



Staying Ahead of Substance Abuse: The Changing Landscape of Marijuana Use

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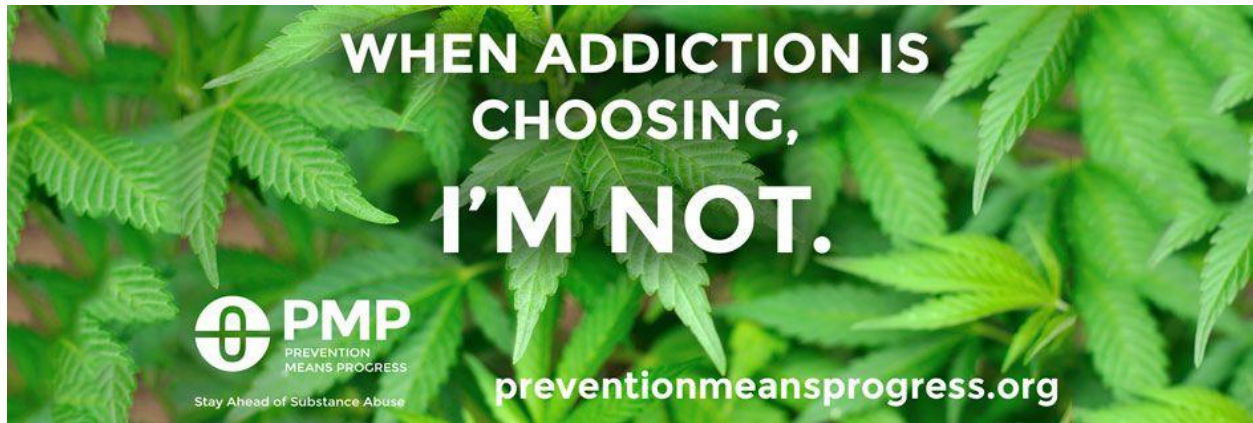


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Introduction

In their comprehensive report, the National Academy of Sciences (NAS) (2017) concludes that the United States is in “a pivotal time in the world of cannabis policy and research,” one in which “Shifting public sentiment, conflicting and impeded scientific research, and legislative battles have fueled the debate about what, if any, harms or benefits can be attributed to the use of cannabis or its derivatives” (p. 2).

Given the continuously changing landscape around marijuana, its different components, legal status, and possible benefits and harms (medically or otherwise), it is critical to distinguish between the many facets and polarized opinions in the publicized discussion surrounding marijuana’s many forms.

According to the CDC’s 2018 fact sheet, marijuana is the most commonly used illegal drug in the United States, with approximately 22.2 million users each month. It also cites research stating that “about 1 in 10 marijuana users will become addicted,” and for those who use marijuana for the first time prior to age 18, “that number rises to 1 in 6.” Additionally, “Marijuana use directly affects the brain – specifically the parts of the brain responsible for memory, learning, attention, decision making, coordination, emotions, and reaction time.” This is especially important when discussing marijuana use and abuse among children and teens, because their “developing brains...are especially susceptible to the adverse effects of marijuana” (CDC, 2018).

This report will begin with a brief overview of what is involved in the discussion of both the marijuana substance and industry, then will explore the current public sentiment and regulatory environment for both medical and recreational marijuana uses. STEPs will then examine data relating to use and abuse by people under the age of 18 years in the localities of Iowa and Nebraska, presenting consumption data, consequence data, and intervening variables. This report will then relay key informant perspectives. Finally, STEPs will deliver conclusions and recommendations, providing a solid foundation for staying ahead of marijuana use and abuse.

This report makes every attempt to bring together the most current information on the status of marijuana. However, it must be noted that certain pieces, especially the legal status piece, have the potential to change rapidly.

Marijuana, the Substance

According to the National Institute on Drug Abuse (2019), “marijuana...is a greenish-gray mixture of the dried flowers of [the] *Cannabis sativa*” plant (NIDA, 2019). The United States Department of Justice Drug Enforcement Agency’s (DOJ, DEA) Drugs of Abuse report (2017) defines marijuana as “a mind-altering (psychoactive) drug, produced by the *Cannabis sativa* plant” (p. 74).

The scientific term for what is generally referred to as “marijuana” is actually “cannabis.” “Cannabis [is] a broad term that can be used to describe the various products and chemical compounds...derived from different species of the cannabis plant” (NAS, 2017, p. 1). More specifically, cannabis is a genus that contains three psychoactive plants: *Cannabis sativa*, *Cannabis indica*, and *Cannabis ruderalis*.

The DEA’s 2017 Edition of *Drugs of Abuse: A Resource Guide* provides a detailed profile of marijuana/cannabis (pp. 74-75) and marijuana concentrates (pp. 76-77)

Canada’s Centre for Addiction and Mental Health (CAMH, 2019) reiterates this clarification in its simple description of cannabis as a “psychoactive drug that is used for recreational and medical purposes.” The Centre explains that it goes by various street names including marijuana, weed, pot, bud, green, herb or flower, hash, extracts (honey oil, phoenix tears, shatter), and edibles (candies, butter, or baked goods).

Cannabis contains hundreds of chemical substances. More than 100 chemicals, called cannabinoids, have been identified as specific to the cannabis plant. THC (delta-9-tetrahydrocannabinol) is the main psychoactive cannabinoid and is most responsible for the “high” associated with cannabis use. Another cannabinoid is cannabidiol (CBD). CBD has little or no psychoactive effects, so you do not feel high. CBD counteracts some of the negative effects of THC. (CAMH, 2019)

For the purposes of this report, STEPs will use the term “marijuana” in general discussion. When the report refers to a specific marijuana component, product, or derivative, use of the proper respective terminology will make that distinction.

Marijuana consumption most commonly occurs through inhalation (smoking or vaporizers) and ingestion (tea or edibles):

1. Inhalation–smoking: Marijuana can be smoked “in hand-rolled cigarettes called *joints*; in pipes, [in] water pipes (sometimes called *bongs*), or in blunts (marijuana rolled in cigar wraps.”
2. Inhalation–vaporizers: “Stronger forms of marijuana” (including sinsemilla, which comes “from specially tended female plants”), and “concentrated resins containing high doses of marijuana’s active ingredients,” including honeylike *hash oil*, waxy *budder*, and hard amberlike *shatter*,” can be inhaled through a vaporizer.

3. Ingestion: Marijuana can be “used to brew tea” and “is frequently mixed into foods (*edibles*) such as brownies, cookies, or candies” (NIDA, 2019).

Once consumed, marijuana can affect its users in a variety of ways that include (DOJ, DEA, 2017, pp. 74-75):

Common physiological, psychological, and behavior effects of marijuana/ cannabinoids:

- Dizziness
- Nausea
- Tachycardia
- Facial flushing
- Dry mouth
- Tremor
- Merriment, happiness, exhilaration
- Disinhibition
- Relaxation
- Increased sociability
- Talkativeness

Enhanced sensory perception gives rise to:

- Increased appreciation of music, art, and touch
- Heightened imagination leading to a subjective sense of increased creativity, time distortions, illusions, delusions, and hallucinations...
- Impaired judgment
- Reduced coordination
- Ataxia

Many of these effects can increase:

- Impediments to driving ability
- Risk-taking behavior
- Emotional lability
- Incongruity of affect dysphoria
- Disorganized thinking
- Inability to converse logically
- Agitation
- Paranoia
- Confusion
- Restlessness
- Anxiety
- Drowsiness
- Panic attacks
- Appetite
- Short-term memory impairment

Marijuana can also effects users physically:

Short-term symptoms:

- Sedation
- Bloodshot eyes
- Increased heart rate
- Coughing from lung irritation
- Increased appetite
- Decreased blood pressure

Long-term health issues:

- Bronchitis
- Emphysema
- Bronchial asthma
- Suppression of the immune system

Withdrawal symptoms can include:

- Headache
- Shakiness
- Sweating
- Stomach pains
- Nausea
- Restlessness
- Irritability
- Sleep difficulties
- Decreased appetite

The wide variety of marijuana's possible effects demonstrates that people can have very different experiences with these substances. Canada's Centre for Addiction and Mental Health explains that cannabis can affect each individual differently and that depends on any of these variables:

- How much you use
- How often and how long you've used it
- Whether you smoke, vape, or eat it
- Your mood, your expectations and the environment you are in
- Your age
- Whether you have certain pre-existing medical or psychiatric condition
- Whether you've taken any alcohol or other drugs (illegal, prescription, over the counter, or herbal) (CAMH, 2019).

Marijuana's medical uses are of particular interest to individuals dealing with certain conditions as well as the jurisdictions that have legalized the medical use of these substances. The NAS (2017) report "provides a broad set of evidence-based research conclusions on the health effects of cannabis and cannabinoids" (p. 2). In their report, the NAS committee's conclusions included that there was indeed evidence to point toward positive therapeutic effects of cannabis or cannabinoid use for a range of illnesses and symptoms (p. 1).

An expert ad hoc committee of the National Academies of Sciences, Engineering, and Medicine conducted a systematic review of

The National Academies of Sciences, Engineering, and Medicine provides a systematic review of evidence available to support various medical effects of cannabis in their 2017 *The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research*.

research on the reported health effects of cannabis, both positive therapeutic and negative damaging effects. They present their analysis with the framework of its level of evidence, ranging between conclusive, substantial, moderate, limited, and no or insufficient (NAS, 2017).

Over the backdrop of these nation-level inquiries, state-level legislators are making decisions about the laws regulating the production, distribution, and consumption of marijuana within their own jurisdictions. According to Medical Marijuana, Inc.'s (2019) Industry Overview, "the cannabis industry" can be broken down into four components, "includ[ing] legal operations concerning marijuana and it's [sic] non-intoxicating cousin, hemp" (*Overview*). These four components are listed below along with the definitions provided by the 2019 Overview:

1. **Recreational marijuana:** Cannabis used to intentionally experience its intoxicating and mind-altering effects.
2. **Medical marijuana:** Cannabis used as a physician-recommended therapy for treating certain health conditions and symptoms.

3. **CBD oil:** A non-intoxicating nutritional supplement made from hemp that is used to promote wellness.
4. **Hemp:** A versatile industrial crop with more than 25,000 product applications (Medical Marijuana Inc, 2019, *Overview*).

These terms tend to be familiar because various states and jurisdictions across the country use them as components to define regulations, which will be discussed in the next section of this report.

Current Regulatory Environment

Federal Level

Marijuana is classified as a non-narcotic hallucinogen and is considered a Schedule I substance under the Controlled Substances Act (CSA), “which places all substances which were in some manner regulated under existing federal law into one of five schedules...based upon the substance’s medical use, potential for abuse, and safety for dependence liability” (DOJ, DEA, 2017, p. 8). To further clarify, the United States Department of Justice, Drug Enforcement Agency’s 2017 Edition of its report titled *Drugs of Abuse* defines the overall group of Schedule I substances as the following:

- The drug or other substance has a high potential for abuse.
- The drug or other substance has no currently accepted medical use in treatment in the United States.
- There is a lack of accepted safety for use of the drug or other substance under medical supervision (p. 9).

Like marijuana, its close relatives, hashish and hashish oil, are both classified as Schedule I substances under the CSA, as are the more potent marijuana concentrates and THC extracts. “Marinol,” on the other hand, which is “a synthetic version of THC,” is classified as a Schedule III substance, and it “can be prescribed for the control of nausea and vomiting caused by chemotherapeutic agents used in the treatment of cancer and to stimulate appetite in AIDS patients” (p. 75).

Marijuana’s designation as a Schedule I Substance has limited opportunities for high-quality clinical research on the effects of this substance in its various forms.

The American Medical Association (AMA) has updated its Policy Statement on Cannabis for Medicinal Use (H-95.952) to include the following changes:

- The AMA encourages continued research of marijuana and related cannabinoids in patients who have serious conditions where marijuana may have efficacy.
- AMA also states that marijuana’s status as a federal Schedule I controlled substance should be reviewed “with the goal of facilitating the conduct of clinical research and development of cannabinoid-based medicines, and alternate delivery methods. This should not be viewed as an endorsement of state-based medical cannabis programs,

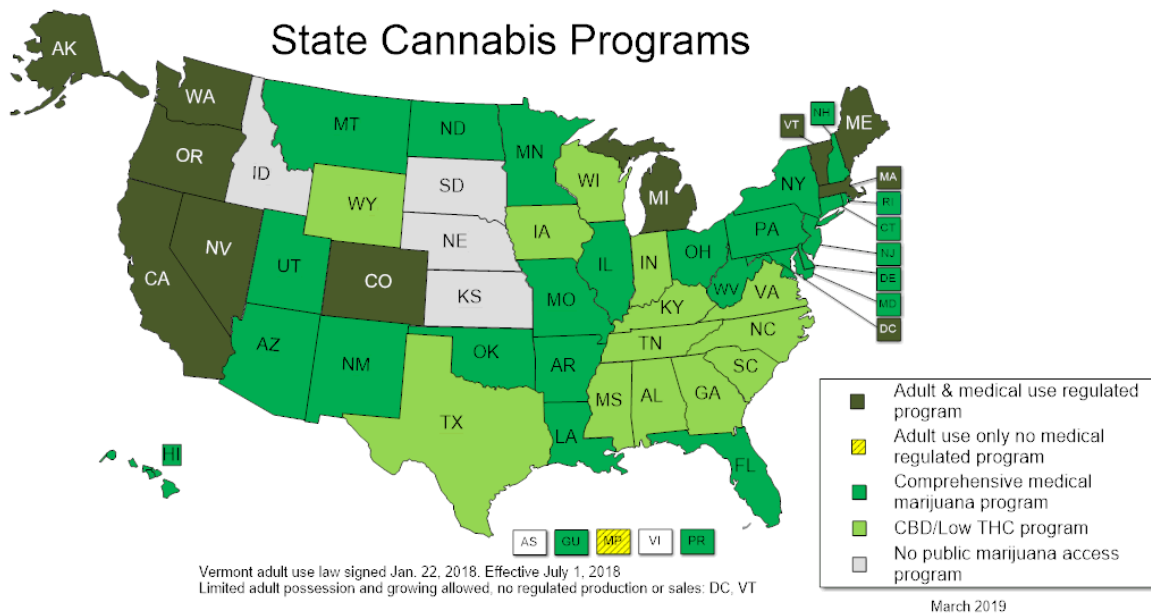
the legalization of marijuana, or that scientific evidence on the therapeutic use of cannabis meets the current standards for a prescription drug product."

- The AMA urges the National Institutes of Health (NIH), Drug Enforcement Agency (DEA), and Food and Drug Administration (FDA) to implement procedures to facilitate grant applications and the conduct of well-designed clinical research into the medical utility of marijuana (Drugs.com, 2018).

A press release in August 2019 revealed that the DEA is moving that direction. "The Drug Enforcement Administration ... announced that it is moving forward to facilitate and expand scientific and medical research for marijuana in the United States. The DEA is providing notice of pending applications from entities applying to be registered to manufacture marijuana for researchers." (DOJ, DEA, 2019)

State Level

According to the National Conference of State Legislatures (NCSL) (2019), California was the first state in the U.S. to pass legislation allowing the "medical use of marijuana," having done so in 1996. As of the latest update, 34 states, the District of Columbia, and the territories of Guam, Puerto Rico, and the U.S. Virgin Islands "have approved a comprehensive, publicly available medical marijuana/cannabis program." In addition, 12 other states have approved programs known as "low THC, high cannabidiol (CBD)" which are not included in the NCSL's criteria for "comprehensive" programs. In sum, at the time of this report, 46 states, D.C., and 3 U.S. territories now have some form of publicly accessible medical marijuana program. Four states do not: Idaho, Kansas, Nebraska, and South Dakota; however, Nebraska and South Dakota have "limited, trial programs" that are not publicly accessible (NCSL, 2019). Below is the NCSL's map depicting states' current statuses, along with specifications of program type.



Ten states, the District of Columbia, and one U.S. territory have some form of regulated adult recreational use program (NCSL, 2019). The Center for American Progress (CAP) together with GBA Strategies conducted a nationwide poll in 2018 which “reveal[ed] nationwide support for marijuana...at an all-time high,” with 68% of Americans “supporting full marijuana legalization” (Medical, *What’s Next?*). The Pew Research Center (2018) survey puts that number a bit lower, at 62%.

The impact of the legalization of marijuana for medical and/or recreational use in each of these jurisdictions may provide valuable lessons for other jurisdictions, including Iowa and Nebraska, as they make those decisions. The Smart Approaches to Marijuana (SAM) organization completed an analysis of those lessons learned.

The Smart Approaches to Marijuana (SAM) organization published a report on the *Lessons Learned from State Marijuana Legalization*.

Local Level

One of this project’s law enforcement interviewees explained the legal status of marijuana in Iowa as follows:

The recent legalization of medical marijuana in the form of CBD products that are available through five state-approved dispensaries, that law was passed in May of 2017, and then the dispensary locally (Council Bluffs) opened in December of 2018. Additionally as a result of the passing of the 2018 farm bill and the subsequent changes in hemp regulation that passed in Iowa too in May of 2019.

The legal status of marijuana in Nebraska is summarized below:

Nebraska legalized hemp production for fiber, grain, or cannabidiol (CBD) in 2019, with the condition that plant parts of industrial hemp have a THC concentration of less than 0.3%. Production and use of marijuana and THC for medical and recreational purposes remain illegal in Nebraska. (UNL, 2019)

Prevalence of Marijuana

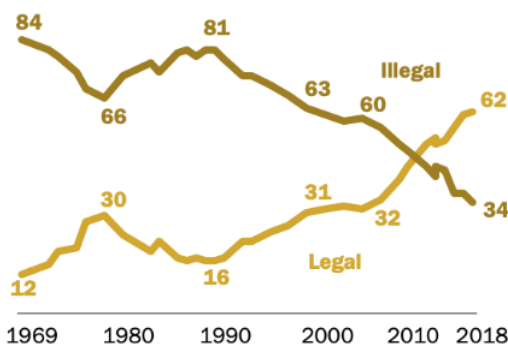
National Level

The number of adults in the U.S. who reported using marijuana at least once in their lifetime (48%) was lower than those who reported using alcohol (86%) or tobacco products (68%). 15% of adults in the U.S. reported using marijuana in the past year, and 19% in the past month (2017 National Survey).

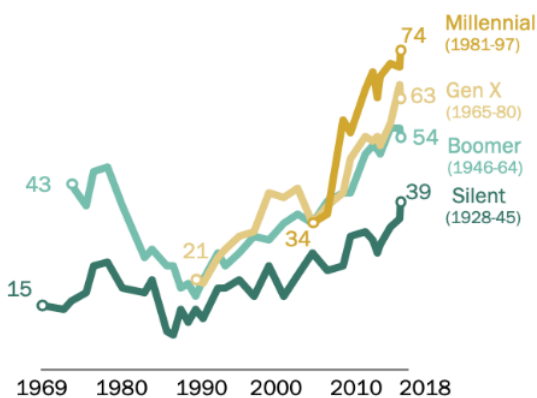
According to the Pew Research Center (2018), 62% of Americans “support marijuana legalization.” The charts below show how this number has changed in the past 50 years both generally as well as among generational groupings:

U.S. public opinion on legalizing marijuana, 1969-2018

Do you think the use of marijuana should be made legal, or not? (%)



% who say marijuana should be made legal



Note: Don't know responses not shown. 1973-2008 data from General Social Survey; 1969 and 1972 data from Gallup. Source: Survey of U.S. adults conducted Sept. 18-24, 2018.

PEW RESEARCH CENTER

Millennials supporting the legalization of marijuana top the chart at 74%, and Gen Xers following at 63% in a close second. The percentages favoring legalization are lower in older generations, however the percentage and pattern of increase is similar across generational divides. The Pew (2018) survey also reported on the breakdown of legalization support among those who identified as Democrat, Republican, and Independent. A higher percentage of Democrats favor legalization (69%) followed closely by Independents (68%). Of those identifying as Republican, 45% said they are in favor of legalization (Pew, 2018).

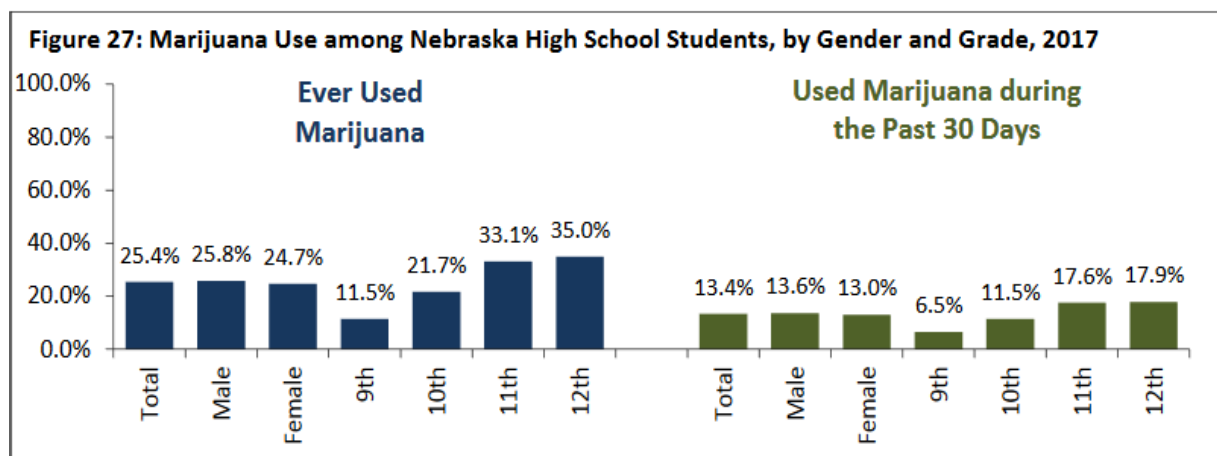
Supporters of legalization cite “medical benefits” (86%) and the ability of “law enforcement to focus on other types of crime” (70%). In contrast, those who oppose legalization cited an increase in “car accidents involving drivers who use marijuana” (79%) and the possible effect of “more people using stronger and more addictive drugs” (69%) (Jones, 2019).

(Pew, 2018)

Local Level

Youth in Nebraska

According to the State of Nebraska 2017 Youth Risk Behavior Survey (YRBS), the percentage of students in Nebraska who reported using marijuana has not changed over the past few years. However, it has dropped significantly since 2003 (UNL, p. 24; CDC, 2017, *Nebraska*). The report shows that in “2017, about 1 in 4 high school students (25.4%) [had] used marijuana at least once during their lifetime” and that just over 1 in 8 (13.4%) “reported using [marijuana] in the past 30 days” (UNL, p. 24; CDC, 2017, *Nebraska*). These measures were similar across gender, but the percentages for both were significantly lower for those students in 9th grade versus those students in 10th–12th grades (UNL, 2017, p. 24; CDC, 2017, *Nebraska*). Only “about 1 in 19 high school students (5.3%)” in Nebraska “reported using marijuana before age 13” (UNL, 2017, p. 25; CDC, 2017). About that same number (5.2%) reported ever having used synthetic marijuana in their lifetime (CDC, 2017, *Nebraska*).



(UNL, 2017, p. 25)

Youth in Iowa

The results for high school students in Iowa are similar, where 26.5% of high school students reported using marijuana at least once during their lifetime, 13.2% reported using marijuana one or more times in the past 30 days, 5.1% reported having tried marijuana for the first time prior to age 13, and 5.1% reported ever having used synthetic marijuana (CDC, 2017, *Iowa*). The percentage of “all students taking” the 2018 Iowa Youth Survey (IYS) who reported marijuana use in the past 30 days has remained stable from 2012 to 2018, as have the percentage differences between grades (IDPH, 2018, p. 107). Likewise, “youth substance abuse declined steadily” in Iowa since 2014 (Governor’s, 2016). The 2018 IYS results show that 2% of 6th graders, 6% of 8th graders, and 21% of 11th graders reported ever having used marijuana in their lifetime (IDPH, 2018, p. 27). The results also show that 1% of 6th graders, 3% of 8th graders, and 11% of 11th graders reported having used marijuana in the past 30 days (IDPH, 2018, p. 28). Further, the report shows that the

most vulnerable ages for trying marijuana for the first time, based on the responses of the oldest respondents, are 13-14 years (7% of 11th graders) and 15-16 years (11% of 11th graders) (IDPH, 2018, p. 28).

Iowa Youth Survey – 2018 State of Iowa Results

Marijuana Use	6 th Grade	8 th Grade	11 th Grade	All Grades
Lifetime Have you ever used marijuana (pot, grass, hash, bud, weed)?	2%	6%	21%	9%
Past 30 days In the past 30 days, have you used marijuana (pot, grass, hash, bud, weed)?	1%	3%	11%	4%

(IDPH, 2018, pp. 27-28)

Consequence Data

According to the DEA (2017), “no deaths from overdose of marijuana have been reported” (DOJ, DEA, 2017, p. 75). However, “there is substantial evidence of a statistical association between cannabis use and increased risk of motor vehicle crashes” along with “moderate evidence of a statistical association between cannabis use and increased risk of overdose injuries, including respiratory distress, among pediatric populations in U.S. states where cannabis is legal” (NAS, *Committee’s*, 2017, p. 4). Further, “THC extraction labs are being reported nationwide, particularly in the western states and in states where local and state marijuana laws are more relaxed” (DOJ, DEA, 2017, p. 76).

Legal-Nebraska

Marijuana remains “the most common illicit drug,” both in general as well as in drug-related crimes in Nebraska (NE DHHS, 2015, p. 77). In Nebraska in 2013, marijuana was involved in “nearly three-fourths of all adult drug possession arrests...and three out of five juvenile drug possession arrests.” Marijuana “was the most common substance found in drivers who were caught driving under the influence of drugs in every year from 2006-2014.” Further, over half of “all new prison inmates” in 2015 state that they had used marijuana in “the five years prior to their incarceration” (pp. 77-82).

Legal-Iowa

Iowa mirrors Nebraska with marijuana being the most common illicit drug, only ranking second behind alcohol, according to the National Survey on Drug Use & Health, 2015–2016 (Governor’s, 2018, p. 2). At the time of the report, 5.5% of Iowans 12 to 17 years of age admitted to using marijuana within the past 30 days; this number was very close to the percentage of Iowans 12 years of age and older who admitted the same (5.5%) (p. 18).

Marijuana was “the most-cited drug detected in fatal crashes” at 51%, compared with 41.1% in the U.S. overall (2016 GHSA & 2016 IDOT; Governor’s, 2018, p. 4). In 2016, the Iowa Department of Public Safety reported that “1 of every 12 marijuana samples sent to Iowa’s crime lab involved marijuana ‘preparations’ (high-THC concentrates such as hash oils, waxes, [and] marijuana-infused edibles” (Governor’s, 2018, p. 23). In 2016, the Iowa State Patrol reported that “Iowa’s leading marijuana interdiction ‘source’ states [were] Colorado (64%), California (18%), Wyoming (9%), [and] Nevada (9%)” (Governor’s, 2018, p. 23). In 2015, “Iowa was the 4th most frequent state destination for Colorado marijuana seized in highway interdictions” (El Paso Intelligence Center, 2016; Governor’s, 2018, p. 23).

Medical-Nebraska

In 2014, marijuana ranked third behind alcohol (62%) and methamphetamine (14%) with 10% of admissions for substance abuse (NE DHHS, 2015, p. 3). According to the NE DHHS (2015) report, 7.2% of trauma center hospitalizations were patients who tested positive for having illegal drugs in their system at the time of admission (p. 103). Of these 724 patients, 324 (44.8%) were found to have marijuana in their system, making marijuana the most common illegal drug found in “hospitalizations in which the patient had [illegal] drugs in their system at the time of admission” (p. 105).

Medical-Iowa

The Iowa Department of Public Health (2017) reported that “marijuana is the primary drug for 76% of Iowa juveniles in treatment” (Governor’s, 2018, p. 18). In 2014, there were 1,633 emergency room admissions in which “cannabis use” was considered a “causal or contributing factor” (Iowa Office of Drug Control Policy, 2016, p. 31).

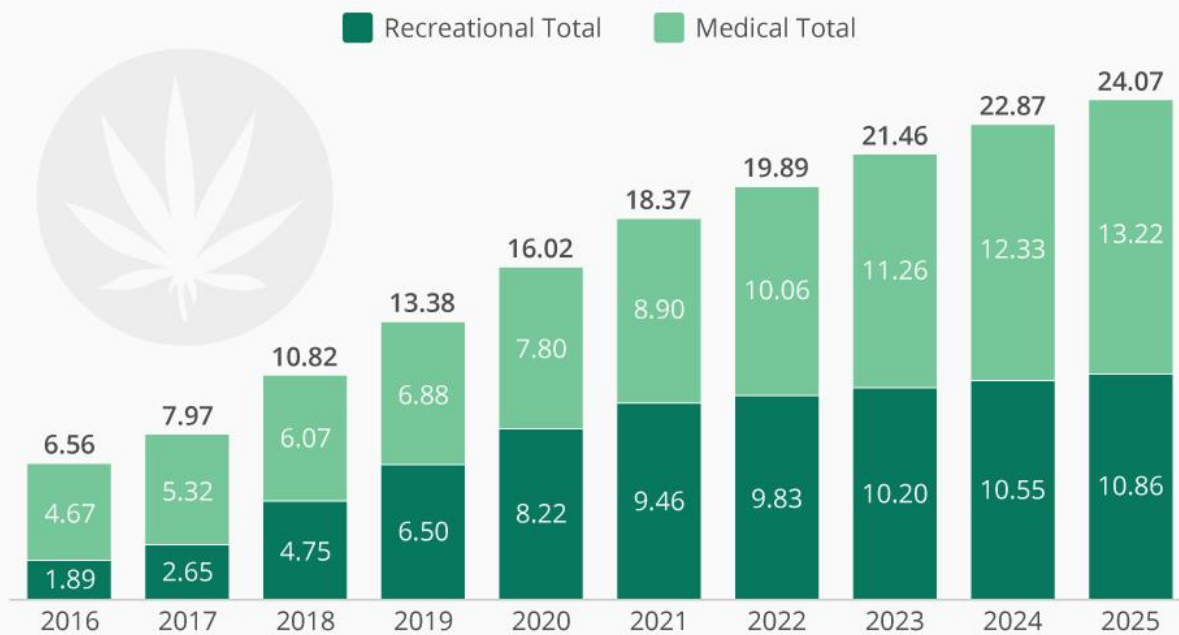
Marijuana, the Industry

The vastness and complexity of the marijuana industry can be defined by the revenue it generates and the stakeholders that it engages.

The tracking and projections of how much money has and will be generated by both the medical and recreational marijuana markets reveals a driving force behind its continuing legalization and acceptance.

U.S. Marijuana Market: The Grass Is Getting Greener

Projected growth of U.S. recreational and medical marijuana sales (billion U.S. dollars)

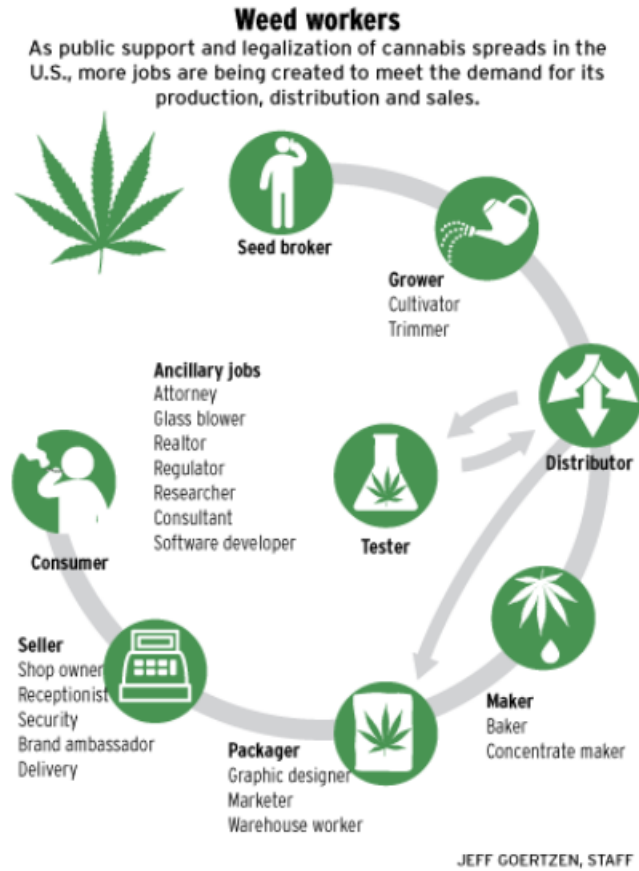


@StatistaCharts Source: The Cannabis Industry Annual Report



These projected sales increases align with a complex and growing marijuana industry. According to the *Special Report: Cannabis Jobs Count* released by Leafly, an online resource on cannabis information, “the number of Americans directly employed in this booming (legal cannabis) industry has soared to more than 211,000” (Barcott, 2019, pg. 2). The report explains that the Bureau of Labor Statistics, as a federal agency, officially considers all cannabis jobs to be illegal so does not break them out as a defined category.

The visual below identifies the variety of workers and roles that constitute the legal cannabis industry, including production, distribution, and sales of the range of marijuana products:



(Goertzen, 2016)

The marijuana industry does not function in isolation, but rather exists within communities. Depending on its legal status and prevalence within those communities, community stakeholders' work is impacted by the marijuana industry. Impacted stakeholders include legislators and law enforcement professionals, as well as social service and treatment professionals. These are among the many sectors from which the Prevention Means Progress coalition draws its membership.

Community Stakeholder Perspectives

Prevention Means Progress (PMP) staff selected a sample of key community stakeholders based on the variety of sectors they represented and the geographic areas they covered. PMP staff made initial contact, and STEPs staff conducted the interviews via audio Zoom. After completing 12 interviews, STEPs staff clustered the sectors represented into two groups for analysis: 1) the Law Making & Enforcement group, which included representatives of the law enforcement, courts, and/or corrections sectors, and 2) the Social Impact & Services group, which included respondents from education, social services, and healthcare sectors. STEPs asked the six interview participants from each group a series of questions about marijuana, their professional role, and the community status of marijuana. Their responses are summarized below in the following sections:

- Terminology and Understanding of Marijuana
- Community Status of Marijuana
- Biggest Concerns about Marijuana
- Biggest Professional Successes Related to Marijuana
- Biggest Professional Challenges Related to Marijuana
- Future of Marijuana in the Community
- Desired Information about Marijuana

Terminology and Understanding of Marijuana

Most interviewees grounded their explanation of the term “marijuana” with a physical description of its plant form, including “green, leafy substance,” “processed leaves,” “ditch weed,” or “the leaves and the seeds and the stuff that would come from a hemp plant.” They went on to acknowledge that marijuana products involve processing or extracting to create forms beyond dried leaves in baggies to include edibles, waxes, hash oils, and other concentrated forms.

Within their discussion of concentrates, the interviewees highlighted the THC content for the purpose of getting high. One of the Social Impact & Service interviewees also mentioned CBD extractions, while one of the Law Making & Enforcement interviewees discussed the prevalence of marijuana compared to cocaine, meth, and heroin.

When asked about what terminology they use in discussing marijuana, the interviewees described that their word choice is often situation- and audience-specific. The Law Making & Enforcement interviewees offered the following examples:

Working with juvenile delinquent referrals, we start with “marijuana” and then throw around the slang terms of “pot” and “weed.”

Discussing the specifics of a particular offense with an officer, I will use the actual substance that the person had.

Talking about this with a criminalist, I may use the substance that was found in the blood or urine test.

Since drug tests test for cannabinoids, we usually call it "cannabis."

From the legislative side, we use "CBD" as well as "marijuana," "cannabis," and also "THC."

The Social Impact & Services interviewees mentioned "marijuana," "THC," and "CBD." They also described using a mix of terms depending on the setting. They offered the following examples:

Within the office, we call it "weed."

Some of our clients refer to it as "loud" or "hash," so we sometimes use the street name just so that we can be consistent and understand what our clients are using.

In court testimony setting, I would say "marijuana" and "marijuana-related products" to include all substances that have THC.

Interviewees explained that the "ground is certainly shifting, and certain things are becoming legal while others aren't. In particular, the CBD shops that are opening up in Iowa have made CBD a separate construct." One interviewee expressed concern about the limited role that physicians play by explaining that "its uses in particular disease states based on a doctor certifying that a patient has those particular disease states...they should have more involvement than just that."

Another interviewee explained that while the "focus is on the CBD component...THC gets pulled along with it." Based on the knowledge that **THC is the component that makes people high**, another interviewee mentioned the challenge of understanding potency:

Where I do struggle is knowing maybe the concentration of THC in each of those various substances. For example, I wouldn't know whether something like an edible had more or less THC than hash, or oil, or the different waxes.

When folks are thinking of marijuana, they're just simply thinking of the green leafy, unprocessed marijuana versus marijuana in its various forms. We're talking more about the high concentration marijuana that we're starting to see,

Community Status of Marijuana

When asked to describe the status of marijuana in their community, the interviewees explained what a unique and complicated “community” they were dealing with. Regardless of whether their defined jurisdiction was in Iowa or Nebraska, they described the complexity of operating “right on the border,” as well as within a country with so much variation on marijuana’s legal status.

Federally, it's still a Class I drug and it's illegal to possess, and yet states have legalized it.

Conversations for both states are in a pretty similar state...with CBD on some aspect, either being legal in some regard...granted license like in the state of Iowa or it being in a more vague state, in Nebraska, I think the states are of similar thinking.

I think that we're consistent in the belief that we're easing our way down the road one step at a time to recreational use, and as we've seen in Colorado and other states, the cost for that far outweighs any benefits that might be associated with the revenues that come with it.

The **proximity to states that have legalized the recreational use** of marijuana is another area of concern shared by the interviewees. They focused on Nebraska’s western border and interstate highway connection to Colorado as well as Iowa’s eastern border with Illinois where recreational marijuana will be legal as of January 1, 2020. Interviewees summarized their concerns as follows:

When one state is bordered by another that has legalized the recreational use of marijuana, there tends to be a very big problem in the bordering state with the influx of marijuana that was legally obtained in one state, arriving in the other state.

As states legalize it, like Colorado has, those states that are near have to deal more with the enforcement and the trafficking issues around that and how that impacts their communities, which ultimately has a financial strain, and then from a community health perspective...

Because of the street price of this drug, it is very profitable for people to make the trip to a bordering state, acquire a quantity of the substance legally, and then illegally traffic it in the bordering state for a much-inflated price. So it results in a lot more accessibility for people in the state that is trying to limit the availability of the drug; certainly the higher concentrations of the drug and especially with regards to young people; and a lot more resources being drained from the criminal justice system, as we prosecute these cases.

The interviewees agreed there is a **great deal of crossover between Iowa and Nebraska**. They reported working together on regional task forces and recognized the PMP Coalition network as helping to bridge any gaps between Iowa and Nebraska. They also acknowledged that the states' proximity to each other create challenges:

One of the biggest challenges that we face right now is the variances in laws...being a river town...certainly influence because of bordering one another.

Anytime you have a neighboring state, you have more of an opportunity for things to crossover. And that would include drugs to cross over.

Omaha and Council Bluffs, they're very ... tightly intertwined with one another. So even if it's legalized in Iowa people from Nebraska are gonna go over to Iowa to get it, because it's right there and they have access to it, they're gonna use it.

Law enforcement interviewees explained that “kids that come over from Nebraska that would get charged” and “Pottawattamie County kids...get arrested over there.” Social service interviewees noted that “many of our families float back and forth between the Council Bluffs area and the larger Omaha metro area.”

When discussing the prevalence of marijuana in their communities, many of the interviewees framed their **comments within the context of other illegal drugs**. The law enforcement interviewees offered the following insights:

There's not a huge rise in marijuana, but it's doesn't decrease either. The biggest change is the THC level has gone much higher, and I think with the other types of products that contain THC, the edibles, the waxes, oils, that type of thing and the higher concentration of THC.

[Citizens] would be impaired on marijuana or products with THC. It seem that potency of the marijuana has increased so that consequently it impairs the people that get in and drive. If it's not alcohol obviously, so we have to decide whether that is the impairment is coming from some type of drug and marijuana seems to be much more common than it used to be...due to the potency of the products that they're consuming.

Our clients are not allowed to smoke marijuana because it is illegal. But it's also a gateway drug to other things, or at least that's what my experience has been. Usually it's not they just use marijuana. There's something else that comes along with it, whether it be alcohol or harder drugs or anything like that. The majority of our clients are not just using marijuana.

Interviewees with a social service/healthcare perspective shared the following observations:

There's prevalence of marijuana in my community. Not as much as other illegal substances. Biggest in our community is meth. Methamphetamine is probably our most abused illicit drug in our community. And opioids are another large focus, at least in the healthcare community.

The population that we're serving right now, I would not identify marijuana as a primary drug of choice (i.e., methamphetamine, opiates) for our client. However, it's usually involved in the second or tertiary drug of choice.

Interviewees also observed a **decreasing severity in policy and practice** responses to marijuana possession:

What [officers] are seeing in court is the sentences on marijuana are less, lesser sentences where there's smaller consequences as far as sentencing ... it's just not regarded as severely as it used to be.

In Nebraska, there are people out there with CBD, some prosecutors are trying to prosecute, others are not.

Social service workers explained:

If we receive an intake alleging parental marijuana use, in the past that would be labeled as a child abuse or child neglect case. And now both of the states are using alternative response where we will go out, engage with the family, offer them resources, any services or support to help address the marijuana usage, but we're not making a finding of abuse or neglect, or removing a child from the home unless either the child tests positive for that substance, or there's some sort of criminal case that results.

They also noted **shifts in the focus of their professional work** related to marijuana:

It used to be we had marijuana grows...now very seldom because marijuana is easier to obtain...e.g., Colorado, you can go out there and you can buy marijuana of a higher quality and bring it, illegally, but you know it's easier to obtain.

As our policies and our ideas have changed over the years, I've seen a practice change in the sense that we look at marijuana not exactly the way one would look at alcohol since marijuana is still illegal, but there's so much less stigma towards marijuana use.

Biggest Concerns about Marijuana

When asked about their biggest concerns about marijuana, the interviewees mentioned a variety of issues spanning attitudes, usage, regulation, crime, enforcement, social justice and the need for research.

Interviewees described a **more laid-back and accepting attitude toward marijuana**:

Nobody really sees it as a problem like it was maybe 10 years ago. There's people that just kind of...accept it.

People have almost gotten to the point where they group it in with alcohol to where alcohol is legal and you utilize it and if over-utilize it, you will end up getting arrested, and it can affect you which is totally true.

A narrative that it does more good than harm. I think that's kinda concerning...because I don't think there's...data out there that would medically support that.

Amongst the population 30 and over, it remains largely something that people don't consider to be lawful to possess or should be lawful to possess. But the population under 30, it is becoming more and more acceptable as a substance that should be not just medicinally used, but recreationally used.

Marijuana (is) more socially acceptable...from the medical standpoint that people are viewing marijuana as a lesser bad option as compared to maybe some other stronger pharmaceuticals.

Suggestions about how to address this issue included “general education and that fine line between the differences between the two, and how they're accepted and what the consequences are.”

As far as the actual **usage of marijuana and its derivative products**, one interviewee stated, “We believe that marijuana is the most widely available and abused illicit drug in the United States and our community is no different.” Others went on to explore the rationales behind this usage:

It's more a fine line of those cannabis oils are helping people who are medically in need of it, but that shouldn't give the general population permission to go out and buy a bag of weed and smoke it in their garage.

It's never just marijuana. Always something that goes along with it. It's very rare you have just a sole marijuana user. And if they are, they're usually not making good decisions while they're under the influence of marijuana. So my concern is if this goes

legal, we're gonna have the same thing that we do with alcohol. People getting out there, drinking, driving, using, becoming addicted. And you know, some of them ruin their lives based on addiction.

We broadly assume that the individuals that are doing that are just doing that for pleasure, and we kind of take away that pain reduction, whether that's...through a CBD oil or somebody self-medicating their early childhood traumas...or mental health issues

Some users might have the goal...to stop using methamphetamine or stop using opioids, and then relies solely on marijuana. That also comes with its own bag of problems in regards to the concentration of THC in some of those products.

Suggestions about how to deal with marijuana usage included “prevention work in the schools and talk to kids in different programs and community events. The more we can prevent that, the better the chance they’re never gonna get involved.”

A number of interviewees expressed concerns about the **impact of marijuana use on youth and families:**

The impact it has on our schools [includes] the kids that are vaping in the middle schools and high schools. And now with the concerns about vaping, they're turning to dabbing.

One of my bigger concerns is when it comes to youth in developing brains. What data...there [is] as to what long-term marijuana usage does do to a developing brain.

When caregivers are still using an illegal drug (like marijuana), they can be taking their children to engage in criminal activity to procure that substance. Or adolescent child may feel like that [usage] is okay. So we see a lot of multi-generational marijuana usage.

My biggest concerns are kind of the effects on families...It can be something that goes down generations, if some family members use.

Suggestions about how to address a negative impact on youth and families included “identifying when family members...struggle with addiction and to give youth the tools to break the cycle. Help them to get out of those habits, because marijuana can be a gateway drug to harder drugs.”

Another interviewee raised **social justice** as another issue:

It seems like certain segments of our society have borne the brunt of the aspects when marijuana was fully illegal in the United States, and then other segments of our population as certain states are legalizing it, are reaping the benefits of that legalization, whether that's states themselves as they're still maintaining prison populations with individuals incarcerated for offenses related to marijuana, yet still benefiting from the tax purposes of the sale of now legalized marijuana. It's so unique, from a social justice lens.

The law enforcement interviewees expressed concerns about the **connections between marijuana use and crimes**:

People are committing crimes to support their habits.

After alcohol, marijuana is the number one substance found in the body of drivers involved in collisions involving serious injuries and death.

As potential means to address these concerns, they suggested “more scientifically validated studies to determine on a more widespread basis what is and isn't a safe level at which you can operate a motor vehicle.” They also mentioned a “need a better method of detection of the substance, because having the substance present at certain levels in the urine creates an entirely different inference than having the presence of the substance at a certain level in the blood.”

Many interviewees shared concern “that this is **moving**, like it has in many other states, **toward a personal or recreational use program**, and as we have seen nationwide there are not any/very many positive impacts from that.” This concern was expressed in a variety of different statements, including:

My biggest concerns, is that it's kind of that slippery slope: other states and how the medical marijuana has progressed into the recreational marijuana. I would like to see that medical marijuana no longer be allowed in the state of Iowa.

We don't want to see the state to turn to recreational use, because...the negative impact far outweighs the positive benefits of a program like that.

I definitely do not wanna see marijuana legalized. I think that it would be really poor for the community.

Recreational use of marijuana is a huge concern...[as far as the] long term I don't know what type of health issues people are going to have with utilizing marijuana...given this higher THC content the addictive quality of it and what it can reveal the problems that it causes for that.

Some interviewees also described **concerns about the implementation of medical marijuana use:**

There's not a lot of regulation around the roll-out of the medicinal marijuana, and that the THC content has been allowed to go up in some of the more recent regulations, too. And it just doesn't seem like responsible.

Biggest concern is that it is around and it is available. We've got medicinal marijuana laws that are in effect, but that we would not have that move into the recreational use.

If it has some type of, like a CBD, with some medicinal use to where it can help people with certain injuries, sicknesses, diseases, it can be utilized to lessen their pain. I suppose that is something that you look at if it's regulated and it's prescribed.

Many interviewees called for **extensive research on marijuana, its derivative products, and their impact** on users:

I'd most wanna see happen would be having the federal government move marijuana from a Schedule I to a Schedule II, to actually get it into a process, by process, I mean the FDA process, to test some of these usages if they actually have a scientific—I shouldn't say scientific—to scientifically test these usages to see if they have a true medical value or not.

There appears to be a stalemate in the federal government, and we have a lot of individual state laboratories that are trying to fill in those gaps one way or the other.

One thing that could be done on behalf of everyone is just to have more factual medical information out there as to what it can and can't do. And that would hopefully enable consumers to make a better choice, as opposed to what they might have heard, read on the Internet, or personally believe.

I would like to see that research continue to be done. I would like to see some longer-term results. I would like to understand the 360-degree view.

So while some states have enacted a per se marijuana level, there is no generally scientific and scientifically accepted per se level of impairment, because it depends so much on a person's personal characteristics, their personal usage patterns, and other things like that.

Biggest Professional Successes Related to Marijuana

Within their respective professions, interviewees identified what they considered to be their professional successes related to marijuana in their communities.

The Law Making & Enforcement interviewees mentioned **getting illegal marijuana off the streets**:

Through mainly the task force, we have seized a lot of marijuana out there, I mean illegal marijuana that is being transported or being sold.

They also pointed to the value of **educating the public about the marijuana and its risks**:

News stories about the negative impact of vaping and the infusing THC into vape compounds, and hopefully that has a positive impact.

More public service announcement type of publicity...and more education of the public with regard to the fact that this is not your...1970's version of marijuana that was 3-5% potent. This is a version of the drug that is highly impairing and can even lead to psychoses and death.

Prevention operations and presentations with the hard part being how to measure that prevention, e.g., measure how many people didn't use because you were able to talk to them before.

Targeting some of those low-risk kids, not getting them involved in the juvenile justice system, and maybe giving them that little bit of education. If anything, getting their families and parents aware and involved in what they're doing.

When they can determine the impact that marijuana has had on their lives and choose not to...use marijuana anymore. That they realize it, and not just me telling them. 'Cause when you get to that point, that's that steppingstone of them buying in and taking control of their own lives. So that's a huge success.

The Social Impact & Services interviewees highlighted as successes their efforts to **understand and serve their clients' motivations and needs**:

We're understanding more about the adult clients we serve, specifically ... understanding more about those early childhood traumas and what might be driving those health choice behaviors.

Any time we can help a parent or a caregiver address their substance abuse and mental health issues while creating an environment where a child can remain in the home, where a family can remain intact.

I think it's generally about physical health. With what resources? We've been able to add a health clinic at our shelter, which is great, they have 5 day a week access to physical health and dental services.

They also spoke about **redefining their roles related to marijuana** based on understanding how systems and programs work:

Providers should not be those to certify that a patient has a particular diagnosis so that they can get the CBD card. So that was a push that came from the administration...because there is no information out there about the use of these products.

My role originally started out as just being at the two high schools, and we've ... realized that a lot of kids are really impacted by substances, either in their family, or by exposure to friends that use in middle school. So my role has ... expanded that I'm responding more in middle school for students...before they're kind of too actively engaged in their own use. And they tend to be...more open and willing to talk about some of the stuff in their family that they're affected by.

Biggest Professional Challenges Related to Marijuana

Interviewees reported what they considered to be their biggest professional challenges related to marijuana as well as how they would like to see them resolved or addressed.

The Law Making & Enforcement interviewees pointed to **inconsistent marijuana laws and enforcement** as one of their biggest professional challenges:

One of my frustrations or challenges is how do we tap the brakes on what might sound good versus what makes good public policy. I mean the documentation, information...from a medical studies, practical information studies to back up those, to back up the public policy.

The biggest challenge that we face is the contradictory laws between the federal and the state level, and even between adjoining states.

We need to come together as a country, both federally and at the state level, and standardize how we're gonna deal with this drug, and you know, that's a legislative issue that we need to deal with that's outside of our control as law enforcement right now.

Opinion towards marijuana has changed to where it's not regarded as seriously... that's a challenge when it gets into the judicial system to where they don't get the sentences they used to get.

They also cited the **public's perceptions and understanding of marijuana** as a frustration in their work:

I think the biggest frustration is them not differentiating a bag of marijuana as being "okay for you" versus the low THC level oils that are being used medically. There's an attitude that "There's nothing wrong with marijuana. It's not a gateway drug. It's not bad for you," just kind of facing those perceptions.

It would have to be the separation between the reality of the substances that we're seeing and the potency and the result of consumption of the substances we are seeing versus the public's perception of marijuana as harmless and even medicinally helpful.

But I think my biggest frustration when it comes to marijuana is, people look at it like alcohol. And people feel that maybe alcohol is harsher than marijuana so why shouldn't marijuana be legalized. Then it just kind of validates that when all these other states are making it legal.

Suggested solutions to some of these law making and enforcement challenges included:

Federal government make it a Schedule II and allow the FDA and DEA to kind of start a process to provide best practices, as well as best solutions out there.

I would like to see...that there wouldn't be this continued...movement towards legalization.

I think mostly just through education. People need to be aware of what the two sides are. So that people do see that...there are...negative consequences on the community and the kids, and families.

The Social Impact & Services interviewees also identified **inconsistent marijuana laws** as a challenge in their work:

People will go to a different state maybe where it is legal, bring those items back to the state of Iowa or the state of Nebraska where it's illegal, and then they don't understand that there are still ramifications in the criminal justice system for those behaviors.

Because those particular (CBD/THC) products don't have the regulations that all other FDA drugs have, and they don't have the literature to support the dosing and the use of those particular products.

They also commented about their frustrations with the **availability and concentration of marijuana products**:

Because there's been less of a stigma around marijuana use, sometimes parents or caregivers can be a bit cavalier about leaving products accessible to children.

Marijuana-related products that have such a high THC concentration that some of the behaviors are so bizarre and really dangerous at times. Especially someone who has untreated mental health issues and then on top of it are using some type of product that they have no idea about the purity or the quality thereof.

Social Impact & Services interviewees pointed out the **unrecognized health-related dangers of marijuana** use as a challenge:

We see people using marijuana as an excuse at times to maybe try to cover up for other substances that they're using. Or if you're smoking marijuana, that you're still smoking something, it's a carcinogen. There are health effects.

When we're treating addiction, and addiction doesn't discriminate on which drug that you choose if you have that disease of addiction, you're gonna become addicted whether it's cannabis, or alcohol, or meth, or cocaine.

There's not much research done out there of the long-term effects, whether that's lung disease or the impact on their mental health.

They also spoke about the frustrations of **limited or inappropriate resources to deal with marijuana** in their communities:

Limited staff...within the school district who can deal with family addiction and also potentially getting into their own cycle of use.

Lack of enough residential treatment beds for families, or enough out-patient treatment options. There are...not enough licensed drug and alcohol treatment counselors or...mental health practitioners who are available to our families. The funding for those services is an issue.

Systems and resources are the biggest barrier. I think some of our systems and structures need to look ourselves in the mirror and say, how are we contributing to the problem? And how are we meeting the clients where they are?

Within the Social Impact & Services arena, suggested solutions included:

I would love for there to be funding for the earlier intervention...where we can respond and support kiddos and families that are struggling with addiction, and...continue that support for those kids as they...are the highest at risk for developing addiction themselves.

I would like to see more information provided to the community on the negative effects of marijuana use.

Future of Marijuana in the Community

When discussing where they saw the marijuana industry heading in their respective communities, most of the interviewees shared their beliefs that the **community was heading toward more lenient legal status and more public tolerance of marijuana:**

It starts with medicinal use and moves on to recreational use and we're not there yet as a state. But that may be something that we have to address in the future.

My professional opinion is just more and more tolerance.

I think it's going to be wherever legislation allows it.

I believe that it's heading towards...legalization of marijuana.

I have a concern for my community, my county, the state, as if this is [to] continue to the laws are relaxed or things continue to get more acceptable, I have concerns over the families, the people, the citizens...because I think there's gonna be a negative impact.

Interviewees also mentioned the **influence that the marijuana industry and market forces might have on movement toward legalization:**

There seems to be such an uptick in recreational or addictive marijuana usage. I see the same type of commerce happening around marijuana-related products in [Nebraska and Iowa].

I think the industry will continue to push that...and then we'll just kinda have to see what happens legislatively.

I think any industry is going to understand how states' legalization of that is going to essentially erode the wall, and it becomes more and more acceptable, and so your messaging and your strategy can get bolder and bolder and bolder.

I'm not sure if the market will support these things long-term. I don't foresee any larger expansion in the near future.

Law Making & Enforcement

When asked their thoughts on whether their profession is prepared to deal with these anticipated industry changes, many Law Making & Enforcement interviewees conveyed that they will **continue to do the best job they can** regardless of what happens on the law making side. They also acknowledged there may have to be **some resource and focus adjustments**:

Law enforcement enforces the laws that legislature creates.

We enforce those laws and...we will do everything we can to...protect people and keep people safe and do the best we can for our community.

We're doing our best right now with the staff that we have. I don't believe we have sufficient staff or resources to address this as it expands. It's gonna change the way that we conduct training operations [and] investigations. It's gonna be a challenging process. Our people will step up and we'll get through it, but it's gonna put a burden, again, on the taxpayers and the citizens in the communities because of the costs that are associated with it.

Even if they legalize marijuana, we'll probably still have to deal with it on a juvenile level because it shouldn't be in the hands of kids [and] there's still going to be an illegal level of it.

Social Impact & Services

Some Social Impact & Services interviewees were confident but acknowledged that there is always **room for improvement, particularly in education and training**. They pointed out that their **work requires a greater focus on other illegal more dangerous substances**:

We could always use more information [and we] would like just some additional training related to those changes and how they're going to roll out.

There's definitely a lot of room for growth in being prepared for that, and I think it kind of goes back to people's comfort level talking about it.

Any time we can be more educated about emerging treatment options and trends, or behaviors, or products, education is good period. I think we're doing a good job, but I think there's always room for improvement.

We're trying to get our arms and our heads around the opioid epidemic. To think about marijuana in that mix is very difficult.

I think as you have an uptick in some of the more toxic illicit substances, it also mutes marijuana's dangers...All being bad, but different shades of bad.

Professionals' Desired Information on Marijuana

The interviewees shared many thoughts about what they would like to learn related to marijuana. They would like to learn more about **legislative processes, ongoing and emerging industry trends, including information about specific marijuana derivative products:**

Definitely a national, landscape regarding that legalization conversation.

I would like to learn more about what the legislators have in mind, and what they intend to do as far as moving towards personal use, or how they're going to provide assistance for us in the local communities to address the concerns of identifying and testing people on...whether they're using or not.

Ongoing trends, just the real differences between the effects that the "street marijuana" would have versus your low THC cannabis oils, and just more on how to communicate that with others, on the differences of how they affect our community and individuals.

I think the biggest is staying up to date. Like all these new oils that are comin' out, what's the difference in 'em. The latest trends for marijuana would be very helpful, especially with the CBD oils.

Where I do struggle is knowing maybe the concentration of THC in each of those various substances. For example, I wouldn't know whether something like an edible had more or less THC than hash, or oil, or the different waxes.

Further, members of both groups are especially interested in **scientific studies regarding a range of effects of using marijuana products**. This is particularly true for the Social Impact group in regard to the higher potency/concentration of THC in products and the effects using these products has on the brain, the developing brain, and the unborn fetus:

I would like to see the results of those scientifically validated studies that I told you were necessary in order to better understand the effects of the higher doses of marijuana that are available.

I think the biggest thing I'd like to know is on the medical standpoint, what is fact and what is fiction.

I'd like to learn more about the ways that the high potency THC products, like how it affects a person's brain, particularly with adolescents.

I think always information on the developing brain, (including when) mom is using marijuana while pregnant or breast feeding or—and then as the child grows up. The effects of kind of moderate use of marijuana versus regular use of marijuana.

More information about the difference between the medicinal use of it and the recreational use of it, and the impact what the impacts are, how they're different.

On the Law Making & Enforcement side, there was also an interest in learning more about the **impact in states where recreational use has been legalized:**

I'm probably...more curious as far as the impact that marijuana's had in these states where it's been legalized for recreational use.

The Social Impact & Services group additionally focused on **information to help them better understand and develop tools to serve their clients involved with marijuana:**

The negative impact that is has on somebody's mental and physical health. The impact that is has on people socially and economically.

I would like to know how parents and caregivers can create an environment that encourages children not to use or encourages children to seek help or support in other ways.

The signs of symptoms, what to look for if you're doing a home visit with the family.

Probably use within our community given the dispensaries. I have no idea how many people have CBD cards in my community, how many are actually using the dispensary.

Professionals Desired Other Stakeholders to Have Information

When asked what they wished other stakeholders understood about marijuana, the Law Making & Enforcement interviewees talked about law making, decision-making and being proactive.

They wanted lawmakers to consider the **full impact of legalization on their communities:**

Lawmakers, before they would you go down that road of legalization that they do a lot of research and see the impact it will have on their state and their community.

I wish they'd see the full picture and the full impact, not just... "It's very minor" and "it will save us dollars," and "it will help with our taxes." Like the big picture about the society and safety and the risks that you're taking by actually moving forward with any legalization. Not just make some decision because of money.

They also mentioned the importance of **making informed decisions about marijuana use, including product specifics and alternative activities:**

I would like to see more honest communication and dissemination of information with regards to the reality of the concentrations of marijuana products that we're seeing being distributed amongst, especially the group of people under the age of 30.

There's a lot of other options out there that maybe don't require chemical ingestion, just healthier lifestyles, both physically and emotionally. There's a lot of other options out there that, I think a lot of times we get caught in this loop of what's one drug versus the other drug.

The Law Making & Enforcement professionals described the importance of **taking a proactive prevention approach as well as collaborating with other professionals:**

That just because a juvenile's arrested and involved in the juvenile justice system, that doesn't solve anything. I think that you're going to have a bigger impact with prevention and education than arresting the kids, putting them through the system. We can be very reactive, but I think that there's more benefit in being more proactive than what the system is.

We need to understand our respective roles and each member needs to understand the other members' roles as well, and our capabilities and limitations. We need to be better informed and collaborate more effectively in the process.

Interviewees with a Social Impact & Services perspective focused their stakeholder information needs around the impact of marijuana use. They cited a need to provide information about the **range of products and possible consequences of using marijuana:**

The medicinal use versus the recreational use. I think that they need to know the difference between, you know even the age groups. I think that everybody just needs to really be educated.

About THC contents and the differences over time for the amounts of THC that is found in marijuana [and] the unintended consequences of legalizing marijuana. I think that light needs to be shed on the bad things that have happened.

That marijuana usage is a drug. That it can have harmful effects on a person and family, can be that gateway to usage of harder drugs as well. I think it's something folks can fall into and not understand necessarily the consequences of utilizing that drug.

Addiction can occur, with any, any substance, and that just that early intervention piece that we, if we can be intervening early to kind of break that cycle of addiction in families.

They also shared a concern about the **social justice around education, policing and sentencing related to marijuana use:**

I would just appreciate equal distribution of all the knowledge and facts to all of our communities that are impacted by it, and fair and equal policing and sentencing with those individuals who ultimately break the law and are arrested.

Summary and Conclusions

The status of marijuana in our community is a complicated and ever-shifting issue. This report explored challenges ranging between gaining a clear understanding of marijuana and its derivative products, keeping track of the ever-changing legalization landscape, accurately gauging the levels of marijuana use and abuse, as well as becoming aware of the growing marijuana industry.

The substance of marijuana is classified as a psychoactive drug. The cannabis plant from which it comes, contains hundreds of chemical substances, including THC, the component responsible for the high feeling, and CBD, cited for its medical applications. Marijuana and its derivatives can be consumed in various ways and produce a wide range of effects on its users.

At the federal level, marijuana is classified as a Schedule I substance, making it illegal and thus limiting clinical research on it. However, most states have publicly accessible medical marijuana programs, and a growing number have legalized its recreational use. Locally, Iowa has such a medical program, but Nebraska does not. Neither states have legalized recreational use of marijuana, but by 2020 both will have border states that have.

According to research conducted by SAMHSA and the PEW Research Center, close to half of adults (48%) in the U.S. have reported using marijuana at least once in their lifetime (2017 National Survey), and close to two-thirds (62%) of Americans support marijuana legalization (Pew, 2018).

The vastness and complexity of the marijuana industry can be broadly defined by the revenue it generates and the stakeholders that it engages. Current and projected dollars generated by both the medical and recreational marijuana markets are projected to continue climbing. In addition, the workforce employed in the state-level legal cannabis industry is booming. These industry and market forces do hold potential influence on any community's legalization decisions.

In order to add a local lens to the marijuana issue, community stakeholders, from both law enforcement and social service sectors, shared their experiences and insights about the impact of marijuana on their professions and on the Omaha-Council Bluffs metropolitan community.

When asked to describe the status of marijuana in their community, the interviewees explained what a unique and complicated "community" they were dealing with, especially within a country with so much variation on marijuana's legal status. The interviewees agreed that there is a great deal of crossover between Iowa and Nebraska and that their proximity to states that have legalized the recreational use of marijuana is a huge area of concern.

Interviewees described seeing a more laid-back and accepting attitude toward marijuana in their communities. And many of the interviewees shared their beliefs that their community was heading toward more lenient legal status and more public tolerance of marijuana.

The interviewees called for more extensive research on marijuana, its derivative products, and their impact on users, seeing that as foundational in establishing appropriate laws and having appropriate community resources in place in both the law enforcement and social services sectors.

The interviewees shared that they would like to learn more about pertinent legislative processes and emerging and ongoing industry trends, including information about specific marijuana derivative products grounded in scientific studies, as well as the impact in states where recreational use has been legalized. The interviewees wanted lawmakers to consider the full impact of legalization on their communities. They also described the importance of taking a proactive prevention and educational approach as well as collaborating with other professionals.

Considerations

It is important to recognize that the primary sources of the information shared in this community assessment, in addition to the community stakeholder interviews, come from organizations that vary widely in their missions and motivations.

The complexity of the laws regulating access to and use of marijuana across the nation requires consideration of a wide range of perspectives. In an effort to accomplish that, STEPs' information sources span federal agencies, marijuana industry resources, and national analytics or think tank organizations.

The mission of the Drug Enforcement Administration (DEA) is to enforce the controlled substances laws and regulations of the United States—marijuana being among those controlled substances. On the opposite side of the marijuana issue, the Leafly website (www.leafly.com) states its mission: “To be the world’s destination to discover, find, and buy cannabis”. It offers information to its millions of monthly visitors about cannabis and how to find various marijuana strains and products at medical and recreational dispensaries.

Next Steps/Recommendations

All community stakeholders—professionals and citizens—need to recognize and acknowledge that the status of marijuana in our communities is a complicated issue. While existing research suggests that there are some health-related benefits, more rigorous clinical research is needed to help understand the broader impact of marijuana use. While public sentiment and industry influences can move legalization forward, it is important to ensure that systems and resources are in place to appropriately deal with any changes in marijuana legalization in both Iowa and Nebraska.

Next steps in this journey should include education about marijuana and its impact on individual users and on our community. That process starts with identifying reliable, objective, and research-based information about marijuana, some of which this report has highlighted.

Since most states have already moved ahead with various forms of marijuana legalization, there is an opportunity to observe and learn from their experiences and adjust local decisions accordingly. Facing the challenges of bordering states with more lenient marijuana laws also requires a strategic community response, including both the law enforcement and social services sectors.

Facilitating conversations on the wide variety of issues identified in this report is a productive next step. Ideally, the cited increases in openness about marijuana would clear the way for more open and collaborative discussions and planning on how to move forward. Such exchanges could, and likely already do, happen within existing regional task forces as well as at professional and organizational gatherings. With its membership spanning a range of professional fields, and its coverage bridging the Iowa–Nebraska state lines, the Prevention Means Progress Coalition and its members have a unique opportunity to build on those connections to facilitate such discussion.

Glossary/Definitions

Bong: “water pipe” used for smoking marijuana (NIDA, 2019).

Black: “a combination of marijuana, opium, and methamphetamine” (DOJ, DEA, 2017, p. 46).

Blunt: “marijuana rolled in [a] cigar wrap” (NIDA, 2019).

Budda: “potent marijuana spiked with opium” (DOJ, DEA, 2017, p. 46).

Budder: a marijuana concentrate.

Cannabimimetic Agent: compound or agent having similar effects to cannabis.

Cannabinoid: “any of various naturally-occurring, biologically active, chemical constituents...of hemp or cannabis including some...that possess psychoactive properties; a substance that is structurally or functionally similar to” the above (“Cannabinoid,” 2019).

Cannabis: “broad term that can be used to describe the various products and chemical compounds...derived from different species of the cannabis plant” (NAS, 2017, p. 1).

CBD Oil: “non-intoxicating nutritional supplement made from hemp that is used to promote wellness” (Medical Marijuana Inc, 2019, *Overview*). CBD oil is “legal under U.S. Federal Law,” although states retain the right to enact their own laws around CBD oil (Medical Marijuana Inc, 2019, *Overview*).

Delta-9-tetrahydrocannabinol (THC): scientific term for the substance known as THC.

Edibles: “any of various food items containing THC” (“Edibles,” 2019).

Hashish (Hash): “consists of the THC-rich resinous material of the cannabis plant, which is collected, dried, and then compressed into a variety of forms, such as balls, cakes, or cookie like [sic] sheets [from which] pieces are then broken off, placed in pipes or mixed with tobacco and placed in pipes or cigarettes, and smoked” (DOJ, DEA, 2017, p. 75).

Hashish Oil (Hash Oil, Liquid Hash, Cannabis Oil): liquid “produced by extracting the cannabinoids from the plant material with a solvent” and which is then dropped onto a cigarette” and smoked (DOJ, DEA, 2017, p. 75).

Hemp: “a versatile industrial crop with more than 25,000 product applications” (Medical Marijuana Inc, 2019, *Overview*). “Over 40 states have established commercial or pilot hemp cultivation programs made legal under the Farm Bill” (Medical Marijuana Inc, 2019, *Overview*).

Joint: “hand-rolled cigarette” used for smoking marijuana (NIDA, 2019).

Marijuana: “a greenish-gray mixture of the dried flowers of *Cannabis sativa*...also called weed, herb, pot, grass, bud, ganja, Mary Jane” etc. and can be smoked “in hand-rolled cigarettes called joints; in pipes, water pipes (sometimes called bong), or in blunts (marijuana rolled in cigar wraps)” (NIDA, 2019).

Marinol: Schedule III substance which is “a synthetic version of THC,” that “can be prescribed for the control of nausea and vomiting caused by chemotherapeutic agents used in the treatment of cancer and to stimulate appetite in AIDS patients” (DOJ, DEA, 2017, p. 75).

Medical Marijuana: cannabis used “as a physician-recommended therapy for treating certain health conditions and symptoms” (Medical Marijuana Inc, 2019, *Overview*).

Psychoactive: “affecting the mind or behavior” (“Psychoactive,” 2019).

Recreational Marijuana: “cannabis used to intentionally experience its intoxicating and mind-altering effects” (Medical Marijuana Inc, 2019, *Overview*).

Resins: “concentrated resins containing high doses of marijuana’s active ingredients, including honeylike hash oil, waxy budder, and hard amberlike shatter...are increasingly popular...[for use]...both recreationally and medically” (NIDA, 2019).

Shatter: cannabis extract, glasslike in appearance.

Sinsemilla: “highly potent marijuana from female plants that are specially tended and kept seedless by preventing pollination in order to produce a high resin content; a female hemp plant grown to produce sinsemilla” (Merriam-Webster, 2019).

Synthetic Marijuana: non-natural substances having similar affects as cannabinoids in the brain; (also called “K2,” “Spice,” “fake weed,” “King Kong,” “Yucatan Fire,” “Skunk,” or “Moon Rocks,” (IYS, 2016).

Community Stakeholder Interview Methodology

Community stakeholders were provided by Prevention Means Progress staff. PMP provided 13 names with a goal of getting at least 10 interviews. PMP made the initial contact with 10 of the stakeholders first, and then later reached out to the remaining 3. STEPs staff handled the follow-up, scheduling, and actual interviews. STEPs conducted interviews with 12 key informants.

STEPs conducted interviews via Zoom (audio only). Interviewees chose between two ways to join the interview through Zoom: a link (to join via computer audio) and a phone number (to join via telephone/computer audio). Each of the participants gave their consent to record their individual interview, and each was recorded directly in Zoom. STEPs transcribed each recording via a professional service, reviewed the transcriptions for accuracy against the original recordings, and moved the transcriptions to Microsoft Excel to clean and analyze them.

STEPs grouped participants into two groups based on their profession/relationship to marijuana: Law Making & Enforcement and Social Impact & Services. The Law Making & Enforcement group included those in professions related to law making and/or the criminal justice system; for example, law enforcement, courts, and/or corrections. The Social Impact & Services group included those in professions related to social services, including education, basic needs, and healthcare. Each grouping included six participants, and STEPs presents the results of the qualitative analysis in this report using these two groupings.

The following page contains the informal script used for each interview.

PMP Marijuana Community Assessment
Community Stakeholder Interview Protocol

Name: _____ Title: _____ Organization: _____
Scheduled date / time: _____ Phone number: _____

Hello. My name is Jenni Smith and I am from UNO's STEPs program (Support and Training for the Evaluation of Programs). Is this timing still going to work for us to talk briefly about how marijuana is impacting your work and our community? We want to be able to incorporate your insights into the Marijuana Community Assessment that we are working on for the PMP Coalition.

1. I am going to be using the term "marijuana" throughout this interview, but I wanted to start by asking you what variety of words you usually use during related discussions – for example, terms like cannabis, hemp, THC, CBD,...? Are you comfortable that you understand the differences among these terms OR is that something you'd like more information about?

2. Which states are included in the geographic scope of what you would define as your professional community?

Is it: Iowa only Nebraska only both Iowa & Nebraska Iowa/Nebraska + ____

3. How would you describe the status of marijuana in your community?

- a. What are your biggest concerns?
- b. What would you most like to see happen?
- c. Does that differ between Iowa and Nebraska? And how do various states impact each other?

4. How is your profession involved with marijuana? What roles do you play?

- a. What do you see as the biggest professional successes?
- b. What would you say are the biggest professional challenges / frustrations?
- c. How would you like to see those challenges/frustrations resolved or addressed?

5. Where do you see the marijuana industry heading in your community / in Iowa / in Nebraska?

a. Do you think that your profession is prepared to deal with these anticipated industry changes? If so, how?

6. What would you like to learn more about related to marijuana?

7. What do you wish other stakeholders understood about marijuana? (NOTE: others = law makers, law enforcement, treatment professionals, prevention educators, families, youth,...)

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