WRITTEN PUBLIC TESTIMONY
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of the
RESEARCH SOCIETY ON ALCOHOLISM
before the
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EDUCATION, AND RELATED AGENCIES
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The Research Society on Alcoholism (RSA) welcomes the opportunity to submit this statement in support of adequate funding for the National Institutes of Health (NIH) and, in particular, the National Institute on Alcohol Abuse and Alcoholism (NIAAA). RSA is a professional research organization whose 1,600 members conduct basic, clinical, and psychosocial research on alcoholism and alcohol abuse. RSA's physicians, scientists, researchers, clinicians, and other experts work closely with NIH and NIAAA to stimulate critical and innovative research initiatives in an effort to address this nation's myriad of health problems that are directly attributable to heavy alcohol use, alcohol abuse, and alcoholism.

Alcoholism is a serious disease that affects the lives of millions of Americans, devastates families, compromises national preparedness, and burdens the country's health care systems. It is beyond cavil, that each dollar spent on alcoholism research will pay huge dividends for all Americans. For this reason, RSA respectfully urges the Appropriations Committee to ensure that sufficient funds are available to NIH and NIAAA for research on the prevention and treatment of alcoholism and the illnesses, injuries, and personal and economic loss associated with the abuse of alcohol.

Alcoholism is a tragedy that touches virtually all Americans. More than half of all adults have a family history of alcoholism or problem drinking. One in ten Americans will suffer from alcoholism or alcohol abuse and their drinking will impact their families, the community, and society as a whole. Untreated addiction costs America $400 billion annually and recent research indicates that alcoholism and alcohol abuse alone, cost the nation approximately $185 billion annually. One tenth of this pays for treatment; the rest is the cost of lost productivity, accidents, violence, and premature death.

The Centers for Disease Control and Prevention (CDC) ranks alcohol as the third leading cause of preventable death in the United States. Heavy drinking, for example, defined as having five or more drinks at least once a week, contributes to illness in each of the top three causes of death: heart disease, cancer, and stroke.

The CDC also links excessive alcohol use, such as heavy drinking and binge drinking, to numerous immediate health risks that pose a menace not only to those consuming alcohol, but those surrounding them including traffic fatalities, unintentional firearm injuries, domestic violence and child maltreatment, risky sexual behaviors, sexual assault, miscarriage and

stillbirth, and a combination of physical and mental birth defects that last throughout the life of a child.

Statistically, alcohol is a factor in 50 percent of all homicides, 40 percent of motor vehicle fatalities, 30 percent of all suicides, and 30 percent of all accidental deaths. The long-term effects of alcohol abuse are just as extreme, leading to chronic organ diseases, neurological and cardiovascular impairment as well as social and psychiatric problems.

The NIAAA, along with the National Institute on Drug Abuse (NIDA), and the Substance Abuse & Mental Health Services Administration (SAMSHA), have conducted research that demonstrates that substance abuse is particularly problematic in younger adolescents because it is the time when individuals are most vulnerable to addiction. According to the CDC, people aged 12 to 20 years drink almost 20% of all alcohol consumed in the United States. The NIAAA's National Epidemiologic Survey on Alcohol-Related Conditions (NESARC) states that 18 million Americans (8.5% of the population age 18 and older) suffer from alcohol use disorders (AUD), and only 7.1% of these individuals have received any treatment for their AUD in the past year. According to SAMHSA, in 2005, 20.9 million Americans needed treatment for AUD but did not receive it.

The U.S. scientific community is addressing alcoholism and addiction disorders at many different levels, starting at the earliest stages of human development. For instance, the NIAAA's NESARC survey sampled across the adult lifespan to allow researchers to identify how the emergence and progression of drinking behavior is influenced by changes in biology, psychology, and in exposure to social and environmental inputs over a person's lifetime. Scientists at NIH are supporting research to promulgate pre-emptive care for fetuses, early childhood, and adolescents; since children who engage in early alcohol use also typically display a wide range of adverse behavioral outcomes such as teenage pregnancy, delinquency, other substance use problems, and poor school achievement.

NIAAA has been working closely with SAMHSA to play a leading role for the work of the Interagency Coordinating Committee for the Prevention of Underage Drinking established under the Sober Truth on Preventing Underage Drinking Act or STOP Act (P.L. 109-422), and for the forthcoming Surgeon General's Call to Action on underage drinking.

The data on alcohol abuse are particularly disquieting in a subsection of the population that is unique for observing the effects of alcohol over a large cross-section of individuals. In the military, the costs of alcoholism and alcohol abuse are enormous. The 2005 results of the Department of Defense's (DoD) 2005 Survey of Health Related Behaviors among Active Duty Military Personnel demonstrate that the rates of heavy drinking remain elevated among U.S. military personnel. This was the first time that this survey series has evaluated behaviors related to mental well being, work stress and family stress associated with deployment to Iraq, Afghanistan, and other theaters of operation.

The prevalence of heavy drinking is higher in the military population (16.1%) than in the civilian population (12.9%). About one in four Marines (25.4%) and Army soldiers (24.5%) engages in heavy drinking; such a high prevalence of heavy alcohol use may be cause for

concern about military readiness. Furthermore, each individual Service branch showed an *increasing* pattern of heavy drinking from 2002 to 2005. These patterns of alcohol abuse, which are often acquired in the military, frequently persist after discharge and are associated with the high rate of alcohol-related health disorders in the veteran population.

While the high rates of use and abuse of alcohol are alarming, the good news is that this nation is poised to capitalize on unprecedented opportunities in alcohol research, opportunities which must be seized. Scientists are currently exploring new and exciting ways to prevent alcohol-associated accidents and violence. Importantly, prevention trials are developing methods to effectively address problem alcohol use. Further, scientists have identified discrete regions of the human genome that contribute to the inheritance of alcoholism. Our improved genetic research will accelerate the rational design of medications to treat alcoholism and also improve our understanding of the interaction and importance of heredity and environment in the development of alcoholism.

The field of neuroscience is another important and promising area of alcohol research. The development of more effective drug therapies for alcoholism requires an improved understanding of how alcohol changes brain function to produce craving, loss of control over drinking behavior, tolerance to alcohol's effects, and the alcohol withdrawal syndrome. NIAAA is testing therapeutic agents that target different neurobiological substrates of alcohol dependence. The Congress needs to become an active partner of this effort and provide funding for the laboratories that are putting this type of bench work into clinical practice.

Alcohol abuse and alcoholism are devastating problems of national importance. Fortunately, alcohol research has reached a critical maturity. At this juncture there are numerous scientific opportunities to develop more effective prevention programs and new and better methods for the treatment of alcoholism. Unfortunately, alcohol research is currently significantly under-funded. The Research Society on Alcoholism calls upon Congressional appropriators to close this funding gap and ensure that the many promising opportunities currently available are not squandered.

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