


STIGMA WITH A BODY COUNT



MEDICAL CANNABIS & ORGAN TRANSPLANT POLICIES

**DISCRIMINATION & BIAS OVERSHADOW
RESEARCH IN TRANSPLANT ACCESS**



Americans for
Safe Access

March 2026

Studies show that medical cannabis patients face reduced access to lifesaving, organ transplant opportunities, often with fatal consequences. Institutional bias within individual transplant programs continues to reinforce outdated assumptions, even though research across kidney, liver, heart, and lung transplantation has yet to identify clinical evidence that medical cannabis exposure alone jeopardizes transplant success. Instead, the available evidence indicates that the most credible cannabis-related risks can be addressed through patient education, product safety standards, disclosure, and careful monitoring. Even in states that prohibit the denial of transplant-related services solely on the basis of medical cannabis patient status, the absence of a national evidence-based standard has allowed inconsistent policies to persist. As a result, organ transplant access remains shaped by lingering stigma rather than clinical evidence.

STIGMA WITH A BODY COUNT: MEDICAL CANNABIS & ORGAN TRANSPLANT POLICIES

Discrimination & Bias Overshadow Research in Transplant Access

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ACKNOWLEDGMENTS:

A special thanks to Karen Jaynes, Codi Peterson, PharmD, Nicky Robins, and Dr. Ryan Vandry for their contributions. This report is in honor of the bravery and courage of Patrick Navarro, his devoted friends and family, especially his wife, Cindy Navarro, who inspired the drafting of this report, to all the patients and families still struggling with stigma and discrimination in their healthcare, and to the advocates fighting to end it.

Founded in 2002, Americans for Safe Access (ASA) is the largest national member-based organization of patients, medical professionals, scientists, and concerned citizens promoting safe and legal access to cannabis for therapeutic use and research.

A LETTER FROM ASA'S EXECUTIVE DIRECTOR

Every policy failure in this report has a human face.

For **Americans for Safe Access (ASA)**, the fight against transplant discrimination did not begin as a theoretical exercise or in legislative drafts. It began with patients and families confronting impossible choices while trying to survive. More than a decade ago, one of those patients was **Norman Smith**, a California medical cannabis patient with liver cancer who was removed from the transplant waiting list after testing positive for tetrahydrocannabinol (THC), despite using cannabis under medical guidance. **His case helped expose a brutal reality: in transplant medicine, stigma can become a death sentence. Norman died before the law caught up with patient needs and before he received the transplant that might have saved his life.**



His experience was not an isolated tragedy. ASA heard from other patients and families facing the same kind of exclusion, the same assumptions, and the same refusal to distinguish between lawful medical treatment and illicit drug abuse. Those cases made clear that medical cannabis patients were being judged through a framework inherited from prohibition rather than by individualized medical evidence. That is why ASA fought for **California's Medical Cannabis Organ Transplant Act**, the first state law in the nation to prohibit denial of transplant-related services solely based on cannabis medicines, and why we continue to fight for similar protections in states across the country.

Ten years later, this issue remains unresolved.

Today, ASA is supporting Patrick Navarro and his family as they fight for reconsideration of a lung-transplant denial issued by the University of California, San Francisco (UCSF). **Patrick is a pancreas and kidney transplant recipient who is currently in the intensive care unit at UCSF, on mechanical ventilation and extracorporeal membrane oxygenation (ECMO) support, after his health deteriorated following a serious infection earlier this year.**

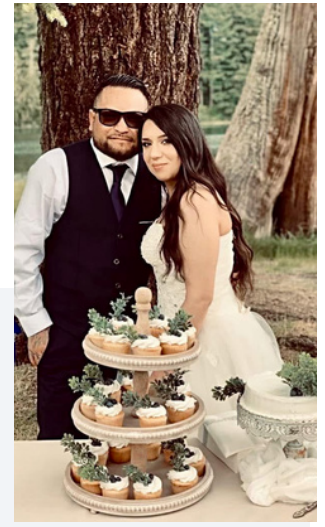


For months, Patrick has been working with ICU staff to build enough strength to endure the lung transplant he needs to survive. Diabetes, the underlying condition that led to his prior organ transplants, has also forced him to live with severe neuropathic pain. Like many patients with that condition, he did not find adequate relief from standard therapies such as gabapentin and amitriptyline and instead relied on medical cannabis to manage his pain.

On March 5, 2026, Patrick received written notice that UCSF had declined him for lung transplantation. The reason provided to the family was explicit: **“long-term marijuana use raising concerns regarding the ability to maintain durable abstinence after lung transplant.”** The significance of that written denial extends beyond Patrick's case alone. California law exists to prevent lawful medical cannabis use from serving as the sole basis for denying transplant-related services.



When Patrick's wife, Cindy Navarro, challenged the UCSF transplant team's decision and cited California's medical cannabis organ transplant law, she was told that the denial was not based on medical cannabis but on other serious medical complications. Yet when the family asked for documentation showing how those other concerns were weighed, when they became disqualifying, or why the written denial focused on cannabis, they received shifting explanations rather than clear answers.



Cindy has been fighting for his life while trying to make sense of a process that has left the family devastated and distrustful. She has described the pain of watching Patrick endure enormous suffering while the path forward appeared to change from possible consideration to near-certain exclusion. She wants transparency, consistency, and a fair review grounded in actual medical evidence rather than assumptions about cannabis and her husband.

That is what ASA is demanding for every medical cannabis patient.

The Navarro Family deserves documentation showing the reasons for denial, how those reasons were evaluated, and how Patrick's case has been presented to other lung-transplant programs. They are asking that any appeal be conducted without allowing stigma around medical cannabis to distort the analysis. **They are asking a question that should concern every patient, physician, policymaker, and transplant center in the country: if a written denial identifies cannabis use as the reason, and other reasons emerge only after the law is raised, what exactly is being evaluated—medical risk, or institutional bias?**

This report is about more than cannabis. It is about whether transplant medicine will follow evidence or assumptions. It is about whether patients will be judged according to individualized clinical review or outdated narratives about drug use. It is about whether legal protections will mean anything when a family is told that their loved one is running out of time.

The stakes are not abstract. They are measured in missed evaluations, delayed listings, denied transplants, and lives cut short. Patrick Navarro's case is happening now. His family is still fighting. And unless transplant systems adopt clear national evidence-based standards, other families will continue to face the same fear, confusion, and potentially deadly consequences.

ASA remains committed to ensuring that no patient is denied a life-saving transplant because of stigma and that no family is forced to navigate these decisions under a system still vulnerable to bias. We must intensify our efforts to secure federal recognition of cannabis as medicine so that patients—regardless of where they live—have clear federal rights and protections, and families will no longer have to fight for justice one patient at a time.



Sincerely,

Steph Sherer
Executive Director
Americans for Safe Access



**Americans for
Safe Access**

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**Americans for
Safe Access**

Advancing Legal Medical Cannabis Therapeutics

EXECUTIVE SUMMARY

Medical cannabis patients continue to face barriers to qualifying for life-saving organ transplantation in the United States. This despite a growing body scientific evidence that cannabis use alone does not predict poor transplant outcomes. Over the past decade, clinical research examining kidney, liver, heart, and lung transplantation has increasingly shown that cannabis exposure itself is not associated with higher mortality or graft failure.



However, studies have documented that patients who use cannabis are less likely to be listed for transplantation or may face delays in evaluation, even when outcome data do not justify their exclusion. Surveys of transplant programs reveal substantial variation in how institutions evaluate cannabis medicines during transplant candidacy. Some programs require prolonged abstinence, others permit case-by-case evaluation, while others still deny eligibility for transplant listing entirely.

Microbial contamination, potential drug interactions with immunosuppressants such as tacrolimus are valid concerns for medical professionals and patients to consider and address as they navigate transplant opportunities. **Major transplant and medical organizations—including the Organ Procurement and Transplantation Network (OPTN), the International Society for Heart and Lung Transplantation (ISHLT), and the American Society of Transplantation (AST)—emphasize individualized assessment, disclosure, and evidence-based decision-making rather than categorical bans.** Existing research suggests that these risks are best addressed through monitoring, patient counseling, and product safety standards rather than blanket exclusion.

OPTN | ORGAN PROCUREMENT AND
TRANSPLANTATION NETWORK

AST | AMERICAN SOCIETY OF
TRANSPLANTATION

 **ISHLT**

The persistence of transplant discrimination against medical cannabis patients has produced legislative responses over the years. Beginning with California's Medical Cannabis Organ Transplant Act in 2015, multiple states have adopted laws prohibiting the denial of transplant evaluation or services solely on the basis of a cannabis medicine regimen.

Ten years after those first patient protections were enacted, transplant access for medical cannabis patients still varies widely depending on geography and institutional practice. Without clearer national guidance grounded in clinical evidence, transplant eligibility will continue to be shaped by stigma, inconsistent policies, and institutional bias.

This briefing from Americans for Safe Access (ASA) reviews the current clinical literature, examines how transplant programs evaluate cannabis use, documents evidence of transplant discrimination, and outlines policy approaches that protect patients while preserving appropriate clinical oversight.

INTRODUCTION

In 2015, California passed the Medical Cannabis Organ Transplant Act (AB258)¹, marking the first state-level effort to protect patients from being denied transplant-related services solely because they use medical cannabis. The law reflected a growing recognition that, despite changes in state law allowing medical cannabis, transplant decisions were still being shaped by stigma and inconsistent institutional practice rather than individualized medical evidence.



That recognition did not emerge from policy debates alone. It came from patients whose lives, and too often deaths, brought the issue into public view.

In 2011, Americans for Safe Access (ASA) was contacted by Norman Smith,² a medical cannabis patient with liver cancer who had been removed from the national transplant waiting list after testing positive for tetrahydrocannabinol (THC). His transplant center informed him that reinstatement would require months of substance-abuse counseling and toxicology testing, in spite of the fact that his cannabis use had been recommended by his physician.

The transplant center wrote:

— ●● —

This letter is to inform you that your name has been removed from the national Wait List... You have been removed due to non-compliance of our substance abuse contract. To reinstate your transplant evaluation, you will need to provide documentation of monthly random toxicology screens... Additionally, you will need to provide documentation of six months of weekly substance abuse counseling.³

— ●● —



rs-Sinai Denying Transplant to Medical Marijuana Patient with Inoperable Liver Cancer

Cedars-Sinai Denying Transplant to Medical Marijuana Patient with Inoperable Liver Cancer Edit video

45 Share Promote Ask Download

At the time, research on cannabis use among transplant candidates was limited. However, the available evidence already suggested that cannabis exposure alone was not associated with increased mortality among transplant candidates. A 2009 retrospective study published in **the American Journal of Transplantation** concluded:



Patients who did and did not use marijuana had similar survival rates. Current substance-abuse policies do not seem to systematically expose marijuana users to additional risk of mortality.⁴

Unfortunately, Smith's case was not unique. ASA documented multiple patients across the United States who were denied transplant listing or removed from transplant waiting lists because of lawful medical cannabis use, including patients in California, Washington, Oregon, and Hawaii. Several patients—including Timothy Garon, Kimberly Reyes, and Norman Smith—eventually died after being denied liver transplants while using physician-recommended medical cannabis.

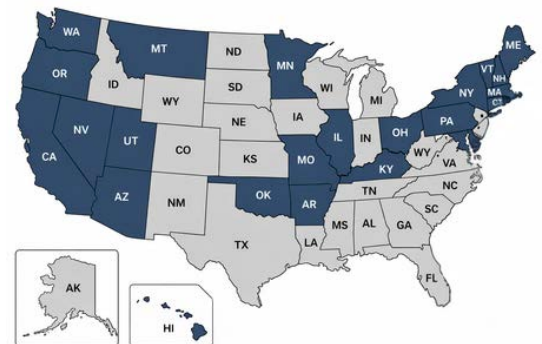
By bringing national attention to these cases, ASA exposed a systemic policy problem and forced a basic question into public debate: should lawful medical cannabis use be treated as legitimate medical treatment, or as evidence of illicit drug abuse, even when permitted under state law? These cases demonstrated that transplant discrimination was not an isolated error but a structural barrier affecting access to life-saving care.

CMA OPPOSES BLANKET RESTRICTIONS OF POTENTIAL ORGAN TRANSPLANT DONORS AND RECIPIENTS BASED SOLELY ON REPORTED OR DETECTED MARIJUANA USES

**California Medical Association.
Resolution T16-14.[ix]**

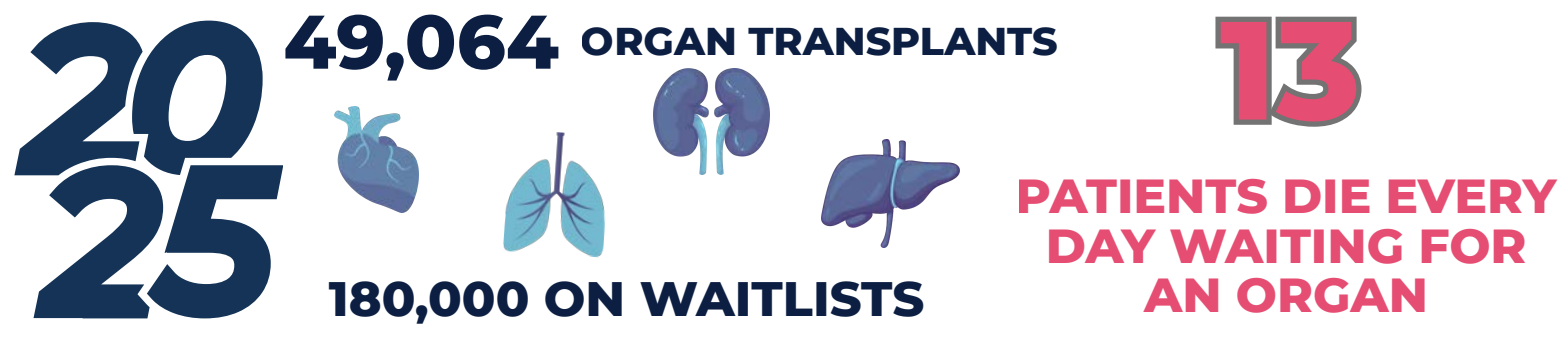
ASA responded with a legislative strategy that framed the issue as healthcare discrimination and a campaign to build support for reform. In 2014, this work led to **the California Medical Association (CMA) unanimously approving a resolution opposing transplant denials based solely on cannabis use⁵**. CMA's support provided the medical foundation needed for a successful legislative campaign.

The following year, California passed AB 258, establishing the principle that transplant eligibility should be determined by actual medical risk rather than cannabis status alone. This legislation established an important principle: transplant eligibility should be determined by actual medical risk, not stigma. Several states have enacted statutory protections preventing transplant discrimination against medical cannabis patients. These include Alabama, Arizona, California, Illinois, Missouri, New Hampshire, New Mexico, Ohio, Oklahoma, Rhode Island, Utah, Washington, and Kentucky. Other states rely on broader medical-care or anti-discrimination provisions that may also apply to transplant decisions.



States with protections for patients needing an organ transplant

Demand for organ transplantation continues to exceed supply. In 2025, **49,064 organ transplants** were performed in the United States. Yet more than **108,000 people remain on the national transplant waiting list**, and thousands die each year while waiting for an organ⁸. Many medical cannabis patients never reach the waiting list at all. This is a major concern, given the poor prognosis these patients face, and that every day not qualified on the list is another day they could miss a lifesaving opportunity.



Across kidney, liver, heart, and lung transplantation, multiple studies have found **no significant outcome penalty associated with cannabis exposure alone**, while newer research suggests patients using medical cannabis may still face reduced access to transplant evaluation or waitlisting even when outcome differences are minimal or absent^{9,10,11,12,13}. In other words, the barrier often appears before transplantation occurs, during candidacy evaluation.

Medical cannabis remains a barrier to organ transplantation in the United States because transplant decisions continue to be shaped by a patchwork of institutional policies rather than a clear national evidence standard. Millions of Americans now use cannabis therapeutically for chronic pain, nausea, spasticity, sleep disturbance, and other serious medical conditions, making the consequences of this policy gap increasingly significant. **This briefing reviews the clinical evidence surrounding cannabis use and transplant outcomes, examines how transplant programs currently approach cannabis use among candidates, and explains why patient protections remain necessary ten years after the first state law addressing transplant discrimination.**

DISCRIMINATION IS REAL

Research confirms what patients and advocates have reported for years: access to transplantation is influenced by cannabis use even when clinical outcomes do not justify exclusion. Legal, ethics, and health policy scholars now increasingly describe this as a form of healthcare discrimination against medical cannabis patients.

An analysis from Harvard Petrie-Flom Center concluded that medical cannabis patients in the United States face discrimination in access to health care services, including restrictions on solid-organ transplantation, even where cannabis use is lawful under state law¹⁴. The University of Illinois Chicago (UIC) Law Review similarly documented how state-authorized medical cannabis patients can still be denied transplant eligibility because transplant programs continue to rely on federal drug-policy assumptions and inconsistent institutional rules rather than uniform medical standards¹⁵.

**CANNABIS CONSUMERS
33 % LESS LIKELY TO BE
INCLUDED ON
TRANSPLANT LISTS**

Marijuana Use Among Adult Liver Transplant Candidates and Recipients.[vi]





One of the clearest examples appears in a study published in *The American Journal of the Medical Sciences*, which examined liver transplant outcomes among patients who reported cannabis use prior to transplantation. Among **111 patients who reported cannabis use, only 32 ultimately received a liver transplant**. The remaining 79 were denied listing or removed from candidacy for a variety of reasons, including financial barriers and other compliance concerns.

Notably, **41 of these patients were denied in part for “continued marijuana use,” and 11 were denied a transplant solely because of cannabis use**. Despite these denials, the study found **“no significant difference in overall mortality between marijuana users and non-users,”** and pre-transplant cannabis use was **not associated with post-transplant infections or readmissions within one year of surgery**¹⁶.

Although this study examined a relatively small cohort at a single transplant center, its findings align with a broader body of research suggesting that cannabis use can influence **whether patients reach the transplant waiting list**, and how long it can take, even when outcomes data does not support their exclusion.

A larger study published in *Clinical Transplantation* examined **2,690 adult liver transplant candidates**, including **630 patients who reported cannabis use**. Researchers found that cannabis consumers were **33 percent less likely to be included on transplant lists and experienced longer wait times** than candidates who did not report cannabis use. Importantly, the study did not find evidence that cannabis use independently predicted worse transplant outcomes, suggesting that reduced listing rates may reflect institutional caution, stigma, or policy variation rather than objective medical risk¹⁷.

MARIJUANA USERS HAVE A GREATER BURDEN OF PSYCHOSOCIAL ISSUES WHICH MAY CONTRIBUTE TO LONGER EVALUATIONS AND LOWER RATE OF LIVER TRANSPLANT LISTING. POST-LT SURVIVAL WAS NOT IMPACTED BY SELF-REPORTED MJ USE HISTORY.

Marijuana Use Among Adult Liver Transplant Candidates and Recipients.[v]



Earlier research examining marijuana use among potential liver transplant candidates reached similar conclusions. A retrospective analysis published in the *American Journal of Transplantation* reported that cannabis use **was not associated with increased mortality among transplant candidates**, challenging assumptions that cannabis exposure itself represents a contraindication to transplantation¹⁸.

More recent research examining kidney transplantation suggests the same pattern may extend beyond liver transplant programs. A 2025 study published in *Kidney360* found that cannabis consumers were **more likely to complete transplant evaluation**, and the study did **not identify an association between cannabis use and post-transplant graft failure or mortality**¹⁹. These findings further reinforce that **cannabis exposure alone does not predict poor transplant outcomes**.

Taken together, these studies support the conclusion that bias is a driving factor in why medical cannabis patients are denied listing or delayed from reaching the transplant waitlist. When clinical evidence does not support the assumption that cannabis use is a contraindication to transplantation, decisions that still restrict access to a life-saving procedure are grounded in stigma rather than medical evidence. That is the essence of discrimination.



DISPARITIES IN CLINICAL PRACTICE

Variation in transplant policy across institutions further reinforces the role of inconsistent practices in shaping patient access. Multiple surveys of transplant clinicians and transplant centers have documented substantial variation in how cannabis use is evaluated during transplant candidacy.

A survey conducted among members of the **American Society of Transplantation** found that transplant programs differed widely in their approach to cannabis use during candidate evaluation. Approximately **28 percent of programs reported rejecting all candidates who used cannabis**, while **52 percent indicated that their policies varied depending on the organ type or clinical circumstances**. Programs also differed in their screening practices: **20 percent of programs did not screen for cannabis at all**. **55 percent reported screening all candidates for cannabis use**, while others screened selectively depending on organ type or clinical concerns²⁰.



Additional research examining transplant-center practices has similarly identified significant national variability. A survey of adult solid-organ transplant centers in the United States reported that transplant policies regarding cannabis frequently reflected differences in **state cannabis laws, institutional policies, and clinician attitudes** rather than uniform national medical guidance²¹.



International data show similar patterns. A survey of heart transplant providers across **26 countries** found that **68 percent of responding programs required a period of cannabis abstinence prior to listing**, **12 percent reported making case-by-case decisions allowing listing for patients using medical cannabis**, while 20 percent reported denying transplant candidacy for cannabis users. **Other respondents supported listing patients on a case-by-case basis, highlighting the absence of a consistent clinical standard.**²²

More recent research confirms that this variability persists. A 2024 survey of transplant clinicians examining heart transplant candidacy reported that **59 percent of heart transplant programs permit medically prescribed cannabis use in certain circumstances, while approximately 60 percent require a period of abstinence—often six months—before patients can be considered for transplant listing**²³.

These surveys consistently demonstrate that **transplant decisions involving cannabis use are often shaped by institutional policies and clinician perceptions rather than uniform guidance informed by clinical evidence**. This is not only a policy inconsistency problem; it is an ethics problem. The AMA Code of Medical Ethics states that organs and tissues should be allocated equitably among patients on the basis of medical need and that under no circumstances should organs be allocated on the basis of non-medical criteria such as social worth, ability to pay, or patients' lifestyle and behavior in contributing to illness.²⁴

**AMA Journal
of Ethics**[®]
Illuminating the
art of medicine

That ethical framework cuts directly against the use of generalized cannabis stigma as a substitute for individualized medical judgment. A Canadian Society of Transplantation white paper reached a similar conclusion, emphasizing that transplant providers should understand the stigma and discrimination experienced by marijuana users and should make reasonable decisions that provide equitable care²⁵.

Clinicians frequently cite several concerns when evaluating transplant candidates who use cannabis, including limited long-term outcomes data, potential drug interactions with immunosuppressive medications such as tacrolimus, concerns about medication adherence, and infectious risks associated with inhaled cannabis products. While these concerns warrant careful clinical evaluation, the existing literature suggests that they are best addressed through **individualized assessment, monitoring, and patient education rather than categorical exclusion from transplantation**.

OUR DATA INDICATES THAT MARIJUANA IS NOT ASSOCIATED WITH INCREASED RISK OF POSTOPERATIVE NONCOMPLIANCE, OTHER ORGAN COMPLICATIONS, INFECTIONS, OR DEATH. AS A SINGLE FACTOR, MARIJUANA MAY NOT NEED TO BE A CONTRAINDICATION FOR LIVER TRANSPLANT.

Marijuana Use And Post-Transplant Complications and Non-Compliance in Liver Transplant Patients[V]

As a result, transplant access for medical cannabis patients often depends on **where they seek care rather than on consistent medical standards**. This variability highlights the need for clearer national guidance and reinforces the importance of patient protections designed to prevent discrimination in access to life-saving transplant services.

CLINICAL EVIDENCE

The clinical literature examining cannabis use among transplant candidates and recipients has expanded **significantly over the past decade**. Across multiple organ types, most studies have not found evidence that cannabis exposure alone predicts poor transplant outcomes.



KIDNEY TRANSPLANTATION

The kidney transplant literature does not support blanket exclusion policies based solely on cannabis use. A 2016 study, “Recreational Marijuana Use is not Associated with Worse Outcomes after Renal Transplantation,” found that marijuana exposure was “not associated with worse primary outcomes” following kidney transplantation and concluded that recreational marijuana use should not necessarily be considered a contraindication to kidney transplantation²⁶.

CANNABIS USERS WERE MORE LIKELY TO COMPLETE THEIR TRANSPLANT EVALUATION (79% VERSUS 63%) & WERE CORRESPONDINGLY MORE LIKELY TO BE WAITLISTED.

Association of Cannabis Use with Access to Kidney Transplantation and Post-Transplant Outcomes^[ii]

Subsequent research has clarified that risks sometimes attributed broadly to cannabis may instead reflect specific clinical circumstances. A 2019 study, “Cannabis Dependence or Abuse in Kidney Transplantation: Implications for Post-transplant Outcomes,” examined patients diagnosed with cannabis dependence or abuse rather than all cannabis users. That study identified a subgroup with greater psychosocial comorbidity and worse post-transplant outcomes, highlighting an important distinction between controlled medical use and clinically significant substance use disorder²⁷.

More recent evidence further challenges reflexive exclusion rules. A 2025 study, “Association of Cannabis Use with Access to Kidney Transplantation and Post-Transplant Outcomes,” reported that cannabis users were more likely to complete transplant evaluation (79 percent versus 63 percent) and more likely to be waitlisted. The study did not identify an association between cannabis use and adverse post-transplant outcomes²⁸

Taken together, these findings indicate that cannabis exposure alone does not predict poor kidney transplant outcomes. Instead, clinically relevant factors include overall patient stability, adherence to care, and co-occurring health or behavioral conditions.

LIVER TRANSPLANTATION

The liver transplant literature is broader than the kidney literature and generally provides reassuring findings regarding cannabis exposure.

A 2018 study, “History of Marijuana Use Does Not Affect Outcomes on the Liver Transplant Waitlist,” found that, unlike illicit drug use, marijuana use was not associated with worse outcomes on the liver transplant waitlist²⁹.

MARIJUANA USERS HAVE A GREATER BURDEN OF PSYCHOSOCIAL ISSUES WHICH MAY CONTRIBUTE TO LONGER EVALUATIONS & LOWER RATE OF LIVER TRANSPLANT LISTING.

Marijuana Use And Post-Transplant Complications and Non-Compliance in Liver Transplant Patients^[v]

CURRENT OBSERVATIONAL DATA DO NOT SUPPORT A LINK BETWEEN CANNABIS USE & POOR PATIENT SURVIVAL POST-TRANSPLANTATION.

Review of liver transplantation candidacy and outcomes among patients who use cannabis: Is it time for a change in policy? ^[vii]

A 2023 study, “Marijuana Use and Post-Transplant Complications and Non-Compliance in Liver Transplant Patients,” found that marijuana is not associated with increased risk of postoperative noncompliance, other organ complications, infections, or death, concluding that, as a single factor, marijuana may not need to be a contraindication for liver transplantation³⁰.

Additional observational evidence reinforces these findings. A 2021 study, “The Impact of Marijuana Use on Liver Transplant Recipients: A 900-Patient Single-Center Experience,” examined 926 liver transplant recipients, including 184 patients who reported cannabis use prior to transplantation. One-year survival rates were 89 percent among non-users, 94 percent among former users, and 83 percent among recent users. These differences were not statistically significant, despite the fact that cannabis users had a greater illness severity baseline. **The authors concluded that marijuana use did not have an adverse impact on post-liver transplant outcomes, even after adjusting for confounding factors³¹.**

CANNABIS USE HAS NOT BEEN ASSOCIATED WITH POOR PATIENT OUTCOMES IN TERMS OF 1-, 3-, AND 5-YEAR PATIENT SURVIVALS.

Review of Liver Transplantation Candidacy and Outcomes Among Cannabis Users: Is It Time For a Change in Policy?[iii]

Review articles have drawn the policy implications of this research directly. A 2023 review, “Review of Liver Transplantation Candidacy and Outcomes Among Patients Who Use Cannabis: Is It Time for A Change in Policy?” **concluded that cannabis use has not been associated with poor patient outcomes in terms of 1-, 3-, and 5-year patient survivals and that liver transplant candidates who use cannabis should not be denied access to transplantation solely on that basis³².**

Overall, the available evidence suggests that cannabis exposure alone is not a reliable predictor of poor liver transplant outcomes.

HEART & LUNG TRANSPLANTATION

Evidence is more limited for heart and lung transplantation, but like kidney and liver, the existing literature does not support a categorical ban on lung and heart transplant candidates who use cannabis.

A 2022 study, “Cannabis Use and Heart Transplantation: Disparities and Opportunities to Improve Outcomes,” noted that transplant societies currently offer little specific guidance regarding cannabis use in heart transplant candidacy decisions and warned that clinician bias and policy inconsistency may contribute to disparities in listing and organ allocation.³³ The authors emphasized that heart transplant teams should not exclude patients from transplant listing based on cannabis use alone and instead should evaluate unhealthy cannabis consumption, route of administration, and overall clinical stability.

For heart and lung transplant candidates, the most concerns identified in the literature are narrower than the broad exclusions sometimes applied in practice. These concerns include pulmonary risks associated with inhaled cannabis products, potential contamination of plant material with fungal pathogens, and possible drug interactions between cannabinoid products and immunosuppressive medications.

Even in these contexts, the literature generally supports individualized clinical assessment rather than categorical exclusion. Evaluating route of administration, product safety, and adherence to post-transplant medical care provides more clinically meaningful information than cannabis status alone.

EVALUATING RISKS

Although the clinical literature does not support blanket exclusion, transplant clinicians frequently raise concerns about several potential risks. The most commonly cited issues include contamination of inhaled cannabis products, potential drug interactions between cannabinoids and immunosuppressant medications, and concerns about adherence to post-transplant treatment protocols.



These risks are real considerations in transplant medicine, but the available evidence suggests that they are best addressed through clinical management rather than categorical denial of transplant eligibility.

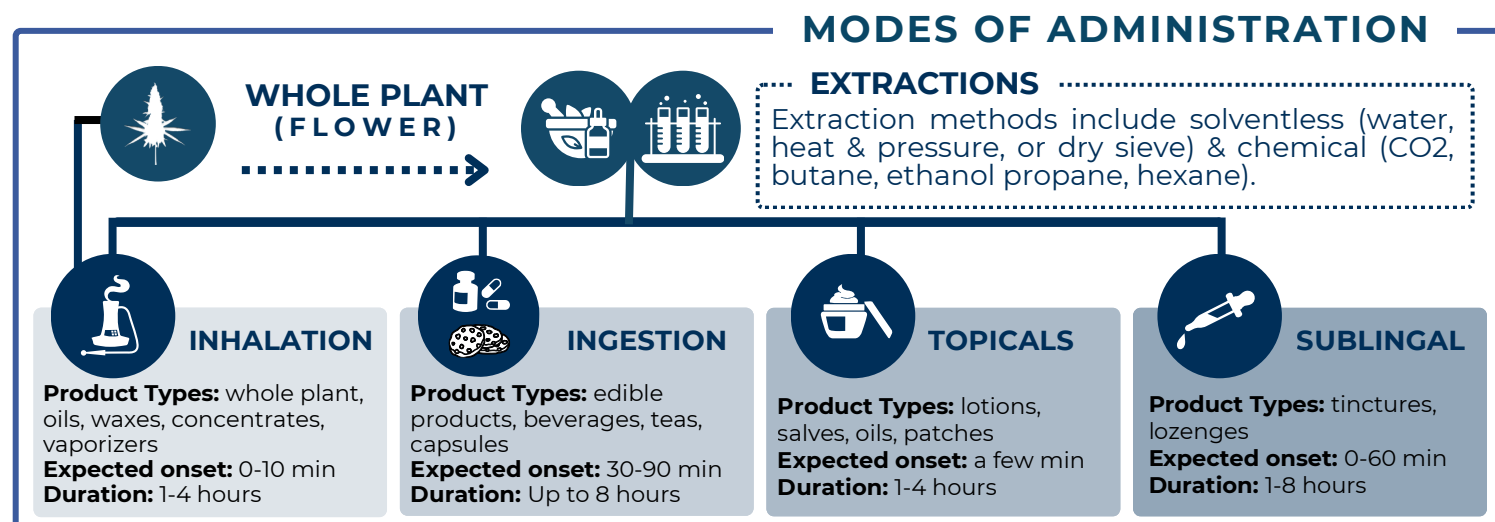
CONTAMINANTS

One of the most concrete concerns in the transplant literature involves contamination of cannabis products with microbial pathogens. Transplant recipients and candidates are often immunocompromised, which increases their susceptibility to opportunistic infections. Case reports dating back several decades have documented invasive aspergillosis associated with inhalation of contaminated cannabis in immunocompromised patients.

A frequently cited case report published in *Chest* described fatal invasive aspergillosis in a bone marrow transplant recipient linked to smoking contaminated marijuana³⁴. Another report documented a renal transplant patient who developed invasive pulmonary aspergillosis after smoking marijuana; the infection was successfully treated, but highlighted the potential infectious risk associated with inhaled plant material³⁵.



These reports illustrate a specific clinical risk: **inhalation of contaminated cannabis products in severely immunocompromised individuals**. However, they do not demonstrate that all medical cannabis use is unsafe for transplant patients. Instead, they highlight the importance of product safety and route of administration.





SafeAccessNow.org/WhatsInYourCannabis



For transplant patients, these developments suggest several practical clinical approaches. Clinicians may recommend specific dosage forms and ensure that patients obtain products from regulated sources subject to laboratory testing, and counsel patients about the specific risks associated with smoking plant material during periods of intense immunosuppression.

In recent years, almost every state-regulated cannabis programs have adopted increasingly stringent microbial testing requirements designed to address these risks precisely. Numerous states now require testing for pathogenic *Aspergillus* species, particularly for inhalable cannabis products, as well as testing for microbial contaminants such as *Salmonella*, *Escherichia coli*, and total yeast and mold counts. Regulatory analysis published in *Environmental Health Perspectives* has documented significant variation among state contaminant testing rules, but the overall trend has been toward stronger microbial screening requirements in regulated markets³⁶.

DRUG INTERACTIONS



Another commonly cited concern involves potential interactions between cannabinoids and immunosuppressive medications used after transplantation. Calcineurin inhibitors such as tacrolimus and cyclosporine are metabolized via cytochrome P450 enzyme pathways, and cannabinoids—particularly cannabidiol (CBD)—can influence those metabolic pathways.

Evidence of such interactions has been documented in clinical studies. A pharmacokinetic investigation reported a clinically significant interaction between CBD and tacrolimus, demonstrating that CBD exposure could increase tacrolimus levels in transplant patients³⁷. More recent laboratory research has further shown that CBD and its metabolites can inhibit tacrolimus metabolism in vitro, suggesting that careful monitoring may be warranted when patients use cannabinoid products concurrently with immunosuppressive therapy³⁸.

DRUG INTERACTIONS & CANNABIS

UNDER MEDICAL SUPERVISION Warfarin, Buprenorphine, Tacrolimus

CAUTION: Clozapine, Methadone, Clobazam, Chlorpromazine, Hexobarbital, Rifampicin, Stiripentol, Theophylline, Valproate

MEDICATIONS THAT INCREASE CANNABIS EFFECTS:

Amiodarone, Amlodipine, Azole, antifungals, Calcium antagonists, Doxycycline, Erythromycin, Fluoxetine, Ketoconazole, Proton pump inhibitors, Verapamil⁴⁰

Transplant clinicians routinely manage interactions involving antifungal medications, antibiotics, cardiovascular drugs, and numerous other therapies that can influence immunosuppressant metabolism. In this context, cannabinoid interactions represent a **manageable pharmacological issue rather than a categorical contraindication**.

CONSIDERATIONS FOR CANNABIS INHALATION

For patients who require polypharmacy, inhalation is an optimal delivery system because it avoids first-pass metabolism in the liver and kidneys. This reduces the risk of drug interactions, making inhalation a safer option for many patients who rely on multiple medications.

Inhalation is a drug delivery method that is widely used, medically accepted, and highly effective. Inhaled medications are rapidly absorbed into the bloodstream, providing near-immediate effects. This is particularly beneficial for patients managing acute symptoms such as pain, nausea, muscle spasms, and respiratory conditions. Research underscores its advantages over other delivery methods.



MANY FDA-APPROVED MEDICATIONS RELY ON INHALATION FOR ITS SUPERIOR BIOAVAILABILITY AND RAPID ONSET OF ACTION. CANNABIS SHOULD BE CONSIDERED ALONGSIDE THESE WIDELY ACCEPTED TREATMENTS.

FDA-APPROVED INHALED MEDICATIONS:

Insulin: Afrezza

Antimicrobial Agents: Amikacin (Arikayce), Aztreonam (Cayston), Tobramycin (Bethkis, TOBI), Pentamidine (NebuPent), Ribavirin (Virazole)

Pulmonary Hypertension Agents: Iloprost (Ventavis), Treprostinil (Tyvaso)

Others: Dornase (Pulmozyme) – pulmonary function, Levodopa (Inbrija) – Parkinson's disease, Loxapine (Adasuve) – antipsychotic

KEY BENEFITS OF INHALATION:

- Avoids first-pass metabolism in the liver and kidneys
- Reduces systemic side effects
- Allows for rapid dose titration by patients

Vaporizing whole-plant cannabis is not the same thing as using cannabis vape pens or oil cartridges. Whole-plant vaporization heats cannabis flower without combustion and avoids many of the additives used in cartridges. By contrast, vape pens and cartridges may contain thinning agents, carrier oils, added terpenes, flavorings, or other adulterants that create a very different toxicology profile when heated and inhaled.

VAPORIZATION: SAFE, APPROVED MEDICAL DEVICE

Unlike common misconceptions that associate inhalation with smoking, this method is a widely used, medically accepted, and highly effective route of administration. It provides relief for various conditions with an established safety profile, supported by extensive research on whole plant cannabis.



Vaporizers come in many sizes, from tabletop to pocket

MEDICAL DEVICES ARE AVAILABLE FOR CANNABIS INHALATION

The Volcano Vaporizer by STORZ & BICKEL is an internationally recognized medical-grade vaporization device, reinforcing the legitimacy of inhaled cannabis use. Unlike combustion methods, vaporization provides a cleaner, controlled way to inhale cannabinoids without harmful byproducts. The device is widely accepted in medical settings:

- CE approval under the Medical Device Regulation (EU) 2017/745
- Approved for medical use in Canada, Europe, Australia, New Zealand, and Israel



CLINICAL MANAGEMENT RATHER THAN EXCLUSION

Taken together, the most credible cannabis-related risks identified in the literature are specific and manageable. They relate primarily to contaminated inhaled products, potential pharmacokinetic interactions with immunosuppressant medications, and patient adherence to complex post-transplant care regimens.

These risks are not unique to cannabis and are already addressed in transplant medicine through routine clinical practices such as patient counseling, laboratory monitoring, and individualized risk assessment. As a result, many transplant researchers and professional organizations increasingly emphasize the importance of evaluating transplant candidates based on individualized clinical evidence rather than applying categorical exclusions.

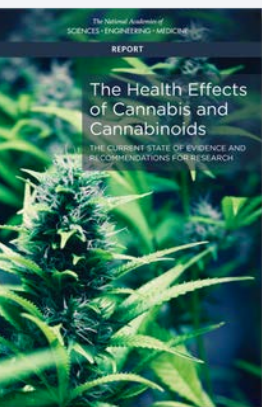
In other words, the available evidence suggests that the appropriate policy response is clinical management and patient education—not automatic disqualification from life-saving transplantation.

TIME TO DITCH THE “ALL USE IS ABUSE” PARADIGM

A persistent problem in transplant policy discussions is the way cannabis use is interpreted through a framework inherited from prohibition-era drug policy. Under this model, any cannabis consumption is typically categorized as abuse. That legacy **still influences transplant decision-making today, particularly when clinicians or transplant programs treat regular cannabis use as presumptive evidence of instability or substance disorder** rather than examining the clinical context of a patient’s treatment.

A related issue is the frequent use of vague terms such as “heavy use” without asking whether the pattern in question reflects adult-use consumption or ordinary medical use. For many patients, daily cannabis use functions in the same way as routine daily use of other symptom-management medications. Frequency alone is therefore a poor proxy for medical risk. A patient using cannabis every day to control chronic pain, nausea, spasticity, insomnia, or other persistent symptoms may appear to be a “heavy user” on paper, even when the clinical reality is stable, therapeutic, and closely tied to disease burden³⁹.

The clinically relevant questions are different: why the patient uses cannabis, whether the product is regulated and tested, whether the route of administration is appropriate for the patient’s condition, and whether the patient is otherwise stable and adherent to care. **The National Academies of Sciences, Engineering, and Medicine** concluded in its 2017 report that substantial evidence supports the therapeutic use of cannabis or cannabinoids for chronic pain in adults, chemotherapy-induced nausea and vomiting, and patient-reported multiple sclerosis spasticity symptoms—exactly the types of chronic conditions that often drive daily therapeutic use⁴¹.



“There is conclusive or substantial evidence that cannabis or cannabinoids are effective for the treatment of chronic pain in adults, as anti-emetics in the treatment of chemotherapy-induced nausea and vomiting, and for improving patient-reported multiple sclerosis spasticity symptoms.”

National Academies of Sciences, Engineering, and Medicine: *The Health Effects of Cannabis & Cannabinoids*, January 2017

“None of the evidence from the systematic reviews included in our analysis demonstrated substantial safety concerns that would argue against the use of marijuana in any of the indications where there exists some support for its benefit.”

FDA’s Center for Drug Evaluation and Research (CDER) “Considerations for Whether Marijuana Has a Currently Accepted Medical Use in the United States for Purposes of Section 202(b) of the Controlled Substances Act”

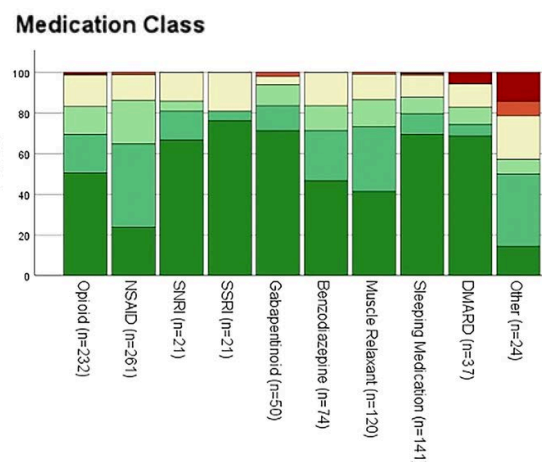


The same caution applies to blunt references to “cannabis use disorder.” Some criteria often cited as warning signs—including regular use, tolerance, physical dependence, or time spent obtaining medication in a heavily regulated environment—can overlap with the realities of long-term medical treatment. That does not mean problematic cannabis use never occurs; rather, it means that diagnosis should not be inferred from frequency alone, and certainly not from lawful medical use alone.

The more useful clinical question is whether cannabis use is associated with functional impairment, unsafe behavior, inability to follow medical instructions, or other patient-specific concerns supported by evidence. Patient survey data illustrate the therapeutic context in which cannabis is often used. In one study of patients with rheumatic conditions, **62.5 percent reported substituting medical cannabis for other medications**, including nonsteroidal anti-inflammatory drugs (NSAIDs), opioids, sleep aids, and muscle relaxants. Most participants reported reducing or discontinuing those medications after beginning cannabis therapy⁴².



Change in medication use since starting medical cannabis. DMARD, disease-modifying antirheumatic drug; NSAID, nonsteroidal anti-inflammatory drug; SNRI, serotonin norepinephrine uptake inhibitor; SSRI, selective serotonin reuptake inhibitor.



Transplant medicine already recognizes that physical dependence on medication does not automatically imply dysfunction or disqualification from care. Patients may rely on opioids, benzodiazepines, steroids, sleep medications, or other prescribed therapies without being categorically excluded from transplant candidacy. Cannabis should be evaluated with the same clinical maturity.

The central question is not whether a patient uses cannabis regularly. The relevant question is whether the patient is medically appropriate for transplantation and capable of safely participating in post-transplant care. The growing body of clinical evidence supports **individualized evaluation rather than categorical exclusion**.

TRANSPLANT & MEDICAL ORGANIZATIONS' POSITIONS

Professional transplant organizations have increasingly acknowledged the need for evidence-based and individualized evaluation of transplant candidates who use cannabis.

THE EVALUATION PROCESS [SHOULD BE] TRANSPARENT, EVIDENCE-BASED (WHERE AVAILABLE), AND REVISABLE

Organ Procurement and Transplantation Network (OPTN) Ethics Committee^[viii]

The **Organ Procurement and Transplantation Network (OPTN)**, which oversees the national transplant system in the United States, does not establish a categorical national rule regarding cannabis use in transplant candidacy. Instead, guidance from the OPTN Ethics Committee emphasizes that transplant candidate evaluations should be applied **“without bias” and that the evaluation process should be “transparent, evidence-based (where available), and revisable.”**⁴³

Similarly, the **International Society for Heart and Lung Transplantation (ISHLT)** has acknowledged the absence of uniform standards across transplant programs. ISHLT guidance has noted that current transplant guidelines often leave cannabis policies to individual programs, resulting in substantial variation in how candidates are evaluated⁴⁴. The organization has called attention to the need for clearer and consistent national guidance and more consistent approaches to evaluating transplant candidates who use cannabis.



ISHLT

AST

**AMERICAN SOCIETY OF
TRANSPLANTATION**

The **American Society of Transplantation (AST)** has focused primarily on patient safety and education. Guidance from the AST Infectious Disease Community of Practice emphasizes that cannabis products can be contaminated with microbial pathogens and that cannabinoids may interact with immunosuppressive medications. At the same time, the organization advises transplant patients to disclose cannabis use so clinicians can provide appropriate counseling and monitoring rather than relying on assumptions or undisclosed use⁴⁵.

Outside the transplant community, organized medicine has also addressed the issue. In 2014, the **California Medical Association** adopted a resolution opposing the use of cannabis toxicology results as a blanket contraindication to organ transplantation and called for transplant policies to be based on evidence rather than categorical exclusion⁴⁶.



**CALIFORNIA
MEDICAL
ASSOCIATION**

These positions reflect a growing consensus among professional organizations that transplant decisions should be grounded in **clinical evidence, transparency, and individualized evaluation**. None of the major transplant organizations has adopted a national policy requiring automatic exclusion of transplant candidates solely because they use cannabis.



However, the absence of a uniform national standard has allowed substantial variation in how transplant centers interpret these issues. As a result, patient access to transplantation can still depend heavily on institutional policies, geographic location, and clinician attitudes rather than consistent medical guidance and emerging science.

ASA POLICY RECOMMENDATIONS

The evidence reviewed in this report shows that cannabis exposure alone is not a reliable predictor of transplant outcomes. Yet, in practice, transplant eligibility for medical cannabis patients continues to vary widely across institutions and states. Without clear national guidance, transplant decisions may still be shaped by stigma, inconsistent policies, and institutional risk aversion rather than clinical evidence.

Addressing these disparities does not require lowering medical standards. Instead, it requires aligning transplant policy with the evidence and applying existing clinical evaluation tools consistently and without stigma.

The policy actions below identify practical steps that transplant programs, regulators, and policymakers can implement immediately.

1. ESTABLISH EVIDENCE-BASED NATIONAL GUIDANCE FOR TRANSPLANT CANDIDACY

Federal transplant authorities and professional organizations must develop clear, evidence-based guidance for evaluating transplant candidates who use cannabis. Existing research across kidney, liver, heart, and lung transplantation shows that cannabis exposure alone is not a reliable predictor of transplant outcomes. National guidance must therefore require individualized clinical evaluation rather than categorical exclusion.



Several existing transplant frameworks provide models for this approach. For example:

The Organ Procurement and Transplantation Network (OPTN) requires transplant centers to evaluate patients based on medical suitability and likelihood of post-transplant adherence rather than substance status alone.

American Society of Transplantation (AST) guidance emphasizes individualized evaluation and disclosure rather than blanket exclusion policies.

Many transplant programs already use structured psychosocial evaluation tools to assess treatment adherence and support systems. These frameworks should be expanded to include cannabis-specific guidance.

KEY POLICY PROVISIONS:



Explicit recognition that cannabis status alone is not a contraindication.

Federal guidance must state clearly that cannabis use alone is not evidence of non-compliance, instability, or transplant unsuitability, and provide rationale documents with research citations that support this change in policy.



A structured framework for individualized review.

Provide education and guidance tools for transplant programs to evaluate actual clinical risks. National transplant guidance should include standardized evaluation tools requiring clinicians to assess:

- treatment adherence history
- route of administration
- product source and safety
- patient support systems
- ability to participate safely in post-transplant care

Federal agencies and professional societies should publish model transplant-evaluation protocols, clinician training modules, evidence summaries with citations, and clinical decision-support tools for transplant teams. Clear national standards applied consistently across transplant programs would preserve clinical judgment while reducing institutional bias and arbitrary exclusion.

2. PROHIBIT TRANSPLANT DENIAL BASED SOLELY ON LAWFUL MEDICAL CANNABIS USE

States must adopt statutory protections preventing transplant programs from denying evaluation, waitlisting, or transplant-related services solely because a patient uses physician-recommended cannabis. Existing state laws demonstrate that such protections are both feasible and compatible with clinical decision-making.

These protections must apply not only to final listing decisions, but also to earlier stages of access, including referrals, evaluation, and continued eligibility while on a waiting list. In practice, patients are often excluded long before a formal denial is issued.

California's Medical Cannabis Organ Transplant Act established the model by prohibiting transplant denial based solely on lawful medical cannabis use while preserving physician authority to evaluate genuine clinical risk. Other states have adopted similar protections.



KEY POLICY PROVISIONS:



Protection against sole-basis denial.

Until federal laws change, state law must clearly prohibit transplant programs from denying transplant evaluation, waitlisting, or transplantation solely because of lawful medical cannabis use. Protections must address all stages of transplant access including physician referrals, transplant evaluation, waitlisting decisions, and maintenance of active listing status.



Preservation of physician authority to assess true clinical risk.

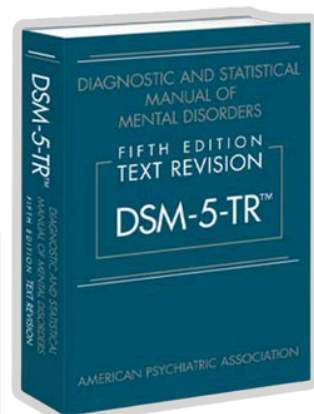
State laws should allow physicians to retain the ability to make recommendations concerning patient cannabis use where it is specifically relevant to infection risk, medication interactions, adherence, or other clinically relevant factors.

This approach would protect patient access without undermining medical oversight. It would also reduce the extent to which access to transplantation depends on geography, state laws, or institutional culture rather than on evidence.

3. REVISE DIAGNOSTIC FRAMEWORKS FOR C.U.D. TO DISTINGUISH MEDICAL USE

Current diagnostic framework for Cannabis Use Disorder (CUD) does not effectively distinguish between recreational use, problematic use, and therapeutic cannabis use among patients managing chronic health conditions. As a result, many patients using cannabis to manage symptoms such as chronic pain, nausea, spasticity, or sleep disorders can often meet certain behavioral criteria associated with CUD despite stable, medically appropriate, and supervised use.

Federal health agencies and professional organizations involved in psychiatric and substance-use disorder classification—including the American Psychiatric Association (APA) and relevant federal research agencies—should revisit the diagnostic framework for Cannabis Use Disorder to ensure it accurately reflects the realities of medical cannabis use in modern healthcare.



KEY POLICY PROVISIONS:



Explicit differentiation of therapeutic medical use.

Patients using physician-recommended cannabis to manage chronic illness should not be presumed to have a substance-use disorder based solely on frequency of use, tolerance, or physical dependence—criteria that commonly occur with countless long-term medical therapies.



Evaluation of underlying health conditions before applying substance-use disorder criteria.

Clinical assessment should first determine whether cannabis use reflects patient self-management of untreated or inadequately treated medical symptoms. Only after these underlying medical needs have been evaluated should diagnostic criteria for Cannabis Use Disorder be applied.

This approach would align cannabis evaluation with how medicine treats many other therapeutic substances. Patients may be physically dependent on and experience withdrawal from medications such as opioids, benzodiazepines, corticosteroids, or sleep medications without being presumed to have a substance-use disorder. Cannabis should be evaluated with the same clinical nuance and not with historical stigma.

Clarifying the distinction between medical use and misuse would reduce inappropriate labeling of patients, improve the accuracy of research on cannabis-related harms, and prevent diagnostic frameworks from reinforcing stigma that can influence transplant eligibility and other medical decision-making.

4. IMPROVE PRODUCT SAFETY COUNSELING FOR PATIENTS

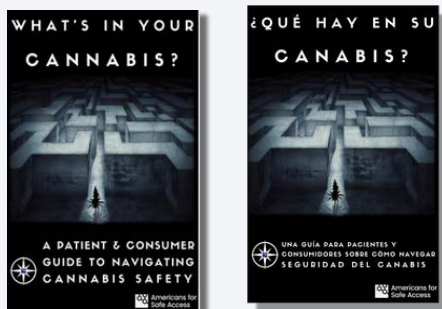
For transplant candidates and recipients who use cannabis, clinicians should provide clear counseling about product safety, route of administration, severe immunosuppression, and contamination risk. Patients should be encouraged to obtain products from regulated sources subject to laboratory testing for microbial contaminants and other safety standards.

Cannabis is generally regarded as a low-toxicity substance, but that assessment does not automatically extend to contaminated products, highly processed extracts, or products containing additives whose inhalation safety has not been established. Cannabis products may be contaminated during cultivation, manufacturing, handling, and storage, and some manufactured products may include excipients, carrier oils, flavoring agents, or concentrated terpene blends that pose distinct safety concerns.

SOURCES OF CONTAMINANTS:

CULTIVATION & PROCESSING	MANUFACTURING	STORAGE
PESTICIDES	ADDITIVES & ADULTERANTS	MOLD, MILDEW, FUNGUS & YEASTS
MOLD, MILDEW, FUNGUS & YEASTS	HEAVY METALS	HEAVY METALS
HEAVY METALS	FOREIGN MATTER	BACTERIA, VIRUSES & PARASITES
BACTERIA, VIRUSES & PARASITES	RESIDUAL SOLVENTS	BACTERIA, VIRUSES & PARASITES
FOREIGN MATTER		

WhatsInYourCannabis.org



FREE PATIENT GUIDE TO NAVIGATING CANNABIS SAFETY

Whole-plant vaporization and vape-pen inhalation should not be treated as interchangeable. Medical vaporization of whole-plant cannabis involves heating cannabis flower to release cannabinoids and terpenes without combustion and without the thinning agents commonly found in cartridges. Vape pens and cannabis oil cartridges may contain additional excipients, carrier oils, flavoring agents, and concentrated terpenes whose inhalation safety may be uncertain, especially when heated. For immunocompromised patients, including transplant recipients, this distinction is clinically important.

Certain additives deserve particular caution. Propylene glycol and polyethylene glycol can generate harmful degradation products when heated. Vitamin E acetate has been strongly linked to severe lung injury and should never be inhaled. Medium-chain triglyceride (MCT) oils, food-grade terpenes, essential oils, artificial flavoring agents, and concentrated terpene blends should not be assumed safe for inhalation simply because they are used in food, fragrance, or other non-pulmonary settings. Added limonene and similar terpenes should likewise not be presumed safe for inhalation simply because they occur naturally in cannabis or are used in other consumer products. (See pages 14-15 for more information on contaminants and routes of administration.)



KEY POLICY PROVISIONS:

**Clear counseling on product risks.**

Patients must be informed that cannabis products present different risk profiles depending on route of administration, formulation, and product quality. For example, the differences between whole-plant vaporization and cartridge-based inhalation products and why they should not be treated as equivalent and the risks involved with inhalation during periods of severe immunosuppression.

**Access to regulated, testable products.**

States should require robust microbial testing standards for cannabis products or require labeling if products have not been tested, and should allow patients to submit products directly to licensed laboratories for contaminant testing when medically necessary.

**Patient review of product testing.**

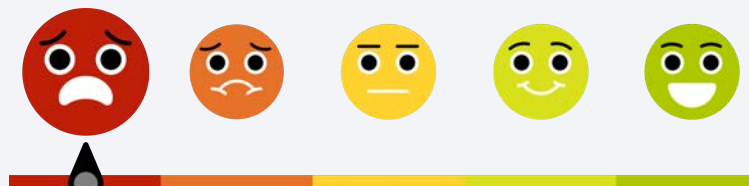
Patients should be encouraged to review the Certificate of Analysis (COA) for any inhaled or concentrated cannabis product and confirm that it matches the batch number on the product label. Clinicians should educate patients about how to identify evidence of testing for microbial contamination, pesticides, solvents, heavy metals, and potency.

This approach would address concerns about infection and product safety directly rather than using them as a rationale for broad exclusion from transplant consideration.

5. STANDARDIZE TRANSPLANT EVALUATION PRACTICES

Transplant programs should evaluate cannabis use using the same clinical framework applied to other medications and substances. Assessment should focus on relevant clinical factors, including treatment adherence, stability of care, substance use disorder, and patient support systems, rather than using cannabis use itself as a proxy for instability.

A standardized evaluation model should distinguish among therapeutic medical use, adult-use consumption, and clinically significant substance use disorder. It should also account for route of administration, product source, frequency of use, and the patient's underlying medical condition.



KEY POLICY PROVISIONS:

**Written, transparent cannabis evaluation criteria.**

Programs must clearly document how cannabis use is assessed and make those criteria available to patients and referring clinicians.

**Distinction between medical use and use disorder.**

Evaluations must avoid collapsing lawful therapeutic use, frequency of use, and functional impairment into the same category.

**Use of existing psychosocial assessment tools.**

Transplant programs already rely on structured psychosocial assessment tools to evaluate medication adherence, support systems, cognitive capacity, and history of substance misuse. Cannabis use should be incorporated into these existing frameworks rather than treated through informal assumptions or separate stigma-driven standards.

This approach would reduce arbitrary decision-making and ensure that individualized review occurs within a fair and coherent framework rather than through informal assumptions or center-specific bias.

6. MONITOR & DOCUMENT DRUG INTERACTIONS

Transplant clinicians should monitor immunosuppressant levels and response when patients report cannabinoid use, particularly with narrow therapeutic index medications such as tacrolimus. As with other drug to drug interactions commonly managed in transplant medicine, close monitoring and dose adjustments can mitigate potential risks while maintaining effective therapy.

Cannabinoids do have the potential to alter the metabolism of certain transplant medications, but these interactions are manageable through standard therapeutic drug monitoring and are not a justification for categorical exclusion.



CBD is the primary cannabinoid of concern when it comes to cannabis-drug interactions, and predominantly via oral dosing. Tacrolimus is impacted by CYP3A inhibition or induction, which is CBD, not THC. Patients using products that do not contain CBD, that use topical products, or that use THC-dominant inhaled products are unlikely to experience clinically meaningful drug interactions.

KEY POLICY PROVISIONS:



Routine, structured inquiry about cannabinoid use.

Clinicians must ask about product type, cannabinoid content, route of administration, frequency of use, and timing of use relative to transplant medications.



Therapeutic monitoring rather than reflexive exclusion.

Where clinically significant drug interactions are plausible, programs should monitor drug levels and adjust dosing as needed instead of relying on abstinence-only rules in place of clinical judgment and management.

This approach would align cannabinoid-related medication management with how transplant medicine already handles other complex therapies and known interaction risks.

7. EXPAND RESEARCH AND DATA COLLECTION

Multi-center studies could further clarify transplant outcomes across different patterns of cannabis use, routes of administration, and patient populations. Expanding research in this area will help refine clinical guidance and reduce uncertainty among transplant programs.

Current studies are informative, but many remain limited by sample size, single-center design, or inadequate distinctions between therapeutic use, adult use, and substance use disorder.



KEY POLICY PROVISIONS:**Better differentiation in research categories.**

Future studies must distinguish medical from non-medical use, inhaled from ingested products, regulated from unregulated products, and controlled use from diagnosed substance use disorder.

**Improved data collection on access barriers.**

Transplant registries and related data systems should capture information not only on outcomes, but also on referral, evaluation, waitlisting, abstinence requirements, and reasons for denial or delay.

This approach would strengthen the evidence base, improve patient safety, and reduce the uncertainty that currently allows stigma and inconsistent institutional policy to fill the gap left by limited data.

8. PROTECT OPEN CLINICAL DIALOGUE AND PATIENT TRUST

Effective transplant care depends on trust. Patients must be able to speak openly with transplant teams about cannabis use without fear that disclosure alone will trigger punishment, exclusion, or assumptions of noncompliance.

When patients believe they will be penalized for honesty, they are less likely to disclose relevant information about cannabinoid use, route of administration, or product type. That undermines patient safety and makes sound clinical management more difficult.

**KEY POLICY PROVISIONS:****Assurances that disclosure alone will not trigger punishment.**

Transplant programs should explicitly state that patient disclosure of lawful medical cannabis use, by itself, will not result in automatic denial, referral refusal, or removal from evaluation.

**Open dialogue as a patient-safety standard.**

Clinicians should be trained to approach cannabis use as a clinical issue requiring documentation, counseling, and monitoring—not as a character judgment or disciplinary matter.

This approach would improve patient trust, strengthen medication safety, and help ensure that transplant decisions are based on complete clinical information rather than incomplete disclosure driven by fear.

9. TRANSPLANT STAKEHOLDER CANNABIS MEDICINE EDUCATION

Transplant recipients often have fewer straightforward symptom-management options, particularly for chronic pain, inflammation-related discomfort, sleep disruption, nausea, and other ongoing quality-of-life issues. In that setting, transplant clinics and medical staff need better education about cannabis medicines and cannabinoid-based therapies as potential therapeutic options in carefully selected patients.

This education should not present cannabis as risk-free or universally appropriate. Rather, it should prepare clinicians to understand when cannabinoid-based therapies may be considered, what risks require monitoring, how non-inhaled and regulated products differ from inhaled or unregulated products, and how cannabis may compare with other symptom-management options that carry their own limitations or risks.



KEY POLICY PROVISIONS:



Clinical education on therapeutic use after transplant.

Transplant professionals should receive training on the potential role of cannabinoid-based therapies in post-transplant symptom management, including pain, sleep, nausea, and inflammation-related symptoms, with attention to route of administration, product quality, and drug-interaction monitoring.



Education that emphasizes safer integration, not reflexive exclusion.

Clinicians must be equipped to counsel patients on regulated products, non-inhaled formulations, potential medication interactions, and appropriate follow-up rather than defaulting to stigma-driven assumptions or abstinence-only demands.

This approach would improve the use of emerging science in clinical decision-making, reduce reliance on outdated assumptions, and help transplant programs approach cannabis medicines with the same level of informed scrutiny applied to other complex therapies.

Implementing these policies would not eliminate clinical judgment in transplant medicine. Instead, they would ensure that decisions are grounded in evidence and applied consistently across institutions.

CONCLUSION

A decade has passed since California enacted the law that should have protected Patrick Navarro from transplant discrimination. In that time, the scientific literature has expanded considerably, and a clearer picture has emerged. **Across kidney, liver, heart, and lung transplantation, the available research does not support treating cannabis exposure alone as a contraindication to transplantation. While certain risks related to contaminated products or drug interactions require clinical attention, those risks are specific, mitigable, and manageable within standard transplant care.**

At the same time, evidence continues to show that cannabis use can influence whether patients are evaluated or listed for transplant, regardless of whether the outcome data justify exclusion. Surveys of transplant programs reveal wide variation in institutional policies, meaning that transplant access can depend heavily on geography, state laws, and institutional culture rather than evidence and consistent medical standards.



Requiring six months of abstinence from cannabis medicines before a patient can become eligible for organ waitlisting is not only unsupported by the available evidence, but also ethically indefensible. For patients with end-stage organ disease, these disparities can carry life-or-death consequences. In many cases, transplantation is the only life-saving treatment available, and delays or exclusions during candidacy evaluation can determine whether a patient receives an organ at all.

The past decade has shown that patient protections can play an important role in addressing this problem. State laws preventing transplant discrimination have saved lives by establishing the principle that transplant eligibility should be determined by medical evidence rather than stigma.

However, the continued variation across transplant programs demonstrates that state-level reforms alone are not enough. Clearer national guidance and evidence-based standards are needed to ensure that transplant decisions are applied consistently across institutions.

Lasting consistency will remain difficult to achieve while federal law continues to treat cannabis as a prohibited substance rather than a recognized medicine. Americans for Safe Access has proposed comprehensive federal legislation—the Medical Cannabis and Cannabinoid Act (MCCA)—to establish a national framework recognizing cannabis as medicine, supporting research, improving product safety standards, and integrating cannabinoid therapies into healthcare systems. Federal reform of this kind would allow transplant policy to evolve toward clearer national standards grounded in medical evidence rather than shaped by the lingering contradictions of prohibition.

Until that happens, patients and families will continue to rely on state protections, institutional reform, and advocacy to ensure that transplant decisions are based on science rather than stigma.

No patient should lose access to a life-saving transplant because outdated assumptions were allowed to outweigh clinical evidence. No family should be forced to fight for fairness and transparency while their loved one is running out of time.

The evidence is clear: without reform, the needless body count will continue to mount.

Patients & families experiencing transplant discrimination related to
NOTE: medical cannabis are encouraged to contact Americans for Safe Access
 by filling out the organ transplant discrimination intake form:

www.SafeAccessNow.org/Organ_Transplant_Discrimination_Form



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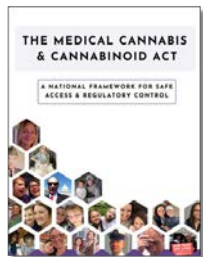
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