

Approved 3-31-89 Ginger Barr, Chm.
Date

MINUTES OF THE HOUSE COMMITTEE ON FEDERAL AND STATE AFFAIRS

The meeting was called to order by Representative Ginger Barr at
Chairperson

1:38 ~~am~~ /p.m. on March 14, 1989 in room 526-S of the Capitol.

All members were present except:

Representative King
Representative Schauf

Committee staff present:

Mary Torrence, Revisor of Statutes Office
Mary Galligan, Kansas Department of Legislative Research
Juel Bennewitz, Secretary to the Committee

Conferees appearing before the committee:

Reverend Richard Taylor, Kansans for Life at Its Best
Richard Beach, M.D., Lawrence, KS
David DePue, Topeka, KS
Lt. William Jacobs, Kansas Highway Patrol (KHP)
John Gillette, Wilson County Attorney
Earl Hindman, Director, Shawnee County Department of Corrections
Gene Johnson, Kansas Community Alcohol Safety Action Project Coordinators Association
Jim Clark, Kansas County and District Attorneys Association

Resource Personnel

Mark Wettig, Kansas Department of Revenue (KDR)
John Smith, Kansas Department of Revenue (KDR)

HB 2228

Chairman Barr explained that Mark Wettig and John Smith from the Kansas Department of Revenue (KDR) were present as resource people.

Representative Mike O'Neal, chief sponsor of the bill, was not present due to the birth of a son.

Reverend Richard Taylor's advocacy of the bill was based on blood alcohol content (BAC) affecting the brain which is supplied by blood. He provided arguments for lowering the blood alcohol level, Attachment No. 1. Attachment No. 1A is a Reader's Digest reprint, "What Two Drinks Will Do to Your Driving" and Attachment No. 1B is a copy of House Journal pages showing presentation of petitions February 24, March 3, and March 9, 1989.

Committee discussion revealed:

1. Eating while drinking will cause blood alcohol to be absorbed more slowly.
2. There is a federal study due in approximately 15 months on the effects of alcohol on driving judgment. The federal government has already declared truckers as impaired at .04.
3. Some other states have a .08 law, most have .10 but none have .05.
4. This law would keep the penalties the same for .05 as currently for .10.
5. Reverend Taylor had no statistics to support his contention that lowering the BAC would deter a person from DUI and not contribute to jail overcrowding.
6. A brief debate between Reverend Taylor and one of the members ensued regarding BAC .01 - .05 as being some evidence of the individual's condition, presenting a prima facie case shifting the burden of proof from the state to the defendant. Reverend Taylor contended the bill says .01 - .05 is illegal for driving and that the person is impaired not drunk. The standard of proof being BAC.

CONTINUATION SHEET

MINUTES OF THE HOUSE COMMITTEE ON FEDERAL AND STATE AFFAIRS

room 526-S, Statehouse, at 1:38 ~~am~~/p.m. on March 14, 1989.

Richard Beach, M.D., reviewed the AMA's 1984 study on Alcohol and the Driver emphasizing the impairment of judgment, Attachment No. 2.

It was briefly discussed that proportions of alcohol in a drink vary with the preparer and a person cannot safely assess how or when that drink will affect him. The ideal situation is for a person who drinks to not drive.

David DePue spoke in favor of the bill based on experience in administering controlled tests involving alcohol to pilots using a simulator; and from family deaths caused by drunk drivers, Attachment No. 3.

Lt. William Jacobs stated the KHP would support any legislation to make the highways safer, Attachment No. 4.

Committee discussion established that:

1. The BAC of .10 within two hours after the operation, or attempted operation, of a vehicle is the current statute.
2. Kansas is a leader in DUI enforcement.
3. Most people convicted of DUI in Kansas test 1.5 higher.
4. There is a percentage taken that test below .10 but the officer must have additional supporting evidence to prove DUI.
5. It is impossible to devise a test that someone can't learn to "beat" if he so chooses.
6. There have been approximately 12,500 DUI convictions during the past 8 - 9 years.
7. It would be impossible for the State of Kansas to have all DUI records due to municipal courts, but on the state level, the number of cases convicted vs. the number of cases filed could be obtained through the Judicial Administrator's Office.
8. The Education and Information Division of the KHP has a controlled program which demonstrates his impairment to a driver.
9. One committee member suggested KHP's film on drinking and driving be a pre-requisite to renewing a driver's license.
10. The two ways to arrest an individual for DUI are:
 - a. if he is involved in an accident and/or
 - b. if the officer has probable causes to believe the person is impaired.

John Gillette said he serves on the Kansas County and District Attorney's Association Legislative Committee which took a position to neither support nor oppose the bill. He stated a personal opinion of .05 not being a large problem and that he had obtained convictions on a .0 BAT. Probable cause would address the situation. He contended the jails are full and he has personally had to make decisions to release misdemeanors in order to provide jail space for felons. Mr. Gillette maintained the person to be kept off the road is the multiple DUI offender who will drive no matter how many convictions he has or with no license.

Committee discussion revealed:

1. Mr. Gillette stated his experience to be that not that many are charged with DUI with a resulting BAC below .10.
2. Mr. Gillette stated awareness of only one case where alcohol use was suspected in an accident but couldn't be proven.
3. Kansas has check lanes for checking for DUI; under other circumstances, an officer must have reason to support DUI to stop a motorist.
4. DUI and DWI are synonymous though DUI is current statutory language.
5. Following is a list of the components of a first DUI offense:
 - a. an option for diversion which is determined by the county/district attorney
 - b. a fine (\$300 in Wilson County)
 - c. 48 continuous hours in jail, scheduled at the convenience of the sheriff
 - d. the cost of a pre-sentencing investigation (PSI)
 - e. \$89.00 court costs
 - f. \$25.00 probation fee and supervised probation by a court service officer for six months
 - g. attorney's fee(s)
 - h. increased insurance costs

CONTINUATION SHEET

MINUTES OF THE HOUSE COMMITTEE ON FEDERAL AND STATE AFFAIRS,
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- i. a basic underlying sentence of 30 days (Usually the offender is held for 6 - 8 hours after apprehension and that time is credited against the time sentenced)
- j. Total cost for a first time DUI can run from \$4,000 - \$10,000. The law specifies 48 hours in jail or 100 hours community service but many counties do not have a court service officer to administer such a program. Loss of driver's license for 30 days or until completion of alcohol education school, whichever is longer, is also included.
6. Rather than lower the BAC to .05, Mr. Gillette suggested changing the presumptive statute.
7. Mr. Gillette's experience has been there are "not many" second and third DUI offenders.
8. Local units of government don't want the liability of a prisoner working on civic projects.
9. The mandatory license suspension can result in job loss and is particularly difficult on indigents.
10. John Smith explained there are 21 points required by the federal government with which Kansas must comply in order to be eligible for funds, the driver's license suspension being one.

Earl Hindman reviewed discussed DUI arrest rates and commitments for the City of Topeka and Shawnee County 1984-1988, Attachment No. 5. He appeared as a conferee rather than as a proponent or opponent. Currently, the jail can only dedicate six daily beds for 48 hour and 5 day DUI commitments with the 90 day DUIs counted as part of the total prison population. He suggested a total systems approach to avoid prison overcrowding.

Committee discussion revealed:

1. Almost 100% of DUI offenders are serving the 48 hour sentence.
2. John Smith explained the federal restrictions regarding jail time are tied to federal funds and the definition of jail must be included. (48 hours - first offense; 5 days - second offense and 90 days - third offense).
3. Mr. Hindman suggested the committee investigate modifying statutory language allowing for some flexibility regarding the intent of "jail time". He supported the electronic monitoring as one alternative and a mechanism at the county level to assure quick-sure sentencing and not delayed punishment.
4. Mr. Hindman suggested jail alternatives such as: supervision, dormitory type living arrangements and possible interface with training.
5. Community service is considered to be work on civic projects e.g. in the past it was cleaning the fairgrounds.

Gene Johnson appeared as a conferee rather than a proponent or opponent. His group provides PSIs. He explained the difference in costs for first and subsequent DUI offenses, discussed tolerance levels, and noted Maine, Utah, Idaho and Oregon as the only states with lower BAC levels (.08), Attachment No. 6.

Jim Clark neither supported nor opposed the bill. He noted the bill would more heavily impact the counties; seemed "heavy handed, illogical and confusing" of the presumptive statute (K.S.A. 8-1005) remained in place; have a detrimental effect on juries; and suggested changing the presumptive statute before lowering the BAC, Attachment No. 7.

Chairman Barr appointed a subcommittee to address concerns with HB 2388: Representative Aylward, Chairman and Representatives Jenkins, Jones, Sebelius and Sprague.

The meeting adjourned at 3:27 p.m. The next meeting of the committee is March 15, 1989, 1:30 p.m. in Room 526-S.

March 14, 1989
Sponsoring on H.B. 2228
.05 Blood Alcohol

House Federal & State Affairs Committee
Richard Taylor
KANSANS FOR LIFE AT ITS BEST!

"Alcohol is a drug. It is the No. 1 drug of abuse in our society. Its only close rival is tobacco."
JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

"Alcohol continues to be the drug most associated with crime, violence, auto accidents, marital problems and child abuse."
Dr. Walter Menninger, Topeka

Three years ago, the American Medical Association assembled 50 years of research and called upon states to make it illegal for drivers to have a blood alcohol content higher than .05%. Because the brain is full of blood, BAC also means BRAIN ALCOHOL CONTENT.

Alcohol in the brain makes the drinker feel good by dulling and depressing brain functions. It is a well known fact that fears and frustrations, worry and anxiety, feelings of inferiority and insecurity are wiped out by alcohol. But this drug dulled brain makes a driver deadly because it fails to acknowledge when such driver is left of center, or going too fast, or should make a decision to hit the brakes.

In 1951, the ROTARIAN MAGAZINE carried an article on WHAT TWO DRINKS WILL DO TO YOUR DRIVING. Sweden's Caroline Institute found that a BAC of .049 caused driving ability to be impaired an average of 41.8%. A Toronto study of 919 drivers concluded that alcohol became a factor in causing auto crashes at concentrations as low as .03% BAC.

DON'T DRINK BEFORE YOU DRIVE is being heard through the land. That would mean .00% BAC. HB 2228 is a reasonable compromise between .00 and .10. Because we could not understand why the Kansas Legislature had not been called upon to pass .05, last Summer letters were sent to all candidates with research asking for their support. 39 elected House members and 11 elected Senators said they would support .05. A large number were undecided until they heard the testimony. That was no problem. After all, who could oppose a law that required persons to drink less before driving?

But we were in for a great surprise. Groups that claim to be concerned about the drinking driver have worked behind the scenes for a NO vote. We have done our best to answer their objections.

POINT O FIVE TO TOO LOW A THRESHOLD, IT IS TOO RADICAL. Sweden, Norway, Finland, Yugoslavia, The Netherlands and other nations have been at .05 for many years. Highway deaths in those countries caused by drinking drivers is around 5%, in the United States around 50%. Nothing is too radical for those who are serious about getting the deadly drinking driver off the road. We have MADD, SADD, and RID. Those opposed to .05 need to form a new group - SODD. Soft On Drinking Drivers.

DUI PROSECUTORS ARE NOT IN FAVOR OF .05. I phoned District Attorney Gene Olander in Topeka on this issue. He said prosecutors have no opposition whatever to this bill, but their organization voted to remain neutral. They will accept legislative leadership in this matter. Will you choose to exercise leadership or will you take the easy way out and say, "Kansas can not do what other states have not yet done"?

.05 CAN NOT BE ENFORCED. The federal government has ordered truck and bus drivers to be found guilty of DUI if their blood alcohol content is .04% or more. How will .04 be enforced if .05 can not be enforced? Truck and bus drivers are better trained than the average auto driver. If they are dangerous at .04, the level for average drivers ought to be lower.

JAILS WILL OVERFLOW WITH DUI CONVICTIONS. The vast majority of persons make a good effort to obey the law. At .05 the concerned drinker will say after two drinks, "I better quit and spend time with non-alcoholic drinks and food before driving so I will not even come close to .05." Prevention, not punishment, is the goal of .05. After two drinks, the average person is still able to exercise fairly good judgment. After more drinking, the brain is unable to make a responsible decision to quit drinking. Persons who think they can drink quite a bit and not go over .10 often drink too much because their alcohol dulled brain does not make a decision to quit. Persons guilty of DUI never intended to drink that much. This bill should keep people out of the county jail, not add to the load.

LAW ENFORCEMENT OFFICERS CAN VISUALLY SPOT MOST PERSONS WHO ARE .10, BUT CAN NOT SPOT PERSONS WHO ARE .05 OR MORE. This bill will close the loophole that now allows drivers to go free if their BAC is under .10. Current law does provide for conviction of DUI if under .10, but all sorts of things must be proven and that takes lots of time and energy. In many and most cases, charges are not filed if a person is under .10 BAC. Law enforcement officers might not go out looking for persons with .05 BAC, but if a driver has been involved in a crash or is suspected of being at .10 and tests below .10, HB 2228 will not allow that driver to go free as currently takes place.

FIRST YOU NEED TO GENERATE PUBLIC SUPPORT FOR .05. The attached petitions and editorials give you a small sample of public support. Representative Amos took a poll of his Johnson County District and found 65.15% supported .05.

.05 WILL MAKE CONVICTIONS MORE DIFFICULT. How can that be when the only change in current law is to substitute .05 for .10? Nothing else needs to be proven under current law except .10 BAC. Nothing else needs to be proven under HB 2228 except .05 BAC. Convictions under this new law should be no more difficult than under the old.

ONE BEER WILL PUT YOU OVER .05. If you weigh around 70 pounds, one beer would put you near .05, but most drivers weigh more than that. .05 BAC in a 70 pound driver makes that person just as deadly as .05 BAC in a 200 pound person.

MORE DRIVERS WILL REFUSE TO TAKE THE TEST FOR FEAR OF BEING OVER .05. Drivers today refuse to take the test for fear of being over .10, so nothing is changed. Under current law, a driver who believes he is under .10, gladly takes the test, and if under .10, usually nothing happens. If this same driver is concerned he might be over .05 and that causes him to refuse to take the test, he will become subject to administrative revocation and made painfully aware that he should drink less in the future before driving.

MANHATTAN POLICE ARE NOT IN FAVOR OF .05 BECAUSE IT TAKES ABOUT THE SAME AMOUNT OF DRINKING TO REACH .05 AS IT DOES TO REACH .10. It will take twice as much drinking for any person of any body weight to dilute the blood with enough alcohol to register .10 BAC as it will to register .05 BAC. I phoned Col. Les Bieler, who is head of the Riley County Police Department, while the Director is away. Col. Bieler said he supported .05 and they would contact lawmakers from their area and ask for support of HB 2228. (Please look at the charts)

WE SHOULD WAIT FOR THE NEW FEDERAL STUDY THAT WILL DETERMINE AT WHAT BLOOD ALCOHOL LEVEL A DRIVER IS IMPAIRED. We have 50 years of research now. Concerned citizens worked hard for years to raise the 3.2 beer drinking age in Kansas from 18 to 21. Finally the federal government forced the issue. Some lawmakers complained loud and long because Washington forced this on the states. Now some of those same lawmakers are saying we should wait until the federal government forces .05 on Kansas.

A study by the British Medical Research Council indicated that field of vision for a driver fell off 30% with a blood alcohol concentration of .055. This reduction of visual field makes it more difficult for drivers to see potential hazards on either side.

A National Transportation Safety Board study found that a driver's likelihood of causing a highway crash increased measurably at .04. At .06 the risk was four times greater. At .08 it was six times as great. At .10 it was about eight times greater.

Two groups are not supporting HB 2228:

1. Those who want to permit persons to enjoy increased good drug feelings that come with more drinking than .05 allows are opposed to this bill.
2. Those who make money selling the drug are not supporting the bill because they want to allow drivers to drink more than .05 will permit.

Abraham Lincoln said liquor has many defenders, but no defense. It seems .10 has many defenders, but no defense. HB 2228 makes one change in current Kansas law. PERSONS ARE PERMITTED TO DRINK LESS BEFORE DRIVING.

1. If you want persons to drink less before driving, vote YES.
2. If you want drivers to drink more than .05 allows, vote NO.
3. If you are undecided, vote to send it to the House floor. Give all House members the right to vote on HB 2228, the most important drinking driver issue to come before the legislature because it strikes at the heart of the matter-DRINKING BEFORE DRIVING.

The alcoholic beverage industry has promoted KNOW YOUR LIMITS and KNOW WHEN TO SAY WHEN campaigns. Charts distributed indicate a driver is safe so long as BAC is under .10% That is also the perception of the public. They have confused the legal limit with a safe driving limit.

Please vote for HB 2228 and send a message loud and clear to every person in Kansas!
DRINK LESS BEFORE DRIVING OR CHOOSE A DESIGNATED DRIVER.

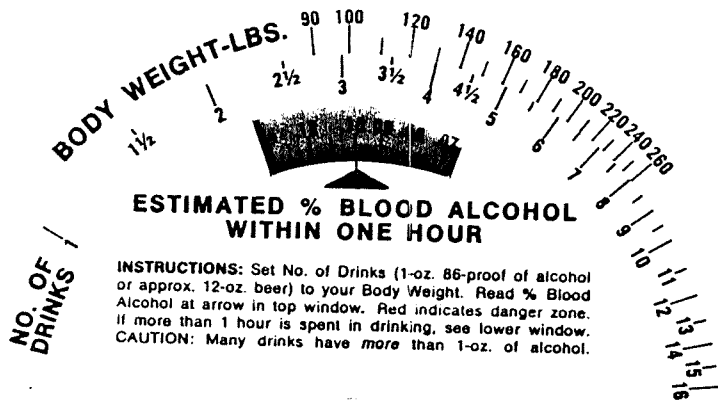
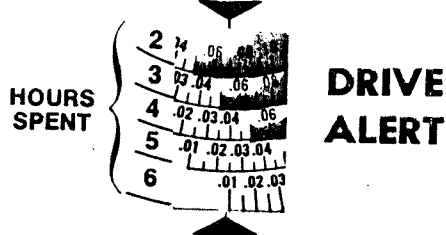


Chart is set to indicate number of drinks and body weight to produce a BAC of .10 within one hour.

I weigh 200 pounds so could have had 6+ drinks and still be under .10 within one hour.

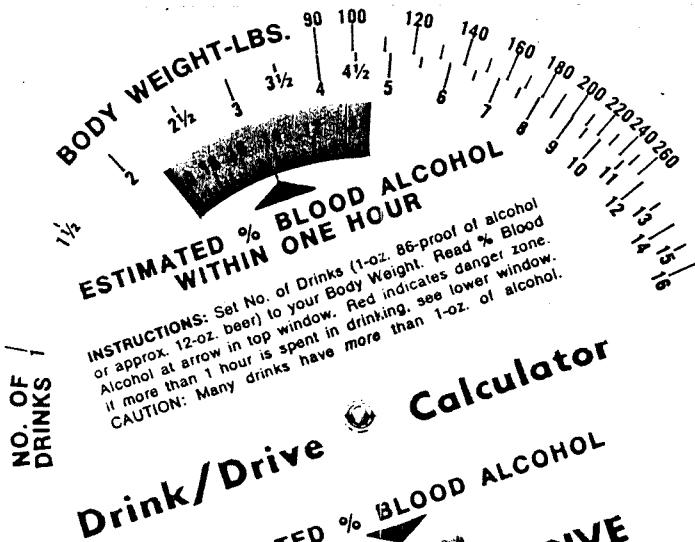
Drink/Drive Calculator

ESTIMATED % BLOOD ALCOHOL



.10% is legally considered under the influence in Kansas

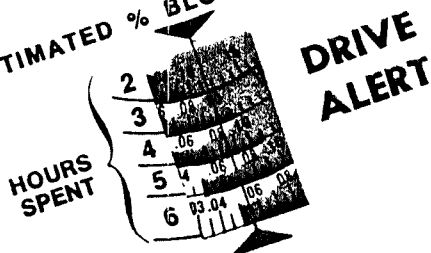
SAFETY DEPARTMENT
Topeka, Kansas



The law permits a blood alcohol test taken up to two hours after driver is picked up. Chart is set to indicate number of drinks and body weight to produce a BAC of .10 with 3 hours spent. (1 hour spent drinking and 2 hours spent waiting.)

I weigh 200 pounds so could have had 9 drinks and still be under .10.

ESTIMATED % BLOOD ALCOHOL



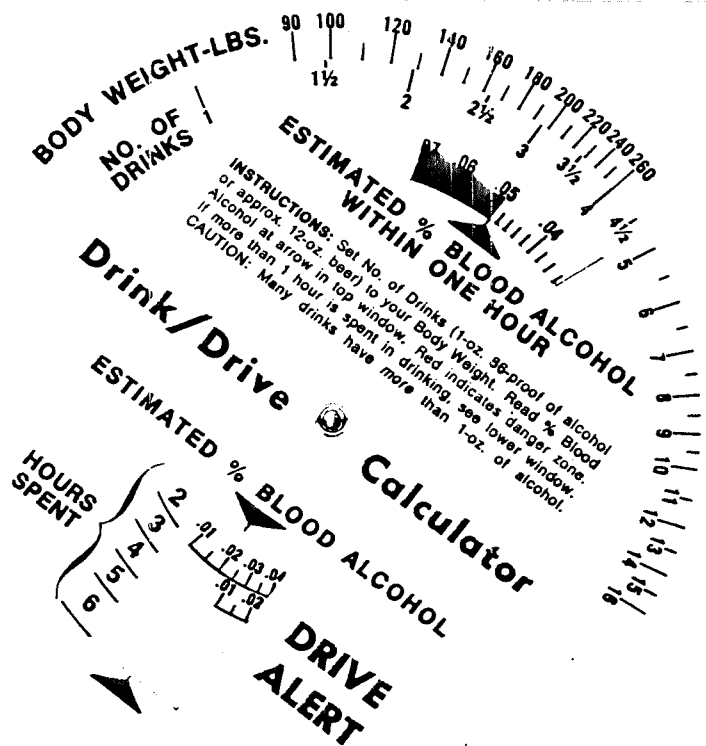
Under current law, a 200 pound person could have had 6 or 9 drinks and still be legal.

.05

Chart is set to indicate number of drinks and body weight to produce a BAC of .05 within one hour.

I weigh 200 pounds so could have had three+ drinks and still be under .05 within one hour.

3 hours spent would give me a BAC of near zero.



.10% is legally considered under the influence in Kansas

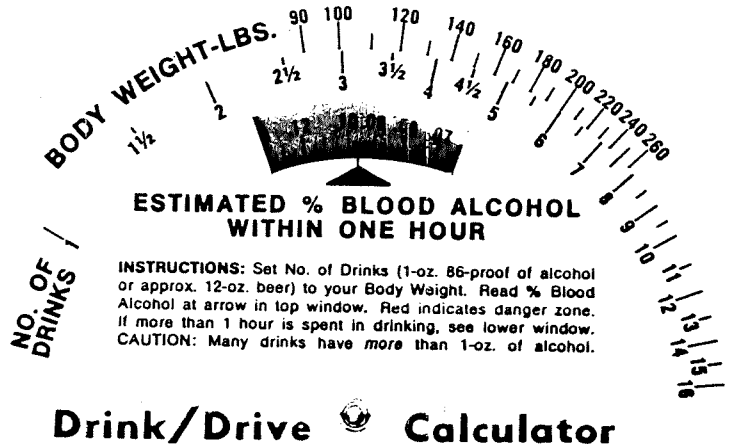
SAFETY DEPARTMENT
Topeka, Kansas

The law permits a blood alcohol test taken up to two hours after driver is picked up. Chart is set to indicate number of drinks and body weight to produce a BAC of .05 with 3 hours spent. (1 hour spent drinking and 2 hours spent waiting.)

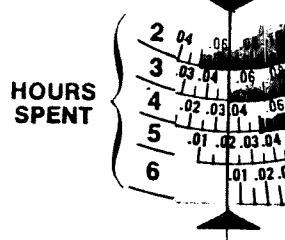
I weigh 200 pounds so could have had 6 drinks and still be under .05.

With .05, a 200 pound person could have had 3 or 6 drinks and still be legal.

Under current law, a 150 pound person who spends 3 hours at a cocktail party, is picked up, and has the test taken up to 2 hours later, could have had 8 drinks and still be at .10 BAC. (150 pounds, 8 drinks, 5 hours, .10 BAC) Under this new law that person could have had only 6 drinks.



ESTIMATED % BLOOD ALCOHOL



DRIVE ALERT

GEORGE NEAVOLL
Editorial Page Editor

Editorials

Sober driving

Tough blood limit, safer roads

THE criminal most likely to kill the average American isn't a knife-wielding psychopath, but a drunken driver. Indeed, 23,632 people died in alcohol-related traffic accidents last year, or 51 percent of all U.S. motor vehicle fatalities.

The good news is that the 1987 figures represent a drop from the previous year in the number of people killed in crashes where alcohol was a factor.

According to the national Centers for Disease Control, the major reasons for fewer alcohol-connected deaths are the enactment of tougher drunk driving laws, increased awareness of the problem and the 21-year-old drinking age in all states.

Also indicating that moderation is catching on, the National Highway Traffic Safety Administration reported last week that the percentage of fatal accidents involving people above the .10 blood-alcohol standard declined from 46 percent in 1982 to 40 percent in 1987.

In other words, the campaign against drunken drivers is working. Lives are being saved. People are learning not to mix drinking and driving.

Based on such success, it's time to take the next big step against drunken drivers — lower the blood-alcohol standard used to determine whether a person is legally intoxicated from the current .10 to .05. Reducing the standard would persuade many "social" drinkers not to assume the added risk of another cocktail or beer at a party, and it would be a strong deterrent against taking a chance on the road.

The group Kansans for Life at Its Best! wants the 1989 Legislature to lower the blood-alcohol level. If enacted, the .05 standard would enhance Kansas' image as one of the most enlightened states in the nation on drunk driving laws.

Although he has not committed himself to the lower standard, Gov. Mike Hayden recently won praise from the National Commission Against Drunk Driving for his efforts on the issue. Mr. Hayden was cited specifically for helping pass a package of laws last legislative session that toughen drunk driving penalties and provide for the automatic loss of license for drivers who fail or refuse to take alcohol tests.

Kansas would be a national leader in adopting the .05 standard, but the rule has proved successful in numerous foreign countries. In most of those nations, people simply don't drink and then get behind the wheel. The threat of punishment has made people more responsible in their drinking, and the number of alcohol-related traffic deaths has declined.

The .05 standard, however, need not be a party pooper. Although the effects of alcohol on individuals vary according to body type and personality, a 160-pound person who had consumed two drinks normally would be well under the limit.

Drunken driving is a senseless, selfish act. Kansans should not tolerate the drunken motorist who jeopardizes the lives of himself and others. Lowering the blood-alcohol standard would give many drinkers a greater incentive to act responsibly.

Back, Bus Drivers Face Tougher Rule On Drunk Driving

By G WALL STREET JOURNAL Staff Reporter
— 1988

WASHINGTON—Truck and bus drivers will be classified as drunk drivers if their blood-alcohol level is 0.04%, rather than the 0.1% rating set by most states, the Transportation Department announced.

The rule, which takes effect Oct. 27, will apply to interstate and intrastate bus and truck drivers. "A tighter standard is justified," Transportation Secretary Jim Burnley said, "because of the larger size of the vehicles involved and the fact that they are driven far more miles than automobiles."

The new regulation will strengthen current rules that prohibit commercial drivers from consuming alcohol while on duty or for four hours before beginning work. If a driver is found to have any trace of alcohol, he or she could be put out of service for 24 hours. A one-year suspension would result from a blood alcohol level of 0.04% or more.

The regulations cover drivers of vehicles with a gross vehicle-weight rating of more than 26,001 pounds, any vehicle required to be placarded while carrying hazardous materials, and any vehicle designed to transport more than 15 persons, including the driver.

The number game

Hutchinson News August 27, 88

The Rev. Richard Taylor had his work cut out for him years ago when he took on sin.

Now, he's working on mathematics. And you know what kind of problems Kansans have with math.

Rev. Taylor, however, is on the side of the angels in his latest cause. He'll need the help of every one of the angels. Again.

He formally announced his latest campaign with letters to the governor, all candidates for the legislature, and newspapers. He urged them all to join with him in changing the state's legal definition of intoxication, by making drivers legally drunk if their blood-alcohol level is .05 percent, instead of the present .1 percent.

"If we're really serious about the alcohol-impaired driver, the drinking driver, this is it," Taylor said. "We're going to work hard on this. This is the big one."

No American state has lowered the level of official drunkenness to .05 from the more common .1 level. The Rev. Taylor's proposal would require not only that Kansas "get serious" about highway drunks, but that it become a leader. Kansas has tried to avoid both seriousness and leadership in this fight.

The Rev. Taylor is right. The campaign should be undertaken.

But even if he were to be successful, this would not be the "big one," as he describes it.

Kansas judges have been unwilling to get tough with drunken drivers at the existing drunk-coddling levels.

The "big one" in the drunken driving campaign is to kick the drunks-coddling judges off the bench, and replace them with judges who show they understand the seriousness of the slaughter of 25,000 Americans each year, and the maiming of thousands more.

Why not?

Ottawa Herald Aug. 27, 1988

Richard Taylor, president of Kansans for Life At Its Best! and a longtime lobbyist at the Kansas Legislature, has proposed a giant step.

He wants to reduce the blood alcohol content requirements for driving while intoxicated from .10 percent to .05 percent.

It would be, he says, a giant step forward for highway safety. He proposed amending KSA 8-1567 to read:

"No person shall operate or attempt to operate any vehicle within this state while the alcohol concentration in the person's blood or breath, at the time or within two hours after the person operated or attempted to operate the vehicle, is .05 or more."

Taylor points out that both The American Medical Association and the National Council on Alcoholism have called on every state to make it a crime to operate a motor vehicle with a blood alcohol level of .05 or more.

Taylor reports that, generally, a 160-pound person who has just had two drinks would be well below .05, and would be below the limit after two hours following four drinks.

What constitutes a drink? One 12-ounce can of 3.2 beer, one four-ounce glass of 12 percent wine or a mixed drink with one ounce of 96 proof distilled spirits. Each of these drinks contains the equivalent of a half ounce of absolute alcohol.

According to Taylor, the .05 measure is already used in many other nations, and it is lower yet in others.

Taylor who has long championed efforts to combat the misuse of alcohol, has mailed his proposal, in the form of a resolution, to every candidate for the Kansas Senate and House.

Why they would oppose such a move, we cannot say. But those who do should be required to explain why someone with more than two drinks in their system should be allowed to get behind the wheel.

WHAT TWO DRINKS WILL DO TO YOUR DRIVING

faster driving you can hold your speed down. By realizing that it normally produces false confidence you can guard against taking chances. You can't lessen alcohol's impairment of vision or slowing of your reactions, but you can consciously try to avoid situations in which quick reactions are imperative. Alcohol makes it harder to concentrate; when you're the driver, withdraw from the conversation; when you're a passenger, don't talk to the driver.

2. *Use your intelligence in pre-spotting hazards.* Obviously, driving on heavy-traffic highways or over long distances after a couple of drinks is quite different from driving a few blocks over quiet streets or a few miles on country roads. Make it a rule never to drive on a main highway, or in tough traffic, or for long distances, unless there's an interval

of roughly an hour for every drink you've had. If that means cutting down or doing without the drinks, cut down or do without them.

3. *Don't stop for a quick one on your drive home from work.* This is the worst time to mix drinking and driving — you're tired, your stomach is empty, hence alcohol has more impact. There are many authentic cases of accidents caused by one drink.

4. *Don't encourage guests who are driving home to have "one for the road."*

5. *For special occasions involving drinking and unavoidable traffic hazards, arrange to have a nondrinker drive you, or go home by cab.*

Perhaps we can't fully solve the problem of drinking drivers. But we can and must adopt a realistic attitude toward a real menace.

Reprinted for and distributed by Preferred Risk Mutual Insurance Co., 1111 Ashworth Road, West Des Moines, Iowa 50265.

"This article which appeared in the October 1951 issue of The Reader's Digest is as timely today as it was then. The facts have not changed. They have been substantiated by many other studies and statistics...and the tragic toll of people killed in accidents involving drinking drivers is now more than 25,000 per year."

REPRINTED FROM THE OCTOBER 1951 ISSUE OF THE READER'S DIGEST
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A
Reader's Digest
REPRINT

What Two Drinks Will Do to Your Driving

Condensed from *The Rotarian*

Don Wharton

EVERYONE KNOWS that heavy drinking makes for irresponsible, reckless driving. But Dr. Leonard Goldberg, of Sweden's Carolinc Institute, wanted to know about the effects on driving of light drinking — just a few beers or highballs. To find out, he tested 37 skilled drivers, aged 20 to 45, most of them instructors at driving schools.

Each man drove as fast as he could through six road tests constructed to measure a variety of driving accomplishments and designed to strain the driver's attention and produce some fatigue. The drivers were clocked over the course and then split into two groups: one to drink, the other to serve as a control. Each driver in the drinking group was given either three or four bottles of beer or sufficient Swedish

A greater menace than the drunken driver is the drinking driver

brännvin to equal three or four ounces of 90-proof whisky — about the same as two good highballs. This wasn't enough alcohol to produce any symptoms of intoxication such as disturbance of gait or slurring of speech. Actually, it created an alcohol concentration in their blood averaging only .049 percent. In the United States, a concentration of not more than .05 percent is legal proof of being sober; in most states three times that much, .15 percent, is required for a driver to be prosecuted for intoxication.

Now came the second run through the tests. Dr. Goldberg reported

The Rotarian (October, '51), copyright 1951 by Rotary International,
35 E. Wacker Drive, Chicago 1, Ill.

that in many instances the impairment in the driving was obvious. Self-confidence went up, judgment down, attention lagged. One driver, trying to back the wheels of the steering side onto a seven-inch-wide plank, missed, tried it again 15 times without changing his technique.

The drivers in the drinking group (all were accustomed to moderate drinking) took longer to make their second run than their first, although they now had the advantage of familiarity with the tests and the feel of the car. In contrast, Dr. Goldberg's control group — the drivers who did not drink between first and second runs — shortened their driving time almost 20 percent. Dr. Goldberg concluded that even a slight amount of alcohol "caused a deterioration of between 25 and 30 percent in the driving performance of expert drivers." And on the three tests most closely corresponding to actual driving, ability was impaired on the average by 41.8 percent.

Many motorists claim they drive better after two or three drinks. Science shows this is pure nonsense — the motorist *feels* he drives better, because alcohol removes his inhibitions and blunts his self-criticisms — for the same reason a drinker thinks his jokes are funnier. But the belief prevails, probably encouraged by laws defining .05 percent alcohol as "sober." Actually, the question is not whether a driver is "sober" but whether his driving ability has been impaired by drink, regardless of how little.

A sociologist experienced with alcohol problems told me that society would be better off if the term "drunken driver" had never been coined. By focusing attention on "drunken" drivers, who are relatively rare, it whitewashes "drinking" drivers, who are almost numberless. A study of traffic around Evanston, Ill., showed that for every "drunken" driver there were about 30 who had been drinking. A report on 17,000 traffic accidents in Michigan reveals that about three times as many accidents were caused by drivers who "had been drinking" as by those actually "under the influence."

As shown by Goldberg's tests, laws acquitting drivers who don't have alcohol concentrations of .05 percent, and requiring additional evidence to prosecute a person when chemical tests show his alcohol concentration is between .05 percent and .15 percent, have no relation to reality. This was confirmed last year by a study in Toronto of 919 drivers involved in personal-injury accidents. The researchers dug into the details of each accident, pinning down the role of mechanical failures, road hazards and driving errors. They concluded that alcohol became a factor in causing accidents at concentrations as low as .03 percent — which can result from one beer or cocktail.

More startling evidence comes from Motorförarna, a Swedish insurance company writing "traffic insurance" solely for nondrinking motorists. Motorförarna has been in

business 18 years, now has over 7000 policyholders. Its record over 14 years compared with those of 30 other Swedish companies indicated that Motorförarna had to pay in losses per vehicle 38 percent less than the average of the other companies. And the number of claims per 100 vehicles was 37 percent less. Since by no means all of the policyholders in these other companies were drinking drivers, alcohol had to play a tremendous role to create the difference between the two groups.

How does alcohol do that?

1. *It slows down reactions.* "The average man after one large whisky," according to New Zealand's Road Code, "will take about 15 percent longer than usual to depress his brake or swing his wheel in an emergency."

2. *It creates false confidence.* New Zealand's Road Code put this neatly: "A little alcohol has the double effect of making him drive worse and believe he is driving better."

3. *It impairs concentration, dulls judgment.* Alcohol makes drivers talk more and causes their attention to be more easily diverted.

4. *It affects vision.* Dr. Goldberg conducted laboratory tests which showed that moderate drinking caused a 32 percent deterioration in vision. "Alcohol has the same effect on vision," he concluded, "as driving with sunglasses in twilight or darkness; a stronger illumination is needed for distinguishing objects and dimly lit objects will not be distinguished at

all; when a person is dazzled by a sharp light it takes a longer time before he can see clearly again." A British ophthalmologist found that alcohol reduced peripheral vision — the capacity to see out of the "corner of the eye" and spot vehicles coming from side roads or pedestrians stepping off curbs.

The problem of the drinking driver can't be solved simply by writing new laws. Those now on the books can't even prevent drunken driving. Neither can it be solved by such neat little slogans as "If you drive, don't drink. If you drink, don't drive." Obviously, it is all right to drive after drinking if the alcohol has disappeared from your system. Dr. Leon Greenberg, director of Yale's Center of Alcohol Studies, says that to be sure of avoiding impairment one must wait half an hour after one drink (highball, cocktail, bottle of beer), two hours after two drinks, four hours after three, six hours after four, eight hours after five.

There are millions of us, reasonable and intelligent people, whose normal social life includes some drinking outside our own homes. Many of us will neither abstain nor wait three or four hours before starting home — yet we want to respect this new evidence. What can we do about it?

If you fit into this group, here are some things you can do:

1. *Familiarize yourself with alcohol's effect on driving.* By recognizing that alcohol produces a tendency to

HP 2033, by Rep. Everhart, A petition requesting you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales and to all measures that promote sales of our most abused drug, signed by W. E. [unclear] and 26 others from the Topeka area.

HP 2034, by Rep. Everhart, A petition requesting you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales and to all measures that promote sales of our most abused drug, signed by Frances I. Wood and 24 others from the Topeka area.

HP 2035, by Rep. Gatlin, A petition requesting support for efforts to restrict gambling and sale and use of alcohol, signed by Melvin Carman and 7 others from the St. Francis area.

HP 2036, by Rep. Goossen, A petition supporting .05 alcoholic concentration legislation and limited parimutuel gambling, signed by Arthur Schrag and 14 others of the McPherson area.

HP 2038, by Rep. Braden, A petition requesting that you say YES to .05 and to limited parimutuel gambling and that you JUST SAY NO to Sunday carry out 3.2 beer sales, to strong beer and wine sales in grocery stores, to price and brand advertising and to all measures that promote sales of our most abused drug, signed by Eldon Thorman and 25 others from Clay Center.

HP 2039, by Rep. Rezac, A petition requesting that you say YES to .05 and to limited parimutuel gambling and that you JUST SAY NO to Sunday carry out 3.2 beer sales, to strong beer and wine sales in grocery stores, to price and brand advertising and to all measures that promote sales of our most abused drug, signed by Iver Swenson and 21 others from the Alta Vista area.

HP 2040, by Rep. Samuelson, A petition supporting the tightening of the Kansas corporate farm law to protect our family farm base, signed by Floyd G. Bartel and 25 others from the Newton area.

HP 2041, by Rep. Gatlin, A petition encouraging support for a parental rights bill, signed by Tom Anderson and 97 others from the Oberlin area.

HP 2042, by Rep. Flottman, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, NO to strong beer and wine sales in grocery stores, NO to price and brand advertising, NO to all measures that promote sales of our most abused drug, signed by Mary J. Stuckey and 34 others from the Winfield area.

HP 2043, by Rep. Flottman, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, NO to strong beer and wine sales in grocery stores, NO to price and brand advertising, NO to all measures that promote sales of our most abused drug, signed by Michael Day and 13 others from Winfield.

HP 2044, by Rep. Flottman, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, NO to strong beer and wine sales in grocery stores, NO to price and brand advertising, NO to all measures that promote sales of our most abused drug, signed by Gladys Clark and 9 others from Winfield.

HP 2045, by Rep. Campbell, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, NO to strong beer and wine sales in grocery stores, NO to price and brand advertising, NO to all measures that promote sales of our most abused drug, signed by Grace H. Jones and 19 others of Oak Hill, Miltonvale and area.

HP 2046, by Rep. Bryant, A petition supporting .05 alcoholic concentration in the breath or blood, signed by Emanuel Comer and 20 others of the Belleville area.

HP 2047, by Rep. Bryant, A petition supporting .05 level for alcoholic concentration in the breath or blood, signed by Ernest Mikerell and 8 others from the Republic area.

HP 2048, by Rep. Flower, A petition requesting limited parimutuel gambling and requesting No Sunday carry out 3.2 beer sales, NO strong beer and wine sales in grocery stores, and NO price and brand advertising, signed by Nellie Scott and 9 others from McLouth.

HP 2049, by Rep. Flower, A petition requesting limited parimutuel gambling and requesting No Sunday carry out 3.2 beer sales, NO strong beer and wine sales in grocery stores and NO price and brand advertising, signed by Chester Shrader and 34 others from McLouth and Tonganoxie.

HP 2051, by Rep. Dean, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Vera Unruh and 87 others from the Wichita area.

HP 2052, by Rep. Chronister, A petition expressing support for .05 and for limited parimutuel gambling and expressing opposition to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Mrs. S. E. Kimberlin and 25 others from Yates Center and Chanute.

HP 2053, by Rep. Bryant, A petition urging YES to .05 level of alcoholic concentration in breath or blood, signed by David Walters and 15 others of the Belleville area.

HP 2054, by Rep. Bryant, A petition supporting tightening Kansas corporate farm law to protect our family farm base, signed by Henry Strnad and 20 others from the Munden area.

HP 2055, by Rep. Shumway, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Rev. Paul Winkler and 10 citizens of Ottawa.

HP 2056, by Rep. Shumway, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Richard Ecord and 43 citizens of Ottawa and Franklin County.

HP 2057, by Rep. Shumway, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Roberta Hughes and 5 citizens of Ottawa and Franklin County.

HP 2058, by Rep. Shumway, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Ernie Watkins and 22 citizens of Ottawa.

HP 2059, by Rep. Shumway, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Shirley L. Everett and 10 citizens of Ottawa and Franklin County.

HP 2060, by Rep. Shumway, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Paul Archer and 29 citizens of Ottawa and Franklin County.

HP 2061, by Rep. Shumway, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Mrs. Carroll B. Wells and 35 citizens of Ottawa.

HP 2062, by Rep. Shumway, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by William R. Weber and 29 citizens of Ottawa and Franklin County.

HP 2063, by Rep. Shumway, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Norma L. Walburn and 28 citizens of Ottawa.

HP 2064, by Rep. Shumway, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Cecil E. Dunkin and 16 citizens of Ottawa and Franklin County.

HP 2065, by Rep. Solbach, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Jessie Randtke and 13 citizens of Lawrence and Douglas County.

HP 2066, by Rep. Whiteman, A petition opposing Sunday carry out 3.2 beer sales and strong beer and wine sales in grocery stores, signed by Phyllis Morgan and 33 others from Hutchinson.

PRESENTATION OF PETITIONS

The following petitions were presented and filed:

HP 2067, by Rep. Littlejohn, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Sally Kuder and 23 others from Stockton.

HP 2068, by Rep. Baker, A petition affirming that the Kansas corporate farm law should, at a minimum, remain unchanged or be strengthened to prevent further vertical integration of livestock production, signed by Del Jacobsen and 27 others from Hays and surrounding area.

HP 2069, by Rep. Baker, A petition supporting the tightening of the Kansas corporate farm law to protect our family farm base, signed by Don Sailors and 33 others from the Erie area.

HP 2070, by Rep. Gregory, A petition supporting the \$2.4 billion 10-year Kansas comprehensive plan for better highway maintenance and improvement of existing highway, including improvements of U.S. 69 and 54, signed by Bill Pollock and 40 others from the Fort Scott area.

HP 2071, by Rep. Gregory, A petition supporting tightening the Kansas corporate farm law to protect our family farm base, signed by Andrew Boggs and 19 others from the Farlington area.

HP 2072, by Rep. Gatlin, A petition encouraging support for a parental rights bill, signed by Lyn Reynolds and 21 others from the Oberlin area.

HP 2073, by Rep. Mollenkamp, A petition favoring tort reform and/or an applicable constitutional amendment to maintain a quality level of medical care for our state population, signed by Fern Bennett and 38 others from the 118th District.

HP 2074, by Rep. Littlejohn, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Wava Hickert and 9 others from the Norton area.

HP 2075, by Rep. Shore, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Grace Kilgore and 16 others from Johnson.

HP 2076, by Rep. Whiteman, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Rev. Stanley Cover and 59 others from Hutchinson.

HP 2077, by Rep. Shumway, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Evelyn D. Bond and 24 citizens from Williamsburg and Franklin County.

HP 2078, by Rep. Littlejohn, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Leslie Togle and 33 others from the Plainville area.

HP 2079, by Rep. Bowden, A petition requesting a YES vote to change the blood alcohol level to .05 and to limited parimutuel gambling and to request a NO vote to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Pearl Wolf and 15 others from the Sedgwick area.

HP 2080, by Rep. Reinert, A petition requesting that you say YES to .05 and limited parimutuel gambling, NO to Sunday 3.2 beer, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Bertha Preston and 38 others from Sublette.

HP 2081, by Rep. Reinert, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Oliver Wright and 32 others from the Sublette area.

HP 2082, by Rep. Shumway, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Willa Henderson and 8 citizens from Ottawa.

HP 2083, by Rep. Roenbaugh, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Everett Sprier and 15 others from the Rozel area.

HP 2084, by Rep. Shumway, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Esther Lambertson and 32 citizens of Ottawa and Franklin County.

HP 2085, by Rep. Lucas, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Katherine Lear and 10 others from Brown and Doniphan Counties.

HP 2086, by Rep. Lucas, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Gordon Hinde and 19 others from Brown and Doniphan counties.

HP 2087, by Rep. Green, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Mabel Reynolds and 81 others from ElDorado and area.

HP 2088, by Rep. Harder, A petition requesting that you say YES to .05, NO to Sunday carry out and strong beer and wine sales in grocery stores, quick shops, service stations and marinas, NO on strong beer and wine sales and NO on price brand advertising by liquor stores, signed by Stan Cover and 62 others from Hutchinson.

HP 2089, by Rep. Campbell, A petition supporting legislation to alleviate the problem of high malpractice premiums threatening to drive many physicians out of the state, signed by Jean Frakes and 1,142 others from Delphos, Bennington, Minneapolis and area.

HP 2090, by Rep. Roper, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Harold Kidder and 39 others from the Girard area.

HP 2091, by Rep. Flottman, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Rex Findley and 34 others of the Tisdale United Methodist Church at Winfield.

HP 2092, by Rep. Flottman, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Debbie Moon and 7 others from Winfield.

HP 2093, by Rep. Snowbarger, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Mary Ellen Long and 19 others from Olathe.

HP 2094, by Rep. Braden, A petition requesting that you say YES to .05 and to limited parimutuel gambling and JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Wayne F. Phillip and 8 others from the McLouth area.

HP 2095, by Rep. Baker, A petition supporting the tightening of the Kansas corporate farm law to protect our family farm base, signed by Dorothy Myers and 22 others from the Marquette and Windom area.

HP 2096, by Rep. Brown, A petition requesting the Kansas legislature and the Governor of the State of Kansas to amend and modify the existing Kansas bingo law, signed by Roger C. Hart and approximately 1,275 others from the Olathe area.

HALL OF THE HOUSE OF REPRESENTATIVES,
TOPEKA, KAN., Thursday, March 9, 1989—9:00 a.m.

PRESENTATION OF PETITIONS

The following petitions were presented and filed:

HP 2097, by Rep. Rezac, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Gladys L. Winters and 15 others from the Onaga area.

HP 2098, by Rep. Hensley, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Mary L. Hartman and 72 others from the Topeka area.

HP 2099, by Rep. Hensley, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Kenneth Jones and 22 others from the Topeka area.

HP 2100, by Rep. Turnquist, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Esther A Beckert and 20 others from the Salina area.

HP 2101, by Rep. Hensley, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by R. Roy Keller, and 32 others from the Topeka area.

HP 2102, by Rep. Bowden, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Wesley Koontz and 14 others from the Goddard area.

HP 2103 by Rep. Francisco, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Dorothy L. Logan, and 12 others from the Wichita area.

HP 2104, by Rep. Roenbaugh, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Jimmie Keas and 24 others from the Larned area.

HP 2105, by Rep. Fry, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Evalena J. Hoyt and 89 other citizens of Lyons.

HP 2106, by Rep. Eckert, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Jennie Miller and 3 others from the Holton area.

HP 2107, by Rep. Eckert, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Vicki Whitaker and 7 others from the Holton area.

HP 2108, by Rep. Sughrue, a petition agreeing that Kansas should reappraise the Classification Amendment. With completed assessed valuations in hand, the state should study classification before allowing the amendment to go into effect. We agree with Kansans Reappraising Classification that a moratorium should be placed on classification and reappraisal, signed by Alberta T. Young and 17 others from the Dodge City area.

HP 2109, by Rep. Littlejohn, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Bonnie Rosenberg and 18 others from Phillipsburg W.C.T.U.

HP 2110, by Rep. Schauf, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by J. C. Hinds and 18 others from the Mulvane area.

HP 2111, by Rep. Campbell. A petition supporting legislation to alleviate the high malpractice premiums, signed by Michael Wedel and 93 others from Minneapolis and surrounding area.

HP 2112, by Rep. Reinhardt, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by May Fortenberry and 9 others from Thayer.

HP 2113, by Rep. Rezac, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Lowell Wendland and 8 others from Westmoreland.

HP 2114, by Rep. Fry, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Ralph K. Helmer and 17 other concerned citizens from Lyons.

HP 2115, by Rep. Holmes, A petition requesting that you say YES to .05 and to limited parimutuel gambling, JUST SAY NO to Sunday carry out 3.2 beer sales, strong beer and wine sales in grocery stores, price and brand advertising and to all measures that promote sales of our most abused drug, signed by Ruth Sinclair, and 18 others from Plains.

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Alcohol and the Driver

Council on Scientific Affairs

Richard E. Taylor, Jr.
Kansas For Life at Its Best
Box 888
Topeka, Kansas 66601

Scientific investigations have produced 50 years of accumulated evidence showing a direct relationship between increasing blood alcohol concentration (BAC) in drivers and increasing risk of a motor vehicle crash. There is scientific consensus that alcohol causes deterioration of driving skills beginning at 0.05% BAC or even lower, and progressively serious impairment at higher BACs. Drivers aged 16 to 24 years have the highest representation of all age groups in alcohol-related road crashes; young drivers involved in alcohol-related fatal crashes have lower average BACs than older drivers. Alcohol impairs driving skills by its effects on the central nervous system, acting like a general anesthetic. It renders slower and less efficient both information acquisition and information processing, making divided-attention tasks such as steering and braking more difficult to carry out without error. The influence of alcohol on emotions and attitudes may be a crash risk factor related to driving style in addition to driving skill. Biologic variability among humans produces substantial differences in alcohol influence and alcohol tolerance, making virtually useless any attempts to fix a "safe" drinking level for drivers. The American Medical Association supports a policy recommending (1) public education urging drivers not to drink, (2) adoption by all states of 0.05% BAC as per se evidence of alcohol-impaired driving, (3) 21 years as the legal drinking age in all states, (4) adoption by all states of administrative driver's license suspension in driving-under-the-influence cases, and (5) encouragement for the automobile industry to develop a safety module that thwarts operation of a motor vehicle by an intoxicated person.

(JAMA 1986;255:522-527)

THREE resolutions relating to alcohol and driving were referred to the Board of Trustees at the 1984 Annual Meeting of the House of Delegates.

From the Council on Scientific Affairs, Division of Personal and Public Health Policy, American Medical Association, Chicago.

Report A of the Council on Scientific Affairs, adopted by the House of Delegates of the American Medical Association of the Annual Meeting, June 1984.

This report is not intended to be construed or to serve as a standard of medical care. Standards of medical care are determined on the basis of all of the facts and circumstances involved in an individual case and are subject to change as scientific knowledge and technology advance and patterns of practice evolve. This report reflects the views of the scientific literature as of June 1984.

Reprint requests to Division of Personal and Public Health Policy, Council on Scientific Affairs, American Medical Association, 535 N Dearborn St, Chicago, IL 60610 (John C. Ballin, PhD).

The House requested that a comprehensive report on alcohol and its effects be prepared for the 1985 Annual Meeting.

Resolution 18 called for the American Medical Association (AMA) to study methodology intended to deter the use of an automobile by an intoxicated person. Resolution 64 asked the

See also pp 450 and 529.

AMA to urge Americans to refrain from driving under the influence of alcohol, asked the AMA to conduct an education campaign on this subject, and asked the AMA to support mandatory suspension of a driver's license

for one year for any conviction for a moving violation if any alcohol is found in the driver's blood. Resolution 83 urged an AMA study of recent legislation among the states on driving while impaired, with incorporation of the effective elements into model legislation for distribution to the membership.

In addressing the concerns cited in the resolutions, reviews were undertaken of current literature on (1) the relationship between blood alcohol levels and driver impairment, (2) scientific issues regarding the reliability of methods to test blood alcohol levels in drivers, and (3) alcohol-impaired driving countermeasures.

Epidemiology of Alcohol in Road Crashes

Studies carried out in the United States and other developed nations since the 1930s indicate a strong, direct relationship between increasing blood alcohol concentration (BAC) in a motor vehicle driver and increasing risk of his involvement in a road crash.^{1,2}

A driver's relative risk of having a road crash shows a dramatic rise as

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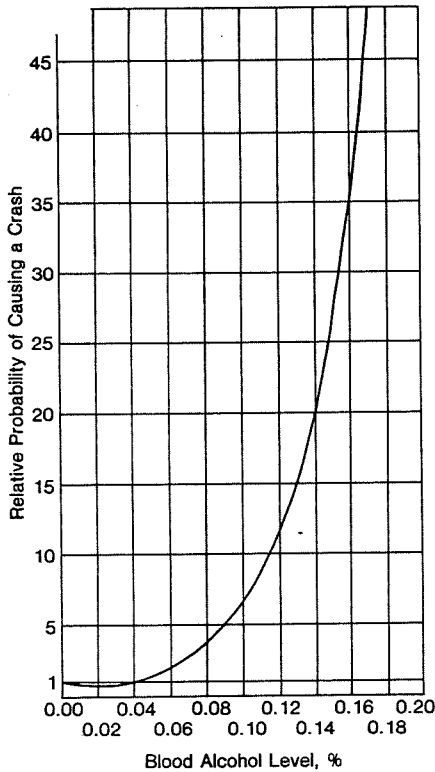


Fig 1.—Relative probability of causing crash rises with rising blood alcohol levels.

the driver's BAC increases (Figs 1 and 2).^{3,4} Alcohol-impaired drivers are believed to be responsible for 25% to 35% of all crashes causing serious injury and 6% of all crashes. In single-vehicle crashes, 55% to 65% of fatally injured drivers have BACs of 0.10% or greater.³

In most states of the United States, a BAC of 0.10% is the legal definition of being under the influence of alcohol for driving-under-the-influence (DUI) prosecution. Since 1960 the AMA has recommended that a blood alcohol level of 0.10% be accepted as prima facie evidence of being under the influence, a position that the Council on Scientific Affairs believes should be revised to a lower BAC in light of scientific evidence. Significant alcohol involvement in injury-causing road crashes begins at a driver BAC of 0.05%. In a recent review, Johnston⁵ concluded that 10% of drivers in crashes that cause property damage had BACs of 0.05% or greater and that 16% to 38% of drivers in injury-causing crashes had BACs of 0.05% or greater (Table 1).

In 1982, one in three persons killed in Australian road crashes and one in five injured had a BAC of 0.05% or

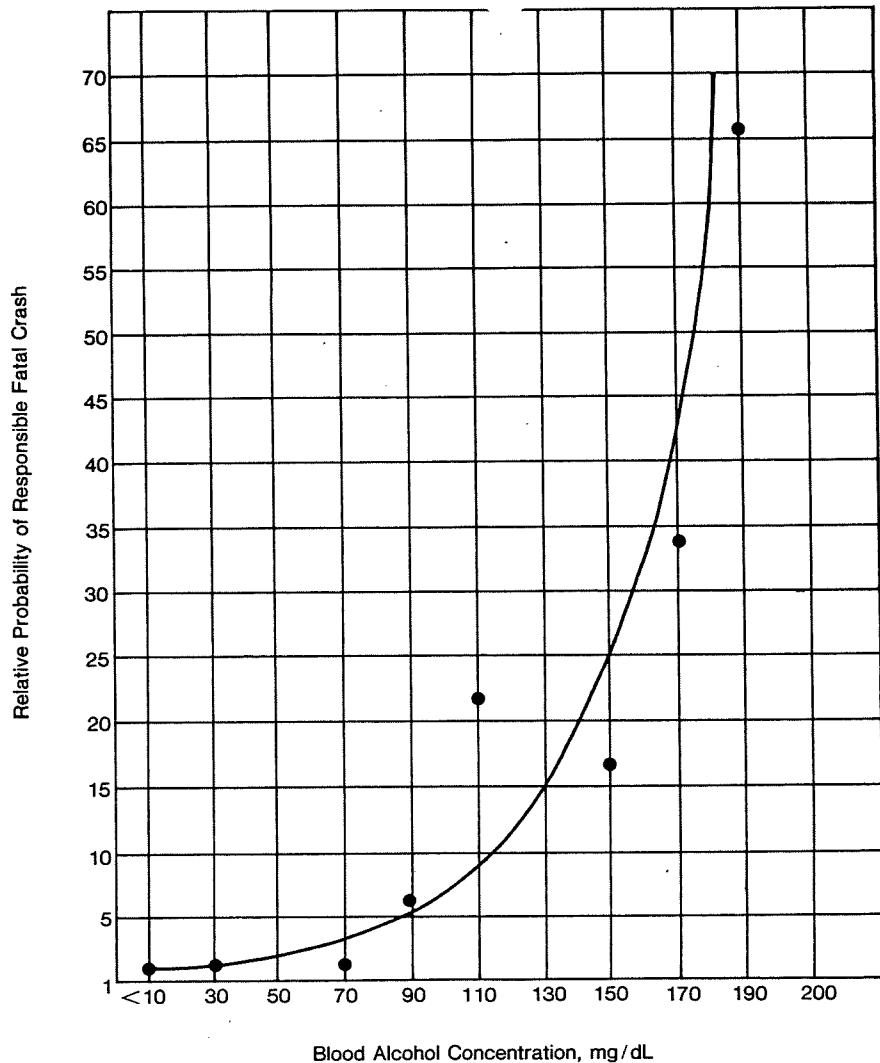


Fig 2.—Relative probability of being responsible for fatal crash rises with rising blood alcohol concentrations.

more.⁵ McDermott and Strong⁶ found that drivers with alcohol levels of 0.05% or more have a greatly increased risk of being involved in a road crash causing injury or death. In the first three years of compulsory BAC testing of adult road crash victims in Australia's Victoria State, 27.1% of 21,863 male driver casualties and 8.7% of 9,187 female driver casualties had BACs exceeding the Victoria legal limit of 0.05%. Soderstrom et al⁷ reported that of 413 road crash victims with measurable BACs at an emergency medical services center in Maryland, 91 had BACs of less than 0.10%.

Alcohol involvement in crashes had been called an epidemic, with little diminution in its proportions despite heightening of public consciousness by the activities of various communi-

ty groups and anti-drunk-driving campaigns.⁸ Ravages of the epidemic have been greater among the young. Fatal Accident Reporting System (FARS) data show, from 1977 to 1981, a steady increase in the overall proportion of measureable blood alcohol levels in drivers aged 16 to 25 years involved in fatal crashes.⁹ The authors believed the data to be more representative of patterns of alcohol use in that age group than improvement in BAC testing and reporting.

Drivers aged 16 to 19 years have the highest rate of alcohol-involved fatal crashes per unit of travel.⁸ Epidemiologic data from FARS also indicate over a number of years that younger drivers involved in fatal crashes have lower average BACs than older drivers.¹⁰ Previous reviews of biographical variables in alcohol-

Table 1.—Incidence of Blood Alcohol Concentrations of 50 mg/dL, by Crash Severity and Type of Road User			
Type of Road User	Crash Severity, %		
	Property Damage	Injury	Fatal
Driver	≈10	16-38	45-55
Passenger*	...	25	25-35
Motorcyclist	...	22-25	35
Pedestrian*	...	19-25	30

*Percentage shown is of those older than 14 years.

related crashes furnished the same finding.

The role of alcohol in crashes of teenage drivers also is indicated in FARS data for 1981 showing that twice as many with positive BACs were involved in single-vehicle crashes as opposed to multiple-vehicle fatal crashes. A driver in a single-vehicle accident is presumed responsible for his own crash. In the same data, five times more male than female teenage drivers were involved in single-vehicle fatal accidents, bearing out by trend if not by precise ratio another consistent biographical finding.⁹

Analysis of 1983 FARS data showed that 33% (17,764) of all drivers in fatal road crashes that year were 16 to 24 years old. Of that number, 38% (6,833) were alcohol involved, compared with 26% in all other age groups. Fatalities in road crashes involving drinking drivers aged 16 to 24 years numbered 7,784 in 1983, of whom 51% (3,992) were the drivers themselves.¹¹

A model developed by Simpson¹² (Fig 3) shows the relative risk by age group of having a fatal crash if drivers were impaired by BACs of 0.08% or greater. With the risk of a sober driver having a fatal crash set at 1, the risk for impaired 16- to 17-year-olds is 165.

Young drivers are overrepresented in crashes and also in alcohol-involved crashes when BACs are low to moderate. Overrepresentation may include exposure (miles driven) as a component. Overrepresentation at low BACs may be a function of younger drinkers having less alcohol tolerance than experienced drinkers and younger drivers having less experience than older drivers.¹⁰

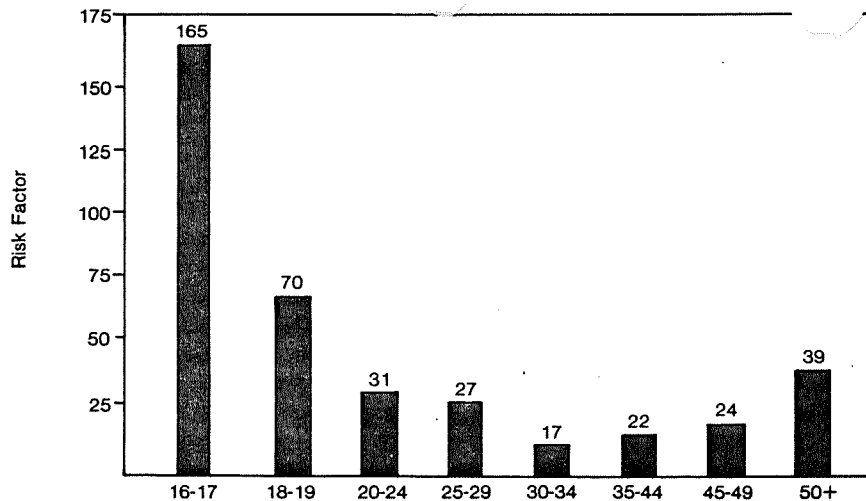


Fig 3.—Age group and risk of fatal collision if impaired.

The Effects of Alcohol

One effect of alcohol in road crashes is its contribution to enhancement of injury in alcohol-impaired victims. Prevention or limitation of trauma is less likely in alcohol-impaired drivers because they are less likely to use seat belts.^{13,14} Contrary to the popular belief in being "too drunk to get hurt," more alcohol-impaired crash victims suffer serious injury than sober victims.¹⁵ Alcohol complicates the physician's task of treating trauma: neurologic injury may be masked by drunkenness, and acute and/or chronic intoxication may be linked to a considerable range of metabolic disturbances, as well as to altered responses to anesthesia and alterations in host defenses against infection.⁷ Experimentally controlled injuries to laboratory animals result in lower survival rates for animals first given alcohol and more extensive intracranial hemorrhage in alcohol-impaired animals after experimental penetration of brain tissue.^{16,17}

The influence of alcohol related to driving behavior and driving skills is mediated through its effects on the central nervous system, similar to those of general anesthetic. Alcohol in small doses may cause performance of driving-related skills to fall off; in moderate to high amounts, alcohol diminishes performance across the board with general impairment of nervous function. Effects may vary with psychological profiles, tolerance to alcohol, and experience

with the drug.

Dose/weight charts may not be appropriate guides to drinking behavior.¹⁸ Biologic variability of response to alcohol has been demonstrated under controlled experimental conditions with both male and female subjects: in single-dose drinking tests the elapsed time from end of drinking to peak BAC varied from 14 to 138 minutes in one group, and in a follow-up study the same investigator found a 14-fold variation between absorption times in different subjects.^{19,20} Women achieve higher peak BACs than men when given identical weight-adjusted doses.

A review of seven studies spanning a 50-year period (Table 2) indicates that at BACs of up to 0.05%, 0% to 10% of persons were considered to be "drunk"; at levels of 0.05% to 0.10%, 14% to 68% of persons were considered to be "drunk"; and at levels of 0.10% to 0.15%, 83% to 97% were considered to be drunk.²¹

The deleterious effect of alcohol at BAC levels of 0.05% to 0.06% is seen in persons performing curve-negotiating "driving" tasks under laboratory conditions. Verhaegen et al²² concluded that at BACs between 0.05% and 0.06%, performance in information processing and curve-negotiation skill deteriorated in test subjects. Burns and Moskowitz²³ observed a 10% to 15% degree of impairment at BACs of 0.05% to 0.08% when subjects had to perform a divided-attention task of tracking and reaction.

Table 2.—Relation Between Blood Alcohol Level and Drunkenness

% of Persons Found to Be Drunk									Total Persons Examined	Investigator†
0.00-0.05*	0.051-0.10	0.101-0.15	0.151-0.20	0.201-0.25	0.251-0.30	0.301-0.35	0.351-0.40	0.401		
0	19	50	83	93	98	100	100	...	1,984	Widmark 221
2	38	93	97	99	100	100	950	Schwarz 195
10	18	47	83	90	95	96	93	100	1,000	Jetter 133
10	68	81	92	97	100	1,712	Andersen 9
0	46	50	92	100	100	100	100	100	140	Harger 111
0	14	69	90	94	94	100	100	100	100	Prag 186
7	25	49	85	93	97	98	100	99	750	Hine 123
4	32	62	89	95	98	99	99	100	6,594	...

*Percent weight by volume (0.05% w/v=50 mg/dL; 0.15% w/v=150 mg/dL) of blood alcohol.

†Numbers under names of investigators are reference citations in reference 35, source of Table 2.

Attwood et al²⁴ tested drivers on closed-course conditions and using a multivariate analysis technique found that drivers with BACs of 0.06% to 0.08% exhibited more variability than alcohol-free drivers in lane position, brake use, and steering controls. Impairment of judgment by alcohol was demonstrated at BACs as low as 0.04% when skilled bus drivers misjudged their ability to drive a vehicle through a space as much as 12 in narrower than the bus.²⁵

Johnston²⁶ states that many tests of alcohol use and skills relevant to driving show that both information acquisition and information processing are rendered slower and less efficient, and the ability to carry out a divided-attention task that requires intellectual time sharing is impaired. He hypothesizes that when impaired drivers enter curves, they devote so much attention to the steering task that other perception of cues related to road curvature suffers, and they fail to reduce speed adequately.

Chemical Tests for BAC

Determination of BAC is made directly by chemical testing of blood drawn from the subject or indirectly by testing of expired breath or urine. More and more, breath-alcohol analysis is performed for the purpose of determining the concentration of alcohol in breath, rather than for attempted conversion to blood-alcohol concentration. Other fluids and tissues may be tested but usually are not in the living subject; recently, there

has been a revival of interest in saliva-alcohol testing.

Laboratory methods for analysis of blood samples include (1) chemical reduction of acid dichromate, (2) enzymatic oxidation by alcohol dehydrogenase with colorimetric determination of NADH (the reduced form of nicotinamide - adenine - dinucleotide) conversion, and (3) gas-liquid chromatography. Choice of the method used by a laboratory may be influenced by the size and sophistication of the facility and the reliability of the method for confirmation of roadside breath analyses. All three methods have strengths and weaknesses, but gas chromatography is the most accurate and best suited for handling large numbers of samples. It also has the advantage of sensitivity to other aliphatic alcohols or volatile toxins that a suspect may have been ingesting with, or without, ethanol.²⁶

Breath analysis is by far the most common method of measuring BAC. The concentration of ethanol in one volume of blood is stated in most textbooks and highway safety regulations to be equivalent to that in 2,100 volumes of alveolar air.²⁷

Dubowski²⁸ challenges the 2,100:1 conversion factor on the basis of sophisticated chemical analyses of blood and breath alcohol. He and O'Neill place the mean alcohol partition-factor between blood and breath, in the postabsorptive phase in healthy adult males, at approximately 2,300:1, with a range of 1,797:1 to 2,763:1 for 95% of a population of 393

healthy adult men and a range of 1,555:1 to 3,005:1 for 99.7%. Quantitative breath-alcohol analyzers are all currently factory calibrated to a conversion factor of 2,100:1 to meet official guidelines of the National Highway Traffic Safety Administration. Dubowski questions whether the conversion of breath alcohol concentration to BAC should be retained for forensic purposes and recommends that breath alcohol concentration alone be used for statutory definition of DUI.

That the 2,100:1 ratio is too low has been raised as a possibility to explain why breath analysis values from one well-regarded instrument are on the average 10% to 15% lower than alcohol concentration in blood samples taken at the same time.²⁹

In a seven-month trial in London of three types of breath-testing instruments used in the United States, the breath-testing instruments tended to underread actual blood alcohol levels by 0 to 20 mg/dL in the BAC range of 0.05% to 0.10%.³⁰

The US National Highway Traffic Safety Administration publishes model specifications for the performance, calibration, and testing of breath alcohol testing devices to ensure their reliability.

DUI Countermeasures

Strengthening of state DUI laws has been a trend over the past several years.

State legislators are apparently recognizing that a growing national

consensus against driving under the influence must be backed by specific laws needed by police, courts, and licensing agencies to get alcohol-impaired drivers off the road.

The AMA in May 1982 issued to state and medical specialty societies a document titled "Drunk Driving Laws" and urged state medical associations to consider seeking enactment of legislation to strengthen DUI laws in their respective states.

The AMA House of Delegates at its 1983 Annual Meeting (Resolution 95, A-83) reaffirmed AMA policy to encourage each state medical society to seek and support legislation to raise the minimum drinking age to 21 years, and it urged all physicians to educate their patients about the dangers of alcohol abuse in general and operating a motor vehicle while under the influence of alcohol in particular.

Among the more visible and easily identified strengthening of state DUI laws is the replacement of "presumptive" by "per se" laws. The latter laws make it illegal in and of itself to drive with a BAC over certain specified limits. In states with "illegal per se" laws, proof of driving under the influence of alcohol is automatic when a properly administered test of the specified type shows the driver's BAC to be over a specified limit. Most states with illegal per se laws set the BAC limit at 0.10%, but the range among all such state laws is from 0.08% to 0.15%.

A variation on the illegal per se law is a two-step law adopted in some states: (1) illegal per se set at a specified BAC, and (2) presumption of driving under the influence set at a lower BAC, requiring supporting evidence other than breath or blood test for prosecution.

The Highway Users Federation recommends an illegal per se law as one provision in any driving legislative package. Provisions include (1) administrative driver's license suspension, whereby the license of any driver arrested for driving under the influence is suspended for a specified period, with harsh penalties imposed for driving while the license is suspended (the measure is aimed at the repeat offender); and (2) recording of all alcohol-related arrests, a provision meant to identify repeat offenders and particularly those whose alcohol-

related arrests are frequently plea bargained to a lesser charge not related to alcohol.

In reviewing the recent records of control measures, Waller³¹ identified two as being associated with positive results: (1) An increase in the age at which one can be issued a driver's license or can drink legally seems to have a positive effect in reducing the number of alcohol-related crashes by 16- and 17-year-olds. (2) License suspension or revocation is the most cost-effective countermeasure yet identified for reducing driving by drunk driving offenders. Arrest, trial, and imprisonment are far more expensive in public servant time and public funds. Revocation of a license for driving under the influence may be mandatory on conviction or may occur administratively upon evidence that the person committed the offense. Waller noted that several investigators have reported that one third to two thirds of persons with revoked licenses continued to drive while the revocation or suspension was in effect but were driving less often and more carefully; multiple DUI offenders who were suspended had better subsequent records than comparable convictees whose licenses were not suspended.

The impact of per se legislation upon deterrence of alcohol-impaired driving was unclear in four reviews of the data, according to Waller. A difficulty often encountered was the inability of the reviewer to separate the effect of per se laws from that of other countermeasures instituted at about the same time in the same states.³¹

Comparison of mandatory licensing sanctions with education and rehabilitation programs for DUI offenders in four states demonstrated clear superiority of the licensing sanctions in reducing DUI recidivism and subsequent crash involvement.³²

Research and Human-Related Risk Factors

Multidisciplinary investigations of driving and drinking are rare to non-existent. Multiple foci of research interest—eg, highway and auto safety, pharmacology, alcohol and substance abuse, trauma treatment, legislation, and regulation—have tended to operate without strong linkages.

On three occasions, in 1972, 1978, and 1983, large assemblies of North American investigators ranked human-related risk factors at or near the top of DUI research needs. In each instance, the group asked for multivariate studies that incorporate human-related variables of an attitudinal-personality nature and a long-term research strategy coordinated through some central organization.³³

Youthful driving and drinking is an area where research on multicausality seemed urgently warranted to investigators, in light of the peculiarly high risk of death and injury from alcohol-related crashes in this group.³⁴ Some suggestive research indicates that drinking and driving populations contain drinking/driving/crash-prone subpopulations in whom the influence of alcohol on emotions and attitudes may be an important causative factor.³⁵ The influence of alcohol on an emotionally charged driving style may be as important as its influence on driving skill.³⁰

Social and cultural factors that influence the magnitude, characteristics, and persistence of the drinking and driving problem are not yet defined. Whether sustained shifts in social norms related to drinking and driving can be brought about—as they were in relation to littering, smoking, and diet/fitness/heart disease—is a question yet to be answered.³⁶

Conclusions

1. Alcohol causes deterioration of driving skills beginning at 0.05% BAC (50 mg of ethanol per deciliter of blood) or even lower. Deterioration progresses rapidly with rising BAC to serious impairment of driving skills at BACs of 0.10% and above, according to scientific consensus.

2. Drivers with BACs of 0.05% to 0.10% are significantly represented in road crash statistics.

3. Drivers aged 16 to 21 years have the highest rate of alcohol-involved fatal crashes per mile, with lower average BACs than older drivers.

The Council on Scientific Affairs recommends that the AMA (1) direct public information and education against *any* drinking by drivers and encourage other organizations to do the same; (2) adopt a position sup-

poring a 0.05% BAC as per se illegal for driving and urge incorporation of that position into all state DUI laws; (3) reaffirm the position supporting 21 years as the legal drinking age, strong penalties for providing alcohol


to persons younger than 21 years, and stronger penalties for providing alcohol to drivers younger than 21 years; (4) urge adoption by all states of an administrative suspension or revocation of driver licenses after DUI con-

viction and mandatory revocation after a specified number of repeat offenses; (5) encourage automobile industry efforts to develop a safety module that thwarts operation of a car by an intoxicated person.

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TO: Members of the House Committee on Federal and State Affairs

FROM: David DePue
5708 SW 13th, Topeka, KS 66604 

DATE: March 13, 1989

SUBJECT: Urging your vote for HB 2228

Other proponents of this bill are presenting facts in support of lowering the legal driving limit of blood alcohol to .05. As a former administrator of a pilots training program, I have seen these research studies conducted. In a series of controlled tests, we administered an ounce of alcohol to veteran pilots and then had them fly a landing approach in a flight simulator. After a second ounce and a waiting period, they flew another simulator, then another. A plotted graph of their flight demonstrated loss of reaction time in judgement after the first to third ounce on all pilots. Pilots in the control group flew consistent landing approaches. Blood alcohol content of .05 will affect the skill and judgement of many drivers, .1 alcohol content is unreasonable.

My reason for being here is to ask you to help stop the killing of innocent people. My wife and I have lost 3 loved ones and nearly 2 more in four separate accidents. She lost her mother, father and sister to drunken drivers. I have a sister who is disabled and the only reason my brother is alive is because the drunk who hit him headon was driving a car while my brother was in a truck with 20 tons of gravel on board.

Please vote to protect these drivers and their possible victims.

SUMMARY OF TESTIMONY

Before the House Federal & State Affairs Committee

March 14, 1989

House Bill 2228

Presented by the Kansas Highway Patrol

(Lieutenant Bill Jacobs)

Appeared in Support

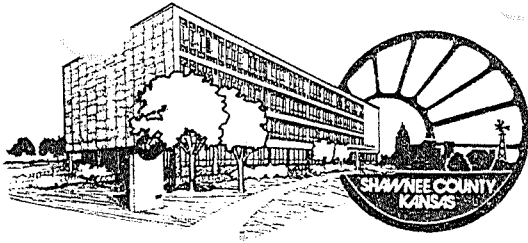
The Kansas Highway Patrol supports House Bill 2228.

House Bill 2228 would amend KSA 8-1567 to prohibit a person from operating or attempting to operate any vehicle within this state while the alcohol concentration in the person's blood or breath, at the time or within two hours after the operation or attempted operation, is .05% or more. The current statute sets that level at .10% and the amendment would reduce that level by one half.

Medical experts have stated many times that any alcohol in a person's system affects that person in a negative manner by reducing their reaction time and impairing their coordination.

The Kansas Highway Patrol would therefore support any legislation which would help make Kansas highways safer for the motoring public.

For the above stated reasons, the Kansas Highway Patrol would ask your favorable consideration of House Bill 2228.



Shawnee County Department of Corrections

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January 24, 1989

CITY

	DUI ARRESTS	DUI COMMITTMENTS			TOTAL COMMITTMENTS
		48 hours	5 days	90+days	
		1984	737	26	
1985	1078	38	80	16	134
1986	1241	72	91	24	187
1987	1403	97	132	30	259
1988	1559	189	130	26	345

COUNTY

	DUI ARRESTS	DUI COMMITTMENTS			TOTAL COMMITTMENTS
		48 hours	5 days	90+days	
		1984	262	33	
1985	212	42	62	24	128
1986	216	75	67	22	164
1987	274	52	94	32	178
1988	205	76	89	43	208

TESTIMONY

Federal and State Affairs Committee
Kansas State House of Representatives
March 14, 1989

HOUSE BILL NO. 2228

Mr. Chairperson and Members of the Committee:

I represent the Kansas Community Alcohol Safety Action Project Coordinators Association. We are not opposing or proposing this particular legislation, however, our organization of 27 members, has provided in excess of 9,000 DUI evaluations for the State of Kansas each calendar year since 1982. Those evaluations are made part of the pre-sentence report and the diversion recommendations to the Courts and the District Attorney prior to sentencing of the individual or placing him or her on diversion. We, in the past, have promoted highway safety and were very active in getting the legislation changed in 1982, which brought about a systems approach to the DUI problem in the State of Kansas. The systems approach consists of the law enforcement, prosecutor, the Judicial System and the education/rehabilitation system working as a team to arrest, convict, sentence and educate or rehabilitate DUI offenders in the State of Kansas. In accomplishing this we find that our alcohol related crashes are decreasing. In the past, prior to 1982, many DUI offenders went undetected. For those who were detected, chances are that they were allowed to resume their trip home after a warning from the arresting officer. If that person was charged, the policy of plea bargaining entered into through the prosecutor's office. Once a person got to Court, the DUI charge was probably reduced to a lesser and included charge of Reckless Driving. Even if the defendant was convicted, the Courts tended to treat him lightly with a minimum fine of \$100, some restrictions on his driving privileges and on some occasions offering education or rehabilitation for the offender.

Since 1982 we have seen a complete turn-about in the philosophy of all of the components of the Alcohol Safety Action Projects. The officers know now that if they make an arrest that they certainly will be prosecuted and in most case found guilty or granted diversion by the Court. In addition, the officers understand that those offenders will have to complete an alcohol and drug information program or a rehabilitation treatment in lieu of a certain amount of jail time and the return of their driving privileges in the State of Kansas. The financial cost to the offender in the State of Kansas at the present time is a minimum of \$310 to be paid to the sentencing Court plus the Court costs and any probation or diversion fees. In addition, the majority of those offenders are ordered to Alcohol Information School or treatment. The minimum cost for the Alcohol Information School is \$65 up to a maximum of \$125. In seven years the cost to the offender has risen over 300%. These are on first time offenses.

For second time offenders the cost goes up considerably and there are no driving privileges for a period of one year. For third time offenders the minimum cost is \$1,000 plus the usual \$110 fee, plus a minimum of 90 days in jail. That offender will not drive for at least one year and most likely for three years, under the laws of the State of Kansas.

Our organization is quite proud of our DUI laws and the changes we have

made in the past seven years. We have noticed a reduction in alcohol related deaths in the State which we feel is largely because of the changes in the law. We have noticed a large number of people who are seeking professional assistance for their alcohol and drug problems that probably would not have done so if not forced by the Courts to do so. In fact the State at this time is experiencing a severe shortage of indigent beds for those people through the Court system.

House Bill No. 2228 would reduce the alcohol concentration level from .10 to .05. This in essence means that anybody who has been operating a motor vehicle at .05 is guilty of DUI. Basically a person with a .05 who is experiencing impaired driving can be arrested and convicted by the Courts under the present law. What this law does is lower that threshold to .05 in which anybody who is operating a vehicle whether in a safe and sound manner or in an impaired manner is guilty of the charge of DUI.

This brings up the question of tolerance in each individual. Some people who drink on a regular basis can handle surprisingly large amounts of alcohol with very little impairment. However, for those people who are not accustomed to drinking; a little bit of booze will go a long way. Those people after a couple of beers or highballs may be very impaired and certainly if operating a motor vehicle would be noticed and consequently would be arrested by a law enforcement officer.

A test taken in the past several years in Los Angeles County by the Alcohol Safety Action Project, revealed impairment at .10 from an average of 17% impairment to 55% impairment. This was based on 30 individuals who had volunteered to participate in a driving experience. These individuals had demonstrated to the police officers in a classroom setting that they could function fairly well after having several drinks. One can see that a wide range of impairment existed in the study with variations of nearly 40%. This proves that alcohol may effect the impairment of physical coordination of one individual considerably more than it will another individual.

Researchers with Sweden's National Road and Safety Traffic Research Institute recently conducted an experiment with 22 volunteers who were classified as moderate drinkers. Their ages ranged from 19 to 38. The volunteers participated in a driving test and were measured on their ability to satisfactorily complete that test.

The researchers then threw a six hour party for those volunteers. The volunteers drank their fill of their favorite alcoholic beverage and were placed in bed at the Institute for a period of eight hours. At that time they were awakened and tested for the alcohol content of their blood level. Their average blood level after eight hours of sleep was .046 or about one-half of the present .10 level in the State of Kansas.

When each volunteers blood alcohol level dropped to zero the researchers ran them through the same course which they had satisfactorily completed prior to their party the day before. Most volunteers scored significantly worse in their efforts after the party than they did previous to the party. The tests also showed impaired driving abilities whether or not the volunteer felt hung-over. Even the stoutest of the subjects who stated they felt fine after a night of drinking, still had a 20% decrease in driving skills.

The question is, if we are to lower our BAC to .05, maybe we should lower

it to .00 and make it illegal to operate a motor vehicle after consuming alcoholic beverages in the State of Kansas.

In summary, our organization does not have the answers to what is best for the citizens of Kansas, but we are comfortable with our present law. We note that there are only four states out of the 50 who have a lower BAC than the State of Kansas. Those states which all have a .08 BAC are as follows - Maine, Utah, Idaho and Oregon.

Thank you for allowing me to appear here and I will attempt to answer any questions.

Respectfully,


Gene Johnson

Legislative Liaison

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Testimony on

HB 2228

The Kansas County and District Attorneys Association has taken no position on House Bill 2228, which would lower the blood alcohol content from .10% to .05% for a violation of K.S.A. 8-1567. As is apparent, opinions differ on the merits of this bill. From our own training, we have shown prosecutors that a person is clearly affected by ingestion of alcohol, even though their BAC is less than the present statutory limit of .10%. On the other hand, the impact of stepped-up DUI enforcement has fallen mainly on county government, in the increased case load in the courts and the crowding of county jails. The effect of this bill in reducing the amount of alcohol in the blood by half creates a fear of an even greater impact.

We agree with the advocates of this bill that as long as the legal limit remains at .10%, there is a perception by the driving public that anything below that is permissible, and the effect of this bill may alter that public perception. However, this attempt at altering public perception by lowering the threshold for criminal behavior is heavy-handed, illogical and confusing when the provisions of K.S.A. 8-1005 remain unchanged. That statute contains the presumption that a blood alcohol content of .10% is proof that a person is under the influence of alcohol. This statutory presumption has been around at least since 1955, when it was set at .15%, and the present level of .10% was established in 1970. The per se violation section of K.S.A. 8-1567 has only been on the books since 1985.

While confusion between the two provisions may cloud public perception, it also may have a more detrimental effect on juries. Presently, prosecutors may charge a DUI case in the alternative: as either driving under the influence, or driving with a BAC of .10%. When a jury is then instructed that if the defendant has a BAC of .10% the jury may only **presume** that the defendant is under the influence, while under the alternative charge, if the BAC is only .05% (as provided in this bill) the defendant may be **convicted** of DUI, the resulting confusion may discourage any finding of guilt beyond a reasonable doubt, which is the standard for a criminal conviction. Assuming a conviction is had, then there is also a good constitutional argument that the law lacks a rational basis and that the punishment is cruel and unusual.

The effect of this bill is that of putting the cart before the horse. If the Legislative determines that the decision to lower the legal BAC limit should be made, then the statutory presumption should be changed before the criminal statute is changed.

8-1005. Evidence; test results admissible in prosecutions; weight to be given evidence. Except as provided by K.S.A. 1987 Supp. 8-1012 and amendments thereto, in any criminal prosecution for violation of the laws of this state relating to operating or attempting to operate a motor vehicle while under the influence of alcohol or drugs, or both, or the commission of vehicular homicide or manslaughter while under the influence of alcohol or drugs, or both, or in any prosecution for a violation of a city ordinance relating to the operation or attempted operation of a motor vehicle while under the influence of alcohol or drugs, or both, evidence of the concentration of alcohol or drugs in the defendant's blood, urine, breath or other bodily substance may be admitted and shall give rise to the following:

(a) If the alcohol concentration is less than .10, that fact may be considered with other competent evidence to determine if the de-

defendant was under the influence of alcohol, or both alcohol and drugs.

(b) If the alcohol concentration is .10 or more, it shall be prima facie evidence that the defendant was under the influence of alcohol to a degree that renders the person incapable of driving safely.

(c) If there was present in the defendant's bodily substance any narcotic, hypnotic, somnifacient, stimulating or other drug which has the capacity to render the defendant incapable of safely driving a vehicle, that fact may be considered to determine if the defendant was under the influence of drugs, or both alcohol and drugs, to a degree that renders the defendant incapable of driving safely.

History: L. 1955, ch. 279, § 1; L. 1967, ch. 60, § 2; L. 1970, ch. 51, § 3; L. 1973, ch. 42, § 1; L. 1976, ch. 49, § 1; L. 1982, ch. 144, § 4; L. 1985, ch. 48, § 7; L. 1986, ch. 40, § 4; L. 1986, ch. 41, § 1; L. 1988, ch. 47, § 15; July 1.