# Alcohol

## What is alcohol?

Alcohol is a liquid obtained by fermenting carbohydrates using yeast or a distillation process. Beer, wine, and distilled spirits are the major types of alcoholic beverages. Despite being legal, alcohol is classified as a drug along with illegal drugs such as heroin, cocaine, or improperly used prescription drugs.

# How do I know if I have a problem with alcohol?

Start with a simple four-question test called CAGE. Among clinicians, CAGE is the most widely used test to determine if a problem with alcohol exists. Here are the questions:

- Have you ever felt you should Cut down on your drinking?
- Have people Annoyed you by criticizing your drinking?
- Have you ever felt Guilty about your drinking?
- Have you ever had a drink first thing in the morning as an Eye opener to steady your nerves or get rid of a hangover?

If you answered yes to at least two questions, you are at risk of having a problem with alcohol. Other diagnostic tools are available to help you further assess your use of alcohol or other drugs. Your physician can help you determine if a problem exists.

#### What is alcoholism?

Alcoholism is an addiction to alcohol. It is considered a brain-based disease characterized by abnormal alcohol-seeking behavior that leads to impaired control over drinking. Alcoholism means a person will continue using alcohol despite the harm it does to their health, family, work or school, and relationships. "Curing" alcoholism is not a matter of willpower or moral strength any more than is curing diabetes or cancer. Like diabetes and cancer, alcoholism is considered a chronic disease which is beyond one's control and fatal if left untreated.

The American Psychiatric Association (APA) uses the term "alcohol use disorder" to define a pattern of alcohol use that leads to significant physical, interpersonal, medical, or work problems. Alcohol use disorder is rated as mild,

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moderate, or severe based on how many criteria are met. A person diagnosed with alcohol use disorder can also be classified as in remission, or what is commonly referred to as "in recovery." Through treatment, some with mild alcohol use disorder are able to learn how to better manage their drinking. Those with moderate or severe alcohol use disorder, who identify themselves as alcoholics, are advised to abstain from alcohol completely, and often find the skills and support to do so through peer support groups like Alcoholics Anonymous.

# Why does alcohol affect different people in different ways?

People with a family history of alcoholism are genetically predisposed to the disease. A person's environment also plays a role in alcoholism. Alcohol has different effects from person to person because of body size, hormones, and metabolism. This is particularly true with women, who typically become inebriated faster, progress to addiction more quickly, and develop diseases related to substance use sooner. One person might drink and even abuse alcohol but never become an alcoholic, while someone with the right biological and other factors can develop symptoms of alcoholism after just one drink. Others may find that their problems with alcohol grow over time.

## How much alcohol is too much?

Here are the guidelines established by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) for adults up to age sixty-five:

- Moderate drinking: For men, four drinks a day and no more than fourteen drinks per week; for women, three drinks a day, and no more than seven drinks per week. Drinking more than these amounts is considered heavy or "at-risk" drinking.
- Binge drinking: Binge drinking is considered to be any amount of drinking that raises one's blood alcohol concentration (BAC) to 0.08 within two hours. For men, this usually means five drinks in two hours; for women, this usually means four drinks in two hours. Binge drinking is a serious problem among high school and college students, as well as many adults. Those who binge drink are at a higher risk for health problems, car crashes, and injuries.

Among men and women older than age sixty-five, more than seven drinks per week or more than three drinks per occasion is considered too much.

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A drink is considered 12 ounces of regular beer, 5 ounces of wine, or 1.5 ounces of 80-proof distilled spirits.

The U.S. Department of Agriculture's recommendations are more restrictive, at one drink per day for women and two drinks per day for men. Alcohol can affect people in different ways based on weight, body chemistry, medications, and how recently they've eaten. These recommendations are estimates based on average conditions.

NIAAA researchers found that the younger someone starts drinking, the more likely that person is to develop an alcohol use disorder. Among respondents who began drinking before age fifteen, more than 40 percent had a problem with alcohol at some point in their lifetimes.

# What are co-occurring disorders?

Co-occurring disorders, or dual disorders, occur when a mental health disorder, like depression or schizophrenia, is present along with addiction, alcoholism, or other substance use disorders. Screening for co-occurring disorders should be part of any good assessment or treatment plan.

Of people who have been diagnosed as alcoholics, 60 to 75 percent have or have had a mental health disorder. Abuse of alcohol, which is a central nervous system depressant, can mask or mimic symptoms of depression or an anxiety disorder. What's more, people with a mental illness require less alcohol use to experience alcohol-related problems, compared to people who don't have a mental illness.

Among clients with co-occurring disorders, alcohol use disorder can lead to a number of problems, such as a recurrence of their mental illness, use of other drugs, homelessness, violence, victimization, incarceration, suicidal behaviors, and hospitalization.

## How does alcohol use affect the brain?

The human brain is made of billions of nerve cells, or neurons. Every time you feel something, including the effects of a drug, neurons are "firing" messages to and from one another. This "conversation" is known as *neurotransmission*. In a chemically dependent person, the conversation has gone awry. The role of brain chemistry in substance use disorders is a relatively new finding in the treatment field, but a rapidly growing body of evidence supports it.

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While specific drugs affect the actions of specific neurotransmitters, alcohol affects the actions of multiple neurotransmitters and is the only drug to do so. Alcohol has been proven to negatively affect mood, memory, reaction time, concentration, and many other critical brain functions.

## Is alcoholism treatable?

Yes. Treatment usually involves detoxification, medications, and outpatient, hospital, or residential therapy. Withdrawal from heavy alcohol use can be an uncomfortable process, and dangerous to your health. It is not advised that you try to quit on your own without medical supervision.

#### Web resources

There are many resources out there. The websites for the following organizations were chosen for their usefulness and user friendliness.

#### National Institute on Alcohol Abuse and Alcoholism (NIAAA)

A branch of the National Institutes of Health, the NIAAA supports and conducts research on the impact of alcohol use on human health and well-being. Its website offers many articles about alcohol, addiction, treatment, and co-occurring disorders.

### Substance Abuse and Mental Health Services Administration (SAMHSA)

SAMHSA is part of the U.S. Department of Health and Human Services. Its mission is to reduce the impact of substance abuse and mental illness on America's communities. Its website offers information and resources about preventing and treating addiction and mental illness.