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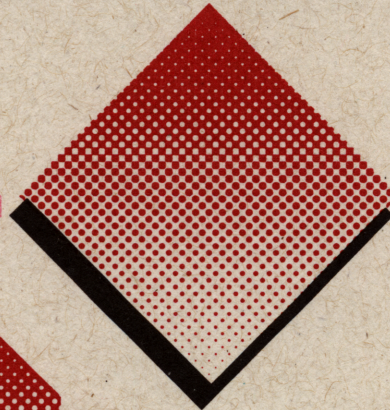
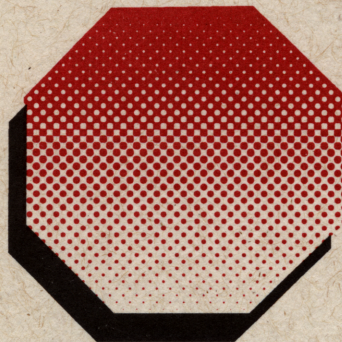


Alcohol and the Older Driver

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ALCOHOL AND THE OLDER DRIVER

INTRODUCTION

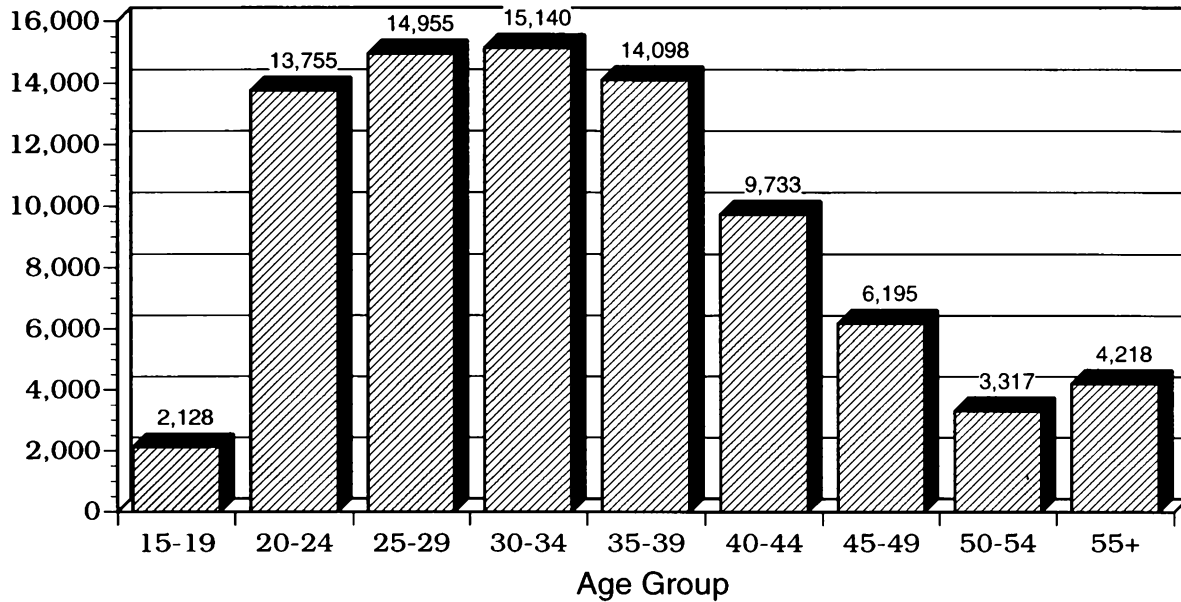
In recent years much attention has been focused upon driving problems created by the use of alcohol. Education, enforcement, and engineering efforts have been implemented in an attempt to deal with the problem. Limited emphasis has been directed toward possible problems encountered by older drivers, however. As the population in Texas and the United States becomes increasingly older, there is a specific need to prepare educational information focused on the mature driver.

NATURE OF THE PROBLEM

Population analysts state that Texas will have approximately 3.5 million licensed drivers over age 55 by the year 2000. The National Council on Alcohol Abuse and Alcoholism estimates that at least 10% of older adults abuse alcohol. It is estimated that 3 million American men and women over the age of 60 are affected by alcoholism. The Department of Public Safety statistics show that in 1991, 5,795 persons over the age of 55 were arrested for Driving Under the Influence (DUI) in Texas. Of that number, 60 DUI drivers were involved in fatal crashes.

Total Driving Under The Influence Arrests By Age Group

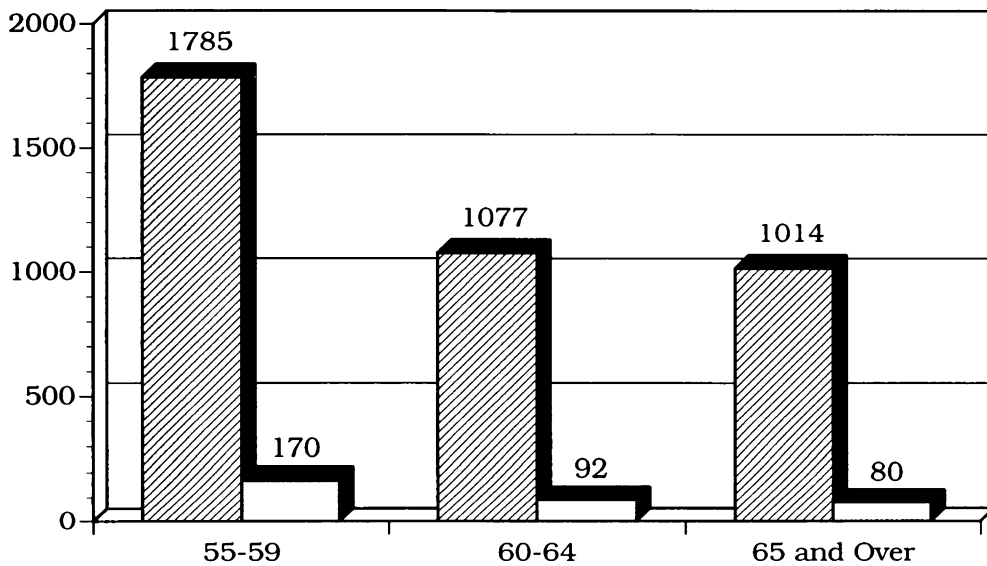
*Total DUI Arrests = 84,608



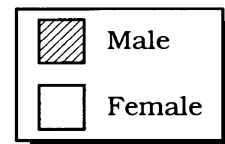
Source: DPS 1996 Uniform Crime Report Statistics

*Does not include 14 and under which account for 17 arrests

Elderly DUI Arrests By Age And Sex Total Arrests = 4,218



Source: DPS 1996 Uniform Crime Report Statistics



Older people who do not go to work, who live alone, and who rarely drive a car can keep their drinking hidden. The incidence of being arrested for DUI for an older person is very low partly because they drive very short distances or not at all. However, those older people who drink and drive are especially vulnerable to accidents because the skills needed for safe driving decline with age. For the same reason, older people who drink are particularly vulnerable to accidents as pedestrians.

While the older population drinks less than younger age groups, drinking problems are more common among older people than Americans realize. The number who have drinking problems is expected to increase as the number of older Americans increases. Since older women will account for the largest proportion of “aging America” a significant increase is anticipated in the number of older women with drinking problems. Health experts anticipate that many women in this age group, who may be widowed and live alone in coming years, may be at higher risk of alcohol abuse.

According to an article, *Older Drinkers: The “Hidden” Alcoholics*, published by the American Association of Retired Persons, the overall prevalence of drinking problems is lower in the later years. A phenomenon which has received little research is that of late-onset heavy drinking and alcoholism. While two-thirds of the drinking problems may be attributed to alcohol abuse earlier in life, about one-third of the new cases may be attributed to late onset. The late-onset heavy drinking may begin in response to stressful life experiences such as bereavement, poor health, economic changes, or retirement, and appears to be more frequent among persons of higher socioeconomic status. Because of generational differences in perceived social acceptability of drinking by older persons, they may be more reluctant than younger drinkers to admit to their true level of consumption and thus they may have a higher rate of denial of alcohol abuse.

Alcohol-related illness may be difficult to separate from other chronic illness and from side effects of medication. More appropriate indicators of alcohol problems among older persons might include housing problems, falls or accidents, poor nutrition, inadequate self-care, lack of physical exercise, and social isolation.

One-third of elderly suicides are people with alcohol problems. The loss of a close relationship is far more likely to lead to suicide among alcoholics than

among victims of depressive illness. The suicide rate is four times higher among older men than older women.

The increase in the older population, along with the increase in the number of alcohol abusers will have serious implications for future health care providers.

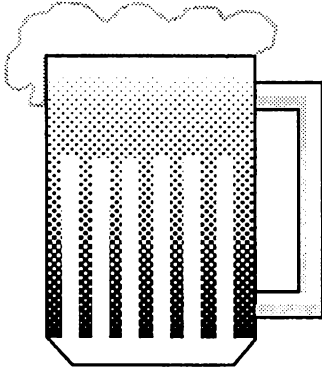
HEALTH EFFECTS OF ALCOHOL AND DRIVING

What should mature drivers know about alcohol in general and specifically about its effects on their driving? The basic answer is the same information all drivers need, plus any specific items which may be related to the aging process.

As with younger people, mature persons may choose from a wide range of alcoholic beverages. It is important to understand, however, that not all alcoholic beverages are the same in terms of alcoholic content. There is a common belief that a can of beer, a shot of whiskey, and other “standard” size drinks all contain an equal amount of alcohol. Unfortunately this is not the case. The differences in alcoholic content, while seemingly small, are important because of the potent nature of even a small amount of alcohol. A typical 12 oz. can of regular beer sold in Texas may have as much as 35% **MORE** pure alcohol in it than one shot of 80 proof whiskey. This difference is magnified when several drinks are consumed.

WHICH OF THE FOLLOWING DRINKS HAS THE HIGHEST ALCOHOL CONTENT?

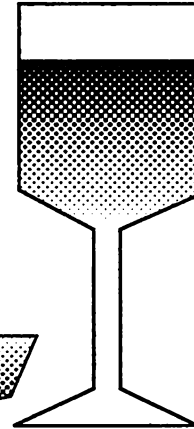
Beer
12 oz.



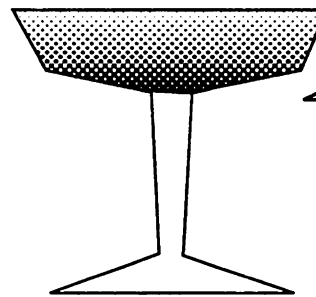
Wine Cooler
12 oz.



Wine
4 oz.



Whiskey
1 oz.



Margarita
2 oz.

The only way to compare drinks is to know two things:

A. Size of Drink (10 oz., 12 oz., 4 oz., etc.)

B. Alcohol Content of the Drink (4%, 12%, 40%, etc.)

If these two items are known, simple multiplication enables a person to determine the actual content of any beverage.

$$\begin{array}{r} 12 \text{ oz. Beer} \\ \times .045 \text{ (by volume)} \\ \hline = 0.54 \text{ oz. alcohol} \end{array}$$

$$\begin{array}{r} 12 \text{ oz. Wine Cooler} \\ \times .051 \\ \hline = 0.612 \text{ oz. alcohol} \end{array}$$

$$\begin{array}{r} 4 \text{ oz. Wine} \\ \times .12 \\ \hline = 0.48 \text{ oz. alcohol} \end{array}$$

$$\begin{array}{r} 1 \text{ oz. Whiskey} \\ \times .040 \\ \hline = 0.40 \text{ oz.} \end{array}$$

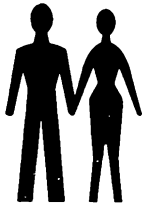
$$\begin{array}{r} 1.5 \text{ oz. tequila} \times .40 = 0.600 \text{ oz.} \\ + .5 \text{ oz. triple sec} \times .25 = 0.125 \text{ oz.} \\ \hline = 0.725 \text{ oz. alcohol} \end{array}$$

TIP:

KNOWING THIS INFORMATION CAN ASSIST A PERSON IN DETERMINING HOW MUCH ALCOHOL HE OR SHE CONSUMES!

FACTORS WHICH INFLUENCE BLOOD ALCOHOL CONCENTRATION (BAC)

The definition of Blood Alcohol Concentration is the relationship of alcohol to the body fluids. Blood alcohol concentration rises as a person consumes alcohol. A number of factors influence the level a person will reach.



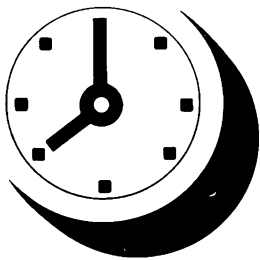
BODY WEIGHT: Larger persons have more blood, body fluid, and tissue in which to disperse alcohol and thus will have a lower BAC, on a given amount of alcohol than a smaller person.



SIZE OF THE DRINK: The larger the drink, the more pure alcohol it may contain.



STRENGTH OF THE DRINK: The higher the percentage of alcohol content, the higher a person's BAC.



TIME SPENT DRINKING: While the body begins to process alcohol very quickly after it enters the system, actual removal may take a long time. Thus a person who consumes a given quantity in a short period of time may achieve an elevated BAC very quickly.



FOOD: Food does not soak up or absorb alcohol, but may coat the lining of the stomach and slow up absorption by about one-third. Foods high in protein seem to be the most beneficial in slowing absorption.

ELIMINATION OF ALCOHOL FROM THE BODY

Alcohol is eliminated from the body through 8% breath, 2% sweat, and 90% liver. The average individual will reduce .015% BAC per hour. Just having one drink can take more than six hours before all alcohol leaves the body. Time is the most important factor in alcohol elimination. Depending on the amount of drinks and other factors, actual removal may take a very long time.

ALCOHOL AND MEDICATIONS

Older persons may face special risks of serious alcohol medicine interactions because of age-related metabolic changes and the high probability of multiple medication use.

Alcohol can increase the risks of a medication to a potentially dangerous level. In fact, drinking alcohol while taking medications compounds the effects. Well over 100 prescription and non-prescription medications may have negative side effects when mixed with alcohol. The chart on page 8 provides examples of these alcohol-medicine interactions. A variety of factors including the type of medicine, the dose, the amount of alcohol consumed, individual metabolism, and the timing of the medicine and alcohol consumption determine how alcohol will affect you. Alcohol makes some medicines work less effectively, therefore, you do not get their full benefit. Alcohol does not interact harmfully with all medicines.



Remember: Drinking alcohol while taking medications can compound the effects! Don't drink and drive!

ALCOHOL-MEDICINE INTERACTION CHART

MIXING ALCOHOL WITH:

CAN CAUSE:

Analgesic Pain Medication

(aspirin, such as Bayer, Empirin)
Ibuprofen (such as Advil, Motrin)

Stomach and intestinal
bleeding; Bleeding ulcers

Antidiabetic Agents

Chlorpropamide (such as
Diabinese)
Tolbutamide (such as Orinase)
Insulin (such as Humulin 70/30)

Altered control of
blood sugar, most
often hypoglycemia

Barbiturates

Secobarbital (such as Seconal)
Phenobarbital (such as Barbital)
Pentobarbital (such as Nembutal)

Greater sedative
effect, drowsiness,
confusion

Benzodiazepines

Alprazolam (such as Xanax)
Diazepam (such as Valium)
Triazolam (such as Halcion)

Greater sedative
effect, impaired
coordination (such
as driving ability)

Monoamine Oxidase (MAO) Inhibitors

Isocarboxazid (such as Marplan)
Phenelzine (such as Nardil)
Tranylcypromine (such as Parnate)

Certain alcoholic
beverages contain
tryamine that can
cause severe high
blood pressure that
may be fatal

**BE SAFE: ASK YOUR DOCTOR OR PHARMACIST WHAT CAN HAPPEN IF YOU MIX YOUR
MEDICINES WITH ALCOHOLIC SUBSTANCES. DON'T DRINK AND DRIVE!**

SOURCE: National Council on Patient Information and Education, Washington D.C.

THE RISK OF A MOTOR VEHICLE CRASH

As a driver's BAC increases, the risk of a crash increases. It is also more likely that not only will that driver be in a crash, but that he/she will be the cause of the crash. Most people arrested for DUI in Texas who take breath or blood tests have BAC's over 0.16%. Time of day is also a risk factor in a fatal crash. In Texas, more DUI accidents were recorded between 1 a.m. and 2 a.m. than any hour of the day. However, intoxicated drivers with a BAC of 0.10% or more were over 100 times more likely to be in a fatal accident at **any time** of the day than was a sober driver.

RISK OF DEATH IN SINGLE VEHICLE CRASHES AS BAC INCREASES

<u>BAC</u>	<u>INCREASED RISK OF DEATH</u>
0.02% - 0.04%	1 1/2 TIMES
0.05% - 0.09%	11 TIMES
0.10% - 0.14%	48 TIMES
0.15% & GREATER	380 TIMES

TEXAS TRAFFIC LAWS RELATING TO ALCOHOL

Any person who drives or operates a motor vehicle in a public place while intoxicated commits an offense punishable by fine, loss of license, and jail confinement.

“Public Place” means any place to which the public or a substantial group of the public has access and include, but is not limited to, streets, highways, and the common areas of schools, hospitals, apartment houses, office buildings, transport facilities, and shops.

A person commits an offense if the person consumes an alcoholic beverage while operating a motor vehicle in a public place and is observed doing so by a police officer. This offense is a Class C misdemeanor (fine of up to \$500).

DEFINITION OF INTOXICATION

Not having the normal use of mental or physical faculties by the reason of the introduction of alcohol, a controlled substance, a drug, or a combination of two or more of those substances into the body. This means that if a person has impaired ability because of alcohol or other drugs, a conviction for DUI is possible regardless of their blood alcohol concentration.

Having a blood alcohol concentration of 0.10% or more. This means that if a person is 0.10% or more, then intoxication is established. This is referred to as “intoxication per se.”

CHEMICAL TESTS FOR INTOXICATION

The basic provisions of the “Implied Consent” Law include:

- A. Person must operate a motor vehicle in a public place.
- B. Person must be arrested for some offense alleged to have been committed while operating a motor vehicle.

- C. Test may be of breath or blood at discretion of police.
- D. Refusal of test may be used in court as evidence.
- E. Person may take an additional test of his blood within two hours of arrest.
- G. Person may introduce in court the fact that he/she requested and was refused a test by police

ADMINISTRATIVE LICENSE REVOCATION (ALR)

Effective January 1, 1995: persons who fail (.10% or greater) a breath or blood test may lose their drivers license. This is a civil action separate from a DWI prosecution.

PENALTIES FOR DUI IN TEXAS

OFFENSE	Penalties		Loss of License
	Jail	Fine	
1st	72 hours to 180 days	up to \$2,000	90 days - one year
2nd	30 days to 1 year	up to \$4,000	180 days - two years
3rd	2 years to 10 years	up to \$10,000	180 days - two years

DUI REHABILITATION PROGRAM

In Texas, an individual who is arrested for DUI and takes probation, may take a state approved DUI education course. An individual is allowed completion of this course only one time to avoid loss of his/her drivers license. Most individuals will take this course on their first offense. The advantages are no loss of license and no jail time.

PREVENTION - REASONABLE ACTIONS TO TAKE

EDUCATION – Learn as much as possible about alcoholism.

CONTROL INTAKE – For some this may mean no alcohol, but all persons must control intake properly.

PLAN ACTIVITIES THAT DO NOT INCLUDE ALCOHOL – Join a senior center in your neighborhood, volunteer your talents with an organization to keep you busy, get a cat or dog that you can give attention to, join an exercise program, participate in a support group, etc.

DESIGNATED DRIVER – If one does have a drink, ensure that transportation to the individual's residence is provided by a sober, designated driver.



DRIVE SAFELY!

Don't Wreck Your Life!

Texas Department of Transportation

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