“Marijuana’s Pandora’s Box in the U.S.”

What America has learned about high-potency cannabis, commercialization, children, mental health, public safety—and the promise of tax revenue

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September 2026 revised and expanded edition by Chaplain Todd DuBord, M.Div.

September 2026 Revision — Updated and expanded with current medical research, public-health evidence, economic data, and updated facts and figures.

In dedication and memory of Chuck Norris (1940–2026), with whom I originally researched and wrote this warning about America’s changing cannabis culture. This revised edition is offered in gratitude for his friendship, conviction, and lifelong concern for the well-being of America’s families.

Chuck passed away on March 19, 2026, before this expanded edition was completed. I have therefore undertaken this September 2026 revision myself, preserving the concerns we originally raised together while correcting outdated figures, strengthening claims where newer evidence warrants it, qualifying claims where the science requires greater precision, and incorporating major research published since our original article. (See The Washington Post obituary of Chuck Norris and “My 20-Year Adventure With Chuck Norris (My Tribute)”.)

When actress Whoopi Goldberg wrote enthusiastically in 2014 about the marijuana vape pen she nicknamed “Sippy,” America was already entering a cannabis era markedly different from anything previous generations had known. The marijuana debate many Americans remembered from the 1960s, 1970s and even 1990s was largely a debate about smoking a plant. Today that same word—marijuana or cannabis—can describe not only the plant but also concentrated oils, vape cartridges, gummies, chocolates, beverages, waxes, “dabs,” and other manufactured products capable of delivering concentrations of THC that earlier generations rarely encountered.

When we originally wrote “Marijuana’s Pandora’s Box in the U.S.,” our central concern was that Americans were making enormous social decisions about cannabis while the product itself was changing underneath us. We warned about increasing THC potency, vaping, edibles, youth exposure, addiction, psychiatric consequences and emergency-room visits. Years later, a much larger body of research allows us to revisit those concerns with far greater precision.

From the beginning, Chuck and I did not approach this issue as detached observers of legalization. During the years we researched and wrote about marijuana together, we both opposed the legalization and commercial expansion of recreational cannabis because of what we believed the accumulating medical, family and social evidence was showing. We had also seen firsthand, over many years, what drug abuse and addiction could do to individuals, marriages, children and entire families. In my own case, that experience began even before my four decades of pastoral ministry. While completing my graduate-degree education and ministry internships in Southern California, I volunteered as a drug counselor at a recovery center in Los Angeles, working directly with men and women struggling to break the grip of substance abuse and rebuild damaged lives. In the forty years of pastoral ministry that followed, I continued seeing the other side of that tragedy—not merely the person using the substance, but spouses losing trust, parents grieving over children, children living with the consequences of an impaired parent, marriages strained or broken, and families attempting to recover long after the original choices had been made.

Those experiences do not by themselves settle every scientific or public-policy question, and they should never be used to pretend that every person who uses marijuana will become addicted or that cannabis alone explains every family crisis. They are, however, part of the reason I have taken the medical and social evidence surrounding marijuana so seriously. Chuck and I consistently opposed recreational marijuana legalization and commercialization during the years we addressed this subject together. The evidence has continued to evolve since our original article, but in my judgment the broader concerns that led us to that conclusion have become more—not less—serious as the modern cannabis marketplace has expanded.

Serious public-health analysis should never depend upon exaggeration. Where studies demonstrate an association rather than proof of causation, this revision says so. Where researchers disagree, that uncertainty belongs in the discussion. Where legal cannabis generates genuine tax revenue, that fact should be acknowledged before asking whether those revenues are large, dependable and sufficient to offset the administrative, medical and social costs accompanying commercialization.

The scientific discussion itself has also matured. In 2024, the National Academies of Sciences, Engineering, and Medicine, at the request of the CDC and NIH, published a major consensus report examining what several decades of changing cannabis policy have taught the United States. Its expert committee represented public health, addiction medicine, epidemiology, economics, neuroscience, pediatrics and policy analysis. The report concluded that cannabis markets, products and policies have evolved faster than consistent public-health protections and research systems have kept pace. (See National Academies, Cannabis Policy Impacts Public Health and Health Equity.)

The marijuana of yesterday is not the THC marketplace of today

One of the clearest developments in modern cannabis is the enormous change in THC potency. THC—delta-9-tetrahydrocannabinol—is the principal psychoactive component responsible for marijuana's intoxicating effects, and the quantities available in modern commercial products can be dramatically greater than those found in marijuana consumed several decades ago.

Ziva Cooper, Ph.D., a UCLA neuroscientist and psychopharmacologist who directs the UCLA Center for Cannabis and Cannabinoids and has served on the National Academies cannabis-policy committee, is among the researchers conducting controlled human studies of cannabis potency, concentrates and the interaction between THC and CBD. UCLA continues to study high-potency concentrates alongside smoked cannabis because potency has become a central question in contemporary cannabis science. (See UCLA — Ziva Cooper research profile.)

The Centers for Disease Control and Prevention notes that THC concentrations in cannabis have increased over recent decades and that greater concentrations can produce stronger effects on the brain. Modern public-health research therefore increasingly distinguishes high-potency products from lower-potency cannabis instead of treating every exposure as pharmacologically equivalent. (See CDC — Understanding Your Risk for Cannabis Use Disorder.)

That distinction is essential because "cannabis" is no longer a precise description of dose. Lower-potency flower, 20-percent-plus flower, an edible containing a measured THC dose, a vape cartridge and a concentrated extract can all be called cannabis while exposing a consumer to very different pharmacological experiences. Someone whose personal experience with marijuana comes from comparatively weak cannabis decades ago should therefore be cautious about assuming that high-potency modern products are merely the same drug in newer packaging.

The 2024 National Academies report documents a contemporary marketplace containing flower, concentrates, edibles, dabs, vape cartridges and other products that differ substantially in THC concentration and method of administration. The policy debate therefore concerns not only whether marijuana is legal, but what kind of cannabis marketplace a community is creating. (See National Academies — cannabis products and policy context.)

From legalization to commercialization

Another distinction frequently lost in the national debate is the difference between decriminalization, legalization and commercialization. They are not synonymous policies. A government might reduce penalties for possessing cannabis without establishing retail stores, authorize limited medical access without creating a recreational marketplace, or permit adult possession while restricting delivery, advertising, retail density, edibles or concentrations of THC.

Commercialization introduces normal market forces such as product innovation, price competition, convenience, customer retention, branding and attempts to expand market share. Those features are not unique to cannabis businesses; they characterize most consumer industries. They deserve closer scrutiny, however, when the commodity being commercialized is psychoactive and can produce dependency in some consumers.

Rosalie Liccardo Pacula, Ph.D., an economist who holds USC's Elizabeth Garrett Chair in Health Policy, Economics and Law, previously spent 21 years at RAND and co-directed RAND's Drug Policy Research Center for 15 years. Her research has focused extensively on the economics of addictive products and the consequences of different regulatory systems. She has served on cannabis-policy bodies for NIDA, the World Health Organization and the National Academies, and her work emphasizes that public-health regulation must account for the very different risks of low-potency plant material and high-potency manufactured products. (See USC — Rosalie Liccardo Pacula biography.)

Pacula and colleagues have argued that cannabis regulation should pay much greater attention to THC potency, product form and patterns of heavy use rather than treating all cannabis products as interchangeable. That is an important distinction because the modern policy question is larger than whether someone carrying marijuana should be arrested; communities are increasingly deciding whether to build a retail marketplace involving storefronts, delivery, concentrated products and convenient edible forms. (See USC Schaeffer Center — Federal Regulation of Cannabis for Public Health.)

The National Academies issued an important warning

The National Academies' 2024 consensus report deserves particular attention because it was not produced by a marijuana-industry group or an anti-marijuana advocacy organization. It was commissioned by the CDC and NIH and written by an interdisciplinary committee of scientists, economists, physicians and policy specialists who approached cannabis from different fields and perspectives.

Among its members were Yasmin Hurd, Ph.D., director of the Addiction Institute at Mount Sinai; Ziva Cooper of UCLA; Beau Kilmer of RAND; Rosalie Pacula of USC; Magdalena Cerdá of NYU; and other nationally recognized researchers. The National Academies describes consensus reports as evidence-based findings subjected to rigorous independent peer review and representing the institution's conclusions concerning the assigned question. (See National Academies — committee and consensus report.)

Yasmin Hurd, Ph.D., the Ward-Coleman Chair of Translational Neuroscience and director of Mount Sinai's Addiction Institute, is one of America's leading researchers on addiction neurobiology and developmental exposure to cannabis. Hurd served as vice chair of the National Academies committee. Looking at the rapidly changing marketplace, she observed that "the knowledge of the scientists, policymakers, and the public has failed to keep pace" with the expansion of the American cannabis market. (See Mount Sinai — Setting the Stage for Better Education on Cannabis Use.)

That observation goes to the heart of the problem. Cannabis commercialization accelerated while researchers were still trying to understand products that were becoming stronger, more diverse and easier to consume. That does not prove that every commercial innovation is harmful, but it does mean public policy has often had to respond after new products and consumption patterns were already established.

Marijuana can produce cannabis-use disorder

One of the persistent myths surrounding marijuana has been that it is essentially non-addictive. Contemporary medicine does not support that categorical claim. Cannabis-use disorder is a recognized clinical diagnosis ranging from mild to severe and can involve craving cannabis, using more than intended, repeated unsuccessful attempts to stop, spending considerable time obtaining or using it and continuing despite health or social consequences.

The CDC estimates that approximately three in ten people who use cannabis have cannabis-use disorder, with risk increasing among those who begin using during youth or adolescence and among people who use it more frequently. That statistic does not mean three out of every ten people who ever experiment with marijuana become profoundly addicted, because cannabis-use disorder exists along a continuum of severity. It does mean the familiar assertion that marijuana cannot produce dependency is inconsistent with contemporary medical knowledge. (See CDC — Understanding Your Risk for Cannabis Use Disorder.)

Dr. Hurd's laboratory at Mount Sinai has spent years investigating the neurobiological mechanisms of addiction and how developmental drug exposure may influence later vulnerability. Her work combines human brain research with experimental models and illustrates why cannabis dependency is now studied as a genuine neurobiological and behavioral disorder rather than dismissed as a matter of weak willpower. (See Mount Sinai — Addiction Institute and Yasmin Hurd research.)

Potency intensifies the concern. A 2025 systematic review examining high-concentration THC products found especially consistent unfavorable associations with cannabis-use disorder and psychosis or schizophrenia, while also warning that much of the literature remains observational and that many studies carry moderate or high risk of bias. That combination is exactly why this article distinguishes concern from certainty: the signal is serious, but the limitations of the evidence should remain visible. (See PubMed — High-Concentration THC Products and Mental Health Outcomes.)

High-potency THC and psychosis

Our original article referred to research suggesting an approximately fivefold increase in psychosis associated with marijuana. That formulation was too broad and deserves correction because the strongest finding did not apply to every person who had ever used cannabis. It involved daily use of high-potency cannabis compared with never-use.

The influential international research was led by Marta Di Forti, M.D., Ph.D., Professor of Drug Use, Genetics and Psychosis at King's College London and an honorary consultant psychiatrist who leads the United Kingdom's first specialist cannabis clinic for patients with psychosis. Her team compared people experiencing first-episode psychosis with healthy controls across 11 European sites and found that daily cannabis use was associated with roughly three times the odds of first-episode psychosis, while daily high-potency use was associated with approximately five times the odds. (See King's College London — High-potency cannabis linked to higher rates of psychosis.)

Professor Di Forti, recipient of the 2025 Schizophrenia International Research Society Outstanding Translational Research Award, has emphasized that changing patterns of cannabis use make potency a major public-health concern. She has said it is "of vital public health importance" to consider adverse effects associated with daily and high-potency cannabis use. (See King's College London — Di Forti translational research award.)

More recent work from Di Forti's group has added another important dimension by finding that the risk of psychotic disorder appears to decline after cannabis cessation, while some frequent high-potency users may retain elevated risk for a longer period. That evidence does not establish that cannabis alone explains every case of psychosis, because genetics, previous psychiatric symptoms, other substance use and socioeconomic factors can complicate observational research. It does reinforce the conclusion that frequency and potency matter greatly. (See King's College London — Cannabis cessation and psychosis risk.)

The developing adolescent brain deserves special attention

Cannabis exposure during adolescence deserves special attention because the nervous system is still undergoing major development. This does not justify claiming that every teenager who experiments with marijuana will experience permanent brain damage. Human development is more complicated, and adolescent cannabis use can coexist with educational, psychiatric, family and social factors that make causal interpretation difficult.

The CDC nevertheless warns that cannabis can affect functions involving memory, learning, attention, decision-making, coordination and reaction time, while the risk of cannabis-use disorder is higher among those who begin using during youth or adolescence. These concerns become more consequential when young users are exposed not only to traditional cannabis flower but also to discreet high-potency vapes and concentrates. (See CDC — Cannabis and Teens.)

Dr. Hurd's research has focused extensively on developmental drug exposure and the neurobiology of addiction. Her laboratory combines human and experimental research to

investigate how cannabis exposure during developmental periods may alter neural systems associated with later vulnerability, which is why the adolescent brain cannot responsibly be treated as simply a smaller version of the mature adult brain. (See Mount Sinai — Yasmin Hurd laboratory research.)

When marijuana becomes candy

Perhaps nothing illustrates the transformation of cannabis more vividly than edible products. Marijuana can now be consumed as gummies, chocolates, baked goods, beverages and other familiar food forms. The danger to children does not require assuming that legal businesses deliberately want toddlers consuming cannabis; a small child cannot reliably distinguish an ordinary gummy from a THC-infused gummy based solely on appearance.

A major study published in Pediatrics examined National Poison Data System reports involving edible cannabis exposures among children younger than six. Researchers identified 7,043 exposures between 2017 and 2021, with reported cases rising from 207 in 2017 to 3,054 in 2021—an increase of 1,375 percent. Nearly 23 percent of the reported children were admitted to a hospital. Those figures do not prove that legalization alone caused every exposure, but they show how dramatically the pediatric poisoning problem expanded during the growth of the commercial edible market. (See American Academy of Pediatrics — Pediatric Edible Cannabis Exposures and Acute Toxicity: 2017–2021.)

The CDC also warns that edible cannabis poses particular risks because intoxicating effects may be delayed, leading some users to consume additional THC before the first dose has taken full effect. Product form therefore changes risk: a child is unlikely to mistake a traditional marijuana cigarette for candy, whereas an edible product creates an entirely different pathway for accidental ingestion. (See CDC — Cannabis poisoning and edibles.)

California's emergency rooms are part of the story

California now has enough experience with legal cannabis that the state maintains a dedicated cannabis-related emergency-department surveillance system. The California Department of Public Health tracks emergency visits involving cannabis poisoning, dependence, abuse and use, allowing public-health officials to examine patterns across time, age groups and counties.

These statistics require careful interpretation because a cannabis-related emergency visit does not necessarily mean marijuana was the sole cause of every medical problem. Cannabis may be the primary cause, a contributing factor or one of several substances involved. Yet the existence of a substantial statewide burden of cannabis-associated emergency care remains relevant to claims that modern marijuana produces little meaningful public-health consequence. (See California Department of Public Health — Cannabis-Related Emergency Department Visits Dashboard.)

The larger lesson is that a commercial cannabis system does not exist only at the cash register where taxes are collected. Its consequences also appear in healthcare systems, poison

centers, mental-health services and emergency departments, and those effects do not always fit neatly into the optimistic economic projections offered when retail legalization is debated.

Cannabinoid hyperemesis syndrome is now a recognized clinical disorder

Our original article discussed reports of chronic marijuana users experiencing cycles of severe nausea and repeated vomiting, a condition that at the time was often described in popular media as mysterious. Today it is widely recognized clinically as cannabinoid hyperemesis syndrome, or CHS, generally occurring among some people who use cannabis frequently over long periods and producing recurrent bouts of severe nausea, vomiting, abdominal pain and dehydration.

The National Academies defines CHS as cyclical nausea, vomiting and abdominal pain occurring after prolonged cannabis use, with symptoms typically resolving after cessation. The irony is striking because cannabis can have anti-nausea applications in some medical contexts, yet prolonged heavy use in susceptible individuals can produce repeated severe vomiting. That apparent contradiction demonstrates why cannabis cannot responsibly be described simply as either “medicine” or “poison”; effects depend on dose, frequency, formulation and individual susceptibility. (See National Academies — cannabis terminology and health effects.)

Driving presents a problem science has not solved as neatly as alcohol

Cannabis presents a difficult road-safety problem because the relationship between THC concentration and functional impairment is more complicated than the relationship between blood-alcohol concentration and alcohol impairment. A person can test positive for THC after the period of greatest acute impairment has passed, and individuals vary substantially in their responses.

That measurement problem does not mean cannabis cannot impair driving. The CDC states that marijuana can slow reaction time, impair coordination and decision-making, and alter perception—abilities essential to operating a vehicle safely. This means communities cannot simply import the regulatory model developed for alcohol, because legalization can expand lawful access while law enforcement continues to face substantial difficulty establishing precisely when an individual cannabis user is functionally impaired. (See CDC — Cannabis and Driving.)

Wilson Compton, M.D., M.P.E., Deputy Director of the National Institute on Drug Abuse and a psychiatrist and epidemiologist who has spent decades studying substance-use patterns and prevention, has helped oversee NIDA’s national research portfolio addressing drug use, epidemiology and public health. His career illustrates why cannabis-impaired driving, dependency and changing consumption patterns remain active research questions rather than fully solved problems. (See NIH/NIDA — Wilson Compton biography.)

The rural workplace deserves far more attention

Our original article gave too little attention to cannabis in safety-sensitive employment. That omission is particularly important for rural communities, where forestry, construction, agriculture, trucking, utilities, road crews, emergency response and heavy-equipment operation all require rapid judgment, coordination and reaction time. An error that might be inconsequential while sitting at home can become catastrophic while operating a logging truck, chainsaw, excavator or other industrial equipment.

This does not justify assuming that every person who lawfully uses cannabis away from work is impaired during working hours. It does mean that increasing access to an intoxicating product presents practical questions for employers because biological testing can often reveal previous cannabis exposure more easily than it can establish precise impairment at a particular moment. For rural America, the cannabis debate therefore cannot remain confined to discussions of storefront locations and tax receipts; employers, workers, insurers, first responders and public-safety agencies are stakeholders as well.

Pregnancy and another developing life

Pregnancy deserves similar care. THC can reach the developing fetus, which is why major medical and public-health bodies advise against cannabis use during pregnancy. Research continues to evaluate outcomes including birth weight, neurodevelopment and pregnancy complications while attempting to disentangle cannabis exposure from tobacco use, socioeconomic conditions and other variables.

The CDC advises pregnant women not to use cannabis and states that prenatal exposure may affect fetal development and increase pregnancy complications. Some studies have found associations with lower birth weight and abnormal neurological development, although the agency emphasizes that additional research is still needed to understand the magnitude and mechanisms of these effects fully. (See CDC — Cannabis and Pregnancy.)

The biological point is straightforward: “natural” and “harmless” are not synonyms. Cannabis contains pharmacologically active compounds capable of crossing into fetal circulation, so pregnancy represents a population for whom substantially greater caution is warranted.

Why legalization and commercialization are not the same question

This distinction deserves repeating because it is fundamental to the entire discussion. A society may conclude that putting adults in jail for possessing marijuana creates harms of its own. That conclusion does not automatically require the creation of an unrestricted commercial industry or the expansion of local retail access.

Jonathan P. Caulkins, Ph.D., Carnegie Mellon University’s H. Guyford Stever University Professor of Operations Research and Public Policy and a member of the National Academy of Engineering, has spent decades applying mathematical and systems analysis to drug markets, illegal markets and cannabis policy. He coauthored Marijuana Legalization: What Everyone Needs to Know and has emphasized throughout his work that cannabis policy encompasses

many regulatory models rather than a binary choice between total prohibition and unrestricted commercialization. (See Carnegie Mellon — Jonathan P. Caulkins biography.)

The 2024 National Academies report reaches a similar structural conclusion by showing that cannabis legalization has taken many forms around the world, with dramatically different degrees of commercialization, retail access and regulatory control. Public-health consequences therefore cannot be understood merely by sorting jurisdictions into the simple categories "legal" and "illegal." (See National Academies — cannabis policy models and commercialization.)

Tax revenue is real—but that is only the beginning of the calculation

Supporters of commercial cannabis frequently cite tax revenue, and responsible analysis should acknowledge immediately that the revenue is real. States with mature legal markets have collected hundreds of millions of dollars annually from cannabis taxes and fees, and some of those revenues fund worthwhile public programs. Dismissing those receipts merely because one opposes cannabis commercialization would weaken rather than strengthen the fiscal analysis.

Colorado provides one of the clearest long-term examples. Official state figures show marijuana tax and fee revenue of approximately $423.5 million in 2021, followed by approximately $325.1 million in 2022, $274.1 million in 2023, $255.4 million in 2024 and $236.4 million in 2025. Those are substantial sums, but the same figures show that annual collections fell by roughly 44 percent from the 2021 peak to 2025. (See Colorado Department of Revenue — Marijuana Tax Reports.)

That decline is why "increased tax revenue" is not, by itself, a complete argument for retail cannabis. A county considering commercial marijuana needs to know how much revenue is expected relative to its total budget, whether that revenue will remain stable, what portion is recurring, and how much must be spent on planning, inspections, tax administration, legal review, public-health oversight and law enforcement before determining the genuine net fiscal benefit.

Dr. Pacula's career has centered on precisely these questions involving the economics of addictive goods, illicit markets and government regulation. Her work emphasizes that cannabis markets respond to ordinary supply-and-demand forces and that tax and regulatory structures alter both consumer and producer behavior. A cannabis tax therefore should not automatically be treated as an indefinitely expanding revenue source capable of permanently financing recurring governmental obligations. (See USC — Rosalie Liccardo Pacula research profile.)

Regulation costs money and expertise

Cannabis does not become administratively simple merely because it becomes legal. Local governments must address zoning, application review, background investigations, inspections, taxation, building compliance, product rules, advertising restrictions, legal questions, security, complaints and enforcement against operators who remain outside the licensed market.

The National Academies' 2024 review concluded that states have developed widely inconsistent public-health protections as policy changes proceeded rapidly without a single

coherent federal regulatory framework. That finding is particularly relevant to small counties, which may have far fewer planning, enforcement and public-health personnel than major metropolitan governments even though they must still understand and administer complex cannabis regulations. (See National Academies — Cannabis Policy Impacts Public Health and Health Equity.)

This does not prove that every cannabis regulatory program costs more than it generates. It demonstrates why gross tax revenue and net public benefit are not the same figure. Planning staff, legal counsel, tax administration, inspections, public-health monitoring and enforcement all impose costs that should be included whenever a jurisdiction advertises the economic advantages of commercial cannabis.

Limited licenses create another governmental challenge

Whenever government allows only a small number of businesses to operate, the licenses themselves can acquire substantial private economic value. Scarcity can produce intense competition for those licenses, making transparent scoring criteria, conflict-of-interest rules and meaningful appeals particularly important.

California's State Auditor examined cannabis permitting practices in several local jurisdictions and warned that systems limiting the number of permits can increase the value of those permits and therefore increase incentives for favoritism or improper influence if safeguards are weak. The Auditor recommended structural protections including blind scoring, impartiality declarations, transparent criteria and independent appeals. That warning does not imply that every local official or applicant is corrupt; it means the structure deserves careful protection wherever government distributes a small number of economically valuable commercial privileges. (See California State Auditor — Local Cannabis Permitting.)

The illegal market did not simply disappear

One of legalization's most attractive promises was that licensed businesses would replace illicit cannabis sellers. Legal markets unquestionably can displace part of the illegal market and provide real advantages involving product testing, labeling and traceability, but experience in legal-cannabis states demonstrates that regulated and illegal suppliers can coexist for long periods.

Dr. Pacula's work on California's legal and illicit cannabis markets has emphasized that illegal producers can remain competitive when taxes, compliance costs and prices create significant differences between regulated and unregulated products. Her analysis of California's cannabis economy has consequently warned against assuming that legalization automatically removes the illegal market. (See USC — Small Cannabis Producers Have Bigger Problems than State Taxes and Regulation.)

The responsible conclusion is therefore modest but important. Legal retail may reduce portions of illegal commerce and may provide safer tested products for legal consumers, but legalization does not automatically make the black market disappear. A county considering retail

sales should evaluate illegal-market enforcement separately rather than assuming licensed storefronts will solve that problem on their own.

Rural California offers a caution about cannabis as an economic strategy

The experience of cannabis-intensive rural counties should also be considered carefully. Mendocino County, for example, has faced broader financial challenges documented by the California State Auditor, including rising expenditures and weakening reserves. The audit did not conclude that cannabis caused Mendocino County's overall fiscal problems, and it would be inaccurate to characterize the county's finances that way.

Nevertheless, Mendocino officials told state auditors that the sharp decline in the local cannabis market may have contributed to difficulties collecting taxes from properties involved in cannabis-related activity. The lesson is not that cannabis inevitably bankrupts rural counties; it is that a once-growing cannabis economy can contract sharply and should not automatically be treated as a permanently expanding foundation for local economic development. (See California State Auditor — Mendocino County audit.)

Rural communities have seen similar cycles in agriculture, mining, timber and other industries. Markets rise, investment follows, tax projections become optimistic and eventually prices or demand change. Cannabis should be evaluated with the same economic realism rather than being granted an assumption of permanent growth.

Crime is one area where evidence should not be exaggerated

Public discussions about dispensaries sometimes imply that every marijuana retailer automatically produces a surge in violent or property crime. The research does not justify such a universal conclusion, and repeating it indiscriminately can weaken stronger, better-supported concerns.

Different studies have reached different results depending upon location, store density, neighborhood conditions, security requirements, illicit-market competition and research methodology. Some have identified increases in particular categories or nearby areas, while others have not found significant changes. There remain legitimate public-safety questions involving impaired driving, theft, diversion, youth access, cash handling and unlicensed competitors, but those concerns are substantial enough without claiming that every dispensary inevitably transforms its neighborhood into a high-crime area.

Some of the most important costs never appear in a county budget

Government budgets can quantify license fees, tax receipts and employee salaries. They have much greater difficulty assigning a single dollar amount to a teenager developing cannabis-use disorder, a family dealing with psychosis, a child hospitalized after ingesting an edible, a driver involved in an impairment-related crash or a worker injured in a safety-sensitive environment.

That does not mean each such event should be attributed to legalization, because human behavior and public health are far too complicated for that. It does mean that a fiscal analysis

counting every tax dollar while ignoring dispersed health and social consequences is incomplete. Public policy has always involved more than government revenue because communities consist of people before they consist of spreadsheets.

Legal availability and commercial availability are not the same thing

Another common argument is that adults already possess and use cannabis, so allowing local retail merely captures purchases that would otherwise occur elsewhere. That may accurately describe some transactions. A resident already driving to another county could make the same purchase locally, keeping some of the economic activity and tax revenue closer to home.

Economists would also ask whether easier access changes behavior. When a product becomes closer, more convenient, available through delivery and incorporated into ordinary commerce, the time and effort required to obtain it decline. It therefore cannot simply be assumed that every local sale represents precisely the same consumption that would have taken place somewhere else. The actual effect may vary by community and population, but the legality of possession and the decision to expand local commercial availability remain separate policy choices.

What America still does not know

One of the most striking conclusions from the National Academies' review is not simply how much researchers now know, but how many important questions remain unanswered. Cannabis products, use patterns and markets continue evolving, while researchers still need better long-term evidence concerning product potency, modes of consumption, population-level harms, roadside impairment, the comparative risks of smoking, vaping, edibles and concentrates, and the consequences of different regulatory systems.

The committee concluded that scientific knowledge and public-health infrastructure have struggled to keep pace with rapidly changing cannabis products and policies. Dr. Hurd's warning therefore bears repeating: "the knowledge of the scientists, policymakers, and the public has failed to keep pace." (See Mount Sinai — Setting the Stage for Better Education on Cannabis Use.)

That is a remarkable sequence. America has moved deeply into commercial cannabis while researchers are still trying to understand the long-term consequences of products dramatically stronger and more varied than those around which much of the original legalization debate developed. In many respects, society changed the marketplace first and researchers were left trying to measure the consequences afterward.

Pandora's Box revisited

The ancient story of Pandora describes the opening of something whose consequences could not simply be gathered up and placed back inside once released. Like every metaphor, it is imperfect, but it continues to illuminate something important about America's cannabis experience.

The country did not merely legalize the comparatively weak marijuana remembered by many older Americans. It helped create a commercial environment in which cannabis could evolve into stronger flower, concentrated extracts, vape products, gummies, beverages and increasingly convenient forms of THC consumption. Medical researchers such as Yasmin Hurd at Mount Sinai, Ziva Cooper at UCLA and Marta Di Forti at King's College London, along with economists and policy scholars such as Rosalie Pacula at USC and Jonathan Caulkins at Carnegie Mellon, have spent years documenting different pieces of that transformation. Their conclusions are not identical, nor do they all advocate precisely the same cannabis policies, which is exactly why their collective work is valuable.

Some adults use cannabis without developing cannabis-use disorder. Some cannabinoids have legitimate therapeutic potential. Regulated products can provide testing and labeling that illicit products lack. Cannabis taxes can generate meaningful government revenue, and not every feared consequence of legalization has appeared uniformly in every jurisdiction. Those facts should be acknowledged because scientific credibility depends on telling the whole truth, not only the evidence that supports one side of a policy argument.

Those acknowledgments do not erase the other side of the evidence. Cannabis can produce dependency. Younger initiation and frequent high-potency use are associated with greater psychiatric risk. Modern products can deliver much larger doses of THC than marijuana from previous generations. Edibles create new accidental-ingestion hazards, cannabis can impair activities essential to safe driving and work, and legal markets require substantial systems of regulation while illegal markets can persist alongside them.

For all of these reasons, Chuck and I opposed the legalization and commercialization of recreational marijuana throughout the years we addressed this subject together. That conclusion grew from both the evidence we examined and what we had seen substance abuse do to real people and families. Since Chuck's passing in March 2026, I have continued reviewing the newest medical and public-health literature for this revised edition. Nothing in that updated record persuades me that the core concerns we raised should be relaxed; in my judgment, the emergence of higher-potency products, concentrated THC, edible exposures, cannabis-use disorder, psychiatric concerns and the difficulties of regulating a rapidly commercialized market make those questions even more pressing.

For me personally, this conclusion is not merely the product of reading medical journals. Long before completing forty years of pastoral ministry, while pursuing my graduate-degree education and fulfilling ministry internships in Southern California, I volunteered as a drug counselor in a Los Angeles recovery center. I saw people struggling desperately to regain control of lives that substance abuse had helped unravel. During the decades of ministry that followed, I encountered those struggles from another vantage point—across the desk, in homes, beside hospital beds and among families trying to put relationships back together. I have watched the effects reach far beyond the individual to husbands and wives, mothers and fathers, sons and daughters, employers, churches and communities.

Those experiences do not permit me to say that every person who uses marijuana will become addicted, that every struggling family reached its condition because of cannabis, or that

marijuana should be blamed for every social consequence associated with substance abuse. The scientific evidence itself would not justify those claims. But firsthand experience has taught me something statistics can easily obscure: when substance use does become destructive, the consequences rarely stop with the person consuming the drug. Families often live with them too, which is why the discussion over commercialization has never seemed to me like an abstract debate over tax receipts, personal preference or another item appearing on a retail shelf.

Our original article closed with a biblical principle that remains remarkably relevant: “All things are permitted, but not all things are of benefit.” — 1 Corinthians 10:23. The distinction between what government permits and what genuinely benefits individuals, families and communities sits near the center of the cannabis debate. Something can be legal while still carrying significant health risks, and an industry can produce genuine tax revenue while also requiring regulation and creating public costs.

America now possesses considerably more evidence than it did when the modern legalization movement accelerated. Yet the nation is also experimenting with products, concentrations and commercial systems that earlier generations never contemplated. The responsible task is to examine that evidence without minimizing it and without claiming more than it proves, remembering that behind every statistic about potency, addiction, psychosis, impaired driving, childhood exposure or revenue are real people and real families who will ultimately carry the consequences.

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