Helping Patients With Alcohol Problems

A HEALTH PRACTITIONER'S GUIDE

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
National Institutes of Health
National Institute on Alcohol Abuse and Alcoholism

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If you are not already doing so, we encourage you to incorporate alcohol screening and intervention into your practice. You are in a prime position to make a difference.

Introduction

This guide is written for primary care practitioners—physicians, nurses, nurse practitioners, physician assistants, and others who see patients for general health care. It has been produced, with guidance from health practitioners and clinical researchers, by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), a component of the National Institutes of Health.

Alcohol problems are common: Fourteen million American adults suffer from alcohol abuse or alcoholism,[1] and more than 100,000 people die from alcohol-related diseases and injuries each year.[2] About a third of all adults engage in some kind of risky drinking behavior, ranging from occasional to daily heavy drinking.[3] Over the past few generations, patterns of alcohol consumption have changed notably: people start drinking at increasingly earlier ages, the likelihood of dependence has risen in drinkers, and women's drinking patterns and rates of dependence have become increasingly similar to men's.[4]

In recent years, many studies have shown that **primary care practitioners can promote significant reductions in drinking levels** in problem drinkers who are not alcohol dependent.[5] Meanwhile, only a third of primary care physicians routinely conduct thorough screenings for alcohol problems.[6] Because most Americans visit their primary care practitioners periodically, you are in a prime position to make a difference—by screening for alcohol problems and providing brief interventions or a treatment referral when needed.

If you are not already doing so, we encourage you to incorporate alcohol screening and intervention into your practice. **With this guide, you have what you need to begin.**

Why Do It?

Your patients need it

National survey data from NIAAA show that **nearly a third of all adults engage in risky drinking,** some only occasionally and others frequently (see "Drinking Patterns" on page 11). As a group, however, nearly one in four of these risky drinkers already meets the criteria for alcohol abuse or dependence,[7] and the rest have substantially increased chances of developing these disorders. If left untreated, these alcohol problems can cause or worsen other health conditions and lead to social, work-related, and legal troubles.

It works

A number of valid and reliable screening tools, including those in this guide, can help you identify the majority of your patients who have alcohol problems. A growing body of research shows that **primary care practitioners can significantly reduce both problem drinking and its medical consequences**—especially for patients who are not alcohol dependent—by conducting brief interventions.[8]

It is quick and easy to incorporate

Screening starts with two or three "how often? how much?" questions about drinking that fit naturally into your regular interview questions. The brief intervention involves stating your concern when drinking levels are too high and agreeing on an action plan. **This can all be accomplished without adding significantly to examination time.**

When To Screen for Alcohol Problems

- As part of a routine examination
- Before prescribing a medication that interacts with alcohol
- In response to problems that might be alcohol related

How To Screen and Conduct Brief Interventions for Alcohol Problems

These steps are described in detail on the following pages.

Step 1: Ask about alcohol use

A. Ask the "quantity-frequency" questions.

B. Ask the "CAGE" questions (CAGE[9,10] is an acronym for key words in the questions; see page 5).

Step 2: Assess

Conduct a brief assessment to determine the severity of the problem and the appropriate action.

Step 3: Advise and assist

Conduct a brief intervention by advising the appropriate action (to cut down or abstain) and by helping to set goals and obtain further treatment if necessary.

Step 4: Arrange followup

Make plans to monitor patient progress.

You can significantly reduce problem drinking in your patients—and its medical consequences—by conducting brief interventions.

Step 1A

Ask the quantity-frequency questions

ASK	IF YOU RECEIVE THESE ANSWERS		THEN
	FROM MEN	FROM WOMEN	
Weekly Average **Multiply the answers to the following two questions.** **a. How often?** On average, how many **days a week** do you drink alcohol? ☐ **b. How much?** On a typical day when you drink, **how many drinks** do you have? × ☐ = ☐	more than **14**	more than **7**	Your patient may be **at risk** for developing alcohol-related problems. go to step 1B **CAGE Questions**
	or	**or**	
Daily Maximum **How much?** What is the **maximum number of drinks** you had on any given day in the past month? ☐	more than **4**	more than **3**	

Below the cutoffs?

If so, screening can stop here *unless* patients who drink are (1) pregnant or trying to conceive (they need advice to abstain) or (2) over age 65, frail, or taking medications that interact with alcohol (they may have problems at lower drinking levels and thus may need advice to cut down, as described in Step 3). Other drinkers below the cutoffs may benefit from reminders that no drinking level is risk free and any drinking can impair driving tasks.

Interview notes

Some clinicians prefer to combine questions a and b into one: "On average, how many drinks do you have a week?" To help patients estimate the number of drinks, see the "What Is a Standard Drink?" chart on page 10 and "What can I do to encourage my patients to give honest and accurate answers to the screening questions?" on page 15.

Step 1B

Ask the CAGE questions

C Have you ever felt that you should **Cut down** on your drinking?

A Have people **Annoyed** you by criticizing your drinking?

G Have you ever felt bad or **Guilty** about your drinking?

E Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover? **(Eye-opener)**

If the answer to any of these questions is "yes," then ask, "Has this occurred during the past year?"

IF YOU RECEIVE THESE ANSWERS	THEN
YES to 3 or 4 questions in the past year	Your patient may be **alcohol dependent** go to step 2 **"Assess"**
YES to 1 or 2 questions in the past year	Your patient may have current **alcohol-related problems** go to step 2 **"Assess"**
NO to all questions	Your patient may still be **at risk** because of the elevated drinking level go to step 2 **"Assess"**

Step 2

Assess to determine the appropriate action

Look for **red flags** (➤) and **possible red flags** (➤) indicating that you should advise abstaining today.

IF YOUR PATIENT...	THEN
➤ Gave **3 or 4 yes** answers to CAGE questions, which indicates **probable alcohol dependence,*** or ➤ Is **pregnant or trying to conceive,** or ➤ Has a **contraindicated medication or medical condition,** such as liver dysfunction, or ➤ Has reported • **blackouts** • **repeated, failed attempts to cut down**	Advise to **abstain** go to step 3 **"Advise and Assist"**
➤ Gave **1 or 2 yes** answers to the CAGE questions,* or ➤ Has a **family history** of alcohol problems, or ➤ Has reported **injuries related to drinking,** motor vehicle crashes, or driving while intoxicated, or ➤ Has possible **medical history indicators,** such as hypertension, trauma, depression, anxiety, sleep disorders, headaches, or sexual dysfunction, or ➤ Has possible **behavioral indicators,** such as problems with work, school, or family	Advise to **abstain or cut down** (according to professional judgment) go to step 3 **"Advise and Assist"**
➤ Answered **NO to all CAGE questions** and ➤ Shows **no evidence of dependence** or red flags other than exceeding screening drinking limits	Advise to **cut down** go to step 3 **"Advise and Assist"**

*This is a brief assessment; if you have the time and wish to pursue a more thorough assessment for alcohol abuse or dependence, see the diagnostic criteria and related questions on pages 12 and 13.

Step 3

Advise and assist

- **State your concern.**

  Give feedback based on the drinking pattern (see the chart on page 11) or something the patient has said: "What you've told me about your drinking concerns me."

- **Give your advice.**

  "I think you should stop." *or* "I think you should cut back."

- **Gauge readiness.**

  "What do you think? Are you ready to try to cut down/abstain?" See Frequently Asked Questions, page 15, for ways to respond to patients who are not ready.

IF YOUR PATIENT IS READY, NEGOTIATE AN ACTION PLAN TO CUT DOWN OR ABSTAIN

Recommend lower limits:

- Patients are less likely to develop alcohol-related problems if they stay below the alcohol screening cutoffs (see page 4).
- To further lessen other risks, including injuries or impaired driving, the daily limit may be reduced to ≤ 2 drinks for men and ≤ 1 for women, recognizing that no level is risk free.
- Consider lower limits for patients who are over 65, are frail, or are taking medications that interact with alcohol.

Help set a goal: Tell patients that some people choose to abstain for a while or for good, while others decide to limit their drinking. Ask: "What do you think will work best for you?"

Encourage reflection: Ask patients to weigh what they like about drinking versus their reasons for cutting down. Suggest that they also examine situations that trigger unhealthy drinking.

Provide patient education materials: See "Materials from NIAAA" on page 20.

Refer for additional evaluation or treatment. To find help:

- For patients with insurance, contact a behavioral health case manager at the insurance company for a referral.
- For patients who are underinsured or uninsured, contact your local health department about addiction services.
- For patients who are employed, ask if they have access to an Employee Assistance Program with addiction counseling.
- To locate treatment options in your area:

  1. Call local hospitals to see which ones offer addiction services.
  2. Call the National Drug and Alcohol Treatment Referral Routing Service (1–800–662–HELP) or visit the Substance Abuse Facility Treatment Locator Web site (http://findtreatment.samhsa.gov).

Involve your patient in making referral decisions.

Schedule a referral appointment while the patient is in the office.

Ask: "How do you feel about this plan?" Go to step 4 **"Arrange followup"**

Step 4

Arrange followup

Arrange followup visits and monitor patient progress in the same way you manage other chronic medical problems such as hypertension. Recognize that behavioral change is an incremental process that may progress with stops and starts. Let the patient know that someone—you or a designated staff member—is always available for ongoing assistance.

At each subsequent visit, support your patient's efforts to cut down or abstain:

- Review goals, progress, and lab results (if appropriate).
- **For those who have made positive change:** Congratulate, reinforce the change, and assess continued motivation for further change if needed.
- **For those who have *not* made positive change:** Express concern, acknowledge that change is difficult, offer encouragement, and assess motivation. (See "What if a patient is not ready to change?" on page 15.)
- Re-advise about sensible drinking levels, identify next goals, and problem-solve, if needed.
- Schedule the next visit.

For patients who need additional support:

- Schedule a separate, focused followup visit.
- Refer for counseling if indicated.
- Consider suggesting that your patient bring a supportive friend or family member to followup visits.

In particular, for those patients you advised to abstain or referred for alcohol treatment:

- Monitor symptoms of depression and anxiety. When these symptoms occur, they often decrease or disappear after 2 to 4 weeks of abstinence. If they persist, treatment may be required.
- Monitor gamma-glutamyl-transferase (GGT) levels, when appropriate, as a means of assessing alcohol treatment compliance. (Note: Not all dependent patients will have elevated GGT levels; see also "Are laboratory tests available to screen for or monitor alcohol problems?" on page 19.)
- Ask the treatment center for periodic updates on your patient's treatment plans and prognosis.

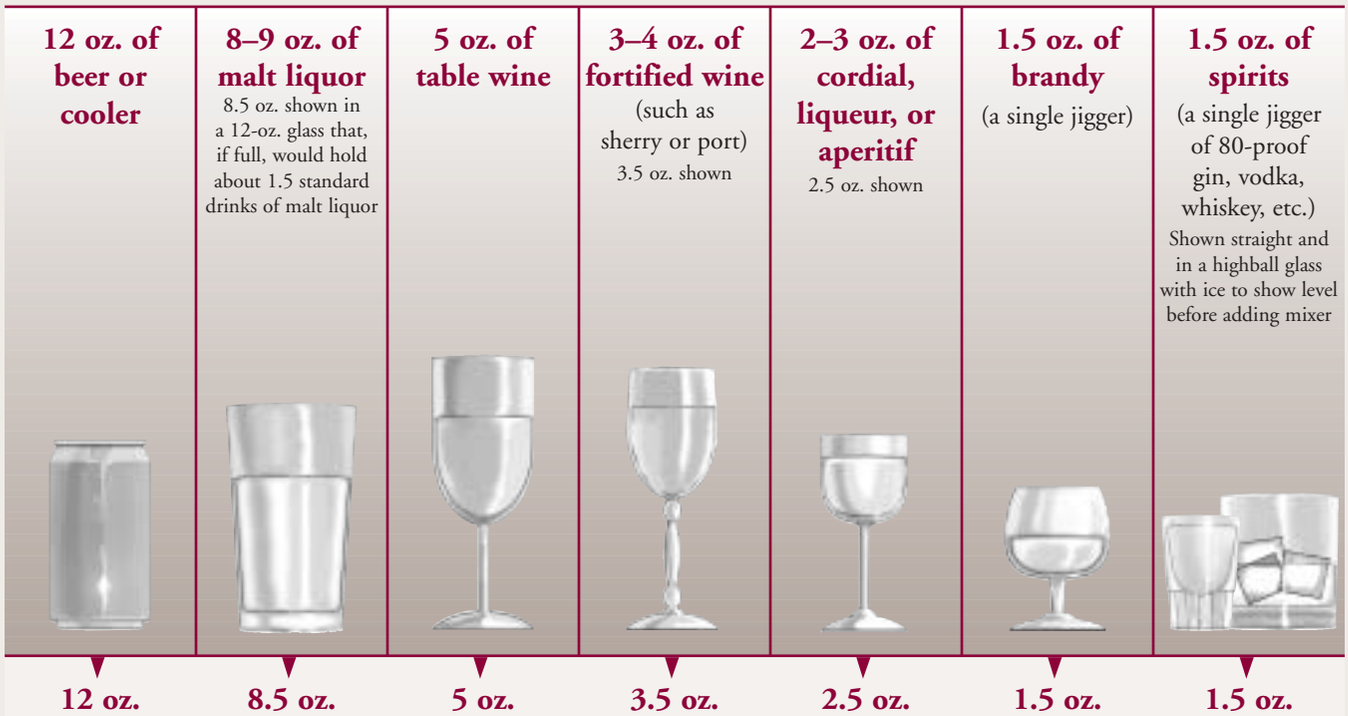
Counseling Tips

- Use an **empathetic, nonconfrontational** style.
- Offer your patient **choices** about how to make changes.
- Emphasize your **patient's responsibility** for changing drinking behavior.
- **Convey confidence** in your patient's ability to change drinking behavior.

Appendix

What Is a Standard Drink?

A standard drink contains about 14 grams (about 0.6 fluid ounces) of pure alcohol. Below are approximate standard drink equivalents.



Note: People buy many of these drinks in containers that hold multiple standard drinks. For example, malt liquor is often sold in 16-, 22-, or 40-oz. containers that hold between two and five standard drinks, and table wine is typically sold in 25 oz. (750 ml.) bottles that hold five standard drinks.

Drinking Patterns: Rates and Risks

As shown below, **nearly a third of U.S. adults engage in risky drinking patterns** and thus need advice to cut down or a referral for further evaluation. During a brief intervention, you can use this chart to show that (1) the majority of people abstain or drink within the screening limits and (2) drinking above the limits markedly raises the risk for alcohol disorders. Though a wise first step, cutting to within these limits is not risk free, as motor vehicle crashes and other problems can occur at lower drinking levels.

HOW MUCH ALCOHOL DO YOU DRINK?				HOW COMMON IS THIS PATTERN?	YOUR CHANCES OF HAVING AN ALCOHOL DISORDER ARE...	
Men		Women		Percent of U.S. adults aged 18 or older	Abuse without dependence	Dependence* with or without abuse
In a typical WEEK	& On any DAY	In a typical WEEK	& On any DAY			
Abstaining or infrequent drinking						
None or fewer than 12 drinks per YEAR		None or fewer than 12 drinks per YEAR		 56%	0	0
Drinking within screening limits						
No more than **14**	& Never more than **4**	No more than **7**	& Never more than **3**	 12%	Less than **1 in 100**	Less than **1 in 100**
Exceeding daily or weekly screening limits (or both)						
No more than **14**	& **5 or more occasionally** (less than once a week)	No more than **7**	& **4 or more occasionally** (less than once a week)	 19%	**1 in 14** (7%)	**1 in 14** (7%)
No more than **14**	& **5 or more frequently** (at least once a week)	No more than **7**	& **4 or more frequently** (at least once a week)	 3%	**1 in 7** (14%)	**1 in 6** (17%)
15 or more	& **5 or more in most cases** (typically once a week or more)	**8** or more	& **4 or more in most cases** (typically once a week or more)	 10%	**1 in 8** (13%)	**1 in 4** (26%)

*More than half of patients with alcohol dependence also meet the diagnostic criteria for alcohol abuse. (See pages 12 and 13 for the diagnostic criteria for alcohol disorders.)

Source: 1992 National Longitudinal Alcohol Epidemiologic Survey, a nationwide household survey of 42,862 U.S. adults aged 18 or older sponsored by the National Institute on Alcohol Abuse and Alcoholism.

Alcohol Abuse:

Diagnostic Criteria* with Sample Questions for Assessment

- ***One* or more of the following, occurring at any time in the same 12-month period—**

  (All questions prefaced by "In the past 12 months,…")

  Failure to fulfill major role obligations at work, school, or home because of recurrent drinking:
  - Have you had a period when your drinking—or being sick from drinking—often interfered with taking care of your home or family? Caused job troubles? School problems?

  Recurrent drinking in hazardous situations:
  - Have you more than once driven a car or other vehicle while you were drinking? Or after having had too much to drink?
  - Have you gotten into situations while drinking or after drinking that increased your chances of getting hurt—like swimming, using machinery, or walking in a dangerous area or around heavy traffic?

  Recurrent legal problems related to alcohol:
  - Have you gotten arrested, been held at a police station, or had any other legal problems because of your drinking?

  Continued use despite recurrent interpersonal or social problems:
  - Have you continued to drink even though you knew it was causing you trouble with your family or friends?
  - Have you gotten into physical fights while drinking or right after drinking?

- **Does not meet the criteria for alcohol dependence**

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Alcohol Dependence:
Diagnostic Criteria* with Sample Questions for Assessment

Three or more of the following, occurring at any time in the same 12-month period—

(All questions prefaced by "In the past 12 months,…")

Tolerance:

- Have you found that you have to drink much more than you once did to get the effect you want? Or that your usual number of drinks has much less effect on you than it once did?

Withdrawal syndrome or drinking to relieve withdrawal:

- When the effects of alcohol are wearing off, have you had trouble sleeping? Found yourself shaking? Nervous? Nauseous? Restless? Sweating or with your heart beating fast? Have you sensed things that aren't really there? Had seizures?
- Have you taken a drink or used any drug or medicine (other than over-the-counter pain relievers) to keep from having bad aftereffects of drinking? Or to get over them?

Impaired control:

- Have you more than once wanted to stop or cut down on your drinking? Or tried more than once to stop or cut down but found you couldn't?

Drank more or longer than intended:

- Have you had times when you ended up drinking more than you meant to? Or kept on drinking for longer than you intended?

Neglect of activities:

- In order to drink, have you given up or cut down on activities that were important or interesting to you or gave you pleasure?

Time spent related to drinking or recovering:

- Have you had a period when you spent a lot of time drinking? Or being sick or getting over the bad aftereffects of drinking?

Continued use despite recurrent psychological or physical problems:

- Have you continued to drink even though you knew it was making you feel depressed or anxious? Or causing a health problem or making one worse? Or after having had a blackout?

*Adapted with permission from the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision. Copyright 2000 American Psychiatric Association.

Frequently Asked Questions

About the effectiveness of alcohol screening and interventions:

- **How effective are the screening questions in this guide at identifying patients with alcohol problems?**

  This guide recommends combining quantity-frequency questions with the CAGE questionnaire. A study of the quantity-frequency questions found that the majority of adults with alcohol dependence (71 percent) surpass either the weekly limits or the daily maximum at least once a week.[11] A review of 10 studies that evaluated the CAGE questionnaire in primary care settings found that it identified 60 to 71 percent of patients with abuse or dependence disorders when a cutoff of one positive response was used, as recommended in this guide.[12] Another study conducted in an urban emergency department found that combining the CAGE questionnaire with the quantity-frequency questions identified 81 percent of patients with lifetime alcohol abuse or dependence.[13]

- **How effective are brief interventions?**

  Randomized, controlled clinical trials in a variety of populations and settings have shown that brief interventions can decrease alcohol use significantly among people who drink above the recommended limits but are not dependent. Major studies have found reductions of up to 30 percent over 12 months in consumption and binge drinking, as well as significant decreases in blood pressure readings, GGT levels, psychosocial problems, hospital days, and hospital readmissions for alcohol-related trauma.[5] Followup periods typically range from 6 to 24 months, although one recent study reported sustained reductions in alcohol use over 48 months.[5] A cost-benefit analysis in this study showed that each dollar invested in brief physician intervention could reap more than fourfold savings in future health care costs.

About patient responses:

What can I do to encourage my patients to give honest and accurate answers to the screening questions?

Using an empathetic, nonconfrontational approach can help put patients at ease. Some practitioners have found that prefacing the screening questions with a nonthreatening opener such as "Do you enjoy a drink now and then?" can encourage reserved patients to talk. To improve the accuracy of estimated drinking quantities, you could ask patients to look at the "What Is a Standard Drink?" chart on page 10. Many people do not know what counts as a single standard drink, especially for beverages with a higher alcohol content such as malt liquors, fortified wines, and spirits.

What if a patient is not ready to change?

Do not be discouraged if some patients are not ready to take action immediately. Decisions to change behavior often involve ambivalence and fluctuating motivation. By offering your advice, you have prompted your patient to think more seriously about his or her drinking behavior. A change in thinking is positive change even if there is not yet a change in behavior. In many cases, continued reinforcement is the key to a patient's decision to take action.

For those who are not ready,

- restate your concern about their health,
- reaffirm your willingness to help when they are ready, and
- continue to monitor alcohol use at later office visits.

In addition, if you suspect that your patient is alcohol dependent, encourage him or her to consult an alcohol treatment center for an evaluation. (To find help, see page 7 under "Abstain.")

Do not be discouraged if some patients are not ready to take action immediately.

About drinking levels and recommendations:

- **How do I factor the potential benefits of moderate drinking into my advice to patients who drink rarely or not at all?**

  Moderate consumption of alcohol (defined by U.S. Dietary Guidelines as up to two drinks a day for men, one for women) has been associated with a reduced risk of coronary heart disease.[14] Achieving a balance between the risks and benefits of alcohol consumption remains difficult, however, because each person has a different susceptibility to diseases potentially caused or prevented by alcohol use. Your advice to a young woman with a family history of alcoholism, for example, would differ from that you would give to a middle-aged man with a family history of premature heart disease. In general, though, for patients who drink rarely or not at all, it is not advisable to suggest that they increase their intake to moderate levels in order to prevent coronary artery disease. Susceptibility to alcohol problems cannot be predicted. And even moderate drinking carries risks, such as higher chances of motor vehicle crashes or adverse interactions with medications. Moreover, similar protection from heart disease can likely be attained through a healthy diet and regular exercise.

- **Why are the screening and moderate drinking limits lower for some patients?**

  The limits are lower for women because they generally have proportionally less body water than men do and thus achieve higher blood alcohol concentrations after drinking the same amount of alcohol.[15,16] In addition, clinicians may recommend reduced drinking levels for people over 65 because of age-related changes that include less efficient liver metabolism, decreased body mass, and increased sensitivity to alcohol. Patients who are frail or taking medications that may interact with alcohol also have a greater risk of problems with alcohol at relatively low levels of consumption.

Even moderate drinking carries risks, such as higher chances of motor vehicle crashes or adverse interactions with medications.

- **Some of my patients who drink heavily believe that this is normal. What percentage of people drink at, above, or below moderate levels?**

  About 7 in 10 adults over 18 either abstain, drink rarely, or drink within the daily and weekly screening limits.[3] The rest exceed the daily screening limits (some occasionally, some often) or the weekly limits, or both.[3] The "Drinking Patterns" chart on page 11 shows the breakout of drinkers in each category, as well as the prevalence of alcohol abuse and dependence in each group. Risky drinkers often believe that most people drink as much and as often as they do, so providing normative data about U.S. drinking patterns and related risks can provide a helpful reality check. In particular, those who believe that it is fine to drink moderately during the week and heavily on the weekends need to know that they have a higher chance not only of immediate alcohol-related injuries, but also of developing alcohol abuse or dependence.

- **Some of my patients who are pregnant do not see any harm in having an occasional drink. What is the latest advice?**

  Research shows a disturbing trend in recent years toward increased drinking during pregnancy.[17] Some women may not be aware of the risks involved, while others may drink before they realize they are pregnant. Each year in the United States, an estimated 40,000 infants are born with some degree of alcohol-related effects.[18] These range from mild learning and behavioral problems to growth deficiencies to severe mental and physical impairment. Research is showing how alcohol does its damage and the ways in which it causes different kinds of damage at different stages of pregnancy. We do not know, however, whether there is any drinking level that is without risk at any time during pregnancy. The best course for any woman who is pregnant—or thinking about becoming pregnant—is not to drink any alcohol at all.

℞ Interactions Between Alcohol and Medications

Alcohol interacts negatively with more than 150 medications. It can either interfere with the metabolism of the medication (generally in the liver) or enhance the effects of the medication (particularly in the central nervous system).

Many classes of prescription medicines can interact with alcohol, including antibiotics, antidepressants, antihistamines, barbiturates, benzodiazepines, histamine H_2 receptor agonists, muscle relaxants, nonnarcotic pain medications and anti-inflammatory agents, opioids, and warfarin. In addition, many over-the-counter medications and herbal preparations can cause negative side effects when taken with alcohol.

For details about drug names and types of interactions, visit the NIAAA Web site to view the article titled "Alcohol and Medication Interactions" in *Alcohol Research & Health,* Vol. 23, No. 1, 1999. A laminated chart of "Interactions Between Alcohol and Various Classes of Medications" is also available. (See "Materials from NIAAA" on page 20.)

About helping patients with alcohol problems:

- **If I suspect that a patient may be alcohol dependent, how can I assess the situation further before making a referral?**

  Although most primary care practitioners do not have the time to do an in-depth assessment for alcohol dependence, sometimes you may want to ask a few additional questions before referring a patient for further evaluation and treatment. This guide lists the diagnostic criteria for both alcohol abuse (page 12) and alcohol dependence (page 13) and provides sample questions for each element. If you believe that further evaluation is necessary, refer your patient to an alcohol treatment center. (To find help, see page 7 under "Abstain.")

- **Should I recommend any particular psychological therapy for my patients?**

  Among the broad range of counseling techniques and psychological therapies currently used to treat alcoholism, no single approach has been found to be clearly superior in promoting long-term recovery from alcoholism for all patients. Studies do suggest, however, that individuals with certain characteristics may find particular benefit in 12-step self-help programs such as the one provided by Alcoholics Anonymous.[19,20,21] These include patients who have high levels of dependence, those with social networks that promote drinking, and those without psychopathology.

- **Are medications available to treat alcoholism?**

  While medications at present cannot replace counseling for alcohol dependence, studies suggest that they may be combined effectively with skilled counseling to improve treatment outcomes. For many years, the only medical treatment approved for use in the United States was disulfiram, which simply provokes intense physical symptoms such as vomiting when alcohol is ingested. Newer medications aim to operate at the molecular level of brain processes that promote and maintain addiction. In 1994, the U.S. Food and Drug Administration approved naltrexone, an opiate antagonist, to help prevent relapse in alcoholics who are undergoing psychological therapy. Ongoing research is likely to provide clinicians with a range of targeted medications for more effective treatment.

If you believe that further evaluation is necessary, refer your patient to an alcohol treatment center.

Are laboratory tests available to screen for or monitor alcohol problems?

For screening purposes in primary care settings, interviews and questionnaires have greater sensitivity and specificity than blood tests for biochemical markers, which identify only about 10 to 30 percent of problem drinkers.[22,23] For monitoring purposes, however, tracking markers of liver damage may be useful for certain patients. For example, chronic, heavy use of alcohol may be associated with elevations in serum GGT, a sign of liver pathology. If a patient has elevated GGT levels and reasons other than excessive alcohol use are ruled out, then monitoring GGT levels may help in assessing treatment success. Blood can also be tested for mean corpuscular volume (MCV), which is often increased in alcohol-dependent persons.[8] Another blood test, the carbohydrate-deficient transferrin (CDT) assay, may help monitor a patient's abstinence,[8] but it is not yet widely available in the United States.

If I refer a patient for alcohol treatment, what are the chances for recovery?

A review of seven large, multisite studies of alcoholism treatment found that about one-third of the 8,400 patients either were abstinent or drank moderately without negative consequences or dependence in the year following treatment.[24] Although the other two-thirds had some periods of heavy drinking, on average they reduced consumption and alcohol-related problems by more than half. This substantial improvement in patients who do not attain perfect abstinence or problem-free reduced drinking is often overlooked. These patients commonly seek further treatment, and their chances of benefiting the next time do not appear to be influenced significantly by having had prior treatments.

How can I help an alcohol-dependent patient who relapses?

Recognize that patients with alcoholism have a chronic disease requiring continuing care, just like patients who have asthma, hypertension, and diabetes. Recurrence of symptoms requiring additional medical care is common and similar across all four of these disorders,[25] perhaps because they all require the patient to change health behaviors to maintain gains. You can respond effectively to a relapse with the following approach:

- assess the reasons for it (denial of diagnosis, stressful events, not seeing a counselor);
- counteract the sense of failure by pointing to previous successes and encouraging a sense of empowerment; and
- help to create a plan for change that includes defining problems, outlining strategies for dealing with them, and planning followup.

Materials from NIAAA

The materials below can be ordered from the NIAAA Publications Distribution Center, P.O. Box 10686, Rockville, MD 20849–0686; phone: (301) 443–3860. They are also available in full text on NIAAA's Web site (www.niaaa.nih.gov). NIAAA continually develops and updates materials for practitioners and patients; please check the Web site for new offerings.

For patients

Alcohol: A Women's Health Issue—Describes the effects of alcohol on women's health at different stages in their lives. NIH Publication No. 02–5152. Also available: a 12-minute video, with the same title, that describes the health consequences of heavy drinking in women.

Alcohol: What You Don't Know Can Harm You—Provides information on drinking and driving, alcohol-medication interactions, interpersonal problems, alcohol-related birth defects, long-term health problems, and current research issues. English version: NIH Publication No. 99–4323; Spanish version: NIH Publication No. 99–4323–S.

Alcoholism: Getting the Facts—Describes alcoholism and alcohol abuse and offers useful information on when and where to seek help. English version: NIH Publication No. 96–4153; Spanish version: NIH Publication No. 99–4153–S.

Drinking and Your Pregnancy—Briefly conveys the lifelong medical and behavioral problems associated with fetal alcohol syndrome and advises women not to drink during pregnancy. Revised 2001. English version: NIH Publication No. 96–4101; Spanish version: NIH Publication No. 97–4102.

Frequently Asked Questions About Alcoholism and Alcohol Abuse—English version: NIH Publication No. 01–4735; Spanish version: NIH Publication No. 02–4735–S.

Rethinking Drinking—Provides patients with a self-evaluation and tips for cutting down on drinking. Scheduled for publication in English and Spanish in 2003.

For health practitioners

A Pocket Guide for Alcohol Screening and Brief Intervention—Condensed from this publication, the pocket guide folds to 4 by 4½ inches.

Alcohol Alerts—These 4-page bulletins provide timely information on alcohol research and treatment.

Alcohol Research & Health—Each issue of this quarterly peer-reviewed journal contains review articles on a central topic related to alcohol research.

Interactions Between Alcohol and Various Classes of Medications—
A laminated 8½- by 11-inch desk chart listing drug classes, generic names, brand names, and types of interactions between alcohol and medications.

Notes

1. Grant BF, Harford TC, Dawson DA, Chou PC, Dufour M, Pickering R. Prevalence of DSM-IV alcohol abuse and dependence: United States, 1992. *Alcohol Health Res World.* 18(3):243-248, 1994.

2. Stinson FS, Nephew TM, Dufour MC, Grant BF. *State Trends in Alcohol-Related Mortality, 1979-92. U.S. Alcohol Epidemiologic Data Reference Manual,* Volume 5, First Edition. Bethesda, MD: NIAAA; 1996.

3. National Institute on Alcohol Abuse and Alcoholism. Unpublished data from the 1992 National Longitudinal Alcohol Epidemiologic Survey (NLAES), a nationwide household survey of 42,862 U.S. adults aged 18 or older.

4. Grant BF. Prevalence and correlates of alcohol use and DSM-IV alcohol dependence in the United States: Results of the National Longitudinal Alcohol Epidemiologic Survey. *J Stud Alcohol.* 58(5):464-473, 1997.

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Referral Resources

To locate treatment options in your area:

- Call local hospitals to see which ones provide addiction services.
- Contact the National Drug and Alcohol Treatment Referral Routing Service: **1-800-662-HELP** or **http://findtreatment.samhsa.gov**.

Local resources

Use this space for contact information for resources in your area (treatment centers, Alcoholics Anonymous, local government services, closest Veterans Affairs medical center, shelters, churches).

NIH Publication No. 03–3769
January 2003