Clinicians should be vigilant in screening HIV-infected patients for all levels of alcohol and other substance use and abuse. Even intermittent use can interfere with adherence to medications, raise the risk of side effects from medications, and reduce the patient’s ability to practice safer sex. HIV-infected patients should be screened annually for substance use even if the baseline screen is negative.

**Use of Screening Instruments**

Brief screening instruments can be incorporated into the routine history-taking process. The chosen screening instruments should be tailored for optimal use at initial, annual, and interim visits and adjusted for the patient’s substance use history. It may be helpful to modify screening tools that have been validated using alcohol questions to also include other drugs. For example, how often do you have a drink containing alcohol or use drugs?

For following are examples of screening instruments that can be easily integrated into primary care practice.

**I. SINGLE ALCOHOL SCREENING QUESTION**

**Target Population: Adults**

How many times in the past year have you had 6 or more drinks in 1 day? where x = 4 for women and x = 5 for men, and one or more heavy drinking days in the past year = positive screen.

Reprinted from the National Institute on Alcohol Abuse and Alcoholism. Patients Who Drink Too Much: A Clinician’s Guide

**II. TWO-QUESTION SCREEN**

**Target Population: Adults**

The combination of the following two questions has a sensitivity of 91% in identifying problem drinkers:

1. Have you ever had a drinking problem?
2. When was your last drink?

Reprinted with permission from Cyr PK, Wattman SA. The effectiveness of screening questions in the detection of alcoholism. JAMA 1988;259:51-54. Copyright © 1988 American Medical Association. All rights reserved.

**III. CAGE-AID (CAGE - ADAPTED TO INCLUDE DRUGS)**

**Target Population: Adults and Adolescents > 16**

A score of 2 may be suggestive of a problem


**IV. TWEAK**

**Target Population: Adults**

TWEAK was developed and validated to screen for risk drinking in pregnant women as well as the general population.

**V. ALCOHOL-RELATED TRAUMA QUESTIONNAIRE**

**Target Population: Adults > 18**

Since your 18th birthday:

1. Have you had any fractures or dislocations to your bones or joints?
2. Have you been injured in a road traffic accident?
3. Have you injured your head?
4. Have you been injured in an assault or fight (excluding injuries during sports)?
5. Have you been injured after drinking?

Result: 0 - low probability

| ≥ 3 - moderate to high (85%-95%) probability |

VI. ALCOHOLIC, SMOKING, AND SUBSTANCE INVOLVEMENT SCREENING TEST (ASSIST)

Target Population: Adolescents and Adults

ASSIST is a screening questionnaire developed by WHO. The ASSIST has been found to differentiate between patients who: 1) are low-risk substance users or abstainers, 2) are at risk for or already have substance use problems, or are at risk for developing dependence, or 3) are dependent on a substance.

The ASSIST is available at: www.who.int/substance_abuse/activities/assist_v3_english.pdf

VII. AUDIT C (QUESTIONS 1,2,3 ONLY) AND AUDIT (QUESTIONS 1-10)

Target Population: Adults

AUDIT C is the first three questions of AUDIT and can be used as an initial screen. A positive total score is an indicator to administer the remaining questions on the full AUDIT or the CAGE to determine the presence of a more severe alcohol problem.

AUDIT C

1. How often do you have a drink containing alcohol? (0) Never, (1) Monthly or less, (2) 2 to 4 times a month, (3) 2 to 3 times a week, (4) 4 times a week
2. How many drinks containing alcohol do you have on a typical day when you are drinking? (0) 1 or 2, (1) 3 or 4, (2) 5 or 6, (3) 7 or 9, (4) 10 or more
3. How often do you have ≥ 6 drinks on one occasion? (0) Never, (1) Less than monthly, (2) Monthly, (3) Weekly, (4) Daily or almost daily

AUDIT (Cont’d.)

4. How often during the last year have you found that you were not able to stop drinking once you had started? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily
5. How often during the last year have you found that you were not able to do what was normally expected from you because of drinking? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily
6. How often during the last year have you had a first drink in the morning to get yourself going after a heavy drinking session? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily
7. How often during the last year have you had a feeling of guilt or remorse after drinking? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily
8. How often during the last year have you been unable to remember what happened the night before because you had been drinking? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily
9. Has a relative, friend, or a physician, or other healthcare worker told you or someone else that your alcohol use has caused problems in the last year? (0) No (1) Yes, but not in the last year (2) Yes, during the last year
10. Have you or someone else been injured as a result of your drinking? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily

A score of ≥ 8 indicates a strong likelihood of hazardous or harmful alcohol consumption


Clinical Indicators of Possible Substance and/or Alcohol Use

Some common clinical indicators may help clinicians identify alcohol and substance use problems. Many surrogate markers listed on the following panel can occur from other causes, particularly in the setting of HIV or HIV/hepatitis C co-infection; however, these indicators should prompt a screen or re-screen for substance/alcohol problems.

Clinical Indicators of Possible Substance and/or Alcohol Use

• Conduct brief interventions with patients who are at-risk users of alcohol or substances. Offer education, advice, and counseling on the deleterious effects of illicit drug use, alcohol use, and misuse of prescription drugs to help stimulate behavior change.
• Discuss treatment options with substance-using patients and ask which treatment options they prefer. Offer referral to substance use treatment programs or other substance use services to patients with active substance use/alcohol problems.

A range of substance use treatment referral options are available, and clinicians should be familiar with these alcohol and substance use treatment programs and services in their areas. Sources of care can be found on the OASAS website at www.oasas.state.ny.us

Clinical Guidelines for HIV-Infected Substance Users

Clinical guidelines on the following areas of care for HIV-infected substance users are available at www.hivguidelines.org:

• Substance use screening
• Working with the active user
• Alcohol use and abuse
• Smoking cessation
• Primary care
• Adherence to ART therapy
• Drug-drug interactions
• Pain management
• Mental health disorders
• Special populations – women, hospitalized users, and adolescents

Common Indicators of Possible Substance and/or Alcohol Use/Abuse

History

• History of referrals or participation in substance/alcohol treatment programs
• Trauma, especially after drinking/substance use
• Legit problems
• Job loss, turnover, downward mobility
• Relationship problems
• Medical history: seizures, pancreatitis, liver disease, symptomatic, tachycardia, cardiomyopathy, endocarditis, chancres
• History of psychiatric symptoms, especially affective disorders
• Historical or current heavy smoking

Physical signs (substances associated with finding)

• Hypertension (alcohol, cocaine, methamphetamine)
• Nasal tachycardia (alcohol, cocaine, marijuana, methamphetamine)
• Precordial heave (unrelated or stimulated withdrawal or stimulant intoxication)
• Alcohol on breath
• Dilated pupils (stimulant use or sedative withdrawal)
• Small pupils (opiate use)
• Needle marks/tracks (any injection use)
• Bruises or healed fractures, especially of the ribs (alcohol)
• Puffy faces (alcohol)
• Pneumocystis (alcohol)
• Weight loss (cocaine, methamphetamine)

Laboratory

• Elevated mean elevated count (MCV), if not taking zidovudine
• Elevated GGT (associated with alcoholic liver disease, and a more sensitive marker than AST)
• AST/ALT
• Decreased serum B12
• Urine drug screens*

* Except under certain circumstances (e.g., suspected drug-induced coma, performing toxicology testing without the patient’s consent is not appropriate). These tests are generally not clinically useful when performed routinely but may elucidate a clinical scenario in which substance use is suspected.