

factsheet Alcohol

What is alcohol?

Ethyl alcohol, or ethanol, is the active chemical ingredient in distilled spirits (liquor), wine and beer. By itself, ethanol is clear and colorless. Beverages containing ethanol get their colors from diluents, additives and by-products of the fermentation (ethanol-production) process. Commonly called alcohol, ethanol is a depressant drug.

Facts About...Alcohol. 1991. Toronto: Addiction Research Foundation.

How is alcohol ingested?

Alcohol is consumed as a beverage.

Facts About...Alcohol. 1991. Toronto: Addiction Research Foundation.

Why do people use alcohol?

People use alcohol for a variety of reasons. It is legal for those ages 21 and older, often “socially acceptable” and easy to obtain.

Even at low doses (a blood alcohol concentration [BAC] of .05 percent), alcohol produces mild intoxication that leads to a feeling of warmth, flushed skin, slightly impaired judgment and decreased inhibitions. At higher doses, these effects are intensified and muscular incoordination, slurred speech, double vision and memory loss may occur.

Teenagers often begin using alcohol for several reasons. Parental alcohol use is the largest predictor of teenage alcohol use. Other strong predictors of teenage alcohol use include cigarette use followed distantly by peer pressure.

Facts About...Alcohol. 1991. Toronto: Addiction Research Foundation.
Interview. 1997. Columbia, S.C.: South Carolina Department of Alcohol and Other Drug Abuse Services.

Are there “safe” levels of alcohol consumption?

The Council on Alcohol Policy of the National Association for Public Health Policy has established guidelines that identify people who are at high risk of experiencing problems related to the use of alcohol. For these individuals, there is no “safe” level of consumption. Specifically, the following individuals are

considered to be at high risk and should abstain from drinking:

- anyone with a personal history of dependence on alcohol, tobacco or other drugs;
- anyone with a strong family history of depression, or alcohol or other drug dependence;
- anyone who is driving or operating machinery;
- anyone who is using other depressant drugs (be sure to read labels on all medications, including over-the-counter drugs);
- anyone who is using other psychoactive drugs;
- anyone younger than the legal purchase age of 21 (except in the presence of a parent or legal guardian as provided by state law, or in religious ceremonies);
- anyone who is pregnant, considering pregnancy or breast-feeding a baby;
- anyone who is under stress; or
- anyone with other physical or psychological conditions that make alcohol consumption unhealthy.

Individuals who are not in any of the high-risk categories identified above should adhere to the following guidelines for low-risk consumption as defined by the Dietary Guidelines for Americans:

- abstinence from alcohol; or
- no more than one drink a day for a woman or no more than two drinks a day for a man, consumed on no more than five days per week, at a rate no faster than one drink per hour.

Alcohol consumption that exceeds the above guidelines is considered to be high risk because it is associated with adverse health consequences and/or risk of dependence. High-risk use can be dangerous and is discouraged in all situations.

The Alcohol Policy Bill of Rights. 1994. Columbia, S.C.: adapted by the South Carolina Department of Alcohol and Other Drug Abuse Services from the *Alcohol Policy Bill of Rights* as developed by the Council on Alcohol Policy of the National Association for Public Health Policy.

How much alcohol is in one drink?

Many people think that there is less alcohol in beer and wine than in distilled spirits. However, the same

fact fact fact fact

amount of alcohol, six-tenths of one ounce, is contained in the following: a five-ounce glass of table wine (12 percent alcohol by volume); a 12-ounce beer (5 percent alcohol by volume); one and one-half ounces (one “shot”) of 80 proof liquor (40 percent alcohol by volume); and one 12-ounce wine cooler (5 percent alcohol by volume).

Even though the beverages differ, the alcohol’s effect on the body by volume is the same.

Facts About...Alcohol. 1991. Toronto: Addiction Research Foundation.

What adverse effects do alcohol users experience?

Alcohol users experience many adverse effects, even at low to moderate doses. These effects include: the headache and nausea that can accompany a typical “hangover”; reduced sensitivity to pain, taste and odor; impaired vision, including a reduced field of vision, reduced glare resistance and less color sensitivity (particularly red); impaired attention and memory; disturbed sleep; and impaired sexual performance. (See *Is alcohol a sexual stimulant?*)

At higher doses, adverse effects can include alcohol poisoning and even death. (See *Is alcohol dangerous?*)

Mind-altering Drugs. 1992. Madison, Wis.: Wisconsin Clearinghouse.

How common is alcohol use?

Alcohol use is very common. Nationwide, almost half of all people ages 12 and older have used alcohol during the past month. Furthermore, 5.6 percent of the population are “heavy” drinkers (exceeding the criteria for low-risk drinking).

Closer to home, alcohol use is a problem among both teenage and adult populations in South Carolina.

Approximately 76 percent of all teenagers in South Carolina have used alcohol at least once by the time they reach the 12th grade. About 28 percent of eighth-graders, 39 percent of 10th-graders and 44 percent of 12th-graders are current alcohol users (i.e., have used alcohol at least once during the past 30 days).

Among the state’s adult population, 85 percent have used alcohol at least once during their lives, and approximately 35 percent of South Carolina adults have used alcohol in the past 30 days.

It is important to note that approximately 5 percent of the state’s adult drinkers consume 50 percent of *all* the alcohol consumed by South Carolinians.

Tragically, in South Carolina approximately 8 percent of all teenagers and 6 percent of all adults (ages 18 and older) are currently experiencing problems related to their use of alcohol that warrant intervention and treatment.

Alcohol Use, 2000 National Household Survey. 2001. Rockville, Md.: U.S. Department of Health and Human Services.

Interview. 1999. Columbia, S.C.: South Carolina Department of Alcohol and Other Drug Abuse Services.

South Carolina Treatment Needs Assessment Adult Household Survey Summary Report. 2001. Columbia, S.C.: South Carolina Department of Alcohol and Other Drug Abuse Services.

The South Carolina Survey, School Year 2002. 2002. Columbia, S.C.: South Carolina Department of Alcohol and Other Drug Abuse Services.

Is alcohol dangerous?

Despite its status as a legal substance for people ages 21 and older, alcohol is still a very dangerous drug.

Problems resulting from alcohol use are the number-one killer of young people ages 15 to 24 in both the United States and South Carolina, and alcohol-related accidents and illnesses account for 11 percent of all deaths in South Carolina each year. Alcohol use is dangerous for several reasons.

First, it impairs judgment. Drinking even moderate amounts of alcohol can lead to dangerous behavior, such as driving under the influence. Despite the risks, 20 percent of 12th-graders admit to driving after drinking during the past year, while 33 percent of 12th-graders admit to riding in a car with an impaired driver during the same period.

Second, risky sexual encounters that can lead to HIV infection (the virus that causes AIDS) and many other sexually transmitted diseases are more likely to occur after a person has been drinking. Evidence indicates that HIV infection is also more likely to occur after a person has been drinking because alcohol ingestion (particularly large amounts over an extended period of time) can suppress immune function.

Third, frequent alcohol use can affect social functioning and school or work performance. Years of heavy drinking can lead to liver and brain damage as well as cancer of the mouth, tongue, pharynx, hypopharynx, esophagus, stomach and liver. Other medical complications include nausea, diarrhea, gastritis, ulcers, malnutrition, high blood pressure and impaired immune function.

Fourth, alcohol cannot legally be purchased or possessed by anyone under the age of 21. Underage persons who are caught purchasing or possessing alcohol can face serious legal consequences.

fact fact fact fact

Finally, at extremely high doses (a BAC of .35 percent), alcohol can cause a person to slip into a coma. At even higher doses (a BAC of .50 percent), death is likely.

Alcohol Alert, Alcohol and AIDS. 1992. Rockville, Md.: National Institute on Alcohol Abuse and Alcoholism.

Alcohol and Young People. 2000. London: Institute of Alcohol Studies.

As a matter of fact...Alcohol Pharmacology. 1992. Jefferson City, Mo.: Missouri Department of Mental Health Division of Alcohol and Drug Abuse.

Facts About...Alcohol. 1991. Toronto: Addiction Research Foundation.

Mind-altering Drugs. 1992. Madison, Wis.: Wisconsin Clearinghouse.

The South Carolina Survey, School Year 2002. 2002. Columbia, S.C.: South Carolina Department of Alcohol and Other Drug Abuse Services.

Is alcohol addictive?

Yes. According to the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR)* published by the American Psychiatric Association, the symptoms of dependence fall into three categories: (1) compulsion or loss of control – taking more than intended, unsuccessfully trying to stop and spending too much time under the influence or recovering from the drug's effects; (2) tolerance – including withdrawal symptoms when drug use is discontinued; and (3) impairment – using the drug despite adverse effects and preoccupation with the drug over everything else.

Alcohol meets all three of these criteria and is both physically and psychologically addictive.

Alcoholism. 2001. Rockville, Md.: National Institute on Alcohol Abuse and Alcoholism.
Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. 2000. Washington, D.C.: American Psychiatric Association.

How can you tell if someone is dependent on alcohol?

Any combination of the following can be signs of dependence on alcohol (i.e., alcoholism): (1) loss of control – attempts to control drinking fail despite promises to self and others; (2) blackouts – inability to recall all or part of a drinking episode; (3) increased tolerance – needs more alcohol than before to obtain the same effects and can “outdrink” most other people; (4) continued drinking despite academic, legal, health, financial, relationship and/or other problems; (5) changes in personality; (6) neglect of responsibilities; (7) preoccupation with drinking – frequent thoughts of drinking occur and non-drinking activities and acquaintances often are avoided; (8) “pre-partying” – drinking occurs before a social event where alcohol will be served and drinks are often “gulped” to get drunk as quickly as possible; (9) denial and minimizing – claims drinking is not a problem and/or tries to justify it; (10) prone to suf-

fer accidents, injuries and illnesses; (11) drinking to feel “normal” – uses alcohol to cope, escape problems, solve problems or feel like everyone else; and (12) drinking in the morning – often drinks to control tremors or shakes that result from drinking the night before.

Warning Signs of a Drinking Problem. 2001. Urbana, Ill.: University of Illinois.

Does alcohol impair driving?

Yes. About 68 percent of all South Carolinians killed in car accidents were drinking just prior to their crashes. BAC levels as low as .03 percent – approximately one drink for a woman and two drinks for a man – can impair driving ability. In South Carolina, individuals are presumed to be driving under the influence (DUI) if they have a BAC of .10 percent or greater. DUI can result in arrest, fines and loss of driver's license. It can also result in injury, property damage and death.

1995-96 Annual Report. 1996. Columbia, S.C.: South Carolina Department of Alcohol and Other Drug Abuse Services.

Mind-altering Drugs. 1992. Madison, Wis.: Wisconsin Clearinghouse.

Is it safe for pregnant and nursing women to use alcohol?

No. When a woman drinks alcohol during pregnancy, the fetus may experience severe damage. Alcohol consumed by the mother passes through the placenta to the fetus, but the fetus is not fully developed and cannot break down the alcohol. Alcohol also can be passed from the mother to the child through breast milk.

Damage caused by alcohol use during pregnancy is known as fetal alcohol syndrome (FAS) or alcohol-related birth defects (ARBD). The most devastating symptom of FAS is mental retardation. FAS is the only known cause of mental retardation that is *completely preventable*. Other symptoms of FAS include: organ dysfunction; growth deficiencies before and after birth; central nervous system dysfunction that leads to learning disabilities and lower IQ; physical malformations on the face and cranial areas; and behavioral and mental problems that often progress into childhood.

Some experts believe that between one-third and two-thirds of all children who require special education have been affected by alcohol in some way.

In South Carolina, one out of every four babies (approximately 15,000 babies a year) are born to mothers who used alcohol and/or illegal or non-prescribed

fact fact fact fact

drugs during pregnancy. The personal and socioeconomic costs associated with this figure are devastating.

1995-96 Annual Report. 1996. Columbia, S.C.: South Carolina Department of Alcohol and Other Drug Abuse Services.

Facts About...Alcohol. 1991. Toronto: Addiction Research Foundation.

Mind-altering Drugs. 1992. Madison, Wis.: Wisconsin Clearinghouse.

Is alcohol a sexual stimulant?

No. While drinking alcohol does decrease inhibitions and make it easier for many people to engage in high-risk sexual activity, it also decreases sensitivity and can cause impotence.

Mind-altering Drugs. 1992. Madison, Wis.: Wisconsin Clearinghouse.

Where can I get more information?

In South Carolina, the Department of Alcohol and Other Drug Abuse Services (DAODAS) operates a statewide toll-free telephone line that provides information and assistance on a variety of topics related to alcohol and other drug abuse. The number is **1-800-942-DIAL (3425)**. DAODAS also offers an online clearinghouse of alcohol and other drug information on the Internet at www.scprevents.org.

The county alcohol and drug abuse authorities and other public and private service providers offer local information and assistance as well.

Nationally, the National Institute on Drug Abuse operates a hotline. That number is **1-800-662-HELP**.



**THE
DRUGSTORE**
Information
Clearinghouse

South Carolina Department of Alcohol and Other Drug Abuse Services
101 Business Park Boulevard • Columbia, SC 29203-9498

toll-free: 1-800-942-DIAL (3425)
www.daodas.state.sc.us

Revised June 2002