



RETHINKING DRINKING

Alcohol and your health

Research-based information from the
National Institutes of Health
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

“Sometimes we do things out of habit and we don’t really stop to think about it. This made me think about my choices.”

“It emphasized that drinking is not bad in and of itself—it’s how much you’re doing it and how it’s affecting your life.”

*“I thought the strategies for cutting down were really good.
It gives you tools to help yourself.”*

These are comments from social drinkers who reviewed *Rethinking Drinking* in focus testing. We welcome your comments as well. Send an email to rethinking@niaaa.nih.gov or call 301–443–3860.

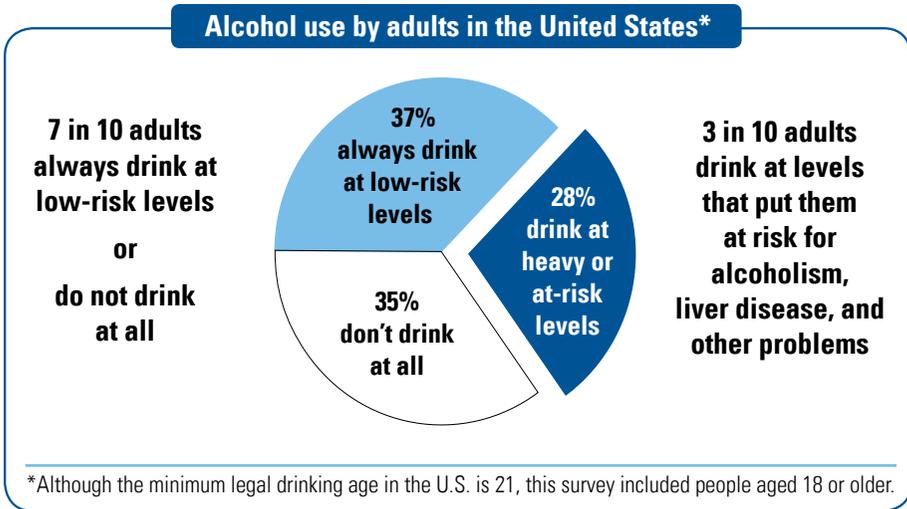
For an online version of this booklet with interactive features and additional resources, visit

[RethinkingDrinking.niaaa.nih.gov](https://www.rethinkingdrinking.niaaa.nih.gov)

RETHINKING DRINKING

Do you enjoy a drink now and then? Many of us do, often when socializing with friends and family. Drinking can be beneficial or harmful, depending on your age and health status, the situation, and, of course, how much you drink.

Do you think you may drink too much at times? Do you think “everyone” drinks a lot? See below for results from a nationwide survey of 43,000 adults by the National Institutes of Health on alcohol use and its consequences.



For anyone who drinks, *Rethinking Drinking* offers valuable, research-based information. The first part, *How much is too much?*, answers these questions and more:

- What’s “low-risk” drinking versus “at-risk” or “heavy” drinking?
- Why is being able to “hold your liquor” a concern?
- What are signs that drinking is causing harm?

Many heavy drinkers do not have alcohol-related problems yet and can reduce their risk of harm by cutting back. For the nearly 18 million Americans who have alcoholism or related problems, however, it’s safest to quit.

The second part of this booklet, *Thinking about a change?*, offers tips, tools, and resources for people who choose to cut down or quit. Success is likely for those who persist in their efforts. Even for those with alcoholism, studies show that most do recover, often without professional treatment.

What do you think about taking a look at your drinking habits and how they may affect your health? *Rethinking Drinking* can help you get started.

HOW MUCH IS TOO MUCH?

What counts as a drink?

Many people are surprised to learn what counts as a drink. In the United States, a “standard” drink is any drink that contains about 0.6 fluid ounces or 14 grams of “pure” alcohol. Although the drinks pictured below are different sizes, each contains approximately the same amount of alcohol and counts as a single drink.

<p>12 fl oz of regular beer</p>  <p>about 5% alcohol</p>	=	<p>8–9 fl oz of malt liquor (shown in a 12 oz glass)</p>  <p>about 7% alcohol</p>	=	<p>5 fl oz of table wine</p>  <p>about 12% alcohol</p>	=	<p>1.5 fl oz shot of 80-proof spirits (“hard liquor”— whiskey, gin, rum, vodka, tequila, etc.)</p>  <p>about 40% alcohol</p>
<p>The percent of “pure” alcohol, expressed here as alcohol by volume (alc/vol), varies by beverage.</p>						

How many drinks are in common containers?

Below is the approximate number of standard drinks in different sized containers of

regular beer	malt liquor	table wine	80-proof spirits or “hard liquor”
12 fl oz = 1	12 fl oz = 1½	750 ml (a regular wine bottle) = 5	a shot (1.5 oz glass/50 ml bottle) = 1
16 fl oz = 1½	16 fl oz = 2		a mixed drink or cocktail = 1 or more
22 fl oz = 2	22 fl oz = 2½		200 ml (a “half pint”) = 4½
40 fl oz = 3½	40 fl oz = 4½		375 ml (a “pint” or “half bottle”) = 8½
			750 ml (a “fifth”) = 17

The examples shown on this page serve as a starting point for comparison. For different types of beer, wine, or malt liquor, the alcohol content can vary greatly. Some differences are smaller than you might expect, however. Many light beers, for example, have almost as much alcohol as regular beer—about 85% as much, or 4.2% versus 5.0% alcohol by volume (alc/vol), on average.

Although the standard drink sizes are helpful for following health guidelines, they may not reflect customary serving sizes. A mixed drink, for example, can contain one, two, or more standard drinks, depending on the type of spirits and the recipe.

What's your drinking pattern?

Using the drink sizes on page 2, answer the questions below:

- On **any day** in the past year, have you ever had
 - For MEN: more than 4 drinks? ▶ yes no
 - For WOMEN: more than 3 drinks? ▶ yes no
- Think about your **typical week**:
 - On average, how many **days a week** do you drink alcohol? (a)
 - On a typical drinking day, how many **drinks** do you have? X (b)

(multiply a x b) —

weekly average =

Sometimes even a little is too much

Even moderate levels of drinking (up to 2 drinks per day for men or 1 for women) can be too much in some circumstances. It's safest to avoid alcohol if you are

- planning to drive a vehicle or operate machinery
- taking medications that interact with alcohol
- managing a medical condition that can be made worse by drinking
- pregnant or trying to become pregnant

Can you "hold your liquor"?

If so, you may be at greater risk. For some people, it takes quite a few drinks to get a buzz or feel relaxed. Often they are unaware that being able to "hold your liquor" isn't protection from alcohol problems, but instead a reason for caution. They tend to drink more, socialize with people who drink a lot, and develop a tolerance to alcohol. As a result, they have an increased risk for developing alcoholism. The higher alcohol levels can also cause liver, heart, and brain damage that can go unnoticed until it's too late. And all drinkers need to be aware that even moderate amounts of alcohol can significantly impair driving performance, even when they don't feel a buzz from drinking.

What's "low-risk" drinking?

A major nationwide survey of 43,000 U.S. adults by the National Institutes of Health shows that only about 2 in 100 people who drink within both the "single-day" and weekly limits below have alcoholism or alcohol abuse. How do these "low-risk" levels compare with your drinking pattern from page 3?



Low-risk drinking limits	MEN	WOMEN
On any single DAY	No more than 4  drinks on any day	No more than 3  drinks on any day
	** AND **	** AND **
Per WEEK	No more than 14  drinks per week	No more than 7  drinks per week

To stay low risk, keep within BOTH the single-day AND weekly limits.

"Low risk" is *not* "no risk." Even within these limits, drinkers can have problems if they drink too quickly, have health problems, or are older (both men and women over 65 are generally advised to have no more than 3 drinks on any day and 7 per week). Based on your health and how alcohol affects you, you may need to drink less or not at all.

What's "heavy" or "at-risk" drinking?

For healthy adults in general, drinking more than the single-day or weekly amounts shown above is considered "at-risk" or "heavy" drinking. About 1 in 4 people who drink this much already has alcoholism or alcohol abuse, and the rest are at greater risk for developing these and other problems.

It makes a difference both *how much* you drink on any day and *how often* you have a "heavy drinking day"—that is, more than 4 drinks in a day for men or more than 3 drinks for women. The more drinks in a day and the more heavy drinking days over time, the greater the chances for problems (see "What's the harm?" on the next page).

Why are women's low-risk limits different from men's?

Research shows that women start to have alcohol-related problems at lower drinking levels than men do. One reason is that, on average, women weigh less than men. In addition, alcohol disperses in body water, and pound for pound, women have less water in their bodies than men do. So after a man and woman of the same weight drink the same amount of alcohol, the woman's blood alcohol concentration will tend to be higher, putting her at greater risk for harm.

How much do U.S. adults drink?

The majority—7 out of 10—either abstain or always drink within low-risk limits. Which group are you in?



What's the harm?

Not all drinking is harmful. You may have heard that regular light to moderate drinking (from ½ drink a day up to 1 drink a day for women and 2 for men) can even be good for the heart. With at-risk or heavy drinking, however, any potential benefits are outweighed by greater risks.

Injuries. Drinking too much increases your chances of being injured or even killed. Alcohol is a factor, for example, in about 60% of fatal burn injuries, drownings, and homicides; 50% of severe trauma injuries and sexual assaults; and 40% of fatal motor vehicle crashes, suicides, and fatal falls.

Health problems. Heavy drinkers have a greater risk of liver disease, heart disease, sleep disorders, depression, stroke, bleeding from the stomach, sexually transmitted infections from unsafe sex, and several types of cancer. They may also have problems managing diabetes, high blood pressure, and other conditions.

Birth defects. Drinking during pregnancy can cause brain damage and other serious problems in the baby. Because it is not yet known whether any amount of alcohol is safe for a developing baby, women who are pregnant or may become pregnant should not drink.

Alcohol use disorders. Generally known as alcoholism and alcohol abuse, alcohol use disorders are medical conditions that doctors can diagnose when a patient's drinking causes distress or harm. In the United States, about 18 million people have an alcohol use disorder. See the next page for symptoms.

What are symptoms of an alcohol use disorder?

See if you recognize any of these symptoms in yourself. 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?
- more than once gotten into situations while or after drinking that **increased your chances of getting hurt** (such as driving, swimming, using machinery, walking in a dangerous area, or having unsafe sex)?
- 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?
- continued to drink even though it was making you feel **depressed or anxious** or adding to **another health problem**? Or after having had a **memory blackout**?
- spent a **lot of time** drinking? Or being sick or getting over other aftereffects?
- continued to drink even though it was causing **trouble** with your **family** or **friends**?
- 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?
- given up** or **cut back** on **activities** that were important or interesting to you, or gave you pleasure, in order to drink?
- more than once gotten **arrested**, been held at a police station, or had other **legal problems** because of your drinking?
- found that when the effects of alcohol were wearing off, you had **withdrawal symptoms**, such as trouble sleeping, shakiness, restlessness, nausea, sweating, a racing heart, or a seizure? Or sensed things that were not there?

If you **don't** have symptoms, then staying within the low-risk drinking limits on page 4 will reduce your chances of having problems in the future.

If you **do** have any symptoms, then alcohol may already be a cause for concern. The more symptoms you have, the more urgent the need for change. A health professional can look at the number, pattern, and severity of symptoms to see whether an alcohol use disorder is present and help you decide the best course of action.

Thinking about a change? The next section may help.

Note: These questions are based on symptoms for alcohol use disorders in the American Psychiatric Association's *Diagnostic and Statistical Manual (DSM) of Mental Disorders*, Fourth Edition. The DSM is the most commonly used system in the United States for diagnosing mental health disorders.

THINKING ABOUT A CHANGE?

THINKING ABOUT A CHANGE?

It's up to you

It's up to you as to whether and when to change your drinking. Other people may be able to help, but in the end it's your decision. Weighing your pros and cons can help.

Pros: What are some reasons why you might want to make a change?

- | | |
|---|--|
| <input type="checkbox"/> to improve my health | <input type="checkbox"/> to lose weight or get fit |
| <input type="checkbox"/> to improve my relationships | <input type="checkbox"/> to save money |
| <input type="checkbox"/> to avoid hangovers | <input type="checkbox"/> to avoid more serious problems |
| <input type="checkbox"/> to do better at work or school | <input type="checkbox"/> to meet my own personal standards |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |

Cons: What are some possible reasons why you might not want to change?

- | | |
|--------------------------------|--------------------------------|
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |

Compare your pros and cons. Put extra check marks by the most important one(s). Is there a difference between where you are and where you want to be?

Ready . . . or not?

Are you ready to change your drinking? If so, see the next sections for support. But don't be surprised if you continue to have mixed feelings. You may need to re-make your decision several times before becoming comfortable with it.

If you're not ready to change yet, consider these suggestions in the meantime:

- Keep track of how often and how much you're drinking.
- Notice how drinking affects you.
- Make or re-make a list of pros and cons about changing.
- Deal with other priorities that may be in the way of changing.
- Ask for support from your doctor, a friend, or someone else you trust.

Don't wait for a crisis or to "hit bottom."

When someone is drinking too much, making a change *earlier* is likely to be more successful and less destructive to individuals and their families.

To cut down or to quit . . .

If you're considering changing your drinking, you'll need to decide whether to cut down or to quit. It's a good idea to discuss different options with a doctor, a friend, or someone else you trust. Quitting is strongly advised if you

- try cutting down but cannot stay within the limits you set
- have had an alcohol use disorder or now have symptoms (see page 6)
- have a physical or mental condition that is caused or worsened by drinking
- are taking a medication that interacts with alcohol
- are or may become pregnant

If you do not have any of these conditions, talk with your doctor to determine whether you should cut down or quit based on factors such as

- family history of alcohol problems
- your age
- whether you've had drinking-related injuries
- symptoms such as sleep disorders and sexual dysfunction

If you choose to cut down, see the low-risk drinking limits on the next page.

Planning for change

Even when you have committed to change, you still may have mixed feelings at times. Making a written "change plan" will help you to solidify your goals, why you want to reach them, and how you plan to do it. A sample form is provided on page 14, or you can fill out one online at the *Rethinking Drinking* Web site.

Reinforce your decision with reminders.

Enlist technology to help. Change can be hard, so it helps to have concrete reminders of why and how you've decided to do it. Some standard options include carrying a change plan in your wallet or posting sticky notes at home. If you have a computer or mobile phone, consider these high-tech ideas:

- Fill out a "change plan" online at the *Rethinking Drinking* Web site, email it to your personal (non-work) account, and review it weekly.
- Store your goals, reasons, or strategies in your mobile phone in short text messages or notepad entries that you can retrieve easily when an urge hits.
- Set up automated mobile phone or email calendar alerts that deliver reminders when you choose, such as a few hours before you usually go out.
- Create passwords that are motivating phrases in code, which you'll see each time you log in, such as 1Day@aTime, 1stThings1st!, or 0Pain=0Gain.

Strategies for cutting down

Small changes can make a big difference in reducing your chances of having alcohol-related problems. Here are some strategies to try. Check off perhaps two or three to try in the next week or two, then add some others as needed. If you haven't made progress after 2 to 3 months, consider quitting drinking altogether, seeking professional help, or both.

Keep track.

Keep track of how much you drink. Find a way that works for you, such as a 3x5" card in your wallet (see page 15 for samples), check marks on a kitchen calendar, or notes in a mobile phone notepad or personal digital assistant. Making note of each drink before you drink it may help you slow down when needed.

Count and measure.

Know the "standard" drink sizes so you can count your drinks accurately (see page 2). Measure drinks at home. Away from home, it can be hard to keep track, especially with mixed drinks. At times you may be getting more alcohol than you think. With wine, you may need to ask the host or server not to "top off" a partially filled glass.

Set goals.

Decide how many days a week you want to drink and how many drinks you'll have on those days. It's a good idea to have some days when you don't drink. Drinkers with the lowest rates of alcohol use disorders stay within these limits (also shown on page 4): For men, no more than 4 drinks on any day *and* 14 per week; and for women, no more than 3 drinks on any day *and* 7 per week. Both men and women over age 65 generally are advised to have no more than 3 drinks on any day *and* 7 per week. Depending on your health status, your doctor may advise you to drink less or not at all.

Pace and space.

When you do drink, pace yourself. Sip slowly. Have no more than one standard drink with alcohol per hour. Have "drink spacers"—make every other drink a nonalcoholic one, such as water, soda, or juice.

Include food.

Don't drink on an empty stomach. Have some food so the alcohol will be absorbed into your system more slowly.

□ **Find alternatives.**

If drinking has occupied a lot of your time, then fill free time by developing new, healthy activities, hobbies, and relationships or renewing ones you've missed. If you have counted on alcohol to be more comfortable in social situations, manage moods, or cope with problems, then seek other, healthy ways to deal with those areas of your life.

□ **Avoid "triggers."**

What triggers your urge to drink? If certain people or places make you drink even when you don't want to, try to avoid them. If certain activities, times of day, or feelings trigger the urge, plan something else to do instead of drinking. If drinking at home is a problem, keep little or no alcohol there.

□ **Plan to handle urges.**

When you cannot avoid a trigger and an urge hits, consider these options: Remind yourself of your reasons for changing (it can help to carry them in writing or store them in an electronic message you can access easily). Or talk things through with someone you trust. Or get involved with a healthy, distracting activity, such as physical exercise or a hobby that doesn't involve drinking. Or, instead of fighting the feeling, accept it and ride it out without giving in, knowing that it will soon crest like a wave and pass.

□ **Know your "no."**

You're likely to be offered a drink at times when you don't want one. Have a polite, convincing "no, thanks" ready. The faster you can say no to these offers, the less likely you are to give in. If you hesitate, it allows you time to think of excuses to go along.

Tools to help you manage urges to drink and build drink refusal skills are available on the *Rethinking Drinking* Web site.

If you want to quit drinking—

The four strategies on this page are especially helpful. But if you think you may be dependent on alcohol and decide to stop drinking completely, don't go it alone. Sudden withdrawal from heavy drinking can be life threatening. Seek medical help to plan a safe recovery.

Support for quitting

The suggestions in this section will be most useful for people who have become dependent on alcohol, and thus may find it difficult to quit without some help. Several proven treatment approaches are available. One size doesn't fit all, however. It's a good idea to do some homework on the Internet or at the library to find social and professional support options that appeal to you, as you are more likely to stick with them (see also Resources on the inside back cover). Chances are excellent that you'll pull together an approach that works for you.

Social support

One potential challenge when people stop drinking is rebuilding a life without alcohol. It may be important to

- educate family and friends
- develop new interests and social groups
- find rewarding ways to spend your time that don't involve alcohol
- ask for help from others

When asking for support from friends or significant others, be specific. This could include

- not offering you alcohol
- not using alcohol around you
- giving words of support and withholding criticism
- not asking you to take on new demands right now
- going to a group like Al-Anon

Consider joining Alcoholics Anonymous or another mutual support group (see Resources). Recovering people who attend groups regularly do better than those who do not. Groups can vary widely, so shop around for one that's comfortable. You'll get more out of it if you become actively involved by having a sponsor and reaching out to other members for assistance.

Feeling depressed or anxious?

It's common for people with alcohol problems to feel depressed or anxious. Mild symptoms may go away if you cut down or stop drinking. See a doctor or mental health professional if symptoms persist or get worse. If you're having suicidal thoughts, call your health care provider or go to the nearest emergency room right away. Effective treatment is available to help you through this difficult time.

Professional support

Advances in the treatment of alcoholism mean that patients now have more choices and health professionals have more tools to help.

Medications to treat alcoholism. Newer medications can make it easier to quit drinking by offsetting changes in the brain caused by alcoholism. These options (naltrexone, topiramate, and acamprosate) don't make you sick if you drink, as does an older medication (disulfiram). None of these medications are addictive, so it's fine to combine them with support groups or alcohol counseling.

A major clinical trial recently showed that patients can now receive effective alcohol treatment from their primary care doctors or mental health practitioners by combining the newer medications with a series of brief office visits for support. See Resources for more information.

Alcohol counseling. "Talk therapy" also works well. There are several counseling approaches that are about equally effective—12 step, cognitive-behavioral, motivational enhancement, or a combination. Getting help in itself appears to be more important than the particular approach used, as long as it offers empathy, avoids heavy confrontation, strengthens motivation, and provides concrete ways to change drinking behavior.

Specialized, intensive treatment programs. Some people will need more intensive programs. See Resources for a treatment locator. If you need a referral to a program, ask your doctor.

Don't give up.

Changing habits such as smoking, overeating, or drinking too much can take a lot of effort, and you may not succeed with the first try. Setbacks are common, but you learn more each time. Each try brings you closer to your goal.

Whatever course you choose, give it a fair trial. If one approach doesn't work, try something else. And if a setback happens, get back on track as quickly as possible.

In the long run, your chances for success are good. Research shows that most heavy drinkers, even those with alcoholism, either cut back significantly or quit.

For tools to help you make and maintain a change, visit the *Rethinking Drinking* Web site.

Ready to begin?

If so, start by filling out the change plan below or online at the *Rethinking Drinking* Web site, where you can print it out or email it to yourself. If you are cutting down as opposed to quitting, you can use the drinking tracker cards on the next two pages.

Change plan

Goal:

- I want to drink no more than ___ drink(s) on any day and no more than ___ drink(s) per week (see page 4 for low-risk limits) or
- I want to stop drinking

Timing: I will start on this date: _____

Reasons: My most important reasons to make these changes are:

Strategies: I will use these strategies (see pages 10–11):

People: The people who can help me are (names and how they can help):

Signs of success: I will know my plan is working if:

Possible roadblocks: Some things that might interfere **and how I'll handle them:**

Drinking tracker cards

If you want to cut back on your drinking, start by keeping track of *every* drink. Below are two sample forms you can cut out or photocopy and keep with you. Either one can help make you aware of patterns, a key step in planning for a change. The “4-week tracker” is a simple calendar form. If you mark down each drink before you have it, this can help you slow down if needed. The “drinking analyzer” can help you examine the causes and consequences of your drinking pattern. Try one form, or try both to see which is more helpful. These are also available on the *Rethinking Drinking* Web site.

4-week tracker



GOAL: No more than ____ drinks on any day and ____ per week.								
Week starting	Su	M	T	W	Th	F	Sa	Total
___/___								
___/___								
___/___								
___/___								

Drinking analyzer



Date	Situation (people, place) or trigger (incident, feelings)	Type of drink(s)	Amount	Consequence (what happened?)

Drinking tracker cards (continued)

These are the same cards as on the previous page. If you cut one out, you will have the drinking analyzer on one side and the 4-week tracker on the other side.

Drinking analyzer



Date	Situation (people, place) or trigger (incident, feelings)	Type of drink(s)	Amount	Consequence (what happened?)

4-week tracker



GOAL: No more than ____ drinks on any day and ____ per week.								
Week starting	Su	M	T	W	Th	F	Sa	Total
___/___								
___/___								
___/___								
___/___								

Resources

Professional help

Your regular doctor. Primary care and mental health practitioners can provide effective alcoholism treatment by combining new medications with brief counseling visits. See “Helping Patients Who Drink Too Much” at www.niaaa.nih.gov/guide or call 301-443-3860.

Specialists in alcoholism. For specialty addiction treatment options, contact your doctor, health insurance plan, local health department, or employee assistance program. Other resources include

Medical and non-medical addiction specialists

American Academy of Addiction Psychiatry

www.aaap.org
401-524-3076

American Psychological Association

1-800-964-2000 (ask for your state’s referral number to find psychologists with addiction specialties)

American Society of Addiction Medicine

301-656-3920 (ask for the phone number of your state’s chapter)

NAADAC Substance Abuse Professionals

www.naadac.org
1-800-548-0497

National Association of Social Workers

www.helpstartshere.org
(search for social workers with addiction specialties)

Treatment facilities

Substance Abuse Treatment Facility Locator

www.findtreatment.samhsa.gov
1-800-662-HELP

Mutual-help groups

Alcoholics Anonymous (AA)

www.aa.org
212-870-3400 or check your local phone directory under “Alcoholism”

Moderation Management

www.moderation.org
212-871-0974

Secular Organizations for Sobriety

www.secularsobriety.org
323-666-4295

SMART Recovery

www.smartrecovery.org
440-951-5357

Women for Sobriety

www.womenforsobriety.org
215-536-8026

Groups for family and friends

Al-Anon/Alateen

www.al-anon.alateen.org
1-888-425-2666 for meetings

Adult Children of Alcoholics

www.adultchildren.org
310-534-1815

Information resources

National Institute on Alcohol Abuse and Alcoholism

www.niaaa.nih.gov
301-443-3860

National Institute on Drug Abuse

www.nida.nih.gov
301-443-1124

National Institute of Mental Health

www.nimh.nih.gov
1-866-615-6464

National Clearinghouse for Alcohol and Drug Information

www.ncadi.samhsa.gov
1-800-729-6686

NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM
