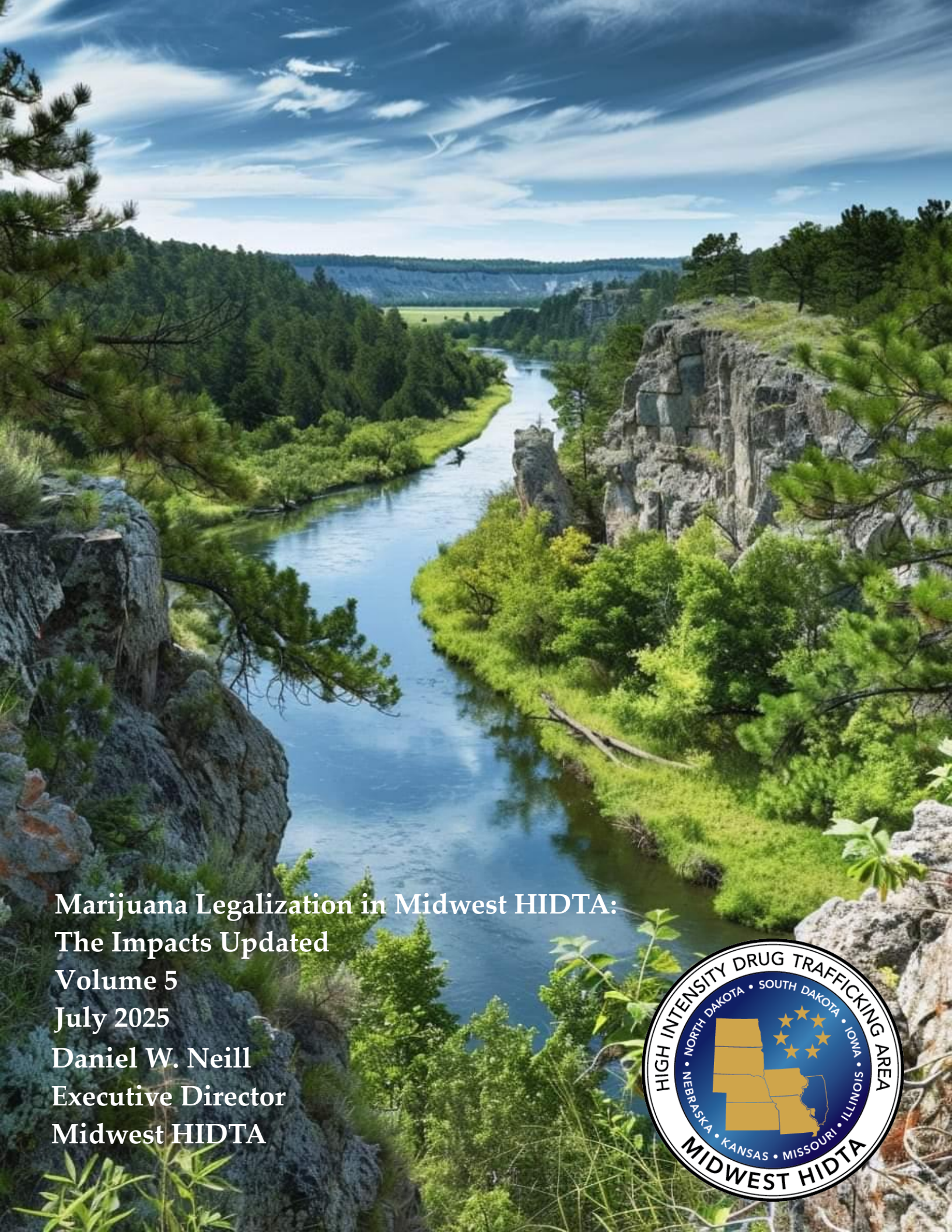

Marijuana Legalization in Midwest HIDTA: The Impacts Updated

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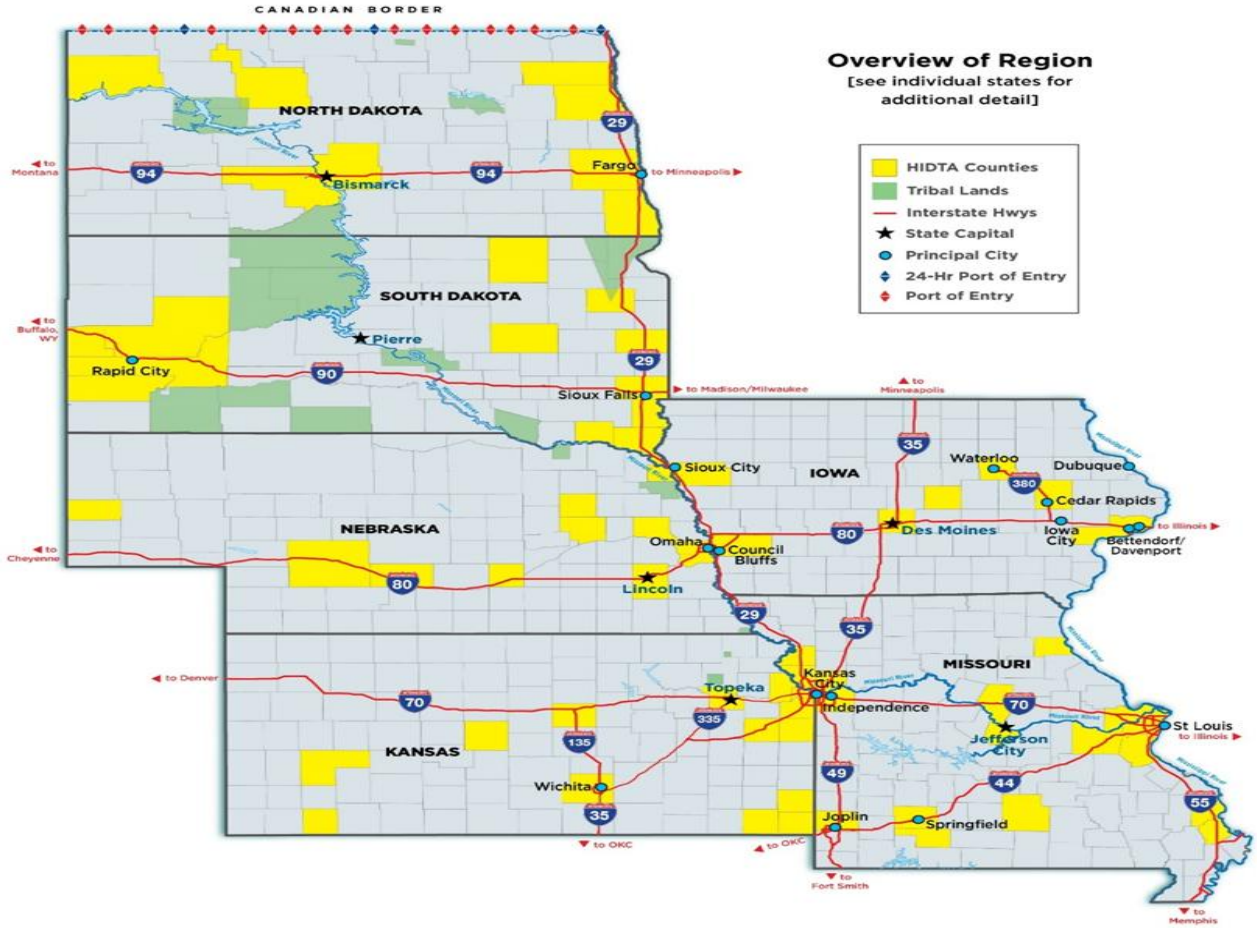
Introduction

The Midwest HIDTA Region

The Midwest HIDTA's seven-state area consists of Iowa, Kansas, Missouri, Nebraska, North Dakota, South Dakota, and the three Illinois counties of Madison, Rock Island, and St. Clair. The region spans over 428,000 square miles, encompasses 73 HIDTA-designated counties, and is considered the largest of the Office of National Drug Control Policy's 33 HIDTA regions. It is as varied as it is vast, and incorporates major urban cities, separated by suburban sprawl and rural countryside. Within the Midwest HIDTA are more than 4,300 miles of interstate highways and an international border stretching over 300 miles. Its central location and intertwining roadways, make the region ideal for drug trafficking organizations and criminals' intent on transporting drugs into or through to other destinations.



Purpose

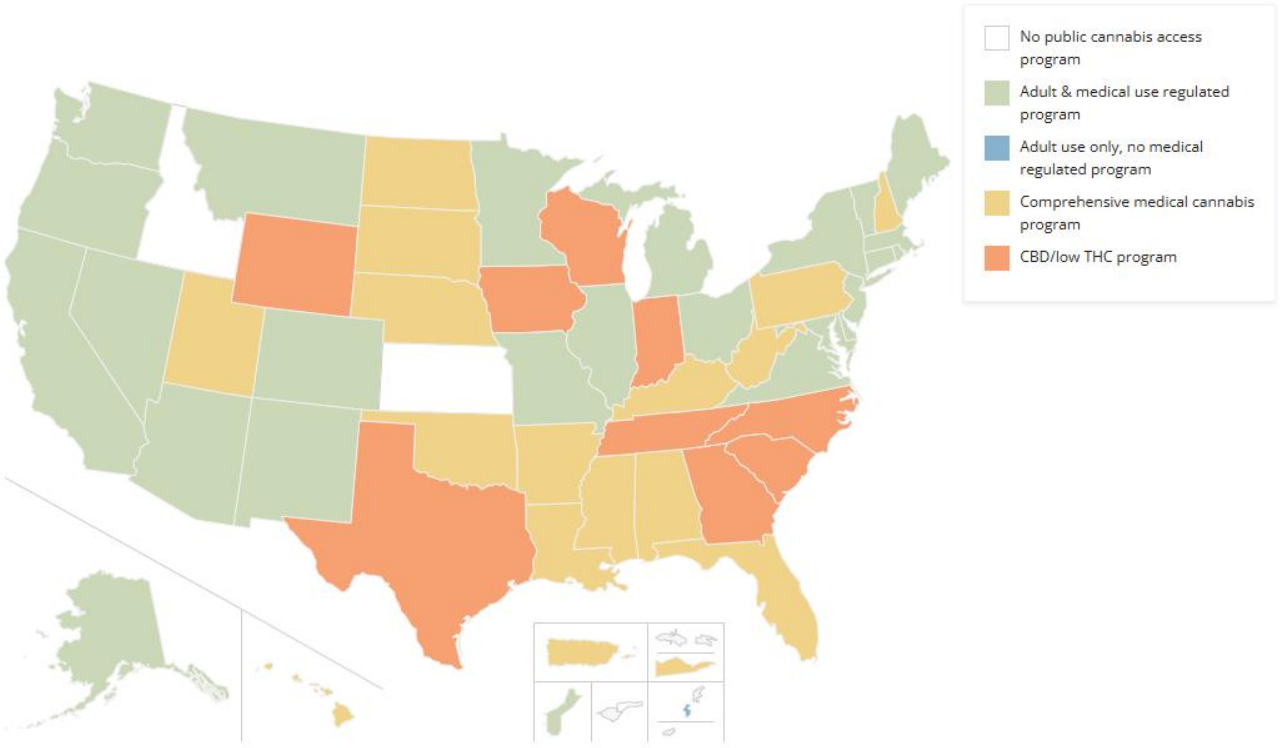
This is the fifth report on the impact of marijuana legalization in the Midwest. The purpose of this report is to provide an update to the information presented in the previous reports, and to focus on specific areas of potential concern pertaining to the legalization of marijuana and its use, which includes national security and health impacts. This report will utilize data and trends from states with operational medical and/or adult use marijuana programs in an attempt to mitigate the future consequences of the marijuana programs already implemented by Midwestern states, and those contemplating a program.

Background

As of March 2025, three Midwest HIDTA states have implemented medical and/or adult use marijuana programs within their jurisdiction: Missouri, North Dakota, and South Dakota. The following is a brief synopsis of the current legal standing of marijuana and cannabinoids in each of the six Midwest HIDTA states:

- Iowa - Authorized the medical use of only cannabidiol (CBD) in 2017 for those with a qualifying medical condition.
- Kansas – No public marijuana/cannabis access program
- Missouri – Medical marijuana approved in 2018, and adult use in November of 2022.
- Nebraska – Medical marijuana approved in 2024; however, it has not yet been implemented at the time of this report.
- North Dakota – Medical marijuana approved in 2016.
- South Dakota – Medical and adult use approved in 2020; however, on November 24, 2021, South Dakota Supreme Court ruled the adult use measure was unconstitutional, therefore adult use remains illegal in South Dakota.

Map of State Cannabis Programs as of February 2025



Source: National Conference of State Legislatures

The National Conference of State Legislatures (NCSL) website utilizes the following criteria to determine if a program is "comprehensive":

1. "Protection from criminal penalties for using cannabis for medical purpose.
2. Access to cannabis through home cultivation, dispensaries or some other system that is likely to be implemented.
3. It allows a variety of strains or products, including those with more than 'low THC.'
4. It allows either smoking or vaporization of some kind of cannabis products, plant material or extract.
5. It is not a limited trial program."

Executive Summary

According to the 2025 Midwest HIDTA Threat Assessment, marijuana is the most widely available and commonly abused illicit drug within the Midwest HIDTA region. The Threat Assessment ranked marijuana as the fifth greatest drug threat of the nine drugs ranked by Midwest HIDTA's initiatives; fentanyl was the greatest drug threat, followed closely by methamphetamine. These rankings were based on the drugs' effect on violent and property crime, followed by overdose and poisoning deaths, then the availability and prevalence of the drug.

The 2025 Midwest HIDTA Threat Assessment also concluded that marijuana decriminalization has created a readily available supply of potent domestically cultivated marijuana for transport into the region. This now includes states within, and bordering, Midwest HIDTA that have legalized various forms of marijuana products. Additionally, reports from regional law enforcement agencies suggests that criminal organizations may clash with one another for the right to distribute marijuana from "legal" states in Midwestern territory.

Throughout the course of this report, the words "cannabis" and "marijuana" are used interchangeably, as are the terms "adult use" and "recreational marijuana," dependent upon the source documentation. Regardless of which word is utilized pertaining to "cannabis" and "marijuana," the reference is to products derived from the Cannabis plant that contains tetrahydrocannabinol (THC), or synthetic cannabinoids, whether the end state referred to is the dried leaves, flowering top, tincture, an edible, or a beverage.

This report will examine a multitude of potential effects associated with the legalization of marijuana in the following sections:

Chapter 1: Legal Overview

- Missouri, South Dakota, and North Dakota are the three states in the Midwest HIDTA region with operational marijuana programs, according to the 2025 Midwest HIDTA Threat Assessment.

- South Dakota and North Dakota both operate medical marijuana programs, and Missouri as of 2022 has authorized medical and adult use marijuana programs, according to the 2025 Midwest HIDTA Threat Assessment. Nebraska voters authorized a medical marijuana program in 2024, which has yet to be implemented.

Chapter 2: National Overview - Security Concerns & Chinese Marijuana Grow Operations

- The Department of Homeland Security has documented approximately 749 properties nationwide connected to Asian Transnational Criminal Organizations (TCOs). [11]

- United States Customs and Border Protection's encounters with "single adult" individuals identified with Peoples of Republic of China citizenship increased 181.4 percent (23,172 to 65,209) from 2021 to 2024. During that same time encounters with Chinese "family unit aliens" increased 5,153.4 percent (249 to 13,081). In the context of the United States government and immigration, a "family unit" is typically defined as a group of two or more aliens, including at least one minor and their parent(s) or legal guardian(s).

Chapter 3: Potential Health Impacts of Usage: Cannabinoid Hyperemesis Syndrome (CHS)

- CHS has three distinct phases: early onset of symptoms, severe vomiting, and relief of symptoms. Severe cyclical nausea and vomiting reported in 100% of cases associated with a regular history of cannabis use. [25]

- CHS occurs when endocannabinoid receptors face chronic overstimulation, which disrupts the body's natural control of nausea and vomiting. [27]

- Research show that CHS affects about 2.75 million Americans each year, with 32.9% of frequent cannabis users who need emergency medical care show signs of CHS. [28] [29]

- CHS puts a heavy strain on healthcare systems, as average evaluation cost prior to diagnosis, per patient, is $76,290. [42]

Chapter 4: Diversion Statistics of Marijuana

- Midwest HIDTA initiatives confiscated 18,124 pounds of marijuana, 797 pounds of marijuana concentrates, and 462 pounds of marijuana consumables in 2024; this total is a 19.3 percent decrease from 2023 (24,012 to 19,383). [45]

- Marijuana represented 62.8 percent of the total drug weight (30,867 pounds) seized by Midwest HIDTA enforcement initiatives in 2024. [45]

Chapter 5: Missouri

- From 2015-2016 to 2022-2023 numbers for past month marijuana usage, among those over 12 years of age, found there was a 129.6 percent increase in Missouri (8.1 – 18.6), compared to 76.7 percent increase nationally (8.6 – 15.2). [55]

- In Missouri, since 2018, when marijuana was first legalized for medical use, cannabis exposure calls to the Missouri Poison Control Center have increased by 266.5 percent (194 to 711). [58]

Chapter 6: North Dakota

- From 2015-2016 to 2022-2023 numbers for past month marijuana usage, among those over 12 years of age, found there was a 121.4 percent increase in North Dakota (5.6 – 12.4), compared to 76.7 percent increase nationally (8.6 – 15.2) [55]

- Marijuana-related emergency department visits increased 194 percent (556 to 1,635) in North Dakota following the legalization of medical marijuana in 2016 [72]

Chapter 7: South Dakota

- From 2015-2016 to 2022-2023 numbers for past month marijuana usage, among those over 12 years of age, found there was a 56.6 percent increase in South Dakota (7.6 to 11.9), compared to a 76.7 percent increase nationally (8.6 to 15.2) [55]

- From 2019 to 2024 the number of cannabis related calls to the South Dakota Poison Control Center increased 223 percent (35 to 113) [84]

Chapter 1: Legal Overview

Introduction

According to the NCSL, as of April 2025, twenty-four (24) states, and the District of Columbia, have legalized adult use marijuana and thirty-nine (39) states have legalized some form of medical marijuana. Nearly every state surrounding those of the Midwest HIDTA region have enacted some form of marijuana legalization. This includes Montana, Colorado, Oklahoma, Arkansas, Kentucky, Illinois, Minnesota, and our neighbor to the north, Canada.

Since the passage of the *Agriculture Improvement Act of 2018*, (also known as the 2018 Farm Bill), every state within the Midwest HIDTA now participates in the production, cultivation, and retail sale of industrial hemp. [1] While industrial hemp is classified as non-psychoactive due to THC content below 0.3%, its leaves bear resemblance to, and share common characteristics with, those of the marijuana plants grown for psychoactive properties. In addition to the state-sanctioned hemp programs throughout the region, at least twelve Indian Nations have received approval to cultivate industrial hemp from the U.S. Department of Agriculture. [1]

State Marijuana Programs Status in the Midwest HIDTA Region

In 2016, North Dakota became the first state in the Midwest HIDTA to approve a medical marijuana program. The following year, Iowa authorized the use of medical cannabidiol (mCBD); while mCBD is permitted, a tetrahydrocannabinol (THC) content greater than .3% is still prohibited. Missouri voters approved a medical marijuana program in 2018, and adult use in 2022.

In 2019, Kansas Senate Bill 28 was signed, which prohibited the initiation of child removal proceedings or child protection actions based solely on the possession or use of a "cannabidiol treatment preparation," which is an oil containing cannabidiol and THC, whose THC concentration is no more than 5 percent relative to the cannabidiol concentration.

In the 2024 election on November 5th, Nebraska voters approved medical marijuana through two measures—Initiative 437 and Initiative 438. Initiative 437, which legalizes possession of up to five ounces of cannabis for medical use with a healthcare practitioner's recommendation, received 71.1% of the vote (637,126 of 896,769). [2] Initiative 438, which establishes a regulatory framework through the Nebraska Medical Cannabis Commission, passed with 66.95% (600,481 of 892,348). [2]

As for implementation, Initiative 437 took effect immediately upon certification. On December 10, 2024, Governor Jim Pillen signed a proclamation making both measures law. Consequently, as of that date, patients with a valid recommendation can legally possess up to five ounces of medical cannabis — no further implementation is required for this part.

In contrast, Initiative 438, which establishes the production and distribution system, requires the Nebraska Medical Cannabis Commission to begin accepting business applications by October 1, 2025. Actual sales through regulated dispensaries is contingent on how quickly the commission establishes rules and licenses operators, with no specific start date set yet.

South Dakota approved both a medical and adult use marijuana program in 2020, although a circuit court ruling overturned adult use marijuana in early 2021. The judge ruled the amendment was unconstitutional, as it violated South Dakota's "single-subject rule," and was a revision of the constitution rather than an amendment. In November 2022, and again in 2024, adult use marijuana was on the ballot in South Dakota, but was rejected both times by the voters.

Also, in November 2024, North Dakota residents were presented with Measure 5. The measure would legalize recreational marijuana for adults 21 and older, allowing possession of up to one ounce of cannabis flower, four grams of THC concentrate, and limited home cultivation. The measure was defeated, with approximately 52.5% of voters rejecting it.

A regional timeline of when the marijuana legislation was enacted is included below:

- 2016: North Dakota Medical Marijuana Legalization (Statutory Measure 5)
- 2017: Iowa Medical Cannabidiol Act (Code Chapter 124E)
- 2018: Missouri Medical Marijuana and Veteran Healthcare Services Initiative (Amendment 2)
- 2019: Kansas Senate Bill 28 ("Claire and Lola's Law) was signed
- 2020: South Dakota Marijuana Legalization Initiative (Amendment A)
- 2022 South Dakota Adult Use Initiative (Measure 27) did not pass
- 2022: Missouri Adult Use Constitutional Amendment (Amendment 3)
- 2024: Nebraska Initiative 437 and 438
- 2024: North Dakota Recreational Marijuana for Adults (Measure 5) did not pass
- 2024: South Dakota Recreational Marijuana for Adults (Measure 29) did not pass

As of March 2025, the medical marijuana programs of North Dakota and South Dakota are currently active; both medical and adult use programs are operational in Missouri.

Potential for Rescheduling of Marijuana

In 2023, a significant debate surrounded the Drug Enforcement Administration's proposed rescheduling of marijuana from Schedule I to Schedule III. This initiative encountered opposition by a coalition of former U.S. Attorneys from both Republican and Democratic administrations. They expressed their concerns through a letter addressed to then United States Attorney General Merrick Garland and DEA Administrator Anne Milgram, signaling a united front against the potential changes in marijuana's classification under federal law. The rescheduling of marijuana by the DEA could fundamentally alter its legal status, creating implications for enforcement, and broader overall societal impacts. As the debate unfolds, the input from legal professionals highlights the challenges and considerations that must be contemplated when reevaluating marijuana's schedule classification.

Bipartisan Opposition to Rescheduling

The bipartisan opposition to the DEA's marijuana rescheduling in 2023 showcases a complex landscape of political, legal, and scientific considerations. Over two dozen former U.S. Attorneys across both major political parties have expressed their opposition to rescheduling marijuana. [3] High-profile political figures, including U.S. Senators and Representatives, have taken varied stances, with some advocating for complete de-scheduling [4], while others have raised concerns over potential violations of international treaties. [5]

The concerns raised by the former U.S. Attorneys regarding the proposed rescheduling are significant and multifaceted. They emphasized critical points pertaining to addiction, potency, lack of medical acceptance, cartel profits, public health and safety risks. Those in favor of de-scheduling point to the Department of Health and Human Services (HHS) recommendation to reschedule marijuana to Schedule III, citing its possible medical benefits and lower risk profile compared to Schedule I substances [6], and the potential to significantly alter the regulatory landscape, potentially easing legal consequences for medical users and facilitating access to banking for cannabis businesses. [4]

The DEA scheduled a preliminary hearing for December 2, 2024, at their headquarters in Arlington, Virginia, to discuss the proposed marijuana rescheduling. [7] Chief Administrative Law Judge John Mulrooney postponed the merit-based proceedings to January 21, 2025. However, on January 13, 2025, Judge Mulrooney granted an appeal filed by one of the petitioners, thereby cancelling the scheduled hearing. This ruling paused the proceedings, pending a resolution of this appeal to the DEA Administrator. [8]

Chapter 2: National Overview – Illegal Chinese Marijuana Grow Operations

Illegal Chinese Marijuana Grow Operations - Introduction

An unprecedented expansion of Chinese-operated marijuana farms has been observed across the United States, with operations stretching from California to Maine. [9] Investigations have revealed a sophisticated network that has rapidly become the dominant force in America's illicit cannabis trade. These investigations, revealed black-market activities that extend far beyond simple illegal grows. These operations involve sophisticated money laundering schemes, human trafficking, and organized crime networks that pose a significant challenge to law enforcement. Throughout this section, how these criminal enterprises operate, their impact on legal cannabis markets, and why they have proven so difficult to shut down will be examined.

Key Findings

- A Department of Homeland Security document in August 2023, estimated approximately 749 properties in Maine and Washington state were connected to Asian Transnational Criminal Organizations (TCOs). [11]

- United States Customs and Border Protection's encounters with "single adult" individuals identified with the Peoples of Republic of China citizenship increased 181.4 percent (23,172 to 65,209) from 2021 to 2024. During that same time, encounters with Chinese "family unit aliens" increased 5,153.4 percent (249 to 13,081). In the context of the United States government and immigration, a "family unit" is typically defined as a group of two or more aliens, including at least one minor and their parent(s) or legal guardian(s).

The Scale of Chinese Black-Market Cannabis Operations

These operations were initially documented in California, the Pacific Northwest, and Colorado; however, the geographic footprint of these operations has grown more extensive.

As they have spread across the United States, the operations have become particularly notable in Oklahoma, where state investigators have identified over 3,000 illegal grows, with 80% linked to Chinese criminal groups. [10] In August 2023, the Department of Homeland Security (DHS) documented approximately 749 properties in Maine and Washington state connected to Asian Transnational Criminal Organizations (TCOs), with 270 properties in Maine actively engaged with Chinese operations. [11]

Estimated Market Value and Production Volumes

The scale of production is substantial. In Oklahoma alone, the estimated value of illegal marijuana cultivation is between $18 billion and $44 billion annually. [10] Meanwhile in Maine, a typical 2,500-square-foot operation can produce 100 pounds per harvest, with 4 to 12 harvests annually.[11] The production efficiency is impressive, as a single property can generate between $1 million to $3 million in annual revenue.[11] These operations often show telltale signs of large-scale production, such as monthly utility bills dramatically rising from $300 to nearly $9,000.[12]

Impact on legal cannabis markets

Harmful effects have been observed on legitimate cannabis businesses. Legal marijuana prices in Maine have plummeted from $2,800 to $1,250 per pound. [11] This price depression coincides directly with the surge in Chinese-operated grows. The flood of illegal product, sometimes referred to as "Triad Weed," has forced many compliant operators out of business. [11]

The impact extends beyond price disruption. In Oklahoma, the illegal marijuana industry has grown so rapidly that it now ranks second only to the oil and gas sector. [10] This explosive growth has overwhelmed regulatory systems, with approximately 90% of Colorado's illicit producers relocating to Oklahoma to exploit looser restrictions. [10]

Organizational Structure and Networks

Investigations into Chinese marijuana farms have revealed a sophisticated criminal enterprise that extends far beyond simple cultivation operations. These investigations have uncovered a complex organizational structure that operates with discipline and efficiency.

Key players and hierarchies

The command structure operates through a confederation overseen by powerful crime bosses based primarily in New York. [10] The discipline within these networks is extraordinary, with bosses conducting strategic meetings in New York to distribute territory and maintain

order. [10] An investigation revealed that the expression "all roads lead to Flushing" has become common in law enforcement circles, referring to the New York neighborhood that serves as the operation's command center. [13] At the top of this hierarchy sit the “triads,” a historic Chinese organized crime groups rooted in southern China. [10]

Several key organizational levels have been identified [13]:

- High-level triad bosses who coordinate nationwide operations
- Regional managers overseeing state-level operations
- Local operators managing individual grow sites
- Workers and cultivators at the ground level

Connection to international crime syndicates

Concerning links have been discovered between these operations and broader criminal enterprises. The DEA has identified these same criminal groups as significant participants in the fentanyl trade, with money from street-level sales flowing back to Chinese money brokers in the New York City area, especially in the neighborhoods of Brooklyn and Queens. [14]

The relationship between these criminal networks and Chinese authorities is complex. While some operations have connections to Chinese triads, particularly the powerful 14K organization [13], these groups have often been found to operate with surprising autonomy. The criminal networks maintain sophisticated international reach through dispersed communities. [10]

Money movement and financial operations

The financial infrastructure supporting these operations is remarkably sophisticated. Evidence suggests that Chinese organized crime has become the dominant money launderer for Latin American cartels. Their financial operations include creating complex international transaction networks, and providing cash services for drug transactions across multiple countries. [10]

The marijuana operations generate substantial funds, which investigators refer to as "another massive bucket of money,” which fuels interconnected criminal enterprises. These funds support an extensive underground banking system that has been identified as "the most extensive network of underground banking in the world”. [10]

Real Estate and Business Fronts

The real estate footprint of Chinese marijuana operations is comprised of a sophisticated network of property acquisitions and business fronts, designed to evade law enforcement detection. A pattern has been uncovered where these operations transform everyday properties into high-tech cultivation facilities.

Property acquisition methods

An investigation revealed that Chinese investors primarily use cash payments to acquire large parcels of land. [15] In Oklahoma, where land prices are particularly attractive, criminal groups have been documented flying private planes carrying suitcases of cash to purchase farms. [13] These properties often show distinctive modifications:

- Double the standard electrical capacity [18]
- Industrial air ducts for ventilation [16]
- Heavy-duty generators in laundry rooms [16]
- Spray foam-sealed walls to mask heat and odor [10]

Straw owner schemes

A prevalent pattern of straw ownership schemes has been identified, designed to circumvent state residency requirements. In Oklahoma, criminal organizations pay local residents to pose as primary license holders. [17] A typical arrangement involves:

- Recruiting local residents with clean records
- Offering cash payments for majority ownership positions
- Creating fraudulent documentation
- Maintaining operational control while appearing compliant

One notable case involved an Oklahoma City accountant who coordinated multiple straw ownership arrangements for Chinese criminal enterprises. These schemes effectively circumvent laws requiring majority local ownership of cannabis businesses. [10]

Shell company operations

Investigations have exposed intricate layers of shell companies designed to obscure true ownership. "These organizations take extraordinary measures to protect their identity through LLCs and straw ownership," explains Bill Jones, California Department of Cannabis Control's (DCC) chief of law enforcement. [17] Suspicious property transactions have been

tracked where Limited Liability Companies upgrade electrical systems to support massive growing operations. [18]

The complexity of these operations extends even to property management. In Antioch, California, cases have been documented where real estate agents have been involved in multiple transactions of properties later discovered to be grow houses. These properties often sell for significantly higher amounts after raids, indicating a pattern of property flipping within the criminal network. [16]

Labor Trafficking and Worker Exploitation

Throughout the course of multiple extensive investigations into Chinese marijuana operations, a disturbing pattern of systematic labor exploitation has been uncovered, that preys on vulnerable immigrants. The findings reveal a calculated recruitment scheme that has trapped thousands of Chinese workers in abusive conditions across multiple states.

One tactic discovered to be utilized by criminal organizations, was the targeting of Chinese immigrants who lost work during the COVID-19 pandemic. [19] Their sophisticated recruitment strategy includes:

- Social media advertisements promising $200 daily wages [19]
- False job descriptions of legitimate agricultural work, i.e. "gardening" and "flower cutting" [19]
- Guaranteed housing and meals [19]

Living and working conditions

The reality these workers face stands in stark contrast to the promises made. It was documented that workers were being forced to endure 14-hour workdays [19], while living in deplorable conditions. In one operation, 20-30 people were found crammed into a single room with just one bathroom and no air conditioning. [20]

Workers sleep in various makeshift accommodations:

- Wooden sheds with dirt floors [21]
- Trailers without basic utilities [21]
- Greenhouse floors [19]
- Fields and ditches, exposed to the elements [19]

Human rights violations

Investigations have revealed severe human rights violations across these operations. Upon arrival, workers often have their phones and car keys confiscated. [19] Cases have been documented where armed guards with guns and machetes patrol the premises [10], and workers face constant surveillance through cameras and security personnel. [22]

The exploitation extends beyond confinement. Workers report receiving no payment for their labor, with some owed up to $12,000 in promised wages. [19] Numerous cases were encountered where workers were exposed to dangerous chemicals, resulting in visible burns on their hands and arms. Many appeared malnourished and showed signs of physical abuse. [21]

Perhaps most disturbing is the discovery of human trafficking elements. Evidence has been found of workers being smuggled directly to farms through Mexican border crossings, with farm owners paying approximately $20,000 per worker to criminal networks. These workers are then forced to work for two years to pay off their "debt." [20]

When workers attempt to demand their wages, they can face violent retaliation. In one instance, a worker who requested payment found himself being threatened by a guard armed with an AK-47 semi-automatic rifle.[20] The presence of drugs, cash, and weapons has created an environment where violence is commonplace, and workers live in constant fear of retaliation if they speak out or attempt to escape.[10]

Border Encounters - Individuals with Chinese Citizenship

The following information obtained from the United States Customs and Border Protection, illustrates the significant rise in encounters with individuals identified with People's Republic of China citizenship. These encounters are nationwide numbers, and include the northern and southern land borders of the U.S.

United States Customs and Border Protection - Chinese Citizenship Encounters					
	2021	2022	2023	2024	% Increase
Accompanied Minors	43	146	206	229	432.6
Family Unit Aliens	249	1,151	6,645	13,081	5,153.4
Single Adults	23,172	26,447	45,769	65,209	181.4
UC / Single Minors	7	12	80	182	2,500
TOTALS	**23,471**	**27,756**	**52,700**	**78,701**	**235.3**

Source: US Customs and Border Protection

- United States Customs and Border Protection's encounters with "single adult" individuals identified with Peoples of Republic of China citizenship increased 181.4 percent (23,172 to 65,209) from 2021 to 2024. During that same time frame, encounters with Chinese "family unit aliens" increased 5,153.4 percent (249 to 13,081). In the context of the United States government and immigration, a "family unit" is typically defined as a group of two or more aliens, including at least one minor and their parent(s) or legal guardian(s).

Law Enforcement Challenges

Law enforcement agencies across the country face a multitude of challenges in combating the influx of Chinese-operated marijuana farms. A complex chain of obstacles, to include jurisdictional issues and resource allocation, has been uncovered that significantly hamper effective enforcement and prosecution efforts.

Jurisdictional complexities and Resource Limitations

A disconnect has been observed between federal and state responses to these operations, as the United States Department of Justice has notably reduced its enforcement priority for marijuana cases due to the spread of its legalization. [10] This shift has created confusion among various enforcement agencies, particularly in states where cannabis is legal or decriminalized.

Investigations reveal that Oklahoma's regulatory structure has made it particularly vulnerable. The state's loose restrictions have attracted illicit producers [10], demonstrating how jurisdictional differences create enforcement gaps that criminal organizations readily exploit.

Identified critical resource constraints that severely impact enforcement capabilities include:

- Severe shortage of personnel with Chinese language skills and cultural knowledge [10]
- Limited ability to infiltrate networks or translate intercepted communications [10]
- Reduced funding for Chinese organized crime investigations since 2001 [10]
- Insufficient expertise in cryptocurrency and complex financial schemes [10]

Investigation and prosecution hurdles

Research has revealed several significant challenges in building successful cases:

- Communication Barriers: WeChat, a primary communication platform for these operations, presents unique monitoring challenges despite Chinese security force oversight. [10]
- Complex Financial Schemes: Sophisticated cryptocurrency operations have been uncovered stealing millions from financial institutions. [10]
- Identity Theft Networks: Criminal groups have infiltrated state systems to obtain thousands of fraudulent driver's licenses. [10]

The sophistication of these operations can be daunting. In one case that was investigated, cybercriminals manipulated the Texas Department of Public Safety's computer system to redirect Asian Americans' driver's licenses to marijuana farms in Oklahoma. [10]

Former DEA Chief of Operations Ray Donovan explained, "The challenge we are having is a lack of interest by federal prosecutors to charge illicit marijuana cases. They don't realize all the implications. Marijuana causes so much crime at the local level, gun violence in particular". [10]

It has been found that these groups often operate with remarkable efficiency, moving thousands of workers across state lines without attracting attention. As one investigator noted, "The discipline involved is incredible. How are we having thousands of workers moved into the country and among states? How are all these groups doing this without more conflict or violence?" [10]

The complexity extends beyond simple enforcement. These operations intersect with broader criminal enterprises, including the aforementioned networks laundering billions for Latin American drug cartels. [10] This multifaceted nature of the threat makes traditional enforcement approaches increasingly ineffective.

Conclusion

This section has provided a cursory examination into the recently discovered involvement of illicit criminal activity associated to individuals of Chinese descent and cannabis trafficking in America. It's important to stress that these illicit Transnational Criminal Organizations (TCO) are not limited to one culture or country, nor does it apply to only one drug type.

Investigations into Chinese marijuana operations have revealed the existence of criminal enterprises that have reached unprecedented proportions across America. These

sophisticated networks have established themselves in the illegal cannabis market, becoming detrimental to legal businesses through price manipulation and unfair competition. The human cost proves equally costly. Thousands of workers remain trapped, potentially facing violence, exploitation, and inhumane treatment.

Law enforcement agencies face an uphill battle against these well-organized criminal networks regardless of national origins. Resource limitations, jurisdictional complexities, and sophisticated evasion tactics allow these operations to continue despite increased raids and seizures by law enforcement entities. The connection to broader criminal enterprises, including international money laundering and drug trafficking, makes this issue far more complex than simple cannabis cultivation investigations.

This growing crisis requires attention and a coordinated response from federal, state, and local authorities. Without strategic intervention and proper resource allocation, these criminal networks will likely expand their illicit operations, continued human rights violations as well as other significant crimes across the United States.

Chapter 3: Potential Health Impacts of Usage: Cannabinoid Hyperemesis Syndrome

Cannabinoid Hyperemesis Syndrome (CHS) has become an increasingly common health concern in the United States. CHS cases have increased dramatically since recreational cannabis became legal in many states. While precise statistics for CHS cases in 2024 are not available, researchers estimate approximately 2.75 million Americans suffer from this condition annually. [28] These patients experience severe cyclical vomiting and intense abdominal pain.

Healthcare providers throughout the United States face growing challenges as more cannabis-related emergency visits occur, and hospitals struggle with the rising number of CHS-related admissions. This section delves into what CHS is, including its symptoms, the current prevalence of CHS, and its effects on healthcare systems.

Understanding Cannabinoid Hyperemesis Syndrome

Healthcare providers recognized Cannabinoid Hyperemesis Syndrome (CHS) as a distinct clinical condition in 2004. The syndrome causes cyclic episodes of severe nausea and vomiting following long-term and excessive cannabis use. [23] Medical professionals have documented increased numbers of cases since its original description, especially when regions have legalized cannabis use.

Definition and symptoms

CHS shows three distinct phases: prodromal (period between the appearance of initial symptoms and full development), hyperemetic (extreme and unrelenting vomiting), and recovery. [24] Patients experience these symptoms during these phases:

- Severe cyclical nausea and vomiting (reported in 100% of cases) [25]
- Abdominal pain (present in 85.1% of patients) [25]
- Compulsive hot bathing behavior to ease discomfort (observed in 92.3% of cases) [25]
- Heavy dehydration and weight loss [26]

The practice of using hot showers or baths to provide temporary relief from symptoms, is a unique characteristic feature of this condition. [27]

Pathophysiology

CHS involves complex interactions within the endocannabinoid system (ECS) that controls gastrointestinal motility, secretions, and visceral pain modulation. [23] The body's ECS has cannabinoid receptors (CB-1 and CB-2) throughout the, "…brain, gastrointestinal tract, peripheral nervous system, and immune system." [25] Scientists have discovered that CHS happens when these endocannabinoid receptors face chronic overstimulation, which disrupts the body's natural control of nausea and vomiting. [27]

The condition shows a remarkable dual effect. Cannabis works as an anti-emetic (anti-vomiting agent) in small doses but triggers vomiting (pro-emetic) at higher doses. [23] This unexpected response seems linked to changes in cannabis products' composition. Modern cannabis has shown increasing THC levels while CBD content has decreased since the 1990s. [27]

Trends and Risk Factors Driving the Rise in CHS Cases

Medical experts now recognize that CHS is much more common than they once thought. Research shows that CHS affects about 2.75 million Americans each year, with the latest estimates suggesting between 2.13 to 3.38 million people across the country struggle with this condition. [28] [39]

CHS develops due to several major risk factors. The most important risk factor comes from long-term cannabis use, specifically weekly use that continues for more than three months. [29] People who start using cannabis in their teenage years face higher risks. The symptoms' frequency and intensity relate directly to how strong the cannabis products are, especially their THC content. [23] A closer look at these factors reveal trends in how people access, use, and consume increasingly potent cannabis.

Impact of cannabis legalization

Marijuana remains the most popular illegal drug at the federal level in the United States, and legal cannabis markets have changed how people access the drug. California was the first state to initiate its medical marijuana program in 1996, and now 39 states have medical cannabis frameworks. Recreational use is legal in 24 states, and the District of Columbia. [30] This widespread acceptance created an approximate 38.5-billion-dollar industry in 2024, [31] with the Substance Abuse and Mental Health Services Administration (SAMHSA) reporting 61.8 million users in 2023, their most recent data available as of this publication. [32]

CHS rates vary by location, mainly due to local cannabis laws and availability. States that have legalized recreational cannabis report more cases, especially in cities that have many dispensaries, as cannabis legalization and CHS prevalence share a strong connection. [38] One example, Colorado, saw its statewide hospitalizations for cyclical vomiting jump 46% in just 5 years, from 2010 to 2014. [33]

Increased potency of modern cannabis products

Modern cannabis products contain higher levels of THC than ever before, which leads to different rates of CHS across regions. [38] THC content in cannabis products has climbed steadily throughout the 2000s:

- 1995: Average THC content was 4% [34]
- 2000: Standard marijuana cigarette ("joint") contained 5% THC [35]
- Present day: Most dispensary strains exceed 20% THC [35]
- Current concentrates: Up to 99% THC potency [36]

This big jump in potency brings greater risks of side effects. Research shows that higher THC levels create stronger physical dependence and make cannabis use disorder more likely. [35]

Changes in consumption patterns

People's cannabis consumption habits have changed dramatically with market developments. Daily cannabis use among young adults (18-35 years) jumped from 6% to 11% between 2011 and 2021. [35] Multiple studies suggest age plays a significant role in who gets affected by CHS:

- Approximately 50%, try cannabis for the first time around age 20 [27]
- People between 16-34 years face the highest medical treatment risk from cannabis use [37]
- Young people aged 12-29 make up 41.6% of all cannabis-related ED visits [38]
- 84% of CHS patients use cannabis 3 - 4 times daily. [35]

Approximately 33% of frequent cannabis users who need emergency care show signs of CHS. [39] CHS cases have risen alongside these new consumption patterns, suggesting a strong connection between how intensely people use cannabis and their risk of developing the syndrome. Research indicates that frequent and long-term exposure to high-potency THC products disrupts the endocannabinoid system's balance, which may trigger the unexpected effects seen in CHS. [33]

Impact on Healthcare Systems

Emergency department visits and Hospitalization Rates

Hospital operations face challenges too. Emergency departments deal with crowded waiting rooms and overworked emergency services. A 2024 study from Kaiser Permanente Northern California monitored suspected CHS cases over 11 years (2009–2019) in a population of approximately 4.6 million. They identified 57,227 patients with at least one CHS-related emergency department visit under a narrow definition (primary vomiting diagnosis tied to cannabis use), with annual prevalence rising by 30.5% (134–175%) over that period. [40]

CHS patients' hospital admission patterns show the condition's severity and its effects on inpatient services, as recent data reveals concerning trends. North American emergency departments reported twice as many CHS cases between 2017 and 2021. [37] CHS patients account for 34.9% of hospital admissions related to cyclic vomiting. [41] Patients typically wait 1 to 2 years for an accurate diagnosis, which results in multiple hospitalizations over this time, further wasting healthcare resources. [41]

Economic burden

CHS puts a heavy strain on healthcare systems. The costs of diagnosis, treatment, and repeated medical care add up quickly. A detailed look at the costs shows:

Cost Category	Impact
Average evaluation cost prior to diagnosis	$76,290.92 per patient [42]
Healthcare utilization	Much higher for CHS patients vs. non-cannabis users [41]
Resource allocation	Multiple ED / clinic visits, and admissions per patient [41]

Several factors make this financial burden even heavier:

- Delayed recognition leads to numerous diagnostic tests [41]
- Patients need repeated trips to emergency departments and hospital stays to manage symptoms [38]
- More healthcare resources are diverted toward supportive care and treatment [41]

Money spent on healthcare goes beyond just direct medical expenses. Patients often undergo needless diagnostic procedures and treatments before doctors identify CHS correctly. They receive multiple imaging studies, endoscopic procedures, and lab tests. [42] The recurring nature of this condition means patients need repeated medical care. Research shows

these patients "consume considerably more health care dollars than patients who deny cannabis use". [41]

Treatment Approaches and Strategies

Managing CHS demands a complete approach that combines immediate symptom relief with long-term treatment strategies. Complete cannabis cessation is the catalyst of long-term management since reducing consumption alone proves insufficient. [43] Treatment success requires specific components:

Treatment Component	Success Rate	Duration
Outpatient Abstinence	54%	2+ weeks [27]
Sustained Cessation	29%	6 months [27]
Unassisted Cessation	8%	6 months [27]

Recovery depends heavily on professional support systems. Patients who participate in formal treatment programs show higher abstinence rates. [27] Cognitive behavioral therapy or family therapy have shown to be helpful. [43]

Patient education

Patient education plays a vital role in treatment success. Healthcare providers have focused on these essential points:

1. Patients must stop using cannabis completely. Their symptoms might take up to six months to improve after quitting [44]
2. They need to avoid triggers and stay cannabis-free
3. Quitting cannabis offers several health benefits such as:

   - Better lung function [43]
   - Sharper memory and thinking skills [43]
   - Higher quality sleep [43]
   - Lower risk of depression and anxiety [43]

A team-based approach with clinicians, pharmacists, and nursing staff will give a complete care experience. [27] This shared model helps achieve:

- Proper medication management
- Side effect monitoring
- Steady patient support
- Regular treatment progress checks

Emergency departments, primary care providers, and substance use counselors need careful coordination to apply these strategies. Patients show substantially better recovery rates when they receive support from dedicated healthcare teams. [27]

Conclusion

Cannabinoid Hyperemesis Syndrome has become a public health challenge that affects millions of Americans and puts a strain on our healthcare systems. Based upon recent data, there appears to be a connection between cannabis legalization and CHS cases. Emergency department visits for CHS have doubled between 2017 and 2021. Healthcare facilities face economic pressure as patient evaluation costs may exceed $76,000 before accurate diagnosis. This indicates healthcare systems would benefit from better recognition and earlier intervention strategies.

Research shows that completely stopping cannabis use is the only way to cure CHS. This fact, combined with the strain on medical resources due to CHS, raises questions about current cannabis laws. Medical experts support stricter THC limits and better public education about CHS risks. CHS's growing presence demonstrates some of the collateral damage of cannabis legalization to public health. Future policies need to balance public health against benefits, especially when there are potential long-term effects on young adults who make up most CHS cases.

Chapter 4: Diversion Statistics of Marijuana

Midwest HIDTA Initiatives

- Midwest HIDTA initiatives confiscated 18,124 pounds of marijuana, 797 pounds of marijuana concentrates, and 462 pounds of marijuana consumables in 2024; this total is a 19.3 percent decrease from 2023 (24,012 to 19,383). [45]

- Marijuana represented 62.8 percent of the total drug weight (30,867 pounds) seized by Midwest HIDTA enforcement initiatives in 2024. [45]

- The most popular methods used to divert marijuana are by privately-owned vehicles and mailing services. [46]

- Marijuana is routinely seized during traffic stops, and in mail centers within the Midwest HIDTA region. [46]

- Seizures involving marijuana transported from legalized states such as California, Colorado, Oklahoma, Oregon, Washington, and other states continue to be commonplace.[A]

Midwest HIDTA Initiative Marijuana Seizures 2020-2024 [46]

	2020	2021	2022	2023	2024
Marijuana (lbs.)	21,670	27,469	26,809	20,723	18,124
Marijuana Concentrates (Hash/Wax - lbs.)	1,091	4,615	1,694	1,018	797
Marijuana Consumables (Edibles – lbs.)	1,738	3,442	1,937	2,271	462
Total Pounds of Marijuana Seized by Year	24,499	35,526	30,440	24,012	19,383

Source: Midwest HIDTA PMP Seizure Data, Accessed January 2025

[A] This statement is supported by data collected from the MW HIDTA DHE program, the Rocky Mountain HIDTA, Oregon-Idaho HIDTA, national seizure reporting systems, postal seizures, and other law enforcement resources.

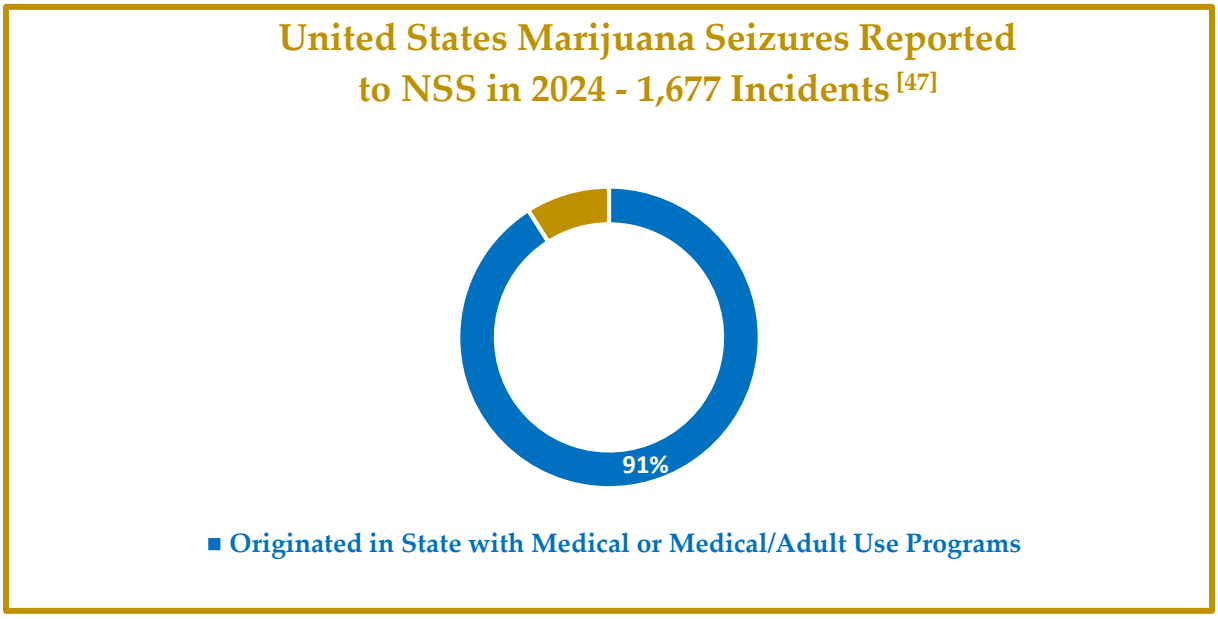
National Seizure System (NSS) – United States Seizures

Data obtained from the NSS-United States Seizures Dashboard, pertains to law enforcement drug seizures taking place in the United States and its territories. However, not all seizures are reported to the NSS; therefore, the following data should be viewed as a baseline. The 2024 data revealed the seizure of 12,023 pounds of marijuana in Midwest HIDTA's area of operation, during 1,635 separate incidents (average seizure per incident = 7.4 pounds). This is a 35.6 percent decrease in pounds seized compared to 2023 (18,669 to 12,023); however, there was a 14.3 percent increase in the number of incidents in 2024 versus 2023 (1,635 to 1,431). Another 5,115 pounds of marijuana were seized, during 342 separate incidents, where the destination was reported to be one of the states comprising Midwest HIDTA, this is a 44.6 percent increase from 2023 (3,538 to 5,115). [47] Additional marijuana seizures in 2024 included:

- 561 pounds of concentrated marijuana (honey oil/wax)
- 306 pounds of hashish oil/liquid
- 350 pounds of edible THC infused food and beverage products
- 143 pounds of THC; Delta-9-THC

The above items were either destined to, or transiting through, Midwest HIDTA states in 2024. [47]

Of the 1,677 United States seizure incidents reported to the NSS in 2024, that involved marijuana and an origin was able to be determined, 74 percent (1,245 events) originated from states with adult use marijuana programs and 91 percent (1,528 events) originated from states with only a medical marijuana program, or both medical and adult use marijuana programs.[47]



NSS - Domestic Highway Enforcement (DHE) Program

The Domestic Highway Enforcement (DHE) Strategy promotes collaborative, intelligence-led, unbiased policing across multiple jurisdictions on the Nation's highways. It enhances the investigative efforts of the High Intensity Drug Trafficking Areas (HIDTA) and impacts traffic safety, homeland security, and other crimes.

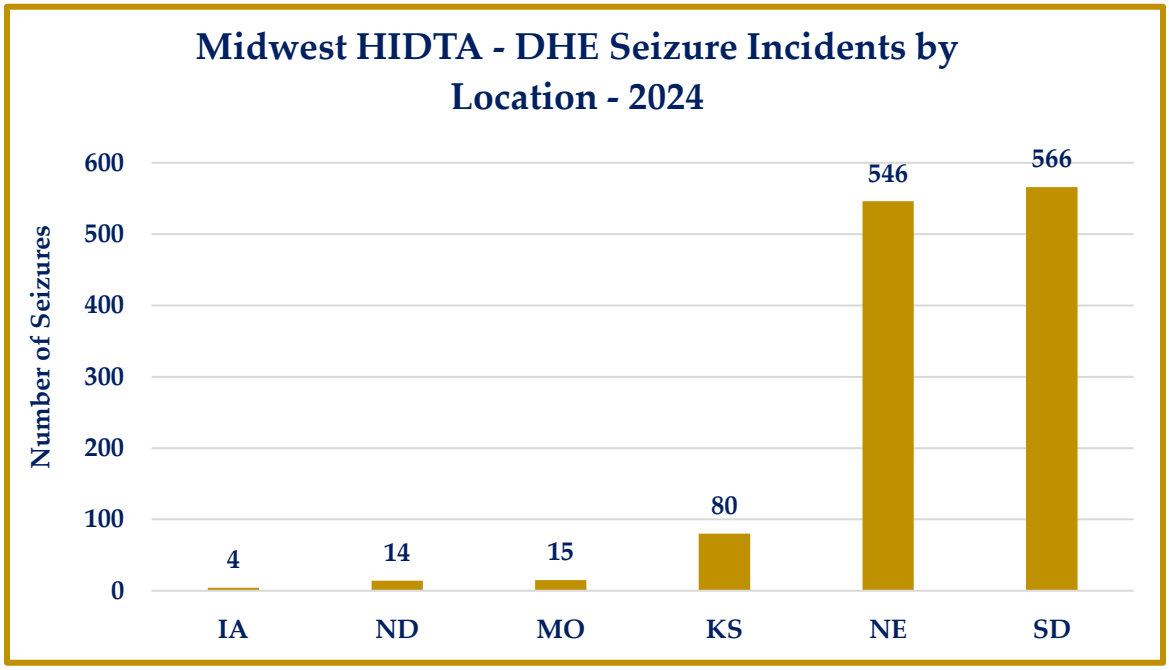
DHE's goals include the following:

- Disrupt and dismantle drug trafficking and money laundering organizations using highways for illegal activities.
- Share intelligence on individuals and organizations transporting illegal drugs, currency, and other contraband.
- Promote shared planning, intelligence, and coordination among Federal, state, and local law enforcement to address crimes and threats on highways.

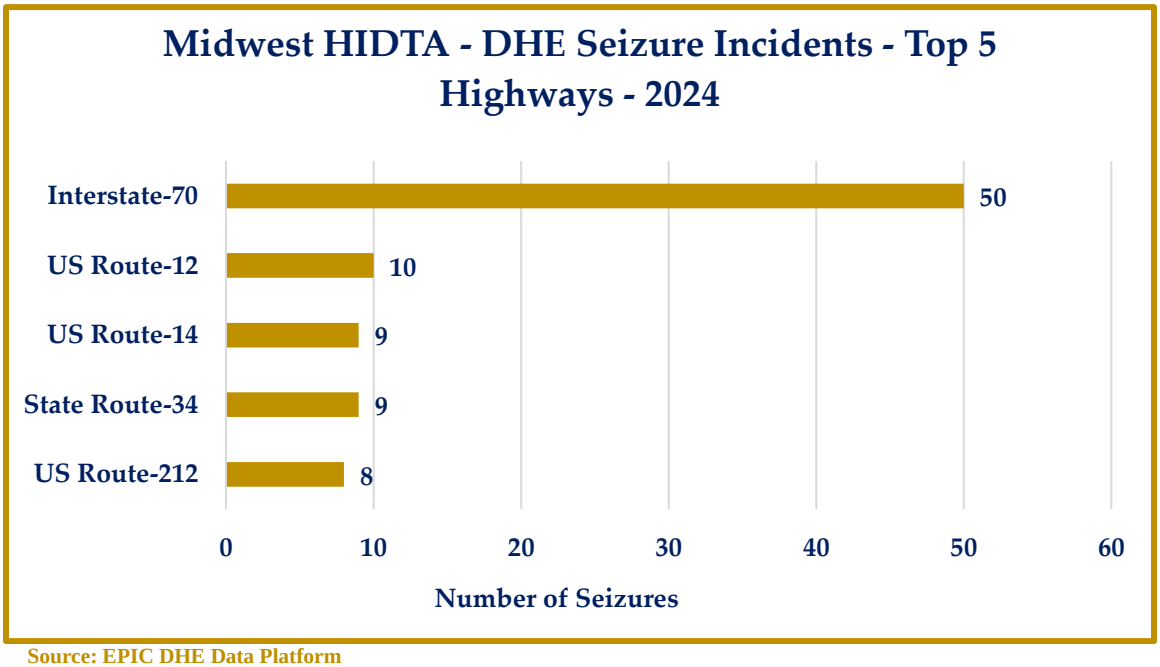
The HIDTA program's wide reach and coordinated nationwide highway enforcement strategy reduce criminal activity and enhance public safety on major transportation corridors. This approach leverages the strengths of HIDTA and local law enforcement agencies to keep highways safe. The DHE strategy is implemented in nine designated regions, coordinated by HIDTA directors in consultation with ONDCP.

DHE reports seizures to the El Paso Intelligence Center (EPIC), who created a shortcut platform within their database for DHE related data. This platform can be utilized to access seizures occurring on United States highways and interstates, through the use of "traffic stops" and "checkpoints." In 2024 nationally, there were 3,373 incidents involving marijuana (cannabis) reported to DHE, with 1,225 of these seizures, more than 3 per day, occurring in a Midwest HIDTA state. [48]

An additional 220 seizures involving marijuana were reportedly destined for Midwest HIDTA states, and 108 incidents where the marijuana seized was stated to have originated in a Midwest HIDTA state. [48] The number of seizures by state, and the top five highways where the most seizures took place are illustrated in the below graphs. [48]



Source: EPIC DHE Data Platform



Source: EPIC DHE Data Platform

Chapter 5: Missouri

Background / Regulatory Overview

Access to medical marijuana in Missouri was legalized following the passing of Amendment 2, and is outlined in Missouri Statute XIV Section 1. Right to Access Medical Marijuana. Out of the 2,413,858 people that voted on this amendment, 1,583,227 voted in favor, a 65 percent passage rate. [49]

Link to Missouri Statute XIV Section 1:

https://revisor.mo.gov/main/OneSection.aspx?section=XIV%20%20%201&constit=y

Following the passage of Amendment 2, a ballot initiative (Amendment 3) to legalize recreational use of marijuana passed on November 8, 2022; out of the 2,057,452 people that voted on the amendment, 1,092,432 voted in favor, a 53 percent passage rate. [50] Possession for adults 21 and over became legal on December 8, 2022, and is outlined in Missouri Statute XIV Section 2 Marijuana legalization, regulation, and taxation. The licensed sale of recreational marijuana commenced on February 3, 2023.

Link to Missouri Statute XIV Section 2:

https://revisor.mo.gov/main/OneSection.aspx?section=XIV%20%20%202&constit=y

Impaired Driving & Traffic Fatalities

Key Finding

- From 2018 to 2023, the total number of statewide traffic deaths increased by 6.7 percent, from 848 to 905, and increased 3.1 percent from 2022 to 2023 [52]

Driving While Intoxicated Offenses:

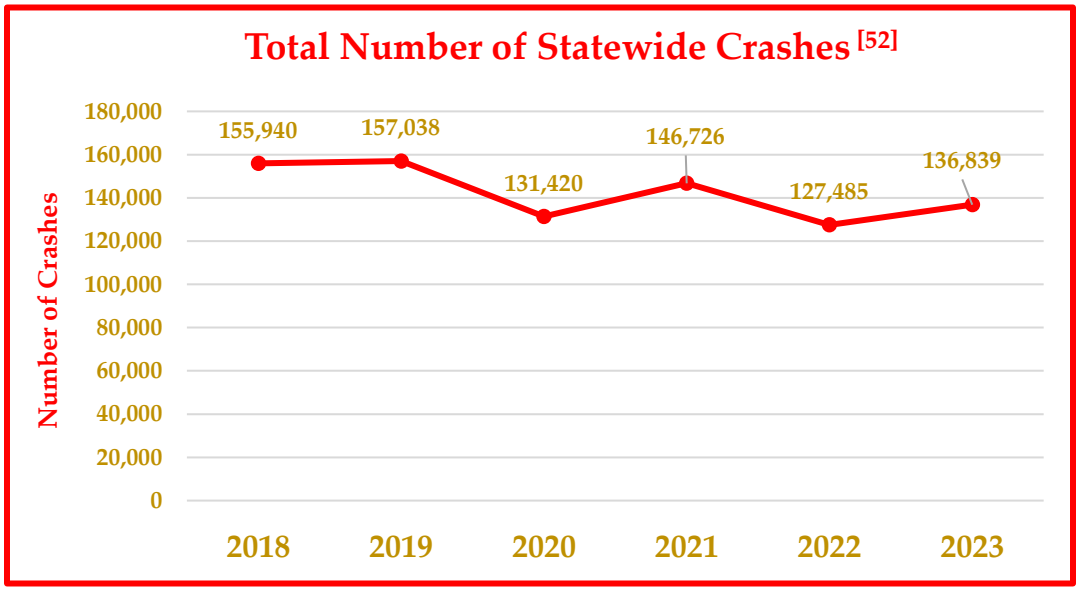
In Missouri, driving under the influence is referred to by statute as DWI (Driving While Intoxicated) or BAC (Driving with Excessive Blood Alcohol Content). Laws concerning intoxicated driving can be found under the revised statutes of Missouri, herein abbreviated as "RSMo."

DWI (Driving While Intoxicated) - A person commits the crime of "driving while intoxicated" if such person operates a motor vehicle while in an intoxicated or drugged condition. §577.010, RSMo. §577.001, RSMo defines intoxicated condition as being under the influence of alcohol, a controlled substance, or drug, or any combination thereof. In Missouri, driving under the influence is referred to by statute as DWI (Driving While Intoxicated) or BAC (Driving with Excessive Blood Alcohol Content).

BAC (Excessive Blood Alcohol Content) (The "per se" law) – A person commits the crime of "driving with excessive blood alcohol content" if such person operates a motor vehicle with eight-hundredths of one percent (.08) or more by weight of alcohol in such person's blood. §577.012, RSMo. Percent by weight of alcohol in the blood is based upon grams of alcohol per 100 milliliters of blood or grams of alcohol per 210 liters of breath. §§ 577.012, 577.037, RSMo

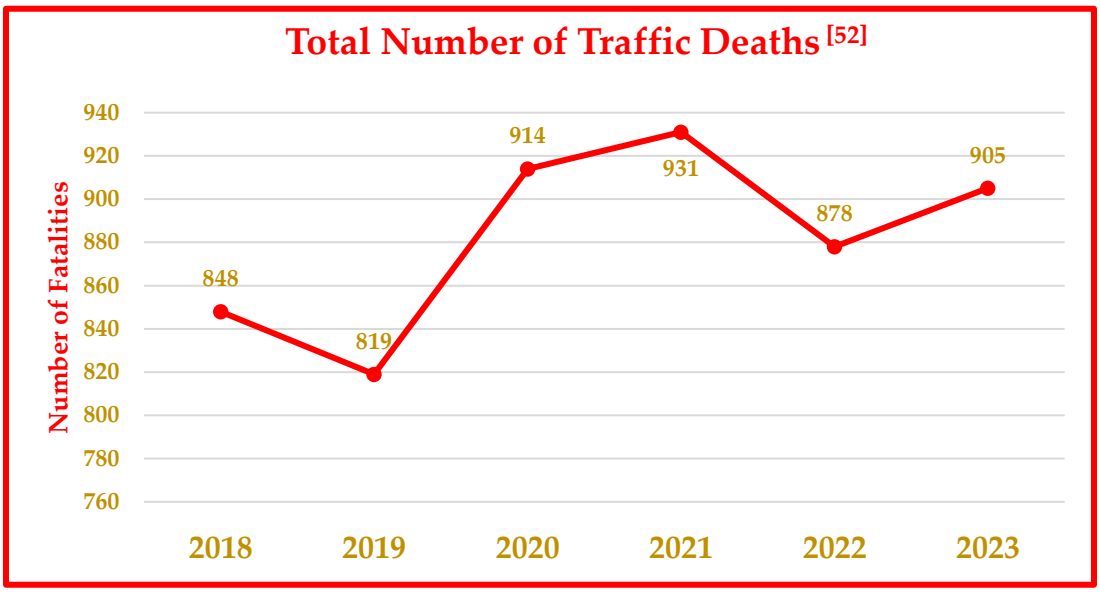
"There is no separate DWI/DUI statute for drug impairment in Missouri, and instead, driving under the influence of drugs is included in the DWI statute, §577.010, RSMo." [51]

Traffic Fatalities



Source: Missouri Highway Patrol

- From 2018 to 2023, the total number of statewide crashes decreased by 12.2 percent, from 155,940 to 136,839; however, there was an increase of 7.3 percent from 2022 to 2023 [52]



Source: Missouri Highway Patrol

- From 2018 to 2023, the total number of statewide traffic deaths increased by 6.7 percent, from 848 to 905, and increased 3.1 percent from 2022 to 2023 [52]

Missouri Traffic Fatalities - Driver Tested Positive for Drugs 2018-2023 [53]

		Fatalities in Crashes Involving Drugs		Fatalities in Crashes Involving Cannabinoids*	
Crash Year	Total Statewide Fatalities	Number of Fatalities	Percent of Total Fatalities	Number of Fatalities	Percent of Total Fatalities
2018	921	344	37.4%	157	17.0%
2019	881	296	33.6%	146	16.6%
2020	987	346	35.1%	182	18.4%
2021	1,016	410	40.4%	202	19.9%
2022	1,057	388	36.7%	173	16.4%
2023	991	363	36.6%	174	17.6%

*Cannabinoids: Delta 9, Hashish Oil, Hashish, Marijuana, Marinol, and THC.

- From 2018 to 2023, the number of statewide fatalities increased 7.6 percent (921 to 991), and the number of fatalities from crashes involving cannabinoids increased 10.8 percent (157 to 174). [53]

- In 2023, the percent of total fatalities in crashes involving cannabinoids was 17.6 percent (174 of 991), up from 16.4 percent (173 of 1,057) in 2022. [53]

Marijuana Availability & Use

Missouri voters approved a medical marijuana program in 2018, with medical marijuana sales starting in October 2020. In 2022, voters approved commercial adult use of marijuana followed by sales effective February 2023.

Key Findings

- From 2015-2016 to 2022-2023, numbers for past month marijuana usage, among those over 12 years of age, found there was a 129.6 percent increase in Missouri (8.1 – 18.6), compared to 76.7 percent increase nationally (8.6 – 15.2). [55]

- From 2015-2016 to 2022-2023, for past month marijuana usage, among those 18-25 years of age, found there was a 59.8 percent increase in Missouri (18.4 – 29.4), compared to 25.6 percent increase nationally (20.3 – 25.5) [55]

National Survey on Drug Use and Health (NSDUH) Data

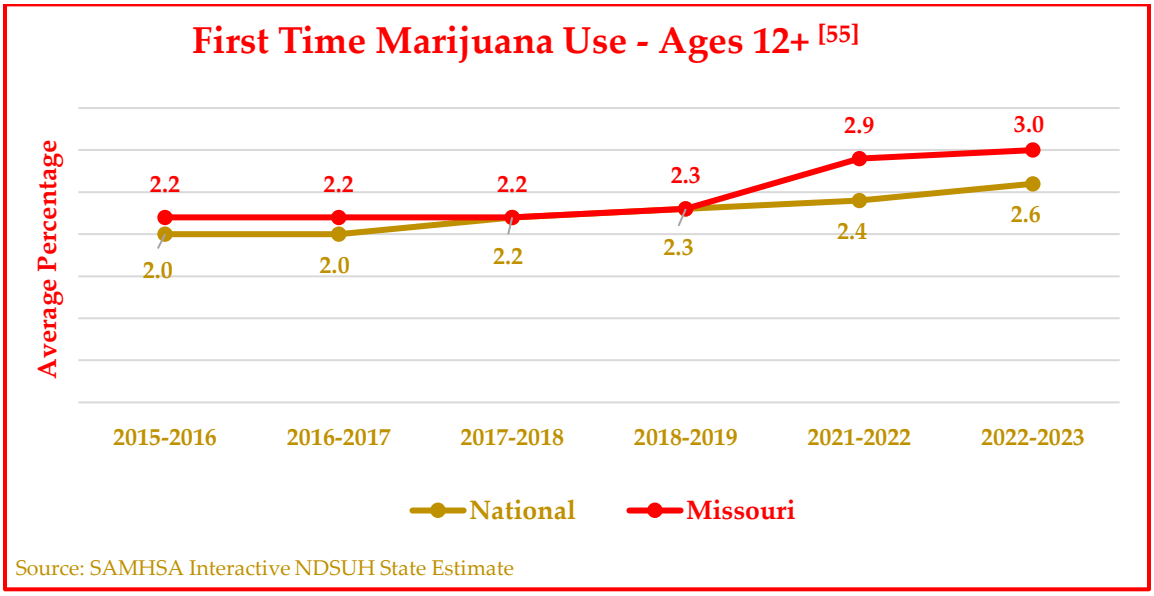
According to their website, the National Survey on Drug Use and Health (NSDUH) provides key statistics on the use of "tobacco, alcohol, prescription psychotherapeutic drugs (pain relievers, tranquilizers, stimulants, and sedatives), and other substances (e.g., marijuana, cocaine)" among the U.S. civilian, noninstitutionalized population aged 12 and older. It also includes questions on mental health issues.

NSDUH gathers data "through face-to-face interviews with a representative sample" at the respondent's residence, "including households and non-institutional group quarters (e.g., shelters, rooming houses, dormitories)." The survey excludes homeless individuals not using shelters, active-duty military personnel, and "residents of institutional group quarters, such as jails and hospitals." [54]

Missouri Averages Compared to National Averages 2023 [55]		
Ages 12 and Older	**Missouri**	**United States**
Alcohol Use Past Month	48.5%	48.1%
Cigarette Past Month Use	18.9%	14.1%
Illicit Drug Use (Other than Marijuana) Past Month	3.8%	3.3%
Marijuana Use Past Month	18.6%	15.2%
Perception of Risk - Smoking Marijuana Once a Month	17.9%	20.4%
SOURCE: SAMHSA, Center for Behavioral Health Statistics and Quality, NSDUH, 2023		

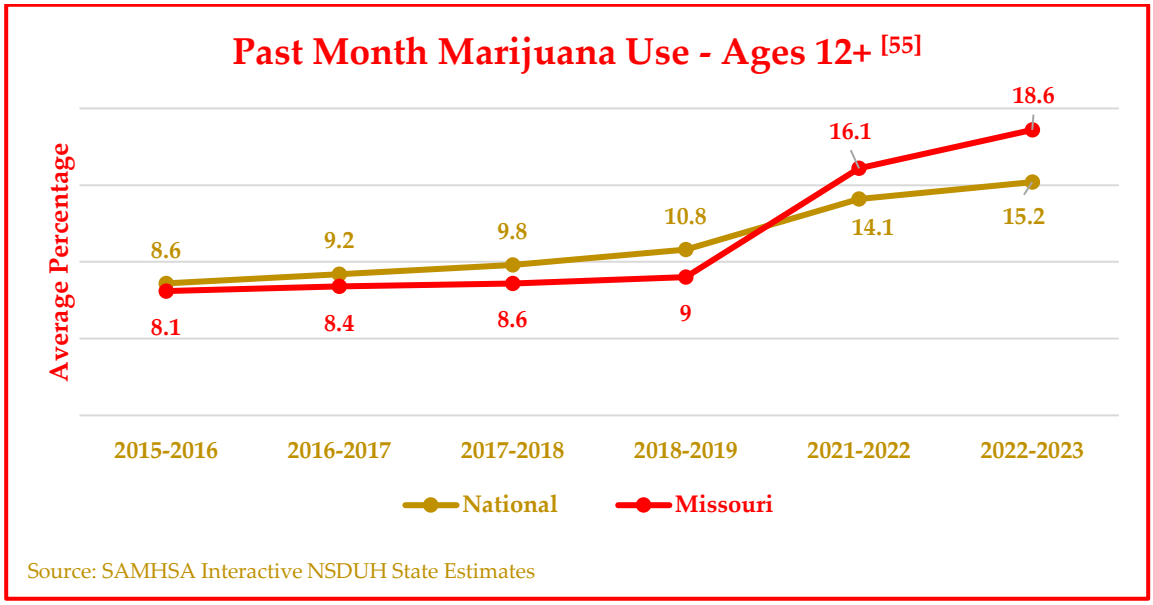
Marijuana First Time Use in Last Year 2023 [55]			
Age	**Missouri %**	**Missouri U.S. Ranking**	**National %**
12 Years +	3.0%	16	2.6%
12-17 YOA	4.4%	33	4.7%
18 Years +	2.7%	15	2.2%
18-25 YOA	8.4%	25	8.3%
26 Years +	1.7%	8	1.2%

Source: SAMHSA Interactive NSDUH State Estimates

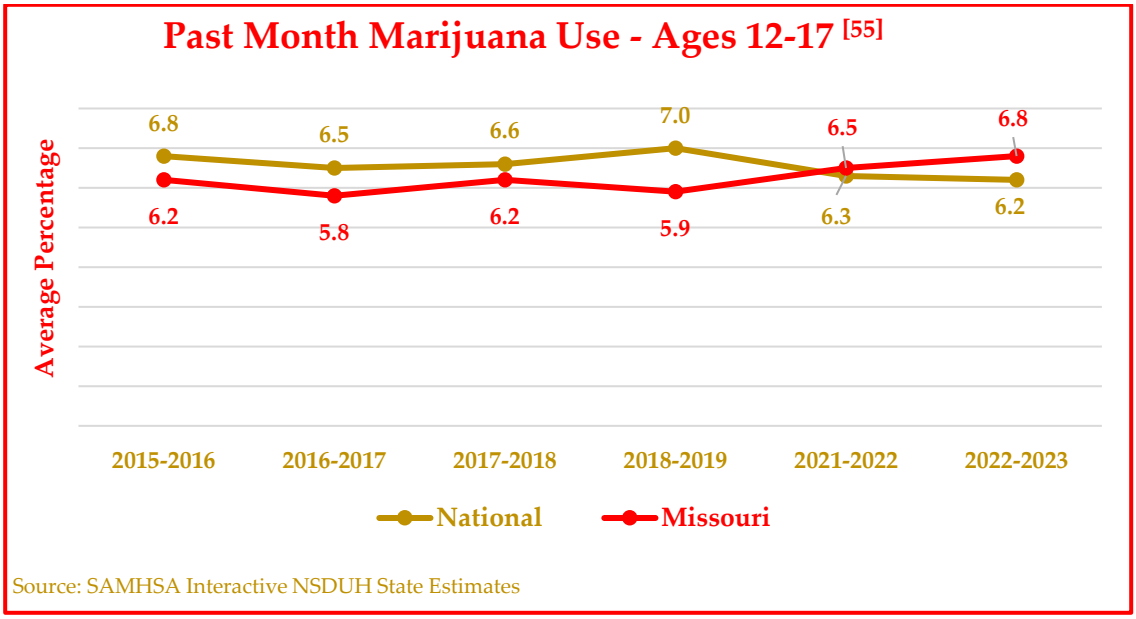


Source: SAMHSA Interactive NDSUH State Estimate

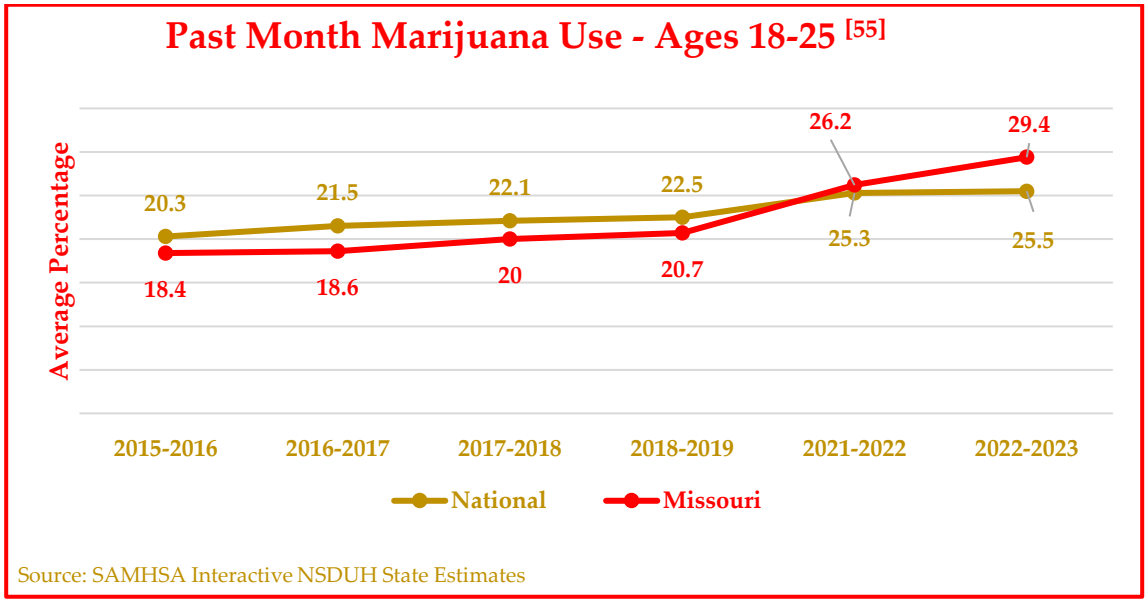
- From 2015-2016 to 2022-2023, numbers for first time marijuana usage, among those over 12 years of age, found there was a 36.4 percent increase in Missouri (2.2 – 3.0), compared to 30 percent increase nationally (2.0 – 2.6). [55]



- From 2015-2016 to 2022-2023, numbers for past month marijuana usage, among those over 12 years of age, found there was a 129.6 percent increase in Missouri (8.1 – 18.6), compared to 76.7 percent increase nationally (8.6 – 15.2). [55]



- From 2015-2016 to 2022-2023, numbers for past month marijuana usage, among those 12-17 years of age, found there was a 9.7 percent increase in Missouri (6.2 – 6.8), compared to 8.8 percent decrease nationally (6.8 – 6.2). [55]



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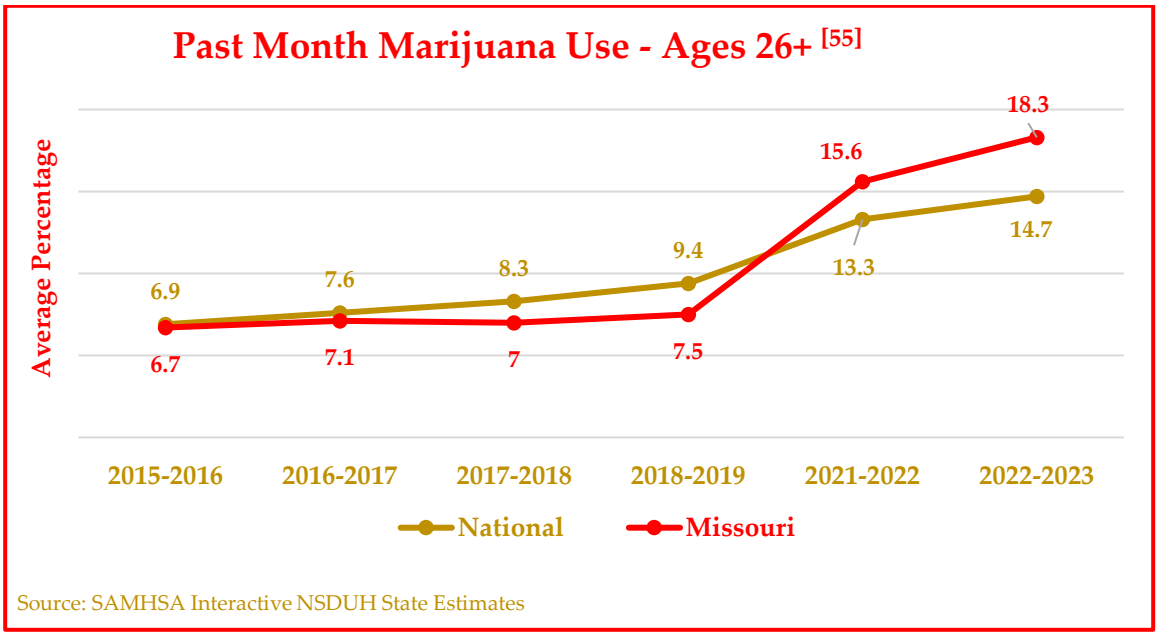


- From 2015-2016 to 2022-2023, numbers for past month marijuana usage, among those 26+ years of age, found there was a 173.1 percent increase in Missouri (6.7 – 18.3), compared to 113 percent increase nationally (6.9 – 14.7) [55]

Missouri 2024 Student Survey and NSDUH Data:

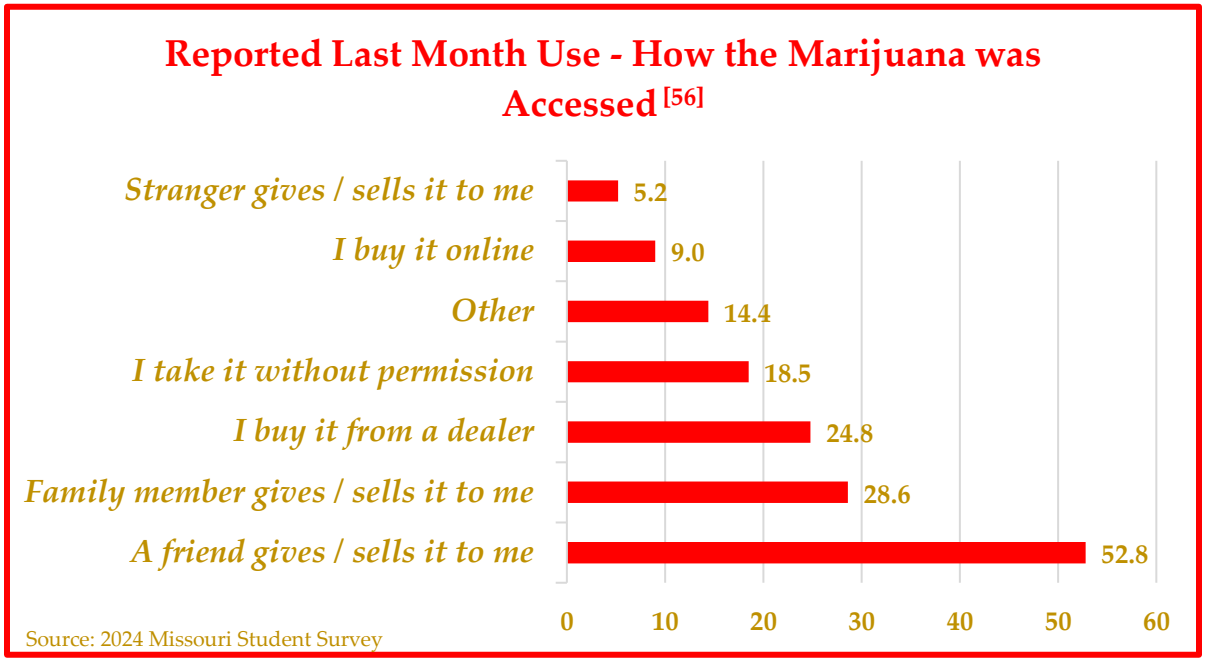
The Missouri Student Survey is a comprehensive survey conducted in even-numbered years to gather information about the behaviors and attitudes of students in Missouri public schools. This survey plays a role in informing policymakers and educators about the needs and challenges faced by students. The survey is conducted by the Missouri Department of Mental Health in collaboration with the Missouri Department of Elementary and Secondary Education.

The survey collects data on various topics including substance use, bullying, mental health, and school climate. It is administered to students in grades 6-12 across the state. The survey is typically conducted online or through paper forms, and strict confidentiality measures are implemented to ensure the privacy of students' responses. The data collected from the survey is then analyzed and used to develop strategies and interventions aimed at improving students' well-being and academic success.

Percentage of Substance Use in Missouri Users (Grades 6-12) [56]
Based on 2024 Missouri Student Survey

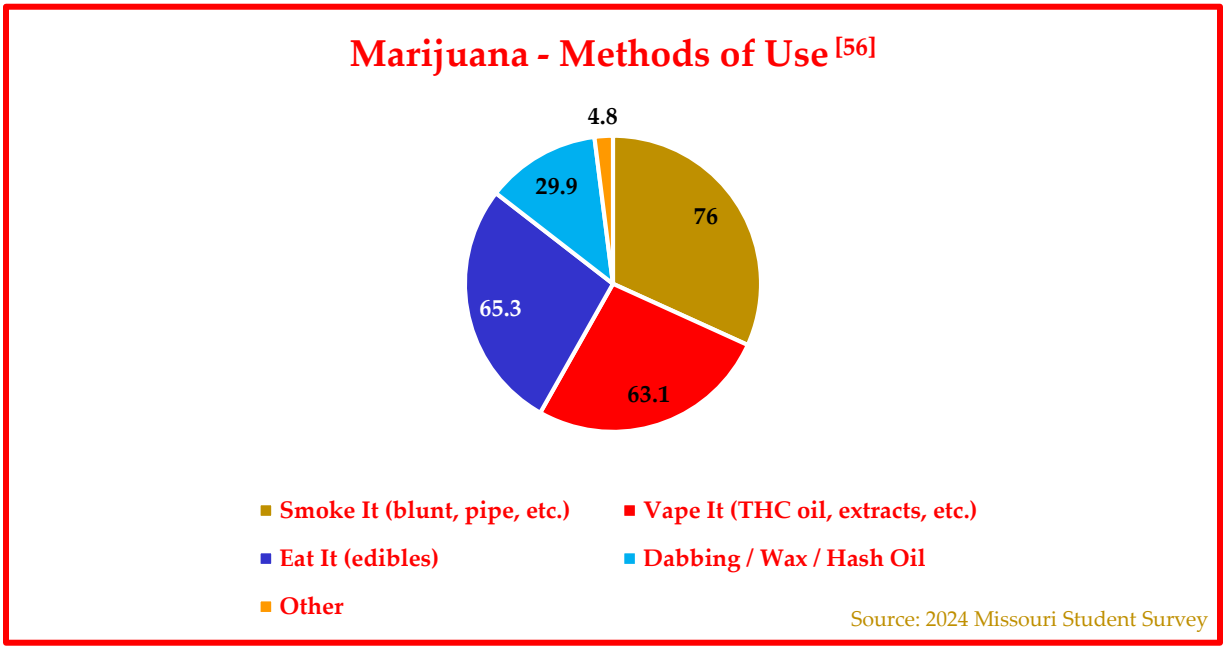
	Lifetime	Last 30-Days
Alcohol	19.9	6.8
Cigarettes	7.4	2
Chewing Tobacco	1.6	0.5
Cocaine	0.5	Not Collected
Hallucinogens	1.9	Not Collected
Marijuana	12.7	7.3
Methamphetamine	0.3	Not Collected

Source: 2024 Missouri Student Survey



- The highest frequency reported method of acquiring marijuana was obtaining it from a "friend" who either gives/sells it (52.8 percent), followed by a family member who either gives/sells it (28.6 percent) [56]

- The least frequent reported method of acquiring marijuana was through a stranger who gives/sells it (5.2 percent) [56]



- The most frequently reported means of marijuana ingestion was to "smoke it" (76 percent), followed by edibles (65.3 percent) [56]

Factors and Perceptions of Adolescent Marijuana Usage [56]					
Marijuana's Perceived Availability					
		Very Easy	Sort of Easy	Sort of Hard	Very Hard
Marijuana - Ease of Acquisition		18.2%	12.3%	14.3%	55.1%
Marijuana - Peer Usage and Perception of					
	0 Friends	1 Friend	2 Friends	3 Friends	4+ Friends
Youth Who Have Friends Who Use Marijuana	74.4%	6.7%	4.8%	3.4%	10.7%
		Not Wrong at All	A Little Bit Wrong	Wrong	Very Wrong
How Wrong Friends View Marijuana Use		13.4%	9.4%	16.0%	61.1%
		Very Cool	Pretty Cool	A Little Cool	Not Cool at All
Level of "Coolness" Linked to Marijuana Use		7.4%	9.9%	15.3%	67.4%
Marijuana - Perceived Risk of Harm From Usage					
		No Risk at All	Slight Risk	Moderate Risk	Great Risk
Using Once or Twice a Week		12.2%	20.0%	22.9%	45.0%
Marijuana - Perceived Wrongfulness of Usage					
		Not Wrong at All	A Little Bit Wrong	Wrong	Very Wrong
Any Use of Marijuana		6.0%	10.1%	14.0%	69.9%
Using Marijuana Once or Twice a Week		5.5%	7.9%	14.2%	72.3%

Source: 2024 Missouri Student Survey

Public Health

Key Findings

- From 2018 to 2023, there was a 259 percent increase (194 to 696) in the total number of cannabis product exposure calls to the Missouri Poison Control Center [58]

- From 2018 to 2022, Missouri overdose deaths for all drug types increased 36 percent (1,608 to 2,180) [60]

Emergency Department Visits & Hospitalizations

Following the medical marijuana legalization in 2018, Missouri's hospitals observed an increase in both emergency room visits and hospitalizations due to marijuana-related events. The number of emergency room visits increased by 105.7 percent between 2018 and 2024 (1,075 to 2,211); the hospitalizations from these visits, increased 29.4 percent from 2018 to 2024 (310 to 401). [57]

Missouri Department of Health & Senior Services [57]

Cannabis-Involved Emergency Department Visits and Hospitalizations 2018-2024*

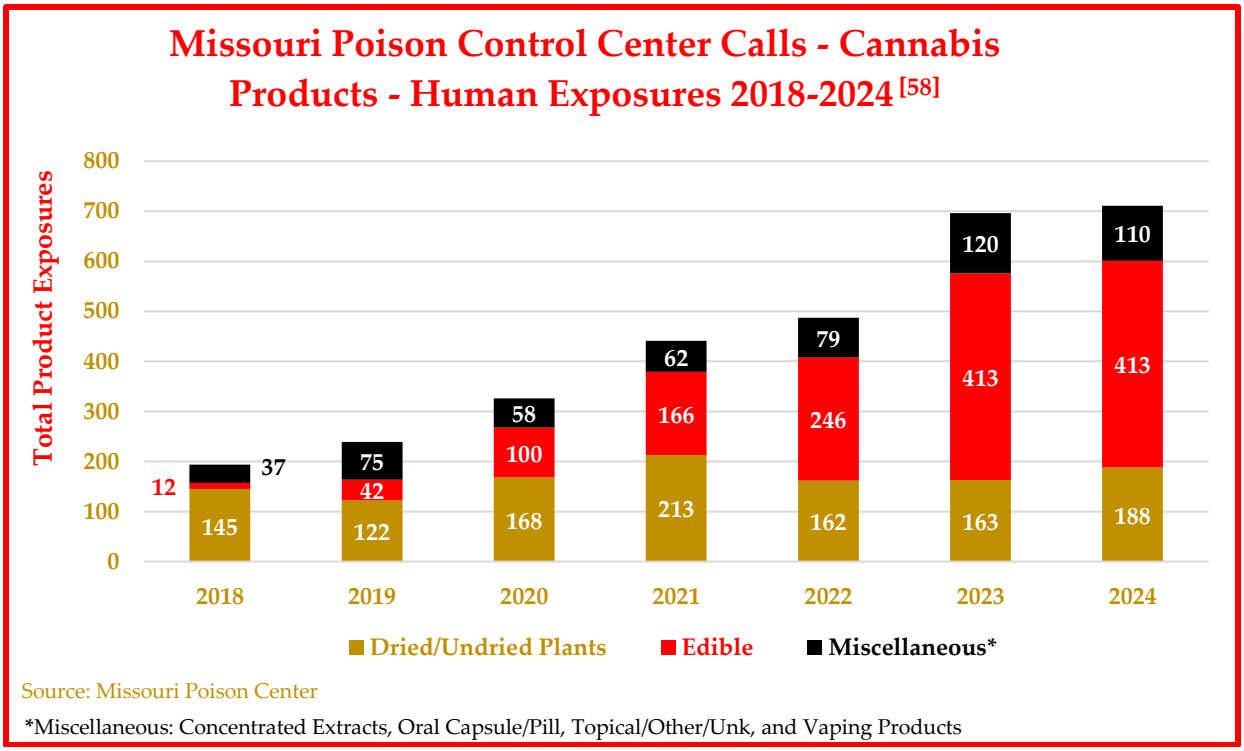
Visit Type	2018	2019	2020	2021	2022	2023*	2024*	% Change
ED Visits	1,075	1,344	1,490	1,538	1,655	2,287	2,211	105.70%
Hospitalizations	310	328	307	340	358	440	401	29.40%

This table includes ICD-10 CM discharge diagnosis codes for Cannabis abuse (F12.1), Cannabis dependence (F12.2), Cannabis use (F12.9), and Cannabis poisoning (T40.7) as the primary diagnosis for initial encounters to identify Cannabis-involved hospital visits.

Source: Missouri Patient Abstract System, Bureau of Health Care Analysis and Data Dissemination

*Note: 2023 and 2024 data are provisional and may be subject to change

Poison Center Calls



- In Missouri, since 2018, when marijuana was first legalized for medical use, cannabis exposure calls have increased by 266.5 percent (194 to 711). [58]

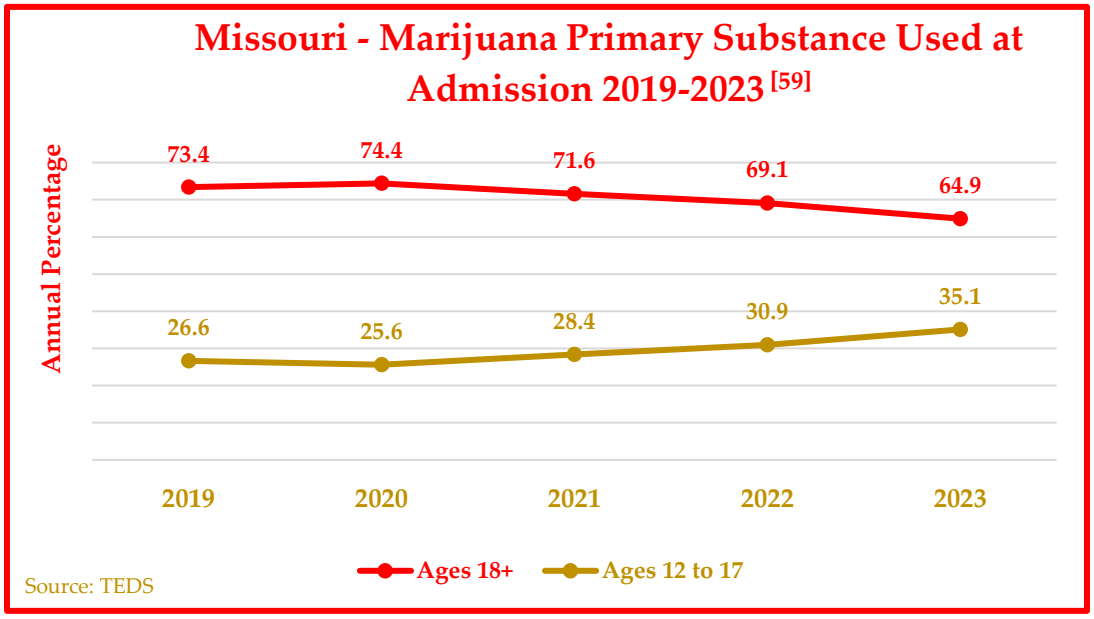
- In 2023 and 2024, the first 2 years after marijuana was legalized for commercial adult use, cannabis exposure calls were higher than the previous 5 years, increasing 46 percent from 2022 to 2024 (487 to 711). [58]

- The largest increase was in the calls related to edible products, which showed an increase of 3,341 percent (12 to 413). [58] The increase in "edible exposures" witnessed in Missouri, mirrors the same trend nationally.

Treatment Admissions Drug Type / Age Group

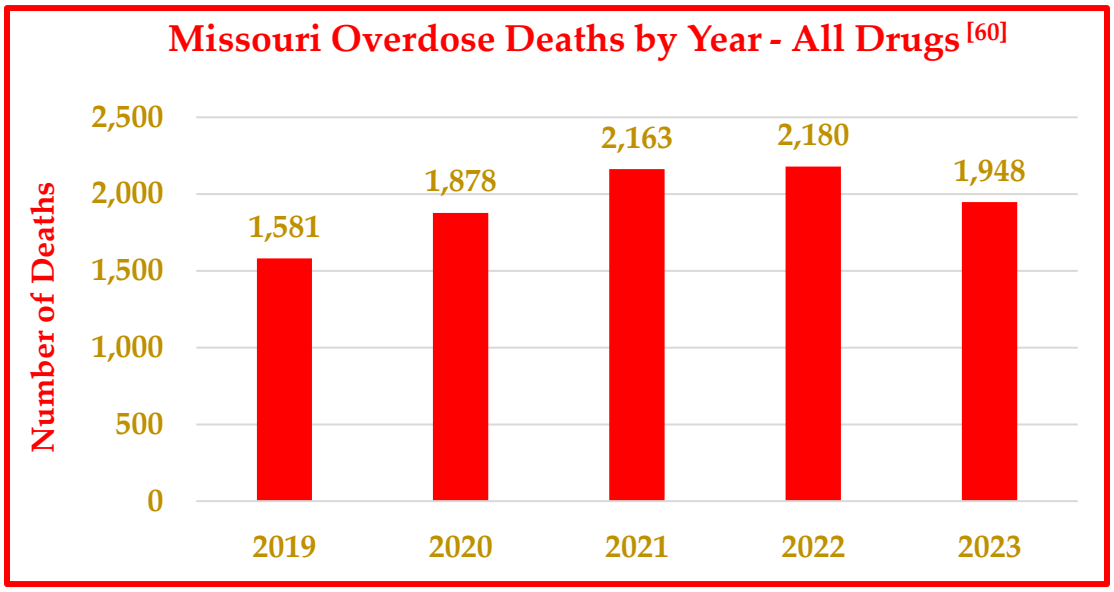
Treatment Admissions Drug Type (TEDS) data refers to a comprehensive collection of information on individuals seeking treatment for substance abuse. TEDS data provides valuable insights into the demographics, drug types, and treatment outcomes of individuals accessing addiction treatment services. This data is collected through a national reporting system that includes information from various treatment facilities across the country.

The data collection process involves the submission of standardized forms by treatment providers, which capture detailed information about the individual's drug use history, socio-demographic characteristics, and the specific type of treatment received. This data is then compiled and analyzed by state and federal agencies to monitor trends in substance abuse, evaluate the effectiveness of treatment programs, and inform policy and funding decisions.



- From 2019 to 2023, the percentage of admissions to treatment, with marijuana being identified as the primary substance as cause, increased 32 percent for ages 12 to 17 (26.6 to 35.1) and decreased 11.6 percent for ages 18+ (73.4 to 64.9) [59]

Fatal Overdose Data Post Legalization



- From 2019 to 2023, Missouri overdose deaths, from all drugs, increased 23.2 percent (1,581 to 1,948), but did decrease 10.6 percent (2,180 to 1,948) from 2022 to 2023 [60]; this data is included in response to assertions that opioid overdose deaths would decline post-marijuana legalization
- The primary class of drugs, most often associated to these fatal overdose deaths was non-heroin (synthetic) opioids. [60]

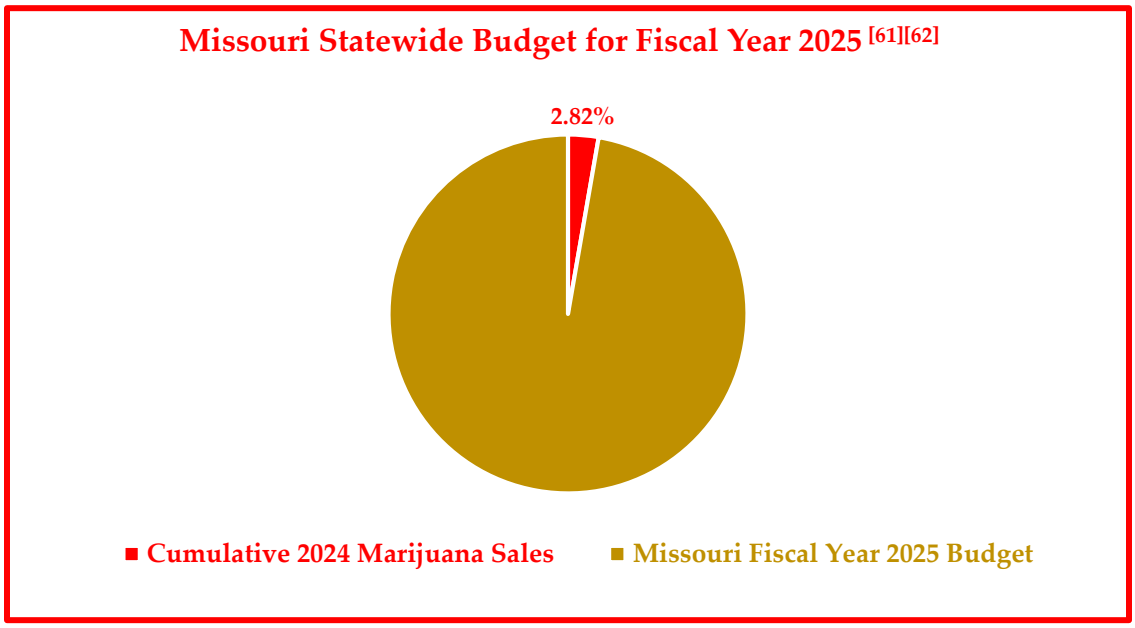
Social Impacts

Key Findings

- Missouri's 2025 Fiscal year budget was $51.8 billion, while the cumulative marijuana sales in Missouri for 2024 totaled $1,460,530,000 (2.82 percent of the budget) [61] [62]

- Peak patient applications took place in March 2022 (20,493); following adult use authorization in November 2022, patient applications have dropped to 831 by February 2025, a 96% decrease [62]

Budgetary and Taxation Impacts



- Missouri's 2025 Fiscal year budget was $51.8 billion, while the cumulative marijuana sales in Missouri for 2024 totaled $1,460,530,000 (2.82 percent of the budget) [61] [62]

- Adult use sales initiated in February 2023, following this, medical marijuana sales decreased 55.9% from February 2023 to February 2025 ($31,210,000 to $13,770,000). Conversely, adult use sales increased 42.8% from February 2023 to February 2025 ($71,730,000 to $102,460,000) [62]

Disbursement of Marijuana Tax Revenue

The passing of the constitutional amendment legalizing the retail sale of marijuana, included a 6 percent tax on the its sale. This was a new source of revenue for the state; however, the dollars produced by the tax are not part of the state's general revenue fund. "Instead, the amendment created the Veterans, Health, and Community Reinvestment Fund…" where the revenue generated would be housed and disbursed through. [63]

The new tax revenues will be used to fund the state departments who regulate the provisions established by the amendment. The funds are then utilized to implement the expungement of criminal records, and finally the remaining funds are evenly divided amongst drug treatment service programs, the Missouri Veteran's Commission, and the public defender system. During Fiscal Year 2024, adult use revenue transfers were made to

the Missouri Veteran's Commission ($6,355,407), Missouri Public Defender System ($6,355,407), and the Missouri Department of Health and Senior Services ($6,355,407). [63][62]

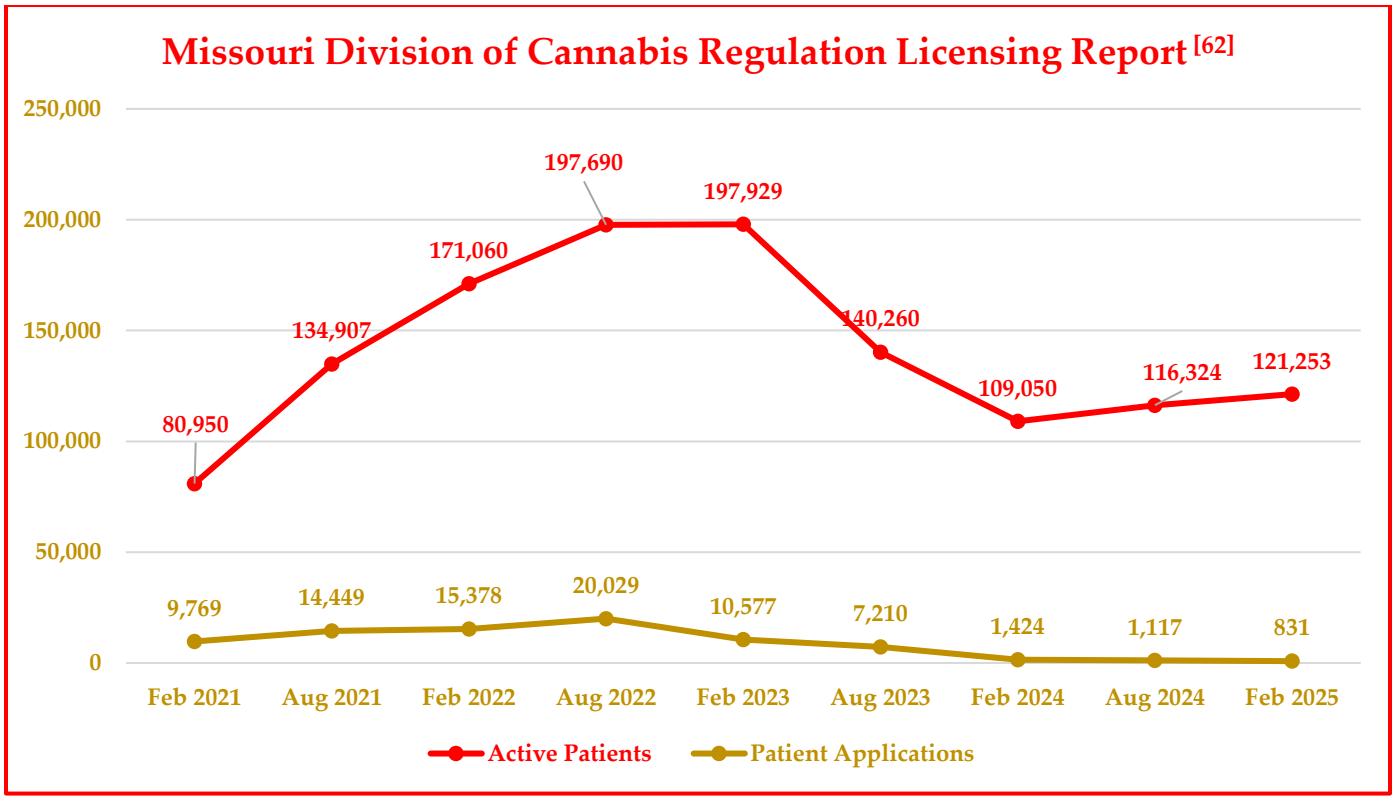
The legalization of recreational marijuana, did not alter the taxation on medical marijuana, which remains at 4 percent. A portion of the revenue generated by the sale of medical marijuana is routed to the Department of Health and Human Services, to be used to cover the costs of implementation, and the Department of Revenue. The remainder of the funds are designated for the Missouri Veterans Commission to provide services to veterans, to include veterans physical and mental health programs, housing assistance, training and education, and the operating and maintenance of veterans' homes. During Fiscal Year 2024, a medical marijuana revenue transfer was made to the Missouri Veteran's Commission ($13,000,000). [63][62]

Dispensary/Cultivator/Medical License Statistics

Missouri Department of Health & Senior Services Licensed Approved to Operate Facilities as of 03-19-2025 [64]			
Marijuana Cultivation Facilities			
Comprehensive	60	Medical	0
Marijuana Dispensary Facilities			
Comprehensive	215	Medical	0
Marijuana Infused Product Manufacturing Facilities			
Comprehensive	83	Medical	0

Definitions:

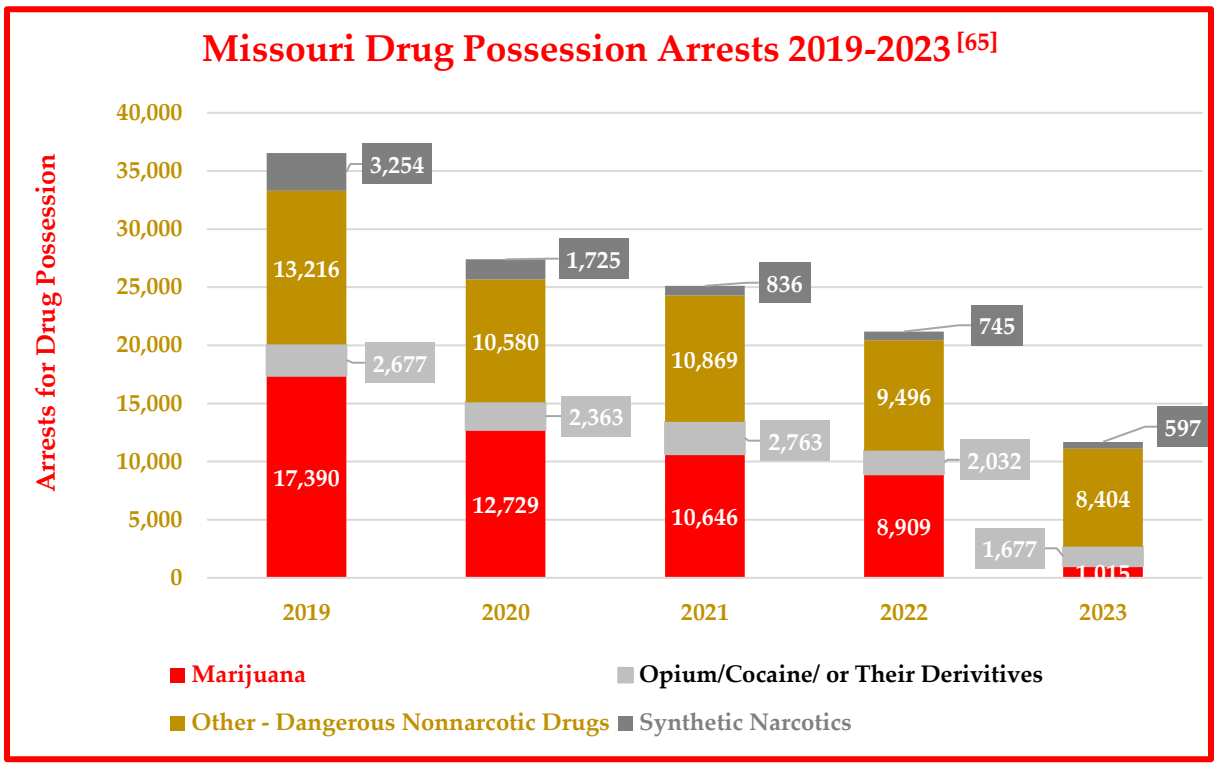
- Comprehensive Marijuana Cultivation Facility – a facility licensed by the department where marijuana cultivation for medical or adult use occur.
- Medical Marijuana Cultivation Facility – a facility licensed by the department where marijuana cultivation operations occur that is limited to medical use.
- Comprehensive Marijuana Dispensary Facility - a facility licensed by the department where marijuana product is dispensed for medical or adult use.
- Medical Marijuana Dispensary Facility - a facility licensed by the department where marijuana is dispensed only for medical use. [64]



- Peak active patient number was in November 2022 (205,897), prior to the authorization of adult use; since then, registered active patients have dropped to 121,253 by February 2025, a 41% decrease [62]

- Peak patient applications took place in March 2022 (20,493); following adult use authorization, patient applications have dropped to 831 by February 2025, a 96% decrease [62]

Marijuana-Related Crime

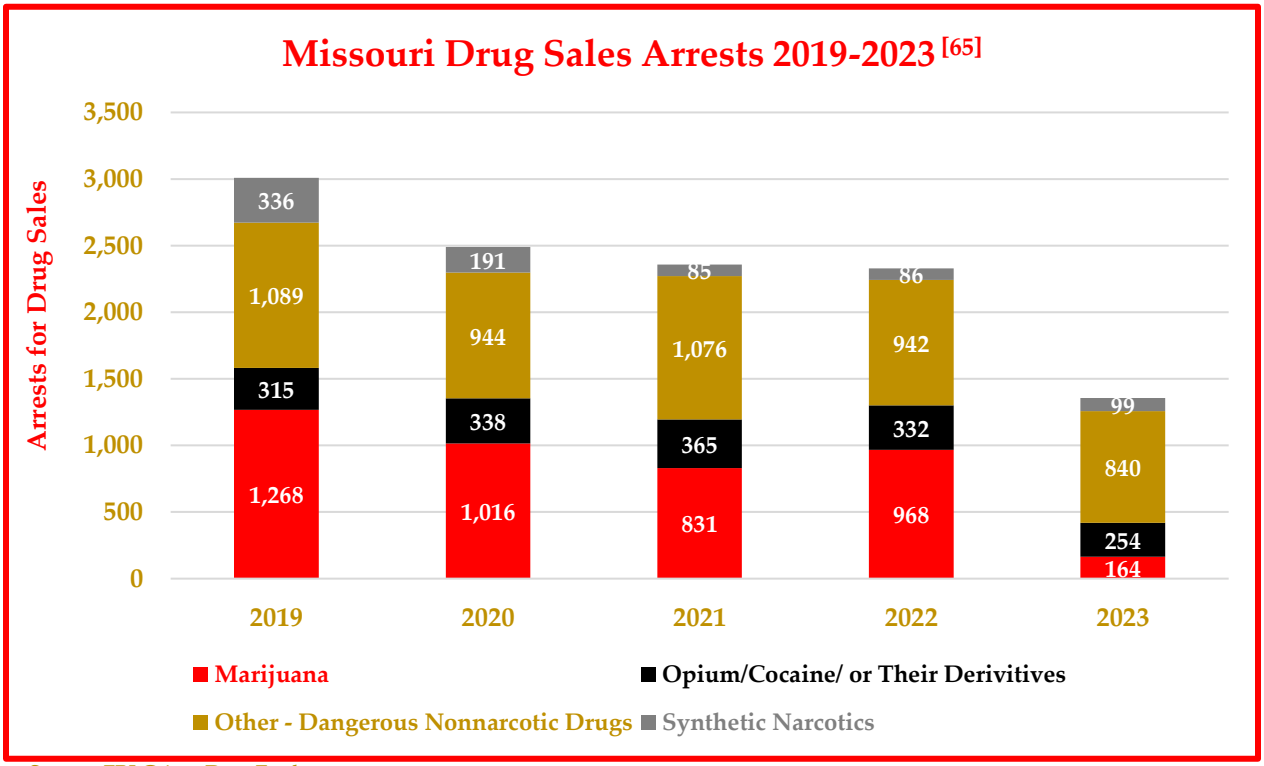


Source: FBI Crime Data Explorer

Arrests for Drug Possession Charges [65]						
	2019	2020	2021	2022	2023	% +/-
Marijuana	17,390	12,729	10,646	8,909	1,015	-94.2%
Opium/Cocaine/ or Their Derivatives	2,677	2,363	2,763	2,032	1,677	-37.4%
Other – Dangerous Nonnarcotic Drugs	13,216	10,580	10,869	9,496	8,404	-36.4%
Synthetic Narcotics	3,254	1,725	836	745	597	-81.7%
TOTALS	**36,537**	**27,397**	**25,114**	**21,182**	**11,693**	**-68%**

- From 2019 to 2023, there was a 68 percent decrease (36,637 to 20,829) in the number of arrests for drug possession [65]

- The greatest percent decrease was in the arrests for marijuana, 94.2 percent (17,390 to 1,015), followed by synthetic narcotics, which decreased 81.7 percent (3,254 to 597) [65]



Source: FBI Crime Data Explorer

Arrests for Drug Sales Offenses [65]						
	2019	2020	2021	2022	2023	% +/-
Marijuana	1,268	1,016	831	968	164	-87.1%
Opium/Cocaine/ or Their Derivatives	315	338	365	332	254	-19.4%
Other - Dangerous Nonnarcotic Drugs	1,089	944	1,076	942	840	-22.9%
Synthetic Narcotics	336	191	85	86	99	-70.5%
TOTALS	**3,008**	**2,489**	**2,357**	**2,328**	**1,357**	**-54.9%**

- From 2019 to 2023, there was a 54.9 percent decrease (3,008 to 1,357) in the number of arrests for drug sales offenses [65]

- The greatest percent decrease was in the arrests for the sale of marijuana, 87.1 percent (1,268 to 164), followed by synthetic narcotics, which decreased 70.5 percent (336 to 99) [65]

Chapter 6: North Dakota

Background / Regulatory Overview

North Dakota became the first state in the Midwest HIDTA to approve a medical marijuana program in 2016, by the passing of North Dakota Initiated Staturoty Measure 5, also known as the North Dakota Compassionate Care Act. Out of the 338,657 people that voted on this amendment, 216,042 voted in favor, a 64 percent passage rate. [66] The regulations governing the medical marijuana program are outlined in North Dakota Century Code Chapter 19-24.1 Medical Marijuana.

Link North Dakota Chapter 19-24.1 Medical Marijuana:

https://ndlegis.gov/cencode/t19c24-1.pdf

In November, 2022, an adult-use marijuana program (Measure 2) was rejected by North Dakota voters. Out of the 238,800 people that voted on this amendment, 131,192 voted against its passing, a 55 percent rejection rate. [67] An adult-use marijuana program (Measure 5) was once again on the ballot in November 2024, this measure was also rejected by North Dakota voters. Out of the 362,722 people that voted on the amendment, 190,548 (52.5 percent) voted against it. [68]

Impaired Driving & Traffic Fatalities

The Midwest HIDTA recognizes that there are numerous data limitations based on current testing methods and processes that make interpreting traffic fatality data difficult. However, this is the most comprehensive data available that allows for multi-year comparisons of drug-related fatalities. Data for this section was gathered from the North Dakota Department of Transportation.

Key Findings

- Since medical marijuana was legalized in 2016, motor vehicle crashes decreased 30 percent (15,017 to 10,475), while North Dakota traffic deaths decreased 6 percent (113 to 106) [70]

- From 2018 to 2023, the percentage of total fatalities increased by 1 percent (105 to 106); however, the percentage of these fatalities involving drugs increased 80.5 percent (41 to 74) [53]

Definitions:

Under North Dakota Century Code 39-08-01, a DUI is defined as operating a vehicle under the influence of alcohol, drugs, or a combination thereof. The legal blood alcohol concentration (BAC) limits for drivers in North Dakota are as follows: drivers over the age of 21 – BAC .08 percent; drivers under the age of 21 – BAC .02 percent; and commercial drivers – BAC .04 percent.

"North Dakota Chapter 39-08-01, Persons under the influence of intoxicating liquor or any other drugs or substances are not to operate a vehicle - Penalty.

1. a. A person may not drive or be in actual physical control of any vehicle upon a highway or upon public or private areas to which the public has a right of access for vehicular use in this state if any of the following apply:

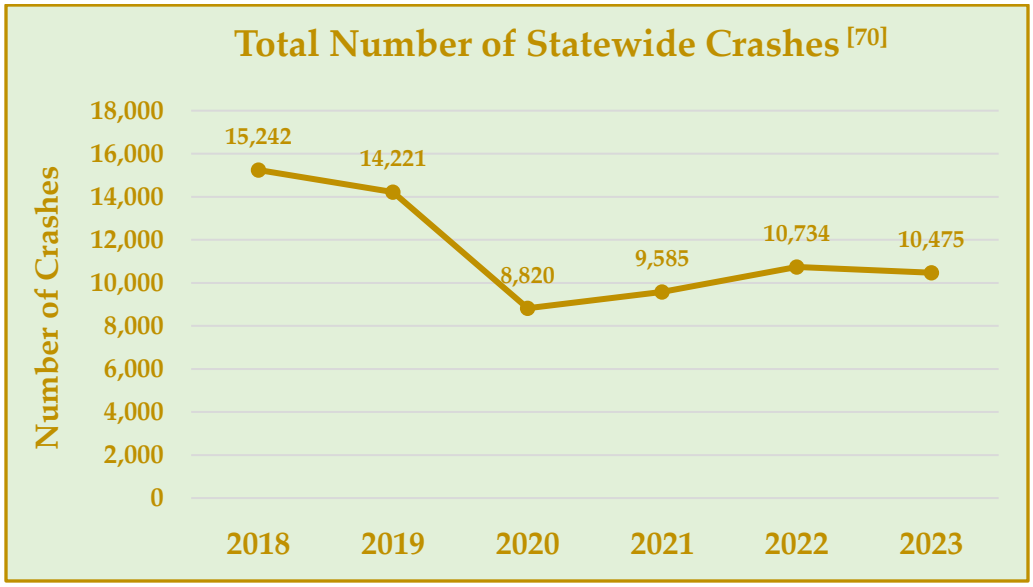
   (1) That person has an alcohol concentration of at least eight one-hundredths of one percent by weight at the time of the performance of a chemical test within two hours after the driving or being in actual physical control of a vehicle.

   (2) That person is under the influence of intoxicating liquor.

   (3) That person is under the influence of any drug or substance or combination of drugs or substances to a degree which renders that person incapable of safely driving.

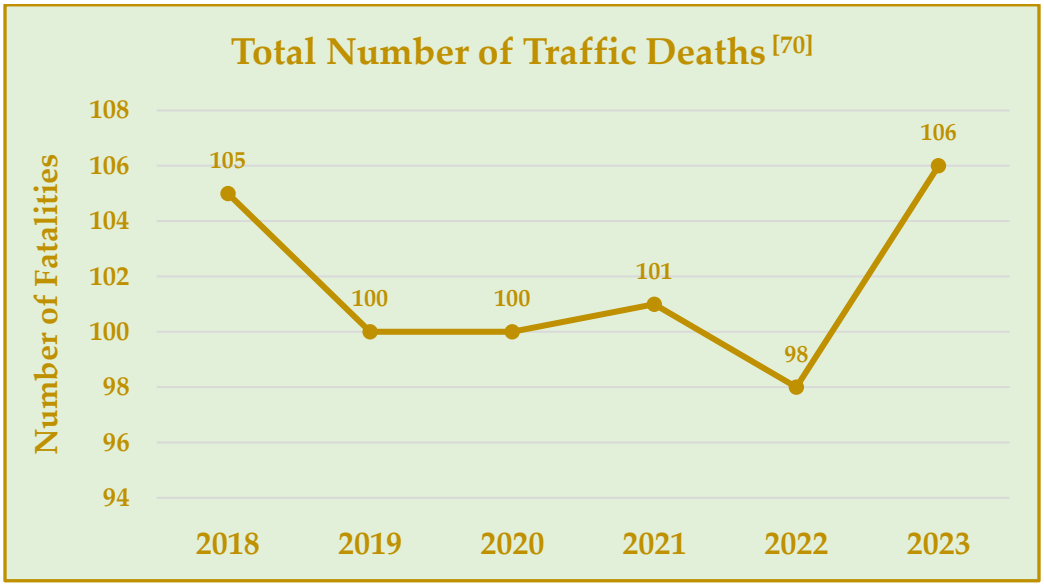
   (4) That person is under the combined influence of alcohol and any other drugs or substances to a degree which renders that person incapable of safely driving." [69]

Traffic Fatalities



Source: ND Dept of Transportation

- From 2018 to 2023, the total number of statewide crashes decreased by 31.3 percent, from 15,242 to 10,475 [70]



Source: ND Dept of Transportation

- From 2018 to 2023, the total number of statewide traffic deaths increased by 1 percent, from 105 to 106; however, there was an increase of 8.2 percent from 2022 to 2023 [70]

North Dakota Traffic Fatalities - Driver Tested Positive for Drugs 2018-2023 [53]					
		Fatalities in Crashes Involving Drugs		Fatalities in Crashes Involving Cannabinoids*	
Crash Year	Total Statewide Fatalities	Number of Fatalities	Percent of Total Fatalities	Number of Fatalities	Percent of Total Fatalities
2018	105	41	39.0%	6	5.7%
2019	100	29	29.0%	7	7.0%
2020	100	39	39.0%	11	11.0%
2021	101	41	40.6%	12	11.9%
2022	98	44	44.9%	12	12.2%
2023	106	74	69.8%	8	7.5%
*Cannabinoids: Delta 9, Hashish Oil, Hashish, Marijuana, Marinol, and THC.					

- From 2018 to 2023, the percentage of total fatalities increased by 1 percent (105 to 106); however, the percentage of these fatalities involving drugs increased 80.5 percent (41 to 74) [53]

Marijuana Availability & Use

North Dakota became the first state in the Midwest HIDTA to approve a medical marijuana program in 2016. Medical marijuana sales, to those with patient cards approved by the North Dakota Division of Medical Marijuana, initiated in March of 2019.

Key Findings

- From 2015-2016 to 2022-2023 numbers for past month marijuana usage, among those over 12 years of age, found there was a 121.4 percent increase in North Dakota (5.6 – 12.4), compared to 76.7 percent increase nationally (8.6 – 15.2) [55]

- From 2015-2016 to 2022-2023 numbers for past month marijuana usage, among those 26+ years of age, found there was a 207.9 percent increase in North Dakota (3.8 – 11.7), compared to 113 percent increase nationally (6.9 – 14.7) [55]

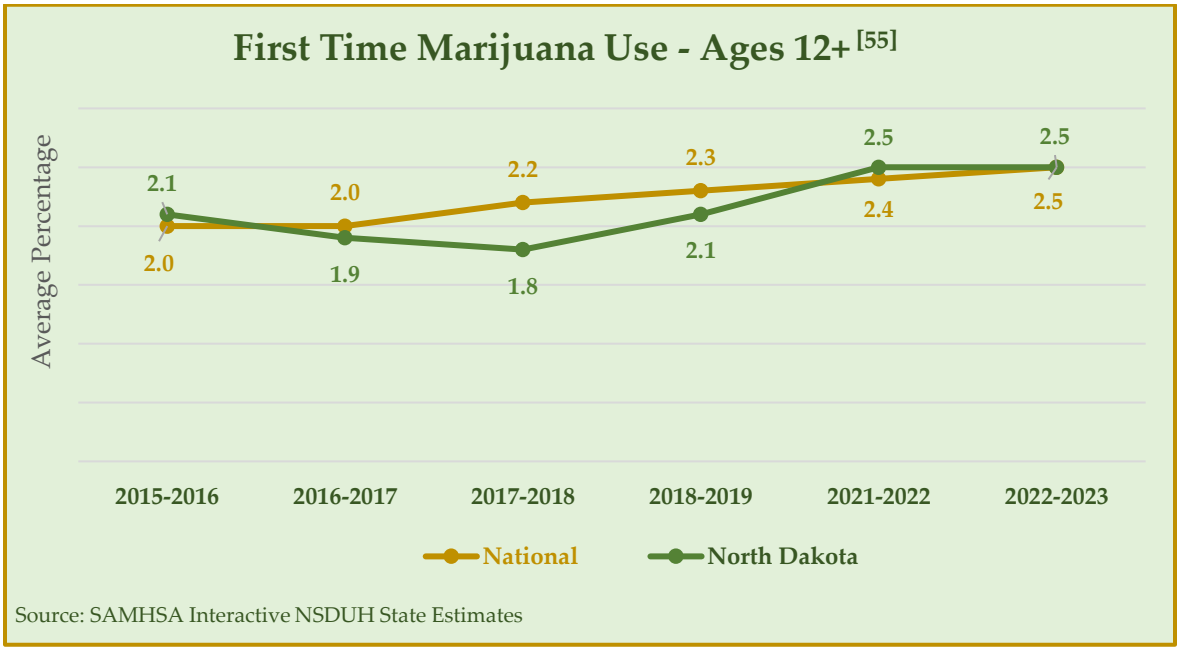
National Survey on Drug Use and Health Data

North Dakota Averages Compared to National Averages 2023 [55]		
Ages 12 and Older	**North Dakota**	**United States**
Alcohol Past Month Use	54.8%	48.1%
Cigarette Past Month Use	16.4%	14.1%
Illicit Drug Use (Other than Marijuana) Past Month	2.8%	3.3%
Marijuana Use Past Month	12.4%	15.2%
Perception of Risk - Smoking Marijuana Once a Month	17.3%	20.4%

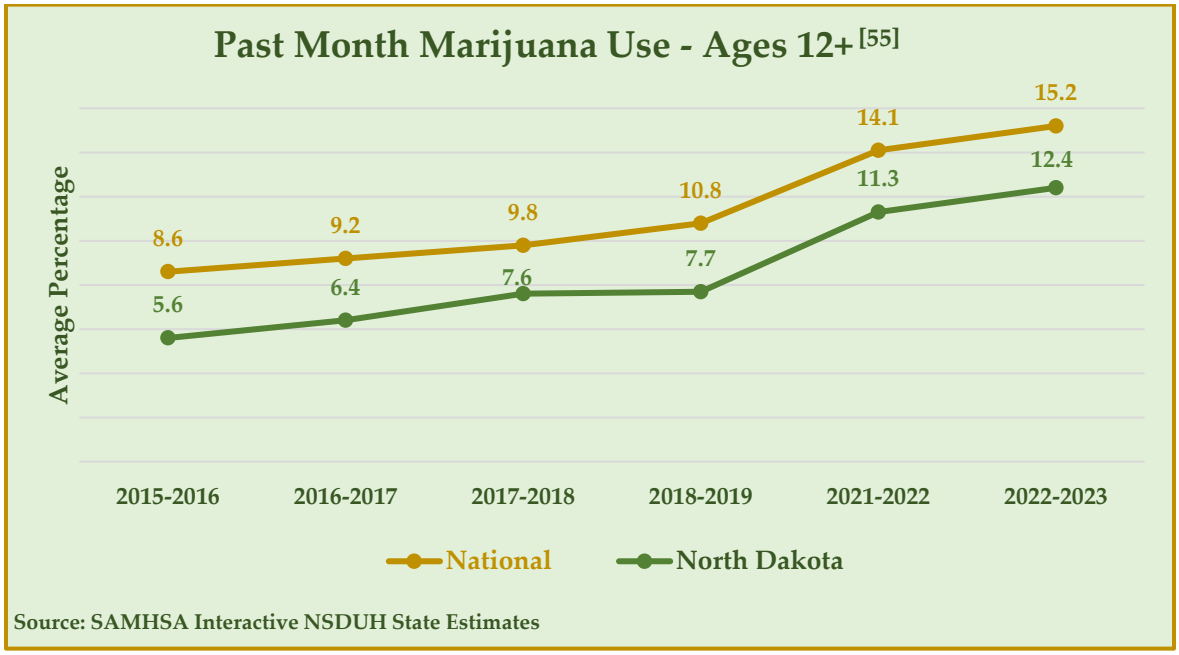
SOURCE: SAMHSA, Center for Behavioral Health Statistics and Quality, NSDUH, 2023 State Tables

Marijuana First Time Use in Last Year - 2023 [55]			
Age	**North Dakota %**	**North Dakota U.S. Ranking**	**National %**
12 Years +	2.5%	27	2.6%
12-17 YOA	4.0%	43	4.7%
18 Years +	2.2%	25	2.2%
18-25 YOA	7.4%	33	8.3%
26 Years +	1.1%	30	1.2%

Source: SAMHSA Interactive NSDUH State Estimates



- From 2015-2016 to 2022-2023, numbers for first time marijuana usage, among those over 12 years of age, found there was a 19 percent increase in North Dakota (2.1 – 2.5), compared to 25 percent increase nationally (2.0 – 2.5). [55]



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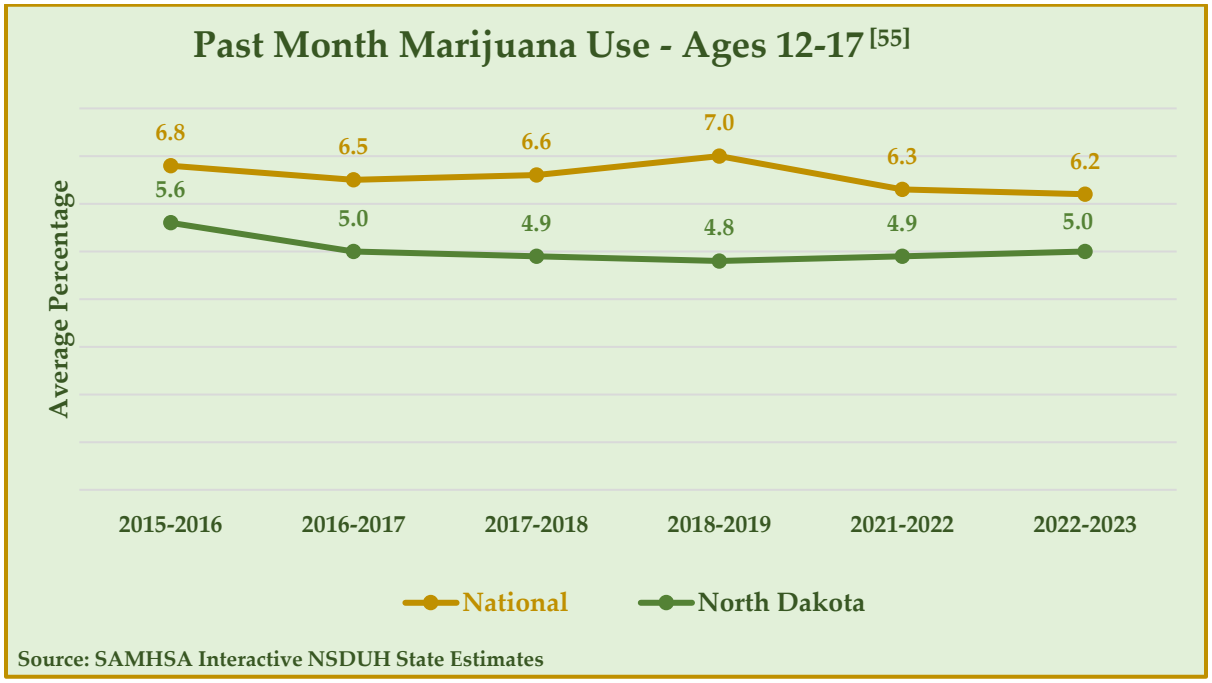
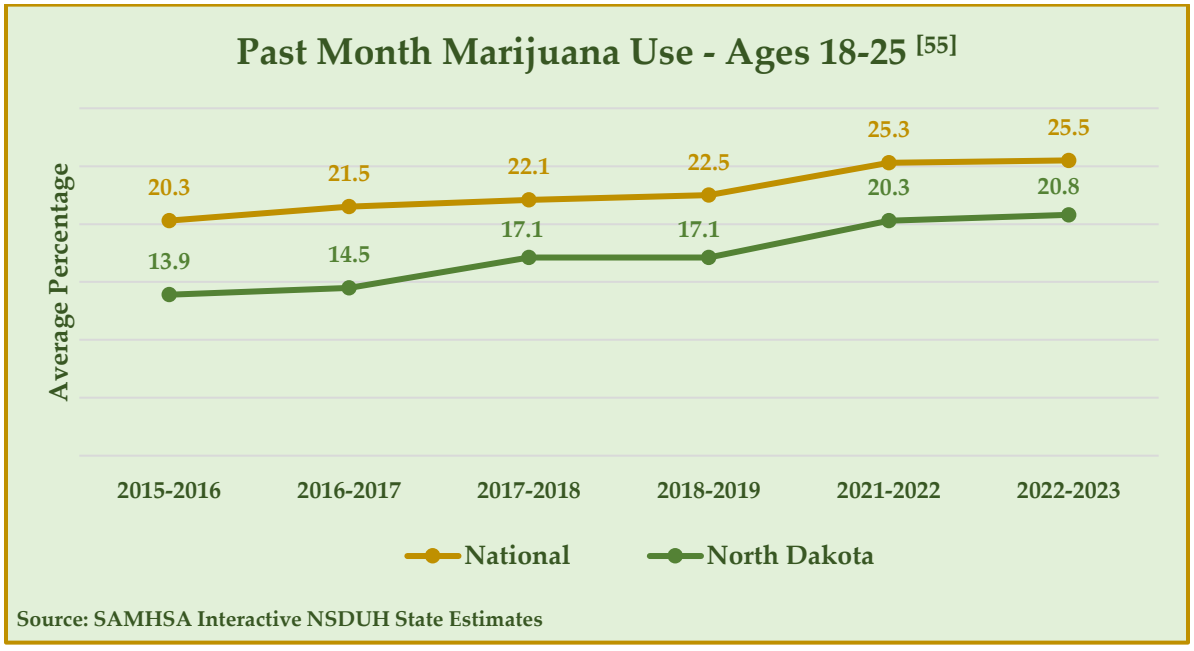
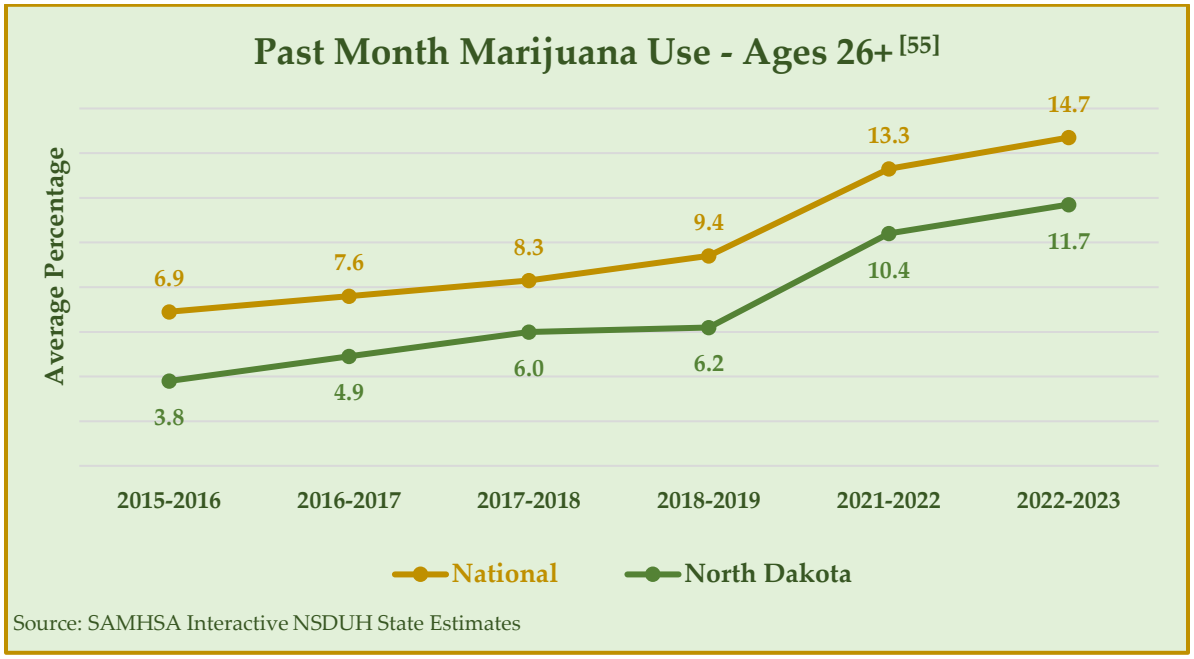


- From 2015-2016 to 2022-2023, numbers for past month marijuana usage, among those 12-17 years of age, found there was a 10.7 percent decrease in North Dakota (5.6 – 5.0), compared to 8.8 percent decrease nationally (6.8 – 6.2) [55]



- From 2015-2016 to 2022-2023, numbers for past month marijuana usage, among those 18-25 years of age, found there was a 49.6 percent increase in North Dakota (13.9 – 20.8), compared to 25.6 percent increase nationally (20.3 – 25.5) [55]



- From 2015-2016 to 2022-2023, numbers for past month marijuana usage, among those 26+ years of age, found there was a 207.9 percent increase in North Dakota (3.8 – 11.7), compared to 113 percent increase nationally (6.9 – 14.7) [55]

Percentage of Substance Users in North Dakota (Grades 9-12) Based on 2023 North Dakota Youth Risk Behavior Survey [71]		
	Lifetime	Last 30-Days
Alcohol	Not Collected	19.5
Cigarettes	20.1	5.4
Chewing Tobacco	Not Collected	3.4
Inhalants	5.3	Not Collected
Marijuana	22.8	11.4
RX Pain Medication Misuse	9.2	Not Collected

Source: 2023 North Dakota Youth Risk Behavior Survey

Public Health

Key Findings

- Marijuana-related emergency department visits increased 336 percent in North Dakota following the legalization of medical marijuana. [72]

- From 2016 to 2023 the number of cannabis related calls to the North Dakota Poison Control Center increased 330 percent (10 to 43) [73]

- Overdose deaths in North Dakota have increased by 90 percent (70 to 133) from 2018 to 2022. [74]

Emergency Department Visits & Hospitalizations

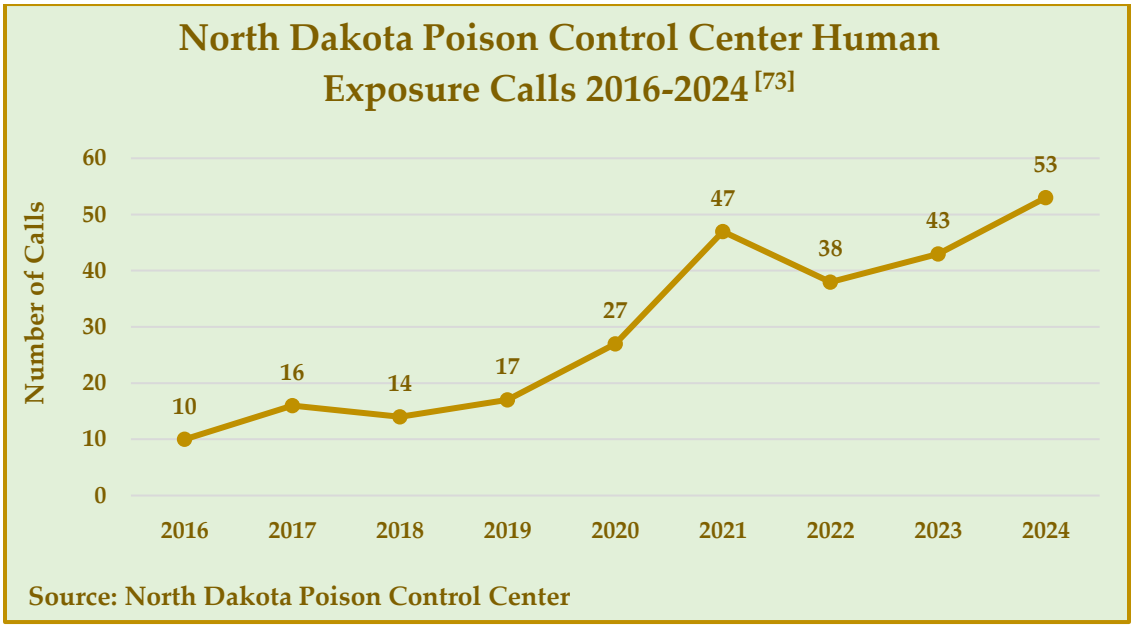
The information below was provided by the North Dakota Department of Health, utilizing the Center for Disease Control's marijuana v3 query, and provided the following caveats to their data: the numbers represent a syndrome definition that utilizes both ICD-10-CM (International Classification of Diseases, 10th Revision, Clinical Modification) codes and chief complaint, which looks for key words, and should not be considered a true number of cases; not every hospital submits both ICD and chief complaint information, so some visits may be missing; some hospitals only submit data on North Dakota residents, so transient populations may not be included, thereby potentially underestimating the impacts; and the increase in numbers may be due to either an increase in cases, or an increase in the number of medical facilities sharing data.

North Dakota Department of Health [72]									
Cannabis-Related Emergency Department Visits and Hospitalizations 2016-2024									
Type	2016	2017	2018	2019	2020*	2021	2022	2023	2024
ED Visits	556	886	1,107	1,210	1,550	1,917	2,196	2,423	1,635
Hospitalizations	139	135	142	148	120	161	143	164	145

*The numbers from 2020 forward were obtained from Essence, a syndromic surveillance system, with a more refined marijuana query.

Following the medical marijuana legalization in 2016, North Dakota's hospitals observed an increase in both emergency room visits and hospitalizations due to marijuana-related events. The number of emergency room visits increased by 194 percent between 2016 and 2024 (556 to 1,635); the hospitalizations as a result of these visits increased 4 percent from 2016 to 2024 (139 to 145). [72]

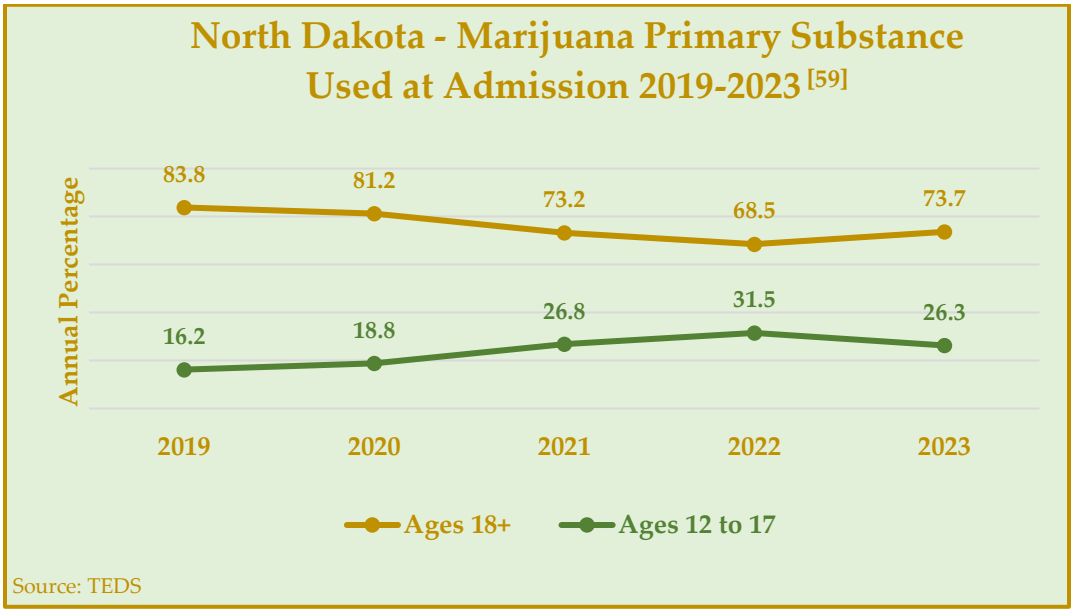
Poison Center Calls



Cannabis Exposures include extracts, oral pills/capsules, vape, topical and other/unknown products.
Disclaimer: Reporting to the Poison Control System is voluntary and the data likely results in underrepresentation of the true occurrence of exposure. Exposure is defined as an actual or suspected contact with any substance, regardless of toxicity or clinical manifestation. Exposures do not necessarily represent a poisoning or overdose.

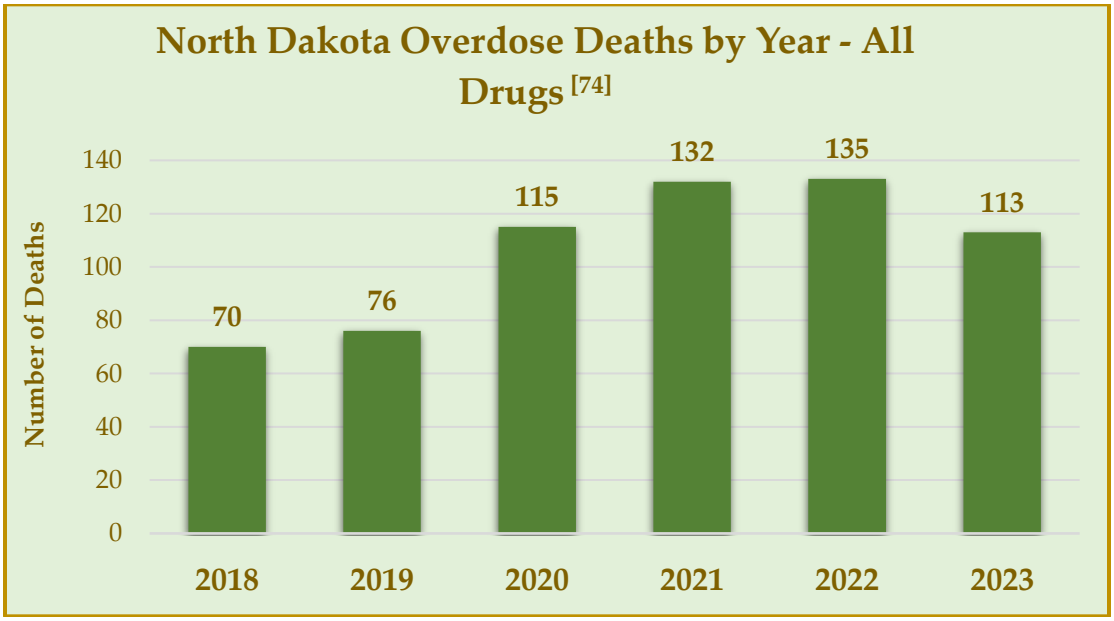
- From 2016 to 2024, the number of cannabis related exposure calls to the North Dakota Poison Control Center increased 430 percent (10 to 53) [73]

Treatment Admissions Drug Type / Age Group



- From 2019 to 2023, the percentage of admissions to treatment, with marijuana being identified as the primary substance as cause, increased 62.4 percent for ages 12 to 17 (16.2 to 26.3) and decreased 12.1 percent for ages 18+ (83.8 to 73.7) [59]

Overdose Data Post Legalization



- From 2018 to 2023, North Dakota unintentional overdose deaths increased 61 percent (70 to 113) [74]; this data is included in response to assertions that opioid overdose deaths would decline post-marijuana legalization

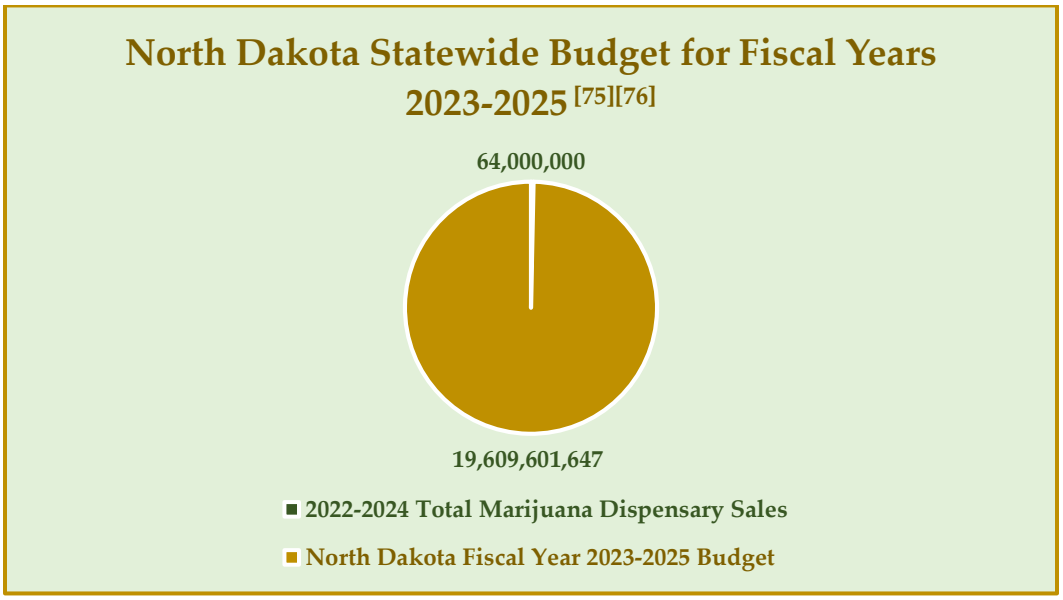
Social Impacts

Key Findings

- From June 2019 to June 2024, there was a 1,305 percent increase in the number of qualifying patient cards (707 to 9,934) [75]

- From 2019 to 2023, there was a 45.7 percent decrease (541 to 294) in the number of arrests for drug sales; the greatest percent decrease was in the arrests for sales of marijuana, 55.6 percent (99 to 44). [65]

Budgetary and Taxation Impacts



- The 2022-2024 total marijuana dispensary sales ($64,000,000), comprised 0.33% of North Dakota's fiscal year budget for 2023-2025 ($19,609,601,647) [75] [76]

- Total dispensary marijuana sales increased 12.3% from 2022 to 2024 ($19,970,000 to $22,424,000) [75]

Sales Tax Status of Medical Marijuana

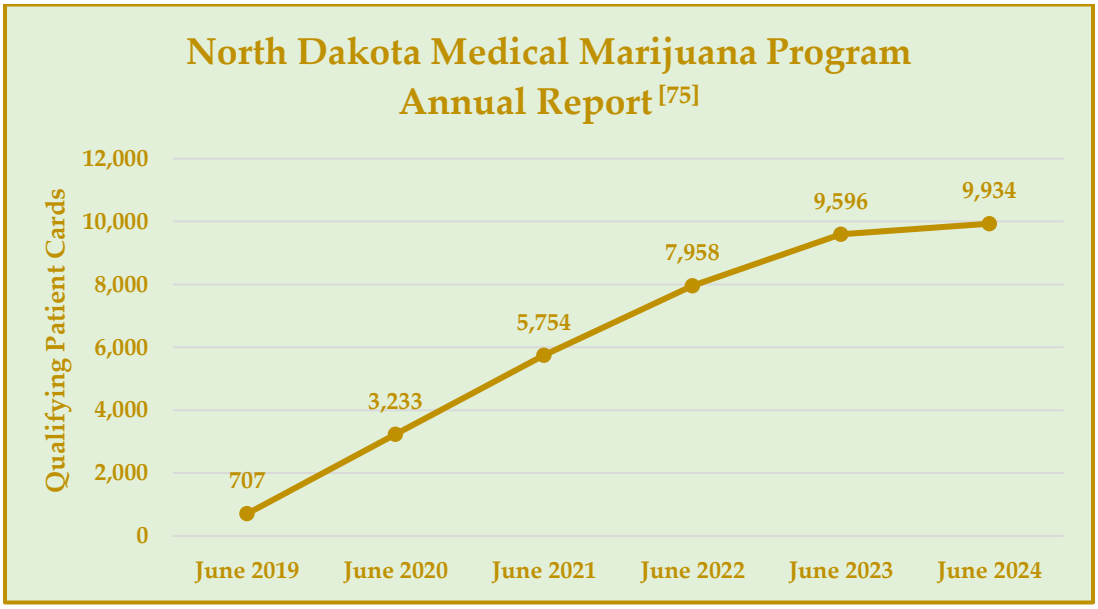
"Medicine purchased without a prescription is subject to North Dakota sales tax. Medical Marijuana does not qualify for this exemption and is subject to sales tax." [77] The collected tax, at a rate of 5 percent, is utilized to fund various state programs and services.

Dispensary/Cultivator/Medical License Statistics

North Dakota Health & Human Services Licensed Facilities as Fiscal Year 2023 [75]	
Medical Marijuana Manufacturing Facilities	2
Medical Marijuana Dispensary Facilities	8

"Manufacturing Facility"- an entity registered by the department as a compassion center authorized to produce and process and to sell usable marijuana to a dispensary.

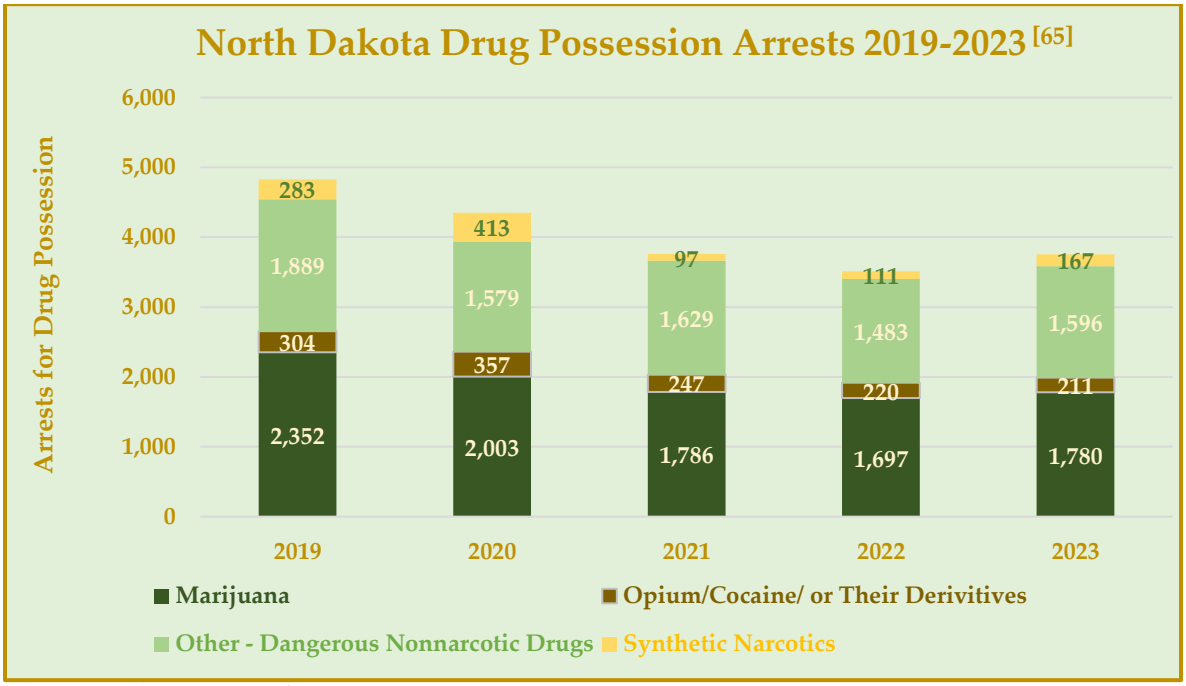
"Dispensary" - an entity registered by the department as a compassion center authorized to dispense usable marijuana to a registered qualifying patient and a registered designated caregiver.



- From June 2019 to June 2024, there was a 1,305 percent increase in the number of qualifying patient cards (707 to 9,934) [75]

- Anxiety Disorder was listed at the debilitating medical condition for 63.6 percent of the qualifying patients as of fiscal year 2024 (6,318 of 9,934) [75]

Marijuana-Related Crime

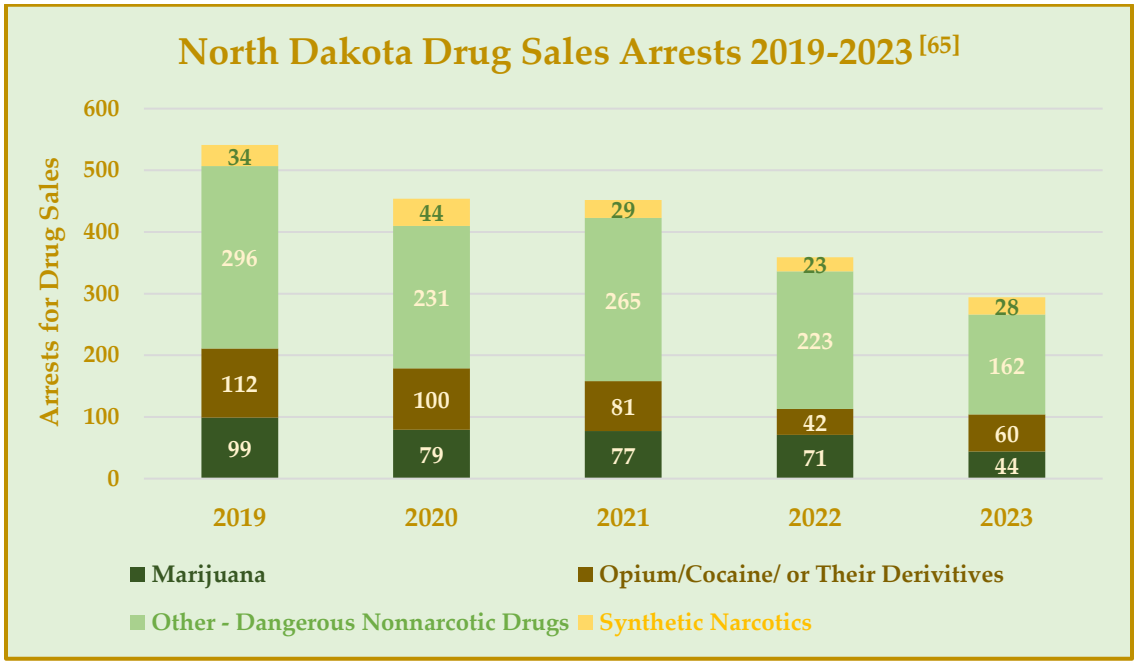


Source: FBI Crime Data Explorer

Arrests for Drug Possession Charges [65]						
	2019	**2020**	**2021**	**2022**	**2023**	**% +/-**
Marijuana	2,352	2,003	1,786	1,697	1,780	-24.3%
Opium/Cocaine/ or Their Derivatives	304	357	247	220	211	-30.6%
Other - Dangerous Nonnarcotic Drugs	1,889	1,579	1,629	1,483	1,596	-15.5%
Synthetic Narcotics	283	413	97	111	167	-41%
TOTALS	**4,828**	**4,352**	**3,759**	**3,511**	**3,754**	**-22.2%**

- From 2019 to 2023, there was a 22.2 percent decrease (4,828 to 3,754) in the number of arrests for drug possession [65]

- The greatest percent decrease was in the arrests for synthetic narcotics, 41 percent (283 to 167), followed by opium/cocaine/or their derivatives, which decreased 30.6 percent (304 to 211) [65]



Source: FBI Crime Data Explorer

Arrests for Drug Sales Offenses [65]						
	2019	**2020**	**2021**	**2022**	**2023**	**% +/-**
Marijuana	99	79	77	71	44	-55.6%
Opium/Cocaine/ or Their Derivatives	112	100	81	42	60	-46.4%
Other - Dangerous Nonnarcotic Drugs	296	231	265	223	162	-45.3%
Synthetic Narcotics	34	44	29	23	28	-17.6%
TOTALS	**541**	**454**	**452**	**359**	**294**	**-45.7%**

- From 2019 to 2023, there was a 45.7 percent decrease (541 to 294) in the number of arrests for drug sales [65]

- The greatest percent decrease was in the arrests for sales of marijuana, 55.6 percent (99 to 44), followed by opium/cocaine/or their derivatives, which decreased 46.4 percent (112 to 60) [65]

Chapter 7: South Dakota

Background / Regulatory Overview

On November 3, 2020, South Dakota voters passed Initiated Measure 26 (medical) and Constitutional Amendment A (recreational) by garnering 70 percent of the vote (417,242 people voted, 291,754 voted in favor) and 54 percent of the vote (415,737 people voted, 225,260 voted in favor), respectively. The passing of these two would have legalized marijuana for both medical and recreational usage.

However, on November 24, 2021, South Dakota Supreme Court ruled the recreational use measure was unconstitutional; therefore, it remains illegal in South Dakota. Initiated Measure 26 authorizing the sale of medical marijuana went into effect on July 1, 2021.

Link to South Dakota Medical Cannabis Chapter 34-20G

https://sdlegislature.gov/Statutes/34-20G

In November 2022, recreational use marijuana was again on the ballot in South Dakota, Initiated Measure 27, but this time was rejected by 53 percent of the 347,463 voters, 183,879 to 163,584. [78] Subsequent to this vote, recreational use marijuana was again on the ballot in November 2024, South Dakota Initiated Measure 29. The measure was once again rejected, this time by a 56 percent of the 427,144 voters, 237,228 to 189,916. [79]

Impaired Driving & Traffic Fatalities

The Midwest HIDTA recognizes that there are numerous data limitations based on current testing methods and processes that make interpreting traffic fatality data difficult. However, this is the most comprehensive data available that allows for multi-year comparisons of drug-related fatalities. South Dakota, whose medical marijuana program is in its infancy, was contacted; however, the South Dakota Highway Patrol advised the information pertaining to the percentage of drivers testing positive for marijuana involved in a fatality accident was not available at this time.

Key Findings

- From 2022 to 2023, the percentage of total statewide fatalities increased 2.2 percent (137 to 140). The percentage of these fatalities that involved drugs increased from 2.2 percent (3 of 137), to 7.1 percent (10 of 140) [53]

- From 2018 to 2023, South Dakota experienced a 7.7 percent increase in the number of statewide traffic fatalities, from 130 to 140 [81]

Definitions

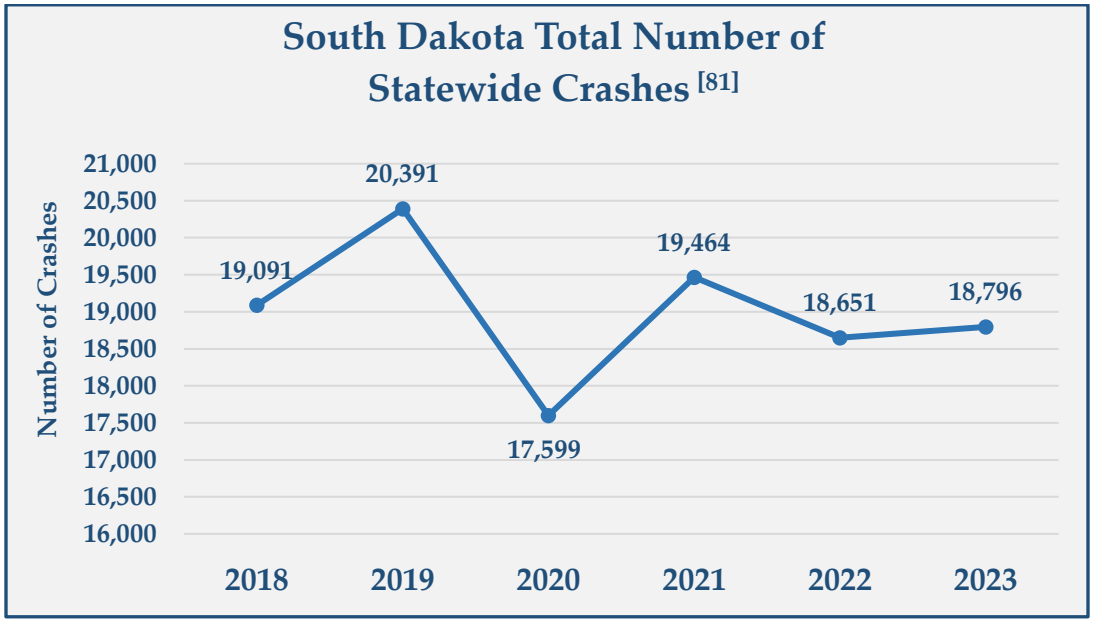
In South Dakota, DUI is defined under South Dakota Codified Law section 32-23-1:

"Driving or control of vehicle prohibited with alcohol in blood or while under influence of alcohol, drug, or intoxicant.

No person may drive or be in actual physical control of any vehicle while:

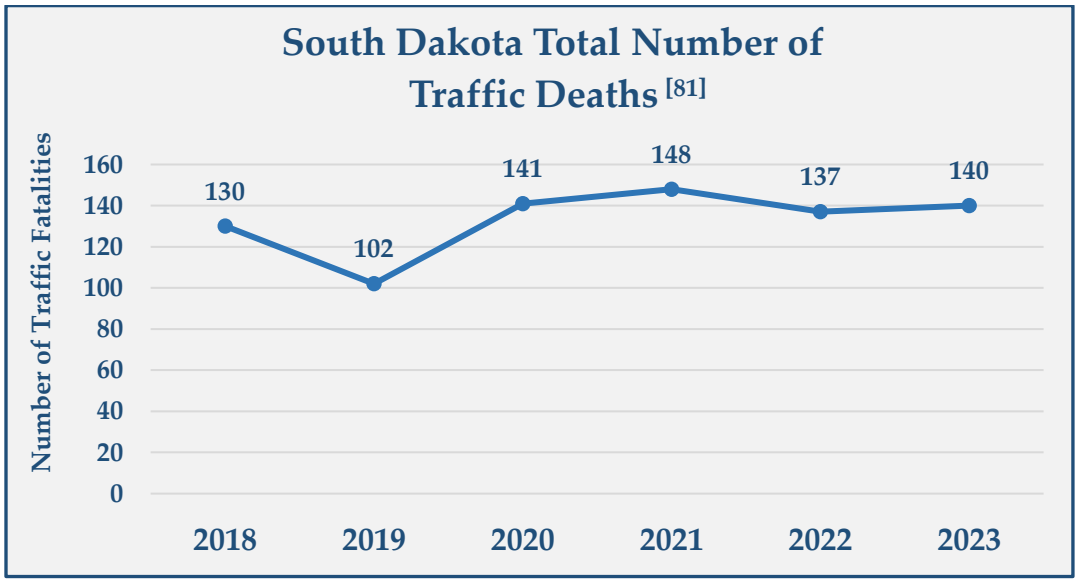
(1) There is 0.08 percent or more by weight of alcohol in that person's blood as shown by chemical analysis of that person's breath, blood, or other bodily substance;
(2) Under the influence of an alcoholic beverage, marijuana, or any controlled drug or substance not obtained pursuant to a valid prescription, or any combination of an alcoholic beverage, marijuana, or such controlled drug or substance;
(3) Under the influence of any controlled drug or substance obtained pursuant to a valid prescription, or any other substance, to a degree which renders the person incapable of safely driving;
(4) Under the combined influence of an alcoholic beverage and or any controlled drug or substance obtained pursuant to a valid prescription, or any other substance, to a degree which renders the person incapable of safely driving; or
(5) Under the influence of any substance ingested, inhaled, or otherwise taken into the body as prohibited by § 22-42-15." [80]

Traffic Fatalities



South Dakota Department of Public Safety

- From 2018 to 2023, South Dakota experienced a 1.5 percent decrease in the number of statewide traffic crashes, from 19,091 to 18,796 [81]



South Dakota Department of Public Safety

- From 2018 to 2023, South Dakota experienced a 7.7 percent increase in the number of statewide traffic fatalities, from 130 to 140 [81]

South Dakota Traffic Fatalities - Driver Tested Positive for Drugs 2018-2023 [53]					
		Fatalities in Crashes Involving Drugs		Fatalities in Crashes Involving Cannabinoids*	
Crash Year	Total Statewide Fatalities	Number of Fatalities	Percent of Total Fatalities	Number of Fatalities	Percent of Total Fatalities
2018	130	21	16.2%	8	6.2%
2019	102	16	15.7%	4	3.9%
2020	141	45	31.9%	25	17.7%
2021	148	40	27.0%	22	14.9%
2022	137	3	2.2%	1	0.7%
2023	140	10	7.1%	2	1.4%
*Cannabinoids: Delta 9, Hashish Oil, Hashish, Marijuana, Marinol, and THC.					

- From 2022 to 2023, the percentage of total statewide fatalities increased 2.2 percent (137 to 140). The percentage of these fatalities that involved drugs increased from 2.2 percent (3 of 137), to 7.1 percent (10 of 140) [53]

Marijuana Availability & Use

South Dakota's approved both a medical marijuana and adult use marijuana program in 2020, although a circuit court ruling overturned adult use marijuana in early 2021. In November 2022 and 2024, adult use marijuana was on the ballot in South Dakota, but both times it was rejected by voters. Medical marijuana sales, to those with patient cards approved by the South Dakota Medical Cannabis Program, began in July of 2022.

Key Findings

- From 2015-2016 to 2022-2023 numbers for past month marijuana usage, among those 12-17 years of age, found there was a 28.4 percent decrease in South Dakota (6.7 to 4.8), compared to an 8.8 percent decrease nationally (6.8 to 6.2) [55]

- From 2013 to 2023, the percentage of students who think people are at moderate/great risk of harm when they smoke marijuana once or twice a week decreased by 17.2 percent (55.2 to 45.7) [82]

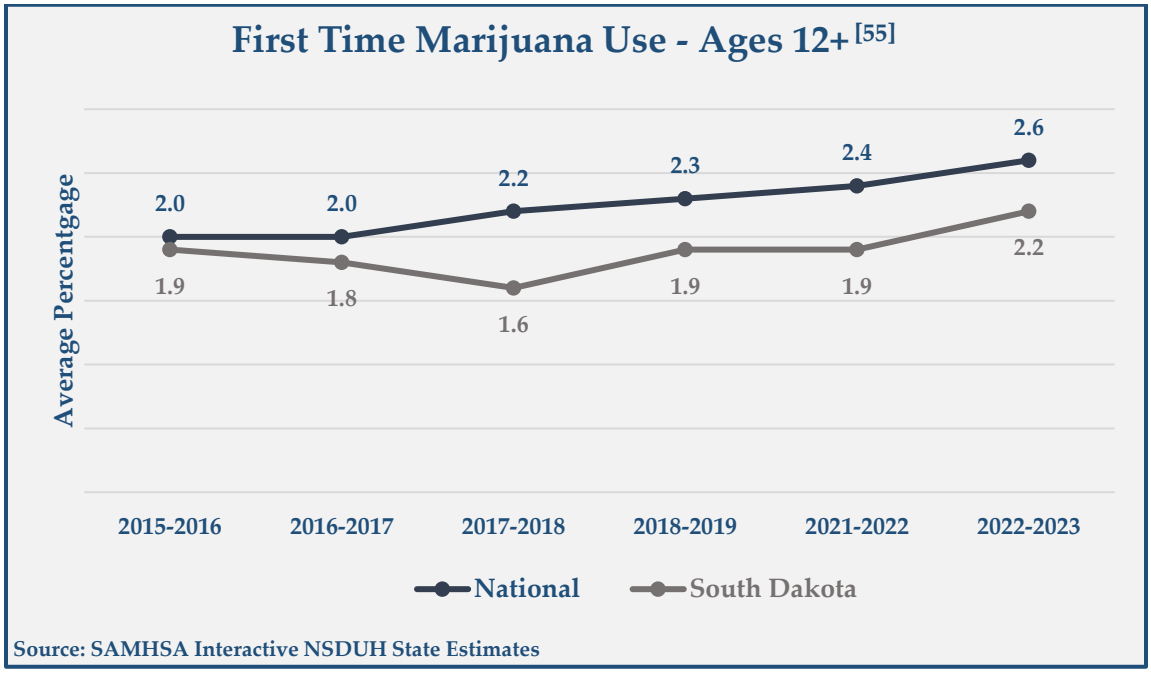
NSDUH Data

South Dakota Averages Compared to National Averages 2023 [55]		
Ages 12 and Older	**South Dakota**	**United States**
Alcohol Past Month Use	49.8%	48.1%
Cigarette Past Month Use	16.5%	14.1%
Illicit Drug Use (Other than Marijuana) Past Month	2.8%	3.3%
Marijuana Use Past Month	11.9%	15.2%
Perception of Risk - Smoking Marijuana Once a Month	18.9%	20.4%

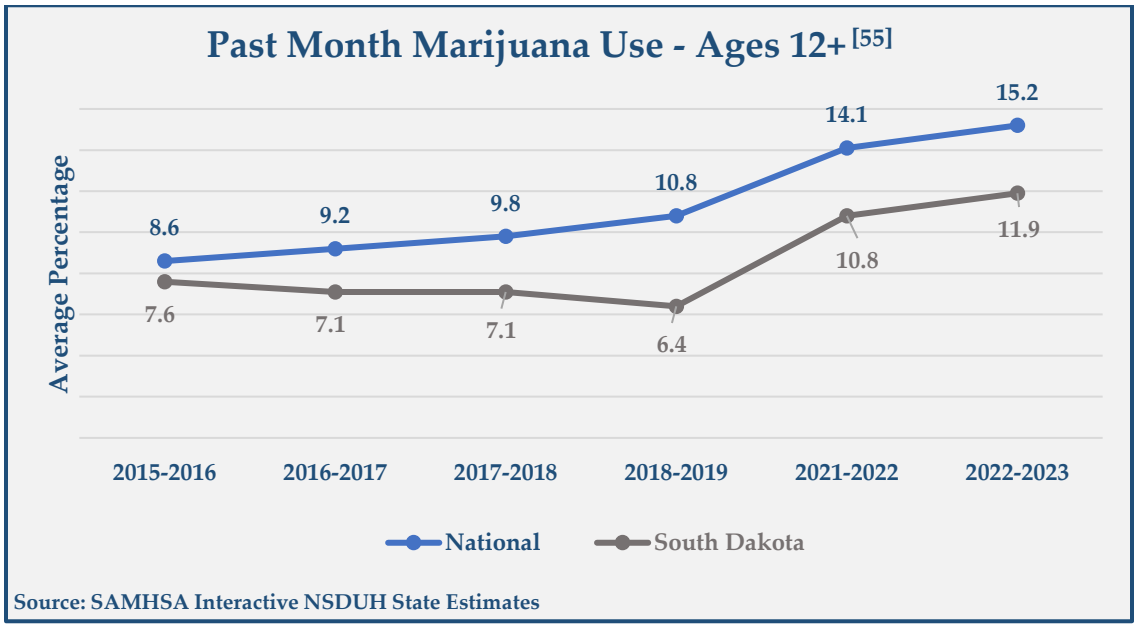
SOURCE: SAMHSA, Center for Behavioral Health Statistics and Quality, NSDUH, 2023

Marijuana First Time Use in Last Year - 2023 [55]			
Age	**South Dakota %**	**South Dakota U.S. Ranking**	**National %**
12 Years +	2.2%	39	2.6%
12-17 YOA	3.6%	48	4.7%
18 Years +	1.9%	39	2.2%
18-25 YOA	7.1%	36	8.3%
26 Years +	1.0%	36	1.2%

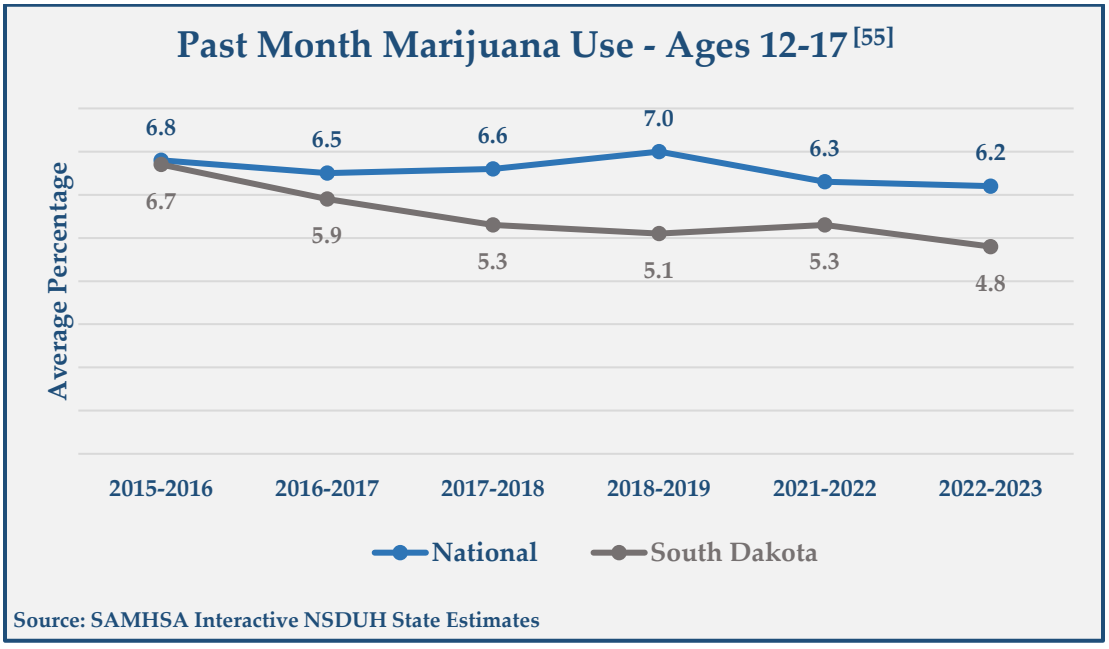
SAMHSA, Interactive NSDUH State Estimates



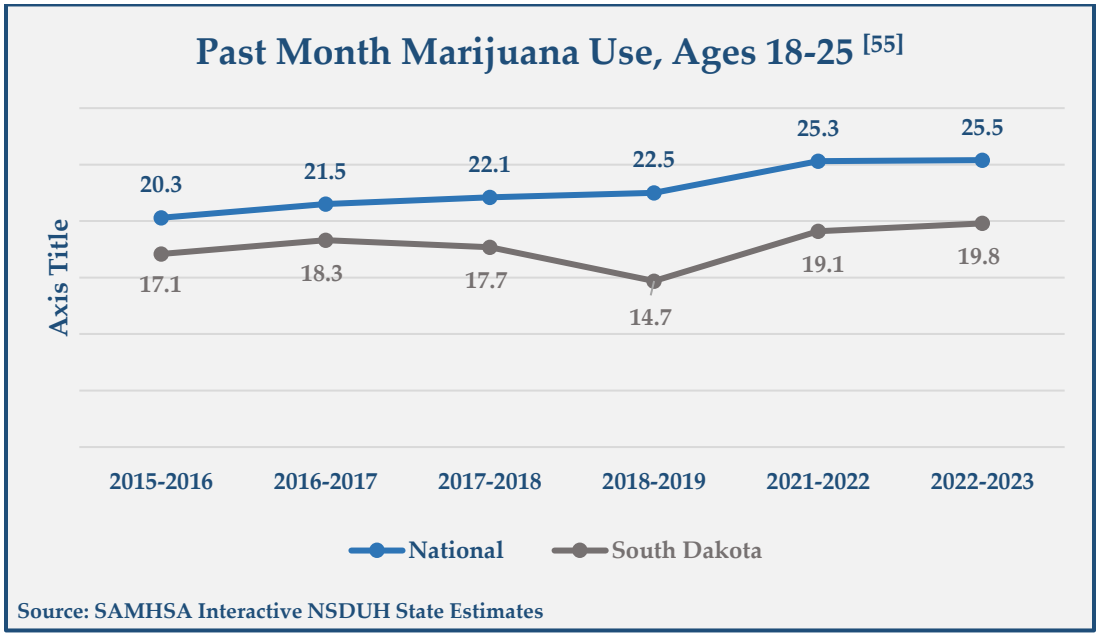
- From 2015-2016 to 2022-2023, numbers for first time marijuana usage, among those over 12 years of age, found there was a 15.8 percent increase in South Dakota (1.9 to 2.2), compared to a 30 percent increase nationally (2.0 to 2.6) [55]



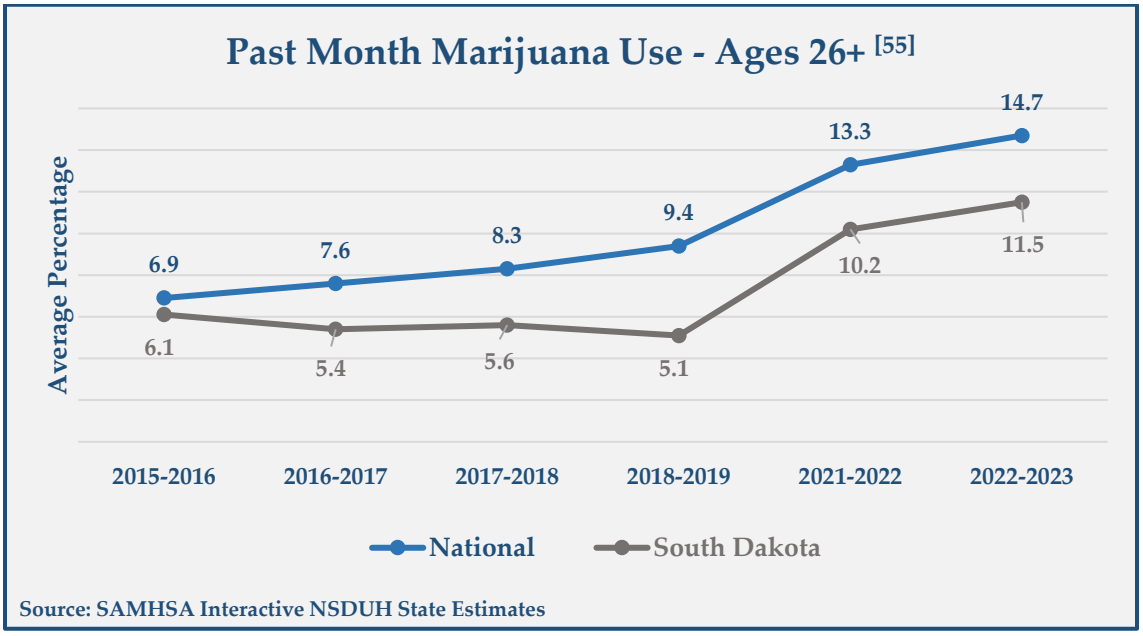
- From 2015-2016 to 2022-2023, numbers for past month marijuana usage, among those over 12 years of age, found there was a 56.6 percent increase in South Dakota (7.6 to 11.9), compared to a 76.7 percent increase nationally (8.6 to 15.2) [55]



- From 2015-2016 to 2022-2023, numbers for past month marijuana usage, among those 12-17 years of age, found there was a 28.4 percent decrease in South Dakota (6.7 to 4.8), compared to an 8.8 percent decrease nationally (6.8 to 6.2) [55]



- From 2015-2016 to 2022-2023, numbers for past month marijuana usage, among those 18-25 years of age, found there was a 15.8 percent increase in South Dakota (17.1 to 19.8), compared to a 25.6 percent increase nationally (20.3 to 25.5) [55]



- From 2015-2016 to 2022-2023, numbers for past month marijuana usage, among those 26+ years of age, found there was an 88.5 percent increase in South Dakota (6.1 to 11.5), compared to 113 percent increase nationally (6.9 to 14.7) [55]

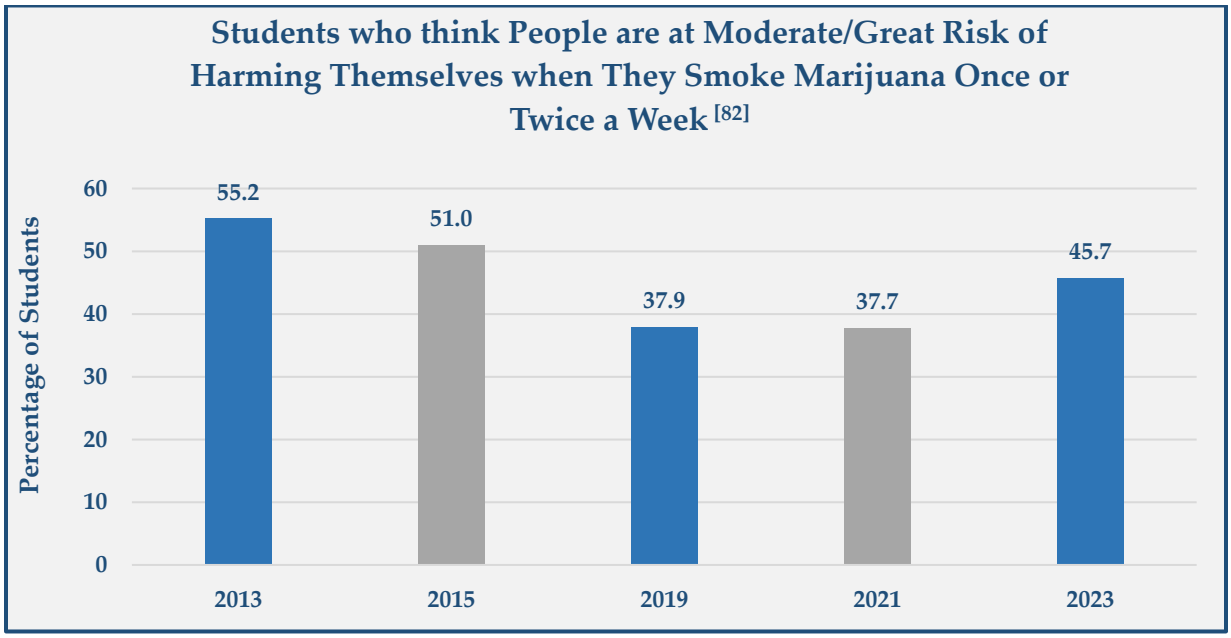
Marijuana in Schools

Since its inception in 1991, the Youth Risk Behavior Survey (YRBS) has been a tool for monitoring six priority health behaviors among high school students. These behaviors include unintentional injuries and violence, sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, alcohol and drug use, tobacco use, dietary behaviors, and physical activity. [82]

Administered biennially during odd-numbered years to grades 9-12 at randomly selected schools across South Dakota, the YRBS focuses on collecting data for developing targeted interventions. This voluntary and anonymous survey provides both unweighted and weighted data, which help in generalizing the findings to all high school students within the state. The weighted data are particularly valuable as they enable the formulation of effective prevention and early intervention programs. Additionally, maintaining a high participation rate is crucial for the validity of the weighted data, as the selected schools cannot be replaced. [82]

Percentage of Substance Users in South Dakota (Grades 9-12) Based on 2013-2023 South Dakota Youth Risk Behavior Survey [82]		
	Lifetime	Last 30-Days
Alcohol	Not Collected	23.5
Cigarettes	17.1	4.6
Chewing Tobacco/Tobacco Product	4.7	Not Collected
Inhalants (e.g. Spray Paint)	6.9	Not Collected
Marijuana	20.9	10.4
Methamphetamine	1.8	Not Collected
Vapor Products/Nicotine Vaping	30.9	14.7

Source: 2013-2023 South Dakota Youth Risk Behavior Survey



South Dakota Department of Health, Youth Risk Behavior Survey

- From 2013 to 2023, the percentage of students who think people are at moderate/great risk of harm when they smoke marijuana once or twice a week decreased by 17.2 percent (55.2 to 45.7) [82]

Public Health

Following the vote to legalize medical marijuana legalization in 2020, South Dakota's hospitals observed an increase in both emergency room visits and hospitalizations due to marijuana-related events, despite the medical marijuana program not being implemented until 2022.[83] The data in the figure below is for those patients seen in a South Dakota hospital, regardless of where the patient resides, and was compiled utilizing ICD-10-CM codes F12 (Cannabis-related disorders) and T40.7 (Poisoning by, adverse effect of and under dosing cannabis).

Key Findings

- From 2018 to 2023, cannabis-related emergency department visits increased 393 percent (58 to 286), and hospitalizations increased 363 percent (19 to 88). [83]

- From 2019 to 2024 the number of cannabis related calls to the South Dakota Poison Control Center increased 223 percent (35 to 113) [84]

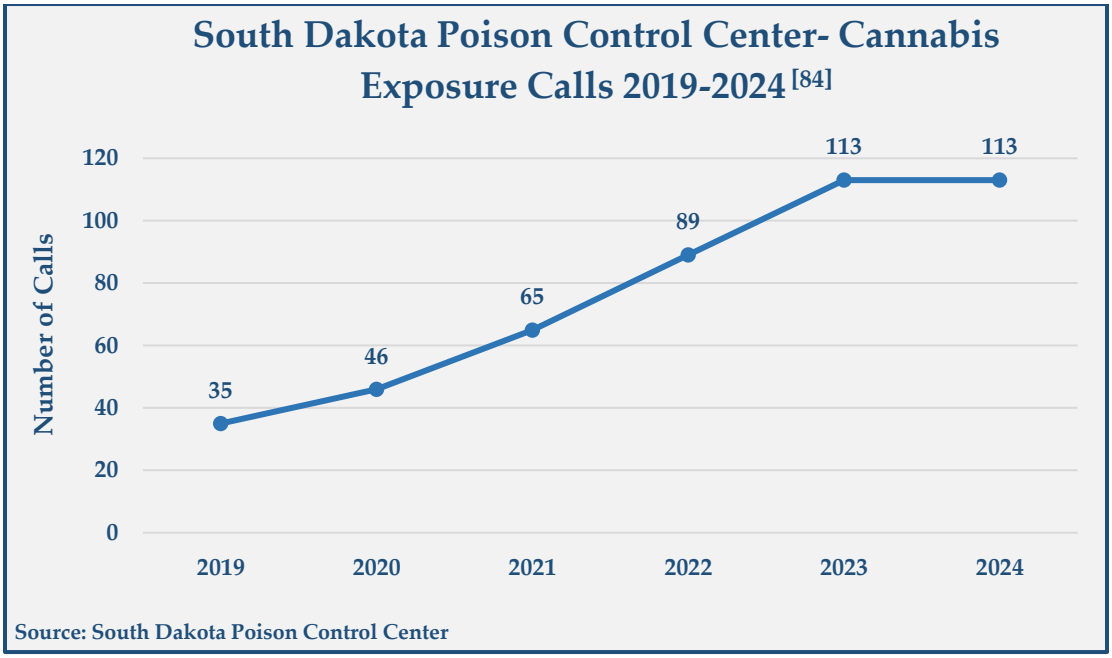
Emergency Department Visits & Hospitalizations

Following medical marijuana legalization in South Dakota, hospitals observed an increase in emergency department visits and hospitalizations for marijuana complications/poisonings. From 2018 to 2023, cannabis-related emergency department visits increased 393 percent (58 to 286), and hospitalizations increased 363 percent (19 to 88). [83]

South Dakota Department of Health [83]							
Cannabis-Related Emergency Department Visits and Hospitalizations 2018-2023							
Type	2018	2019	2020	2021	2022	2023	% Change
ED Visits	58	92	108	125	165	286	+393%
Hospitalizations	19	25	21	37	33	88	+363%

Source: South Dakota Department of Health Epidemiology, Surveillance, and Informatics Center

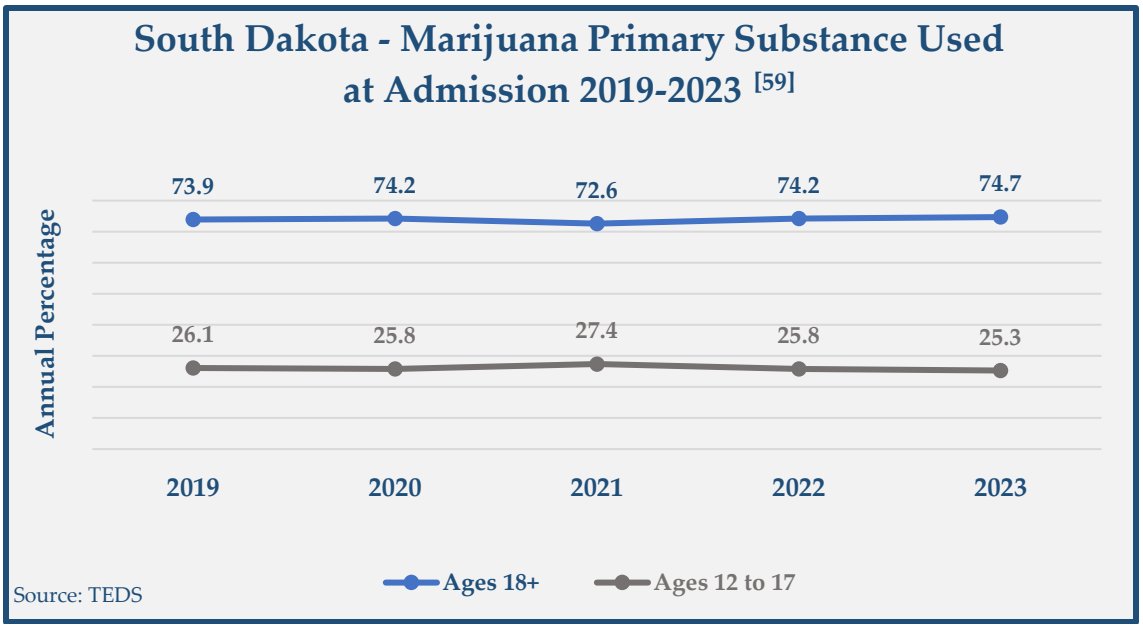
Poison Center Calls



Cannabis Exposures include extracts, oral pills/capsules, vape, topical and other/unknown products.
Disclaimer: Reporting to the Poison Control System is voluntary and the data likely results in underrepresentation of the true occurrence of exposure. Exposure is defined as an actual or suspected contact with any substance, regardless of toxicity or clinical manifestation. Exposures do not necessarily represent a poisoning or overdose.

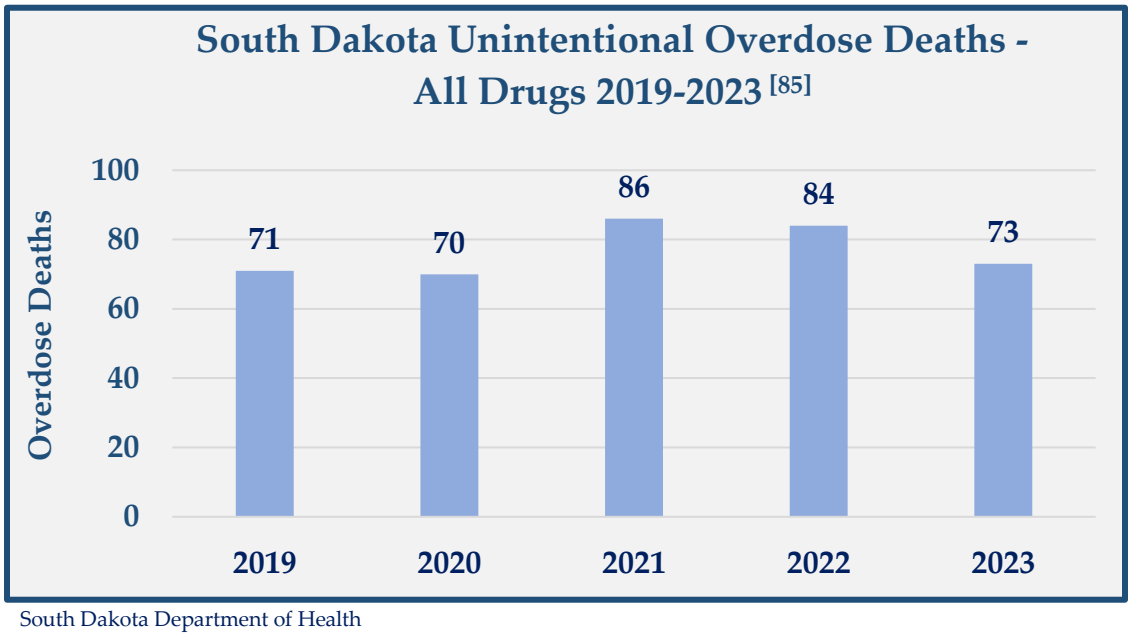
- From 2019 to 2024, the number of cannabis related calls to the South Dakota Poison Control Center increased 223 percent (35 to 113) [84]

Treatment Admissions Drug Type / Age Group



- From 2019 to 2023, the percentage of admissions to treatment, with marijuana being identified as the primary substance as cause, decreased 3.1 percent for ages 12 to 17 (26.1 to 25.3) and increased 1.1 percent for ages 18+ (73.9 to 74.7) [59]

Overdose Data Post Legalization



- From 2019 to 2023, South Dakota unintentional overdose deaths increased 2.8 percent (71 to 73). However, from 2019 to 2022 they increased 18.3 percent (71 to 84), with a decline of 13.1 percent (84 to 73) taking place from 2022 to 2023. [85] This data is included in response to assertions that opioid overdose deaths would decline post-marijuana legalization.

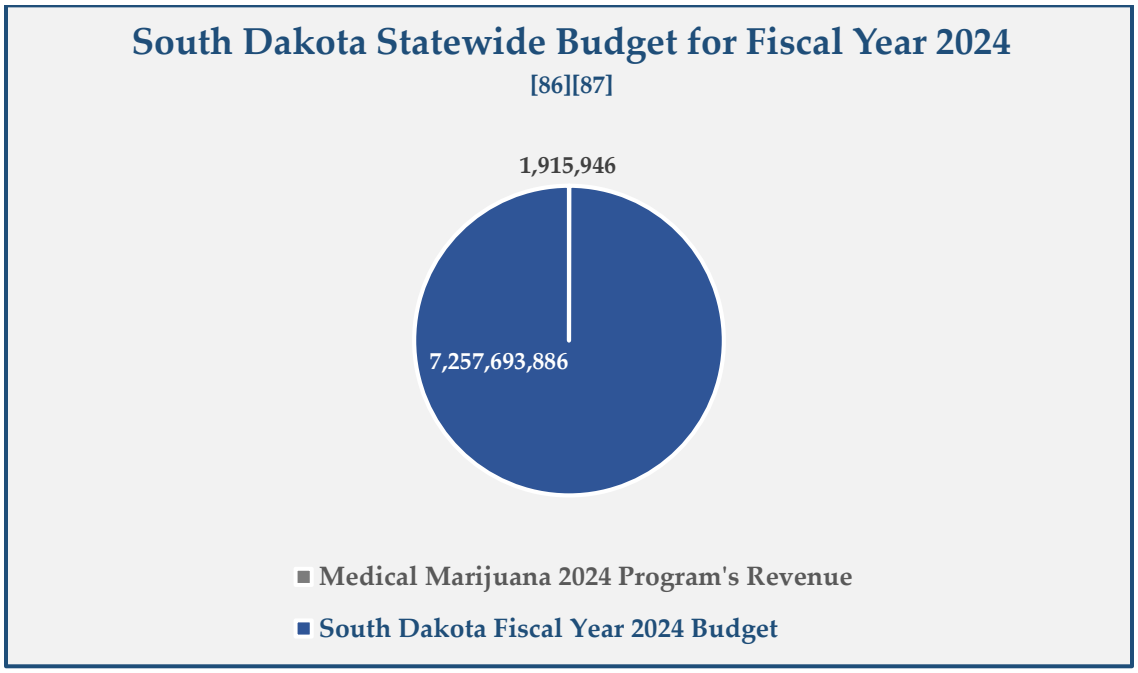
Social Impacts

Key Findings

- From 2019 to 2023, there was a 24.8 percent decrease (395 to 297) in the number of arrests for drug sales [65]

- The revenue from the medical marijuana program was 0.03 percent of the 2024 Fiscal Year Budget [86] [87]

Budgetary and Taxation Impacts



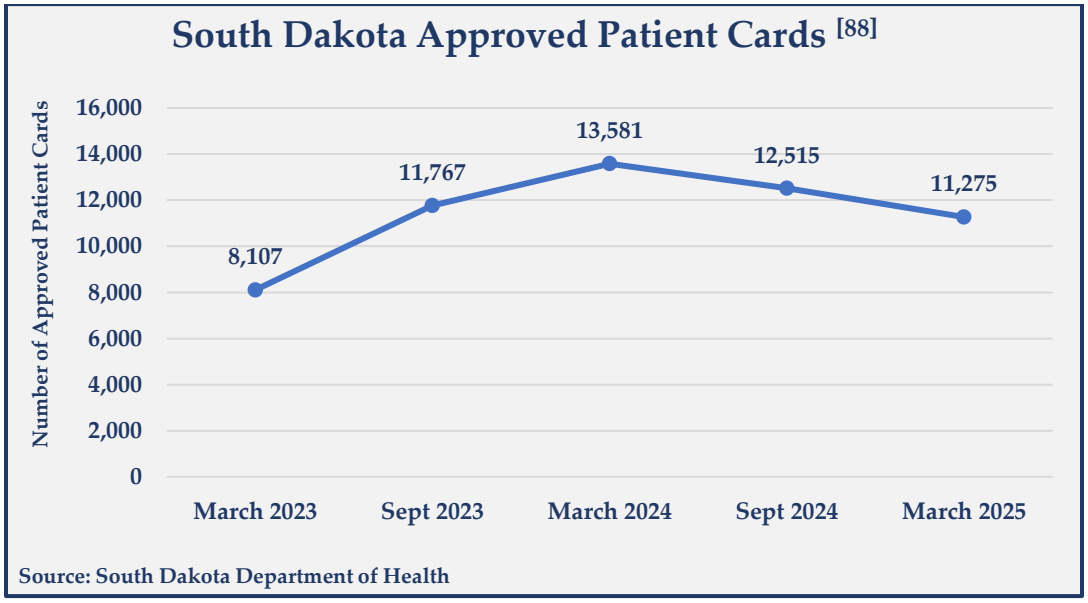
- The revenue from the medical marijuana program ($1,915,946) was 0.03 percent of the 2024 Fiscal Year Budget ($7,257,693,886) [86] [87]

- Of the total revenue generated ($1,915,946), medical cannabis cardholder fees generated 60 percent ($1,141,176) of the revenue, while establishment fees produced the remaining 40 percent ($774,770) [86]

Dispensary/Cultivator/Medical License Statistics

South Dakota Department of Health Certified Establishments [88]	
Medical Marijuana Cultivation Facilities	33
Medical Marijuana Manufacturing Facilities	17
Medical Marijuana Dispensary Facilities	65

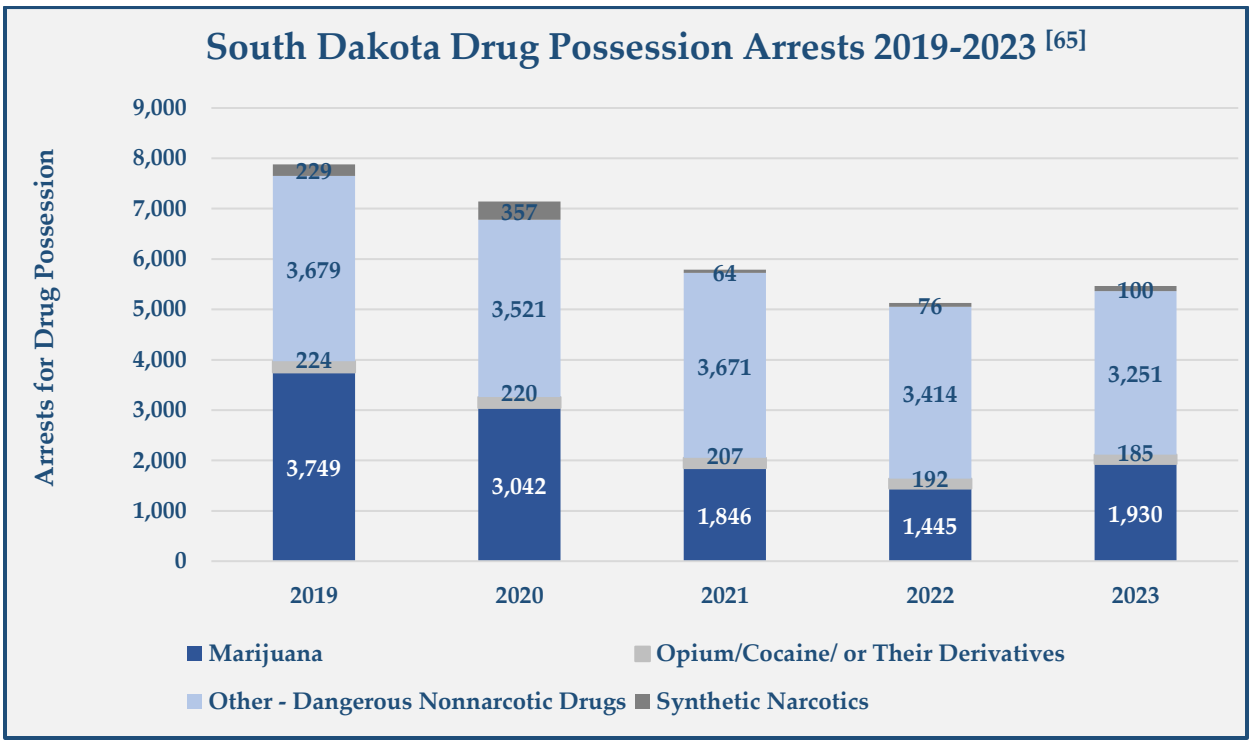
Source: South Dakota Department of Health



- From March 2023 to March 2025, there was a 39 percent increase in the number of qualifying patient cards (8,107 to 11,275), with the highest number of approved patient cards being reported in February 2024 (13,705) [88]

- According to the SFY2024 Medical Cannabis Annual Report the medical condition attributing to 72.7 percent (10,001) of the patient numbers was "severe, debilitating pain," followed by post-traumatic stress disorder with 11.7 percent (1,608) [86]

Marijuana-Related Crime

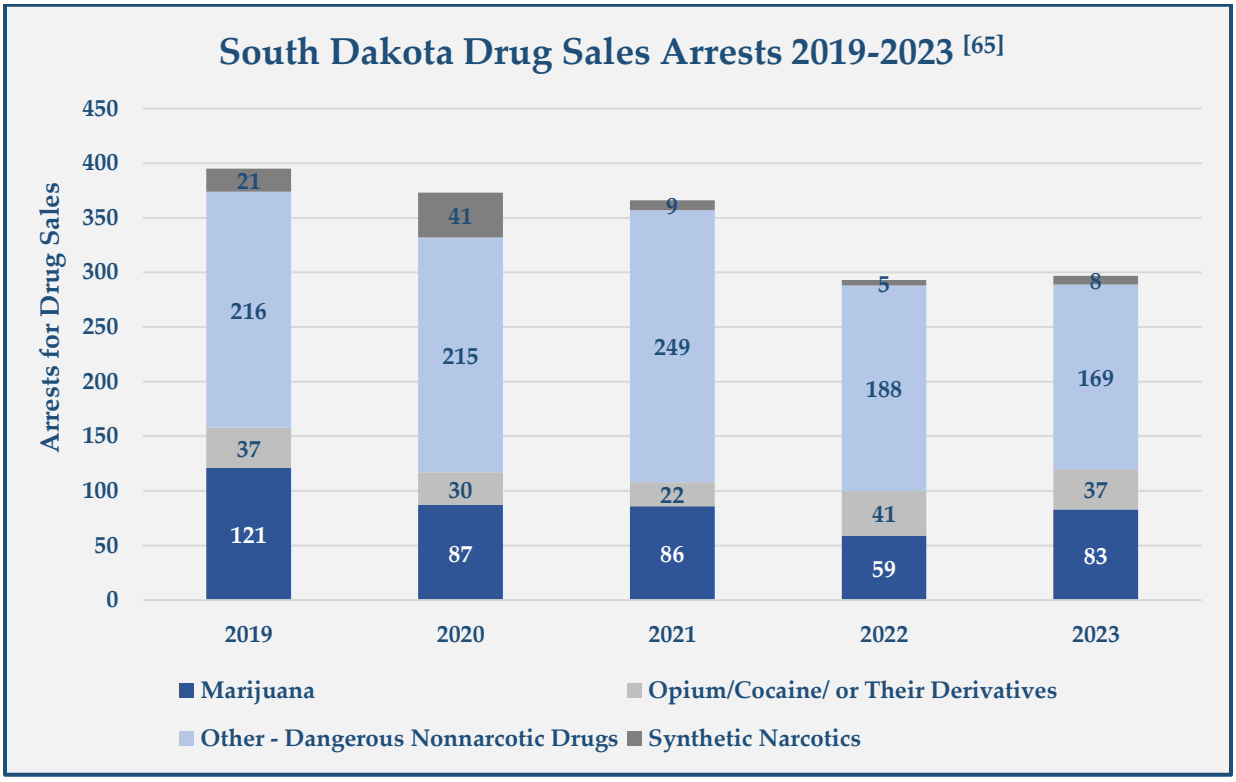


Source: FBI Crime Data Explorer

Arrests for Drug Possession Charges [65]						
	2019	**2020**	**2021**	**2022**	**2023**	**% +/-**
Marijuana	3,749	3,042	1,846	1,445	1,930	-48.5%
Opium/Cocaine/ or Their Derivatives	224	220	207	192	185	-17.4%
Other - Dangerous Nonnarcotic Drugs	3,679	3,521	3,671	3,414	3,251	-11.6%
Synthetic Narcotics	229	357	64	76	100	-56.3%
TOTALS	**7,881**	**7,140**	**5,788**	**5,127**	**5,466**	**-30.6%**

- From 2019 to 2023, there was a 30.6 percent decrease (7,881 to 5,466) in the number of arrests for drug possession [65]

- The greatest percent decrease was in the arrests for synthetic narcotics, 56.3 percent (229 to 100), followed by marijuana, which decreased 48.5 percent (3,749 to 1,930) [65]



Source: FBI Crime Data Explorer

Arrests for Drug Sales Offenses [65]						
	2019	**2020**	**2021**	**2022**	**2023**	**% +/-**
Marijuana	121	87	86	59	83	-31.4%
Opium/Cocaine/ or Their Derivatives	37	30	22	41	37	0%
Other - Dangerous Nonnarcotic Drugs	216	215	249	188	169	-21.8%
Synthetic Narcotics	21	41	9	5	8	-61.9%
TOTALS	**395**	**373**	**366**	**293**	**297**	**-24.8%**

- From 2019 to 2023, there was a 24.8 percent decrease (395 to 297) in the number of arrests for drug sales [65]

- The greatest percent decrease was in the arrests for sales of synthetic narcotics, 61.9 percent (21 to 8), followed by marijuana, which decreased 31.4 percent (121 to 83) [65]

Conclusion

Although the full consequences of marijuana legalization may unfold over several decades, numerous outcomes have already become evident. The data presented in this report comprehensively documents the adverse effects of marijuana legalization on public health and safety, not only within the Midwest HIDTA region but also beyond. These impacts include, but are not limited to:

- Expanding illicit markets supplied by illegal cultivation operations and diversion. Some of which involve foreign nationals operating in the United States.

- Public health concerns due to increased reporting of cannabinoid hyperemesis syndrome diagnoses, accompanied by increased strains on the healthcare system as well as the costs associated to diagnosis and treatment.

- Increased use rates of marijuana following legalization due to its increased presence in the marketplace.

- Increased rates of marijuana-related emergency department visits and hospitalizations post-legalization.

- Increased rates of marijuana exposure calls to state poison centers for the intentional and unintentional consumption of a marijuana product.

As marijuana markets mature across the Midwest HIDTA region, the region is expected to witness a persistent decline in the perception of harm associated with marijuana usage among all age groups. Consequently, the Midwest may experience a continuation of marijuana use, particularly among young adults and non-medically qualifying individuals. This trend can largely be attributed to the increasing availability and social acceptance of marijuana. However, it is crucial to note that current research suggests that this can have unforeseen consequences, such as increases in marijuana use disorders, the use of other illicit drugs [89], a decline in the academic performance of youth [90], and adverse marijuana-related mental health conditions. [91]

The marijuana legalization programs in the Midwest HIDTA region may be in their infancy, but the impacts of state-sanctioned marijuana usage have already been well-documented by the early programs in Western states, such as Colorado, Washington, and

Oregon. The economic and social costs of legalization to state and local governments may potentially outweigh the revenue generated by the marijuana industry. Individuals residing in the Midwest region should be informed about the diverse issues associated with legalization, including its costs and its potential impacts on public health and public safety. Of key importance is the need for continued data collection and reporting. The sharing of evidence-based research will enable individuals and policymakers alike to make informed decisions in the formation of policies.

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