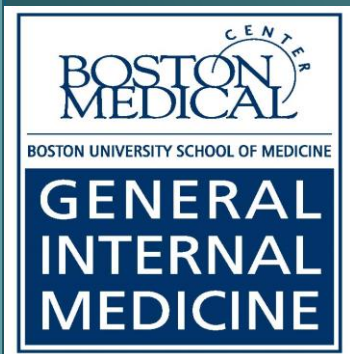


This is the property of 2016 CRIT/FIT. Permission is required to duplicate.

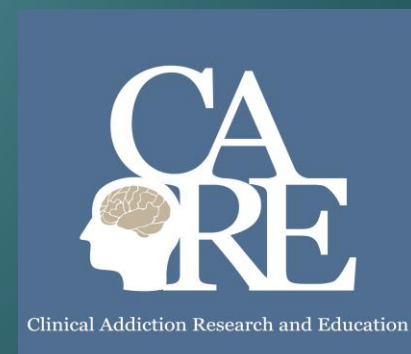
# UNHEALTHY ALCOHOL AND OTHER DRUG USE: SCREENING AND DIAGNOSIS

Richard Saitz MD MPH FACP DFASAM

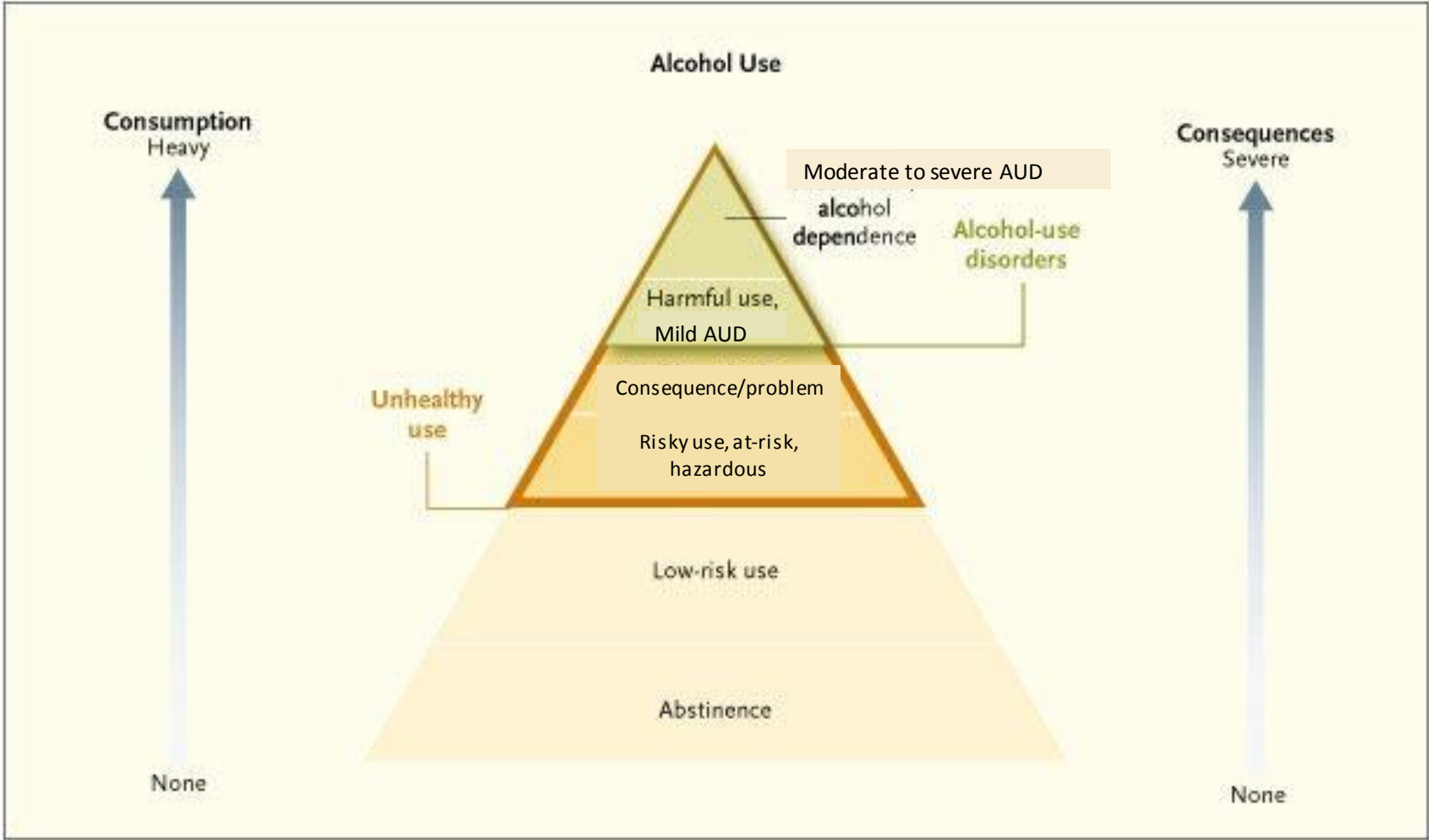
Chair, Department of Community Health Sciences  
Professor of Community Health Sciences and Medicine



Boston Medical Center is the primary teaching affiliate  
of the Boston University School of Medicine.



# UNHEALTHY USE



# Case

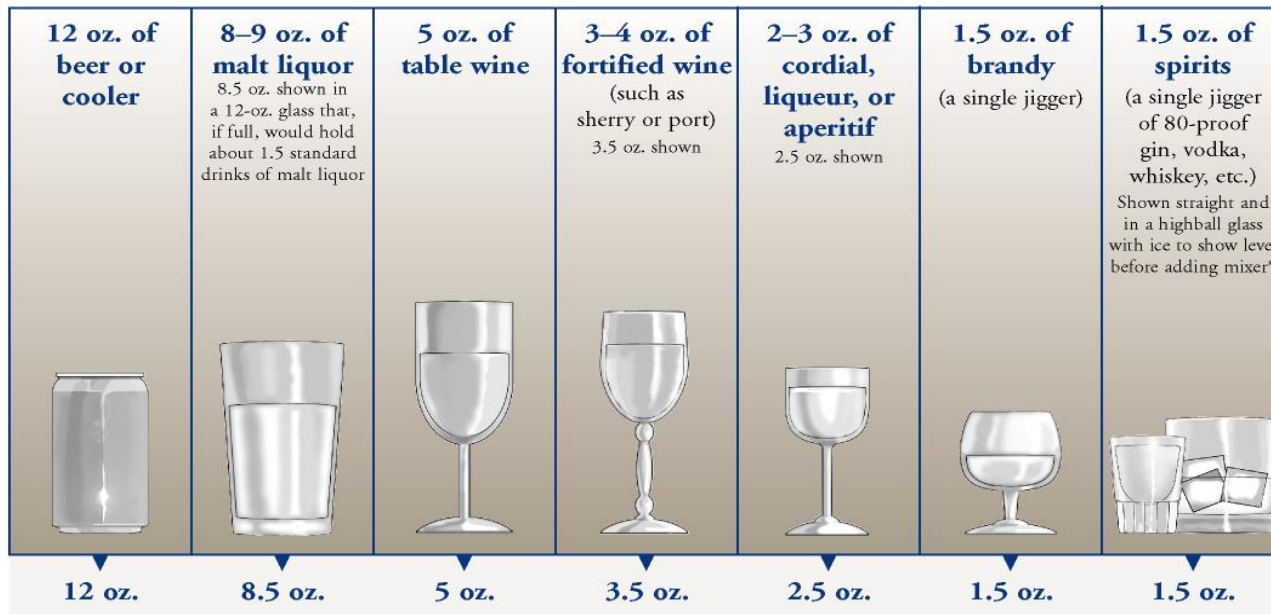
A 36 year old resident enjoys 2-3 beers 2-3 times a week after work





# Risky Amounts

- Men
  - >14 drinks per week, >4 per occasion (5+)
- Women,  $\geq 65$ 
  - >7 drinks per week, >3 per occasion (4+)



Drugs: Any?



# LOW RISK USE

Evidence for her  
likely an

**Addiction**

EDITORIAL

## Has the leaning tower of presumed health benefits from 'moderate' alcohol use finally collapsed?

The evolving epidemiological literature, including improved methodology for assessing causality in observational studies, is raising doubts about whether moderate alcohol consumption has a protective effect on health.

For several decades, most epidemiologists have agreed that 'moderate' (i.e. low average volume) alcohol consumption is protective against cardiovascular disease. Indeed, estimates of protective effects for prevalent chronic conditions

with exposure to a putative causal factor, can test the relationship between that causal factor and the outcome. The assumption is that the genotype itself has no direct effect on the outcome and no role in the outcome apart from a mediating effect via the causal factor. If the genetic variation turns out to be associated with the outcome, there is a reasonable presumption that this is through the putative cause.

An MR meta-analysis by Holmes et al. found that

Somati. Chikritzhs T et al. *Addiction* May 2015;110:726-7.

“moderate” or “responsible”

SSA  
doi:10.1111/add.12828

Stockwell et al. *JSAD* 2016  
No mortality benefit.



## 'Single' Item (Alcohol)

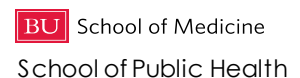
- “Do you sometimes drink beer wine or other alcoholic beverages?”
- “How many times in the past year have you had 5 (4 for women) or more drinks in a day?”
  - +answer:>0
  - 82% sensitive, 79% specific for unhealthy use
    - 8 or more c/w dependence
      - » Can be self-administered

NIAAA. Clinicians Guide to Helping Patients Who Drink Too Much, 2007.

Smith PC, Schmidt SM, Allensworth-Davies D, Saitz R. J Gen Intern Med 2009 24:783-8 and erratum. DOI: 1007/s11606-009-0928-6.

Saitz R et al. Journal of Studies on Alcohol and Drugs. 2014;75(1):153-157.

McNeely J et al. Validation for self-administration. J Gen Intern Med. 2015 Dec;30(12):1757-64



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

## AUDIT-C

<b>Question #1: How often did you have a drink containing alcohol in the past year?</b>	
• 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)
<b>Question #2: How many drinks did you have on a typical day when you were drinking in the past year?</b>	
• 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)
<b>Question #3: How often did you have six or more drinks on one occasion in the past year?</b>	
• 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,  $> 4$  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

*Coulton S, et al. BMJ. 2006;332:511–517.*

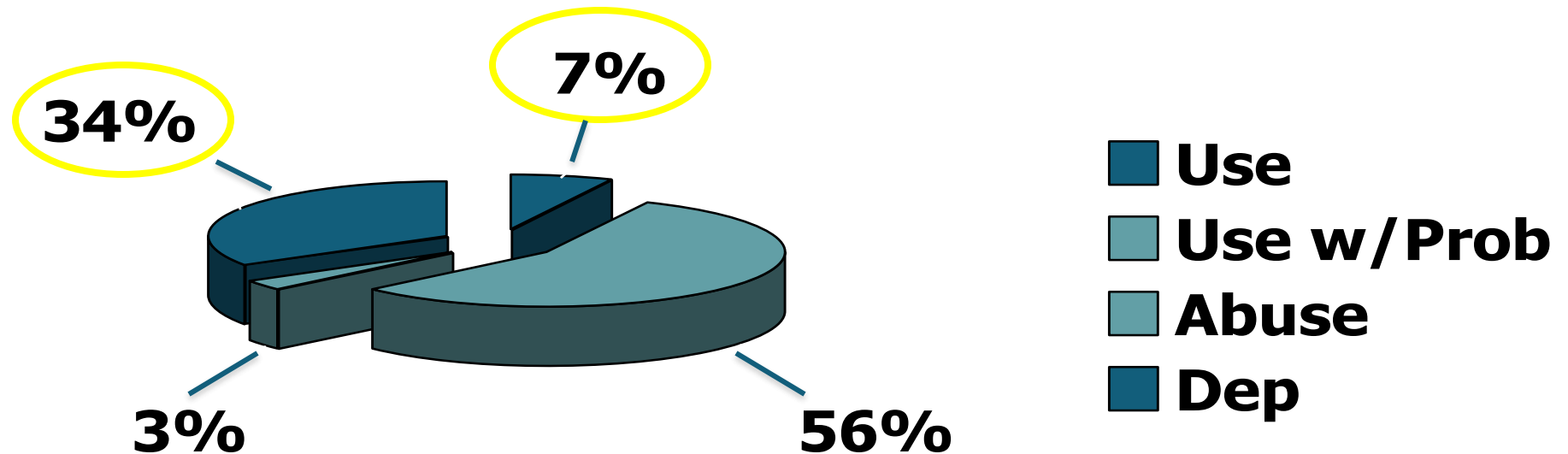
*Maisto & Saitz Am J Addict 2003;12:S12-25.*



# 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  $\geq 1$  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

## STEP 1 – Ask the NIDA Quick Screen Question

**Instructions:** Using the sample language below, introduce yourself to your patient, then ask about past year drug use, using the NIDA Quick Screen. For each substance, mark in the appropriate column. For example, if the patient has used cocaine monthly in the past year, put a mark in the “Monthly” column in the “illegal drug” row.

### Introduction (Please read to patient)

*Hi, I'm \_\_\_\_\_, nice to meet you. If it's okay with you, I'd like to ask you a few questions that will help me give you better medical care. The questions relate to your experience with alcohol, cigarettes, and other drugs. Some of the substances we'll talk about are prescribed by a doctor (like pain medications). But I will only record those if you have taken them for reasons or in doses other than prescribed. I'll also ask you about illicit or illegal drug use—but only to better diagnose and treat you.*

Quick Screen Question:	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
<u>In the past year</u> , how often have you used the following?					
<b>Alcohol</b>					
<ul style="list-style-type: none"> <li>• For men, 5 or more drinks a day</li> <li>• For women, 4 or more drinks a day</li> </ul>					
<b>Tobacco Products</b>					
<b>Prescription Drugs for Non-Medical Reasons</b>					
<b>Illegal Drugs</b>					

# OTHER SCREENING TESTS TO BE AWARE OF

- Adolescents: 2-items (see NIAAA website), CRAFFT (disorders)
- Geriatrics: CARET, G-MAST
- Pregnancy: TWEAK, T-ACE, 4Ps Plus (use, Pregnancy, use by Parents and Partners)
- Note: here we want to identify ANY use (children, pregnancy)

## Other tests, formerly known as screening tests...to be aware of

- CAGE, CAGE-AID, 2-item conjoint
- AUDIT
- DAST
- ASSIST
- May want to use these as severity assessments





# 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, psilocybin, ecstasy, amphetamines, designer drugs, THC, PCP, etc.

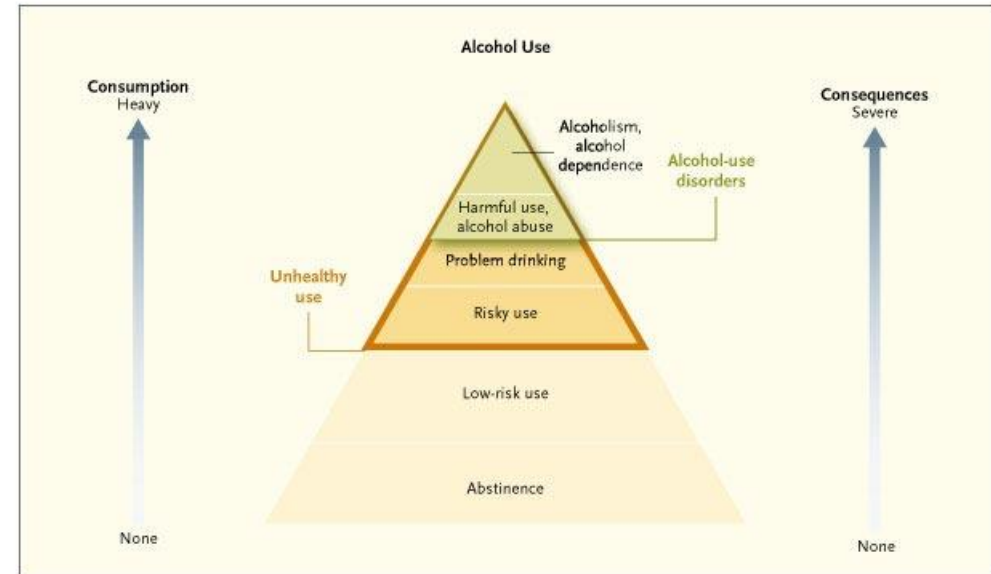
- “Routine screen” (urine, serum)
  - Opiates (less often ‘-oids’)
  - Cocaine
  - Benzodiazepines
  - Barbiturates
  - Alcohol
  - ACTM
  - ASA
- Less available/need to request opioids, other specific drugs

# Assessment—for what?

## Moderate/severe disorder

### Terminology

- Low or lower risk use
- Unhealthy use
  - Hazardous or at-risk
  - **Disorder (DSM5)**
    - **Mild**
      - Harmful (ICD 10)
        - » Abuse (DSM IV)
    - **Moderate/severe**
      - Dependence (physiologic vs. DSM-IV)
        - » Addiction



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

# This is substance abuse



Substance misuse: e.g. taking oral contraceptive to treat bronchitis; taking a suppository orally

# STOP TALKING DIRTY

- dirty, clean
  - negative, positive
- abuse, abuser, addict (except self)
- disease 1<sup>st</sup>
  - person 1<sup>st</sup> (person with...disorder, addiction)
- medication assisted treatment, substitution, replacement
  - treatment, medication treatment, opioid agonist treatment
- misuse (except Rx)
- problem
- relapse

Kelly JF, Wakeman SE, Saitz R. Stop talking 'dirty': clinicians, language, and quality of care for the leading cause of preventable death in the United States. *Am J Med*. 2015 Jan;128(1):8-9. doi: 10.1016/j.amjmed.2014.07.043. Epub 2014 Sep 3.

<http://www.asam.org/advocacy/find-a-policy-statement/view-policy-statement/public-policy-statements/2014/08/01/terminology-related-to-the-spectrum-of-unhealthy-substance-use>

Saitz R. Things that Work, Things that Don't Work, and Things that Matter—including Words. *J Addict Med* 2015;9:429-30.

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Miller WR. Retire the Concept of "Relapse". *Subst Use Misuse*. 2015;50(8-9):976-7

[www.isaje.net](http://www.isaje.net)

## 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"—he has been "abusing" drugs and has a "dirty" urine sample. Someone *outside* the system that cares for all other health conditions addresses the results. In the worst case, the drug use is addressed by incarceration.

On December 9, 2013, the first ever national drug policy reform summit was held at the White House. A major thrust of this summit was to mark a philosophical shift away from the "war on drugs" and toward a broader public health approach. Much of the summit was devoted to addressing the stigma surrounding addiction and the under-recognized importance of language.

Stigma is defined as an attribute, behavior, or condition that is socially discrediting. 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.<sup>1</sup> A World Health Organization study of the 18 most stigmatized social problems (including criminal behavior) in 14 countries found that drug addiction was ranked number 1, and alcohol addiction was ranked number 4.<sup>2</sup>

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 contributory factor to the perpetuation of stigma may be the type of language we use.

Use of the more medically and scientifically accurate "substance use disorder" terminology is linked to a public health approach that captures the medical malfunction inherent in addiction. Use of this term may decrease stigma and increase help-seeking. In contrast, tough, punitive, language, including the word "war," in "war on drugs," is intended to send an uncompromising message, "You use, you lose," in the hopes of deterring drug involvement. Accompanying this aggressive rhetoric are terms such as drug "abuse" and drug "abusers," implying willful misconduct (ie, "they can help it and it is their fault"). This language increases stigma and reduces help-seeking.

Since the 1970s, such language has become the norm. Even our federal health institutions that address addictions have the term "abuse" in their names (eg, National Institute on Drug Abuse), and their materials often refer to affected individuals as substance "abusers." But, does it really matter what we call it? Rhetorical opposition has persisted regarding the use of stigmatizing language, but there was



# STOP TALKING DIRTY

EDITORIAL

THE AMERICAN  
JOURNAL of  
MEDICINE

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

CrossMark

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[www.isaje.net](http://www.isaje.net)



 School of Medicine  
School of Public Health

# 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)

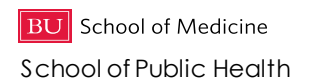
2 or more in 12 mo; 2-3=mild, 4-5=moderate, 6 or more=severe

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>

## RETHINKING DRINKING Alcohol and your health

Email Page Print Link to Us Bookmark and Share

Search

### HOW MUCH IS TOO MUCH?

What counts as a drink?

Is your drinking pattern risky?

What's the harm?

What are the risks?

What are symptoms of an alcohol use disorder?

How can you reduce your risks?

### THINKING ABOUT A CHANGE?

It's up to you

Strategies for cutting down

Support for quitting

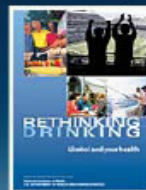
### RESOURCES

Tools

Info & help links

Q & As

## TAKE IT with you



Download or order

this 16-page booklet,  
*Rethinking Drinking:  
Alcohol and Your  
Health*

[Home >](#)

### 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 risks.

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, 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?

Click for feedback >>

This Web site does not collect or store any entries, email addresses, or information that would allow visitors to be personally identified. For details, see our [Privacy statement](#).

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.

<< Previous

Next >>

# 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
- Sleep disorders
- 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

# FOR ASSESSEMENT

## 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 drug use?
- Or used drugs?

Mayfield D et al. Am J Psych 1974;131:1121

Brown RL & Rounds LA. Wisconsin Med J 1995;94:135-40.



# Alcohol Use Disorders Identification Test

## AUDIT

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

PATIENT: Because alcohol use can affect your health and can interfere with certain medications and treatments, it is important that we ask some questions about your use of alcohol. Your answers will remain confidential, so please be honest.

Place an X in one box that best describes your answer to each question.

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

*Note:* This questionnaire (the AUDIT) is reprinted with permission from the World Health Organization. To reflect standard drink sizes in the United States, the number of drinks in question 3 was changed from 6 to 5. A free AUDIT manual with guidelines for use in primary care settings is available online at [www.who.org](http://www.who.org).



## 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?”

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

# SCREENING: TOOLS

# NIDAMED

 SCREENING FOR  
DRUG USE IN  
GENERAL MEDICAL  
SETTINGS  
*Resource Guide*

 SCREENING FOR  
DRUG USE IN  
GENERAL MEDICAL  
SETTINGS  
*Quick Reference Guide*



## 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](http://www.drugabuse.gov/NIDAMED)

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(1-877-643-2644) and request NIDACRD26.

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rights, visit <http://www.hhs.gov/oc/hipaa>,  
or call 1-866-627-7748.

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National Institutes of Health

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 School of Medicine  
School of Public Health

# SCREENING: TOOLS, ASSIST

## STEP 1

### Ask the patient about past drug use.

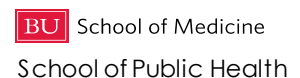
Which of the following substances have you used *in your lifetime*?

- |   |  |
|---|--|
| <b>a. Tobacco products</b><br>(cigarettes, chewing tobacco, cigars, etc.)                     | <b>h. Sedatives or sleeping pills</b> (Valium, Serepax, Xanax, etc.)   |
| <b>b. Alcoholic beverages</b><br>(beer, wine, liquor, etc.)                                   | <b>i. Hallucinogens</b> (LSD, acid, mushrooms, PCP, Special K, ecstasy, etc.)  |
| <b>c. Cannabis</b> (marijuana, pot, grass, hash, etc.)  | <b>j. Street opioids</b><br>(heroin, opium, etc.)  |
| <b>d. Cocaine</b><br>(coke, crack, etc.)  | <b>k. Prescription opioids*</b><br>(fentanyl, oxycodone, hydrocodone, methadone, buprenorphine, etc.)                  |
| <b>e. Prescription stimulants*</b> (Ritalin, Concerta, Dexedrine, Adderall, diet pills, etc.) | <b>l. Other—Specify</b>  |
| <b>f. Methamphetamine</b><br>(speed, ice, etc.)   | <small>* Please report nonmedical use only: do not record medications that are used as prescribed by a doctor.</small> |
| <b>g. Inhalants</b> (nitrous, glue, gas, paint thinner, etc.)                                 |  |

### 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.	Never	Once or Twice	Monthly	Weekly	Almost Daily or Daily
	1. In the past 3 months, how often have you used each of the substances you mentioned [first drug, second drug, etc.]?	0	2	3	4
<b>If the answer to Question 1 is "Never," skip to Question 5. Otherwise, continue: In the past three months...</b>					
2. How often have you had a strong desire or urge to use?	0	3	4	5	6
3. How often has your use of [first drug, second drug, etc.] led to health, social, legal, or financial problems?	0	4	5	6	7
4. How often have you failed to do what was normally expected of you because of your use of [first drug, second drug, etc.]?	0	5	6	7	8
<b>For each substance ever used (i.e., those mentioned in the "lifetime" question):</b>		<b>NO</b>	<b>YES, but not in the past three months</b>	<b>YES, in the past three months</b>	
5. Has a friend or relative or anyone else ever expressed concern about your use of [first drug, second drug, etc.]?	0	3	6		
6. Have you ever tried and failed to control, cut down, or stop using [first drug, second drug, etc.]?	0	3	6		
7. Have you ever used any drug by injection? (nonmedical use only)			Recommend HIV/ Hepatitis B & C Testing	Ask about pattern of injecting. Recommend HIV/ Hepatitis B & C Testing	

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:

Do this for EACH substance



High risk  
Score  $\geq 27$



- ✓ 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

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)

# WORDS THAT MATTER--SUMMARY

## Use

- Alcohol, drug use disorder
  - Addiction
  - Person with/who...
- (Agonist) treatment
- Positive/negative (test)
- Unhealthy
- At-risk, risky, hazardous
- Heavy use, episode
- (Return to) use
- Low risk

## Avoid

- Abuse, abuser, user, addict, alcoholic
- Substitution, replacement
- Clean, dirty
- Misuse\*
- Relapse
- Binge\*
- Dependence\*
- Problem
- Inappropriate

\*define to avoid confusion. Misuse may be ok for Rx drug...

Taking a birth control pill to relieve a headache is misuse  
“medication” vs. “drug”



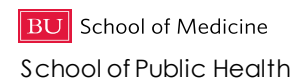




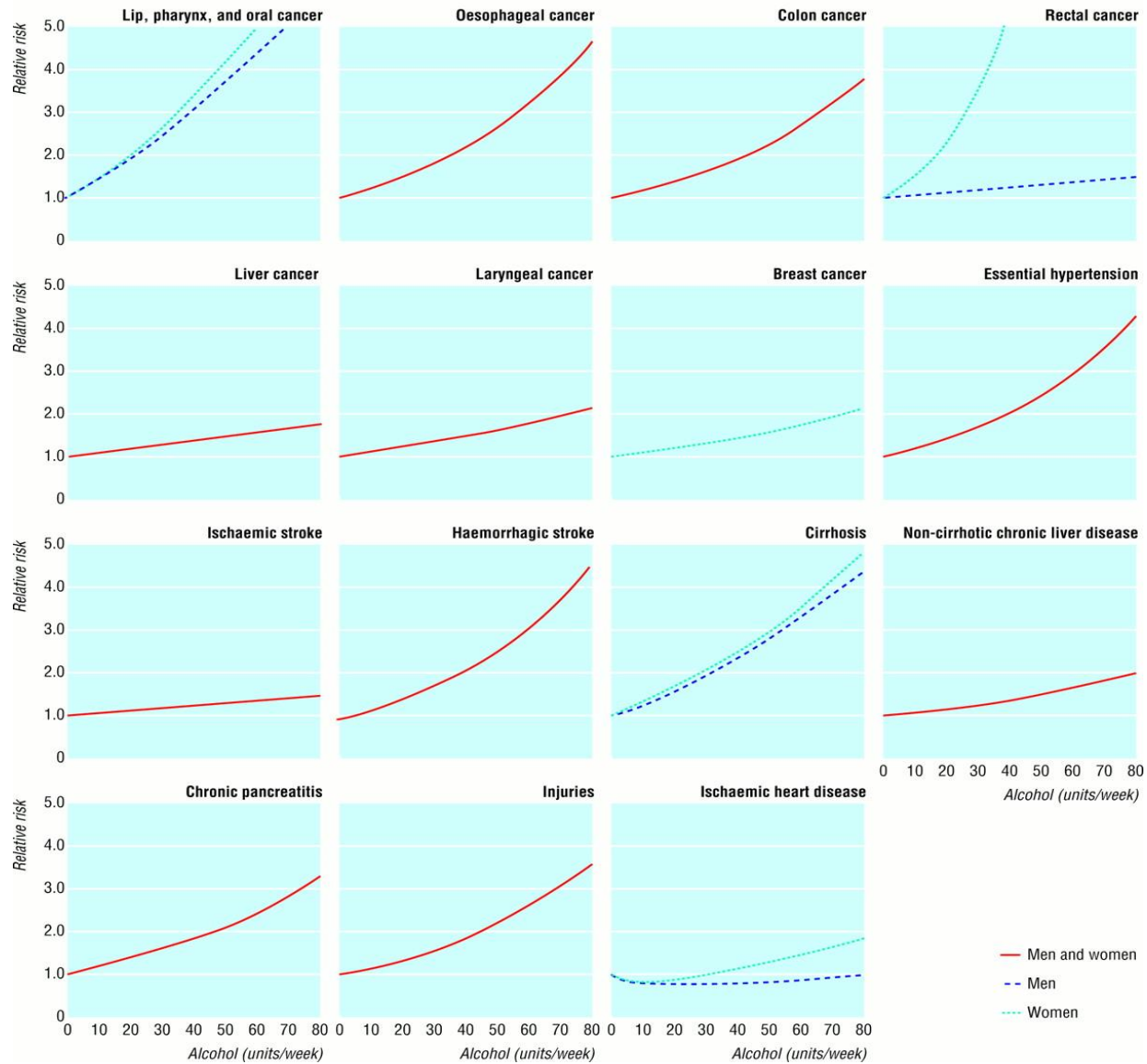
# Injury and Alcohol

	Population attributable fraction (%)
Alcohol dependence	4.0
<b>Non-dependent use</b>	<b>6.6</b>

*Spurling & Vinson. Ann Fam Med 2005;3:47-52. Case crossover study. 2517 acute injuries, 3 EDs in MO. 10.6% Would not have occurred without alcohol consumption.*



# Cause Specific Relative Risks of Health Consequences



# SCREENING: TOOLS, ASSIST

## Tobacco and Alcohol

For any frequency of use *in the past 3 months*:

### TOBACCO USE

Any current tobacco use places a patient at risk.

**Advise** all tobacco users to quit.

*For more information on smoking cessation, please see "Helping Smokers Quit: A Guide for Clinicians" at <http://www.ahrq.gov/clinic/tobacco/clinhlpsmksgt.htm>.*

### ALCOHOL USE

Question the patient in more detail about frequency and quantity of use:

**How many times in the past year have you had:**



**For men:** 5 or more drinks in a day?



**For women:** 4 or more drinks in a day?

**If the answer is:**

**None—Advise** patient to stay within these limits:

✓ For healthy **men** under the age of 65:  
No more than 4 drinks per day AND no more than 14 drinks per week.

✓ For healthy **women** under the age of 65:  
No more than 3 drinks per day AND no more than 7 drinks per week.

✓ Encourage talking openly about alcohol and any concerns it may raise and rescreen annually.

**One or more times of heavy drinking—**  
Patient is an at-risk drinker.

*Please see "Helping Patients Who Drink Too Much: A Clinician's Guide" at [http://pubs.niaa.nih.gov/publications/Practitioner/CliniciansGuide2005/clinicians\\_guide.htm](http://pubs.niaa.nih.gov/publications/Practitioner/CliniciansGuide2005/clinicians_guide.htm) for information to help **assess, advise, and assist** at-risk drinkers or patients with alcohol use disorders.*

# Dependence (DSM IV)

- Impaired control /Preoccupation
  - A great deal of time getting, using, recovering
  - Activities given up or reduced
  - More or longer than intended
  - Cannot cut down or control
  - Use despite knowledge of health problem
- Withdrawal
  - Symptoms, using to relieve symptoms
- Tolerance
  - Increased amounts to achieve effect
  - Diminished effect from same amount

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



# ADDICTION

## Short Definition:

Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.

Addiction is characterized by inability to consistently abstain, impairment in behavioral control, craving, diminished recognition of significant problems with one's behaviors and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death.

# LOW RISK USE

Evidence for benefit is  
likely apply to

## Addiction

EDITORIAL

### Has the leaning tower of presumed health benefits from 'moderate' alcohol use finally collapsed?

The evolving epidemiological literature, including improved methodology for assessing causality in observational studies, is raising doubts about whether moderate alcohol consumption has a protective effect on health.

For several decades, most epidemiologists have agreed that 'moderate' (i.e. low average volume) alcohol consumption is protective against cardiovascular disease. Indeed, estimates of protective effects for prevalent chronic conditions

with exposure to a putative causal factor, can test the relationship between that causal factor and the outcome. The assumption is that the genotype itself has no direct effect on the outcome and no role in the outcome apart from a mediating effect via the causal factor. If the genetic variation turns out to be associated with the outcome, there is a reasonable presumption that this is through the putative cause.

An MR meta-analysis by Holmes et al. found that

Som

Chikritzhs T et al. *Addiction* May 2015;110:726-7.

or "responsible"

11d

## Never exceed the daily or weekly limits

(2 out of 3 people in this group abstain or drink fewer than 12 drinks a year)

Prevalence (US)



72%

Disorder

fewer than  
**1 in 100**

## Exceed only the daily limit

(More than 8 out of 10 in this group exceed the daily limit *less than once a week*)



16%

**1 in 5**

## Exceed both daily and weekly limits

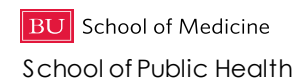
(8 out of 10 in this group exceed the daily limit *once a week or more*)



10%

almost  
**1 in 2**

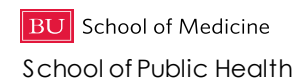
NIAAA, NESARC. 2% exceed weekly only; 1 in 13 have disorder



# CAGE

For current...	Sensitivity %	Specificity %
Unhealthy alcohol use ( $\geq 2$ )	53-69	70-97
Alcohol use disorder ( $\geq 2$ )	77	79
Alcohol use disorder ( $\geq 1$ )	89	81

Maisto & Saitz *Am J Addict* 2003;12:S12-25.





# LABORATORY TESTS (ALCOHOL)

<b>Test for Unhealthy Alcohol Use</b>	<b>Sensitivity</b>	<b>Specificity</b>
<b>Questionnaire (\$12.48)</b>	69%	98%
<b>CDT (\$291.89)</b>	47%	71%
<b>GGT (\$72.59)</b>	37%	72%
<b>MCV (\$130.92)</b>	32%	71%
<b>AST (\$132.74)</b>	20%	80%

*Coulton S, et al. BMJ. 2006;332:511–517.*

