

Resource Summary

Drug Control Program
Department of Health and Human Services
National Institutes of Health (NIH)

	Budget Authority (in millions)		
	FY 2024 Final	FY 2025 Enacted	FY 2026 Requested ¹
Drug Resources by Function			
Research and Development: Prevention	\$470.581	*	\$268.461
Research and Development: Overdose Reduction	\$232.871	*	\$131.774
Research and Development: Treatment	\$941.276	*	\$533.025
Research and Development: Recovery	\$83.168	*	\$47.062
Total, Drug Resources by Function	\$1,727.897	*	\$980.322
Drug Resources by Decision Unit			
National Institute on Alcohol Abuse and Alcoholism (NIAAA)			
Research and Development: Prevention	\$54.740	*	--
Research and Development: Treatment	\$9.792	*	--
Total, National Institute on Alcohol Abuse and Alcoholism (NIAAA)	\$64.532	*	--
National Institute on Drug Abuse (NIDA)			
Research and Development: Prevention	\$415.841	*	--
Research and Development: Overdose Reduction	\$232.871	*	--
Research and Development: Treatment	\$931.484	*	--
Research and Development: Recovery	\$83.168	*	--
Total, National Institute on Drug Abuse (NIDA)	\$1,663.365	*	--
National Institute on Behavioral Health (NIBH)	--	*	\$980.322
Total, Drug Resources by Decision Unit	\$1,727.897	*	\$980.322
Drug Resources Personnel Summary			
Total FTEs (direct only)	437	*	**
Drug Resources as a Percent of Budget			
Total Agency Discretionary Budget (in Billions)	\$44.750	\$44.470	\$27.506
Drug Resources Percentage	3.86%	*	3.56%

¹ The FY 2026 drug control methodology is adjusted to align with the proposed reorganization of NIAAA and NIDA into NIBH. The FY 2026 drug control budget excludes research management and support costs, including only direct research costs in NIBH.

* Consistent with the 2025 operating plan, funding levels are displayed for statutory PPAs. This activity is not intended to be separate PPA for 2025 and is rolled up within the account.

**Drug control FTEs for NIBH are to be determined.

Program Summary

MISSION

Within the National Institutes of Health (NIH), the National Institute on Behavioral Health (NIBH) will support research in pursuit of the objectives of the National Drug Control Strategy.

The FY 2026 President’s Budget proposes a newly streamlined Institute, NIBH, consisting of the National Institute on Alcohol Abuse and Alcoholism (NIAAA), the National Institute on Drug Abuse (NIDA), and the National Institute of Mental Health (NIMH). The mission of these Institutes will be integrated into NIBH. As relates to the National Drug Control Strategy, NIBH’s mission will be to generate and disseminate fundamental knowledge about the adverse effects of alcohol and other substances on health and well-being, and apply that knowledge to improve diagnosis, prevention, and treatment of substance use-related problems, across the lifespan. Through continued investments across a broad range of scientific approaches, goals, and objectives, NIBH research will hold enormous promise to reduce the burden of addiction and mental illness and improve quality of life for all Americans.

Substance use disorders (SUDs) are a significant public health crisis. Over 48 million people in the United States had a substance use disorder in 2023, and hundreds of thousands of people die each year from overdose and other drug- and alcohol-related causes. The U.S. overdose epidemic has been particularly devastating. But remarkably, these deaths began falling in 2023, and provisional data show they declined by more than 25 percent in 2024. This trend suggests the overdose epidemic may be abating, though researchers do not know if it will persist or what is driving it. At the same time, overdose deaths are increasing for some groups, including Americans over age 55. Moreover, a growing proportion of overdose deaths involve both opioids and stimulants or other drug combinations. Patterns of drug use among young people also remain a cause of concern. Record numbers of young adults are using psychedelic drugs, cannabis, and e-cigarettes (e-cigs), despite health risks.² These trends point to the need for continued efforts to reduce harmful substance use, especially in populations that remain at high risk.

Although the rate of underage drinking in the United States has declined over the past several decades, alcohol remains the most widely used substance among youth. A major priority within NIBH’s mission will be research on the prevention and treatment of underage drinking and its harmful consequences. Binge drinking³ and high intensity drinking⁴ among young people remain significant concerns. These drinking patterns are particularly troubling as they increase risks for poor academic performance, alcohol-related blackouts, injuries, overdoses, sexual assault, unsafe sexual behavior, alcohol use disorder (AUD), and other detrimental consequences.

² monitoringthefuture.org/wp-content/uploads/2024/07/mtfpanel2024.pdf

³ NIH defines binge drinking as a pattern of drinking that increases an individual’s blood alcohol concentration to 0.08 percent or higher. This typically occurs after four drinks for women and five drinks for men – in about two hours. Research suggests that fewer drinks in the same timeframe result in the same blood alcohol concentration in youth.

⁴ NIH defines high intensity drinking two or more times the sex-specific binge drinking thresholds.

NIBH will lead research advances to improve primary prevention of harmful substance use, extend the reach of evidence-based therapies for SUD, and develop new, more effective therapies. The Institute will also prioritize research in overdose prevention approaches such as community naloxone distribution and drug checking tools; and in recovery services such as residential and school-based programs.

METHODOLOGY

The FY 2026 drug control methodology is adjusted to align with the proposed reorganization of NIAAA and NIDA into NIBH. The FY 2026 drug control budget excludes research management and support costs, including only direct research costs in NIBH. All NIBH research on drugs other than alcohol with addictive potential will be part of the National Drug Control Budget. Within alcohol research, the prevention and treatment components of NIBH's underage drinking research program will be classified as a part of the National Drug Control Budget. Underage drinking research is defined as research that focuses on alcohol use by youth (individuals under the legal drinking age of 21), as well as the negative consequences of underage alcohol use (e.g., alcohol-related injuries, impact on adolescent development including on the developing brain, and risk for AUD). The proposed NIBH National Drug Control Budget will include basic biological and behavioral research, epidemiological research, screening studies, the development and testing of preventive and treatment interventions, and efforts to disseminate evidence-based information.

Budget Summary

The FY 2026 budget request for drug control-related activities at NIH is \$980.3 million.

As a component of the nation's drug control strategy, the proposed National Institute on Behavioral Health (NIBH) will continue to invest in substance use prevention, substance use disorder (SUD) treatment, overdose reduction, and recovery services related to substance use in alignment with the priorities of the Office of National Drug Control Policy.

Substance Use Prevention

NIH supports a broad portfolio of research to prevent substance use and addiction, including underage alcohol use. This includes epidemiologic research to understand patterns of drug and alcohol use. For example, the Monitoring the Future Survey, which collects data on substance use and related attitudes among 8th, 10th, and 12th graders each year, found that alcohol, cannabis, and nicotine (by vaping) remain the most common types of substances used by adolescents.⁵ While delta-9-THC is the primary psychoactive component of cannabis, data show that some youth are turning to other substances derived from the cannabis plant, including delta-8-THC.⁶

Meanwhile, the Population Assessment of Tobacco and Health (PATH) Study, a collaboration between the Food and Drug Administration (FDA) and NIH, has found that adolescents who vape nicotine have higher odds of subsequently initiating cigarettes, cannabis, and other drugs.⁷ The PATH Study also found a link between youth e-cig use and exposure to e-cig advertisements through social media, websites, and convenience stores, suggesting that reduced exposure to such ads could reduce youth e-cig use.⁸

NIH also supports longitudinal research to understand risk and protective factors for substance misuse and SUD. Research shows that adverse early childhood experiences are associated with early substance misuse, which may in turn alter brain development in ways that increase the risk of SUD in adulthood.⁹

The National Consortium on Alcohol and Neurodevelopment in Adolescence (NCANDA) is a multi-site study to identify brain characteristics in humans that may predict alcohol misuse or occur because of adolescent alcohol exposure. Established in 2012, NCANDA investigators are now following the initial adolescent cohort into young adulthood and examining the sex-specific relationships among brain maturation, alcohol misuse, mental health, and sleep. Data from NCANDA, for example, has demonstrated that adolescent binge drinking is associated with accelerated decline of gray matter volume in the brain, with the most significant effects observed in the frontal regions that are important for executive functioning, such as performing complex tasks and decision-making. NCANDA data is also enabling research focused on, for example,

⁵ monitoringthefuture.org/wp-content/uploads/2024/01/mtfoverview2024.pdf

⁶ pubmed.ncbi.nlm.nih.gov/38470384

⁷ pubmed.ncbi.nlm.nih.gov/39137612

⁸ pubmed.ncbi.nlm.nih.gov/37515897

⁹ pubmed.ncbi.nlm.nih.gov/29690790

neurobiological risk and resilience factors for alcohol use¹⁰ and how alcohol use in adolescence negatively affects developmental trajectories involved in the regulation of sleep.¹¹ Translation of these findings into clinical practice will help youth and adolescents receive the most personalized and appropriate care for alcohol misuse and its consequences.

Even with these advances, much remains to be learned about how a vast constellation of early-life experiences, combined with a person's genetic makeup, affects vulnerability to SUD and other psychiatric disorders. Building off NCANDA, the Adolescent Brain Cognitive Development (ABCD) Study is collecting brain imaging, environmental, and other data from more than 12,000 children aged 9-10 and following them through adulthood to help fill this knowledge gap. The study has found that among children never exposed to alcohol, those with genetic risk factors for AUD were likely to have brain differences previously only seen in adults with AUD.¹² Thus, rather than being a consequence of AUD, those differences might predispose people to AUD and could help inform preventive strategies. More recently, with funding from other NIH Institutes and the NIH Helping to End Addiction Long-term (HEAL) Initiative[®], the HEALthy Brain and Child Development (HBCD) Study was launched to complement the ABCD study by following brain development in thousands of children from birth through their first decade of life.

Another major program within NIH's prevention research is the Neurobiology of Adolescent Drinking in Adulthood (NADIA) consortium to examine, using animal models, the mechanisms by which adolescent drinking leads to changes in brain structure and function that persist into adulthood. NADIA researchers recently tested the effects of chronic adolescent alcohol exposure on pain-related behavior and brain function. They found that chronic adolescent alcohol exposure caused an abnormally heightened sensitivity to pain during adolescence and into adulthood, even after abstinence, in males but not females. In addition, chronic adolescent alcohol exposure resulted in alterations in a pain-related brain neurocircuit in adult males, but not adult females. This study suggests that there are sex-dependent effects of chronic adolescent alcohol exposure on pain-related behaviors and neurocircuitry that persist into adulthood.¹³ These results are important given previous research demonstrating that alcohol consumption and coping with pain are linked, and that chronic alcohol misuse increases pain sensitivity and makes pain worse over the long-term.

NIH supports studies to understand and address the interactions between individuals and environments that contribute to drug use, addiction, and related health problems. NIH's portfolio in this area includes studies to develop, evaluate, and implement evidence-based prevention programs for youth. These programs include individual-, family-, school-, community-, and environmental-level interventions. For college settings, NIH provides the College Alcohol Intervention Matrix (CollegeAIM), an online resource that rates over 60 evidence-based alcohol interventions in terms of effectiveness, cost, and other factors, allowing school officials to select among the many potential interventions to address harmful and underage student drinking.

¹⁰ pubmed.ncbi.nlm.nih.gov/39577156

¹¹ pubmed.ncbi.nlm.nih.gov/37058610

¹² pubmed.ncbi.nlm.nih.gov/34092032

¹³ pubmed.ncbi.nlm.nih.gov/37717844

NIH also administers the HEAL Preventing Opioid Use Disorder (OUD) program,¹⁴ which aims to identify risk factors for OUD among youth and test multi-level prevention strategies. For example, current projects focus on outreach and counseling for at-risk youth at community drop-in centers, individual and community-level interventions tailored to at-risk American Indian/Alaska Native youth, and school anti-drug programs that emphasize improving student engagement over disciplinary actions like expulsion.

Increasing implementation of alcohol screening and brief intervention in primary care and developing evidence-based behavioral interventions to reduce underage drinking is another priority prevention area for NIH. For example, NIH's Alcohol Screening and Brief Intervention for Youth: A Practitioner's Guide was developed to assist pediatric and adolescent health practitioners in identifying patients at risk for underage drinking and associated problems. This screening resource has been validated among youth in pediatric emergency room settings, school settings, and primary care settings, and among youth with chronic health conditions.

Treatment

A key priority for NIH is to develop new treatments for SUD. Of the 48.5 million people who had an SUD in 2023, less than 15 percent received any kind of treatment. Among those with SUD, 28.9 million people met criteria for AUD, and less than 10 percent of those individuals were referred to treatment, with only 1.9 percent receiving medication-assisted treatment in the past year.¹⁵ While medications are available for alcohol, tobacco, and opioid use disorders, there are no FDA approved treatments for other SUDs. Another challenge is that existing treatments do not work for all people, underscoring the importance of developing a broader range of interventions. To that end, NIH supports research to evaluate the safety and efficacy of medications, behavioral interventions, and medical devices to prevent and treat SUD and drug overdose. This work spans all phases of medical product development including synthesis and preclinical evaluation of potential therapeutics, clinical trial design and execution, and preparing regulatory submissions, and includes a range of approaches such as the development of vaccines, antibodies, and sequestrants designed to trap drugs in the body before they enter the brain. Since September 2019, NIH-supported research has led to more than 60 Investigational New Drug applications and 3 Investigational Device Exemptions submitted to the FDA for evaluation in clinical trials.

An especially exciting area of therapeutics development is research on the blockbuster drugs known as GLP-1 agonists. These drugs mimic the activity of a hormone called glucagon-like peptide-1 (GLP-1), which suppresses food cravings, and there is emerging evidence that they might help suppress drug cravings. NIH-funded studies show that use of the GLP-1 agonist semaglutide for diabetes is associated with lower incidence and recurrence of alcohol and cannabis use disorders, and lower OUD-related overdose risk.¹⁶ GLP-1 agonists show promise for reducing substance use in preclinical studies¹⁷ and are being clinically tested to reduce use of opioids, stimulants, tobacco, and alcohol.

¹⁴ heal.nih.gov/research/new-strategies/preventing-opioid-use-disorder

¹⁵ samhsa.gov/data/report/2023-nsduh-detailed-tables

¹⁶ pubmed.ncbi.nlm.nih.gov/38486046; pubmed.ncbi.nlm.nih.gov/39320894

¹⁷ pubmed.ncbi.nlm.nih.gov/35695511

Another promising area of research is neuromodulation therapies for SUD. For example, deep brain stimulation—which involves inserting electrodes into the brain to stimulate certain regions—is in clinical trials for treatment-resistant OUD. Researchers are also studying non-invasive neuromodulation technologies for SUD, such as low-intensity focused ultrasound and transcranial magnetic stimulation, which is FDA-approved as an adjunct smoking cessation therapy, in part due to NIH-funded research. A new program launched in 2025 supports clinical trials of non-invasive neuromodulation paired with behavioral interventions to treat stimulant use disorders (StUDs).

NIH supports research on behavioral interventions for SUD. An ongoing study is testing the efficacy of two intervention approaches for non-college emerging adults who report heavy drinking.¹⁸ One approach is a combined multi-session brief alcohol intervention with a Substance Free Activity Session (SFAS). The SFAS attempts to increase engagement in goal-directed activities that might provide alternatives to alcohol use and provides tools to reduce stress and develop mood-enhancing behavioral substitutes to drinking (or substance use). The researchers are also testing a second intervention, Relaxation Training, in combination with SFAS to determine if this intervention approach better addresses risk factors for alcohol misuse by enhancing wellness, managing stress, and increasing positive activities.

NIH also supports a Clinical Trials Network (CTN) that conducts research on SUD treatments across settings and populations, as well as implementation studies that help bring research results into practice. Improving access to medications for treating opioid use disorder (MOUD), which includes buprenorphine (BUP), methadone, and naltrexone, is a high priority. The CTN is supporting a study in which people with OUD can begin treatment with BUP or extended-release (XR) BUP in the emergency department.

CTN is also testing strategies to safely improve access to methadone, which is available only at federally regulated clinics. However, NIH-funded research has found that easing methadone regulations during the COVID-19 pandemic saved lives, with no increase in methadone-involved deaths. A large CTN trial is now evaluating the safety and effectiveness of office-based methadone.

CTN investigators are also conducting research to fill the critical need for effective medications to treat StUDs. Based on evidence that the body's endogenous opioids can contribute to stimulant addiction, one trial is evaluating whether XR-BUP and XR-naltrexone together are effective for cocaine use disorder (CcUD). Another CTN study suggests that ketamine may have potential to treat CcUD. By using artificial intelligence to scan medical records data from 90 million patients, the study found that patients with CcUD who had received ketamine for its accepted indications—anesthesia or depression—had improved rates of CcUD remission.¹⁹

NIH also prioritizes research on strategies to prevent and treat drug-related harms, including transmission of HIV and hepatitis C virus, and risk of infections that can damage the heart. While substance use and SUD are well-understood risk factors for HIV infection, it is not clear

¹⁸ reporter.nih.gov/project-details/10157726

¹⁹ pubmed.ncbi.nlm.nih.gov/36792381

why they are also associated with poor responses to anti-retroviral therapy. NIH-funded research suggests that opioids might upregulate HIV co-receptors, called chemokine receptors, which the virus uses to invade cells.²⁰ Ongoing research is examining how opioid/chemokine interactions may facilitate entry of HIV into the brain, where it can cause neurological complications.

HEAL-funded projects are working toward non-addictive treatments for chronic pain, including non-opioid medications and behavioral interventions. For example, a first-in-human study is examining the safety and pharmacology of Kindolor—a novel drug that may interrupt the nerve signals underlying pain.²¹ The Integrative Management of chronic Pain and OUD for Whole Recovery (IMPOWR) program is testing interventions for patients with co-existing chronic pain and OUD, such as physical therapy, pain coping skills, and novel MOUD dosing regimens.

Recovery

Given that addiction is a chronic relapsing disorder, NIH is prioritizing research to identify best practices in recovery and relapse prevention. There are a variety of recovery service models—including peer-based mutual aid groups, recovery housing, and youth programs—but there is little evidence regarding which kinds of program works best for different people. Moreover, many such programs focus on short-term medical treatments and lack support for participants to receive long-term MOUD.²² In 2020, NIH established the Recovery Research Networks program to develop tools, resources, and training to grow this area of research. With additional support from the HEAL Initiative[®], this program has expanded and is testing new and existing recovery models through clinical trials.

The Recovery Research Networks are working to better integrate MOUD treatment into recovery settings. In the United States, recovery support has traditionally been the domain of treatment providers and peer support groups, with the latter sometimes viewing MOUD as inconsistent with recovery. Recovery community centers (RCCs) are a newer recovery model, offering peer support and other services, such as basic needs assistance. A recent Networks survey found that most RCCs also link their clients to MOUD providers, thus combining the benefits of peer support with improved access to MOUD treatment.²³

NIH is also supporting research to understand the biological basis of relapse and recovery. One such study found that among people who have received treatment for StUDs, those who relapse have distinctive changes in brain connectivity that could inform new interventions to prevent relapse.²⁴

Sleep is also linked to drug use and to recovery, with research indicating that SUDs increase the risk of sleep disorders, which can in turn increase the risk of substance withdrawal, craving, and relapse. NIH-funded studies show that periods of withdrawal are associated with impaired sleep

²⁰ pubmed.ncbi.nlm.nih.gov/35976538

²¹ pubmed.ncbi.nlm.nih.gov/33117893

²² pubmed.ncbi.nlm.nih.gov/34700201

²³ pubmed.ncbi.nlm.nih.gov/38426533

²⁴ pubmed.ncbi.nlm.nih.gov/35727973

as well as increased levels of orexins, which are brain proteins that promote wakefulness.²⁵ Meanwhile, clinical trials are testing whether suvorexant, an orexin blocker used for insomnia, can improve sleep and withdrawal among people recovering from opioid use disorder (OUD).

Overdose Reduction

Amid the U.S. opioid overdose crisis, developing and implementing interventions to prevent drug overdose and other drug-related harms remains a national priority. With HEAL Initiative funding in FY 2022, NIH launched a research network that focuses on testing new overdose reduction strategies, evaluating new ways to deliver existing strategies, and reaching rural and underserved populations.

Synthetic opioids and particularly illicitly manufactured fentanyl are the primary driver of overdose fatalities, making it critical to develop interventions to prevent and reverse opioid overdose. NIH is supporting research on several promising overdose reversal agents. By screening a massive chemical library, investigators recently found a compound that supercharges the opioid overdose reversal agent naloxone's ability to block opioid signaling by almost eight-fold. In a preclinical model of overdose, this compound enabled lower effective doses of naloxone and limited naloxone-induced withdrawal.²⁶ NIH is also developing an anti-fentanyl antibody. In preclinical studies, the antibody reversed drug-induced respiratory depression within minutes and protected against later drug exposures over the next month.²⁷ Researchers have completed a phase 1 clinical study on the compound and are analyzing the data.

Because drug combinations play an increasing role in overdose deaths, NIH is leading several research efforts to better understand drivers of polysubstance use and to develop effective interventions for it. For example, a HEAL-funded program supports research to define polysubstance use patterns and outcomes, and to improve their prevention and treatment. Other studies are testing interventions for polysubstance use in primary care settings. For example, collaborative care interventions emphasize shared decision-making between patients and their healthcare providers and have shown efficacy for treating chronic illness in primary care. In the Co-Care study, NIH-supported researchers are investigating whether primary-based collaborative care can reduce polysubstance use and overdose risk.

IRP investigators are leading research on innovative approaches to track overdose risk and outcomes. One group developed an AI method to help predict regional opioid overdose deaths based on social media data. By analyzing posts from over 6 million Twitter (now X) users, this method found that language expressing negativity, boredom, and overwork is a powerful predictor of overdose deaths at the county level.²⁸ Other IRP researchers are examining overdose risk from emerging synthetic opioids called nitazenes and have found that nitazene analogs are 10-40 times more potent than fentanyl.²⁹

²⁵ pubmed.ncbi.nlm.nih.gov/36328706

²⁶ pubmed.ncbi.nlm.nih.gov/38961287

²⁷ pubmed.ncbi.nlm.nih.gov/38052779

²⁸ pubmed.ncbi.nlm.nih.gov/37270657

²⁹ pubmed.ncbi.nlm.nih.gov/38481848

NIH supports research to develop more robust overdose prevention tools and devices, such as tools to help people check drugs for adulterants. For example, through its Small Business Innovation Research/Technology Transfer programs, NIH-funded researchers have developed new rapid-acting test strips that can detect fentanyl in amounts 1,000 times lower than the limit of currently available test strips.³⁰ Other research focuses on devices to more rapidly detect and treat overdose. One company has received FDA premarket clearance for a smartphone app that detects slowed breathing by recording inaudible soundwaves during chest movements.

NIH also supports research to improve nationwide monitoring of substance use trends. For example, the National Drug Early Warning System (NDEWS) explores methods to enhance real-time data on emerging drug threats, such as by monitoring drug mentions in 911 calls and social media. NDEWS and other programs have found that counterfeit pills containing fentanyl have spread throughout illicit drug markets³¹ and that the potent veterinary sedatives xylazine and medetomidine continue to spread as adulterants in illicit fentanyl.³² Both substances can produce extreme sedation, and xylazine injection can cause painful skin wounds.

NDEWS and Biobot Analytics—a commercial wastewater testing company that NIH supported as a small business startup—are also investigating wastewater-based epidemiology (WBE) to monitor community-level drug use, and to determine how to harmonize WBE with other more traditional drug use measures, as well as how to implement it on a national scale. While comprehensive analysis continues, participating public health departments are already using the Biobot data to inform overdose prevention efforts, such as increasing naloxone distribution to areas of high opioid use.

³⁰ pubmed.ncbi.nlm.nih.gov/38757262

³¹ pubmed.ncbi.nlm.nih.gov/38744553; pubmed.ncbi.nlm.nih.gov/39079225

³² pubmed.ncbi.nlm.nih.gov/38180756; pubmed.ncbi.nlm.nih.gov/39230918