

# Substance Abuse in Brief

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## What You Should Know About Alcohol Problems

Alcohol use is legal for persons age 21 and older, and the majority of people who drink do so without incident. However, there is a continuum of potential problems associated with alcohol consumption. Alcohol is the most used intoxicating substance in the United States—82 percent of people age 12 and older have used alcohol at least once in their lifetimes. And nearly half of all Americans age 12 and older—an estimated 109 million people—have used alcohol in the past month (Substance Abuse and Mental Health Services Administration 2002).

### How Do We Define “Alcohol Problem”?

The term alcohol problem refers to any problem related to alcohol use that may require some type of intervention or treatment. Alcohol problems vary in duration (that is, they are acute, intermittent, or chronic) and severity (that is, ranging from mild to severe). People who drink may, on occasion, consume alcohol at levels that pose a risk for alcohol-related problems. Such risky drinkers typically experience mild or moderate intermittent alcohol problems. More severe chronic problems may be experienced by persons clinically diagnosed with alcohol abuse or alcohol dependence (Institute of Medicine 1990). Some characteristics that may affect a client’s development of alcohol problems or treatment of these problems include his or her age, cultural background, and mental or physical health, including disabilities.

### Risky Drinking

A significant proportion of problems related to alcohol use occur in persons who are not alcohol dependent but who engage in risky drinking (Institute of Medicine 1990; National Institute on Alcohol Abuse and Alcoholism 2000). Although risky drinking is not a clinically defined condition with quantifiable symptoms, it is typically defined as consuming alcohol in a way that may pose a risk of physical or emotional harm to the drinker or others but has not produced effects that would result in a diagnosis of alcohol abuse or dependence problems (Babor and Higgins-Biddle 2000). Risky drinking includes heavy or excessive drinking, such as binge drinking (drinking four or more drinks on a single occasion for females and five or more drinks for males) (National Institute on Alcohol Abuse and Alcoholism 2000). It also includes drinking in situations that increase the risk of harm, such as before or while driving, while pregnant, or while taking certain prescription medications (e.g., certain sedatives) (Fiellin et al. 2000). Identifying risky drinking behavior may lead to the early detection and prevention of the more serious problems of alcohol abuse and dependence.

#### Inside

- 2 Alcohol Dependence
- 2 Factors That May Contribute to Alcohol Dependence
- 3 Consequences of Problem Alcohol Use
- 4 Detection and Treatment of Alcohol Use Problems
- 5 References
- 6 Providing Treatment Referrals
- 6 What You Can Do To Raise Awareness
- 6 National Alcohol Screening Day

### Alcohol Abuse

A person who frequently engages in risky drinking may have a more severe alcohol problem—alcohol abuse. A recognized medical condition, alcohol abuse is the regular use of alcohol despite recurrent adverse consequences. A diagnosis of alcohol abuse is made when someone exhibits one or more of the following within a 12-month period:

- Recurrent alcohol use resulting in a failure to fulfill obligations at work, school, or home
- Recurrent alcohol use in situations in which it is physically hazardous (e.g., driving an automobile when impaired by alcohol use)
- Recurrent alcohol-related legal problems
- Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by alcohol use (American Psychiatric Association 1994).



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...continued on page 2

# Substance Abuse in Brief

April 2003

Alcohol abuse, although problematic, usually does not progress to dependence. In fact, a recent study found that 5 years after being diagnosed with alcohol abuse, only 3.5 percent of abusers met the criteria for alcohol dependence (Schuckit et al. 2001).

## Alcohol Dependence

The most severe problem is alcohol dependence, also referred to as alcoholism or alcohol addiction. In 2001 an estimated 5.4 million people age 12 and older were dependent on alcohol (Substance Abuse and Mental Health Services Administration 2002). Alcohol dependence is a chronic disease with discrete definable symptoms. An individual has become alcohol dependent when he or she experiences three or more of the following in a 12-month period:

- Tolerance: the need for increasing amounts of alcohol to reach intoxication.
- Withdrawal: the occurrence of physical symptoms when heavy alcohol use is reduced or stopped. Its symptoms may include tremors, sweating, a high pulse rate, nausea or vomiting, insomnia, and anxiety. Severe withdrawal may induce transient hallucinations or grand mal seizures.
- Drinking larger amounts or drinking over a longer period than was intended.
- A persistent desire or unsuccessful efforts to cut down on or control alcohol use.
- Spending a great deal of time obtaining, using, or recovering from the effects of alcohol use.
- Giving up or reducing social, occupational, or recreational activities because of alcohol use.
- Using despite having knowledge of persistent or recurring physical or psychological problems that were caused or exacerbated by alcohol use (American Psychiatric Association 1994).

Alcohol dependence is a persistent condition. Approximately two-thirds of persons who are alcohol dependent will still be dependent in 5 years (Schuckit et al. 2001).

## Factors That May Contribute to Alcohol Dependence

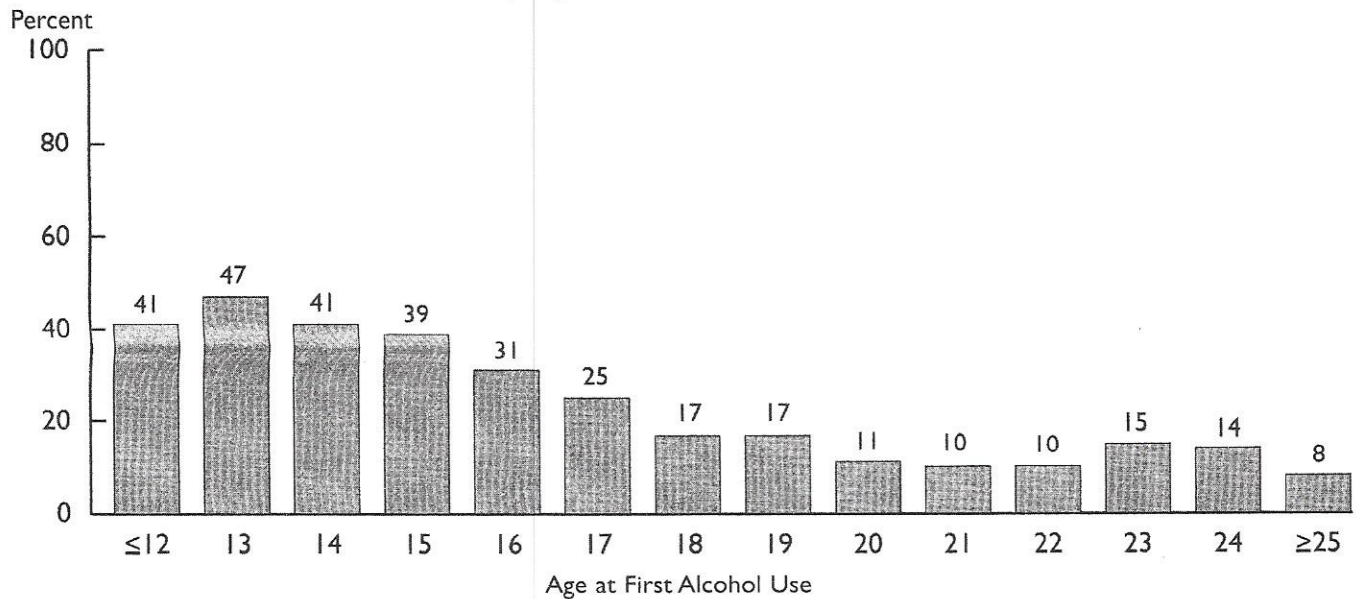
Alcohol dependence is influenced by both genetic and environmental factors. Persons with a family history of dependence have a higher chance of lifetime dependence than those without such a history (U.S. Department of Health and Human Services 2000). In addition, researchers have identified genes that influence people's susceptibility to alcohol dependence; however, hereditary influences alone do not predict a future of alcohol dependence. Environmental factors also play a significant role. For example, the child of a parent who is dependent on alcohol may be genetically predisposed to alcohol dependence but may effectively thwart it through education, self-monitoring, and social support (National Institute on Alcohol Abuse and Alcoholism 1995). Conversely, neurochemical changes in the brain caused by repeated abuse of substances such as alcohol can lead to neurological substance dependence, even if the individual has no genetic vulnerability to addiction disorders (Center for Substance Abuse Treatment 1999).

Preventing drinking among youth is important, not only because drinking alcohol is illegal for persons younger than age 21, but also because postponing the onset of alcohol use decreases the likelihood of developing dependence later in life. About 40 percent of those who start drinking at age 15 or younger develop alcohol dependence at some point; for those who start drinking at age 21 or older, the figure is approximately 10 percent (see figure 1) (Grant and Dawson 1997). Several factors may help discourage or at least postpone alcohol use. Parental support, communication, and monitoring are significantly related to whether adolescents drink, the amount they drink, and the frequency of their drinking. Adolescents' drinking behavior is also related to their friends' acceptance or rejection of drinking and whether their friends drink (National Institute on Alcohol Abuse and Alcoholism 1997).

# Substance Abuse in Brief

April 2003

**Figure 1. Percentage of Adults Diagnosed With Lifetime Alcohol Dependence by Age at First Alcohol Use**



Source: Grant and Dawson 1997.

## Consequences of Problem Alcohol Use

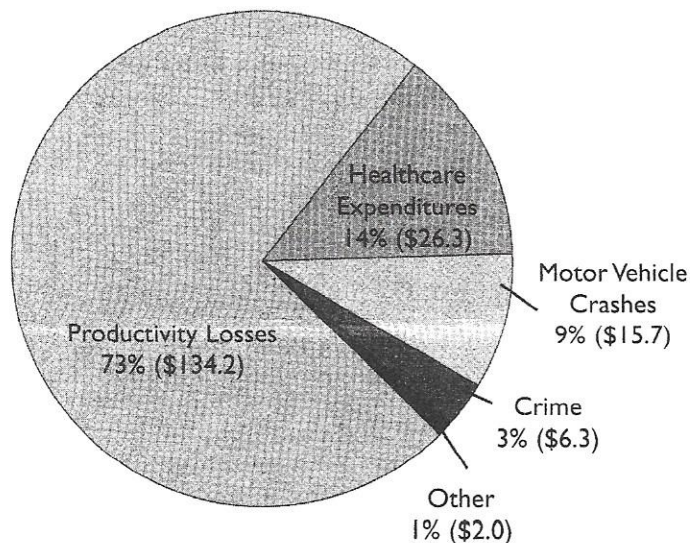
Identifying and eliminating problem drinking behaviors are important for many reasons. Problem alcohol use of any degree of severity may disrupt family and social relationships and lead to psychological problems, violence and aggression, and legal problems. Problem alcohol use is also linked to an increased risk of injuries, including those resulting from automobile crashes, falls, and fires. Not only does the risk of injury increase with the amount of alcohol consumed, but this risk begins to rise at relatively low levels of consumption. Problem drinking may also contribute to unsafe sex practices leading to an increased incidence of HIV/AIDS, hepatitis, and other sexually transmitted diseases. Finally, higher levels of alcohol consumption are associated with a greater risk of negative health effects, including a weakened immune system, tuberculosis, coronary heart disease, stroke, liver cirrhosis, and cancer (National Institute on Alcohol Abuse and Alcoholism 2000).

The most recent calculation of the overall economic costs of alcohol problems was estimated by the National Institute on Alcohol Abuse and Alcoholism at more than \$184 billion in 1998 (see figure 2). More than 70 percent of these costs were attributed to productivity losses (\$134.2 billion) caused by impaired workplace and household productivity related to alcohol use, worktime lost by incarcerated offenders and victims of alcohol-related crime, and alcohol-related premature death. Other economic costs of alcohol problems include healthcare expenditures related to the prevention and treatment of alcohol abuse and dependence and the medical consequences of alcohol consumption (\$26.3 billion), administrative and property damage costs from alcohol-related motor vehicle crashes (\$15.7 billion), criminal justice system costs stemming from alcohol-related crime (\$6.3 billion), fire destruction attributable to alcohol use (\$1.5 billion), and alcohol-related social welfare expenditures (\$0.5 billion) (National Institute on Alcohol Abuse and Alcoholism 2000).

# Substance Abuse in Brief

April 2003

**Figure 2. Estimated Economic Costs of Alcohol Abuse in the United States, 1998 (in billions of dollars)**



Source: National Institute on Alcohol Abuse and Alcoholism 2000.

## Detection and Treatment of Alcohol Use Problems

Prevention of and early intervention in alcohol problems are important to reduce their consequences and related social and economic costs. Alcohol screening attempts to identify both risky drinkers and drinkers who are experiencing symptoms of alcohol abuse or dependence. Screening tools range from brief self-administered questionnaires to lengthy clinician-administered interviews. Screening for co-occurring mental disorders is also essential for planning an effective intervention.

Once an alcohol problem has been identified, it should be treated appropriately. Not only do affected individuals experience different types of alcohol problems; each individual has different characteristics, strengths, and weaknesses that should be considered when assessing what treatment methods are most appropriate. A comprehensive and effective assessment should provide a detailed description of the kind of alcohol problem experienced by a particular individual at a specific time (Institute of Medicine 1990).

In general, persons identified as risky drinkers—those experiencing mild or moderate alcohol problems—may benefit most from brief interventions, which usually incorporate counseling and education sessions that provide practical advice and build skills (Babor and Higgins-Biddle 2000; Institute of Medicine 1990). Typically used by a primary care provider, brief interventions are designed to reduce alcohol use, thus minimizing the risk of developing alcohol-related problems (Fleming and Manwell 1999). Research has shown that brief interventions are effective in reducing drinking and related problems (Babor and Higgins-Biddle 2000).

Brief interventions are insufficient for persons diagnosed with alcohol dependence. These persons may benefit more from intensive treatment approaches, which can include psychological, pharmacological, social, and medical services. The primary goal of all treatment programs should be to eliminate alcohol use as a factor contributing to physical, emotional, and social problems (Institute of Medicine 1990).

# Substance Abuse in Brief

April 2003

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U.S. Department of Health and Human Services  
7079 Oakland Mills Road  
Columbia, MD 21046

# Substance Abuse in Brief

April 2003

## Providing Treatment Referrals

The Substance Abuse and Mental Health Services Administration provides information about local treatment programs (1-800-662-HELP). In addition, the Substance Abuse Treatment Facility Locator ([www.findtreatment.samhsa.gov](http://www.findtreatment.samhsa.gov)) provides a searchable directory of more than 11,000 alcohol and drug treatment programs.

## What You Can Do To Raise Awareness

- **Employers:** Provide educational materials about potential alcohol use problems and institute employee assistance programs. Visit [www.workplace.samhsa.gov](http://www.workplace.samhsa.gov) for more information.
- **Faith-Based Communities:** Provide training to clergy so that they understand the nature and signs of potential alcohol use problems and can provide referrals to community treatment resources. The *Substance Abuse Resource Guide: Faith Communities* (available online at [www.ncadi.samhsa.gov](http://www.ncadi.samhsa.gov)) provides additional resources.
- **Educators:** Provide parents and students with information on drinking. Lesson plans, activities, and parent information for fifth graders are available online at [www.ncadi.samhsa.gov](http://www.ncadi.samhsa.gov). The publication *Keeping Your Kids Drug-Free* (available online at [www.ncadi.samhsa.gov/govpubs/phd884/default.pdf](http://www.ncadi.samhsa.gov/govpubs/phd884/default.pdf)) also provides valuable information for parents.

## National Alcohol Screening Day

The National Alcohol Screening Day (NASD) program, the Nation's only large-scale screening and early intervention program for alcohol problems, has screened more than 50,000 individuals since its inception in 1999. Screenings are conducted at community-based healthcare facilities, primary care offices, and colleges. NASD is held annually in April and is organized by the nonprofit organization Screening for Mental Health, Inc., with major support from the National Institute on Alcohol Abuse and Alcoholism, the Center for Substance Abuse Treatment, and the Center for Substance Abuse Prevention.

For more information, visit [www.mentalhealthscreening.org](http://www.mentalhealthscreening.org) or contact Screening for Mental Health, Inc., at 781-239-0071 or [info@mentalhealthscreening.org](mailto:info@mentalhealthscreening.org).