NIDA Research on Cannabis and Cannabinoids

url: https://nida.nih.gov/research-topics/marijuana/nida-research-cannabis-cannabinoids  
  
  
What kinds of marijuana research does NIDA fund?  
As part of its mandate to study drug abuse and addiction and other health effects of both legal and illegal drugs, NIDA funds a wide range of research on marijuana (cannabis); its main psychotropic ingredient, delta-9-tetrahydrocannabinol (THC); and chemicals related to THC (cannabinoids), including:  
  
Patterns and trends in marijuana use and attitudes, particularly among adolescents, including THC vaping  
Short- and medium-term effects of THC on the brain and behavior; driving under the influence of cannabis; and genetic, epigenetic, and environmental factors that mediate marijuana s effects  
Long-term effects of prenatal and adolescent cannabis exposure on brain development  
Development and impact assessment of prevention programs on marijuana use  
Screening and brief assessment for cannabis use disorder  
Medications, mHealth, and behavioral treatments for cannabis use disorder  
Function of the brain s endocannabinoid system, including its role in pain, mental illness, and HIV  
Potential therapeutic uses of THC and other cannabinoids in treatment of pain, HIV, addiction, and other health conditions  
Social, behavioral, and public health and safety impacts of policy changes related to marijuana (i.e., medical marijuana and recreational legalization)  
Does NIH permit or fund studies on therapeutic benefits of marijuana or its constituent chemicals?  
Yes. Research suggests that THC and other cannabinoids, may have potential in the treatment of pain, nausea, epilepsy, obesity, wasting disease, addiction, autoimmune disorders, and other conditions. NIDA has provided and continues to provide funding for research related to therapeutic uses of cannabinoids as it pertains to its mission, including studies on the use of THC and cannabidiol (CBD), another chemical constituent of marijuana, for the treatment of pain (as an alternative to opioid pain relievers), addiction, and other disorders. Research on therapeutic uses of marijuana or of specific chemicals in the marijuana plant for other diseases and conditions is supported by other components of the National Institute of Health (NIH) as is appropriate to their mission. For a complete listing of all projects funded by NIH examining the potential therapeutic benefits of cannabinoids, see the Therapeutic Cannabinoid Research category in the NIH RePORT database.  
  
The vast majority of research proposals received and funded by NIH on therapeutic benefits of cannabinoids have examined individual cannabinoid chemicals or, in a few cases, marijuana leaves delivered through some means other than smoking. Various factors make smoked marijuana less therapeutically promising than cannabinoids medications delivered through alternative routes of administration, including the potential harmful effects on the lungs and the risk for addiction. In addition, marijuana leaves contain numerous poorly understood chemicals in addition to THC and CBD. It is difficult to standardize dosages of a smoked plant with highly variable cannabinoid concentrations (see NIDA s DrugFacts, Marijuana as Medicine). A few medications derived from THC, however, are now approved by the U.S. Food and Drug Administration for relieving nausea associated with cancer chemotherapy and stimulating appetite in patients with wasting syndrome that often accompanies AIDS.  
  
Research proposals submitted to any NIH Institute of Center (IC) to study therapeutic benefits of marijuana or one of its ingredients must meet the same accepted standards of scientific design as any other proposal and, on the basis of peer review, should meet public health significance and IC priorities to be competitive with other applications that qualify for funding.  
  
Does NIDA have an official stand on legalization or decriminalization of marijuana for either recreational or therapeutic use?  
No. NIDA is a scientific, not a policy-making agency. The same is true for the NIH as a whole. NIDA s role is to conduct and support scientific research on drugs and drug abuse and to advise the public and policy-makers, such as Congress, the White House Office of the National Drug Control Policy, and the U.S. Drug Enforcement Administration on the results of that research with the goal of ensuring that the nation s drug policies are informed by science.That said, NIDA does closely watch legislative changes both nationally and at the state level and supports research that studies how changing drug policies for instance laws around recreational or therapeutic use of marijuana affect rates of substance use and related public health issues.