



Screening & Diagnosis of Alcohol Use Disorder

*Montana Primary Care Association
AUD Webinar Series, Part 1 of 4*

Bob Sise, MD, MBA, MPH, DABOM, FAPA, FASAM
 406 Recovery | Montana nonprofit
 Host: Montana Primary Care Association
 Tuesday, September 1, 2026 | 12:00-1:00 pm MDT

9/1 screening & diagnosis / 9/8 early intervention / 9/22 outpatient detox & treatment / 9/29 pregnant/postpartum



406Recovery.Care

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Disclosures

Employment

- 406 Recovery (Montana nonprofit) - principal / CEO and co-founder.
- Consultant w/ Community Medical Services and MPCA

Off-label / products

None expected. This session does not cover pharmacotherapy, compounding, or product promotion. Educational, not promotional.

Public role: 406recovery.care/our-team/robert-g-sise/ | No One Point Care affiliation on this activity. | FDA/FTC: no medication efficacy claims in this session.

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Learning Objectives

By the end of this session, participants will be able to:

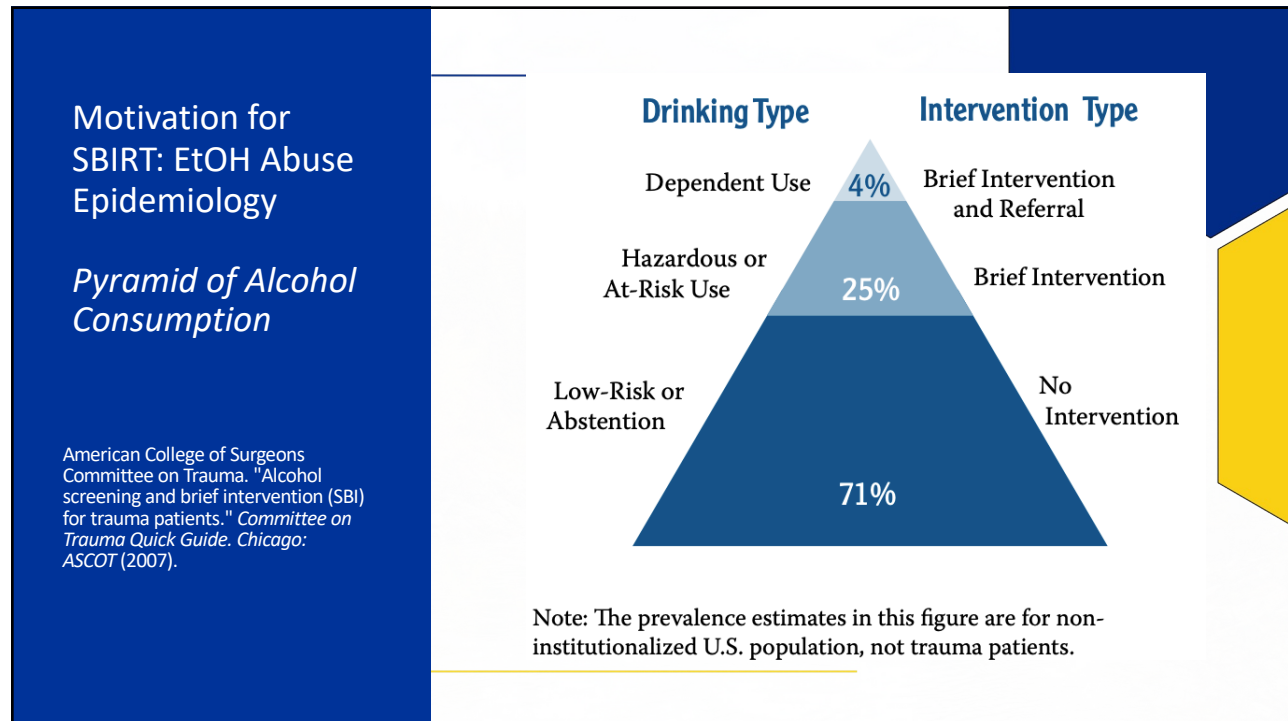
1. Acknowledge how Screening, Brief Intervention, and Referral to Treatment (SBIRT) is an evidence-based public health approach used to identify, reduce, and prevent risky substance use and substance use disorders (including alcohol use disorder)
2. Select and apply a brief validated screen for unhealthy alcohol use.
3. Apply DSM-5-TR AUD criteria after a positive screen and specify severity and remission
4. Identify withdrawal-risk features that warrant urgent medical evaluation (this session does not teach withdrawal treatment).

USPSTF. JAMA. 2018;320(18):1899-1909. PMID 30422198. | APA. DSM-5-TR. 2022. | ASAM. J Addict Med. 2020;14(3S):1-72.

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SCREENING, BRIEF INTERVENTION AND REFERRAL TO TREATMENT (SBIRT)

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SAMHSA
Substance Abuse and Mental Health
Services Administration

**on
SBIRT**

Public health approach:

- early intervention for individuals with risky alcohol and drug use
- timely referral to more intensive substance abuse treatment for those who have substance abuse disorders.

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SAMHSA
Substance Abuse and Mental Health
Services Administration

on SBIRT

SAMHSA defines a comprehensive SBIRT model to include the following characteristics:

- Universal screening
- Brief interventions (5-10 minutes)
- One or more specific behaviors related to risky alcohol and drug use are targeted.
- The services occur in a public health non-substance abuse treatment setting
- In addition to brief intervention, it includes referral to treatment.

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SBIRT Stages:

The Evidence by Disease Process

	Screening	Brief Intervention ¹	Brief Treatment ²	Referral to Treatment	Evidence for Effectiveness of SBIRT
Alcohol Misuse/Abuse	✓	✓	✓	✓	Comprehensive SBIRT effective (Category B classification, USPSTF)
Illicit Drug Misuse/Abuse	✓	*	*	✓	Growing but inconsistent evidence
Tobacco Use	✓	✓	✓	✓	Effective brief approach consistent with SBIRT (USPSTF; 2008 U.S. Public Health Service (PHS) Clinical Practice Guideline)

Key: ✓ Evidence for effectiveness/utility of component

* Component Demonstrated to show Promising Results

— Not Demonstrated and/or Not Utilized

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Clinical Workflow:

Ask → Screen → Assess → Diagnose → Triage

Ask about alcohol use (standard drinks): "Do you drink alcohol, or have you had any beer, wine, or liquor in the past year?" If so:



**A positive screen identifies unhealthy alcohol use;
it does not by itself diagnose alcohol use disorder.**

At each transition, consider withdrawal risk, immediate safety, and the appropriate level of care.

USPSTF. JAMA. 2018;320(18):1899-1909. PMID 30422198. | NIAAA. From Risk to Diagnosis to Recovery.

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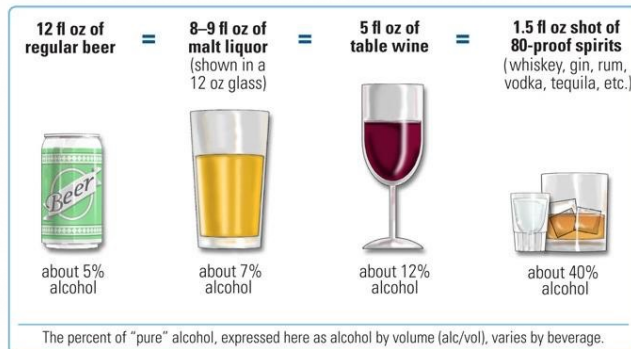
What Is a Standard Drink?



One U.S. standard drink = 14 grams (0.6 fl oz) of pure ethanol.

12 oz beer (~5% ABV) | 5 oz wine (~12% ABV) | 1.5 oz spirits (~40% ABV / 80-proof)

100-proof = 50% alcohol by volume - 1.5 oz of 100-proof is more than one standard drink. Craft beer, large wine pours, and cocktails often count as more than one.



NIAAA. The Basics: Defining How Much Alcohol Is Too Much. Core Resource on Alcohol (accessed 2026-08-29). 14 g / 12 oz beer / 5 oz wine / 1.5 oz 80-proof spirits.

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Binge, Weekly Heavy, NSDUH Heavy, and DGA 2025-2030



NIAAA binge (left glasses)

4+ drinks women / 5+ men in about 2 hours (typically BAC ~0.08%). Still current.

NIAAA heavy (operational / screening) (right glasses)

Women: 4+ drinks on any day OR 8+/week. Men: 5+ on any day OR 15+/week. Same weekly numbers as CDC. Not a SAMHSA term.

SAMHSA NSDUH 'heavy alcohol use'

Binge on 5+ days in the past 30 days. Survey term. Do not mix with NIAAA weekly heavy. Not 'does not meet DSM.'

DGA 2025-2030 (FINAL Jan 2026) - public-health line

Consume less alcohol for better overall health. No 2/day-men / 1/day-women limit. 2020-2025 2/1 is previous, not current DGA.

NIAAA public advice is also 'the less, the better.' Old 4/14 and 3/7 'low-risk' limits are NOT on live NIAAA pages (retired as public rec; USPSTF 2018 still quotes them historically).

Heavy / unhealthy use can exist with or without AUD. Pregnancy: any alcohol is unhealthy. Screen; management is Session 4.

BINGE drinking is defined as:

WOMEN 4 consuming or more drinks on an occasion



MEN 5 consuming or more drinks on an occasion



HEAVY drinking is defined as:

WOMEN 8 consuming or more drinks per week



MEN 15 consuming or more drinks per week



Sources on each row: NIAAA Core Resource (rev. 2025-05-08) + Drinking Patterns (Jan 2026); CDC excessive alcohol use; SAMHSA 2025 NSDUH (heavy = binge on 5+ of past 30 days); Dietary Guidelines for Americans, 2025-2030 (HHS/USDA, 7 Jan 2026). APA DSM-5-TR 2022.

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Why Screen?



Most people with unhealthy alcohol use or AUD are not in specialty treatment.

→ Your screen is often the essential step in identifying alcohol use disorder

Alcohol Use Disorder (AUD) in the United States

28 million
or **1 in 10**

people ages 12 and older had AUD in 2024.

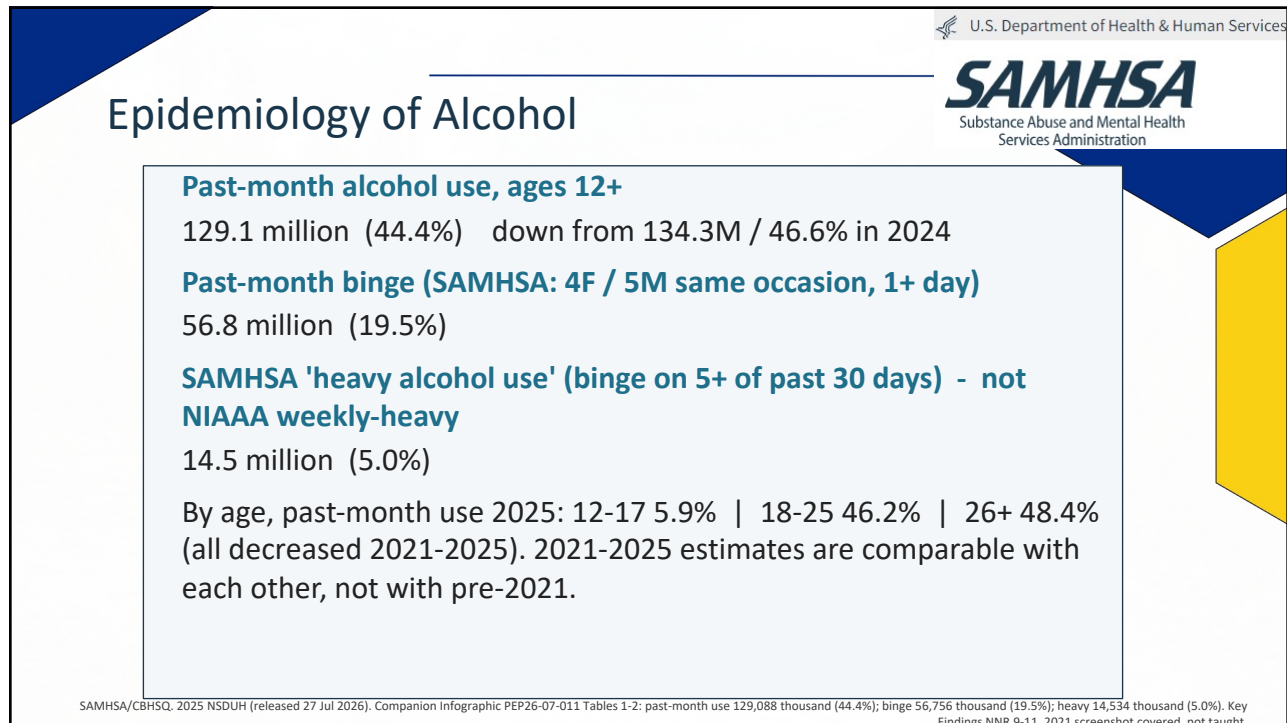


Source: 2024 NSDUH

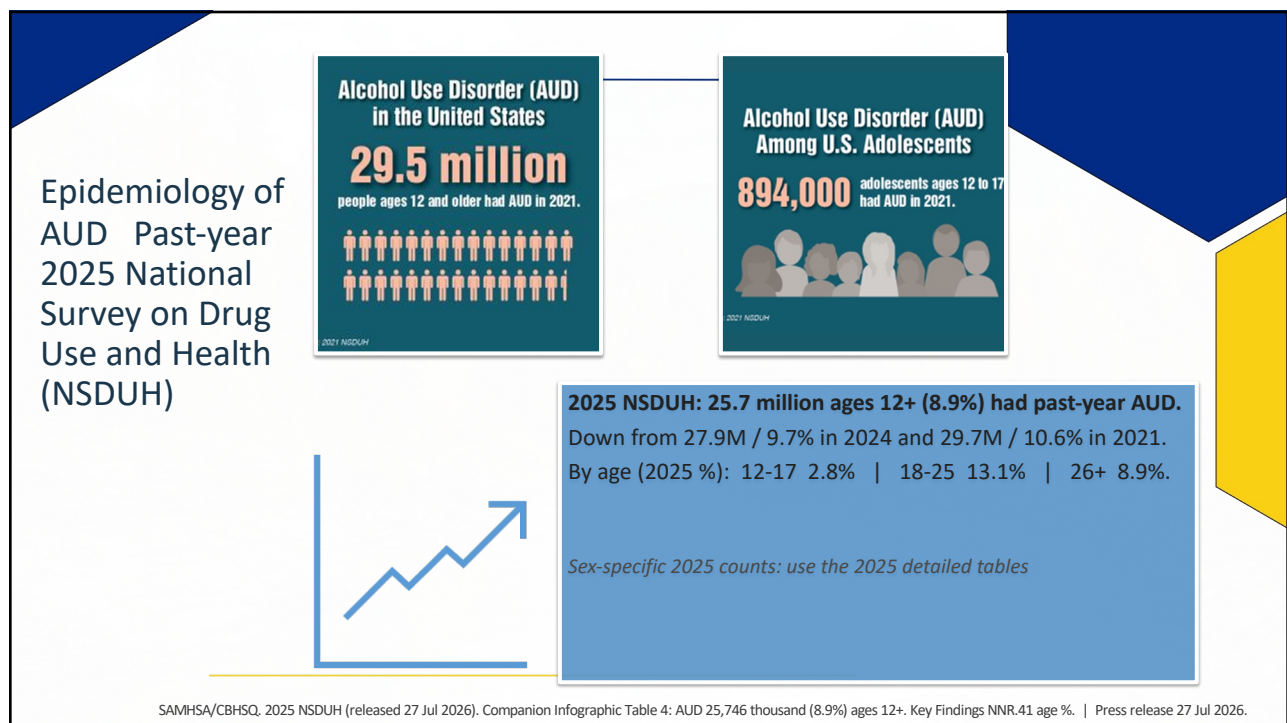
USPSTF Grade B is for adults in primary care who are not already seeking AUD treatment

USPSTF. JAMA. 2018;320(18):1899-1909. PMID 30422198. | SAMHSA 2025 NSDUH (released 27 Jul 2026). | Grant 2015 PMID 26039070 (19.8% of 12-month AUD received alcohol treatment).

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Mortality and Economic Burden



Alcohol-Related Deaths

- 178,307 average annual alcohol-attributable deaths, 2020-2021 (Esser, MMWR 2024). Latest CDC ARDI/MMWR as of 29 Aug 2026.

Excessive alcohol use remains a major preventable contributor to mortality.

ARDI still uses 2020-2021 mortality (CDC ARDI announcements through 16 Apr 2024).

Economic Burden

- Estimated economic cost of excessive drinking: \$249 billion in 2010 (Sacks 2015).

Esser MB et al. MMWR. 2024;73(8):154-161. PMID 38421934. | Sacks JJ et al. Am J Prev Med. 2015;49(5):e73-e79. PMID 26477807 (\$249B in 2010).

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Impacts of Alcohol Misuse - Individual, Family, Community



Individual Morbidity and Mortality	Family/Relationships	Communities/ Society
• Unintentional injuries such as motor vehicle crashes, falls, drownings, and burns • Alcohol poisoning • Risky sexual behaviors • Effects on pregnant people and their babies, including miscarriage and stillbirth • Cardiac issues, such as high blood pressure, heart disease, and stroke • Liver disease, gastritis, pancreatitis, and digestive issues • Several different types of cancer, including mouth, throat, larynx, esophagus, liver, breast, colon, pancreatic, and rectum • Neurological issues, including learning and memory problems, poor school performance, difficulty walking (ataxia), blindness, encephalopathy, and dementia • A weakened immune system • Weight and blood sugar level changes • Behavioral health conditions, such as depression, anxiety, concurrent substance misuse, AUD, and suicide • Fertility issues affecting both males and females	Partners • Intentional injuries and violence, like sexual assault, homicide, domestic/intimate partner violence • Decreased quality of life • Physical and mental health problems • Divorce and/or separation Children • Poor school performance • Negative effects on infants, children, and adults whose mothers drank during pregnancy, like pre-term birth, low birth weight, and fetal alcohol spectrum disorders • Abuse and neglect • Riding with driver under the influence • Adverse childhood experiences	Workplace • Unemployment • Decreased productivity and career advancement and/or opportunities • Workplace problems (e.g., harassment) Public Safety • Motor vehicle crashes • Violent crime (e.g., assault, homicide) • Disruptive behavior (e.g., threats, disorderly conduct) • Incarceration and penal costs

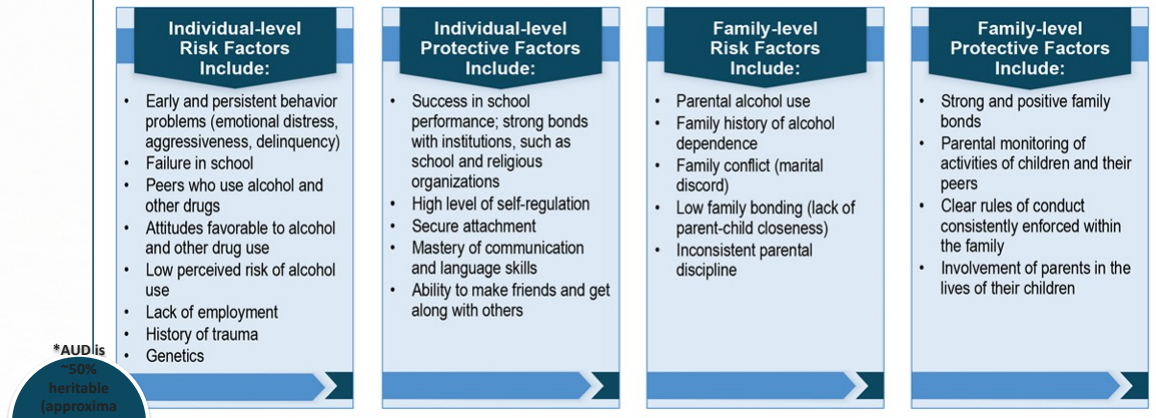
WHO: alcohol is a causal factor in 200+ diseases and injuries. CDC excessive alcohol use. NIAAA Alcohol's Effects on the Body (June 2025). Infographic from original deck (PEP 2022 compiled similar content - not the only source).

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Etiology and Risk Factors



Risk and Protective Factors Associated with Alcohol Misuse



*AUD is ~50% heritable (approximate).
Verhulst 2015; h2 = 0.49 [95% CI 0.43-0.53].

Verhulst B, Neale MC, Kendler KS. Psychol Med. 2015;45(5):1061-1072. PMID 25171596. Graphic: risk/protective factors (SAMHSA community-level compilation). ~50% is approximate.

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SBIRT: Screening for Alcohol Use Disorder

- Variety of tools available
- Those targeting Alcohol Use Disorder have the most robust evidence supporting their use:
 - AUDIT*
 - AUDIT-C*
 - SASQ*
 - CRAFFT (for youth)*

*+ or concerning result should followed by diagnostic interview

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Step 1: Screening

The Alcohol Use Disorders Identification Test (AUDIT)

One drink equals:



12 oz.
beer



5 oz.
wine



1.5 oz.
liquor
(one shot)

1. How often do you have a drink containing alcohol?	Never	Monthly or less	2 - 4 times a month	2 - 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?	0 - 2	3 or 4	5 or 6	7 - 9	10 or more
3. How often do you have four 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, in 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, in the last year
	0	1	2	3	4

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Step 1: Screening

AUDIT

Interpretation

Score*	Suggested zone	Indicated action
0-3: Women 0-4: Men	I - Low risk (low risk of health problems related to alcohol use)	Brief education
4-12: Women 5-14: Men	II - Risky (increased risk of health problems related to alcohol use)	Brief intervention
13-19: Women 15-19: Men	III - Harmful (increased risk of health problems related to alcohol use and a possible mild or moderate alcohol use disorder)	Brief intervention or referral to specialized treatment
20+: Men 20+: Women	IV - Severe (increased risk of health problems related to alcohol use and a possible moderate or severe alcohol use disorder)	Referral to specialized treatment

Validated in adolescents ages 14 to 18*:

→ cut point of 2 for to qualify for Zone II- "risky" **

→ cut point of 3 for alcohol abuse or dependence **

*Knight, John R., et al. 2002**

*Society of Adolescent Health and Medicine ***

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Abbreviated Version: **Alcohol Use Disorders Identification Test (AUDIT-C)**

Name: _____ Age: _____
 Gender: _____ Date of test: _____

Instructions: To assess potential health and medication interactions, we need to ask about your alcohol use. Please answer as correctly and honestly as possible by indicating which answer is right for you.

1. How often did you have a drink containing alcohol in the past year? Consider a "drink" to be a can or bottle of beer, a glass of wine, a wine cooler, or one cocktail or a shot of hard liquor (like scotch, gin, or vodka).

Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week
☐	☐	☐	☐	☐
0	1	2	3	4

2. How many drinks did you have on a typical day when you were drinking in the past year?

0, 1, or 2 drinks	3-4 drinks	5-6 drinks	7-9 drinks	10 or more drinks
☐	☐	☐	☐	☐
0	1	2	3	4

3. How often did you have 6 or more drinks on one occasion in the past year?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily
☐	☐	☐	☐	☐
0	1	2	3	4

Total score: _____ / 12

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AUDIT-C

The three questions (score 0-4 each; total 0-12)

- How often did you have a drink containing alcohol?
- How many drinks did you have on a typical drinking day?
- How often did you have six or more drinks on one occasion?

Common cutoffs for unhealthy use
4 or more men | 3 or more women

Sensitivity/specificity tradeoff (Bradley 2007: men Se 0.86/Sp 0.89; women Se 0.73/Sp 0.91 at these thresholds). Population and purpose matter.

Bush et al. Arch Intern Med. 1998;158:1789-1795. PMID 9738608. | Bradley et al. ACER. 2007;31:1208-1217. PMID 17403059. | Smith et al. JGIM. 2009;24:783-788. PMID 19247718.

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AUDIT-C in Practice

USE THE RESULT

A positive screen indicates unhealthy alcohol use until you assess further.

DO NOT OVERCALL IT

A positive screen is not, by itself, an AUD diagnosis.

NEXT STEP

AUDIT and/or discussion of Quantity/pattern, evaluation using DSM-5-TR criteria, consequences, last drink, and withdrawal risk.

Bush et al. Arch Intern Med. 1998;158:1789-1795. PMID 9738608. | Bradley et al. ACER. 2007;31:1208-1217. PMID 17403059. | Smith et al. JGIM. 2009;24:783-788. PMID 19247718.

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My clinic ran out of AUDIT questionnaires, the EHR is down, my dog ate my homework... now what?

Single Alcohol Screening Question (SASQ) alternative:

How many times in the past year have you had 5 (men) / 4 (women and adults >65) or more drinks in a day?

1 or more = positive screen*

NEXT STEP

Quantity/pattern, DSM-5-TR criteria, consequences, last drink, and withdrawal risk.

**SASQ has roughly 73%–88% sensitivity and 74%–100% specificity for unhealthy use.*

Bush et al. Arch Intern Med. 1998;158:1789-1795. PMID 9738608. | Bradley et al. ACER. 2007;31:1208-1217. PMID 17403059. | Smith et al. JGIM. 2009;24:783-788. PMID 19247718.

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Youth Screening

The CRAFFT Interview

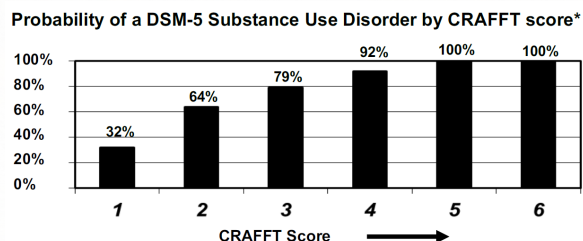
→ validated in adolescent population

C	Have you ever ridden in a CAR driven by someone (including yourself) who was "high" or had been using alcohol or drugs?	No	Yes
R	Do you ever use alcohol or drugs to RELAX , feel better about yourself, or fit in?	No	Yes
A	Do you ever use alcohol or drugs while you are by yourself, or ALONE ?	No	Yes
F	Do you ever FORGET things you did while using alcohol or drugs?	No	Yes
F	Do your FAMILY or FRIENDS ever tell you that you should cut down on your drinking or drug use?	No	Yes
T	Have you ever gotten into TROUBLE while you were using alcohol or drugs?	No	Yes

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CRAFFT: EtOH/drugs in youth

- Favored by American Academy of Pediatrics Policy Statement on SBIRT.*
- Responding "yes" to two of the questions is considered a positive screen**
 - At the very least prompts brief counseling.
- A score of 4 or more has a association with a diagnosis of a substance use disorder**



Nuance: : USPSTF still rates evidence as insufficient to recommend for or against routine alcohol screening specifically in ages 12–17, but it explicitly notes that NIAAA and AAP recommend CRAFFT for identifying risky adolescent substance use.

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Case 1: A Positive Screen, Now What?

A 42-year-old patient scores 7 on the AUDIT-C (or yes on SASQ). He reports two to three drinks most nights, more on weekends, and no current withdrawal symptoms.

- Pause: What does this score establish? What must you ask before diagnosing alcohol use disorder?

Teaching case (hypothetical). Screen first; diagnose with a clinical interview.

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Case 1: A Positive Screen is Not Yet a Diagnosis

Next steps:

- Use a nonjudgmental diagnostic interview:

quantity, frequency, and pattern

- consequences and functional impact

DSM-5-TR criteria over 12 months

- last drink and withdrawal risk

A positive screen identifies unhealthy alcohol use; it does not diagnose AUD.

Teaching case (hypothetical). Screen first; diagnose with a clinical interview.

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After a Positive Screen

1. Clarify exposure: typical day, heaviest day, frequency, pattern, last drink (withdrawal clock).
2. Assess AUD vs unhealthy use: the 11 DSM-5-TR criteria, roles/relationships, risky use, health effects.
3. Assess safety and comorbidity: withdrawal history, other substances (especially sedatives), medications, psychiatric symptoms, medical illness, pregnancy, suicidality, safe setting.
4. Document: screen result; whether AUD is met; severity; remission specifier if applicable; next clinical step.

NIAAA. From Risk to Diagnosis to Recovery. | APA. DSM-5-TR. 2022. | ASAM. J Addict Med. 2020;14(3S):1-72.

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DSM 5 Diagnostic Criteria *Alcohol Use Disorder*

- A. A problematic pattern of alcohol use leading to clinically significant impairment or distress, as manifested by ≥ 2 of the following, occurring within a 12-month period:
1. Alcohol is often taken in larger amounts or over a longer period than was intended
 2. Persistent desire or unsuccessful efforts to cut down or control alcohol use
 3. A great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects
 4. Craving, or a strong desire or urge to use alcohol
 5. Recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home
 6. Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol
 7. Important social, occupational, or recreational activities are given up or reduced because of alcohol use
 8. Recurrent alcohol use in situations in which it is physically hazardous
 9. Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol
 10. Tolerance, as defined by either of the following:
 - a. A need for markedly increased amounts of alcohol to achieve intoxication or desired effect
 - b. A markedly diminished effect with continued use of the same amount of alcohol
 11. Withdrawal, as manifested by either of the following:
 - a. The characteristic withdrawal syndrome for alcohol
 - b. Alcohol (or a closely related substance, such as a benzodiazepine) is taken to relieve or avoid withdrawal symptoms

Specify current severity:

Mild: Presence of 2–3 symptoms.

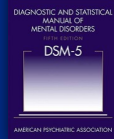
Moderate: Presence of 4–5 symptoms.

Severe: Presence of 6 or more symptoms.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.)

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DSM-5-TR Alcohol Use Disorder Criteria, Severity, Remission



Most articulately: problematic pattern with impairment/distress and 2+ of 11 criteria within 12 months. Diagnosis = clinical interview, not a screen score.

1. Impaired control: larger/longer than intended; unsuccessful cut-down; time spent; craving
2. Social impairment: role failure; interpersonal problems; activities given up
3. Risky use: hazardous use; continued use despite physical or psychological harm
4. Physiologic: tolerance; withdrawal (neither necessary nor sufficient for the diagnosis)
5. **Severity: mild 2-3 | moderate 4-5 | severe 6+ criteria**
6. Remission (after full criteria previously met): early = 3 to <12 months with no criteria except craving may persist; sustained = 12+ months. Specify in a controlled environment if access is restricted.

Sise Mantra: physiologic dependence + impaired function merits treatment (note: captures the vast majority but not all)

APA. Diagnostic and Statistical Manual of Mental Disorders, 5th ed, Text Revision. 2022. (Not DSM-5 2013.)

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Case 2

A patient drinks six to eight beers nightly. He has tried unsuccessfully to cut down, missed work twice after drinking, and continues despite escalating conflict at home. He reports morning tremor that improves after alcohol.

Pause: Which DSM-5-TR criteria are present?

Teaching case (hypothetical). DSM-5-TR criteria determine diagnosis and severity.

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Case 2: Count Criteria, Then Assign Severity

Diagnostic criteria met by patient include:

- unsuccessful cut-down efforts
- role impairment
- consequent social or interpersonal problems
- withdrawal

Do we need to elicit more information?

Reminder: mild 2-3, moderate 4-5, severe 6 or more.

Teaching case (hypothetical). DSM-5-TR criteria determine diagnosis and severity.

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DSM-5-TR Alcohol Intoxication

A NOW assessment - not a 12-month AUD diagnosis.

- A. Recent ingestion of alcohol.
- B. Clinically significant problematic behavioral or psychological changes (e.g., inappropriate sexual or aggressive behavior, mood lability, impaired judgment) that developed during, or shortly after, alcohol ingestion.
- C. One or more of the following signs/symptoms developing during, or shortly after, alcohol use:

Slurred speech | Incoordination | Unsteady gait | Nystagmus | Impairment in attention or memory | Stupor or coma

Not attributable to another medical condition or another substance. A person can be intoxicated without AUD.

APA. Diagnostic and Statistical Manual of Mental Disorders, 5th ed, Text Revision (DSM-5-TR). 2022. (Not DSM-5 2013.)

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BAC and Clinical Presentation (nontolerant)

BAC (%)	Typical Effects*
0.02-0.03	Slight euphoria, no loss of coordination, loss of shyness
0.04-0.06	Feeling of well-being, relaxed, disinhibition, euphoria, sense of warmth, minor impairment of reasoning/memory lowering of caution
0.07-0.09	Slight impairment (e.g. balance, speech, vision and hearing, reaction times, reasoning, judgement), euphoria, reduced self-control
0.1-0.125	Significant impairment (e.g. coordination, judgement, speech, vision and hearing, reaction times), euphoria
0.13-0.15	Gross motor impairment, lack of physical control, blurred vision, major loss of balance, euphoria reduced (i.e. dysphoria appears)
0.16-0.2	Dysphoria, anxiety, restlessness, nausea, very intoxicated
0.25	Needs assistance walking, total mental confusion, dysphoria, nausea & vomiting
0.3	Loss of consciousness
≥0.4	Onset of coma, respiratory arrest, death

BAC of 100 mg/dL = 0.1 %; Federal limit to legally drive in the US is a BAC of 0.08%, except Utah where it is 0.05%

*These effects are generalized & may vary depending on individual factors



1844)

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DSM-5-TR Alcohol Withdrawal

After stopping or cutting down heavy, prolonged use - not an AUD screen.

- Cessation of (or reduction in) alcohol use that has been heavy and prolonged.
- Two or more of the following, developing within several hours to a few days:
 - Autonomic hyperactivity (sweating or pulse >100) | Increased hand tremor
 - Insomnia | Nausea or vomiting | Transient visual, tactile, or auditory hallucinations or illusions | Psychomotor agitation | Anxiety | Generalized tonic-clonic seizures
- Distress or impairment.
- Not another medical/mental disorder or another substance.

Seizures and hallucinosis are red flags for urgent medical evaluation.

APA. DSM-5-TR. 2022. | ASAM. J Addict Med. 2020;14(3S):1-72. (Not DSM-5 2013.)

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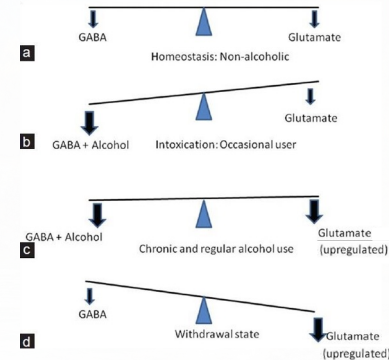
Pathophysiology

❖ Alcohol interferes with 2 neurotransmitters:

- Gamma-aminobutyric acid A (**GABA-A**) agonist
- N-methyl-D-aspartate (**NMDA**)-glutamate antagonist

Alcohol Use	Alcohol Quantity	Neuronal Effects		Clinical Effect
		GABA Receptors	NMDA-Glutamate Receptors	
Naïve/Sober	No Alcohol			Baseline
Acute		Enhanced inhibition	Blocked excitation	Intoxication/Sedation
Chronic/Tolerance		Down-regulation	Up-regulation	New baseline
Abstinent		Loss of inhibition	Uncontrolled excitation	Withdrawal/Autonomic instability

= alcohol; = no alcohol; = GABA receptor; = NMDA-glutamate receptor; = Blocked excitation



Neuropsychopharmacology 2010; 35: 217-38.; Alcohol and alcoholism. Harrison's principles of internal medicine, 18th ed. Columbus: McGraw-Hill; 2012.

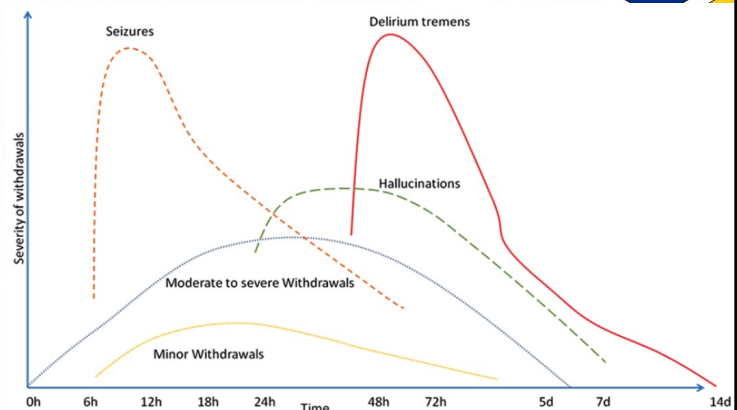
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Alcohol Withdrawal by Severity

Table 2: Clinical descriptions of alcohol withdrawal syndromes by severity^[4-6]

Minor withdrawal	Starts about 6 h after cessation or decrease in intake, lasts up to 24-48 h: tremors, sweating, tachycardia, GI upset, headache, anxiety and clear sensorium (intact orientation). ^[4] Usually corresponds to CIWA-Ar <10
Moderate to severe withdrawal	Alcoholic hallucinosis: Hallucinations (visual/tactile/auditory) and illusions in clear sensorium (well oriented) and stable vitals. Lasts 24 h to 6 days. ^[5] Rarely beyond 1 month but definitely <6 months Alcohol withdrawal seizure: One or two generalized tonic-clonic seizure. Begins within 6-48 h after the last drink. Multiple seizures (upto 6) can occur, within a span of 6 h. ^[6] High risk of progression to DT ^[5] DT: Tremors, sweating, tachycardia, anxiety, hallucinations/illusions, disorientation, agitation secondary to previous symptoms. Begins 48-72 h after last drink ^[4] and may last up to 2 weeks. Usually CIWA-Ar >20

DT – Delirium tremens; GI – Gastrointestinal; CIWA-Ar – Clinical Institutes Withdrawal Scale for Alcohol (Revised)^[9]



ASAM Clinical Practice Guideline on Alcohol Withdrawal Management. J Addict Med. 2020;14(35):1-72. doi:10.1097/ADM.0000000000000668. Graphics from original deck. No dosing in this session.

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Withdrawal Red Flags

This is a referral list, not a treatment protocol.

Urgent medical evaluation is warranted with active drinking and:

- Prior withdrawal seizure or delirium tremens
- Hallucinations, confusion, severe agitation, or unstable vital signs
- Serious medical illness or high-risk concurrent sedative use
- Pregnancy or acute suicidality
- No reliable support, safe setting, or ability to monitor symptoms

ASAM Clinical Practice Guideline on Alcohol Withdrawal Management. J Addict Med. 2020;14(3S):1-72. doi:10.1097/ADM.0000000000000668. No dosing in this session. Pharmacotherapy = Session 3 (Sept 22).

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Withdrawal Screening: PAWSS

Prediction of Alcohol Withdrawal Severity Scale

Predicts risk of severe alcohol withdrawal in hospitalized patients.

Instructions

Use in patients ≥18 years old admitted to general floor, with or without history of alcohol abuse. Do not use in patients with active or uncontrolled seizure disorder.

When to Use

Pearls/Pitfalls

Why Use

Threshold criteria

Patient consumed any amount of alcohol within the last 30 days OR patient had a positive blood alcohol level upon admission

No

Yes

→ Score of 4 or higher (High Risk): Indicates a high risk for severe complication

Source:



<https://www.mdcalc.com/calc/10102/prediction-alcohol-withdrawal-severity-scale>

Ask the patient

Have you been recently intoxicated or drunk within the last 30 days?	No	0	Yes	+1
Have you ever experienced previous episodes of alcohol withdrawal?	No	0	Yes	+1
Have you ever experienced withdrawal seizures?	No	0	Yes	+1
Have you ever experienced delirium tremens (DTs)?	No	0	Yes	+1
Have you ever undergone alcohol rehabilitation treatment (i.e., inpatient or outpatient treatment programs, or Alcoholics Anonymous attendance)?	No	0	Yes	+1
Have you ever experienced blackouts?	No	0	Yes	+1
Have you combined alcohol with other "downers" (e.g., benzodiazepines, barbiturates) during the last 90 days?	No	0	Yes	+1
Have you combined alcohol with any other substance of abuse during the last 90 days?	No	0	Yes	+1

Clinical evidence

Positive blood alcohol level (BAL) on presentation	No	0	Yes	+1
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2 points
PAWSS

Average risk

Likelihood ratio 0.07 for complicated AWS (withdrawal hallucinosis, withdrawal-related seizures, or delirium tremens)

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Quick Review: Match the Tool to the Task



Screen (unhealthy use)

- AUDIT-C: 3 items; first-line / more time efficient
- AUDIT: more comprehensive, elucidates intervention
- SASQ: single-item heavy-drinking day
- CRAFFT in youth

Diagnose

- DSM-5-TR clinical interview + severity questions

Withdrawal (do not use to diagnose AUD)

- PAWSS: estimates risk of complicated withdrawal in acute-care settings

Saunders 1993 PMID 8329970; Bush 1998 PMID 9738608; Sullivan 1989 PMID 2596506; Maldonado 2015 PMID 25979430; Ewing 1984 PMID 6471323; ASAM 2020; USPSTF 2018.

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Case 3

A patient wants to stop drinking today. She drinks a fifth of liquor daily, had a withdrawal seizure two years ago, takes prescribed clonazepam, and lives alone. She denies current hallucinations.

Pause: Is routine outpatient monitoring appropriate?

Teaching case (hypothetical). Use structured withdrawal-risk assessment and medical judgment.

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Case 3: Withdrawal Risk Changes the Next Step

Immediate priorities

- **Clarify time of last drink and current symptoms**
- Assess vital signs, cognition, suicidality, and medical stability
- **Identify prior seizure/DT history and concurrent sedative use**
- Arrange urgent medical evaluation or a higher level of care when risk is elevated

Withdrawal risk can take priority over diagnostic completion.

Teaching case (hypothetical). Use structured withdrawal-risk assessment and medical judgment.

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Clinical Course



Average age of first drink is around 15 years of age

AUD is typically chronic in nature, with fluctuations over time (i.e., periods of exacerbations and remissions)

Without formal treatment, only 20-30% of patients with AUD are likely to achieve abstinence & remain in long-term remission

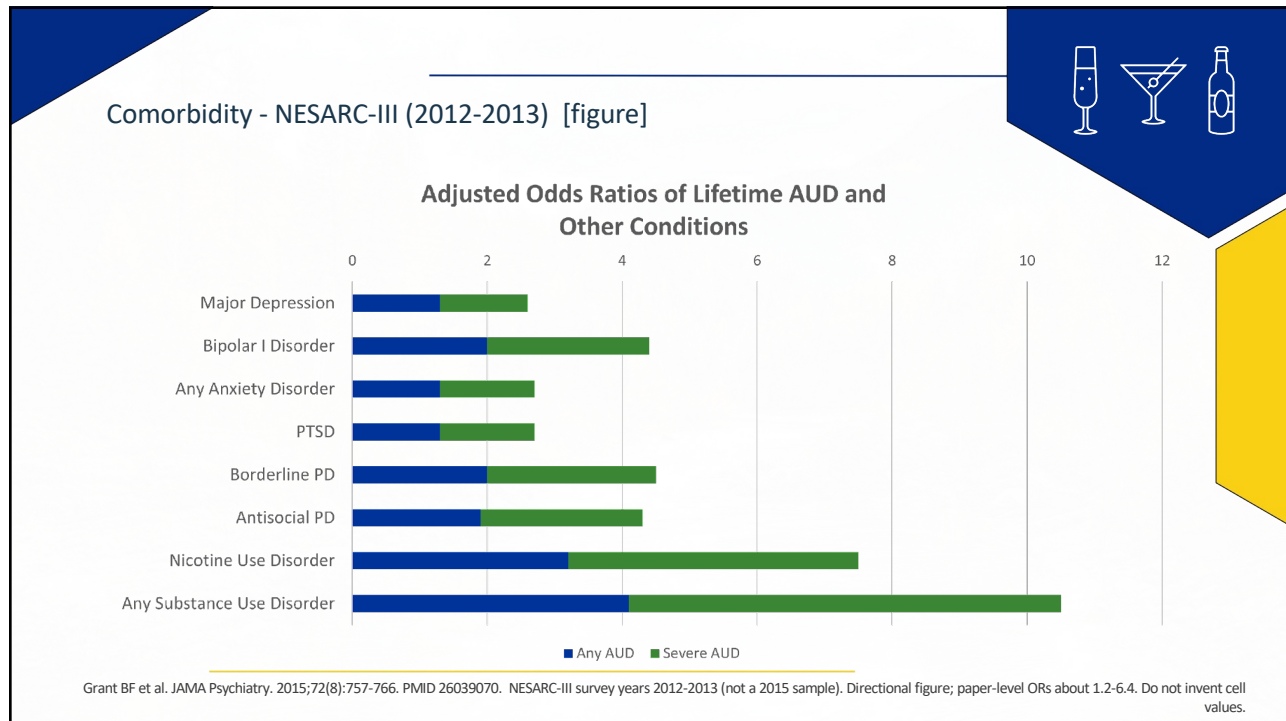
For many individuals, drinking moderates in the mid-20s
This is a vulnerable time frame when an AUD develops in those at ↑ risk

Lifespan is ↓ by 10-15 years in those who continue to drink, & the leading causes of death are accidents, heart disease, cancer, & suicide

“Natural Recovery”
~70% of people with problematic drinking will improve without interventions

Titus-Lay, E. Substance-Related Disorders. CPNP Psychiatric Pharmacotherapy Review. 2022.; Alcohol Res. 2020; 40(3): 02.

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Takeaways

1. Screen with AUDIT-C or SASQ (or CRAFFT in youth). A positive screen identifies unhealthy alcohol use - it is not an AUD diagnosis.
2. Diagnose with a DSM-5-TR criteria. Specify severity (mild / moderate / severe) and remission when applicable.
3. Know withdrawal red flags (prior seizure/DTs, unstable vitals, hallucinosis, pregnancy, suicidality, no safe setting, concurrent sedatives) and refer for urgent medical evaluation.

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References

1. USPSTF. *JAMA*. 2018;320(18):1899-1909. PMID: 30422198. Current final recommendation as of August 29, 2026.
2. USPSTF. Draft Recommendation Statement. August 5, 2025. Update in progress; not in force.
3. American Psychiatric Association. *DSM-5-TR*. 2022, with September 2025 supplement wording.
4. Saunders JB, et al. 1993. PMID: 8329970.
5. Bush K, et al. 1998. PMID: 9738608.
6. Bradley KA, et al. 2007. PMID: 17403059.
7. Smith PC, et al. 2009. PMID: 19247718.
8. Ewing JA. 1984. PMID: 6471323.
9. Sullivan JT, et al. 1989. PMID: 2596506.
10. Maldonado JR, et al. 2015. PMID: 25979430.
11. American Society of Addiction Medicine. *Journal of Addiction Medicine*. 2020;14(3S):1-72.
12. SAMHSA/CBHSQ. 2025 National Survey on Drug Use and Health detailed tables and Companion Infographic PEP26-07-011. Released July 27, 2026.
13. Esser MB, et al. *MMWR*. 2024;73:154-161.
14. Sacks JJ, et al. 2015. PMID: 26477807. Estimated excessive alcohol-use cost: \$249 billion in 2010.
15. Grant BF, et al. 2015. PMID: 26039070. NESARC-III, 2012-2013.
16. Dawson DA, et al. 2005. PMID: 15658574.
17. Fan AZ, et al. 2019. PMID: [add PMID].
18. NIAAA Core Resource. Revised May 8, 2025: *Drinking Patterns*. January 2026.
19. HHS/USDA. *Dietary Guidelines for Americans, 2025-2030*. January 7, 2026.
20. Verhulst B, et al. 2015. PMID: 25171596.
21. Koob GF, Volkow ND. 2010. PMID: 19710631.
22. NHTSA. *The ABCs of BAC*. DOT HS 809 844.
23. CDC. *Impaired Driving*. 2026.
24. NIAAA. *Alcohol's Effects on the Body*. June 2025.
25. VA/DoD. *Clinical Practice Guideline for the Management of Substance Use Disorders*. 2021; still current.
26. CDC Alcohol-Related Disease Impact. National alcohol-attributable deaths, 2020-2021.

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Questions?

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