

Alcohol Use Disorders

In Depth Report

Extensive review of health topics and links to related information

ALCOHOL USE DISORDERS

Alcohol dependence; Alcohol abuse; Alcoholism

An in-depth report on the causes, diagnosis, treatment of alcoholism.

Highlights - Do you have a drinking problem?

Do You Have a Drinking Problem?

You may have an alcohol use disorder if you:

- Have little or no control over the amount you drink, when you drink, or how often you drink.
- Tried to limit or stop your drinking but found you could not.
- Had withdrawal symptoms when you tried to stop drinking. (These symptoms include tremors, anxiety, irritability, racing heart, nausea, sweating, trouble sleeping, and seizures)
- Have put yourself in a dangerous situation (such as driving, swimming, and unsafe sex) on one or more occasions while drinking.
- Have become tolerant to the effects of drinking and require more alcohol to become intoxicated.
- Have continued to drink despite having memory blackouts after drinking or having frequent hangovers that cause you to miss work and other normal activities.
- Have continued to drink despite having a medical condition that you know is worsened by alcohol consumption.
- Have continued to drink despite knowing it is causing problems at home, school, or work.
- Start your drinking early in the day.

Screening Tests

There are many screening tests that doctors use to check for alcohol use disorders. Some of these tests you can take on your own. The CAGE test is an acronym for the following questions. It asks:

- Have you ever felt you should CUT (C) down on your drinking?
- Have people ANNOYED (A) you by criticizing your drinking?
- Have you ever felt bad or GUILTY (G) about your drinking?



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- Have you ever had a drink first thing in the morning, to steady your nerves, or to get rid of a hangover (use of alcohol as an EYE-OPENER [E] in the morning)?
- If you responded “yes” to at least two of these questions, you may be at risk for alcoholism.

Screening in the Doctor's Office

Primary care doctors should screen adults for alcohol misuse, according to guidelines from the U.S Preventive Services Task Force (USPSTF). Health care providers can give people identified at risk brief behavioral counseling interventions to help them address their drinking.

Medications for Alcohol Use Disorders

Oral naltrexone (ReVia, generic) and acamprosate (Campral, generic) are effective medications for treating alcohol use disorders, according to a 2014 study in the Journal of the American Medical Association.

Introduction

Alcohol use disorders refer to excessive drinking behaviors that can create dangerous conditions for an individual and others. Alcohol use disorders are sometimes classified as alcohol abuse (problem drinking) and alcohol dependence (alcoholism).

Alcohol Abuse (Problem Drinking): Alcohol abuse is an unhealthy pattern of excessive drinking that can lead to alcohol dependence (alcoholism). People who abuse alcohol drink too much or too frequently, but they are not yet physically addicted to alcohol. Alcohol abuse often results in adverse outcomes such as:

- Failure to fulfill work or personal obligations
- Recurrent use of alcohol in potentially dangerous situations
- Problems with the law
- Continued use in spite of harm being done to social or personal relationships

Alcohol Dependence (Alcoholism): Alcohol dependence is the medical term for alcoholism. Alcohol dependence is physical addiction to alcohol. It is a chronic and oftentimes progressive condition that is characterized by:

- Craving. Strong urge to drink.
- Loss of control. Not being able to limit consumption of alcohol once you start drinking.



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- Tolerance. Increased amounts of alcohol are needed to produce an effect.
- Physical dependence. Withdrawal symptoms (nausea, sweating, irritability, and tremors) develop when drinking is stopped or reduced.

New Perspectives on Substance Abuse: Experts are evolving on their perspectives and understanding of substance use disorders. In the latest edition of its diagnostic manual, the American Psychiatric Association (APA) removed the distinction between “abuse” and “dependence.” Instead, the APA recommends that people with alcohol issues be diagnosed simply with a single condition, alcohol use disorder, with subtypes ranging from mild to severe. The APA also prefers not to use the term “addiction,” for diagnoses because of its “uncertain definition.”

Alcoholism is a chronic illness marked by dependence on alcohol consumption. It interferes with physical or mental health, and social, family, or job responsibilities. This addiction can lead to liver, circulatory, and neurological problems. Pregnant women who drink alcohol in any amount may harm the fetus.



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Levels of Drinking

In the United States, the definition of 1 drink is 14 grams of pure alcohol, which is equivalent to:

- 12 ounces of beer
- 5 ounces of wine
- .5 ounces (a jigger or shot) of hard liquor

Other countries define a standard drink differently, for example, 10 grams of alcohol in Australia or 19.75 grams in Japan. A person is affected by the amount of alcohol consumed, not the type. Beer and wine are not “safer” than hard liquor; they simply contain less alcohol per ounce.



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Light-to-moderate drinking is defined as no more than 2 drinks a day for men or 1 drink a day for women.

For some people, such as women at risk for breast cancer, even light drinking may be harmful. Even small amounts of alcohol should be avoided in certain circumstances, such as before driving a vehicle or operating machinery, during pregnancy, when taking medications that may interact with alcohol, or if you have a medical condition that may be worsened by drinking.

Heavy (at-risk) drinking increases the risk for alcohol use disorders, as well as other health problems. Heavy (at-risk) drinking is defined as:

- More than 4 drinks in a day or 14 drinks per week, for men
- More than 3 drinks in a day or 7 drinks per week, for women

Causes

The chemistry of alcohol allows it to affect nearly every type of cell in the body, including those in the central nervous system. After prolonged exposure to alcohol, the brain becomes dependent on it. Genetic, psychological, and environmental factors affect the risk of alcoholism, and the time it takes to develop.

Alcohol's Effect on the Brain

Alcohol alters brain function by interacting with many different chemical messengers in the brain (neurotransmitters). Specifically, alcohol affects the balance between "inhibitory" and "excitatory" neurotransmitters. This balance changes over time:

- Short-term alcohol use increases inhibitory neurotransmitters and suppresses excitatory neurotransmitters. In the short term, alcohol has a "depressant" effect. It causes the slowed-down and sluggish speech and movement patterns associated with being drunk. At the same time, alcohol increases pleasurable feelings, such as euphoria and a sense of being rewarded.
- Long-term alcohol use forces the brain to try to restore balance by decreasing inhibitory neurotransmitter activity and increasing excitatory neurotransmitter levels. This leads to tolerance: Increasing amounts of alcohol are required to produce a pleasurable high. Over the long term, tolerance can lead to addiction.

Genetic Factors

Genetic factors are significant in alcoholism and may account for about half of the total risk for a person becoming alcohol dependent. The role that genetics plays in alcoholism is complex and it is likely that many different genes are involved.



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However, genes are not the sole determinant. Environment, personality, and psychological factors also play a strong role.

Causes of Alcoholic Relapse

When an alcohol-dependent person tries to quit drinking, the brain seeks to restore what it perceives to be its equilibrium. The brain responds with depression, anxiety, and stress (the emotional equivalents of physical pain), which are produced by brain chemical imbalances. These negative moods continue to trigger people to return to drinking long after physical withdrawal symptoms have resolved. Emotional stress and social pressure also contribute to relapse.

Risk Factors

According to the U.S. National Institute of Alcohol Abuse and Alcoholism, about 70% of American adults always drink at low-risk levels or do not drink at all. (Thirty-five percent of Americans do not consume alcohol.) About 28% of American adults drink at levels that put them at risk for alcohol use disorder and alcohol-related problems.

There are many different risk factors for alcohol abuse and dependence.

Age

Alcohol use disorders are most common among people ages 18 to 29. According to surveys, nearly 80% of American adolescents have used alcohol. Anyone who begins drinking in adolescence is at risk for developing alcoholism. The earlier a person begins drinking, the greater the risk. Drinking on a regular basis also increases the risk.

People with a family history of alcoholism are more likely to begin drinking before the age of 20 and to become alcoholic. Young people at highest risk for early drinking are those with a history of abuse, family violence, depression, and stressful life events. Peer pressure is also an important factor as is the portrayal and promotion of alcohol in the media.

Gender

Men have a greater risk than women for alcohol use disorders.

Family History

People with a family history of alcoholism are more likely to have a problem with alcohol disorders. Alcohol use disorders appear to be strongly heritable. The risk is significantly increased in first-degree relatives,



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especially father to son. The risk is further increased if the affected parent began drinking before age 25. Children who grow up in an alcoholic household where abusive behavior is common are also more likely to later develop problems with alcohol.

Social and Cultural Factors

Different cultures and societies have different beliefs and expectations regarding drinking and what constitutes acceptable drinking behavior. Alcoholism is not restricted to any specific socioeconomic group or class.

Race and Ethnicity

Overall, there is no difference in alcoholic prevalence among African-Americans, Caucasians, and Hispanic-Americans. Some population groups, such as Native Americans, have an increased risk of alcoholism while others, such as Jewish and Asian Americans, have a lower risk. These differences may be due in part to genetic susceptibility and cultural factors.

Mental Health Disorders

Alcoholism and other substance abuse addictions are very common among people who have mental health problems. Depression is a very common psychiatric problem in people with alcoholism. Studies suggest that long-term alcohol use may cause chemical changes in the brain that increase the risk for depression. Alcohol abuse and dependence is also prevalent in people with anxiety disorders, bipolar disorder, and schizophrenia. Children with attention deficit hyperactivity disorder (ADHD) or conduct disorders may have a higher risk for alcoholism in adulthood.

Complications

Alcoholism reduces life expectancy by about 10 to 12 years. The earlier that people begin drinking heavily, the greater their chances of developing serious illnesses later on in life.

Alcoholism and Early Death

Alcohol can affect the body in so many ways that researchers have a hard time determining exactly what the consequences are from drinking. Heavy drinking is associated with earlier death. However, it is not just from a higher risk of the more common serious health problems, such as heart attack, heart failure, diabetes, lung disease, or stroke. Chronic alcohol consumption leads to many problems that can increase the risk for death:



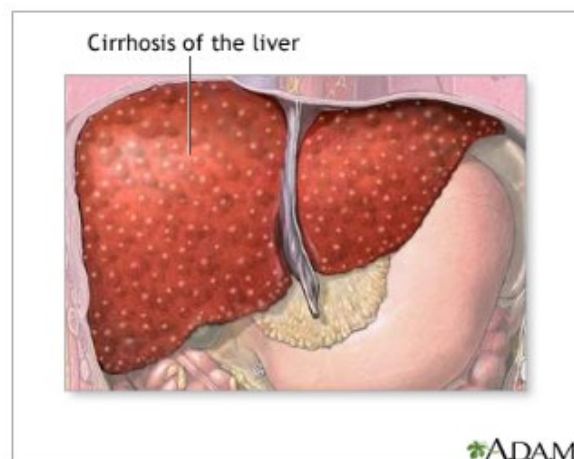
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- Excessive drinking accounts for 1 in 10 deaths in American working adults, according to the U.S. Centers for Disease Control (CDC)
- People who drink regularly have a higher rate of death from injury or violence.
- Alcohol overdose can lead to death. This is a particular danger for adolescents who binge drink.
- Alcohol abusers who need surgery have an increased risk of postoperative complications, including infections, bleeding, reduced heart and lung functions, and problems with wound healing. Alcohol withdrawal symptoms after surgery may delay recuperation.

Liver Disorders

Alcohol-induced liver disease (also called alcoholic liver disease) is a spectrum of liver disorders caused by excessive alcohol consumption. Alcohol-induced liver disease includes:

- Fatty liver
- Alcoholic hepatitis
- Alcoholic cirrhosis



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Cirrhosis is a chronic liver disease that causes damage to liver tissue, scarring of the liver (fibrosis; nodular regeneration), and progressive decrease in liver function.

Fatty liver: is an accumulation of fat inside liver cells. It is the most common type of alcohol-induced liver disease and can occur even with moderate drinking. Symptoms include an enlarged liver with pain in the upper right quarter of the abdomen. Fatty liver can be reversed once the person stops drinking. Fatty liver can also develop without drinking, especially in people who are obese or have type 2 diabetes.

Alcoholic hepatitis: is inflammation of the liver that develops from heavy drinking. Symptoms include fever, jaundice (yellowing of the skin), right-side abdominal pain, fatigue, and nausea and vomiting. Mild cases may not produce symptoms. People who are diagnosed with alcoholic hepatitis must stop drinking. Those who continue to drink may go on to develop cirrhosis and liver failure.



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Alcoholism also increases the risks for hepatitis B and C, which are associated with increased risks for cirrhosis and liver cancer. Chronic forms of viral hepatitis can lead to cirrhosis and liver cancer, and alcoholism significantly increases these risks. People with alcoholism should be immunized against hepatitis B. There is no vaccine for hepatitis C.

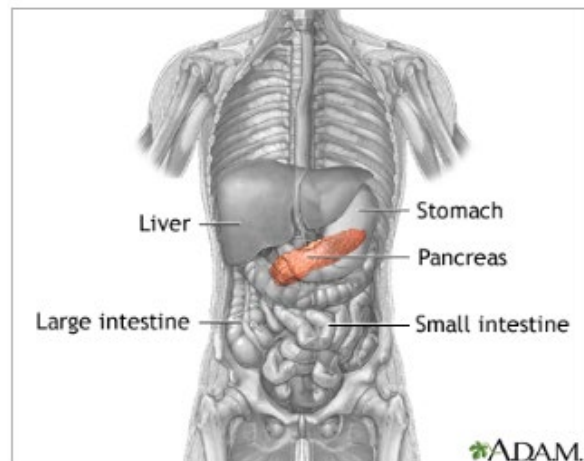
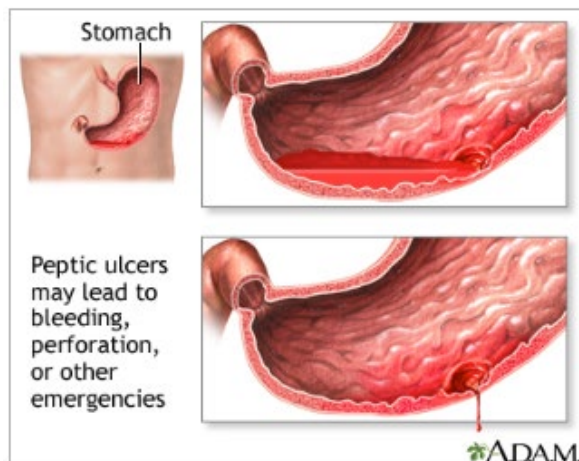
Cirrhosis: is a progressive and irreversible scarring of the liver that can eventually be fatal. Excessive alcohol use is the leading cause of cirrhosis. Consequences of a failing liver include excessive fluid in the abdomen (ascites), bleeding disorders that increase pressure in certain blood vessels (portal hypertension), and brain function disorders (hepatic encephalopathy).

Between 10 to 20% of people who drink heavily develop cirrhosis. Alcoholic cirrhosis (also sometimes referred to as portal, Laennec's, nutritional, or micronodular cirrhosis) is the primary cause of cirrhosis in the U.S.

Gastrointestinal Problems

Alcoholism causes many problems in the gastrointestinal tract. Violent vomiting can produce tears in the junction between the stomach and esophagus. Heavy drinking increases the risk for ulcers, particularly in people taking nonsteroidal anti-inflammatory drugs (NSAIDs) such as aspirin or ibuprofen. It can also lead to swollen veins in the esophagus, (varices), and to inflammation of the esophagus (esophagitis) and bleeding.

Alcohol can contribute to serious acute and chronic inflammation of the pancreas (pancreatitis) in people who are susceptible to this condition. There is some evidence of a higher risk for pancreatic cancer in people with alcoholism, although this higher risk may occur mainly in people who are also smokers.



Heart Disease and Stroke

Moderate amounts (1 to 2 drinks a day) of alcohol may modestly improve some heart disease risk factors, such as increasing HDL (good) cholesterol levels and preventing clot formation. However, there is no definitive



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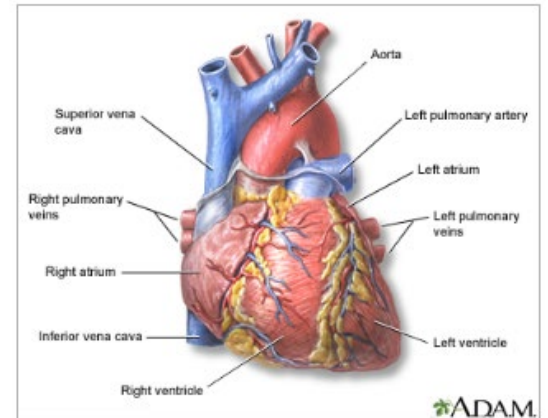
proof that light-to-moderate drinking improves heart and overall health, The American Heart Association does not recommend drinking alcoholic beverages to reduce cardiovascular risk.

Excessive drinking clearly has negative effects on heart health. Alcohol is a toxin that damages the heart muscle. In fact, heart disease is one of the leading causes of death for alcohol-dependent people. Alcohol abuse raises levels of triglycerides (unhealthy fats) and increases the risks for high blood pressure, heart failure, and stroke. In addition, the extra calories in alcohol can contribute to obesity, a major risk factor for diabetes and many heart problems.

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Cancer

Heavy alcohol use increases the risks for mouth, throat, esophageal, gastrointestinal, liver, and colorectal cancers. Even light drinking can increase the risk of breast cancer. Women who are at high risk for breast cancer should consider not drinking at all.



Lung Problems

Over time, chronic alcoholism can cause severe reductions in white blood cells, which increases the risk for pneumonia. People who are alcohol dependent should get an annual pneumococcal pneumonia vaccination. The initial signs of pneumococcal pneumonia are high fever and cough, sometimes with stabbing chest pains. Contact your health care provider immediately if you experience these symptoms.

Skin, Muscle, and Bone Disorders

Severe alcoholism is associated with osteoporosis (loss of bone density), muscular deterioration, skin sores, and itching.

Sexual and Reproductive Function

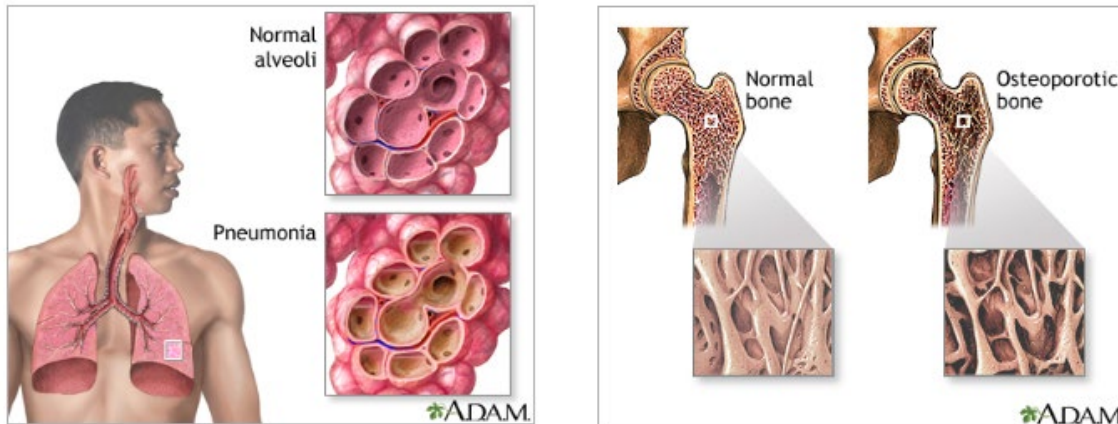
Sexual Function and Fertility: Alcoholism increases levels of the female hormone estrogen and reduces levels of the male hormone testosterone. Imbalances in these hormones may lead to erectile dysfunction and enlarged breasts in men, and infertility in women. Other increased risks for women include menstruation problems such as absent menstrual periods and abnormal uterine bleeding.

Drinking During Pregnancy: Even moderate amounts of alcohol can have damaging effects on a developing fetus, including low birth weight and an increased risk for miscarriage. High amounts can cause



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fetal alcohol syndrome, a condition associated with poor growth and developmental delay. The risk for fetal alcohol syndrome is increased depending on when alcohol exposure occurs during pregnancy, the pattern of drinking (4 or more drinks per occasion), and how frequently alcohol consumption occurs.



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Weight and Diabetes

A beer contains about 153 calories, a glass of wine contains 125 calories, and a shot of hard liquor has 97 calories. Heavy drinking contributes to excess calories, which can lead to weight gain. Obesity is a major risk factor for type 2 diabetes.

People with diabetes should be aware that alcohol consumption can cause hypoglycemia (low blood sugar). If you choose to consume alcohol, do so in moderation and only drink on a full stomach. Be sure to check your blood glucose level before drinking to make sure it is not low.

Sleep Disturbances

Alcohol is associated with insomnia and other sleep disorders. Although alcohol may hasten falling asleep, it causes frequent awakenings throughout the night. Alcohol disrupts sleep patterns by reducing sleep quality and the amount of time spent in deep sleep. People with alcohol-use disorders who stop drinking often continue to experience sleep problems for some time.

Mental Functioning

Both short- and long-term alcohol use adversely affects the brain and causes cognitive impairment, including lapses in memory, attention, and learning abilities. Short-term heavy drinking can cause blackouts. Long-term alcohol use can physically shrink the brain. Depending on length and severity of alcohol abuse, neurologic damage may or may not be permanent.

Recent high alcohol use (within the last 3 months) is associated with some loss of verbal memory and slower reaction times. Over time, chronic alcohol abuse can impair so-called “executive functions,” which include problem solving, task flexibility, short-term memory, and attention. These problems are usually mild to moderate and can last for weeks or even years after a person quits drinking.



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Vitamin and Mineral Deficiencies

Chronic alcohol use can cause vitamin and mineral deficiencies for several reasons. People who are alcohol-dependent often do not eat well and are poorly nourished. In addition, alcohol interferes with the absorption and metabolism of nutrients. Deficiencies in magnesium and vitamin B pose particular health risks.

For vitamin B:

- Thiamine (B1) deficiency is associated with Wernicke-Korsakoff syndrome, also called alcoholic encephalopathy, which causes permanent brain damage.
- Folate (B9) deficiency can cause severe anemia. Deficiencies during pregnancy can lead to birth defects in the infant.
- B12 deficiency can lead to pernicious anemia and neurological problems.

Drug Interactions

Alcohol interacts with nearly all medications. The effects of many medications are strengthened by alcohol, while others are inhibited. Of particular importance is alcohol's reinforcing effect on anti-anxiety drugs, sedatives, sleep medications, antidepressants, and antipsychotic medications.

Alcohol also interacts with many drugs used by people with diabetes. It interferes with drugs that prevent seizures or blood clotting. It increases the risk for gastrointestinal bleeding in people taking aspirin or other nonsteroidal inflammatory drugs (NSAIDs), including ibuprofen and naproxen.

In general, people who require medication should use alcohol with great care, if at all.

Increased Risk for Other Addictions

Alcohol and nicotine addiction share common genetic factors, which may partially explain why people with alcohol problems are often smokers. Alcoholics who smoke compound their health problems. In fact, some studies indicate that people who are alcohol-dependent and smoke are more likely to die of smoking-related illnesses than alcohol-related conditions. Abuse of other drugs is also common among alcoholics.

Accidents and Violence

Alcohol plays a large role in accidents, suicide, and crime:

- Alcohol plays a major role in more than half of all automobile fatalities. Fewer than 2 drinks can impair the ability to drive.
- Alcohol-related automobile accidents are one of the leading causes of death in young people.



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- Alcohol is significantly implicated in crimes involving rape, assault, and murder.
- Alcohol abuse is a common problem in homes with domestic violence and child abuse.
- Alcoholism is the primary diagnosis in many people who commit suicide.

Special Concerns for the Elderly

Health care provider may overlook alcoholism when evaluating older people, mistakenly attributing the signs of alcohol abuse to the normal effects of the aging process. But alcohol abuse is a serious concern for older people. Some older people have struggled with alcohol abuse or dependence throughout their lives. Others may turn to alcohol later in life to cope with loss (death of a spouse), loneliness, and depression.

Alcohol affects the older body differently. It takes fewer drinks to become intoxicated, and older organs can be damaged by smaller amounts of alcohol than those of younger people. Alcohol can worsen many conditions common in older populations (diabetes, memory loss, osteoporosis, and high blood pressure). It can increase the risk for falls. Also, many of the medications prescribed for older people interact adversely with alcohol.

The Effects of Hangover

Although not traditionally thought of as a medical problem, hangovers have significant consequences. Hangovers can impair job performance, increasing the risk for mistakes and accidents. Hangovers are generally more common in light-to-moderate drinkers than heavy and chronic drinkers, suggesting that binge drinking can be as threatening as chronic drinking. Any man who drinks more than 5 drinks or any woman who has more than 3 drinks at one time is at risk for a hangover.

Symptoms

You may be experiencing symptoms of alcohol use disorder if you:

- Have little or no control over the quantity you drink or the duration or frequency of your drinking
- Tried to limit or stop your drinking but found you could not
- Had withdrawal symptoms when you tried to stop drinking. (These symptoms include tremors, anxiety, irritability, racing heart, nausea, sweating, trouble sleeping, and seizures.)
- Have had one or more occasion when you put yourself in a dangerous situation (such as driving, swimming, or unsafe sex) while drinking



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- Have become tolerant to the effects of drinking and require more alcohol to become intoxicated (the idea of being able to “hold your liquor” is an illusion)
- Have continued to drink despite having memory blackouts after drinking or having frequent hangovers that cause you to miss work and other normal activities
- Have continued to drink despite having a medical condition that you know is worsened by alcohol consumption
- Have continued to drink despite you know it is causing problems at home, school, or work
- Drink alone or start your drinking early in the day
- Have a history of legal problems caused by your drinking

Alcohol use disorders can develop insidiously, and there is often no clear line between alcohol abuse (problem drinking) and alcohol dependence (alcoholism). Eventually, alcohol dominates thinking, emotions, and actions and becomes the primary means through which a person can deal with social relations, work, and life.

Diagnosis

The American Psychiatric Association has specific diagnostic criteria for alcohol use disorders. They include:

- Craving, including desires to use more frequent or larger amounts of alcohol
- Tolerance, including needing to use larger amounts of alcohol to achieve intoxication
- Withdrawal, including having physical or emotional symptoms when stopping or reducing alcohol use

Sometimes a person can recognize that alcohol is causing problems, and will seek the advice of a health care provider on their own. Other times, family, friends, or co-workers may be ones who must encourage the person to discuss their drinking habits with their provider. According to the CDC, only 1 in 6 American adults, including binge drinkers, have ever discussed their alcohol use with a health care professional.

Guidelines recommend that primary care doctors routinely screen for alcohol misuse during office visits with their patients. Screening may begin with a simple question: “Do you sometimes drink alcoholic beverages?”

Screening Tests for Alcoholism

A health care provider who suspects alcohol abuse should ask the person questions about current and past drinking habits to distinguish low-risk from at-risk (heavy) drinking. Screening tests for alcohol problems in older people should check for possible medical problems or medications that might place them at higher risk for drinking than younger individuals.



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A number of short screening tests are available, which people can even take on their own.

AUDIT Test: The Alcohol Use Disorders Identification Test (AUDIT) is specifically recommended as a screening tool by the U.S. Preventive Services Task Force. It is designed to identify people at risk for heavy (hazardous) drinking. A short 3-question version asks people how often in the past year they drink alcohol, how many drinks they typically have on a day when they do consume alcohol, and how often they have had 6 or more drinks on one occasion.

The full 10-question version of AUDIT asks:

- How often do you have a drink containing alcohol?
- How many drinks containing alcohol do you have on a typical day when you are drinking?
- How often do you have 6 or more drinks on that occasion?
- How often during the last year have you found that you were not able to stop drinking once you had started?
- How often during the last year have you failed to do what was normally expected from you because of drinking?
- How often during the last year have you been unable to remember what happened the night before because you had been drinking?
- How often during the last year have you needed an alcoholic drink first thing in the morning to get yourself going after a night of heavy drinking?
- How often during the last year have you had a feeling of guilt or remorse after drinking?
- Have you or someone else been injured as a result of your drinking?
- Has a relative, friend, doctor, or another health professional expressed concern about your drinking or suggested you cut down?

CAGE Test: The CAGE test is an acronym for the following questions and is one of the quickest screening tests. It asks:

- Have you ever felt you should CUT (C) down on your drinking?
- Have people ANNOYED (A) you by criticizing your drinking?
- Have you ever felt bad or GUILTY (G) about your drinking?
- Have you ever had a drink first thing in the morning, to steady your nerves, or to get rid of a hangover (use of alcohol as an EYE-OPENER [E] in the morning)?

Two "yes" responses indicate a lifetime history of alcohol problems.



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Other Screening Tests: Other screening tests include the Michigan Alcoholism Screening Test (MAST), the Alcohol Dependence Scale (ADS), and the T-ACE.

Physical Exam and Laboratory Tests

The health care provider will perform a physical examination and ask about family and medical history. The provider may order tests to check for health problems that are common in people who use alcohol. These tests may include:

- Blood alcohol level (This shows if you have recently been drinking alcohol. It does not diagnose alcohol use disorder.)
- Urine blood screen (which includes alcohol)
- Complete blood count
- Liver function tests
- Magnesium blood tests

Some blood tests use biologic markers to identify organ damage associated with chronic heavy alcohol use:

- Carbohydrate-deficient transferrin (CDT) assists with iron transport in the body. It is a marker for heavy drinking and can be helpful in monitoring progress towards abstinence.
- Gamma-glutamyltransferase (GGT) is a liver enzyme that is very sensitive to alcohol. It can be elevated after moderate alcohol intake and in chronic alcoholism.
- Aspartate (AST) and alanine aminotransaminases (ALT) are liver enzymes that are markers for liver damage.
- Mean corpuscular volume (MCV) refers to the size of red blood cells. High levels of MCV are common in people with alcoholism.

Treatment

There are many options for treatment for alcohol use disorders. They depend in part on the severity of the drinking problem.

Treatment for alcohol use disorder may include:

- Education about alcohol and addiction



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- Psychotherapy, which may include individual, group, or family sessions
- Medications

Guidelines recommend that primary care doctors do brief behavioral counseling interventions for people who show signs of risk to help them reduce or stop their drinking. Your health care provider may give you an action plan for working on your drinking, ask you to keep a daily diary of how much alcohol you consume, and recommend target goals for your drinking. Your provider may recommend anti-craving or aversion medication and also refer you to other health care professionals for substance abuse services.

Treatment of alcoholism is often complicated and compounded by accompanying medical illnesses such as high blood pressure, stomach ulcers, and nutritional deficiencies. Psychiatric illnesses such as depression, anxiety, and bipolar disorder are also common. These co-existing conditions must be addressed and treated.

Treatment Goals

The ideal goal of long-term treatment for alcohol dependence is total abstinence. People who achieve total abstinence have better survival rates, mental health, and relationships, than those who continue to drink or relapse. To achieve this, you need to learn how to replace the addictive patterns with healthy behaviors.

Because abstinence can be challenging to attain, many professionals choose to treat alcoholism as a chronic disease. In other words, people with alcohol use disorders should expect and accept relapse but should aim for as long a remission period as possible. Even merely reducing alcohol intake can lower the risk for alcohol-related medical problems.

Alcoholics Anonymous (AA) and other alcoholism treatment groups express concern about treatment approaches that do not aim for strict abstinence. Many people with alcoholism are eager for any excuse to start drinking again. There is also no way to determine which people can stop after one drink and which ones cannot.

Evidence strongly suggests that seeking total abstinence and avoiding high-risk situations are the optimal goals for people with alcoholism. A strong social network and family support is also important. Families and friends need to be educated on how to assist, and not enable, the drinker. Support groups such as Al-Anon can be very helpful in providing advice and guidance for family members.

Inpatient Versus Outpatient Treatment

The choice of a treatment facility depends on a number of factors, including cost and insurance coverage. A primary consideration is whether the person will need medical supervision during withdrawal (detoxification).

Some studies have reported better success rates with inpatient treatment of patients with alcoholism.



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However, other studies strongly suggest that alcoholism can be effectively treated in outpatient settings.

Residential (inpatient) centers provide intensive care in a safe and structured facility. A typical stay at an inpatient center can last from 1 to 3 months. During this time, the person undergoes detoxification and, once stabilized, then begins daily treatment for recovery. Therapeutic treatment includes education, counseling, support groups, and medication if needed. Mental health disorders and medical conditions are also addressed.

Outpatient treatment centers provide similar therapies but the person lives at home and attends an alcohol recovery program several times a week.

The current approach to outpatient treatment often uses "medical management," a disease management approach that is used for chronic illnesses such as diabetes. With medical management, people receive regular 20-minute sessions with a health care provider. The provider monitors the person's medical condition, medication, and alcohol consumption.

Once people complete an inpatient or outpatient program, they need help to maintain sobriety. Relapse is common in the first year after treatment. "Aftercare" programs help reduce the risk of relapse. These programs can range from support groups or 12-step programs to sober-living or transitional houses that offer an abstinent environment.

Treatment for Alcohol Withdrawal

About half of people who have alcohol-use disorders experience withdrawal symptoms when they stop drinking. Alcohol withdrawal symptoms occur within 6 to 12 hours after the last drink, but can persist for many days. Symptoms usually peak during the second day of abstinence and improve by the fifth day.

Withdrawal symptoms can include:

- Sweating
- Shaking
- Headaches
- Anxiety
- Irritability
- Insomnia
- Nausea and vomiting



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While uncommon, severe symptoms of alcohol withdrawal can include seizures, hallucinations, and delirium tremens. Delirium tremens is a potentially life-threatening condition marked by severe mental and nervous system changes.

A health provider should medically manage or supervise the detoxification process. Detox may be done on an inpatient or outpatient basis depending on the person's age, health condition, and severity of symptoms. Anti-anxiety medications such as benzodiazepines may be administered to help relieve withdrawal symptoms.

Detoxification does not cure the craving for alcohol but it is the first step for recovery. People who complete detox can then begin other treatments (counseling, medication) to address their addiction.

Medications

Three drugs are specifically approved to treat alcohol dependence:

- Naltrexone (ReVia, Vivitrol, generic)
- Acamprosate (Campral, generic)
- Disulfiram (Antabuse, generic)

Naltrexone and acamprosate are anticraving drugs. Disulfiram is an aversion drug. Other medications, which are not approved for alcohol disorder treatment, may be prescribed off-label.

Anticraving Medications

Anticraving drugs are opioid antagonists. These drugs reduce the intoxicating effects of alcohol and the urge to drink.

Evidence suggests that acamprosate and oral naltrexone are very effective for preventing craving and helping maintain abstinence. Researchers are also studying whether they can be used in combination for people who do not respond to single drug treatment.

Naltrexone: Naltrexone (ReVia, Vivitrol, generic) is approved for the treatment of alcoholism and helps reduce alcohol dependence in the short term for people with moderate-to-severe alcohol dependency. ReVia, a pill that is taken daily by mouth, is the oral form of this medication. Vivitrol is a once-a-month injectable form of naltrexone. Studies suggest that oral naltrexone can help reduce heavy drinking and prevent relapse.

Naltrexone should be prescribed along with psychotherapy or other supportive medical management. The most common side effects are nausea, vomiting, and stomach pain, which are usually mild and temporary.



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Other side effects include headache and fatigue. High doses can cause liver damage. The drug should not be given to anyone who has used narcotics within 7 to 10 days.

It is important to take the pill form of naltrexone (Revia, generic) on a daily basis. Because many people have difficulty sticking to this daily regimen, a monthly injection of Vivitrol is another option. Injectable naltrexone can cause skin reactions and infections. People should monitor the injection site for pain, swelling, tenderness, bruising, or redness and contact their doctors if these symptoms do not improve within 2 weeks.

Naltrexone does not work in all people. Some studies suggest that people with a specific genetic variant may respond better to the drug than those without the gene.

Acamprosate: Acamprosate (Campral, generic) is a newer anti-craving medication. It appears to work by restoring the balance of GABA and glutamate neurotransmitters. Studies indicate that it reduces the frequency of drinking and, in combination with psychotherapy, improves quality of life even in people with severe alcohol dependence.

The drug may cause occasional diarrhea, nausea, and headache. People with kidney problems should use acamprosate cautiously.

Aversion Medications

Disulfiram: Aversion medications have properties that interact with alcohol to produce distressing side effects. Disulfiram (Antabuse, generic) causes flushing, headache, nausea, and vomiting if a person drinks alcohol while taking the drug. The symptoms can be triggered after drinking half a glass of wine or half a shot of liquor and may last from half an hour to 2 hours, depending on dosage of the drug and the amount of alcohol consumed.

One dose of disulfiram is usually effective for 1 to 2 weeks. Overdose can be dangerous, causing low blood pressure, chest pain, shortness of breath, and even death.

Research suggests that disulfiram is not that effective for reducing heavy alcohol consumption. Other drug treatments such as acamprosate or naltrexone are now more commonly used

Psychotherapy and Behavioral Methods

Standard forms of psychotherapy for alcohol use disorders include:

- Cognitive-behavioral therapy
- Combined behavioral intervention
- Interactional group psychotherapy based on the Alcoholics Anonymous (AA) 12-step program



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These approaches are all effective. Specific people may do better with one program than another. Some forms of therapy may be provided in individual, group, or family sessions.

Interactional Group Psychotherapy (Alcoholics Anonymous)

AA, which was founded in 1935, is an excellent example of interactional group psychotherapy. It remains the most well-known program for helping people with alcoholism. AA offers a very strong support network using group meetings open 7 days a week in locations all over the world. A buddy system, group understanding of alcoholism, and forgiveness for relapses are AA's standard methods for building self-worth and alleviating feelings of isolation.

AA's 12-step approach to recovery includes a spiritual component that might deter people who lack religious convictions. AA emphasizes that the "higher power" component of its program need not refer to any specific belief system. Associated membership programs, Al-Anon and Alateen, offer help for family members and friends.

The 12 Steps of Alcoholics Anonymous

- We admit we were powerless over alcohol and that our lives have become unmanageable.
- We have come to believe that a Power greater than ourselves could restore us to sanity.
- We have made a decision to turn our will and our lives over to the care of God, as we understand what this Power is.
- We have made a searching and fearless moral inventory of ourselves.
- We have admitted to God, to ourselves, and to another human being the exact nature of our wrongs.
- We are entirely ready to have God remove all these defects of character.
- We have humbly asked God to remove our shortcomings.
- We have made a list of all people we had harmed and have become willing to make amends to them all.
- We have made direct amends to such people wherever possible, except when to do so would injure them or others.
- We have continued to take personal inventory and when we were wrong promptly admitted it.



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- We have sought through prayer and meditation to improve our conscious contact with God as we understand what this higher Power is, praying only for knowledge of God's will for us and the power to carry that out.
- Having had a spiritual awakening as the result of these steps, we have tried to carry this message to alcoholics and to practice these principles in all our affairs.

Cognitive-Behavioral Therapy

Cognitive-behavioral therapy (CBT) uses a structured teaching approach and may be better than AA for people with severe alcoholism. People are given instruction and homework assignments intended to improve their ability to cope with basic living situations, control their behavior, and change the way they think about drinking.

A CBT therapist may recommend:

- Keeping a diary of your drinking experiences and identifying risky situations and triggers that prompt drinking.
- Skills to help cope when exposed to “cues” (places or circumstances that provoke the desire to drink).
- Activities that can replace drinking.

CBT may be especially effective when used in combination with opioid antagonists, such as naltrexone. CBT that addresses alcoholism and depression is an important treatment for people with both conditions.

Combined Behavioral Intervention

Combined behavioral intervention (CBI) is a newer form of therapy that uses special counseling techniques to help motivate people with alcoholism to change their drinking behavior. CBI combines elements from other psychotherapy treatments such as cognitive behavioral therapy, motivational enhancement therapy, and 12-step programs. It teaches how to cope with drinking triggers. People also learn strategies for refusing alcohol so that they can achieve and maintain abstinence. In a well-designed study, CBI, combined with regular doctor's office visits (medical management), worked as well as naltrexone in successfully treating alcoholism.

Treating Sleep Disturbances

People with alcohol use disorders often have insomnia and other sleep problems, which can last months to years after abstinence. Sleep disturbances may even influence relapse. Available therapies include sleep



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hygiene, bright light therapy, meditation, relaxation methods, and other nondrug approaches. Many of the medications for insomnia are not recommended for people with alcoholism because they can interact dangerously with alcohol.

Other Treatments

Some people try other methods, such as acupuncture, hypnosis, or relaxation techniques. Such approaches are not harmful, although it is not clear how effective they are.

Resources

- www.niaaa.nih.gov -- National Institute on Alcohol Abuse and Alcohol
- <http://rethinkingdrinking.niaaa.nih.gov> -- Rethinking Drinking: Alcohol and Your Health
- www.samhsa.gov - Substance Abuse and Mental Health Services Administration
- www.ncadd.org -- National Council on Alcoholism
- www.alcoholics-anonymous.org -- Alcoholics Anonymous
- www.al-anon.alateen.org -- Al-Anon Family Groups
- www.nofas.org -- National Organization on Fetal Alcohol Syndrome
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