

## Screening and Ongoing Assessment for Substance Use in HIV-Infected Patients

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.

### Recommendation:

All HIV-infected patients should be screened for substance use at baseline and at least annually. At-risk drug and alcohol users should be screened more frequently to identify escalation of present levels of use or harmful consequences from use. Screening questions should be phrased to include both alcohol and drug use.

### Inquire about the following:

- Current and past substance use
- Most commonly used recreational drugs including alcohol, marijuana, stimulants (cocaine including crack cocaine, methamphetamines), opiates, and benzodiazepines
- Use of prescription opiates and benzodiazepines
- Whether the patient, or those around him/her, has any perception of having a substance use problem, now or in the past

### Approach:

- Use nonjudgmental language when screening for substance use.
- Do not screen if patient has alcohol on his/her breath or appears to be under the influence of any drug.
- Ask screening questions that vary from brief to more detailed, using the more detailed questions to explore situations that are suspicious for problem drinking/substance use.

- When the patient discloses use of a particular substance or when you suspect the use of a particular substance, ask about:
  - injection drug use, both current and past.
  - use of other additional substances. Polydrug use is common in substance-using patients.
- Screen patients who are heavy smokers for other addictions.

For additional information about screening for substance use, refer to [www.hivguidelines.org](http://www.hivguidelines.org).

### 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?*

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 x 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 is considered a positive screen.*

Reprinted from the National Institute on Alcohol Abuse and Alcoholism. *Helping Patients Who Drink Too Much: A Clinician's Guide*, 2005. Available at: [http://pubs.niaaa.nih.gov/publications/Practitioner/CliniciansGuide2005/clinicians\\_guide.htm](http://pubs.niaaa.nih.gov/publications/Practitioner/CliniciansGuide2005/clinicians_guide.htm)

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\* Except for the TICS, the clinical utility of the screening instruments listed on this card was based on their use in identifying alcohol problems only.

#### II. TWO-QUESTION SCREENS

**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?

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The Two-Item Conjoint Screen (TICS) is easy to administer, has been shown to identify 80% of current substance abusers, and is particularly sensitive to polysubstance use disorders:

1. In the last year, have you ever drunk or used drugs more than you meant to?
2. Have you felt you wanted or needed to cut down on your drinking or drug use in the last year?

≥ 1 positive may be suggestive of a problem

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

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

- (1) Have you ever felt the need to *cut down* on your use of alcohol or drugs?
- (1) Has anyone *annoyed* you by criticizing your use of alcohol or drugs?
- (1) Have you ever felt *guilty* because of something you've done while drinking or using drugs?
- (1) Have you ever taken a drink or used drugs to steady your nerves or get over a hangover (*eye-opener*)?

A total of ≥ 2 may be suggestive of a problem

Printed with permission of the Wisconsin Medical Society; cited from Brown RL, Rounds LA. Conjoint screening questionnaires for alcohol and other drug abuse: Criterion validity in primary care practice. *Wisconsin Medical Journal* 1995;94:135-140.

#### IV. TWEAK

**Target Population:** Adults

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

- (2) *Tolerance*: How many drinks can you hold? (>5 = positive)
- (2) *Worry*: Have close friends or relatives worried or complained about your drinking?
- (1) *Eye-opener*: Have you ever taken a drink to steady your nerves or get over a hangover?
- (1) *Amnesia*: Has a close friend or relative ever told you about things you said or did when drinking that you could not remember?
- (1) *Kut down*: Have you ever felt the need to cut down on your use of alcohol?

A score of ≥ 3 is suggestive of harmful drinking

Reprinted from Russell M. New assessment tools for drinking in pregnancy: T-ACE, TWEAK, and others. *Alcohol Health Res World* 1994;18:55-61.

#### 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?
- (1) Have you been injured in a road traffic accident?
- (1) Have you injured your head?
- (1) Have you been injured in an assault or fight (excluding injuries during sports)?
- (1) Have you been injured after drinking?

**Result: 0 - low probability**

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

Reprinted with permission from Skinner HA, Holt S, Schuller R, et al. Identification of alcohol abuse using laboratory tests and a history of trauma. *Ann Intern Med* 1984;101:847-851.

## VI. ALCOHOL, 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](http://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 indication 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)  $\geq 4$  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  $\geq 6$  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 failed 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 needed 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. Have you or someone else been injured as a result of your drinking?

(0) No (2) Yes, but not in the last year (4) Yes, during the last year

10. Has a relative, friend, or a physician, or other healthcare worker been concerned about your drinking or suggested you cut down?

(0) No (2) Yes, but not in the last year (4) Yes, during the last year

**A score of  $\geq 8$  indicates a strong likelihood of hazardous or harmful alcohol consumption**

Reprinted from Babor TF, de la Fuente JR, Saunders J, et al. *AUDIT: The Alcohol Use Disorders Identification Test*. Guidelines for Use in Primary Health Care, 2nd ed. Geneva, Switzerland, 2001:1-40.  
Available at: [http://whqlibdoc.who.int/hq/2001/WHO\\_MSD\\_MSB\\_01.6a.pdf](http://whqlibdoc.who.int/hq/2001/WHO_MSD_MSB_01.6a.pdf)

### 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.

### Brief Interventions and Referral for Substance Use Treatment

- Conduct brief interventions with patients who are at-risk users of alcohol or substances. Offer education, advice, and counseling on the detrimental 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/abuse problems.

A range of substance use treatment referral options is available, and clinicians should be familiar with the 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](http://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](http://www.hivguidelines.org):

- Substance use screening
- Working with the active user
- Alcohol use and abuse
- Smoking cessation
- Primary care
- Adherence to ARV 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
- Legal problems
- Job loss, turnover, downward mobility
- Relationship problems
- Medical history: seizures, pancreatitis, liver disease, cytopenias, tachyarrhythmias, endocarditis, abscesses
- History of psychiatric symptoms, especially affective disorders
- History of or current heavy smoking

#### Physical signs (substances associated with finding)

- Hypertension (alcohol, cocaine, methamphetamine)
- Resting tachycardia (alcohol, cocaine, marijuana, methamphetamine)
- Tremor (alcohol 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 facies (alcohol)
- Hepatomegaly (alcohol)
- Weight loss (cocaine, methamphetamine)

#### Laboratory

- Elevated mean cell volume (MCV), if not taking zidovudine
- Elevated GGT (associated with alcoholic liver disease, and a more sensitive marker than AST)
- AST > ALT
- Decreased serum B<sub>12</sub>
- Urine drug screens\*
- Blood alcohol levels\*

\* 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.