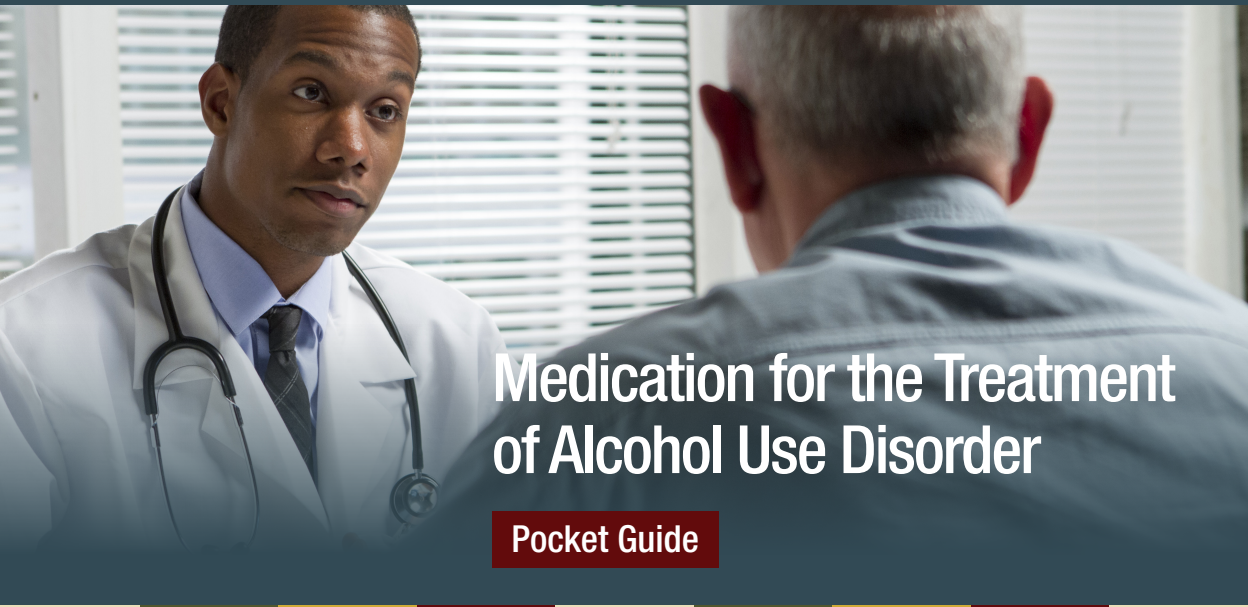

Medication for the Treatment of Alcohol Use Disorder

Pocket Guide

National Institute on Alcohol Abuse and Alcoholism

Substance Abuse and Mental Health Services Administration
SAMHSA

Medications are underused in the treatment of alcohol use disorder. According to the National Survey on Drug Use and Health, of the estimated 17.6 million people who needed treatment for an alcohol use problem in 2014, only 1.6 million (8.9%) received any type of specialty treatment (excluding mutual-help groups).

SAMHSA and NIAAA created Medication for the Treatment of Alcohol Use Disorder: A Brief Guide, a 35-page booklet to assist clinicians in prescribing medications. This information is excerpted from that publication which is available for download at http://store.samhsa.gov/product/Medication-for-the-Treatment-of-Alcohol-Use-Disorder-A-Brief-Guide/SMA15-4907

This pocket guide offers:

- A Checklist for Prescribing Medication
- Approved Medications for Use in Treatment of Alcohol Use Disorder
- Standard Drink Sizes/Amounts and Recommended Limits

Checklist for Prescribing Medication for the Treatment of Alcohol Use Disorder

Screen for risky alcohol use

Use Screening, Brief Intervention, and Referral to Treatment (SBIRT), an approach in which screening is followed up as appropriate with brief intervention, and with referral to treatment for those needing more extensive care (http://www.samhsa.gov/sbirt)

Assess the need for medication-assisted treatment

Consider prescribing medications for patients who are dependent on alcohol or have stopped drinking but are experiencing cravings or relapses. Patients who have moderate or severe alcohol use disorder and have not improved with psychosocial approaches alone are particularly strong candidates. (See table for more information about candidates).
Your assessment should include:

- A patient history
  - Ensure that the assessment includes a medical and psychiatric history, a substance use history, and an evaluation of family and psychosocial supports.
  - Access the patient's prescription drug use history through the state's prescription drug monitoring program (PDMP), where available, to detect unreported use of other medications, such as opioid analgesics or sedative-hypnotics, that may interact negatively with alcohol or with alcohol treatment medications.

- A physical examination that measures neurocognitive function, identifies the sequelae of alcohol use and looks for evidence of hepatitis dysfunction.
- Laboratory testing to confirm the presence of alcohol related drinking and identify alcohol related damage.

Educate the patient about how the medication works and the associated risks and benefits; obtain informed consent.

Evaluate the need for medically managed withdrawal from alcohol

- Note that withdrawal generally begins within 24 to 48 hours after the blood alcohol level drops and can persist for 5 to 7 days.
- Use a standardized clinical rating instrument for withdrawal, such as the Clinical Institute Withdrawal Assessment for Alcohol Scale, Revised (CIWA-Ar) https://umem.org/files/uploads/1104212257_CIWA-Ar.pdf

Address co-occurring disorders

- Have a unified treatment approach to meet the substance use, mental health, and related needs of a patient

Integrate pharmacologic and nonpharmacologic therapies

- Recognize that medications for moderate or severe alcohol use disorder, professional counseling, and mutual-help groups can be combined in a comprehensive, complementary approach.

Refer patients for higher levels of care, if necessary

- Refer the patient for more intensive or specialized services if office-based treatment is not effective or the clinician does not have the resources to meet a particular patient's needs, Providers can find programs in their areas or throughout the United States by using SAMHSA's Behavioral Health Treatment Services Locator at http://www.findtreatment.samhsa.gov.

Medications Approved in the Treatment of Alcohol Use Disorder*

DOSAGE AND FREQUENCY OF ADMINISTRATION		
Disulfiram	**Naltrexone oral and extended release injectable formulations**	**Acamprosate delayed-release tablets**
Oral: 250 to 500 mg per day- Daily	Oral: 50 to 100mg per day –Daily Extended-release injectable: 380mg per month - Monthly	Oral: 666 mg- Three times per day

PRINCIPAL ACTION		
Disulfiram	**Naltrexone oral and extended release injectable formulations**	**Acamprosate delayed-release tablets**
When taken in combination with alcohol, causes a significant physical reaction, involving nausea/vomiting, flushing, and heart palpitations. The knowledge that such reactions are likely if alcohol is consumed acts as a deterrent to drinking. Given sufficient amounts of alcohol in the patient's system, more severe reactions may occur, such as respiratory depression, cardiovascular collapse, arrhythmias, myocardial infarction, acute congestive heart failure, unconsciousness, convulsions, and death.	Blocks opiate receptors that are involved in the rewarding effects of drinking and craving for alcohol. Extended-release injectable naltrexone is administered every 4 weeks, thereby minimizing opportunities for nonadherence, as compared with daily oral ingestion. The monthly injection also produces a more consistent and predictable blood level of the drug, because the depot injection bypasses first-pass metabolism.	Is thought to reduce symptoms of protracted abstinence by counteracting the imbalance between the glutamatergic and GABAergic systems associated with chronic alcohol exposure and alcohol withdrawal.

CLINICAL USES/IDEAL CANDIDATES		
Disulfiram	**Naltrexone oral and extended release injectable formulations**	**Acamprosate delayed-release tablets**
Candidates include patients dependent on alcohol who have completed alcohol withdrawal. Ideally, candidates are committed to abstinence and willing to take disulfiram under the supervision of a family member or treatment program.	Oral naltrexone and extended-release injectable naltrexone are indicated for the treatment of alcohol dependence in patients who can abstain from alcohol in an outpatient setting before the initiation of treatment. Naltrexone has not been shown to be effective in patients who are drinking at treatment initiation. Both formulations may have the greatest benefit in patients who can discontinue drinking on their own for several days before treatment initiation. Extended-release injectable naltrexone is also indicated for the prevention of relapse to opioid dependence following detoxification.	Acamprosate is indicated for the maintenance of abstinence in patients who are dependent on alcohol and are abstinent at treatment initiation. The efficacy of acamprosate in promoting abstinence has not been demonstrated in subjects who have not completed detoxification or who have not achieved alcohol abstinence before beginning treatment.

CONTRAINDICATIONS		
Disulfiram	**Naltrexone oral and extended release injectable formulations**	**Acamprosate delayed-release tablets**
Contraindicated in the presence of severe myocardial disease or coronary occlusion, psychoses, pregnancy, and in those with high levels of impulsivity, suicidality, and hypersensitivity to disulfiram or to other thiuram derivatives used in pesticides and rubber vulcanization. Patients who are taking or have recently taken metronidazole, paraldehyde, alcohol, or alcohol-containing preparations (e.g., cough syrups, tonics) should not be given disulfiram. Disulfiram labeling also includes several important precautions regarding drug–drug interactions. See the package insert for specific contraindications.	Contraindicated in patients receiving opioid analgesics and those receiving long-term opioid therapy or anticipating a need for opioids (e.g., surgery), because it could precipitate a severe opioid withdrawal or block opioid analgesia; patients currently dependent on opioids, including those being maintained on opioid agonists such as methadone or partial agonists such as buprenorphine; patients in acute opioid withdrawal; patients who have failed the naloxone challenge test or whose urine tests positive for opioids. Contraindicated in patients with a history of sensitivity to polylactide-co-glycolide, carboxymethyl cellulose, or any components of the diluent used for the injectable medication. It should not be given to patients whose body mass precludes intramuscular (IM) injection with the 2inch needle provided. Inadvertent subcutaneous injection may cause a severe injection-site reaction. Although not in current labeling, the consensus of the panel is that use should be avoided in patients with serum aminotransferase levels greater than five times the upper limit of normal, except where the benefits outweigh the risks.	Acamprosate is indicated for the maintenance of abstinence in patients who are dependent on alcohol and are abstinent at treatment initiation. The efficacy of acamprosate in promoting abstinence has not been demonstrated in subjects who have not completed detoxification or who have not achieved alcohol abstinence before beginning treatment.

WARNINGS		
Disulfiram	**Naltrexone oral and extended release injectable formulations**	**Acamprosate delayed-release tablets**
Use with caution in patients with heart disease, diabetes, hypothyroidism, epilepsy, cerebral damage, chronic or acute nephritis, acute hepatitis or other hepatic diseases, and in patients older than 60. Hepatic toxicity (including hepatic failure resulting in liver transplantation or death) has been infrequently reported. Severe and sometimes fatal hepatitis associated with disulfiram may develop after many months of therapy. Hepatic toxicity has occurred in patients with or without a history of abnormal liver function. Patients should be advised to immediately notify their physician of any early symptoms of hepatitis, including fatigue, weakness, malaise, anorexia, nausea, vomiting, jaundice, or dark urine. Liver function tests (taken at baseline and 10–14 days later) are suggested to detect any hepatic dysfunction that may result from disulfiram therapy. In addition, complete blood counts and serum chemistries, including liver function tests, should be monitored. Psychotic reactions have been noted, attributable to the unmasking of underlying psychoses in patients.	Cases of hepatitis and clinically significant liver dysfunction were observed in association with extended-release injectable naltrexone treatment. Discontinue use of naltrexone in the event of symptoms or signs of acute hepatitis. Use with caution in patients with moderate to severe renal impairment. Patients should take no opioids, including opioid-containing medications, for a minimum of 7 days before starting naltrexone to avoid precipitating opioid withdrawal. Patients needing opioid analgesia or patients with a history of opioid use disorder may respond to lower doses of opioids after treatment with extended-release injectable naltrexone. Failure to carefully titrate opioid dose could result in potentially life-threatening opioid intoxication and overdose. Patients should be told of the serious consequences of trying to overcome the opioid blockade.	Before initiating treatment with acamprosate, evaluate the patient's renal function through a standard panel for urea, electrolytes, and serum creatinine to rule out severe renal impairment. For patients with moderate renal impairment (creatinine clearance of 30–50 mL/min), a reduced dose of acamprosate (one 333 mg tablet 3 times a day) is recommended. Because of elevated risk of diminished renal function in people ages 65 or older, baseline and frequent renal function tests are important in this population.

USE IN PREGNANT AND POSTPARTUM WOMEN		
Disulfiram	**Naltrexone oral and extended release injectable formulations**	**Acamprosate delayed-release tablets**
Pregnancy: The FDA has not assigned a pregnancy category. The safe use of this drug in pregnancy has not been established. Therefore, disulfiram should be used during pregnancy only when, in the judgment of the physician, the probable benefits outweigh the possible risks. **Nursing:** Do not give disulfiram to nursing mothers.	**Pregnancy:** FDA Pregnancy Category C‡ **Nursing:** Transfer of naltrexone and 6ß-naltrexol into human milk has been reported with oral naltrexone. Because animal studies have shown that naltrexone has a potential for tumorigenicity and other serious adverse reactions in nursing infants, an individualized treatment decision should be made whether a nursing mother will need to discontinue breastfeeding or discontinue naltrexone.	**Pregnancy:** FDA Pregnancy Category C‡ **Nursing:** It is not known whether acamprosate is excreted in human milk.

** This table highlights some properties of each medication. It does not provide complete information and is not intended as a substitute for the package inserts or other drug reference sources used by clinicians (see http://www.dailymed.nlm.nih.gov for current package inserts). For patient information about these and other drugs, visit the National Library of Medicine's MedlinePlus (http://www.medlineplus.gov). Whether a medication should be prescribed and in what amount are matters to be discussed between an individual and his or her health care provider. The prescribing information provided here is not a substitute for the clinician's judgment, and the National Institutes of Health and SAMHSA accept no liability or responsibility for use of the information in the care of individual patients.*

Standard Drink Sizes/Amounts and Recommendations

12 fl oz of regular beer = **8–9 fl oz of malt liquor** (shown in a 12 oz glass) = **5 fl oz of table wine** = **1.5 fl oz shot of 80-proof distilled spirits** (gin, rum, tequila, vodka, whiskey, etc.)

about 5% alcohol

about 7% alcohol

about 12% alcohol

40% alcohol

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

A "standard" drink is any drink that contains about 0.6 fluid ounces or 14 grams of "pure" alcohol. Although the drinks shown here are different sizes, each contains approximately the same amount of alcohol and counts as a single standard drink.

According to the National Institute on Alcohol Abuse and Alcoholism (NIAAA), the following are recommended limits. People, with exceptions noted below, are advised to stay within these limits.

- For healthy men **up to age 65**
  - No more than **4** drinks a **day** AND
  - No more than **14** drinks in a **week**

- For healthy **women** (and healthy **men over age 65**)
  - No more than **3** drinks in a **day** AND
  - No more than **7** drinks in a **week**

- **Abstinence** should be advised to individuals who:
  - Take **prescriptions or over-the-counter medications** that may interact with alcohol
  - **Try cutting down** but cannot stay within limits they have set
  - **Have had an alcohol use disorder** or now have symptoms
  - Have a **physical or mental health condition** that may be exacerbated by alcohol
  - Are or may become **pregnant**
  - Are **younger than age 21**

Disclaimer

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