

Alcohol Use Disorder Resource Guide

This resource guide combines the key takeaways, charts, and resources from The ASAM Treatment of Alcohol Use Disorder Course.



Table of Contents

• Non-Stigmatizing Terminology.....	2
• Screening and Assessment	2
• Unhealthy Alcohol Use	2
• NIAAA Single Question Screener.....	3
• AUDIT-C	3
• DSM-5: AUD Adaptation.....	3
• Standard Drink.....	4
• Alcohol Withdrawal Syndrome	5
• Uncomplicated vs Complicated Withdrawal.....	5
• Outpatient Management.....	6
• Medication Options for Outpatient Treatment.....	6
• Long vs Short Acting Benzodiazepines	7
• Principles of Inpatient Management.....	7
• Medications for AUD.....	8
• Behavioral Therapy for AUD.....	8
• Additional Resources	9

Non-Stigmatizing Terminology

The language we choose shapes the way we treat our patients

Instead of:	You can say...
Addict, junkie, alcoholic, substance abuser	Person with a substance use disorder
Addicted baby	Baby experiencing substance withdrawal
Drug habit, abuse, problem	Substance use disorder, use, misuse
Dirty vs clean urine	Positive or negative, detected or not detected
Clean	Person in recovery, abstinent, not drinking or taking drugs
Substitution or replacement therapy, medication-assisted treatment	Medication for addiction treatment, medication for opioid or alcohol use disorder
Relapse	Use, return to use, recurrence of symptoms or disorder

Grayken Center for Addiction. Reducing Stigma: Why Words About Addiction Matter.

<https://www.bmc.org/addiction/reducing-stigma>

Screening and Assessment

Unhealthy Alcohol Use

Number of drinks is determined by the U.S. Department of Health and Human Services, Dietary Guidelines for Americans 2015-2020.

	ASSIGNED FEMALE AT BIRTH	ASSIGNED MALE AT BIRTH
DAILY NO MORE THAN	3	4
WEEKLY NO MORE THAN	7	14

Recovery Research Institute. 2022. Guide to Drinking Levels.

<https://www.recoveryanswers.org/resource/guide-drinking-levels/>

NIAAA Single Question Screener

How many times in the past year have you had 5 or more drinks in a day (♂)
or 4 or more drinks in a day (♀)?
>0 is considered a positive screen.

AUDIT-C

Please circle the answer that is correct for you.				
1. How often do you have a drink containing alcohol?				
Never (0)	Monthly or less (1)	Two to four times per month (2)	two or three times per week (3)	Four or more times per week (4)
2. How many drinks containing alcohol do you have on a typical day when you are drinking?				
0-2 drinks (0)	3 or 4 drinks (1)	5 or 6 drinks (2)	7 to 9 drinks (3)	10 or more drinks (4)
3. How often do you have six or more drinks on one occasion?				
Never (0)	Less than monthly (1)	Monthly (2)	Weekly (3)	Daily or almost daily (4)
TOTAL SCORE Add the number for each question to get your score.				
Maximum score is 12. A score of ≥ 4 identifies 86% of men who report drinking above recommended levels or meets criteria for alcohol use disorders. A score of > 2 identifies 84% of women who report hazardous drinking of alcohol use disorders.				

DSM-5: AUD Adaptation

The Three Cs:

Craving, Loss of Control, Consequences

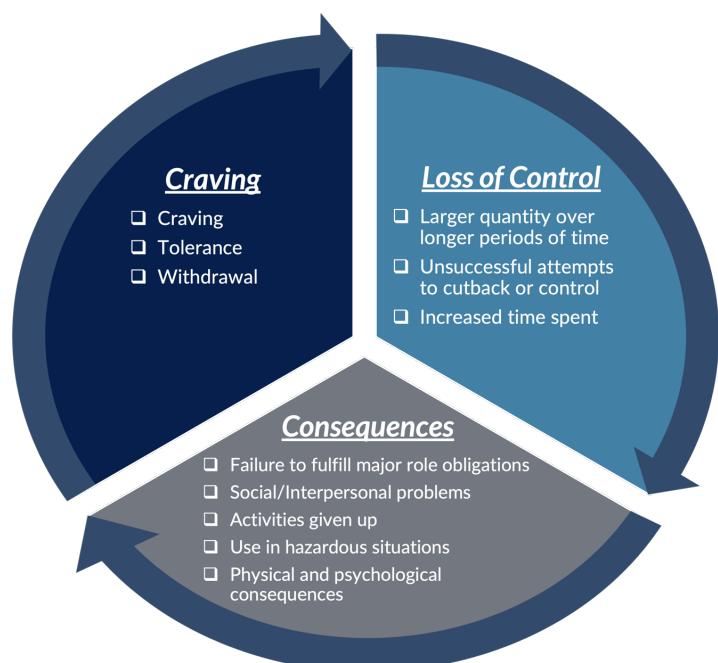
Alcohol Use Disorder Diagnosis:

Two or more diagnostic criterion in the prior 12 months.

Severity:

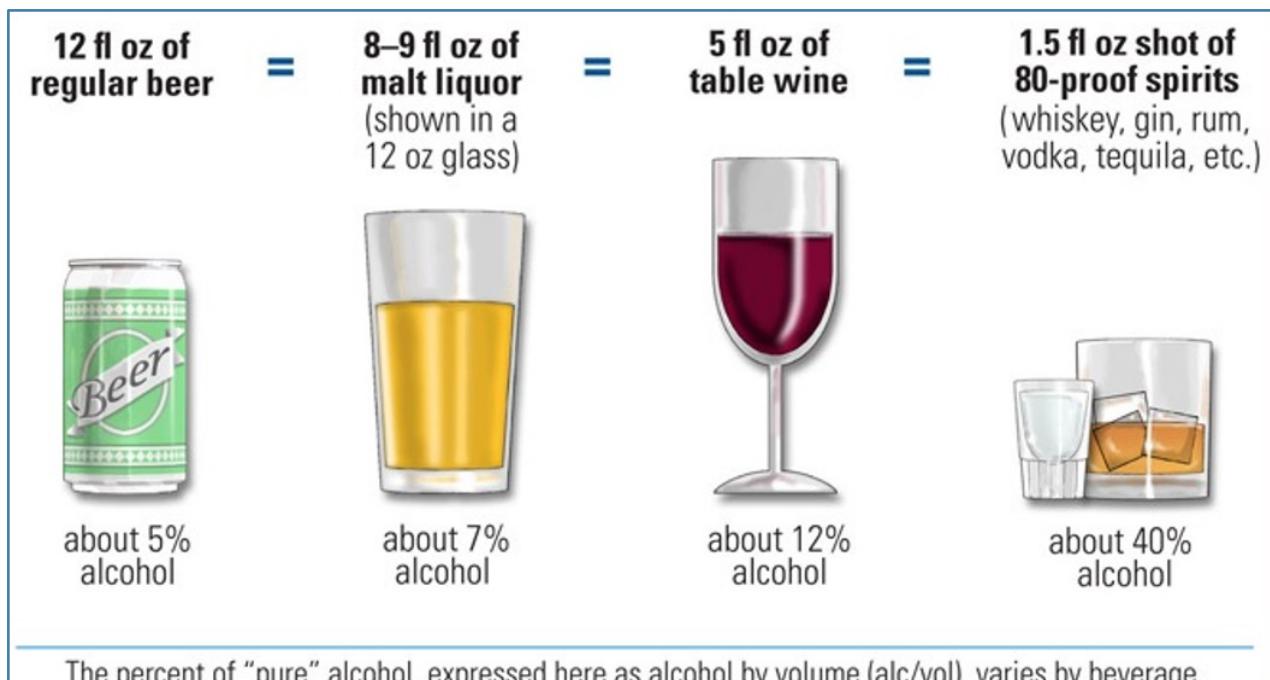
The criteria count is used to determine the severity of the diagnosis:

Mild (2-3), Moderate (4-5), Severe (≥ 6)



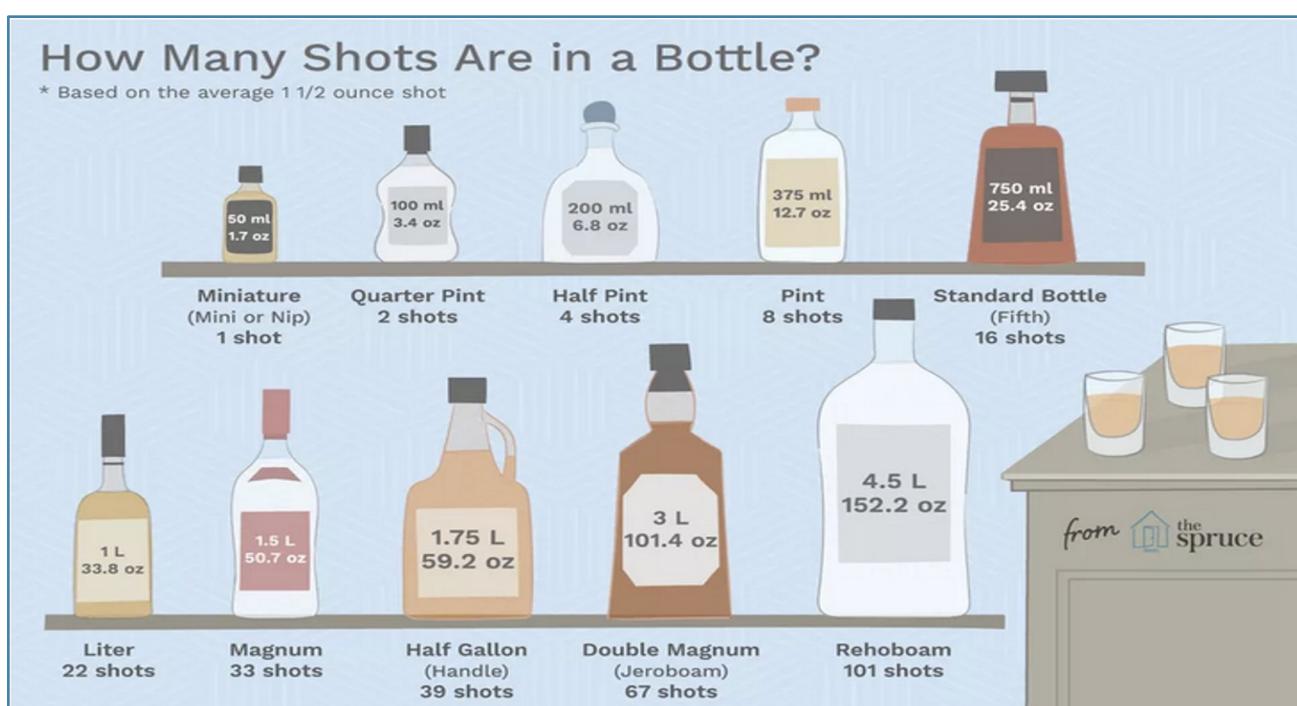
Standard Drink

A standard drink is an alcoholic drink containing roughly 14 grams of pure alcohol. The amount of fluid ounces to reach 14 grams of pure alcohol varies by the type of drink (beer, wine, spirits).



The percent of "pure" alcohol, expressed here as alcohol by volume (alc/vol), varies by beverage.

Niaaa.nih.gov. 2022. What Is A Standard Drink? National Institute on Alcohol Abuse and Alcoholism (NIAAA).
<https://www.niaaa.nih.gov/alcohols-effects-health/overview-alcohol-consumption/what-standard-drink>



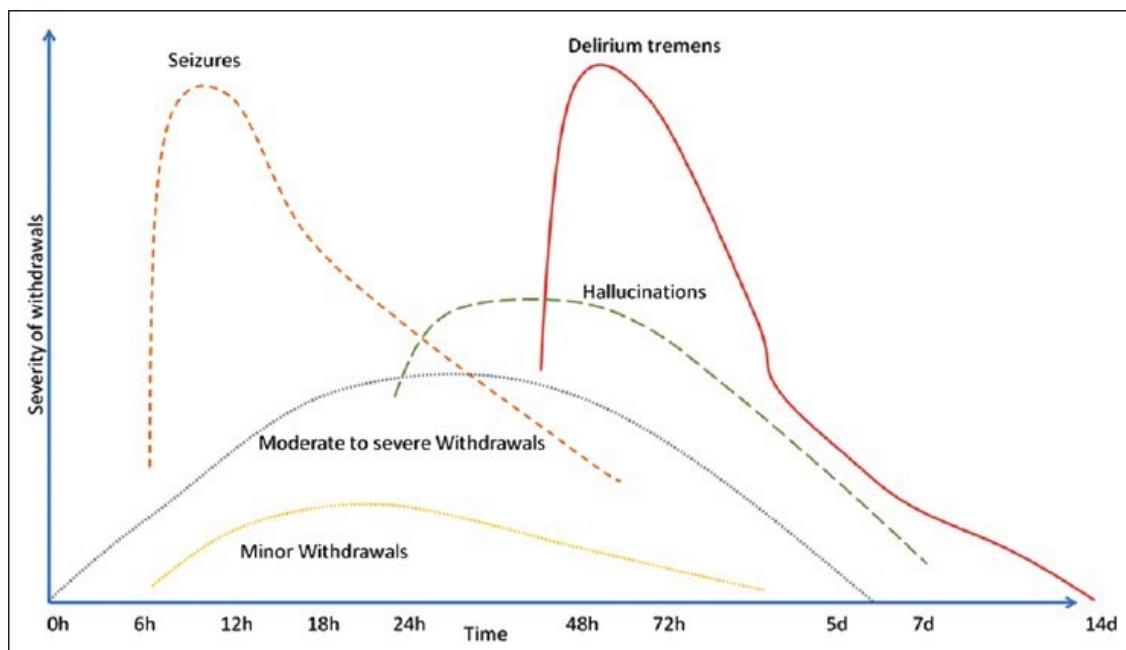
Graham, C., 2021. How Many Shots Are in That Bottle of Liquor? The Spruce Eats.
<https://www.thespruceeats.com/how-many-shots-in-a-bottle-761232>

Alcohol Withdrawal Syndrome

Timeline of Withdrawal Symptoms

- First hours – days:** Predominantly minor moderate symptoms within first hours to two days.
- 1-2 days:** Hallucinations begin 1-2 days after cessation of alcohol intake.
- 48-72 hours:** Severe manifestations of delirium tremens (DTS) generally peak at 48-72h, though seizures usually peak early.

Note: For some patients, a seizure can be the first manifestation of alcohol withdrawal.



Kattimani S, Bharadwaj B. Clinical management of alcohol withdrawal: A systematic review. Ind Psychiatry J. 2013;22(2):100-108. doi:10.4103/0972-6748.132914. <https://pubmed.ncbi.nlm.nih.gov/25013309/>

Uncomplicated vs Complicated Withdrawal

Uncomplicated Withdrawal	Complicated Withdrawal
<ul style="list-style-type: none">Early symptoms<ul style="list-style-type: none">Begin early in course of withdrawalAnxiety, diaphoresis, nausea, vomiting, tremor, nystagmus <p>Lack of GABA</p> <chem>NC(CC(=O)O)C(=O)O</chem>	<ul style="list-style-type: none">5% of withdrawalGenerally symptoms begin in 3-5 days<ul style="list-style-type: none">Autonomic hyperactivity - hypertension, tachycardiaDisorientation, paranoia, psychosisSeizures peak < 24hrs <p>Lack of GABA and Excess Glutamate</p> <chem>NC(CC(=O)O)C(=O)O</chem>

Outpatient Management

Outpatient Management Triage Checklist

For outpatient triaging, make sure the patient has:

	A support system	
	Only mild or moderate symptoms	
	Ability to check in frequently	
	No significant comorbidities or pregnancy	
	No history of severe withdrawal	

Medication Options for Outpatient Treatment

1. Benzodiazepines

- Preferred for higher risk patients and those with any active withdrawal symptoms

2. Gabapentin

- Generally safer
- Less sedation
- Less "kindling"

Five facets to think about before prescribing:

- Safety in preventing complicated withdrawal
- Sedation level
- Attenuation of the "kindling" phenomenon
- Risk level of the patient
- Severity of current withdrawal symptoms



Long vs Short Acting Benzodiazepines

Long-acting benzodiazepines are preferred as they provide a gentler taper and are safe for patients with liver disease. You can substitute chlordiazepoxide for diazepam by simply using a 50-milligram tablet instead of a 10-milligram tablet.

Medication Options	
Diazepam	Gabapentin
<ul style="list-style-type: none">Day 1: 10mg orally q6hDay 2: 10mg orally q8hDay 3: 10mg orally q12hDay 4: 10mg orally once (provide ~5 extra prn doses)	<ul style="list-style-type: none">Day 1: 300mg orally q6hDay 2: 300mg orally q8hDay 3: 300mg orally q12hDay 4: 300mg orally once (provide ~5 extra prn doses)

Principles of Inpatient Management

Benzodiazepines are the first line medications for alcohol withdrawal syndrome.

Principle	Notes/Takeaways									
1. Use a protocol	<ul style="list-style-type: none">Symptom-drivenTreatment based on a symptom score<ul style="list-style-type: none">Most common: CIWA score									
2. Risk stratify	<ul style="list-style-type: none">Determine if the patient is at risk for complicated alcohol withdrawal (seizures, delirium tremens).<ul style="list-style-type: none">High risk factors include history of complicated alcohol withdrawal, presenting with a seizure. Consider risk assessment tool such as Prediction of Alcohol Withdrawal Severity Scale (PAWSS).									
3. If high risk, be aggressive	<ul style="list-style-type: none">Determine how to treat the patientBenzodiazepines<ul style="list-style-type: none">Early treatment to prevent symptoms from worseningFront loading therapy or using standing doses or a taper in addition to symptom triggered therapyPhenobarbital<ul style="list-style-type: none">Front loading therapy followed by a taper as monotherapyRescue therapy with doses if nonresponsive to benzodiazepines									
4. Consider adjunctive medications	<table><tbody><tr><td>Clonidine, dexmedetomidine</td><td>→</td><td>For agitation/autonomic hyperactivity</td></tr><tr><td>Haloperidol, quetiapine*</td><td>→</td><td>For agitation</td></tr><tr><td>Valproic acid, carbamazepine</td><td>→</td><td>For help with withdrawal symptoms</td></tr></tbody></table>	Clonidine, dexmedetomidine	→	For agitation/autonomic hyperactivity	Haloperidol, quetiapine*	→	For agitation	Valproic acid, carbamazepine	→	For help with withdrawal symptoms
Clonidine, dexmedetomidine	→	For agitation/autonomic hyperactivity								
Haloperidol, quetiapine*	→	For agitation								
Valproic acid, carbamazepine	→	For help with withdrawal symptoms								

* Haloperidol and quetiapine can lower the seizure threshold.

Medications for AUD

FDA approved vs off-label medications for MAUD:

	Naltrexone	Acamprose	Disulfiram	Gabapentin	Topiramate
Dose	50mg PO daily or 380mg IM monthly	666mg three times daily	250mg daily	600mg three times daily*	100mg two times daily*
FDA Approved for AUD	YES	YES	YES	NO	NO
Side effects	<ul style="list-style-type: none">NauseaHeadacheDysphoriaHepatotoxicity	<ul style="list-style-type: none">Diarrhea (16%)	<ul style="list-style-type: none">HepatitisNeuropathy"Disulfiram reaction"	<ul style="list-style-type: none">Dizziness / ataxiaSomnolenceDiversion?	<ul style="list-style-type: none">Cognitive disturbanceGI upsetTaste perversionParesthesia
Price	\$33 / month \$1350 /month (injection)	\$70 / month	\$34 / month	\$30 / month	\$14 / month
Notes	<ul style="list-style-type: none">Safe in Child-Pugh Class A/BNo opioids!	<ul style="list-style-type: none">Safe in Child-Pugh Class A/BAvoid with CKD	<ul style="list-style-type: none">Only appropriate if goal is abstinence	<ul style="list-style-type: none">Slow titrationConsider with neuropathy	<ul style="list-style-type: none">Caution with CKDConsider with seizure history

*Requires uptitration

Behavioral Therapy for AUD

- Motivational Enhancement Therapy** - involves enhancing communication, engagement, and motivation to change.
- Cognitive Behavioral Therapy (CBT)** - identifies patterns, thoughts, feelings, and behaviors associated with substance use and unlearning them.
- Community Reinforcement approach** - involves coping skills to help individuals engage with healthy sources of reinforcement.
- Twelve Step Facilitation** - uses a structured, manual-guided approach delivered over several weeks, covering core topics including assessment and overview, acceptance, surrender, and getting active.
- Community Reinforcement and Family Training (CRAFT)** - involves using family members to develop practical strategies to motivate change, including understanding a loved one's triggers for using alcohol, developing positive communication strategies, problem-solving, and getting a loved one to accept help.

Additional Resources



Clinical Practice
Guideline on Alcohol
Withdrawal Management



VA/DOD Clinical Practice
Guideline on Management
of Substance Use Disorders



National Institute
on Alcohol Abuse
and Alcoholism

NIAAA Core
Resource on Alcohol

American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Washington D.C.: 2013.
<http://dx.doi.org/10.1176/appi.books.9780890425596>.

Amato L, Minozzi S, Vecchi S, Davoli M. Benzodiazepines for alcohol withdrawal. *Cochrane Database of Systematic Reviews*. 2010. doi:10.1002/14651858.cd005063.pub3

Askgaard G, Hallas J, Fink-Jensen A, Molander AC, Madsen KG, Pottegård A. Phenobarbital compared to benzodiazepines in alcohol withdrawal treatment: A register-based cohort study of subsequent benzodiazepine use, alcohol relapse and mortality. *Drug Alcohol Depend*. 2016;161:258-264. doi:10.1016/j.drugalcdep.2016.02.016

Caine D, Halliday GM, Kril JJ, Harper CG. Operational criteria for the classification of chronic alcoholics: identification of Wernicke's encephalopathy. *J Neurol Neurosurg Psychiatry*. 1997 Jan;62(1):51-60. doi: 10.1136/jnnp.62.1.51. PMID: 9010400; PMCID: PMC486695.

Carroll KM, Ball SA, Martino S, et al. Computer-assisted delivery of cognitive-behavioral therapy for addiction: a randomized trial of CBT4CBT. *Am J Psychiatry*. 2008;165(7):881-888. doi:10.1176/appi.ajp.2008.07111835

DeCarolis DD, Rice KL, Ho L, Willenbring ML, Cassaro S. Symptom-driven lorazepam protocol for treatment of severe alcohol withdrawal delirium in the intensive care unit. *Pharmacotherapy*. 2007;27(4):510-518. doi:10.1592/phco.27.4.510

Depts.washington.edu. 2022. Resources for Safer Drug Use - HaRRT Center.
<https://depts.washington.edu/harrtlab/resources/>

Duby JJ, Berry AJ, Ghayem P, Wilson MD, Cocanour CS. Alcohol withdrawal syndrome in critically ill patients: protocolized versus nonprotocolized management. *J Trauma Acute Care Surg*. 2014 Dec;77(6):938-43. doi: 10.1097/TA.0000000000000352. PMID: 25248063

Eyer F, Schuster T, Felgenhauer N, et al. Risk assessment of moderate to severe alcohol withdrawal--predictors for seizures and delirium tremens in the course of withdrawal. *Alcohol Alcohol*. 2011;46(4):427-433. doi:10.1093/alcalc/agr053

Additional Resources

- Ferguson JA, Suelzer CJ, Eckert GJ, Zhou XH, Dittus RS. Risk factors for delirium tremens development. *J Gen Intern Med.* 1996;11(7):410-414. doi:10.1007/BF02600188
- Galvin R, Bråthen G, Ivashynka A, et al. EFNS guidelines for diagnosis, therapy and prevention of Wernicke encephalopathy. *Eur J Neurol.* 2010;17(12):1408-1418. doi:10.1111/j.1468-1331.2010.03153.x
- Goodson CM, Clark BJ, Douglas IS. Predictors of severe alcohol withdrawal syndrome: a systematic review and meta-analysis. *Alcohol Clin Exp Res.* 2014;38(10):2664-2677. doi:10.1111/acer.12529
- Hayashida M, Alterman AI, McLellan AT, et al. Comparative effectiveness and costs of inpatient and outpatient detoxification of patients with mild-to-moderate alcohol withdrawal syndrome. *New England Journal of Medicine.* 1989;320(6):358-365. doi:10.1056/n
- Hecksel KA, Bostwick JM, Jaeger TM, Cha SS. Inappropriate use of symptom-triggered therapy for alcohol withdrawal in the general hospital. *Mayo Clin Proc.* 2008;83(3):274-279. doi:10.4065/83.3.274
- Hjermø I, Anderson JE, Fink-Jensen A, Allerup P, Ulrichsen J. Phenobarbital versus diazepam for delirium tremens--a retrospective study. *Dan Med Bull.* 2010;57(8):A4169.
- Holbrook AM, Crowther R, Lotter A, Cheng C, King D. Meta-analysis of benzodiazepine use in the treatment of acute alcohol withdrawal. *CMAJ.* 1999;160(5):649-655.
- Ives TJ, Mooney AJ 3rd, Gwyther RE. Pharmacokinetic dosing of phenobarbital in the treatment of alcohol withdrawal syndrome. *South Med J.* 1991;84(1):18-21. doi:10.1097/00007611-199101000-00006
- Jonas DE, Amick HR, Feltner C, et al. Pharmacotherapy for adults with alcohol use disorders in outpatient settings: a systematic review and meta-analysis. *JAMA.* 2014;311(18):1889-1900. doi:10.1001/jama.2014.3628
- Joudrey PJ, Oldfield BJ, Yonkers KA, O'Connor PG, Berland G, Edelman EJ. Inpatient adoption of medications for alcohol use disorder: A mixed-methods formative evaluation involving key stakeholders [published online ahead of print, 2020 Jun 2]. *Drug Alcohol Depend.* 2020;213:108090. doi:10.1016/j.drugalcdep.2020.108090
- Kelly JF, Humphreys K, Ferri M. Alcoholics Anonymous and other 12-step programs for alcohol use disorder. *Cochrane Database Syst Rev.* 2020;3(3):CD012880. Published 2020 Mar 11. doi:10.1002/14651858.CD012880.pub2
- Kelly JF, Magill M, Stout RL. How do people recover from alcohol dependence? A systematic review of the research on mechanisms of behavior change in Alcoholics Anonymous. *Addiction Research & Theory.* 2009;17(3):236-259. doi:10.1080/16066350902770458
- Kramp P, Rafaelsen OJ. Delirium tremens: a double-blind comparison of diazepam and barbital treatment. *Acta Psychiatr Scand.* 1978;58(2):174-190. doi:10.1111/j.1600-0447.1978.tb06930.x
- Magill M, Ray L, Kiluk B, et al. A meta-analysis of cognitive-behavioral therapy for alcohol or other drug use disorders: Treatment efficacy by contrast condition. *J Consult Clin Psychol.* 2019;87(12):1093-1105. doi:10.1037/ccp0000447
- Maldonado JR, Sher Y, Das S, et al. Prospective Validation Study of the Prediction of Alcohol Withdrawal Severity Scale (PAWSS) in Medically Ill Inpatients: A New Scale for the Prediction of Complicated Alcohol Withdrawal Syndrome. *Alcohol Alcohol.* 2015;50(5):509-518. doi:10.1093/alc/alc043
- Mayo-Smith MF. Pharmacological management of alcohol withdrawal. A meta-analysis and evidence-based practice guideline. American Society of Addiction Medicine Working Group on Pharmacological Management of Alcohol Withdrawal. *JAMA.* 1997;278(2):144-151. doi:10.1001/jama.278.2.144

Additional Resources

- Miller WR, Meyers RJ, Tonigan JS. Engaging the unmotivated in treatment for alcohol problems: a comparison of three strategies for intervention through family members. *J Consult Clin Psychol.* 1999;67(5):688-697. doi:10.1037//0022-006x.67.5.688
- Monitoring of liver function tests in patients receiving naltrexone or extended-release naltrexone. PCSS Guidelines. 2022 May. <https://pcssnow.org/wp-content/uploads/2014/10/PCSS-MAT-NTX-Liver-Safety-Guideline1.pdf>
- Mortensen MB, Nordestgaard BG. Statin Use in Primary Prevention of Atherosclerotic Cardiovascular Disease According to 5 Major Guidelines for Sensitivity, Specificity, and Number Needed to Treat. *JAMA Cardiol.* 2019;4(11):1131-1138. doi:10.1001/jamacardio.2019.3665
- Myrick H, Malcolm R, Randall PK, et al. A double-blind trial of gabapentin versus lorazepam in the treatment of alcohol withdrawal. *Alcohol Clin Exp Res.* 2009;33(9):1582-1588. doi:10.1111/j.1530-0277.2009.00986.x
- Stock CJ, Carpenter L, Ying J, Greene T. Gabapentin versus chlordiazepoxide for outpatient alcohol detoxification treatment. *Ann Pharmacother.* 2013;47(7-8):961-969. doi:10.1345/aph.1R751
- Nisavic M, Nejad SH, Isenberg BM, et al. Use of Phenobarbital in Alcohol Withdrawal Management - A Retrospective Comparison Study of Phenobarbital and Benzodiazepines for Acute Alcohol Withdrawal Management in General Medical Patients. *Psychosomatics.* 2019;60(5):458-467. doi:10.1016/j.psym.2019.02.002
- Perry EC. Inpatient management of acute alcohol withdrawal syndrome. *CNS Drugs.* 2014;28(5):401-410. doi:10.1007/s40263-014-0163-5
- Rastegar DA, Applewhite D, Alvanzo AAH, Welsh C, Niessen T, Chen ES. Development and implementation of an alcohol withdrawal protocol using a 5-item scale, the Brief Alcohol Withdrawal Scale (BAWS). *Subst Abus.* 2017;38(4):394-400. doi:10.1080/08897077.201
- Reus VI, Fochtman LJ, Bukstein O, et al. The American Psychiatric Association Practice Guideline for the Pharmacological Treatment of Patients With Alcohol Use Disorder. *Am J Psychiatry.* 2018;175(1):86-90. doi:10.1176/appi.ajp.2017.1750101
- Salottolo K, McGuire E, Mains CW, van Doorn EC, Bar-Or D. Occurrence, Predictors, and Prognosis of Alcohol Withdrawal Syndrome and Delirium Tremens Following Traumatic Injury. *Crit Care Med.* 2017;45(5):867-874. doi:10.1097/CCM.0000000000002371
- Sullivan JT, Sykora K, Schneiderman J, Naranjo CA, Sellers EM. Assessment of alcohol withdrawal: the revised clinical institute withdrawal assessment for alcohol scale (CIWA-Ar). *Br J Addict.* 1989;84(11):1353-1357. doi:10.1111/j.1360-0443.1989.tb00737.x
- Taylor F, Huffman MD, Macedo AF, et al. Statins for the primary prevention of cardiovascular disease. *Cochrane Database Syst Rev.* 2013;2013(1):CD004816. Published 2013 Jan 31. doi:10.1002/14651858.CD004816.pub5
- The ASAM clinical practice guideline on alcohol withdrawal management. *Journal of Addiction Medicine.* 2020;14(3S):1-72. doi:10.1097/adm.0000000000000668
- Wood E, Albarqouni L, Tkachuk S, et al. Will This Hospitalized Patient Develop Severe Alcohol Withdrawal Syndrome?: The Rational Clinical Examination Systematic Review [published correction appears in JAMA. 2019 Jul 23;322(4):369]. *JAMA.* 2018;320(8):825-8