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How Many Is Too Many?

When Drinking Becomes a Problem

For some people, a glass of wine, a beer, or a cocktail is an occasional treat. Others struggle to stop at just one or even many drinks. Some may drink alcohol in moderation, but still feel like they're not in control of their drinking. How do you know if alcohol has become a problem for you?

Some people should avoid alcohol completely. These include pregnant women and people who take certain medications. For most adults, experts recommend men limit alcohol to no more than two drinks per day, and women to no more than one drink per day. Drinking less is better for your health than drinking more.

"And you aren't supposed to save those up and drink them all on a Saturday night," says Dr. George Koob, director of NIH's National Institute on Alcohol Abuse and Alcoholism. This type of drinking, called binge drinking, is especially dangerous. Binge drinking is when you have five or more drinks within a few hours for men, and four or more for women. Examples of a standard drink size are a 12-ounce glass of beer, a 5-ounce glass of wine, or 1.5 ounces of hard liquor.

Binge drinking can lead to blackouts or even deadly overdoses. Heavy drinking in general can cause many health problems. These include liver disease, heart and lung problems, and muscle and bone weakness.

There has been some recent good news about drinking in the U.S. "We've seen a steady decline in underage drinking," Koob says. "And deaths associated with driving while intoxicated have, overall, gone down."

"We've also seen movements for things like 'dry January,' 'sober curious,' and bars serving non-alcoholic cocktails," Koob explains. "People are more aware that there are individuals who don't want to drink."

But there's also bad news. Over the last two decades, deaths involving alcohol use have more than doubled. The biggest increase has been for women.

The COVID-19 pandemic may have made things worse. "Quite a few studies indicate that people tried to cope with the stress of the pandemic by drinking," says Koob. "And there were stressors all over the place. Isolation. Loss of jobs. Worry about getting sick. And, for women in particular, increases in responsibilities at home."

Rethinking Your Drinking • Alcohol use disorder is when you can't stop or control your alcohol use despite damage to your work, health, or personal life. This doesn't look the same for everyone. It's a complex disorder and can be mild, moderate, or severe.

"Alcohol use disorder is not caused by a single thing," says Dr. Robert Messing, who studies alcohol and the brain at the University of Texas. "Different people can have different combinations of symptoms."

It helps to know what symptoms to look for so you can make changes to your drinking habits early (see the Wise Choices box on next page for a list). If alcohol is causing problems in your life, many effective therapies are available.

Talk therapies, like cognitive behavioral therapy, can help you learn your triggers for drinking and ways to manage them. Peer

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groups can provide you with support through your recovery.

"And there are very good, safe medications," says Dr. Nancy Diazgranados, who treats people with alcohol use disorder at the NIH Clinical Center. "They take away the cravings, or the desire or need for that next drink. That makes it easier to quit because you're not thinking about that next drink all day." These non-addictive medications can be prescribed by a physician.

Some people may benefit from family counseling to help repair relationships damaged by alcohol use, Diazgranados says. Other types of therapy, such as recreational and vocational therapy, teach people how to avoid alcohol in their personal and work lives. You have a better chance of recovery when you use many of the different treatments at the same time, she says.

Definitions

Inflammation
Heat, swelling, and redness caused by the body's protective response to injury or infection.

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Changing Your Brain • You may not succeed the first time you try to quit or cut back on drinking. Relapse is common in alcohol use disorder.

"If you have a slip every once in a while, we still consider you to be in at least the early stages of recovery," Koob says.

It can take many tries to regain control of your alcohol use. That's because alcohol can actually change your brain. Researchers are trying to better understand those changes and how to reverse them.

Diazgranados' team is comparing brain differences between heavy drinkers, moderate drinkers, and people who don't drink.

"We want to know how brain functions are affected by drinking," she explains. They're using brain scans to look at alcohol's effects on different brain areas. Those areas could then potentially be targeted with new treatments.

Messing's lab is looking at ways to change the brain's responses to alcohol, too. They're especially interested in the brain's **inflammation** response.

"Hangovers are made better by anti-inflammatory drugs, like aspirin," explains Messing. "That's probably an indicator that inflammation is caused by heavy drinking."

His team is looking into whether that increased inflammation triggers brain activity that then causes people to drink more—and how to prevent that with medication.

Understanding how alcohol changes the brain could lead to new ways to prevent and treat addiction. But for now, if you're struggling with alcohol, talk with someone you trust.

"Seek help, whether it's from your health care provider, or a pastor, or a friend," says Diazgranados. "There's always someone willing to help you through treatment."

For help finding treatment, visit alcoholtreatment.niaaa.nih.gov. ■

Wise Choices

What's Your Relationship with Alcohol?

If you answer "yes" to two or more of these questions, talk with your health care provider about alcohol use disorder. In the past year, have you:

- Had times when you ended up drinking more, or longer, than you intended?
- More than once wanted to cut down or stop drinking, or tried to, but couldn't?
- Wanted a drink so badly you couldn't think of anything else?
- Found that drinking—or being sick from drinking—often interfered with taking care of your home or family? Or caused job troubles or school problems?
- Continued to drink even though it was causing trouble with your family or friends?
- Given up or cut back on activities that were important or interesting to you, or gave you pleasure, in order to drink?
- Had to drink much more than you once did to get the effect you want? Or found that your usual number of drinks had much less effect than before?
- Found that when the effects of alcohol were wearing off, you had withdrawal symptoms, like shakiness, nausea, sweating, or a racing heart?
- More than once gotten into situations while or after drinking that increased your chances of getting hurt?
- Continued to drink even though it was making you feel depressed or anxious or adding to another health problem?

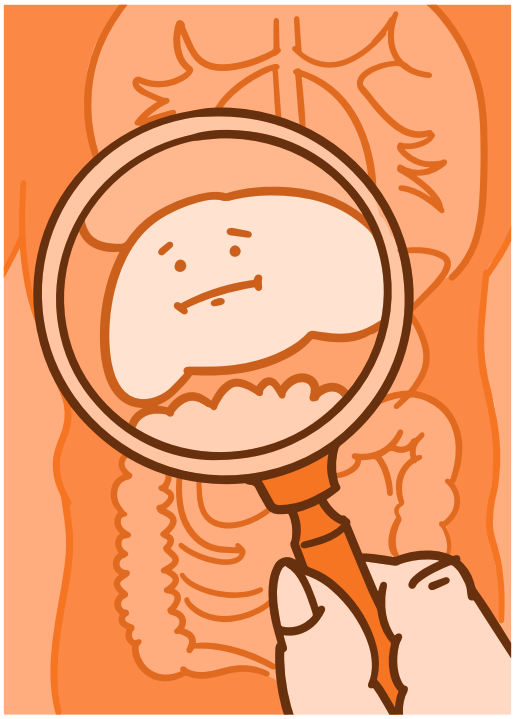
See full list at rethinkingdrinking.niaaa.nih.gov.

Web Links

For more about excess drinking, see "Links" in the online article: newsinhealth.nih.gov/2022/10/how-many-too-many

Recognizing Jaundice

Signs That Your Liver Isn't Delivering



Some babies have a yellowish tint to their skin or the whites of their eyes right after birth. This is called jaundice. It can happen to adults, too. For adults, it can be a sign of a serious health condition.

Your liver helps rid your body of natural waste products and other harmful substances. If something interferes with this process, toxic compounds can build up in your body.

Jaundice happens when you have too much of a compound called bilirubin. Bilirubin forms when your body breaks down old or damaged red blood cells. The most common symptom is a yellow tint to your skin, the whites of your eyes, or the inside of your mouth. You may also have dark urine or pale stools.

Babies become jaundiced when their livers can't break down all the bilirubin that is produced the first few days after birth. Jaundice in babies usually goes away on its own in a week or two. If it goes on longer than this, they should be evaluated by a doctor.

In adults, many health conditions can lead to jaundice. One of the more common causes is when bile ducts get blocked. Bile ducts drain bilirubin from the liver into the intestines. They can get blocked by hard, pebble-like pieces of material that form in the gallbladder, called gallstones. Gallstones are usually made of bilirubin or cholesterol (a waxy, fat-like substance). Cancers of the bile duct or pancreas can also cause a blockage.

Jaundice can also be a sign of liver disease. Some liver diseases are caused by drinking too much alcohol or taking drugs. Others are caused by too much fat buildup in the liver.

Misusing certain medications, like acetaminophen, can damage the liver and lead to jaundice. So can hepatitis, or inflammation of the liver. Viruses are the most common cause of hepatitis. But the condition can be caused by other things, like toxins and certain diseases.

If a liver disease lasts for only a short time, the liver may be able to heal. But if the disease becomes chronic, meaning it lasts for a long time, it can lead to scarring of the liver. This scarring is called cirrhosis. Cirrhosis can impair the liver's ability to function and may eventually lead to liver failure.

Not everyone who has jaundice has a serious health condition. Some people are born with a condition called Gilbert syndrome. This condition slows the liver's ability to break down bilirubin. It can lead to short periods of high bilirubin levels and, sometimes, jaundice. But it doesn't lead to further complications and doesn't need special treatment.

If you have any symptoms of jaundice, see a health care provider right away. "Your provider will need to do liver tests to figure out what type of jaundice it is," says Dr. David Goldberg, a liver specialist at the University of Miami Health System.

Treatment depends on the cause. Gallstones are most commonly treated with surgery to remove the gallbladder. Liver damage that's caused by medications will often heal once you stop taking the medication. Antiviral drugs can treat hepatitis virus infections. People with a chronic liver disease should limit alcohol use to prevent further liver damage.

Goldberg is one of several NIH-funded researchers studying whether cholesterol-lowering drugs called statins can slow or prevent the progression of liver disease.

You can take steps to protect yourself from things that damage the liver. See the Wise Choices box for tips on keeping your liver healthy. ■

Wise Choices

Take Care of Your Liver

- Eat a healthy diet and maintain a healthy weight.
- **Take steps to prevent hepatitis infections.** Get vaccinated against hepatitis A and B. Always wash your hands after using the toilet, changing diapers, and before and after handling or preparing food. Learn more at bit.ly/3U4xptL.
- **Limit alcohol use.** Drinking too much alcohol harms the liver.
- **Quit smoking.** You can get free help quitting at 1-800-QUIT-NOW or smokefree.gov.
- Take medications only as directed.
- **Tell your provider about all the medicines you take,** including over-the-counter drugs and supplements.

Web Links

For more about jaundice, see "Links" in the online article: newsinhealth.nih.gov/2022/10/recognizing-jaundice

Health Capsules

For links to more information, please visit our website and see these stories online.

Kids' Sleep Linked to Brain Health

Experts suggest that children ages 6 to 12 get at least nine hours of sleep each day. But many don't get that much. A new NIH-funded study shows that getting enough sleep may be especially important for preteen brains.

Researchers identified more than 4,000 children, ages 9 or 10, who got at least nine hours of sleep per day, according to their parents. This group was compared to a similar number of kids who got less than nine hours of sleep.

The children who got less sleep had more mental health and behavioral challenges than those who got enough sleep. Less sleep was linked to stress, depression, anxiety, and aggressive behavior. Kids who lacked sleep also had problems with making decisions, solving conflicts, and learning. Differences between the groups continued two years later.

Brain scans were taken at the start of the study and two years later. These showed that the groups also had differences in brain structure.

The findings suggest that sleep affects learning and behavior through specific brain changes.

"Children who had insufficient sleep had smaller volume in certain areas of the brain responsible for attention, memory, and inhibition control, compared to those with healthy sleep habits," says study lead Dr. Ze Wang of the University of Maryland. More studies are needed to confirm these findings and to see if these brain changes can be reversed. ■

Vaccinations and Older Adults

When fall arrives, many of us know it's time to get the annual flu, or influenza, shot. It's also a good time to consider what other vaccines or boosters to get to protect your health.

Staying up to date on vaccines is especially important for older adults. Our immune system helps the body fight infection, but it gets weaker as we age. Vaccines help to strengthen the immune system.

Other vaccines that are important to older adults include COVID-19, pneumonia, shingles, and TDP (tetanus, diphtheria, and pertussis).

It's best to get the flu vaccine by the end of October, so you'll be protected when flu season starts. But it's not too late to get the shot even a few months later. Certain flu vaccines are designed especially for people ages 65 and older.

Studies show that COVID-19 vaccines make it less likely you'll get seriously ill or need to go to the hospital if infected with the virus. They also reduce the risk of getting the disease. New booster shots targeting the Omicron variants became available in fall 2022.

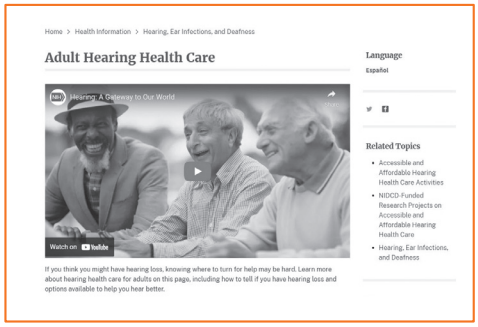
The pneumococcal vaccine is recommended for all adults ages 65 and older. It protects against serious infections like pneumonia. As for other vaccines, the TDP booster shot should be given every 10 years. And the shingles vaccine is safe and effective for healthy adults ages 50 and older.

Protect yourself by keeping your vaccines up to date. Talk with a health care provider about which ones you need and if they can be taken together. Visit www.nia.nih.gov/health/vaccinations-older-adults. ■

Featured Website

Adult Hearing Health Care
bit.ly/3dkQ3wJ

Nearly half of U.S. adults ages 60 to 69 say they have hearing loss. Find helpful information on age-related hearing loss and where to turn for help. Get details about hearing aids and assistive devices. Learn how to prevent noise-induced hearing loss and tinnitus.



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