



Medication-Assisted Treatment for Substance Use Disorders

Extended-Release Injectable Naltrexone (VIVITROL[®])

**Resource Guide for Court Personnel
2015**

Contents

Introduction	<u>3</u>
Program Requirements and Eligibility	<u>4</u>
Participating Agencies	<u>6</u>
Key Contacts	<u>8</u>
Medication-Assisted Treatment	<u>11</u>
Extended-Release Injectable Naltrexone (VIVITROL®)	<u>13</u>
Resources	<u>15</u>
Project History	<u>17</u>
Substance Use Disorders Overview	<u>20</u>

Introduction

The 2014-2015 Florida General Appropriations Act allocated funds to provide for extended-release injectable naltrexone (VIVITROL®) to treat alcohol or opioid addicted offenders in community-based drug treatment programs. These funds were appropriated to the Office of the State Courts Administrator (OSCA) and the OSCA has contracted with the Florida Alcohol and Drug Abuse Association (FADAA) to establish a program enabling providers to access this medication as a treatment option for offenders who are ordered to treatment by the court. These funds will be used to reimburse providers for screening and assessing individuals for the appropriateness of administering VIVITROL®, for actual administration of the medication, and for medical support and monitoring. These dedicated resources made available by the Legislature enable providers to expand their clinical and medical treatment protocols and make more treatment options available to the courts.

The U. S. Food and Drug Administration (FDA) has approved three medications for use in the treatment of opioid dependence: methadone, naltrexone, and buprenorphine and three medications for alcohol addiction: disulfiram, naltrexone, and acamprosate. With an array of medications now available for addressing the emerging prescription painkiller epidemic and other substance use disorders, it is crucial that providers in both primary and specialty care settings become trained in Medication-Assisted Treatment (MAT), an approach that uses FDA-approved pharmacological treatments, often in combination with psychosocial treatments, for patients with substance use disorders. Equally important, stakeholders, policy makers, and insurers must strive to learn about available medicines and promote policies that ensure that use of these medications is covered as part of a comprehensive approach to treating alcohol, prescription, and illicit drug dependence. (Source: Assisted Treatment for Opioid Addiction, HealthCare Brief, Office of National Drug Control Policy, Executive Office of the President, www.WhiteHouse.gov/ONDCP, September 2012)

Program Requirements and Eligibility

The FADAA/OSCA VIVITROL® project is based on proviso language in the 2014 General Appropriations Act that states that funding is provided for “medication to treat alcohol or opioid-addicted offenders in court-ordered, community-based drug treatment programs. . .” Specifically, the funds will allow treatment providers to make VIVITROL available to offenders who are ordered to treatment and referred by the court to be evaluated for treatment of a substance use disorder. Although this medication is available now for some individuals eligible through either the Department of Children & Families (DCF) or the Department of Corrections (DOC), it is not readily accessible to many offenders due to the cost and their lack of third party insurance or Medicaid coverage.

In addition to covering the cost of the medication, this funding will cover other medication related services, including patient medication education, physical examination, laboratory studies, and medication monitoring. Because those who abuse opioids and alcohol often abuse other substances as well, and because addiction is a chronic relapsing condition, a comprehensive approach to treatment is essential. Medication-assisted treatment, along with counseling to promote adherence and other social services such as employment counseling and housing assistance, support offenders as they build new drug-free lives and enter long-term recovery.

Eligibility for funding through this project includes any offender with a criminal case (felony or misdemeanor) who is ordered into community-based treatment by the court, including, but not limited to, those offenders participating in drug courts, mental health courts, or veterans courts. Individuals participating in a drug court, mental health court, or veterans court, may particularly benefit from the services available through this project because they receive an enhanced level of monitoring and supervision that is often required for clients who have long-term substance use and behavioral disorders. MAT provides an additional option for courts when offenders are referred for treatment repeatedly yet continue to appear in court for the same offenses (repeat DUI charges, possession of controlled substances, etc.). No offender should be automatically disqualified, but should be referred to a qualified provider for screening to determine what treatment services are appropriate to their needs.

The following are general guidelines for offenders who may be appropriate for the VIVITROL® program.

Offenders appropriate for evaluation to use VIVITROL®:

- ◆ Over the age of 18
- ◆ Alcohol or opioid dependent
- ◆ Young offenders - first and repeat offenders
- ◆ Both alcohol and opioid dependent
- ◆ Leaving jail or prison
- ◆ Healthcare professionals
- ◆ Previous failed treatment episodes
- ◆ In drug court, mental health court, or veterans court
- ◆ Unable to receive or not appropriate for agonist meds (buprenorphine or methadone)
- ◆ Finishing detox or already abstinent but at high relapse risk
- ◆ Unable (e.g., due to job) to use agonist meds – or unwilling to use them
- ◆ Not stabilizing on methadone or buprenorphine
- ◆ Completing methadone or buprenorphine treatment

Offenders who may not be a candidate for VIVITROL®:

- ◆ Requires opioid analgesics for pain management
- ◆ Are currently physiologically dependent on opioids or in acute withdrawal
- ◆ Have a positive urine screen for opioids
- ◆ Pregnant women
- ◆ Have acute hepatitis and/or clinically significant liver dysfunction
- ◆ Severe renal failure or moderate to severe renal insufficiency

Participating Agencies

A current (updated as new providers enroll) list of agencies participating as providers in the FADAA/OSCA VIVITROL® project can be found on the FADAA website at:

www.fadaa.org

The providers listed on this page have at least **3 years of** experience using VIVITROL® as part of a comprehensive substance abuse treatment program with both DCF and/or DOC clients and can serve as a resource for court personnel and newly enrolled providers.

Banyan Health Systems

Bruce Hayden, CEO
11031 N.E. 6th Avenue
Miami
(305) 757-0602
bhayden@banyanhealth.org

Lakeview Center, Inc.

Dennis Goodspeed, CEO
1221 West Lakeview Avenue
Pensacola
(850) 432-1222
dgoodspeed@bhcpns.org

Drug Abuse Coordinating Council, Inc. (DACCO)

Mary Lynn Ulrey, CEO
4422 E. Columbus Dr.
Tampa
(855) 322-2600
marylynnu@dacco.org

Aspire Health Partners

Dick Jacobs
P.O. Box 538350
Orlando
(407) 245-0045
dick.jacobs@aspirehp.org

River Region Human Services

Dr. Tiffany Green, CEO
2055 Reyko Road, Suite 101
Jacksonville
(904) 899-6300
tiffany.green@rrhs.org

Meridian Behavioral Healthcare

Richard Anderson, CEO
PO Box 141750
Gainesville
(352) 374-5600
rva@mbhci.org

LifeStream Behavioral Center

Jonathan M. Cherry, CEO
P.O. Box 491000
Leesburg
(352) 315-7500
jcherry@lsbc.net

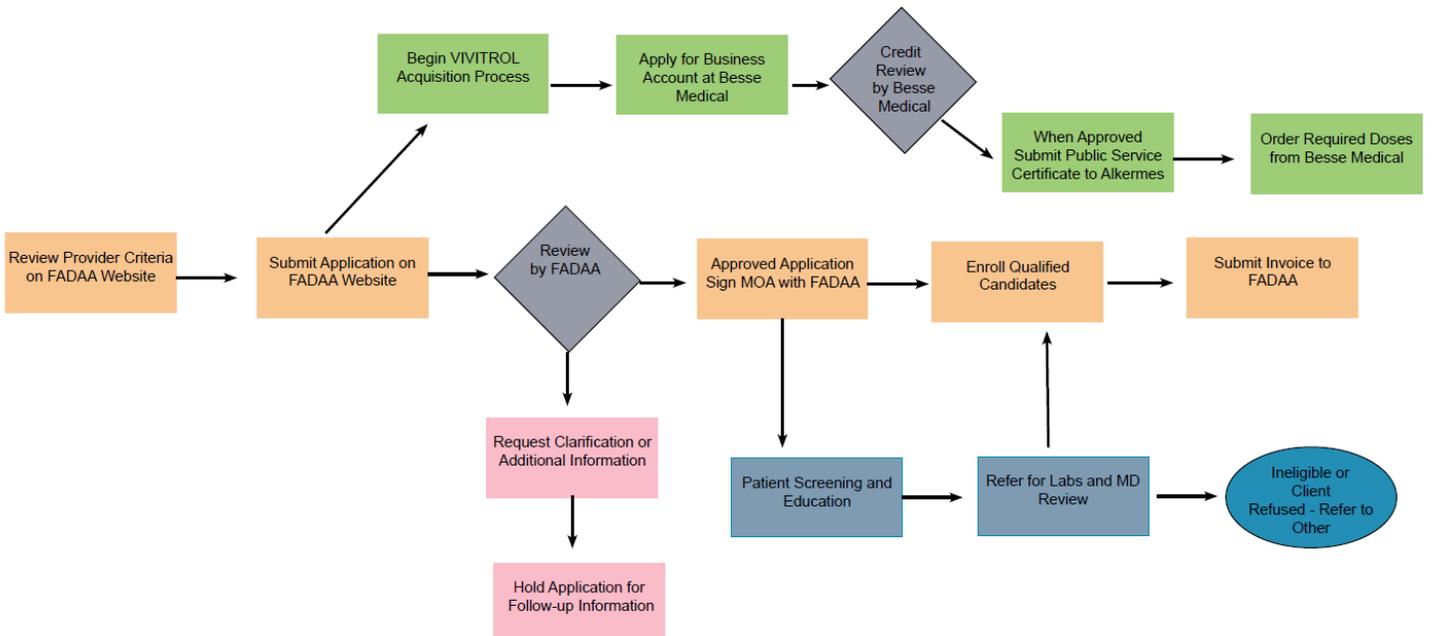
BayCare Behavioral Health

Doug Leonardo
P.O. Box 428
New Port Richey
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douglas.leonardo@baycare.org

Agencies that are currently working with the Courts can get information about participating in this project on the FADAA website at www.fadaa.org.

To become an approved provider for this program, agencies must be licensed by DCF as a substance abuse treatment provider in Florida, establish an account with the on-line pharmacy Besse Medical to purchase VIVITROL®, and have sufficient medical capacity, either on staff or through a contract, to dispense, administer, and monitor use of the medication. The flow chart below illustrates the application and enrollment process.

VIVITROL Process Map for Provider Enrollment



Key Contacts

Florida Alcohol and Drug Abuse Association

For general questions about the project:

Kathy Goltry, Project Director

Phone: 850-878-2196 Ext 118

Email: kgoltry@fadaa.org

Mary Booker, Assistant Director of FADAA, Contract Manager

Phone: 850-878-2196 Ext 115

Email: MBooker@fadaa.org

For questions about the reimbursement process for VIVITROL:

Angie Durbin, Director of Finance and Human Resources, FADAA

Phone: 850-878-2196 Ext 105

Email: ADurbin@fadaa.org

For questions about on-line applications or data submission:

Eric Nelson, Director of Information Technology, FADAA

Phone: 850-878-2196 Ext 117

Email: ENelson@fadaa.org

Key Contacts

Office of the State Courts Administrator

Jennifer Grandal

Senior Court Operations Consultant

Office of the State Courts Administrator

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Contact information for drug court, mental health court, and veterans court personnel in each Judicial Circuit can be found [here](#).

Key Contacts

Alkermes, Inc.

Alkermes, Inc. is the pharmaceutical company that manufactures VIVITROL®. Alkermes representatives are available to provide information and data to providers and courts regarding all aspects of the medication.

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Medication-Assisted Treatment

Medication-Assisted Treatment (MAT) is a form of pharmacotherapy and refers to any treatment for a substance use disorder that includes a pharmacological intervention as part of a comprehensive substance abuse treatment plan with an ultimate goal of patient recovery with full social function. MAT is the use of medications, in combination with counseling and behavioral therapies, to provide a whole-patient approach to the treatment of substance use disorders. Research shows that when treating substance-use disorders, a combination of medication and behavioral therapies is most successful. MAT is clinically driven with a focus on individualized patient care. As part of a comprehensive treatment program, MAT has been shown to:

- ◆ Improve survival
- ◆ Increase retention in treatment
- ◆ Decrease illicit opiate use
- ◆ Decrease hepatitis and HIV seroconversion
- ◆ Decrease criminal activities
- ◆ Increase employment
- ◆ Improve birth outcomes with perinatal addicts

Taking medication for opioid addiction is compared to taking medication to control heart disease or diabetes. Used properly, medication helps people manage their addiction. MAT has been demonstrated to be effective in the treatment of alcohol dependence with FDA-approved drugs such as disulfiram, naltrexone, and acamprosate, and opioid dependence with methadone, naltrexone, and buprenorphine.

MAT and the use of VIVITROL® (extended-release injectable naltrexone) is an evidence-based practice for patients who are alcohol or opioid dependent. VIVITROL® is an opioid antagonist in extended release form that is approved for the treatment of both opioid dependence and alcohol dependence. Source and for more information please see: <http://www.samhsa.gov/medication-assisted-treatment>

FDA-Approved Medications for Substance Use Disorders

Medication Generic Name	Use	Trade Name	How it works	Abuse Potential	Administration Method	Special License or Credential	Year Approved by FDA	Physician Training Required
Acamprosate Calcium	Alcohol	Campral®	Reduces cravings by reducing symptoms of protracted alcohol withdrawal.	No	Oral, two tablets, 3 x day	No	2004	No
Disulfiram	Alcohol	Antabuse®	Aversive; causes severe physical discomfort if patient consumes alcohol.	No	Oral, one tablet daily	No	1951	No
Naltrexone	Alcohol and Opioids	ReVia® Depade® VIVITROL®	By blocking opioid receptors, it blocks cue-triggered craving and decreases the euphoric effects of alcohol.	No	Oral, tablet 1 x day VIVITROL® - Injection taken every 30 days	No	1994 – naltrexone; VIVITROL® - for alcohol 2006, opioids 2010	No
Buprenorphine	Opioids	Suboxone®	A long-acting partial opioid, it relieves withdrawal, decreases craving, and prevents euphoria if other opioids are used.	Yes	Oral, tablets sublingually or sublingual film once daily	Varies by state	2002	Yes – 8 hours of training
Methadone	Opioids	Methadone	A long-acting ‘full’ opioid that relieves withdrawal, blocks craving, and prevents euphoria if other opioids are used.	Yes	Oral, liquid solution	Yes – certification by state and feds	1947	No

Chart adapted from *Getting Started with Medication-Assisted Treatment, With lessons from Advancing Recovery*, Maureen Fitzgerald, Editor, NIATx, University of Wisconsin-Madison, 2010.

Extended-Release Injectable Naltrexone (VIVITROL®)

Extended-Release Injectable Naltrexone - VIVITROL®

Naltrexone is a non-addictive antagonist used in the treatment of opioid and alcohol dependence. As an antagonist, naltrexone does not mimic the effects of opioids. It simply blocks opioid receptor sites so that other substances present in a patient's system cannot bind to them. Naltrexone can be administered in an injectable long-acting formulation which is marketed under the brand name of VIVITROL®. This formulation is designed for once-monthly dosing. The medication is FDA approved for use in individuals with opioid or alcohol use disorders to prevent relapse.

Naltrexone for Alcohol Dependence

As a non-addictive antagonist, naltrexone is used to block opioid receptors so they cannot be activated. In people with alcohol dependence, it is believed that this blockade (opioid antagonism) diminishes craving for alcohol and leads to a greater ability to resist urges to drink excessively. Naltrexone is available in two forms: oral daily form (ReVia®, Depade®) and injectable monthly extended-release form, (VIVITROL®) which was approved by FDA for treatment of alcohol dependence in 2006.

Although the mechanism responsible for the reduction in alcohol consumption observed with treatment is not entirely understood, preclinical data suggests that occupation of the opioid receptors results in the blockade of the neurotransmitters in the brain that are believed to be involved with alcohol dependence. ([Source: Dr. David Gastfriend, Webinar Dec. 29, 2014.](#)) This blockade may result in the reduction in alcohol consumption observed in patients treated with naltrexone.

Naltrexone for opioid dependence

Naltrexone is a non-opioid medication that is approved for the treatment of opioid dependence. As an opioid receptor antagonist; naltrexone binds to opioid receptors, but instead of activating the receptors, it effectively blocks them. Through this action, it prevents opioid receptors from being activated by agonist compounds, such as heroin or prescription pain killers, and is reported to reduce craving and prevent relapse.

As opposed to other medications used for opioid dependence (methadone and buprenorphine), naltrexone can be prescribed by any individual who is licensed to prescribe medicine (e.g., physician, doctor of osteopathic medicine, physician assistant, and nurse practitioner). Both the oral daily form and the injectable extended-release form are FDA approved for treatment of opioid dependence. VIVITROL® was approved by the FDA for this use in 2010.

Source and for additional information see: [Naltrexone for Extended-Release Injectable Suspension for Treatment of Alcohol Dependence. TIP 49, Chapter 4 \(Oral Naltrexone\), Chapter 5 \(IM\).](#)

Learn more about Medication-Assisted Treatment and VIVITROL® from the following free resources:

- ◆ [Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction](#)
- ◆ [Incorporating Alcohol Pharmacotherapies Into Medical Practice. Treatment Improvement Protocol \(TIP\) Series 49. HHS Publication No. \(SMA\) 09-4380](#)
- ◆ [Clinical Use of Extended-Release Injectable Naltrexone in the Treatment of Opioid Use Disorders: A Brief Guide](#)
- ◆ [Medication-Assisted Treatment for Opioid Addiction: Facts for Family & Friends](#)
- ◆ [Medication-Assisted Treatment for Opioid Addiction, Healthcare Brief, Office of National Drug Control Policy, Executive Office of the President,](#)
- ◆ [NDCI Drug Court Practitioner Fact Sheet: Extended-Release Naltrexone](#)
- ◆ [Is There a Role For Extended-Release Naltrexone in Drug Courts? Results of a Pilot Study from DRUG COURT REVIEW, National Drug Court Institute, Volume IX, Issue 1, Page 23.](#)
- ◆ [NIDA Info Facts: Treatment Approaches to Drug Addiction](#)
- ◆ [Medication Assisted Therapy Toolkit](#)
- ◆ [SAMHSA Treatment Locator 1-800-662-HELP](#)

- ◆ [Medication-Assisted Treatment for Substance Use Disorders: Extended-Release Naltrexone \(XR NTX; VIVITROL®\), Webinar, David R. Gastfriend M.D.](#)
- ◆ [Evidence for the Efficacy of Naltrexone in the Treatment of Alcohol Dependence \(Alcoholism\), Naltrexone Clinical Update, Addiction Treatment Forum, Stewart B. Leavitt, PhD, Editor, Published by Addiction Treatment Forum. Mundelein, IL, 2002 Clinco Communications, Inc.](#)
- ◆ [Substance Abuse and Mental Health Services Administration. \(2012\). An Introduction to Extended-Release Injectable Naltrexone for the Treatment of People With Opioid Dependence. Advisory, Volume 11, Issue 1,](#)
- ◆ Information about [VIVITROL®](#)
- ◆ Information about [Alkermes](#) (Manufacturer of VIVITROL®)

Project History

VIVITROL® is a non-narcotic medication approved by the U.S. Food and Drug Administration (FDA) and Substance Abuse and Mental Health Services Administration (SAMHSA) to be used as a treatment alternative, along with counseling, for alcohol and opioid addiction. This medication is the only extended-release medication approved by the FDA for this purpose. This medication is used by the Department of Veterans Affairs and is being utilized by justice agencies across the country including the Departments of Corrections in Colorado, Florida, Missouri, Pennsylvania, jail systems including New York City at Riker's Island, and in drug courts nationwide.

FADAA is a 501(c)(3) non-profit organization incorporated in 1981 representing over 135 of Florida's premiere community-based substance abuse treatment/prevention and mental health agencies, community anti-drug coalitions, managing entities and federally qualified health care centers. Through state and locally initiated contracts with the Department of Children and Families (DCF), the Department of Corrections (DOC), the Department of Juvenile Justice (DJJ), and the Agency for Health Care Administration (AHCA), Florida's drug courts and various other social service and criminal justice organizations, FADAA's members provide direct service to the citizens of Florida to prevent and treat substance use disorders and mental illness. FADAA's members serve individuals in criminal justice, child welfare, primary health care, and juvenile justice systems. The Association advances addiction treatment, prevention, and research through public policy leadership, communications, and professional development including on-site and web-based training and technical assistance to Florida providers and state and local stakeholders to improve the behavioral healthcare service delivery system.

FADAA has a 33 year history of collaboration with national and state-level organizations and local partners including DOC, DCF, the Florida Juvenile Justice Association, the Florida Council for Community Mental Health, Partners in Crisis, the Florida Coalition for Children, and the Smart Justice Alliance to provide and advance training and technical assistance in emerging trends such as medication-assisted treatment (MAT) and other evidence-based practices. FADAA is uniquely positioned with substance abuse treatment providers as members to market, educate, and

engage these providers and their local criminal justice system partners to initiate or expand the use of VIVITROL®.

From 2006 to 2008, FADAA in collaboration and under contract with the DCF, participated in a national initiative, the Advancing Recovery Grant, funded by the Robert Wood Johnson (RWJ) Foundation to increase the effective use of evidence-based practices (EBPs), specifically medication-assisted treatment with VIVITROL®. FADAA's role in this effort was three-fold:

- ◆ Identify and engage a specific number of providers to participate in the pilot;
- ◆ Organize and facilitate delivery of provider training on client selection, provider capacity requirements for participation, administration of the medication, and developing a utilization and outcome tracking system; and,
- ◆ In conjunction with DCF, monitor the status of the project, including identifying and remediating any local or state barriers to service delivery and develop the infrastructure needed to implement the utilization of VIVITROL®, identifying funding alternatives for the medication, including the use of the Indigent Psychiatric Drug Program.

The RWJ funded initiative resulted in positive client results. The average number of heavy drinking days per month decreased from 28.9 days per month at the time of the first injection to 1.7 days by the second injection. For 70% of clients, the number of heavy drinking days was 0 by the fourth injection. Clients also steadily improved in their motivation to quit drinking and experienced a steady decrease in their urge to drink.

The project also resulted in the creation of guidelines to approve provider agencies to access medications through the State Pharmacy, the development of procedures for medication purchase, and processes for identifying provider capacity to administer medication-assisted treatment. Subsequent to the end of the RWJ funded project, FADAA continued to work to sustain the use of VIVITROL® with providers who participated in the RWJ pilot and to encourage the use of VIVITROL® to additional

providers. By 2009, the number of providers participating in the VIVITROL® initiative increased by 50%.

For the past several years FADAA has been working with DOC to establish a program to utilize VIVITROL® for probationers in community drug treatment secure and non-secure residential treatment programs. FADAA worked with DOC to develop a protocol to select providers that had the medical capacity to implement the program. With dedicated funding this past legislative session, FADAA is presently working with DOC to expand the number of providers utilizing the medication.

In addition, FADAA has been working with DCF to expand the number of providers utilizing the medication. In 2013, with FADAA's help in recruiting additional providers, the DCF doubled the number of providers utilizing this medication.

Substance Use Disorders Overview

The *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5), no longer uses the terms substance abuse and substance dependence, rather it refers to substance use disorders, which are defined as mild, moderate, or severe to indicate the level of severity, which is determined by the number of diagnostic criteria met by an individual. Substance use disorders occur when the recurrent use of alcohol and/or drugs causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home. According to the DSM-5, a diagnosis of substance use disorder is based on evidence of impaired control, social impairment, risky use, and pharmacological criteria. According to SAMHSA, the following list includes the most common substance use disorders in the United States.

Alcohol Use Disorder (AUD)

Excessive alcohol use can increase a person's risk of developing serious health problems in addition to those issues associated with intoxication behaviors and alcohol withdrawal symptoms. According to the Centers for Disease Control and Prevention (CDC), excessive alcohol use causes 88,000 deaths a year.

Data from the [National Survey on Drug Use and Health \(NSDUH\)](#) show that in 2013, slightly more than half (52.2%) of Americans ages 12 and up reported being current drinkers of alcohol. Most people drink alcohol in moderation. However, of those 135.5 million alcohol users, an estimated 18 million have an AUD. Many Americans begin drinking at an early age. In 2012, about 24% of eighth graders and 64% of twelfth graders used alcohol in the past year.

Excessive drinking can put you at risk of developing an alcohol use disorder in addition to other health and safety problems. Genetics have also been shown to be a risk factor for the development of an AUD.

The definitions for the different levels of drinking include the following:

♦ **Moderate Drinking**—According to the Dietary Guidelines for Americans, moderate drinking is up to 1 drink per day for women and up to 2 drinks per day for men.

♦ **Binge Drinking**—SAMHSA defines binge drinking as drinking 5 or more alcoholic drinks on the same occasion on at least 1 day in the past 30 days. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines binge drinking as a pattern of

drinking that produces blood alcohol concentrations (BAC) of greater than 0.08 g/dL. This usually occurs after 4 drinks for women and 5 drinks for men over 2 hours.

◆ **Heavy Drinking**—SAMHSA defines heavy drinking as drinking 5 or more drinks on the same occasion on each of 5 or more days in the past 30 days.

To be diagnosed with an AUD, individuals must meet certain diagnostic criteria. Some of these criteria include problems controlling intake of alcohol, continued use of alcohol despite interference with major obligations or social functioning, development of a tolerance, drinking that leads to risky situations, or the development of withdrawal symptoms. The severity of an AUD—mild, moderate, or severe—is based on the number of criteria met.

Learn more about alcohol from the [Alcohol, Tobacco, and Other Drugs](#) topic. Learn more about the [medications for AUD](#). Find more information at the [NIAAA website](#).

Cannabis Use Disorder

Marijuana is the most-used drug after alcohol and tobacco in the United States. According to SAMHSA data:

◆ About 20 million people ages 12 and up report using marijuana during the past month.

◆ In 2013, there were 2.4 million people in that age range who had used marijuana for the first time within the past 12 months. People between the ages of 12 and 49 report first using the drug at an average age of 18.

◆ In the past year, 4.2 million people ages 12 and up met criteria for a substance use disorder based on marijuana use.

Marijuana's immediate effects include distorted perception, difficulty with thinking and problem solving, and loss of motor coordination. Long-term use of the drug can contribute to respiratory infection, impaired memory, and exposure to cancer-causing compounds. Heavy marijuana use in youth has also been linked to [increased risk for developing mental illness and poorer cognitive functioning](#).

Some symptoms of cannabis use disorder include disruptions in functioning due to cannabis use, the development of tolerance, cravings for cannabis, and the development of withdrawal symptoms, such as the inability to sleep, restlessness, nervousness, anger, or depression within a week of ceasing heavy use.

Learn more about cannabis from the [Alcohol, Tobacco, and Other Drugs](#) topic. For information about the treatment of cannabis use disorder, visit SAMHSA's [Treatments for Substance Use Disorders](#) page.

Hallucinogen Use Disorder

Hallucinogens can be chemically synthesized (as with lysergic acid diethylamide or LSD) or may occur naturally (as with psilocybin mushrooms, peyote). These drugs can produce visual and auditory hallucinations, feelings of detachment from one's environment and oneself, and distortions in time and perception. In 2013, approximately 280,000 Americans had a hallucinogen-use disorder. (Source: Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (September 4, 2014). The NSDUH Report: Substance Use and Mental Health Estimates from the 2013 National Survey on Drug Use and Health: Overview of Findings. Rockville, MD.)

Symptoms of hallucinogen use disorder include craving for hallucinogens, failure to control use when attempted, continued use despite interference with major obligations or social functioning, use of larger amounts over time, use in risky situations like driving, development of tolerance, and spending a great deal of time to obtain and use hallucinogens. Learn more about hallucinogens from the [Alcohol, Tobacco, and Other Drugs](#) topic page on the SAMHSA website.

Opioid Use Disorder

Opioids reduce the perception of pain but can also produce drowsiness, mental confusion, euphoria, nausea, constipation, and, depending upon the amount of drug taken, can depress respiration. Illegal opioid drugs, such as heroin and legally available pain relievers such as oxycodone and hydrocodone can cause serious health risks from snorting or injecting them. These methods increase their risk for serious medical complications, including overdose. Increasingly, users are switching from prescription opiates to heroin as a result of availability and lower price.

Because of variable purity and other chemicals and drugs mixed with heroin on the black market, this also increases risk of overdose. Overdoses with opioid pharmaceuticals led to almost [17,000 deaths in 2011](#). Since 1999, opiate overdose deaths have increased 265% among men and 400% among women. In 2013, an estimated 1.8 million people had an opioid use disorder related to prescription pain relievers and an estimated 517,000 had an opioid use disorder related to heroin use.

Symptoms of opioid use disorders include strong desire for opioids, inability to control or reduce use, continued use despite interference with major obligations or social functioning, use of larger amounts over time, development of tolerance, spending a great deal of time to obtain and use opioids, and withdrawal symptoms that occur after stopping or reducing use, such as negative mood, nausea or vomiting, muscle aches, diarrhea, fever, and insomnia. For information about the treatment of opioid use disorder, visit [SAMHSA's Treatments for Substance Use Disorders](#).

Stimulant Use Disorder

Stimulants increase alertness, attention, and energy, as well as elevate blood pressure, heart rate, and respiration. They include a wide range of drugs that have historically been used to treat conditions, such as obesity, attention deficit hyperactivity disorder and, occasionally, depression. Like other prescription medications, stimulants can be diverted for illegal use. The most commonly abused stimulants are amphetamines, methamphetamine, and cocaine. Stimulants can be synthetic (such as amphetamines) or can be plant-derived (such as cocaine). They are usually taken orally, snorted, or intravenously.

In 2013, an estimated 855,000 people ages 12 and older had a stimulant use disorder because of cocaine use, and an estimated 469,000 people had a stimulant use disorder as a result of using other stimulants besides methamphetamines. In 2013, almost 600,000 people in the United States ages 12 and up reported using methamphetamines in the past month.

Symptoms of stimulant use disorders include craving for stimulants, failure to control use when attempted, continued use despite interference with major obligations or social functioning, use of larger amounts over time, development of tolerance, spending a great deal of time to obtain and use stimulants, and withdrawal symptoms that occur after stopping or reducing use, including fatigue, vivid and unpleasant dreams, sleep problems, increased appetite, or irregular problems in controlling movement.

Learn more about stimulants from the [Alcohol, Tobacco, and Other Drugs](#) topic. For information about the treatment of stimulant use disorder, visit SAMHSA's [Treatments for Substance Use Disorders](#) page.

Tobacco Use Disorder

According to the CDC, more than 480,000 deaths each year are caused by cigarette smoking. Tobacco use and smoking do damage to nearly every organ in the human body, often leading to lung cancer, respiratory disorders, heart disease, stroke, and other illnesses.

In 2013, an estimated 66.9 million Americans aged 12 or older were current users of a tobacco product (25.5%). Young adults aged 18 to 25 had the highest rate of current use of a tobacco product (37.0%), followed by adults aged 26 or older (25.7%), and by youths aged 12 to 17 (7.8%).

In 2013, the prevalence of current use of a tobacco product was 40.1% for American Indians or Alaska Natives, 27.7% for whites, 27.1% for blacks, 25.8% for Native Hawaiians or other Pacific Islanders, 18.8% for Hispanics, and 10.1% for Asians.

For information and strategies to help stop smoking or using tobacco, visit [SAMHSA's Treatments for Substance Use Disorders](#) page. To find out more about smoking and tobacco, visit the [CDC](#) website or [Tobacco Free Florida](#).

Source and for further information about substance use disorders, see <http://www.samhsa.gov/disorders/substance-use> Downloaded October 10, 2014.