UNHEALTHY ALCOHOL AND OTHER DRUG USE: SCREENING AND DIAGNOSIS

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Case

A 29 year old resident enjoys 2-3 beers 2-3 times a week after work
Risky Amounts

- **Men**
  - >14 drinks per week, >4 per occasion (5+)

- **Women, ≥65**
  - >7 drinks per week, >3 per occasion (4+)

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Drugs: Any?
‘Single’ Item (Alcohol)

- “Do you sometimes drink beer wine or other alcoholic beverages?”
- “How many times in the past year have you had 5 (4 for women) or more drinks in a day?”
  - +answer:>0
  - 82% sensitive, 79% specific for unhealthy use
  - 8 or more c/w dependence
    » Can be self-administered

## Alcohol Use Disorders Identification Test Consumption items (AUDIT-C)

### AUDIT-C

| Question #1: How often did you have a drink containing alcohol in the past year? |
|--------------------|------------------|
| Never              | (0 points)       |
| Monthly or less    | (1 point)        |
| Two to four times a month | (2 points) |
| Two to three times per week | (3 points) |
| Four or more times a week | (4 points) |

| Question #2: How many drinks did you have on a typical day when you were drinking in the past year? |
|--------------------|------------------|
| 1 or 2             | (0 points)       |
| 3 or 4             | (1 point)        |
| 5 or 6             | (2 points)       |
| 7 to 9             | (3 points)       |
| 10 or more         | (4 points)       |

| Question #3: How often did you have six or more drinks on one occasion in the past year? |
|--------------------|------------------|
| Never              | (0 points)       |
| Less than monthly  | (1 point)        |
| Monthly            | (2 points)       |
| Weekly             | (3 points)       |
| Daily or almost daily | (4 points) |

The AUDIT-C is scored on a scale of 0-12 (scores of 0 reflect no alcohol use). In men, a score of 4 or more is considered positive; in women, a score of 3 or more is considered positive. Replace six with four for women, in item 3.

- Requires scoring
- $\geq 3$ women, $\geq 4$ men
  - 73-86% sensitivity
  - 89-91% specificity
- $\geq 7$ to 10 suggests moderate to severe disorder

Saitz R. Screening for unhealthy use of alcohol and other drugs. UpToDate 2016.
PREVALENCE IN PRIMARY CARE

- Alcohol
  - >1/3 Abstinent
  - >1/3 Low risk
  - <1/3 Unhealthy
    - >1/5 dependent
    - <2/5 problem use (nondependent)
    - <2/5 risky use
What ever happened to the CAGE? Disorder, Ever
What about laboratory tests?
Less sensitive and more costly

PREVALENCE IN PRIMARY CARE, OTHER DRUGS

3%, most not with alcohol
- 34% of those have dependence, only 7% use with no problems

SINGLE ITEM, OTHER DRUGS

“How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?”

- If asked to clarify the meaning of “non-medical reasons”, add "for instance because of the experience or feeling it caused”
- a response of ≥1 is considered positive
- 100% sensitive, 74% specific for drug use disorder, similar to 10-item DAST (n=286)
  - 3 or more c/w dependence
  - Valid for self-administration
- 93% and 94% sensitive for past-year drug use
  - 82%, 96%, respectively, for saliva test or self-report

LABORATORY TESTS

- **Useful**
  - detect (heavy) use (usually recent)
  - overdose, intoxication, poisoning
  - screening trauma patients
  - assessment and monitoring

- **Not so useful**
  - screening for unhealthy use
  - general health care settings
  - less sensitive for potent substances like LSD, fentanyl, psilocibin, ecstasy, amphetamines, designer drugs, THC, PCP, etc.

- “Routine screen” (urine, serum)
  - Opiates (less often ‘-oids’)
  - Cocaine
  - Benzodiazepines
  - Barbiturates
  - Alcohol
  - ACTM
  - ASA

- Less available/need to request opioids, other specific drugs
Assessment—for what?
Moderate/severe disorder

Terminology

- Low or lower risk use
- Unhealthy use
  - Hazardous or at-risk
  - Disorder (DSM5)
    - Mild
      - Harmful (ICD 10)
    - Moderate/severe
      - Dependence (ICD 10)

Addiction: loss of control, compulsive use, use despite harm, a brain disorder [www.asam.org](http://www.asam.org)

Stop Talking ‘Dirty’: Clinicians, Language, and Quality of Care for the Leading Cause of Preventable Death in the United States

A patient with diabetes has “an elevated glucose” level. A patient with cardiovascular disease has “a positive exercise tolerance test” result. A clinician within the health care setting addresses the results. An “addict” is not “clean”—the term “clean” is reserved for one who has successfully abstained from substances outside the system that cares for all other health conditions addressing the results. In the worst case, the drug use is addressed by incarceration. On December 9, 2015, the first ever national drug policy meeting was held in the White House. A major focus of the meeting was to create a philosophical shift away from the “war on drugs” to a focus on broader public health approach. Much of the summit was devoted to addressing the stigma surrounding addiction and the under-recognized burden of drug addiction.

Stigma is defined as an attribute, behavior, or condition that is socially disvalued. It is important because of the 23 million Americans who meet criteria for a substance use disorder each year, only 10% access treatment, and stigma is a major barrier to seeking help. A World Health Organization study showed that patients in the United States with drug addiction were ranked number 1, and alcohol addiction was ranked number 4, despite harmful consequences. Yet, despite evidence of a strong causal role for genetics and impairment in inhibitory control, stigma is alive and well. Research is now revealing that one contributor factor to the perpetuation of stigma may be a type of language. Stigma degrades the self-esteem and scientifically accurate terminology is linked to a public health approach that captures the medical multifactorial nature of addiction. Use of this term may decrease stigma and increase help-seeking. In contrast, tough language, language including the word “wasted” or “used,” or describing drug users as “monsters” or “riff-raff,” or “you lose,” in the hopes of deterring drug involvement.

Accompanying this aggressive rhetoric are terms such as “they use drugs” and “they fail to support their family members.” Language that normalizes drug use (eg, “they can help it and it is their fault”). This language increases stigma and reduces help-seeking.

Since the 1990s, such language has become the norm. Even our federal health terminologies that address addiction have the terms “abuse” in their names (eg, National Institute on Drug Abuse and National Center on Addiction). This is contrary to the idea that they are a brain disorder. What does that mean? Rhetorical opposition has persisted revealing the use of stigmatizing language, but there was...
RISKY / AT-RISK /HAZARDOUS AMOUNTS

- On average, how many *days per week* do you drink alcohol?
- On a *typical day* when you drink how many drinks do you have?
- What is the maximum number of drinks you had on any given *occasion* during the last month?
Alcohol use disorder (DSM 5)
2 or more in 12 mo; 2-3=mild, 4-5=moderate, 6 or more=severe

1. recurrent use resulting in a failure to fulfill major role obligations at work, school, or home
2. recurrent use in situations in which it is physically hazardous
3. continued use despite having persistent or recurrent social or interpersonal problems
4. tolerance
5. withdrawal
6. use in larger amounts or over a longer period than intended
7. persistent desire or unsuccessful efforts to cut down
8. a great deal of time is spent obtaining alcohol, using it, recovering from it
9. important social, occupational, or recreational activities given up or reduced
10. use despite knowledge of related physical or psychological problem
11. craving
HOW TO ASK?

Many options…
Assessment: Patient self-assessment

http://rethinkingdrinking.niaaa.nih.gov

What are symptoms of an alcohol use disorder?

A few mild symptoms — which you might not see as trouble signs — can signal the start of a drinking problem. It helps to know the signs so you can make a change early. If heavy drinking continues, then over time, the number and severity of symptoms can grow and add up to an “alcohol use disorder.” Doctors diagnose an alcohol use disorder, generally known as alcohol abuse or alcoholism, when a patient’s drinking causes distress or harm. See if you recognize any of these symptoms in yourself. And don’t worry — even if you have symptoms, you can take steps to reduce your risk.

In the past year, have you (check all that apply and click the “Feedback” button, below):

- had times when you ended up drinking more, or longer, than you intended?
- more than once wanted to cut down or stop drinking, 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, such as trouble sleeping, shakiness, restlessness, nausea, sweating, a racing heart, or a seizure? Or sensed things that were not there?

Click for feedback >>

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The questions listed above 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.
Symptoms and signs of disorder or risk

- Abscess
- Burns, injuries
- Heartburn
- Gastrointestinal upset
- AM cough or HA
- Anxiety, stress
- Insomnia
- Concentration
- Memory
- Tachycardia
- Hypertension
- Skin track marks
- Nasal congestion, perforation
- Tremor
- Pupil dilation or constriction
- Menstrual irregularity
- Ecchymosis/purpura

- Palmar erythema
- Scars from trauma
- Gynecomastia
- Hepatomegaly
- Spiders
- Uric acid, glucose
- MCV, AST, HDL, GGT
- Medical history
  - Cellulitis, phlebitis
  - STD/HIV
  - Endocarditis
  - Blackouts
  - Depression
  - Hypertension
  - Trauma
  - Chronic abdominal pain
  - Liver disease
  - Sexual dysfunction

- Use in high risk situations?
- Medical condition
- Medications
- How often maximum?
- Personal or family history?
- Pregnancy
- Interpersonal or work problems
  - Family
  - Work/school
  - Accidents/injuries
- Sleep disorders
FOR ASSESSMENT

**CAGE**
- Have you ever felt you should **Cut down** on your drinking?
- Have people **Annoyed** you by criticizing your drinking?
- Have you ever felt bad or **Guilty** about your drinking?
- Have you ever taken a drink first thing in the morning (**Eye-opener**) to steady your nerves or get rid of a hangover?

**CAGE-AID**
- Or drug use?
- Or drug use?
- Or used drugs?

Alcohol Use Disorders Identification Test

**AUDIT**

For item 3 use 5 for men, 4 for women; >4-7 (8) is positive; >20 suggests dependence.

<table>
<thead>
<tr>
<th>Questions</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How often do you have a drink containing alcohol?</td>
<td>Never</td>
<td>Monthly or less</td>
<td>2 to 4 times a month</td>
<td>2 to 3 times a week</td>
<td>4 or more times a week</td>
</tr>
<tr>
<td>2. How many drinks containing alcohol do you have on a typical day when you are drinking?</td>
<td>1 or 2</td>
<td>3 or 4</td>
<td>5 or 6</td>
<td>7 to 9</td>
<td>10 or more</td>
</tr>
<tr>
<td>3. How often do you have 5 or more drinks on one occasion?</td>
<td>Never</td>
<td>Less than monthly</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Daily or almost daily</td>
</tr>
<tr>
<td>4. How often during the last year have you found that you were not able to stop drinking once you had started?</td>
<td>Never</td>
<td>Less than monthly</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Daily or almost daily</td>
</tr>
<tr>
<td>5. How often during the last year have you failed to do what was normally expected of you because of drinking?</td>
<td>Never</td>
<td>Less than monthly</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Daily or almost daily</td>
</tr>
<tr>
<td>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?</td>
<td>Never</td>
<td>Less than monthly</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Daily or almost daily</td>
</tr>
<tr>
<td>7. How often during the last year have you felt a feeling of guilt or remorse after drinking?</td>
<td>Never</td>
<td>Less than monthly</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Daily or almost daily</td>
</tr>
<tr>
<td>8. How often during the last year have you been unable to remember what happened the night before because of your drinking?</td>
<td>Never</td>
<td>Less than monthly</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Daily or almost daily</td>
</tr>
<tr>
<td>9. Have you or someone else been injured because of your drinking?</td>
<td>No</td>
<td>Yes, but not in the last year</td>
<td>Yes, during the last year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?</td>
<td>No</td>
<td>Yes, but not in the last year</td>
<td>Yes, during the last year</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total**
2 items suggest (alcohol) disorder

- “In the past year, have you sometimes been under the influence of alcohol in situations where you could have caused an accident or gotten hurt?”
- “Have there often been times when you had a lot more to drink than you intended to have?”

<table>
<thead>
<tr>
<th>Group</th>
<th>Sensitivity</th>
<th>Specificity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects in the development sample</td>
<td>96%</td>
<td>85%</td>
</tr>
<tr>
<td>Subjects in the 3 validation samples</td>
<td>72% to 94%</td>
<td>80% to 95%</td>
</tr>
<tr>
<td>Screen-positive subjects in the 3 validation samples</td>
<td>77% to 95%</td>
<td>62% to 86%</td>
</tr>
</tbody>
</table>

Screening: Tools

NIDA MED

www.nida.nih.gov/nidamed/

Without the whole picture, you might not get the whole treatment.

To give you the best possible care, your doctor needs to know about any and all drugs you are taking, including tobacco, alcohol, illicit drugs, and over-the-counter and prescription medications—even those not prescribed for you.

Tell Your Doctor About All The Drugs You Use.

www.drugabuse.gov/NIDAMED
SCREENING: TOOLS, ASSIST

STEP 1

Ask the patient about past drug use.

Which of the following substances have you used in your lifetime?

- Tobacco products (cigarettes, chewing tobacco, cigars, etc.)
- Alcoholic beverages (beer, wine, liquor, etc.)
- Cannabis (marijuana, pot, grass, hash, etc.)
- Cocaine (coke, crack, etc.)
- Prescription stimulants* (Ritalin, Concerta, Dexedrine, Adderall, diet pills, etc.)
- Methamphetamine (speed, ice, etc.)
- Inhalants (nitrous, glue, gas, paint thinner, etc.)
- Sedatives or sleeping pills (Valium, Serepax, Xanax, etc.)
- Hallucinogens (LSD, acid, mushrooms, PCP, Special K, ecstasy, etc.)
- Street opioids (heroin, opium, etc.)
- Prescription opioids* (fentanyl, oxycodone, hydrocodone, methadone, buprenorphine, etc.)

Other—Specify

* Please report nonmedical use only; do not record medications that are used as prescribed by a doctor.

Patient reports no lifetime drug use:
Reinforce abstinence. Screening is complete.

Alcohol, Smoking and Substance Involvement Screening Test. WHO ASSIST Working Group (2002). *Addiction, 97 (9): 1183-1194*
# Screening: Tools, ASSIST

**Patient reports lifetime use of one or more substances:**

Ask the following questions for each drug mentioned (scores will be tallied at the end). *For Tobacco and Alcohol, go to page 6.*

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Once or Twice</th>
<th>Monthly</th>
<th>Weekly</th>
<th>Almost Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In the <em>past 3 months</em>, how often have you used each of the substances you mentioned? (first drug, second drug, etc.)?</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>If the answer to Question 1 is “Never,” skip to Question 5. Otherwise, continue: <em>In the past three months...</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. How often have you had a strong desire or urge to use?</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3. How often has your use of [first drug, second drug, etc.] led to health, social, legal, or financial problems?</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4. How often have you failed to do what was normally expected of you because of your use of [first drug, second drug, etc.]?</td>
<td>0</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

*For each substance ever used* (i.e., those mentioned in the “lifetime” question):

<table>
<thead>
<tr>
<th>Question</th>
<th>NO</th>
<th>YES, but not in the past three months</th>
<th>YES, in the past three months</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Has a friend or relative or anyone else ever expressed concern about your use of [first drug, second drug, etc.]?</td>
<td>0</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>6. Have you ever tried and failed to control, cut down, or stop using [first drug, second drug, etc.]?</td>
<td>0</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

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Alcohol, Smoking and Substance Involvement Screening Test. WHO ASSIST Working Group (2002). *Addiction, 97* (9): 1183-1194
SCREENING: TOOLS, ASSIST

**STEP 2**

Determine Risk Level

For each substance (except tobacco and alcohol), add up the scores for questions 1 through 6. To determine patient's risk level and the respective recommendations, see below:

- **High risk**
  - Score >27
  - Provide feedback on the screening results
  - Advise, Assess, and Assist
  - Arrange referral
  - Offer continuing support

- **Moderate risk**
  - Score 4-26
  - Provide feedback
  - Advise, Assess, and Assist
  - Consider referral based on clinical judgment
  - Offer continuing support

- **Lower risk**
  - Score 0-3
  - Provide feedback
  - Reinforce abstinence
  - Offer continuing support

Do this for EACH substance

**Alcohol, Smoking and Substance Involvement Screening Test. WHO ASSIST Working Group (2002). Addiction, 97 (9): 1183-1194**
Summary

• Screen to identify the spectrum of unhealthy use
  • Includes (risky) use, use with consequences, disorder
• Validated questions best
• Incorporate into health history, ask “matter of fact”
• Assess after a positive screening test
  • To confirm unhealthy use
  • To identify moderate/severe disorder (and mild disorder or consequences not meeting disorder criteria)