fluctuations, we carried out structural time series analyses examining monthly crash statistics. In each case we looked for evidence of either an immediate decrease in the rate or a change in the general trend of alcohol-related crashes following implementation of the lower BAC limit. There was no significant change in the rate, nor in the trend, coinciding with introduction of the lower BAC limit, for any of the measures examined.

To determine whether the trend in alcohol-related crashes in North Carolina may have benefitted in comparison with a broader general trend in the U.S. (which had leveled out and appeared to be on the verge of increasing again), we compared North Carolina fatal crash data with those from 11 other states that have high rates of alcohol testing for fatally injured drivers. The data series representing the North Carolina proportion of all fatally injured drivers in the 12 states who had BACs in excess of 0.10% was examined for either a step shift or a change in the trend. Again there was no evidence that the pattern in North Carolina changed following enactment of the lower BAC limit, or that it differed in comparison to the other 11 states.

To see whether the BAC levels of persons had been reduced by the 0.08% law, even if not brought below the 0.10% threshold of the previous limit, we examined the mean monthly BACs of fatally injured drivers whose BAC was above 0.10%. Again there was no evidence of an effect of the new BAC limit. The monthly average BACs remained essentially unchanged from 1990 through 1995, with an overall mean of 0.21%.

Finally, we conducted a series of simple before-after comparisons of various indicators of alcohol involvement in fatal crashes. These analyses examined each of the six measures that the National Highway Traffic Safety Administration used in its initial examination of the effect of 0.08% laws: (1) driver BAC $\geq$ 0.01%, (2) driver BAC $\geq$ 0.10%, (3) police-reported alcohol involvement, (4) single vehicle nighttime crash, (5) single vehicle nighttime male driver crash, and (6) estimated alcohol involvement. To examine changes in these measures we used the same analytic approach employed by Hingson et al. (1996) in their widely-cited study of the first five states to enact 0.08% limits – comparing changes in North Carolina rates with those in comparison states. To avoid potential pitfalls of trying to select a single appropriate comparison state, we compared North Carolina data with all 37 states that had retained higher per se limits from 1991 through 1996.

Of the six measures considered, two showed a significantly greater decrease in North Carolina than in the comparison states: police-reported alcohol and estimated alcohol, which is based in part on police report as well. For both these measures, the apparent effect of the 0.08% law is an artifact of grouping several months data before the law took effect, rather than an effect of the law itself. During the pre-0.08% period, noteworthy changes occurred in North Carolina that are obscured when the data are grouped. When analyses to ameliorate this artifact were conducted, none of the six measures showed a significantly greater decrease in North Carolina than in the states that retained a higher BAC limit.

Although North Carolina has a reputation for being progressive and aggressive in its efforts to deal with drinking drivers, it does not appear that the state is so different as to render it non-comparable to other states. Several indicators of alcohol use in fatal crashes during the early 1990s were similar to those for other states. On the salient measures of police-reported alcohol involvement and the proportion of killed drivers with a BAC in excess of 0.10%, the rates in North Carolina were lower by differences of 2.3% and 1.7%, respectively, both of which are statistically significant.

In conclusion, it appears that lowering the BAC limit to 0.08% in North Carolina did not have any clear effect on alcohol-related crashes. The existing downward trend in alcohol-involvement among all crashes and among more serious crashes continued, but does not appear to have changed following enactment of the lower BAC limit. When compared with the 11 other states that measure alcohol use by the large majority of fatally injured drivers, as does North Carolina, the measured BACs of fatally injured drivers did not decline as a result of the 0.08% law in North Carolina. Finally, the North Carolina trend in several other commonly used indicators of alcohol involvement in fatal crashes did not differ in comparison with the 37 states that retained higher BAC limits.

(5)

United States General Accounting Office

GAO

Report to Congressional Committees

June 1999

HIGHWAY SAFETY

Effectiveness of State .08 Blood Alcohol Laws

COMPLIMENTS OF THE
ALASKA STATE LIBRARY

GAO

Accountability * Integrity * Reliability

GAO/RCED-99-179

GAO

United States
General Accounting Office
Washington, D.C. 20548

Resources, Community, and
Economic Development Division

B-280883

June 23, 1999

The Honorable John McCain
Chairman
The Honorable Ernest F. Hollings
Ranking Minority Member
Committee on Commerce, Science,
and Transportation
United States Senate

The Honorable Bud Shuster
Chairman
The Honorable James L. Oberstar
Ranking Democratic Member
Committee on Transportation and Infrastructure
House of Representatives

In 1997, someone in the United States died in an alcohol-related motor vehicle crash every 32 minutes. For years, the Congress and the states have grappled with and sought solutions to the problem of drunk driving. Most states have laws making it illegal for people to drive with a specified level of alcohol in their blood, usually set at .10 blood alcohol concentration (BAC)—the level at which a person's blood contains 1/10th of 1 percent alcohol. However, 16 states have more stringent laws setting the limit at .08 BAC. In 1998, the Clinton administration endorsed a bill that would have required all states to enact and enforce .08 BAC laws or face reductions in federal highway funds. The Senate approved this bill; the House took no action.

The Transportation Equity Act for the 21st Century directed GAO to evaluate the effectiveness of state .08 BAC laws in reducing the number and severity of crashes involving alcohol.[1] To accomplish this objective, we reviewed (1) the policies and positions of the Department of Transportation's (DOT) National Highway Traffic Safety Administration (NHTSA) on .08 BAC laws and other drunk driving countermeasures and (2) seven published studies on the effect of .08 BAC laws on the number and severity of crashes involving alcohol, including three studies released on April 28, 1999.

[1]The Transportation Equity Act for the 21st Century also directed us to study the effectiveness of .02 BAC laws for drivers under 21 in reducing the number and severity of crashes involving alcohol. The National Highway System Designation Act of 1995 required all states to enact and enforce such laws or face reductions in federal highway funds. However, as agreed to by your staff, we will not address the impact of .02 BAC laws, since all 50 states and the District of Columbia now have laws establishing BAC levels of .02 or less for drivers under 21.

Results in Brief

Overall, the evidence does not conclusively establish that .08 BAC laws, by themselves, result in reductions in the number and severity of alcohol-related crashes. There are, however, strong indications that .08 BAC laws in combination with other drunk driving laws (particularly license revocation laws), sustained public education and information efforts, and vigorous and consistent enforcement can save lives. For example, while two studies have concluded that California's .08 BAC law was not directly associated with the decline in drunk driving deaths the state experienced in the early 1990s, these studies found that the .08 BAC law was effective when paired with the state's license revocation law, which took effect 6 months later.

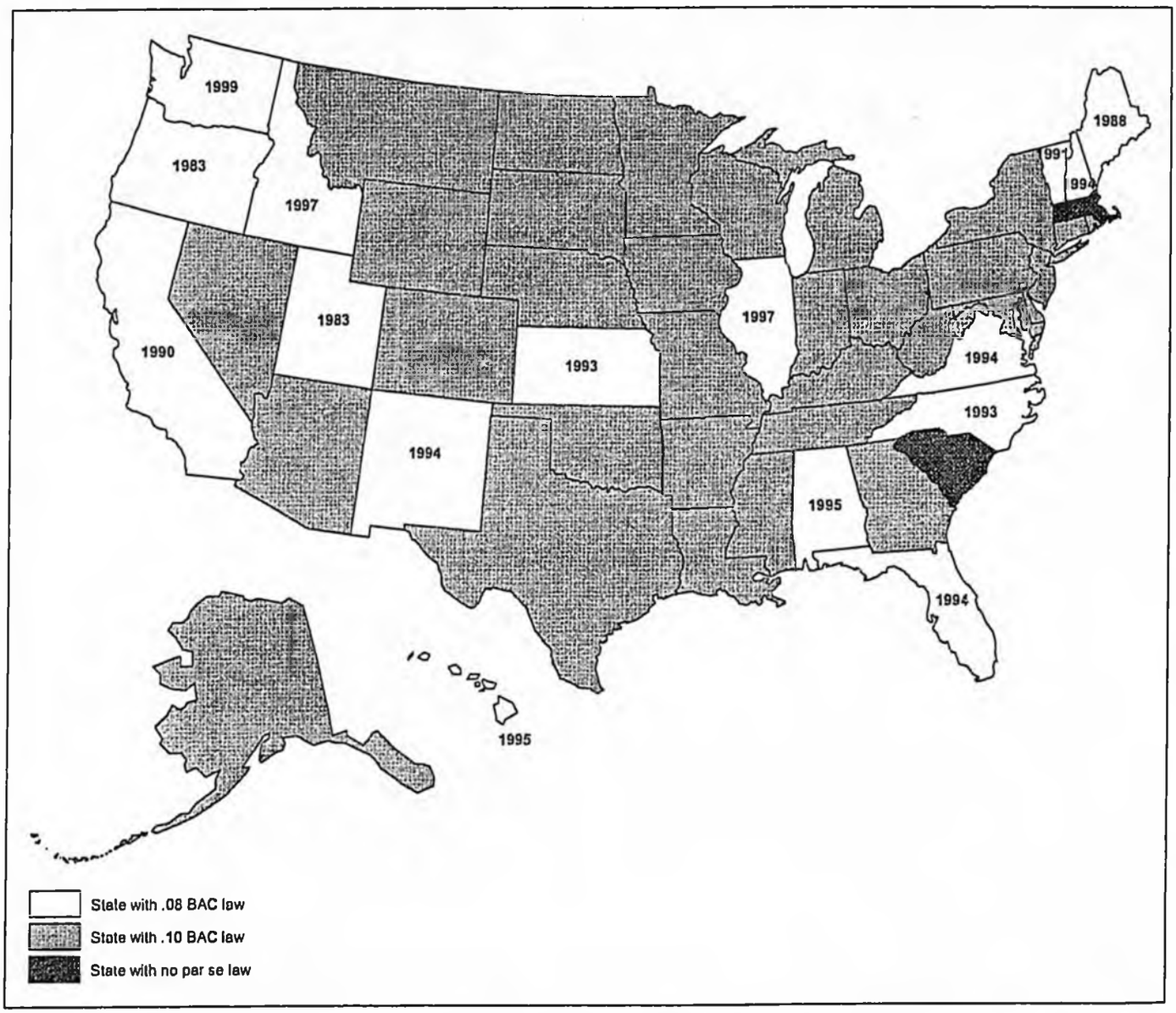
Until recently, only four published studies examined the effectiveness of .08 BAC laws in five states and, while NHTSA characterized the studies as conclusively establishing that .08 BAC laws by themselves were effective, the studies had limitations and raised methodological concerns calling their conclusions into question or reported mixed results. In April 1999, three additional studies were released that were more comprehensive and showed many positive results but nevertheless fell short of providing conclusive evidence that .08 BAC laws were, by themselves, responsible for reductions in alcohol-related crashes and fatalities. It is difficult to accurately predict how many lives would be saved if all states enacted .08 BAC laws because whether a state sees reductions after enacting a .08 BAC law depends on a number of factors, including the degree to which the law is publicized, how well it is enforced, other drunk driving laws in effect, and public attitudes concerning alcohol. Despite the absence of a strong causal link between .08 BAC laws by themselves and reductions in traffic fatalities, other evidence, including medical evidence on drivers' impairment, should be considered when evaluating the effectiveness of .08 BAC laws.[2]

Background

It is illegal in every state and the District of Columbia to drive a motor vehicle while under the influence of alcohol. In addition, all states but two have blood alcohol "per se" laws—laws that make it unlawful for a person to drive a motor vehicle with a *specific* amount of alcohol in his or her blood. As figure 1 shows, 32 states and the District of Columbia have set that amount at .10 BAC. In 16 states, the per se limit is 20 percent lower, or .08 BAC.

[2]Because the Transportation Equity Act for the 21st Century directed us to review the effectiveness of .08 BAC laws in reducing the number and severity of crashes involving alcohol, we did not evaluate the medical impairment evidence.

Figure 1: State Blood Alcohol "per Se" Laws



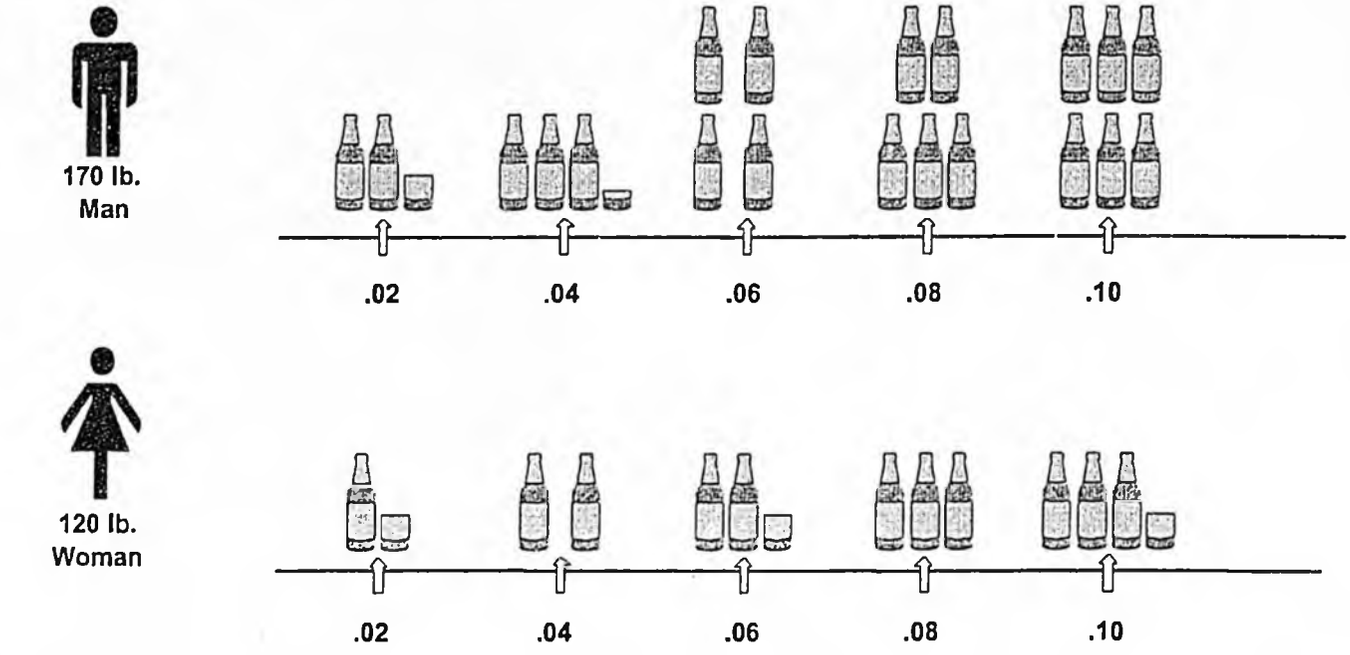
Note: States with .08 BAC laws are shown with the year the law became effective.

Source: GAO's illustration based on information from NHTSA.

On average, according to NHTSA, a 170-pound man reaches .08 BAC after consuming five 12-ounce beers (4.5-percent alcohol by volume) over a 2-hour period. A 120-pound woman reaches the same level after consuming three beers over the same period. NHTSA publishes a BAC estimator that computes the level of alcohol in a person's blood on the basis of the person's weight and gender and the amount of alcohol consumed over a specified period of time. This estimator assumes average physical attributes in the population—in reality, alcohol affects individuals differently, and this guide cannot precisely predict its effect on everyone. For example, younger people have higher concentrations of body water than older people; therefore, after consuming the same amount of alcohol, a 170-pound 20-year-old man attains a lower BAC level on average than a 170-pound 50-year-old man.

As figure 2 illustrates, NHTSA's estimator shows that the difference between the .08 BAC and .10 BAC levels for a 170-pound man is one beer over 2 hours. The difference between the .08 BAC and .10 BAC levels for a 120-pound woman is one-half a beer over the same time period.

Figure 2: Alcohol Consumption and Blood Alcohol Levels



Source: GAO's illustration based on NHTSA's BAC estimator.

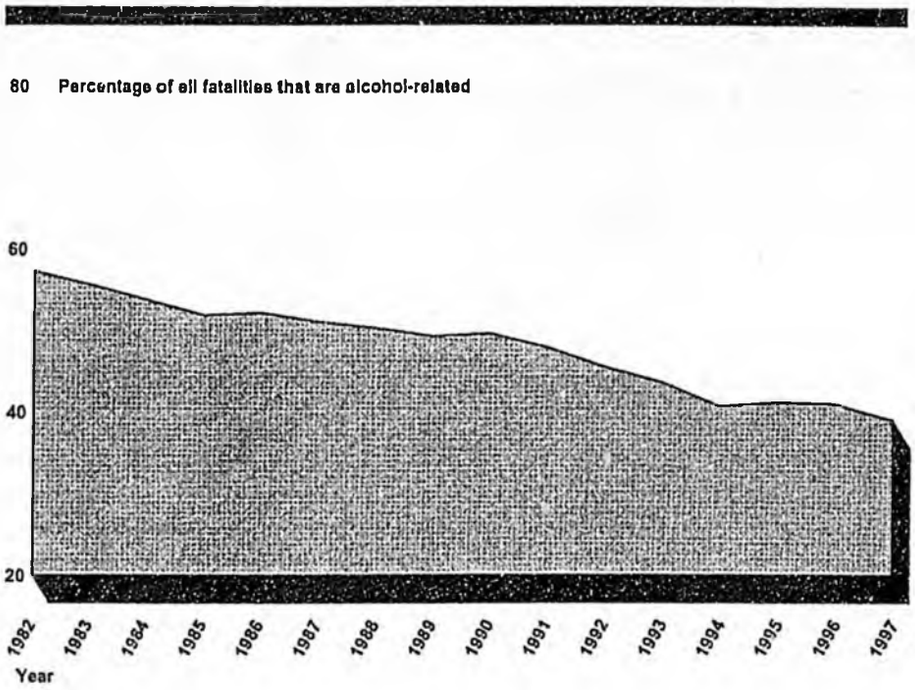
Alcohol use is a significant factor in fatal motor vehicle crashes. In 1997, the most recent year for which data are available, there were 16,189 alcohol-related fatalities, representing 38.6 percent of the nearly 42,000 people killed in fatal crashes that year. In the states with .08 BAC laws, alcohol was involved in 36 percent of all traffic fatalities, lower than the national average and the 39.5-percent rate of alcohol involvement in the

rest of the states.[3] Utah had the lowest level at 20.6 percent; the District of Columbia had the highest at 58.5 percent. Among the 10 states with the lowest levels of alcohol-related fatalities, 3 were states with .08 BAC laws and 7 were states with .10 BAC laws. Among the 10 states with the highest levels of alcohol-related fatalities, 2 were states with .08 BAC laws, 7 were states with .10 BAC laws, and 1 had no BAC per se law.

Although alcohol use remains a significant factor in fatal crashes, fatalities involving alcohol have declined sharply over the last 15 years. In 1982, 25,165 people died in crashes involving alcohol, 57.3 percent of the nearly 44,000 traffic fatalities that year. The proportion of fatal crashes that involved alcohol declined during the 1980s, falling below 50 percent for the first time in 1989. The involvement of alcohol in fatal crashes declined markedly in the early 1990s, from about 50 percent of the fatal crashes in 1990 to nearly 40 percent in 1994. During this time, the number of people killed in crashes involving alcohol declined by around 25 percent. The proportion of fatalities involving alcohol rose slightly in the next 2 years before falling, in 1997, to its lowest level since 1982, as figure 3 shows.

[3]This analysis excludes Idaho and Illinois, states that had .08 BAC laws take effect during 1997.

Figure 3: Alcohol-Related Fatalities, 1982-97



Source: GAO's illustration based on NHTSA's Traffic Safety Facts, 1997.

Each state reports, and NHTSA collects and publishes, data on fatal crashes through the Fatal Accident Reporting System (FARS), a comprehensive national database of all crashes in which a person dies within 30 days of the crash. These data include (1) the number of fatalities that occur in all crashes and (2) the number of drivers involved in fatal crashes. FARS also includes whether crashes involved drivers who had been drinking. However, FARS has limitations regarding alcohol involvement in crashes—for example, fewer than half of the drivers at the scene of fatal accidents are tested for alcohol. To address the missing data, NHTSA developed a statistical model, first used in 1982, to estimate alcohol involvement in cases in which data are not available. The model provides estimates in three broad categories—sober (.00 BAC), "low BAC" (.01- .09 BAC), and "high BAC" (.10 BAC and above).[4] Therefore, certain questions—such as how many fatal crashes involve drivers with .08 BAC

[4]When cataloguing fatalities in crashes in which more than one driver had been drinking, FARS uses the driver with the higher BAC.

levels versus other levels or what the average BAC of drunk drivers involved in fatal crashes is—cannot be reliably answered by this model. NHTSA plans to release a new model in 1999 that will estimate specific BAC levels.

NHTSA Believes All States Should Have Alcohol Deterrence Measures, Including .08 BAC Laws

NHTSA believes that the best countermeasure against drunk driving is a combination of laws, public education, and enforcement. Since 1970, NHTSA has espoused a "systems approach" to reducing drunk driving including enforcement, judicial, legislative, licensing, and public information components. In 1997, NHTSA published an action plan developed with other participants to reduce alcohol-related driving fatalities to 11,000 by the year 2005. This plan recommended that all states pass a wide range of laws, including ones establishing .08 BAC limits, license revocation laws—under which a person deemed to be driving under the influence has his or her driving privileges suspended or revoked, comprehensive screening and treatment programs for alcohol offenders, vehicle impoundment, "zero tolerance" BAC and other laws for youth, and primary enforcement laws for safety belts.[5] The plan also called for increased public awareness campaigns, with an emphasis on target populations such as young people and repeat offenders. Similarly, "The Presidential Initiative for Making .08 BAC the National Legal Limit," published by NHTSA in August 1998, contained a four-point plan that recommended the expansion of public education campaigns; the building of public-private partnerships; and active, high-visibility enforcement of several alcohol laws.

The value of public education and enforcement has been demonstrated in a number of studies. A recent NHTSA evaluation of a sobriety checkpoint program in Tennessee, a state with a .10 BAC limit, concluded that the program and its attendant publicity reduced alcohol-related fatal accidents in that state by 20.4 percent. A systems approach to traffic safety is not limited to preventing drunk driving. Our January 1996 report concluded that the states that have been most successful at increasing safety belt use among all drivers are the ones with primary enforcement laws, visible and aggressive enforcement, and active public information and education programs.[6]

[5]Primary enforcement laws permit officials to enforce safety belt requirements independently of other traffic safety laws, in contrast to secondary enforcement laws, which allow officials to enforce safety belt requirements only when other traffic safety laws are being enforced.

[6]Motor Vehicle Safety: Comprehensive State Programs Offer Best Opportunity for Increasing Use of Safety Belts (GAO/RCED 96-24, Jan. 3, 1996).

Since 1992, when it first recommended in a report to the Congress that all states have .08 BAC laws, NHTSA's position has changed from urging the states to pass .08 BAC laws to favoring that states be required to do so. The latter position was embodied in the President's endorsement of a Senate bill entitled the Safe and Sober Streets Act. This bill would have required all states to enact and enforce .08 BAC laws by October 1, 2001, or lose 5 percent of certain federal highway funds the first year and 10 percent each succeeding year. The Senate approved this bill on March 4, 1998, but the House took no action before the 105th Congress adjourned.[7]

As figure 4 shows, NHTSA has a number of reasons why it believes all states should adopt .08 BAC laws.

Figure 4: NHTSA's Reasons Why All States Should Adopt .08 BAC Laws

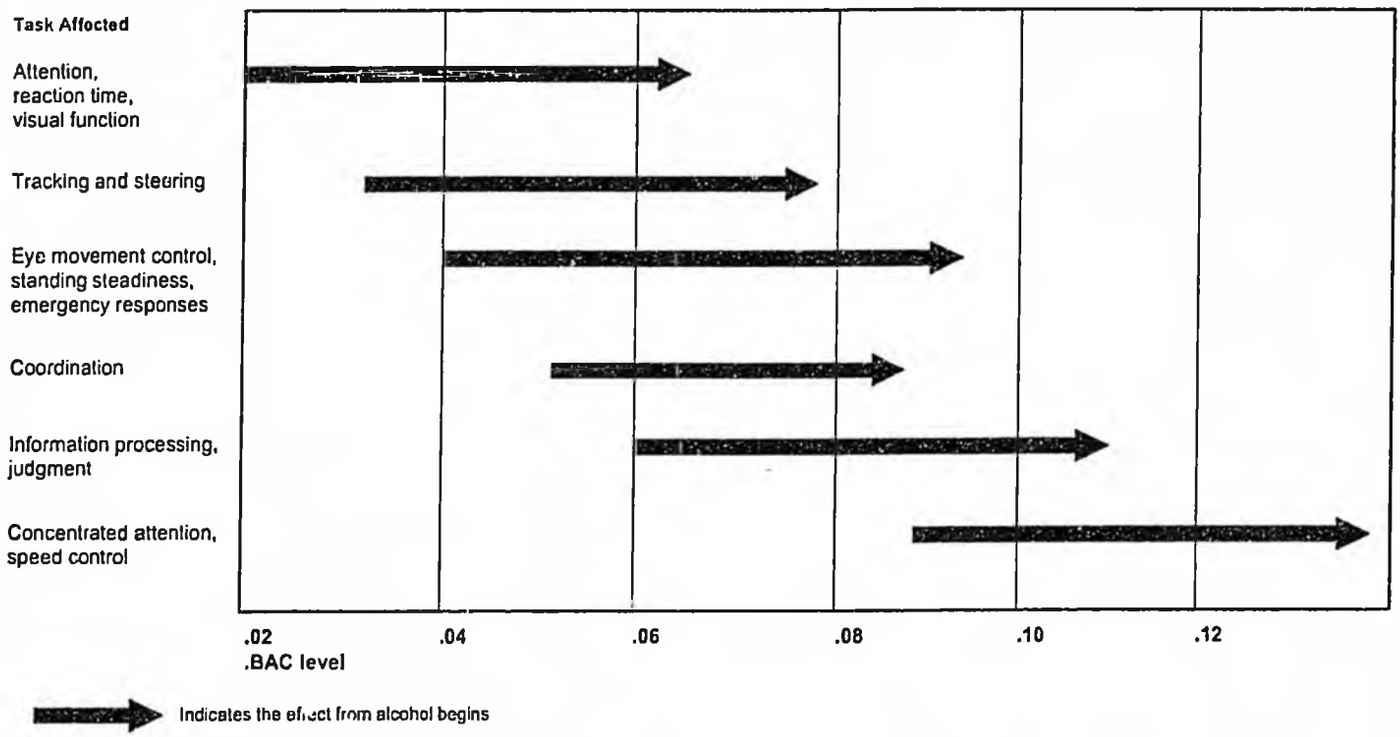
- Virtually all drivers are substantially impaired at .08 BAC with regard to critical driving tasks.
- The risk of being in a crash increases substantially when a driver reaches .08 BAC.
- .08 is a reasonable level to set the limit.
- The public supports lower BAC limits.
- Other industrialized nations have .08 or lower BAC laws.
- Lowering the limit to .08 is a proven effective countermeasure that will reduce crashes and save lives.

One of NHTSA's principal arguments for nationwide adoption of .08 BAC laws is that the medical evidence of drivers' impairment at that level is substantial and conclusive. According to NHTSA, and as shown in figure 5, reaction time, tracking and steering, and emergency responses are impaired at even low levels, and substantially impaired at .08 BAC. As a result, the risk of being in a motor vehicle crash increases when alcohol is involved, and increases dramatically at .08 BAC and higher levels. In contrast to NHTSA's position, industry associations critical of .08 BAC laws contend that .08 BAC is an acceptable level of impairment for driving a motor vehicle and that these laws penalize "responsible social drinking." These associations also believe that .08 BAC laws do not address the problem of drunk driving because many more drivers using alcohol are reported at the "high" BAC levels (above .10 BAC) than the lower BAC levels.

[7]The Senate approved this bill as an amendment to its surface transportation reauthorization bill. However, these provisions were not included in the House bill and were not included in the final version of the Transportation Equity Act for the 21st Century.

Because we were directed to review the impact of .08 BAC laws on the number and severity of crashes involving alcohol, we did not review the medical evidence on impairment or other arguments in favor of or in opposition to .08 BAC laws.

Figure 5: NHTSA's Position on Medical Evidence of Drivers' Impairment



Source: GAO's illustration based on information from NHTSA.

NHTSA also believes that lowering the BAC limit to .08 is a proven effective measure that will reduce the number of crashes and save lives. For example, in a December 1997 publication, NHTSA stated that "recent research . . . has been quite conclusive in showing the impaired driving reductions *already attributable to .08,* as well as the potential for saving additional lives if all states adopted .08 BAC laws" (emphasis added). In

May 1998, the NHTSA Administrator stated, "The traffic safety administration is aware of four published studies, . . . [and] each study has shown that lowering the illegal blood alcohol limit to .08 is associated with significant reductions in alcohol-related fatal crashes." In a fact sheet distributed to state legislatures considering these laws, NHTSA stated that the agency's "analysis of five states that lowered the BAC limit to .08 showed that significant decreases in alcohol-related fatal crashes occurred in four out of the five states *as a result of the legislation*" (emphasis added). NHTSA used these study results to encourage states to enact .08 BAC laws, testifying in one instance before a state legislature, "We conservatively project a 10-percent reduction in alcohol-related crashes, deaths, and injuries" in the state.

Seven Studies Have Examined the Effectiveness of .08 BAC Laws

Seven studies have been published assessing the effect of .08 BAC laws on motor vehicle crashes and fatalities in the United States. Four studies published between 1991 and 1996 assessed the effectiveness of .08 BAC laws in the five states that enacted them between 1983 and 1991. On April 28, 1999, NHTSA released three additional studies. Table 1 summarizes the seven studies that examine .08 BAC laws.

Table 1: Studies on the Effectiveness of .08 BAC Laws

Title of study	Released	Conducted by	Funded by	Scope
The Effects Following the Implementation of an .08 BAC Limit and an Administrative Per Se Law in California	1991	Research and Evaluation Associates	NHTSA	California
A Preliminary Assessment of the Impact of Lowering the Illegal BAC Per Se Limit to .08 in Five States	1994	NHTSA staff	NHTSA	Ca lifornia, Utah, Oregon, Maine, and Vermont
The General Deterrent Impact of California's .08% Blood Alcohol Concentration Limit and Administrative Per Se License Suspension Laws	1995	Department of Motor Vehicles, State of California	California Offi raffic Safety	California
Lowering State Legal Blood Alcohol Concentration Limits to .08%: The Effect on Fatal Motor Vehicle Crashes	1996	Researche.s from Boston University's School of Public Health	Grants, including ones from the National Institute on Alcohol Abuse and Alcoholism and the U.S. Centers for Disease Control and Prevention	California, Utah, Oregon, Maine, and Vermont
The Effects of 0.08 Laws	1999	Rainbow Technology Inc., and NHTSA's National Center for Statistics and Analysis	NHTSA	California, Utah, Oregon, Maine, Vermont, New Hampshire, North Carolina, Kansas, New Mexico, Florida, and Virginia.
Evaluation of the Effects of North Carolina's 0.08% BAC Law	1999	University of North Carolina	NHTSA	North Carolina
The Relationship of Alcohol Safety Laws to Drinking Drivers in Fatal Crashes	1999	Pacific Institute for Research and Evaluation	NHTSA	50 states and the District of Columbia

The First Four Published Studies Had Limitations and Raised Methodological Concerns

Although NHTSA characterized the first four studies on the effectiveness of .08 BAC laws as conclusively establishing that .08 BAC laws resulted in substantial reductions in fatalities involving alcohol, we found that three of the four studies had limitations and raised methodological concerns that called their conclusions into question. For example, while a NHTSA-endorsed Boston University study concluded that 500 to 600 fewer fatal crashes would occur each year if all states adopted .08 BAC laws, this study has been criticized for, among other reasons, its method of comparing states; and a recent NHTSA study characterized the earlier study's conclusion as "unwarranted." The fourth study reported mixed

results. Therefore, these studies did not provide conclusive evidence that .08 BAC laws by themselves have resulted in reductions in drunk driving crashes and fatalities. A task force of the New Jersey State Senate examined this evidence and, in a report issued in December 1998, reached a similar conclusion.[8]

The California Studies

NHTSA has cited California's experience as evidence of the effectiveness of .08 BAC laws. For example, in a publication promoting the need for .08 BAC laws, NHTSA stated that "alcohol-related fatalities significantly decreased after the state's BAC limit was lowered to .08 in 1990." In another publication, it said "California's .08 law was analyzed by NHTSA, [and] . . . the state experienced a 12% reduction in alcohol-related fatalities, although some of this can be credited to the new administrative license revocation law."

While NHTSA's 1991 study by Research and Evaluation Associates (see table 1) did find a 12-percent decline in alcohol-related fatalities after the .08 BAC law took effect, the study had important limitations. For example, the authors had available to them only 1 year of data for the period after the law went into effect, an unusually short period of time to analyze trends, and the authors acknowledged this limitation. California also had a license revocation law—under which a person deemed to be driving under the influence has his or her driving privileges suspended or revoked—take effect 6 months after the .08 BAC law. Although the authors concluded that this law had no effect, they stated that they were unable to accurately account for the separate effects of the two laws.

A more comprehensive, methodologically sound study of California was released by the state's Department of Motor Vehicles in 1995. In contrast to the 1991 review, this study was based on 4 years of data after the law became effective and found mixed results. The study concluded that the .08 BAC law was not associated with any statistically significant reductions in crashes resulting in fatalities or serious injuries in which drivers were reported to have been drinking, but that reductions did occur in accidents that took place during hours in which alcohol involvement is probable, such as nighttime crashes between 2 and 3 a.m. The study found

[8]State of New Jersey, Senate Task Force on Alcohol-Related Motor Vehicle Accidents and Fatalities, Dec. 11, 1998. Created by the leaders of the New Jersey State Senate, the task force was composed of elected officials and representatives from the state's judicial, medical, academic, and law enforcement communities. The task force was charged with, among other things, evaluating the available studies, and determining whether reducing the BAC limit to .08 would reduce the number of alcohol-related accidents and fatalities in New Jersey. The task force concluded that "the impact of laws that reduce the per se BAC level from .10 to .08, in isolation, is inconclusive" and that the effect of public education and awareness campaigns and license revocation laws "can be greater than changing the legal BAC."

reductions associated with the state's license revocation law—a 9 to 13 percent decline in crashes resulting in fatalities or serious injuries in which drivers were reported to have been drinking. However, given the 6-month time period separating the effective dates of the two laws, the authors concluded that .08 BAC and license revocation laws most likely worked together to lower fatalities.

Although the 1995 study was more comprehensive than the 1991 study, NHTSA's public statements and literature often quote the 12-percent reduction cited in the 1991 study and rarely refer to the 1995 study. California continued to experience a decline in alcohol-related fatalities through the 1990s—from 47 percent of fatalities in 1991 to 36 percent in 1997. California traffic safety and law enforcement officials believe that this progress is attributable to the combination of stronger laws, a sustained public information campaign, and vigorous enforcement.

The Boston University Study

A 1996 study by researchers from the Boston University School of Public Health published in the American Journal of Public Health compared the first five states to adopt .08 BAC laws with five "nearby" states that retained .10 BAC laws. It found a 16 percent greater decline in the proportion of alcohol-related fatalities among drivers in the states adopting the lower limit and concluded that if all states adopted .08 BAC laws, 500 to 600 fewer fatal crashes would occur annually. These study results were endorsed by NHTSA and often cited in the agency's literature and public statements. President Clinton cited the study in a March 1998 statement and said ". . . if all states lower their BAC to .08, it will result in 600 fewer alcohol-related deaths each year."

However, this study has been criticized by many traffic safety experts both inside and outside of NHTSA and has methodological limitations that call its results into question. For example:

- Many traffic safety experts question this study's method of comparing one state to another. The study does not explain the criteria used to select the comparison states. Using one state as a control to assess the impact of a new law in another state assumes that all other conditions are held equal except for the introduction of the law. One critic noted, for example, that one of the states with a .08 BAC law employs random roadside sobriety checkpoints and was compared to a state with a .10 BAC law that prohibits the practice. Changing the selection of comparison states can dramatically change this study's results. According to NHTSA, while other traffic safety studies have made single state comparisons, it is best to compare one state

to several or to the rest of the nation.

- Three of the five states had license revocation laws take effect within 10 months of their .08 BAC laws. This study made no effort to separately analyze the relative contribution of the two types of laws to any subsequent decline in fatal motor vehicle crashes in those three states. Thus, in at least three states, the authors' findings could as easily apply to the license revocation law as the .08 BAC law. The authors acknowledged this limitation, but it is rarely cited in NHTSA's literature and public statements endorsing this study and its findings.

- The study's conclusion that 500 to 600 fewer fatal crashes would occur annually if all states had .08 BAC laws is unfounded. The study does not explain how this estimate was derived or how the reduction could be credited to .08 BAC laws since the .08 BAC and license revocation laws went into effect within 10 months of each other in three of the five states. The authors told us that the estimate assumed that all states without .08 BAC laws would experience a reduction of up to 10 percent in alcohol-related crashes after enacting the laws. However, the study provides no basis for assuming that reductions of that magnitude would occur. Even this particular study found that while three of the five states experienced reductions greater than their comparison state, two of the five did not. NHTSA's April 1999 study of the effect of .08 BAC laws in 11 states (see table 1) characterized this conclusion as "unwarranted."

NHTSA Staff Study

In 1994, NHTSA staff conducted a study that examined FARS data in the first five states that enacted .08 BAC laws (see table 1). NHTSA has often cited this study as evidence of the effectiveness of .08 BAC laws. For example, a December 1997 publication with the National Safety Council said, "... significant reductions in alcohol-related fatal crashes were found in 4 out of the 5 states ranging from 4% to 40%. ..."

The staff study examined 6 measures of alcohol involvement, ranging from fatal crashes involving drivers with high BACs to single-vehicle crashes late at night, in each of the five states (for a total of 30 measures) and found statistically significant decreases in 9 of the 30 measures. The study also had several important limitations, which the authors acknowledged. For example, as with the Boston University study, the staff study made no effort to separately account for the relative contributions of .08 BAC laws and license revocation laws in the three states that enacted them within a short period. The staff study cautioned that the results were preliminary and that they pointed to the need for further research. NHTSA's public

statements, however, were more definitive—conveying, for example, the impression that fatal crashes involving alcohol went down 40 percent in one of the five states. However, the 40-percent figure refers to only one of the six measures in Vermont, a state that experiences fairly significant year-to-year variations in fatal crashes. One of the authors told us he viewed the results as indicative of positive but not clear results.

Recent Studies Are More Comprehensive, but Results Are Mixed

On April 28, 1999, NHTSA released three studies that it sponsored (see table 1). These studies are more comprehensive than the earlier studies and show many positive results but fall short of conclusively establishing that .08 BAC laws by themselves have resulted in reductions in alcohol related fatalities. For example, during the early 1990s, when the involvement of alcohol in traffic fatalities declined from around 50 percent to nearly 40 percent—a trend in states with both .08 BAC and .10 BAC laws—eight states' .08 BAC laws became effective, and the recent studies disagree on the degree to which .08 BAC laws played a role. Two of the studies reached different conclusions about the effect of one state's .08 BAC law—one concluded that the law brought about reductions in drunk driving deaths in North Carolina, while another concluded that the state's reductions occurred as the result of a long-term trend that began before the law was enacted. In a statement releasing the three studies, NHTSA credited the nation's progress in reducing drunk driving to a combination of strict state laws and tougher enforcement and stated that "these three studies provide additional support for the premise that .08 BAC laws help to reduce alcohol-related fatalities, particularly when they are implemented in conjunction with other impaired driving laws and programs."

Eleven-State Study

An April 1999 NHTSA study of 11 states with .08 BAC laws (see table 1) assessed whether the states experienced statistically significant reductions in three measures of alcohol involvement in crashes after the law took effect: (1) the number of fatalities in crashes in which any alcohol was involved, (2) the number of fatalities in crashes where drivers had a BAC of .10 or greater ("high BAC"), and (3) the proportion of fatalities involving "high BAC" drivers to fatalities involving sober drivers. The study performed a similar analysis for license revocation laws and also modeled and controlled for any preexisting long-term declining trends these states may have been experiencing when their .08 BAC laws went into effect. The study found that 5 of the 11 states had reductions in at least one measure and that 2 of the 11 states had reductions in all three measures. Table 2 summarizes the states and measures for which the

study found statistically significant reductions after .08 BAC laws became effective.

Table 2: Results of the 11-State Study of .08 BAC Laws

State	Year .08 BAC law became effective	Statistically significant reduction occurred in: Alcohol-related fatalities	Fatalities involving "high BAC" drivers	Proportion of fatalities involving "high BAC" drivers to those involving sober drivers
Utah	1983	No	No	No
Oregon	1983	No	No	No
Maine	1988	No	No	No
California	1990	No	No	No
Vermont	1991	**Yes**	**Yes**	**Yes**
Kansas	1993	No	No	**Yes**
North Carolina	1993	No	No	**Yes**
Florida	1994	**Yes**	**Yes**	**Yes**
New Hampshire	1994	No	No	No
New Mexico	1994	No	No	**Yes**
Virginia	1994	No	No	No
Total		**2 of 11**	**2 of 11**	**5 of 11**

Note: "Yes" indicates a statistically significant reduction after the .08 BAC law became effective. "No" indicates no statistically significant reduction.

Reductions in all three measures of fatalities involving alcohol occurred in Florida and Vermont. Although alcohol involvement in fatal crashes began to decline in Florida before the .08 BAC law was enacted, it continued to do so after the law went into effect on January 1, 1994. According to FARS, the number of alcohol-related traffic deaths in Florida declined in 1994 by nearly 10 percent, while the proportion of fatalities involving alcohol fell from 44 to 39 percent—in 1997 it stood at around 34 percent. While the study noted that Vermont has experienced fluctuations in its fatal crash rates, it found that after Vermont's .08 BAC law took effect, it also experienced statistically significant reductions in both the number of fatalities involving alcohol and the proportion of fatalities involving drivers with high BACs to those involving sober drivers. In this study, Vermont was the only state of the first five states to enact .08 BAC laws that showed any reductions in alcohol-related fatalities associated with .08 BAC laws.

Three other states that enacted .08 BAC laws in 1993 and 1994—North Carolina, New Mexico, and Kansas—experienced statistically significant reductions in the proportion of fatalities involving drivers with high BACs to those involving sober drivers. According to one of the authors, this proportion is the most accurate indicator of the study's three measures—the study noted that if fatalities involving sober drivers decline along with alcohol-related fatalities, then some broader cause other than alcohol legislation is affecting all traffic fatalities. However, if the .08 BAC law operates as expected, alcohol-related deaths will decline while deaths involving sober drivers remain unaffected. In Kansas, the proportion of alcohol involvement declined because fatalities involving sober drivers increased while alcohol-related fatalities remained relatively stable, and in North Carolina, fatalities involving sober drivers increased markedly while fatalities involving drivers with high and low BACs continued their preexisting downward trend. The author stated that without the .08 BAC legislation, alcohol-related fatalities would have been expected to increase along with fatalities involving sober drivers.

In two states where no statistically significant reductions occurred after .08 BAC laws became effective in any category—California and Virginia—the study found that the .08 BAC laws were effective when paired with the states' license revocation laws. In both cases, the license revocation laws went into effect after the .08 BAC laws, and the study found that the reductions did not begin until the license revocation laws were in force.

Finally, the study found no statistically significant reductions in four states. Utah experienced no noticeable change in fatalities involving alcohol after enacting both its .08 BAC and license revocation laws in 1983. The authors noted that the rate of alcohol involvement in fatal crashes in Utah was substantially lower than the national average and that further reductions would have been difficult. Fatalities involving alcohol in Oregon showed little change after the .08 BAC law went into effect in 1983—the most dramatic change occurred over 6 years after the law's implementation. Maine experienced no significant reductions in alcohol-related fatalities after its .08 BAC law was implemented in 1988. New Hampshire experienced a decline in alcohol-related fatalities 2 years before its .08 BAC law went into effect in 1993 but saw no significant decline in fatalities associated with the .08 BAC law.

The study was careful to not draw a causal relationship between the reductions it found and the passage of .08 BAC laws by themselves. Rather,

it concluded that .08 BAC laws added to the impact that enforcement; public information; and legislative activities, particularly license revocation laws, were having. In addition to the two states where .08 BAC and license revocation laws were found to be effective in combination, the study noted that the five states with .08 BAC laws that showed reductions already had license revocation laws in place. One of the authors told us that this suggested that the .08 BAC laws had the effect of expanding the scope of the license revocation laws to a new portion of the driving public.

University of North Carolina Study

A NHTSA-sponsored study by the University of North Carolina concluded, in contrast to the 11-state study, that the .08 BAC law in North Carolina had little clear effect. The study examined alcohol-related crashes and crashes involving drivers with BACs greater than .10 from 1991 through 1995; compared fatalities among drivers with BACs greater than .10 in North Carolina with such fatalities in 11 other states; and compared six measures of alcohol involvement in North Carolina and 37 states that did not have .08 BAC laws at that time. The study controlled for and commented on external factors that could confound the results, such as the state's sobriety checkpoints, enforcement, and media coverage. The study found the following:

- No statistically significant decrease in alcohol-related crashes after passage of North Carolina's .08 BAC law in three direct and two "proxy" measures.[b]
- A continual decline in the proportion of fatally injured drivers with BACs equal to or greater than .10 but no abrupt change in fatalities that could be attributed to the .08 BAC law.
- Decreases in alcohol-related crashes in North Carolina and in the 11 other states studied. While North Carolina's decreases were greater, the study concluded that no specific effects could be attributed to the .08 BAC law.
- No statistically significant difference between North Carolina and 37 states without .08 BAC laws in four of the six measures. While reductions in police-reported and estimated instances of alcohol involvement were found to be statistically significant, these reductions happened 18 months before North Carolina lowered its BAC limit. The authors attributed these decreases, in part, to increased enforcement.

[b]Direct measures are actual observations, such as police reports of alcohol involvement in crashes, whereas proxy measures are not actual observations, but categories in which the involvement of alcohol is considered probable, such as nighttime crashes between 2 and 3 a.m.

The study concluded that the .08 BAC law had little clear effect on alcohol-related fatalities in North Carolina, and that a downward trend was already occurring before North Carolina enacted its .08 BAC law and that this trend was not affected by the law. The authors offered several possible explanations, including that (1) the effects of the .08 BAC laws were obscured by a broader change in drinking-driving behavior that was already occurring; (2) North Carolina had made substantial progress combating drunk driving and that the remaining drinking and driving population in North Carolina was simply not responsive to the lower BAC law; and (3) .08 BAC laws are not effective in measurably affecting the behavior of drinking drivers.

50-State Study

The third April 1999 NHTSA study did a complex regression analysis assessing the effect of three drunk driving laws, including .08 BAC laws.[10] It evaluated .08 BAC laws by comparing two groups—states with .08 BAC laws with states with .10 BAC laws, before and after the laws were passed. The study examined quarterly FARS data for all 50 states and Washington, D.C. from 1982 through 1997 and tested for reductions in the involvement of (1) "low BAC" drivers (.01 BAC through .09 BAC) and (2) "high BAC" drivers (.10 BAC and above) in fatal crashes. The study was more comprehensive than the prior multistate studies, having controlled for the effects of factors such as the number of licensed drivers, vehicle miles traveled, per capita beer consumption, unemployment rates, urban/rural composition, season, safety belt laws, and existing downward trends in alcohol-related fatal crashes. This study concluded that states that enacted .08 BAC laws experienced an 8-percent reduction in the involvement of drivers with both high and low BACs when compared with the involvement of sober drivers. The study estimated that 274 lives have been saved in the states that enacted .08 BAC laws and that 590 lives could be saved annually if all states enacted .08 BAC laws.

While more comprehensive than other studies, the study used a method to calculate the 8-percent reduction that is different, and thus not directly comparable, to those for fatality estimates reported in other studies and publications. In particular, this method can produce a numerical effect that is larger than other methods. In the past, NHTSA's statistics and other studies measured differences either (1) in the number of alcohol-related fatalities or the number of drivers reported to have been using alcohol (termed "alcohol-involved" drivers) or (2) in the proportion of such

[10]Regression analysis is a statistical technique used to describe and analyze relationships between a dependent variable (e.g. fatal crashes involving alcohol) and one or more independent variables (e.g. .08 BAC and license revocation laws).

fatalities or drivers as a percentage of all fatalities or drivers. The 50-state study's 8-percent estimate is the change in the ratio of alcohol-involved drivers to sober drivers who are in fatal crashes. While this is not an inappropriate way to measure differences in crashes and fatalities, this method can increase the size of the effect because, rather than comparing fatalities or drivers involving alcohol to all fatalities or drivers, it compares the number of alcohol-involved drivers to just the number of sober drivers. This method produced a larger effect in this study because, since 1982, of the drivers involved in fatal crashes, the number reported to have been using alcohol has dramatically declined (by around 39 percent), while the number reported to have been sober has substantially increased (by around 25 percent). While the 11-state study also measured this ratio, that study did not report a numerical effect.

Table 3 illustrates the difference between these methods of portraying traffic statistics using NHTSA's FARS data on drivers involved in fatal crashes between 1995 and 1997. As the table shows, while the number of alcohol-involved drivers declined by about 6 percent, the ratio of such drivers to sober drivers declined by 9 percent.

Table 3: Drivers Involved in Fatal Crashes, 1995-97

	1995	1997	Difference
Alcohol-involved drivers	14,269	13,393	(6.1%)
Sober drivers	41,895	43,209	3.1%
All drivers	56,164	56,602	0.8%
Ratio of alcohol-involved drivers to sober drivers	34%	31%	(9%)

Source: GAO's analysis of FARS data.

Another reason why this study's results cannot be directly compared to other studies' is because it did not include data for drivers under 21. In 1997, drivers under 21 accounted for around 14 percent of the drivers in fatal crashes and about 12 percent of the drivers in fatal crashes involving alcohol. According to the authors, drivers under 21 were excluded from the analysis because other laws affect these drivers, such as minimum drinking age and "zero tolerance" BAC laws, and thus the primary effect of .08 BAC legislation would be expected to be on the population over 21 years old. While this argument may have merit, other arguments exist for including this population. First, NHTSA has stated that .08 BAC laws have a general deterrent effect on drinking and driving among all drivers. Also, young drivers violating .08 BAC laws have been prosecuted under those

laws without regard to age, suggesting that these laws do not affect only adults. For example, in California, 13,067 drivers under 21 were convicted under the state's .08 BAC law in 1997, compared with 11,517 drivers under 21 convicted under the state's "zero tolerance" BAC law. Finally, with the exception of the 1994 NHTSA staff study, all other studies of the effect of .08 BAC laws, including the recent 11-state and North Carolina studies, have included persons under 21 in their analyses.

Including persons under 21 years old would have changed these study results. In particular, the study would have found no statistically significant reductions associated with .08 BAC laws for drivers at low BAC levels. The findings regarding drivers at high BAC levels—a group that contains over 3 times as many drivers—would have remained substantially unchanged.

The study warns that "it is important to interpret estimates of lives saved due to any single law with considerable caution." In particular, as the study notes, factors such as public education, enforcement, and changes in societal norms and attitudes toward alcohol have produced long-term reductions in drunk driving deaths over many years. This study did more to control for extraneous factors than any of the other multistate studies, but this is inherently difficult to do, and in this case the authors estimate that 50 to 60 percent of the reductions in alcohol-related fatalities are explained by the laws it reviewed and the other factors it considered, a moderate level for statistical analyses of this type. Because of the uncertainties, the study's estimate of lives saved is also expressed as a range—and the number of lives saved in states with .08 BAC laws could have been as few as 88 or as many as 472.[11] Similarly, if the states without .08 BAC laws enacted them and experienced reductions comparable to those found in the study, the number of lives saved annually was projected to be as few as 200 or as many as 958. While the study reported results for the three laws it reviewed, including .08 BAC laws, the study also concluded that "the attribution of savings to any single law should be made with caution since each new law builds to some extent on existing legislation and on other ongoing trends and activities."

Conclusions

While indications are that .08 BAC laws in combination with other drunk driving laws as well as sustained public education and information efforts and strong enforcement can be effective, the evidence does not

[11]The study made range estimates at the 95 percent confidence level, meaning that one would expect these results to occur in 95 out of 100 cases.

conclusively establish that .08 BAC laws by themselves result in reductions in the number and severity of crashes involving alcohol. Until recently, limited published evidence existed on the effectiveness of .08 BAC laws, and NHTSA's position—that this evidence was conclusive—was overstated. In 1999, more comprehensive studies have been published that show many positive results, and NHTSA's characterization of the results has been more balanced. Nevertheless, these studies fall short of providing conclusive evidence that .08 BAC laws by themselves have been responsible for reductions in fatal crashes.

Because a state enacting a .08 BAC law may or may not see a decline in alcohol-related fatalities, it is difficult to accurately predict how many lives would be saved if all states passed .08 BAC laws. The effect of a .08 BAC law depends on a number of factors, including the degree to which the law is publicized; how well it is enforced; other drunk driving laws in effect; and the unique culture of each state, particularly public attitudes concerning alcohol.

As drunk driving continues to claim the lives of thousands of Americans each year, governments at all levels seek solutions. Many states are considering enacting .08 BAC laws, and the Congress is considering requiring all states to enact these laws. Although a strong causal link between .08 BAC laws by themselves and reductions in traffic fatalities is absent, other evidence, including medical evidence on impairment, should be considered when evaluating the effectiveness of .08 BAC laws. A .08 BAC law can be an important component of a state's overall highway safety program, but a .08 BAC law alone is not a "silver bullet." Highway safety research shows that the best countermeasure against drunk driving is a combination of laws, sustained public education, and vigorous enforcement.

Agency Comments and Our Evaluation

DOT provided comments on a draft of this report (see app. I). The Department generally agreed with the information presented in the report. DOT reiterated its long-standing commitment to a systems approach for combating drunk driving and stated that while no individual component, including .08 BAC laws, is effective in isolation, the overall evidence supports the effectiveness of .08 BAC laws. DOT stated that the four original studies provided positive, if not conclusive, results and formed a reasonable basis for supporting .08 BAC laws. The three recent studies added to this body of evidence, including the North Carolina study, which, while finding little clear effect of the state's .08 BAC law, did find

reductions. Consequently, DOT concluded that significant reductions have been found in most states, that consistent evidence exists that .08 BAC laws, at a minimum, add to the effectiveness of laws and activities already in place, and that a persuasive body of evidence is now available to support the Department's position on .08 BAC laws.

Overall, we believe that DOT's assessment of the effectiveness of .08 BAC laws is fairly consistent with our own. We agree with DOT on the importance of a systems approach to combating drunk driving; we have noted examples in this report such as the state of California, where .08 BAC laws were not effective until other complementary measures were put into place. DOT did not disagree with our discussion concerning the limitations and methodological concerns for three of the first four studies or with our assessment that recent studies reach different conclusions about the effectiveness of .08 BAC laws; we believe those study results must be viewed in the context of their limitations and conclusions. Although DOT stated that studies showed significant reductions in most states, the 11-state study demonstrated reductions associated with .08 BAC laws in a minority of states (5 of 11) and a minority of the measures (9 of 33) it studied. In addition, many of the results DOT cited as consistent evidence supporting its position were reductions that study authors determined not to be statistically significant—thus, no conclusions on the effectiveness of .08 BAC laws can be drawn from them. Although we characterize the strength of the study results differently, we and DOT reach essentially the same conclusion regarding the effectiveness of .08 BAC laws, both by themselves and in combination with other measures.

Scope and Methodology

To determine the effect of .08 BAC laws on the number and severity of alcohol-related crashes, we analyzed the body of research published between 1991 and 1999. Of the seven studies, five were published by NHTSA, one by the state of California, and one by the American Journal of Public Health. We reviewed the studies' methodologies, findings, and conclusions and met with study authors at NHTSA, the Pacific Institute for Research and Evaluation, the California Department of Motor Vehicles, and Boston University's School of Public Health. We also discussed the studies and traffic safety issues with NHTSA officials in Washington, D.C., Boston, Massachusetts, and San Francisco, California; officials of the American Automobile Association, the Insurance Institute for Highway Safety, the National Sheriffs Association, Mothers Against Drunk Driving, the American Beverage Institute, the National Restaurant Association; and state traffic safety and law enforcement officials in California.

The scope of our study was limited to the effect of .08 BAC laws on the number and severity of alcohol-related crashes. We did not review several other arguments raised by both proponents and opponents of .08 BAC laws; for example, while we describe the medical evidence on impairment, we did not evaluate that evidence. In addition, our ability to review the severity of alcohol-related crashes was limited by the fact that the FARS database—used entirely by five of the seven studies and in part by a sixth—includes only fatal crashes. The .08 BAC laws reviewed may have had a greater or lesser effect on nonfatal crashes than it did on fatal crashes. Finally, section 2008 of the Transportation Equity Act for the 21st Century required us to review the effect of .02 BAC laws for drivers under 21 in reducing the number and severity of alcohol-related crashes. As agreed with your staff, we will not address those laws as all 50 states and the District of Columbia now have laws establishing BAC levels of .02 or less for drivers under 21 years of age.

We performed our work from August 1998 through April 1999 in accordance with generally accepted government auditing standards.

We will send copies of this report to cognizant congressional committees; the Secretary of Transportation; and the Administrator, National Highway Traffic Safe' 'ministration. We will make copies available to others upon request. you have any questions regarding this report, please contact me at (202) 512-3650 or Ronald Stouffer at (202) 512-4416. Key contributors are listed in appendix II.

Sincerely yours,

Phyllis F. Scheinberg

Phyllis F. Scheinberg
Associate Director,
Transportation Issues