

TESTIMONY

Magnitude of Alcohol-Related
Mortality and Morbidity
Among U.S. College Students
Ages 18-24 and
Strategies for Prevention

U.S. Senate Committee on Governmental Affairs
May 15, 2002

Ralph Hingson, Sc.D.
Professor
Associate Dean for Research
Boston University School of Public Health

My name is Dr. Ralph Hingson. For the past three years I have participated in a Task Force of college presidents, researchers and students convened by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) to 1) review the magnitude and dimensions of college student drinking problems in the United States and 2) to explore what prevention and treatment strategies have been tested and found in scientific research to reduce those problems.

I would first like to review the methods and key findings from a paper I wrote that was published last month in the Journal of Studies on Alcohol entitled "Magnitude of Alcohol-Related Mortality and Morbidity Among U.S. College Students Ages 18-24". Then I will identify the major types of interventions demonstrated by scientific research to reduce alcohol problems among persons ages 18-24.

In our paper we sought to 1) determine the number of alcohol-related traffic and other unintentional injury deaths among 18-24 year old part time and full time college students and 2) estimate the numbers of 18-24 year old college students who engaged in a variety of behaviors after drinking that pose health risks. Prior survey research studies had identified the percentage of college student respondents who engage in alcohol-related risky behaviors but did not provide estimates of the numbers of students who engage in these behaviors.

To derive these estimates we examined multiple data sources.

- 1) The U.S. Department of Transportation Fatality Analysis Reporting System that examines the number and ages of alcohol-related traffic deaths in the United States.
- 2) The mortality files of the U.S. Centers for Disease Control, which annually records the numbers and ages of unintentional injury deaths in the United States.
- 3) The U.S. Department of Education data on the numbers of 18-24 year old undergraduate college students.
- 4) U.S. Census Bureau data on the total number of 18-24 year olds residing in the United States.
- 5) A review published in 1999 in the Annals of Emergency Medicine by Smith et al. of alcohol involvement in unintentional injury deaths identified in over 300 medical examiner studies published in scientific literature over the 20 year period from 1975-1995.
- 6) The 1995 CDC National College Health Risk Behavior Survey of 2 and 4-year college students. Of 4,838 students surveyed 3,077 were ages 18-24.
- 7) The 1999 Harvard School of Public Health College Alcohol Survey of 12,317 full time four-year students ages 18-24 at 128 U.S. colleges and universities.
- 8) The 1999 National Household Survey of Drug Abuse sponsored by the Substance Abuse and Mental Health Administration. This survey interviewed 66,706 persons in a representative sample of the U.S. population including 19,438 respondents ages 18-24 of whom 6,930 were enrolled in college.

The article that details the methods of these surveys is included in your packet from NIAAA.

We estimate based on the information contained in these data sources that in 1998 there were approximately 1,400 alcohol-related unintentional injury deaths among U.S. college students of which 1100 were alcohol-related traffic deaths.

Further, when we examined the percentages of college students 18-24 who indicated they experienced alcohol-related health problems or engaged in alcohol-related behaviors that pose health risks and then multiplied those percentages by the populations the surveys represent, we found that among college students ages 18-24, 3.3 million drank at least 5 drinks one or more times in the past month.

In addition, in the past year:

2.1 million drove under the influence of alcohol

500,000 were injured because of drinking

400,000 had unprotected sex because of drinking

100,000 had sexual intercourse when they were so intoxicated they were unable to give consent

Further, the drinking college students not only put their own health at risk:

Over 600,00 college students were hit or assaulted by another drinking college student,

and 70,000 were a victim of a sexual assault or date rape by another drinking college student.

Even though a higher percentage of college students drink heavily and drive under the influence of alcohol than same age persons not in college, only 1/3 of 18-24 year olds are enrolled in college. Thus, while there are 1400 18-24 year old college students who die from alcohol-related unintentional injuries, 3200 18-24 year olds not in college also die from these injuries. While 2.1 million college students ages 18-24 drive after drinking each year, so too do 3.3 million non-college 18-24 year olds.

The numbers of individuals who die from alcohol-related injury and who engage in risky alcohol-related behaviors quite frankly exceeded my expectations, and prompt me to reach two immediate conclusions. First, we must improve our data systems on alcohol-related deaths. Every unnatural death should be tested for alcohol and whether this individual was a college student should be recorded. No matter how conservative our estimation procedures, direct test results would be preferable. One of the reasons we have made progress in reducing alcohol-related traffic deaths over the past two decades is because most fatally injured drivers are tested for alcohol and we can measure whether the number of alcohol-related traffic deaths declines in states that pass new laws to reduce drinking and driving.

Second, we need to expand treatment and prevention programs to reduce college drinking problems. In addition to individual counseling approaches that have been demonstrated in numerous experimental studies to reduce alcohol problems, there are environmental changes that will also reduce the alcohol-related death toll in this age group. These include:

- Enforcement of the legal drinking age of 21, and laws making it illegal to drive after any drinking if one is under 21. These laws exist in every state.
- Administrative license revocation (the law in 40 states).
- Lowering the legal blood alcohol limit to .08% (the law in 32 states).
- Mandatory screening and treatment of persons convicted of driving under the influence of alcohol (the law in 23 states).
- Primary enforcement safety belt laws (the law in 18 states).

Increasing the price of alcohol and reducing the numbers of liquor outlets near colleges will also reduce drinking problems.

Moreover, we need colleges and their surrounding communities to work together in comprehensive partnerships to address this problem. If campuses crack down but surrounding communities are lax, the problem will be pushed out into the community. Conversely, tougher policies and enforcement by communities if not also pursued by colleges will only drive the problem back onto campuses. Finally, if students are involved as one of the partners in this process they will be less likely to regard these restrictions as authoritarian and paternalistic and more will be willing to comply with them.

Alcohol is the leading contributor to the leading cause of death among college youth and all youth ages 1-34, unintentional injury. Fortunately, we know a great deal about how to reduce these deaths and if we apply what we already know we can substantially reduce the burden these problems place on our society. We can reduce not only the health and social problems heavy drinking college students create for themselves, we can also help protect those students who choose not to drink from the risks to their health and well-being posed by college students who drink to excess and behave irresponsibly after drinking.