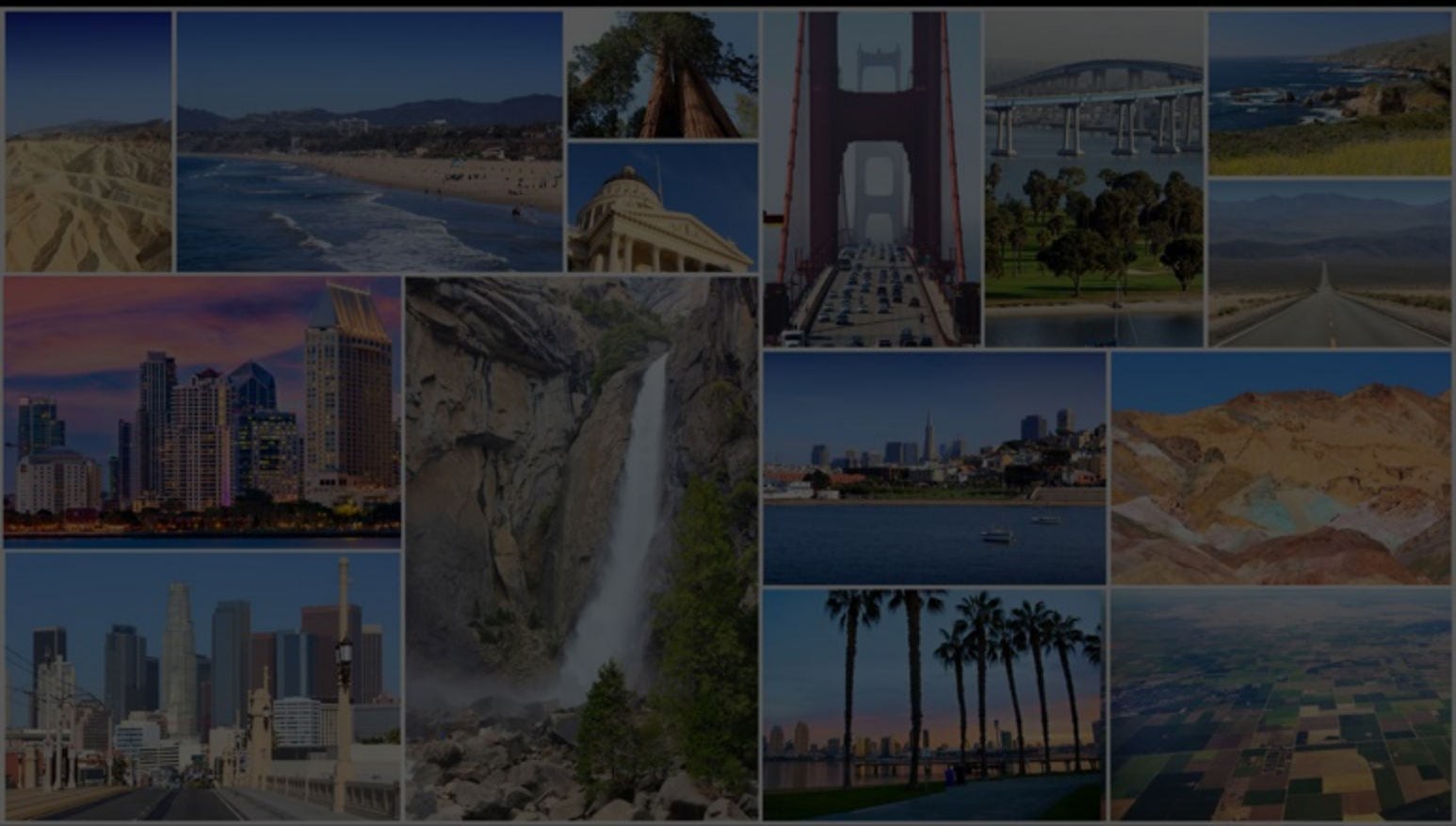




# MARIJUANA'S IMPACT ON CALIFORNIA

CALIFORNIA HIGH INTENSITY DRUG TRAFFICKING AREAS REPORT

2022



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# EXECUTIVE SUMMARY

## *Summary of a Few Key Findings from Throughout the Report*

### **Section One: Potency and Price of Marijuana**

- ❖ Nationally, the average potency of tetrahydrocannabinol (THC), the primary psychoactive found in marijuana concentrates has risen from 13.23% in 1995 to 53.63% in 2019. This represents an increase of over 300%.
- ❖ Nationally, the average potency of tetrahydrocannabinol (THC), the primary psychoactive found in raw marijuana flower, has risen from 3.96% in 1995 to 13.85% in 2019. This represents an increase of nearly 250%.
- ❖ The price of a pound (lb.) of marijuana in California can vary from \$100 to \$2000 depending on THC potency level.

### **Section Two: Vaping**

- ❖ Nationally in 2021, the daily use of nicotine vaping is higher than the daily use of smoking tobacco across all grade levels: 1.10% vs. .04% in 8<sup>th</sup> grade, 2.5% vs. .8% in 10<sup>th</sup> grade, and 5.4% vs. 2% in 12<sup>th</sup> grade.
- ❖ In California between 2017-2019, 6% of 7<sup>th</sup> graders surveyed reported vaping as their main mode of (marijuana) consumption while 9<sup>th</sup> and 11<sup>th</sup> graders favored smoking (marijuana).

### **Section Three: California Youth Marijuana Use Ages 12-17**

- ❖ California youth have predominantly had a lower perception of risk of smoking marijuana once a month, compared to the national average (2014-2020).
- ❖ From 2018 to 2020, California's rank increased nationally in past month usage of marijuana by 12-17 year-olds (by state).
- ❖ California lifetime use of drugs and alcohol for 7<sup>th</sup>, 9<sup>th</sup> and 11<sup>th</sup> grades has been decreasing since the 2011-2013 survey period.

- ❖ Drugs continue to be among the leading reasons for California public school expulsions (2016-2020).

#### **Section Four: California Marijuana Use Ages 18-25**

- ❖ Since 2015-2016, California's marijuana use by 18 to 25 year olds continued to surpass their use of cigarettes.

#### **Section Five: California Marijuana Use Ages 26 and Older**

- ❖ In 2019-2020, California's marijuana and cigarette use for individuals 26 years and older was lower than the national average.

#### **Section Six: California Arrests for Drug Sales, DUI, Possession of Cannabis While Driving and Arrest Data**

- ❖ In California, the percentage of driver fatalities testing positive for legal and/or illegal drugs increased from 43% in 2018 to 50% in 2019.
- ❖ In California, arrests for the sale of marijuana has decreased from 2015 (8,368) to 2020 (1,274).

#### **Section Seven: Public Health**

- ❖ National marijuana edibles exposure calls to Poison Control, for ages 0-12, from 2016 (187) to 2021 (4329) has increased by 2215%.
- ❖ In California in 2021, the highest number of marijuana exposure calls to Poison Control Centers were for individuals 5 years of age and under.
- ❖ Nationally in 2021, marijuana was the most prevalent drug present in alcohol-related polysubstance emergency department visits (30.6%).
- ❖ From 2008 (2,030) to 2020 (13,568) there was a 568% increase in California emergency department visits and admissions for primary marijuana use.

## **Section Eight: Treatment**

- ❖ Nationally from 2016 to 2019, the highest percentage of marijuana treatment admissions were amongst those 26 years and older.
- ❖ In California in 2020, 44.4% of marijuana treatment admissions were amongst those 26 years of age, and older, compared to 51.4% nationally .

## **Section Nine: Diversion, Eradication and Related Crime**

- ❖ California eradicates more illicit cannabis cultivation sites than any other state; it seizes more illicitly cultivated cannabis plants than any other state; it arrests more individuals associated with illicit cultivation; and it seizes more weapons from illicit cultivation sites than any other state in the country.
- ❖ In 2020 and 2021, most illegal marijuana plant seizures occurred on private land (trespass grows).
- ❖ Marijuana was the most seized drug (in pounds) by U.S. Border Patrol from FY19-FY21.
- ❖ Marijuana was the most seized drug (in pounds) by Nationwide Air and Marine Operations in FY21.

## **Section Ten: THC Extraction Labs**

- ❖ There were 194 reported clan lab incidents in California in 2019. Out of the 194 reported labs, 72.6% were honey oil/THC extraction (141), followed by 9.3% precursor chemicals (18).
- ❖ There were 132 reported clandestine (clan) lab incidents in California in 2020. Out of the 132 reported labs, 64% were honey oil/THC extraction (82), followed by 19% methamphetamine (24).

## **Section Eleven: Environmental Impacts of Marijuana Cultivation**

- ❖ Outdoor marijuana grows consume an estimated 29.4 million gallons of water per year.

- ❖ Researchers estimate over 1.4 million pounds of fertilizers and toxicants used annually at outdoor marijuana grow sites in California.

## INTRODUCTION

In 1996, California became the first state to legalize marijuana for medicinal purposes with the passage of Proposition 215, the Compassionate Use Act. Now, in 2022, recreational marijuana use is fully legal within California for individuals 21 years of age and over. This report will outline the current and potential impacts of these policies.

### **Purpose**

The purpose of this report is to describe the impacts that have arisen from the legalization of marijuana for both medical and recreational use in California. By gathering and examining data, citizens and policymakers can better understand the implications and effects of marijuana's increased presence in California.

### **Background**

Due to concerns about public health risks and other possible impacts of marijuana, there is an on-going debate in the United States regarding the effects of the increasing prevalence of marijuana in our society.

Some common arguments for the legalization of marijuana use include:

- Marijuana legalization would eliminate arrests for possession and sale, resulting in fewer citizens with criminal records and a reduction in the incarcerated population.
- Legalization frees up law enforcement resources to target more serious and violent crimes.
- Legalization would reduce the disproportionate incarceration of minorities for possession of small quantities of marijuana.
- Legalization would reduce traffic fatalities since users may switch from alcohol to marijuana.
- Legalization would increase tax revenue from sales.
- Legalization would reduce profits for drug cartels trafficking marijuana.

Arguments for continued restrictions include:

- Marijuana use among youth and young adults would increase due to availability and the



normalization of marijuana.

- Road fatalities would increase due to marijuana impairment.
- Marijuana-related emergency room visits would increase.
- The costs of physical and mental health services would increase due to marijuana use.
- Marijuana will continue to be diverted to illegal markets.
- Social and economic costs (e.g., poor academic outcome to include risks of dropping out of school) will far exceed the benefit to society of any potential revenue generated.<sup>1</sup>
- Marijuana cultivation would cause environmental degradation to air, water, land, and wildlife.

## **History of Marijuana in California**

California's relationship with marijuana has evolved over time, and a brief look at how it has changed since marijuana first gained any legal status is necessary to understand where the state stands now and to create a starting point for this report.

### Proposition 215

California was the first state to decriminalize possession of lesser quantities of marijuana, when voters approved the Compassionate Use Act on November 5, 1996; also known as Proposition 215. Proposition 215 was intended to ensure that seriously ill Californians could obtain and use marijuana for the treatment of serious medical diseases such as cancer, AIDS, and severe spasms.<sup>2</sup> Currently, Proposition 215 makes California one of 37 states that allows marijuana for medical uses.

Proposition 215 allows the use of marijuana upon recommendation of a physician and ensures that patients and primary caregivers are not prosecuted or sanctioned. It also encourages the federal and state governments to implement plans to provide for the safe and affordable distribution of marijuana to all patients medically in need.

### California State Assembly Bill 420 (SB 420)

The Medical Marijuana Program Act, which became effective on January 1, 2004, created a voluntary identification card system for purchasing medical marijuana. This bill was signed by Governor Gray Davis in 2003 and was intended to clarify the scope of Proposition 215 to ensure its equitable application across the state. SB 420 allows the California Attorney General to clarify policies for the possession and cultivation of marijuana, and to create new regulations as needed.

To facilitate the tracking of medical marijuana distribution, the California Department of Public Health Medical Marijuana Program (MMP) was specifically established to create a state-authorized medical marijuana identification card (MMIC) program and a registry database for verification of qualified patients and their primary caregivers. However, this program is voluntary.



## **Commercialization of Medical Marijuana**

Beginning in 2010, marijuana in California grew into a commercialized industry, with the number of dispensaries and other marijuana-related businesses increasing quickly. In 2010, Los Angeles reported 545 dispensaries compared to 186 in 2007, an increase of 193%.<sup>3</sup> As of 2021, the L.A. City Controller's documents state that there are 135 regulated cannabis shops and at least 1,400 unlicensed marijuana dispensaries within the LA metropolitan area.<sup>4</sup>

### California State Assembly Bill 1449 (AB 1449)

In September 2010, Governor Arnold Schwarzenegger signed California State Assembly Bill 1449 (AB 1449) into law, which reduced the sanction for possessing less than one ounce of marijuana from a misdemeanor to an infraction, legally the equivalent of a parking ticket. This essentially decriminalized the personal possession of up to one ounce of marijuana.<sup>5</sup>

### California State Assembly Bills 21, 2516 and 2679; and Senate Bill 837

The Medical Cannabis Regulation and Safety Act (MCRSA) includes four bills and directed the California Department of Food and Agriculture to create the Medical Cannabis Cultivation Program (MCCP). The MCCP was charged to create a licensing program for medical cannabis cultivation, implement a "track and trace" program, and evaluate potential environmental impacts in compliance with the California Environmental Quality Act.<sup>6</sup> These bills were enacted September 2015.

### California State Assembly Bills 266 and 243, and Senate Bill 643

The Medical Marijuana Regulation and Safety Act 2016 (MMRSA) includes three bills: Assembly Bill 266 (Bonta, Cooley, Jones-Sawyer, Lackey, and Wood) establishes a dual licensing structure requiring state and local license permits; Assembly Bill 243 (Wood) aims to establish a regulatory and licensing structure for cultivation sites under the Department of Food and Agriculture; Senate Bill 643 (McGuire) sets the criteria for the licensing of medical marijuana businesses, regulates physicians, and recognizes local authority to levy taxes and fees.<sup>7</sup> These bills took effect January 2016.

## **Full Legalization of Marijuana**

### California Proposition 64

On November 8, 2016, California voters approved Proposition 64 or, the Control, Regulate and Tax Adult Use of Marijuana Act (AUMA) which legalized the adult use of cannabis. According to California Health and Safety Code 11362.5 HS, adults 21 and over can possess 1 ounce of cannabis per day, grow six mature plants and 12 immature plants (for medical use). However, commercial sales of marijuana for recreational use were postponed until January 1, 2018.<sup>8</sup> This report shows the impacts AUMA has had on the public health, education and criminal justice systems in California.

#### California State Assembly Bill 133 and Senate Bill 94

The Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA), signed by Governor Brown, on June 27, 2017, combined elements of the Medical Cannabis Regulation and Safety Act (MCRSA) and the Adult Use of Marijuana Act (AUMA). This act created one regulatory system for both medicinal and recreational (adult-use) cannabis under the California Department of Food and Agriculture (CDFA).<sup>9</sup> It also increased the amount of cannabis personal possession from 4 to 8 grams.

#### California Assembly Bill 1793

This bill requires the state to track down and process all marijuana cases eligible for expungement. Assembly Bill 1793 gave local prosecutors until July 1, 2020 to process eligible cases to review whether to challenge the recall or dismissal of sentence, dismissal and sealing, or re-designation of an existing conviction to a lesser offense. This was signed by Governor Brown on September 30, 2018.<sup>10</sup>

#### California Budget Trailer Assembly Bill 97

With the passage of Budget Trailer Assembly Bill 97, Senate Bill 97, the rules for provisional marijuana licenses were revised. It is now possible to get a provisional commercial cannabis license if the applicant has submitted a completed state cannabis license application, and the applicant is following the California Environmental Quality Act, and has completed or is in the process of completing their local city or county permits. This bill requires that no later than July 1, 2021, the State Department of Public Health establish a certification program for manufactured marijuana products comparable to the National Organic Program and the California Organic Food and Farming Act. This bill extends the repeal date from July 1, 2019 to July 1, 2021. Governor Newsom signed this into law on July 1, 2019.<sup>11</sup>

#### California Budget Trailer Senate Bill 97

This bill gives power to licensing authorities to issue a citation to a licensee, or unlicensed person, for any act or omission that violates or has violated a provision of MAUCRSA. This bill extends the repeal date for the provisional or temporary license to January 1, 2022. This bill also requires that no later than July 1, 2021, the State Department of Public Health establish a certification program for manufactured marijuana products comparable to the National Organic Program, and the California Organic Food and Farming Act, and extends the repeal date from July 1, 2019 to July 1, 2021.<sup>12</sup>

#### California Senate Assembly Bill 657 Cannabis Cultivation: County Agricultural Commissioner's Reporting

Requires county agricultural commissioners to report, to the secretary of state, the total acreage and production value of marijuana produced in the commissioner's county. Governor Newsom

signed this into law on September 5, 2019.<sup>13</sup>

#### California Senate Bill 527 Local Government: Williamson Act: Cultivation of Cannabis and Hemp

This bill adds cannabis and hemp to the definition of agricultural commodities, therefore qualifying these crops as appropriate use in an agricultural preserve (an area of at least 100 acres designated by the Board of Supervisors within which a landowner may contract with the County to receive property taxes in exchange for maintaining the land on open space use). The bill was signed by Governor Newsom on September 6, 2019.<sup>14</sup>

#### California Assembly Bill 1810

This bill makes it illegal for passengers in limos, taxis, buses, and other commercial vehicles to consume marijuana, although alcohol is allowed. Signed by Governor Newsom on October 8, 2019. This bill extends through January 1, 2021.<sup>15</sup>

#### California Senate Bill 223

This bill authorizes school districts to set policies that allows a parent or guardian of a pupil to possess and administer the pupil's medicinal marijuana at a school site. The bill was signed by Governor Newsom on October 9, 2019, and took effect January 1, 2020.<sup>16</sup>

#### California Assembly Bill 228

This bill was introduced for the cannabidiol (CBD) market, and it would prohibit restrictions on the sales of food, beverages, or cosmetics that include industrial hemp or cannabinoids, extracts, or derivatives from industrial hemp. This bill did not pass in 2019.<sup>17</sup>

#### California Assembly Bill 37

This bill allows state tax deductions for cannabis business expenses even though there is federal disallowance for these deductions. This bill passed the Senate and Assembly and was signed by Governor Newsom on October 12, 2019, and went into effect January 1, 2020.<sup>18</sup>

#### California Senate Bill 153 – Industrial Hemp

This bill would revise regulating the cultivation and testing of industrial hemp to conform to the requirements for a state plan under the federal Agricultural Marketing Act of 1946, as amended by the federal Agriculture Improvement Act of 2018. It revises the definition of “industrial hemp” and its terms. A state hemp regulatory plan was submitted to the United States Secretary of Food and Agriculture (USDA). This bill was signed by Governor Newsom on October 12, 2019.<sup>19</sup> At time of publication, some plans have been approved and others are under review.

#### California Senate Bill 34

This bill will permit licensed businesses to donate cannabis products for medical marijuana patients in need. This bill was signed by the Governor in October 12, 2019 and went into effect January 1, 2020.<sup>20</sup>

#### California Assembly Bill 1291

This bill requires marijuana license applicants to agree to enter into a labor peace agreement within 60 days of employing 20 or more employees. The bill passed the Senate and was signed by Governor Newsom on October 12, 2019. The law took effect on January 1, 2020.<sup>21</sup>

#### California Senate Bill 185

Applies the same prohibitions against misrepresentation of “county of origin” to misuse of “appellations of origin” (specific qualities due to the geographical environment in which produced) and prohibits use of names that are likely to mislead consumers or cannabis product type. The bill passed and was signed by Governor Newsom in October 12, 2019.<sup>22</sup>

#### California Assembly Bill 1529

This urgency bill was created to change the size requirement of the universal marijuana symbol as it pertains to vape cartridges, to no less than 0.25” x 0.25” (lowering it from the requirement of 0.5” x 0.5”). This bill was signed by Governor Newsom on October of 12, 2019.<sup>23</sup>

#### California Senate Bill 595

This bill requires a state licensing authority to develop and implement a program to provide a deferral or waiver of a marijuana application fee, marijuana licensing fee, or cannabis renewal fee for needs-based applicants or a needs-based licensee, on or before January 1, 2020. The bill passed by Senate and was signed by Governor Newsom on October 12, 2019.<sup>24</sup>

#### California Marijuana Chemicals Listed January 3, 2020

The office of Environmental Health edz Assessment added marijuana smoke and tetrahydrocannabinol (THC) to their list of known toxins and carcinogens. On January 3, 2020, marijuana smoke and THC was listed as known to the state of California to cause reproductive toxicity (Development Endpoint). At a public meeting on December 11, 2019, the Developmental and Reproductive Toxicant Identification Committee (DARTIC) in its official capacity as the “state’s qualified experts determined that cannabis (marijuana) smoke and Δ9-tetrahydrocannabinol (Δ9-THC)” were shown to cause reproductive toxicity based on the developmental endpoint. Regulations for the listing of chemicals by the DARTIC are set out in Title 27, California Code of Regulations, in section 25305(b) (1).

*A complete, updated Proposition 65 chemical list is available on the OEHHA website at <https://oehha.ca.gov/proposition-65/proposition-65-list>.*

#### California Senate Bill 67

This bill establishes an appellations of origin program, which is meant to indicate where marijuana is grown and how that influences the geographical area of the environment instead of identifying solely by county. It also prohibits marketing, of any product, to use a county of origin in the name of the product unless 100% of the cannabis contained in the product was produced in that county. Governor Newsom signed this bill on August of 2020.<sup>25</sup>

#### California Assembly Bill 1872

This bill freezes state marijuana cultivation and excise taxes for the entire year of 2021. This bill is intended to provide financial stability for marijuana businesses in California, where the taxes are the highest in the nation. The Governor signed this into law on September 18, 2020.<sup>26</sup>

#### California Assembly Bill 1458

A certificate of analysis is required on edible marijuana products to report that the milligrams (mg) of tetrahydrocannabinol (THC) per serving does not exceed 10 mg per serving, plus or minus 12% until January 1, 2022. The bill includes plus or minus 10% after January 1, 2022. Governor Newsom signed this bill on September 29, 2020.<sup>27</sup> Note: This bill regulates weight in a product not potency.

#### California Senate Bill 1244

This bill allows state licensed marijuana testing labs to provide sample testing services to law enforcement. Governor Newsom signed this bill on September 29, 2020.<sup>28</sup>

#### California Assembly Bill 1948

This bill would reduce the existing tax rate on marijuana, and marijuana products, to 11% on and after the date of this bill until July 1, 2023, at which time the tax would return to 15%. This bill would defer the imposition of the cultivation tax. This bill would take effect immediately as a tax levy, but its operative date would depend on its effective date. Introduced to Assembly on January 17, 2020.<sup>29</sup>

#### California Assembly Bill 2094

Assembly Bill 2094 would authorize a licensing authority under Medicinal and Adult Use Cannabis Regulation and Safety Act (MAUCRSA) to fine up to \$30,000 per violation of a person who rents, leases or makes a room available for the purpose of unlawfully manufacturing, distributing, or sell marijuana. The bill would authorize a case to enforce the civil penalty to be brought by a licensing entity, the Office of the Attorney General, or a local jurisdiction. Amended in Assembly on May 6, 2020, and is listed as still in committee as of this writing.<sup>30</sup>

#### California Proposition 65: Changes to the Law

Proposition 65 became law in California in November of 1986, also known as the Safe Drinking water and Toxic Enforcement Act of 1986. This proposition requires businesses to provide warning of significant exposures to chemicals that cause cancer, birth defects and other reproductive dangers. Effective January 3, 2021 proper signage will be placed on marijuana products. Marijuana smoke is now listed as a carcinogen and having reproductive toxins. Smoked and non-smoked products will require Prop 65 warnings for cancer and developmental toxicity from tetrahydrocannabinol (THC).<sup>31</sup>

#### California Assembly Bill 384

California Assembly Bill 384 would prohibit a licensed Veterinarian to possess, administer, dispense, or prescribe the use of marijuana for animals. However, it does allow for a licensed Veterinarian to discuss or recommend the use of cannabis as a therapeutic agent without sanction against their license. On April 15, 2021, this bill passed as amended.<sup>32</sup>

#### California Assembly Bill 141

Assembly Bill 141 combines the three state licensing authorities into a single California Department of Cannabis Control (DCC). This department provides licensure, safety, and quality assurance. The DCC will consolidate the three state marijuana programs: which are the Bureau of Cannabis Control (BCC), the California Department of Food and Agriculture (CDFA) CalCannabis Cultivation Licensing Division, and the California Department of Public Health's (CDPH) Manufactured Cannabis Safety Branch. Governor Newsom signed AB141 into law on July 12, 2021.<sup>33</sup>

#### California Senate Bill 160

California Senate Bill 160 makes modifications to AB141. The California Department of Food and Agriculture (CDFA) will keep the Cannabis Appellations Program. The Cannabis Organic Certification (OCal) Program will also stay in the (CDFA). The OCal Program will initiate marijuana standards comparable to the National Organic Program. Governor Newsom signed SB160 into law on July 16, 2021.<sup>34</sup>

#### California Assembly Bill 1305

The Controlled Substances Act is a federal law generally prohibits commercial marijuana activity, but authorizes cultivation and distribution of marijuana for research purposes. AB1305 would exempt individuals from Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA) activity that is in accordance with Drug Enforcement Agency (DEA) registration, if the person that is engaging in the activity provides the licensing authority valid



documentation of their registration and location with the DEA prior to engaging in the activity. This bill became law on August 31, 2021.<sup>35</sup>

#### California Assembly Bill 1302

California Assembly Bill 1302 would restrict the placement of commercial billboards. This bill passed the Senate floor; but was vetoed by Governor Newsom on September 2, 2021, because it would've allowed more billboards and weakened the protections set in place to protect youth from exposure to marijuana and marijuana advertising.<sup>36</sup>

#### California Assembly Bill 287

This bill would require a civil action for a penalty on a person engaging in commercial marijuana activity without a license required by MAUCRSA, of up to 3 times the amount of the license fee for each violation. This bill will declare that its provisions further the purposes and intent of the Control, Regulate and Tax Adult Use of Marijuana Act. This bill became a law on September 23, 2021.<sup>37</sup>

#### California Senate Bill 166

The California Cannabis Equity Act of 2018 requires the Department of Cannabis Control, to develop and implement a program to provide a deferral or a waiver for an application fee, licensing fee, or a fee for renewal otherwise required by MAUCRSA, for needs-based applicant or needs-based licensee. Governor Newsom signed into law on September 23, 2021.<sup>38</sup>

#### California Senate Bill 311

The Compassionate Access to Medical Cannabis Act or Ryan's Law requires specified types of health care facilities to allow terminally ill patients marijuana. Governor Newsom approved the bill on September 28, 2021.<sup>39</sup>

#### California Senate Bill 292

California Senate Bill 292 will require the testing plan of an established agricultural research organization and hemp breeder to provide for testing representative sample, instead of all the plants cultivated within a determined timeframe. The bill would require a grower of industrial hemp to include the country of origin, instead of the county, of the approved cultivar in the registration application. This became a law on October 4, 2021.<sup>40</sup>

#### California Assembly Bill 1138

This bill would impose a civil penalty on persons who are encouraging unlicensed commercial marijuana activity of up to \$30,000 for each violation. This bill would limit the filing of an action



for civil penalties against a person, pursuant to MAUCRSA, to three years after filing of the discovery of a violation. Governor Newsom signed this bill on October 5, 2021.<sup>41</sup>

#### California Assembly Bill 1222

On October 5, 2021, Governor Newsom signed bill 1122 into law. The bill will allow marijuana beverages to be packaged in glass containers that are clear or see through of any color. Before delivery or sale at a retailer, marijuana and marijuana products must be labeled and placed in a tamper-evident, child-resistant package and will include a unique identifier for tracking marijuana and marijuana products. Packages and labels should not attract the interest of children.<sup>42</sup>

#### California Senate Bill 544

MAUCRSA prohibits marijuana products from being sold unless a representative sample, of specified batches has been tested by a licensed testing laboratory. SB544 would require the bureau to create a standardized marijuana testing method to be used by all laboratories in California. Governor Newsom signed the bill into law on October 5, 2021.<sup>43</sup>

#### California Senate Bill 73

California Senate Bill 73 allows the deletion of various crimes relating to controlled substances to include possessing or agreeing to sell or transporting marijuana, planting or cultivating peyote, and various crimes relating to individuals that had been previously convicted, including specified felony offenses. SB73 authorizes remaining prohibitions on probation to be waived by a court in the interests of justice. Governor Newsom signed this bill into law on October 5, 2021.<sup>44</sup>

#### California Assembly Bill 45

California Assembly Bill 45 “allows for the inclusion of hemp and cannabinoids (e.g., CBD), extracts, or derivatives of hemp in food and beverages, dietary supplements, cosmetics, and processed pet food provided that they, among other things, contain less than 0.3% THC.” Governor Newsom enacted AB45 into law on October 6, 2021.<sup>45</sup>

#### California Assembly Bill 527

On October 7, 2021, Governor Newsom enacted AB527 into law “which would further the provisions authorizing the prescription, furnishing, dispensing, transfer, transportation, possession, or use of cannabis oil products, e.g. Cannabidiol (CBD), in accordance with federal law, to include all products with cannabinoids. This bill would require the Department of Justice (DOJ) to provide the University of California with access to data for research.”<sup>46</sup>

#### California Assembly Bill 1690

With the introduction of California Assembly Bill 1690 to the Assembly on January 24, 2022, “single use of tobacco and marijuana products would not be allowed. This prohibits a person or entity from giving, selling or passing on to another person of any age in this state a cigarette using a single-use filter made of any material for single use plastic of any kind to help manual use or filtration of a tobacco product. This includes cigars, a single use e-cigarette or vaporizer, or cigarette related items.”<sup>47</sup> As of May 16, 2022, bill 1690 was moved to the inactive file at the request of its author.

#### California Assembly Bill 1725

California Assembly Bill 1725 would “make it a felony with 16 months in jail or 2 to 3 years in county jail. This would apply if a person were over 18 years of age to plant, cultivate, harvest, dry or process less than 6 living plants. If a person is 18 years or younger and violates these provisions, they must complete drug education and counseling and do community service.” This bill was introduced in Assembly on January 27, 2022. This legislation died because it did not receive a hearing.<sup>48</sup>

#### California Assembly Bill 1014

California Assembly Bill 1014 requires regulations that allow for different value tiers an increase in the value of marijuana goods to be carried during delivery, eluding coordination with the California Highway Patrol. AB1014 states that the delivery of marijuana be made only by a licensed retailer, or employee carrying a current license and government identification with photo and possess an automobile insurance policy. This policy should cover third-party liability of deliveries of marijuana goods by an employee who uses their own vehicle. AB1014 passed Assembly on January 31, 2022.<sup>49</sup>

#### California Assembly Bill 2506

This bill would suspend the California cultivation tax from July 1, 2023, to July 1, 2028 and would discontinue the requirement that the department adjust the cultivation tax rate for inflation for the 2023 calendar year and during the suspension. The bill would increase, from July 1, 2023, until July 1, 2028, the excise tax by an additional percentage that the Department of Finance estimates will generate the amount of revenue that would have been collected pursuant to cultivation tax. The bill was introduced in Assembly on February 17, 2022. This bill is considered dead.<sup>50</sup>

#### California Assembly Bill 2691

California Assembly Bill 2691 would allow a licensee who holds a valid state cultivation license and a valid license, permit, or other authorization for cannabis cultivation issued by a local jurisdiction, to apply for a temporary event cultivator retail license. The bill was introduced in Assembly on February 18, 2022. This legislation is considered inactive at the request of the bill's author, Assembly Member Wood.<sup>51</sup>

#### California Assembly Bill 2792

The legislation proposes a new standard for tax treatment from July 2022 onwards. This requires the distributor to collect the marijuana excise tax from the marijuana retailer on or before 90 days, after marijuana or marijuana product was sold by the retailer to purchase. It also states that any tax owed by a marijuana retailer that has not been collected by a distributor; is considered a debt owed to the State of California by the producer or marijuana retailer. The bill was introduced in Assembly on February 18, 2022. This legislation is considered dead.<sup>52</sup>

#### California Assembly Bill 2844

This bill would give the authority to issue a state caterer license that would authorize the licensee to serve marijuana or marijuana products at a private event or venue approved by a local jurisdiction. The purpose of this license is to allow event attendees 21 years of age or older to consume marijuana or marijuana products that is not hosted, sponsored, or advertised by the caterer. The bill was introduced in Assembly on February 18, 2022. This bill died in Assembly Appropriations.<sup>53</sup>

#### California Assembly Bill 1656

The Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA) will not forbid a licensee from manufacturing, distributing, or selling products that are made from industrial hemp or cannabinoids, extracts, or derivatives from hemp if the product complies with applicable state laws. The bill passed the Assembly on April 18, 2022.<sup>54</sup>

#### California Assembly Bill 2568

California Assembly Bill 2568 introduced on February 18, 2022, states that it is not a crime for individuals and firms to provide insurance and related resources to persons licensed to participate in commercial marijuana activities.<sup>55</sup> This bill was enrolled and presented to Governor Newsom on September 6, 2022.

#### California Assembly Bill 1646

This would authorize marijuana beverages to be packaged into containers of any material that are free of color (any clear packaging). All marijuana and marijuana products will have two

different product labels and inserts that include information displayed in legible writing in accordance with the requirements. AB1646 passed the Assembly on May 5, 2022.<sup>56</sup>

#### California Senate Bill 988

California Senate Bill 988 makes changes to the existing Compassionate Access to Medical Cannabis Act. It revokes the requirement that health care facilities that permit patient use of medical marijuana comply with other drug and medication requirements. SB988 would require a health care facility to require a patient or a primary caregiver to be responsible for acquiring, retrieving, administering and removing medicinal marijuana and would require medicinal marijuana always be stored securely. The bill passed the Senate on May 9, 2022.<sup>57</sup>

#### California Assembly Bill 2728

This bill would increase the civil penalty on a person engaging in a commercial marijuana endeavor without a license. It would allow these penalties to be comparable to the size and scale of the unlicensed marijuana operation. The bill passed Assembly on May 19, 2022.<sup>58</sup>

#### California Assembly Bill 2595

This bill requires the California State Department of Social Services to update regulations regarding when a minor is investigated by a social worker, for alleged child abuse or neglect. The family or people involved be treated as if the parent's use or possession of marijuana is the same as if it were alcohol or a legal medication. AB2595 passed in Assembly on May 25, 2020.<sup>59</sup>

#### California Assembly Bill 1885

"This would stop the California Veterinarian Medical Board from disciplining a veterinarian who uses marijuana as a medicine for animals for such things that may have therapeutic purposes, unless the veterinarian is employed by or has an agreement with a marijuana license." The bill passed in the Assembly on May 25, 2022.<sup>60</sup>

#### California Assembly Bill 1894

Starting July 1, 2024, California Assembly Bill 1894 would require that packaging and labeling of marijuana vaporizers fully display a specific message of how to properly dispose as hazardous waste or, to imply that it may not be thrown into the trash or recycling streams. The bill passed in the Assembly on September 18, 2022.<sup>61</sup>

#### California Assembly Bill 1954

"This bill would prohibit a medical doctor from not evaluating an individual or denying treatment because of a positive drug screen for tetrahydrocannabinol (THC), or report of

medical marijuana use without completing a case-by-case evaluation on the patient to determine that the patient's use of medical marijuana is medically significant. The bill specifies that a physician and/or surgeon, will not be punished for having administered treatment or medication to a qualified patient." Governor Newsom signed AB1954 on September 2, 2022.<sup>62</sup>

#### California Assembly Bill 2150

The University of California San Diego at the California Center for Medicinal Cannabis Research would study and examine the effects of marijuana products that are in the commercial markets. This Center would collaborate with the Department of the California Highway Patrol, to evaluate driving impairments and public safety consequences of marijuana use while driving. The bill passed in the Assembly on May 25, 2022. This legislation is no longer available; the author withdrew the bill from the Senate committee on Business, Professions and Economic Development.<sup>63</sup>

#### California Assembly Bill 2925

The Control, Regulate and Tax Adult Use of Marijuana Act of 2016 (AUMA) requires the Controller to distribute funds from the Youth Education, Prevention, Early Intervention, and Treatment Account to the State Department of Health Care Services for programs to prevent substance use disorders and prevent harm from substance use. This bill would require the State Department of Health Care Services, on or before July 10, 2023, to provide to the Legislature a spending report of funds from the Youth Education, Prevention, Early Intervention and Treatment Account for the 2021-2022 and 2022-2023 fiscal years. This bill would require the department to provide a spending report for the prior fiscal year. The bill passed in Assembly on May 25, 2022.<sup>64</sup>

#### California Senate Bill 1097

California Senate Bill 1097 would require, in addition to existing product labels, a clear and prominent warning regarding the risks that marijuana use may contribute to mental health problems by July 1, 2025. This bill would require that on or before January 1, 2024, the department create a public use pamphlet or brochure that includes prescribed information, recommendations that new users start with lower doses and the dangers of purchasing illegal marijuana and marijuana products. This information contained in this brochure should be re-certified every 5 years starting on January 1, 2030, to provide the most updated language. The bill passed the Senate on May 25, 2022.<sup>65</sup>

#### California Assembly Bill 2188

This bill will “alter the California Fair Employment and Housing Act to make it unlawful for an employer to discriminate against a person in hiring, termination, or any term or condition of employment, or otherwise penalize a person, if the discrimination is based upon the person’s use of cannabis off the job and away from the workplace or, with prescribed exceptions, upon an employer-required drug screening test that has found the person to have non-psychoactive cannabis metabolites in their urine, hair, or bodily fluids.”<sup>66</sup> The bill passed the Assembly on May 26, 2022.

#### California Assembly Bill 1706

If a sentence has not been challenged by July 1, 2020, this bill requires the court to update the record and notify the Department of Justice. The Department of Justice must complete and update records on or before July 2023. The bill would enable a conviction, arrest, or other proceeding to be dismissed, and sealed, or re-designated. The bill passed in Assembly on May 26, 2022.<sup>67</sup>

#### California Assembly Bill 2210

California Assembly Bill 2210 gives the Department of Cannabis Control authority to issue a state temporary event license to a marijuana retail licensee. It would authorize onsite marijuana retail sales at an event once the application has been approved by the state. The bill passed in Assembly on May 26, 2022.<sup>68</sup>

#### California Senate Bill 1148

California Senate Bill 1148 ensures that “California Environmental Quality Act (CEQA) does not apply to the issuance of a California state marijuana license if the applicant follows all local ordinances that regulate commercial marijuana activity and if the local jurisdiction has filed a notice of exemption or a notice of determination.”<sup>69</sup> The bill passed the Senate on May 26, 2022 and is in the Assembly Appropriations Committee.

#### California Assembly Bill 195

This bill signed into law on June 30, 2022, eliminates a cultivation tax placed on marijuana growers and shifts excise tax collection from distributors to retail businesses. This bill amends the California Revenue and Taxation Code to eliminate the cultivation tax on harvested marijuana. The bill also gives three years of relief for excise tax.<sup>70</sup>

#### Targeting and Offsetting Existing Illegal Contaminants (TOXIC) Act

Targeting and Offsetting Existing Illegal Contaminants (TOXIC) Act would raise the criminal penalty to a maximum of 20 years in prison and fines up to \$250,000 for using banned pesticides in illegal cannabis cultivation. The TOXIC Act would authorize \$250 million over 5 years to

the Forest Service to use Superfund Toxic waste remediation to address the environmental damages caused by banned pesticides on federal lands.<sup>89</sup>

## **Federal Position on the Legalization of Marijuana**

### The Ogden Memo

Marijuana use, whether intended for medical purposes or not, is illegal at the federal level under the Controlled Substances Act of 1970. On October 19, 2009, United States Department of Justice (USDOJ) Deputy Attorney General David Ogden issued a memorandum to provide clarification and guidance regarding to federal investigations and prosecution, to federal prosecutors in states with medical marijuana laws. This memo emphasized that federal prosecution resources should be used rationally and efficiently. The memorandum adds that: "...nothing herein precludes investigation or prosecution where there is a reasonable basis to believe that compliance with state law is being involved as a pretext for the production or distribution of marijuana for purposes not authorized by state law. Nor does this guidance preclude investigation or prosecution, even when there is clear and unambiguous compliance with existing state law, in particular circumstances *where investigation or prosecution otherwise serves important federal interests*."<sup>71</sup>

The Federal Department of Justice will prosecute:

- Unlawful possession or unlawful use of firearms;
- Violence;
- Sales to minors;
- Financial and marketing activities inconsistent with the terms, conditions, or purposes of state law, including evidence of money laundering activity and/or financial gains or excessive amounts of cash inconsistent with purported compliance with state or local law;
- Amounts of marijuana inconsistent with purported compliance with state or local law;
- Illegal possession or sale of other controlled substances; or
- Ties to other criminal enterprises.<sup>72</sup>

### The Cole Memo

As with medical marijuana, recreational marijuana use is also illegal at the federal level. However, on August 29, 2013, a memorandum was released by the Department of Justice's Office of the Deputy United States Attorney James Cole. This memo described a new set of priorities for federal prosecutors operating in states which had legalized the medical use of marijuana. The Cole Memo provided direction to U.S. Attorneys stating, "in light of recent state ballot initiatives that legalize, under state law, the possession of small amounts of marijuana and provide for the regulation of marijuana production, processing, and sale."<sup>73</sup>



The Cole Memo was directed to federal prosecutors and federal law enforcement agencies and, while refocusing federal resources, identified eight priority areas that states needed to ensure would not be violated. These guidelines included:

- Preventing the distribution of marijuana to minors;
- Preventing revenue from the sale of marijuana going to criminal enterprises, gangs, and cartels;
- Preventing the diversion of marijuana from states where it is legal under state law in some form to other states;
- Preventing state-authorized marijuana activity from being used as a cover or pretext for the trafficking of other illegal drugs or other illegal activity;
- Preventing violence and the use of firearms in the cultivation and distribution of marijuana;
- Preventing drugged driving and the exacerbation of other adverse public health consequences associated with marijuana use;
- Preventing the growing of marijuana on public lands and the attendant public safety and environmental dangers posed by marijuana production on public lands;
- Preventing marijuana possession or use on federal property.<sup>74</sup>

#### Rescinding of the Cole Memo

On January 4, 2018, the Cole memorandum was rescinded by a memo signed by United States Department of Justice (USDOJ) Attorney General Jeff Sessions. In a release the United States Department of Justice stated:

*“The Department of Justice today issued a memo on federal marijuana enforcement policy announcing a return to the rule of law and the rescission of previous guidance documents. Since the passage of the Controlled Substances Act (CSA) in 1970, Congress has generally prohibited the cultivation, distribution, and possession of marijuana.*

*In the Memorandum, Attorney General Jeff Sessions directs all U.S. Attorneys to enforce the laws enacted by Congress and to follow well-established principles when pursuing prosecutions related to marijuana activities. This return to the rule of law is also a return of trust and local control to federal prosecutors who know where and how to deploy Justice Department resources most effectively to reduce violent crime, stem the tide of the drug crisis, and dismantle criminal gangs.”<sup>75</sup>*

#### Federal H.R.5485 - Hemp Farming Act of 2018

This act legalizes industrial hemp containing tetrahydrocannabinol (THC), the psychoactive component of marijuana, concentration of no more than 0.3% by removing it from Schedule I of the Controlled Substances Act. States and Indian tribes may regulate the production of hemp by submitting a plan to the Department of Agriculture (USDA). The bill also makes hemp producers eligible for the federal crop insurance program and certain USDA research grants. Its

provisions were incorporated into the 2018 United States Farm Bill that became law on December 20, 2018.<sup>76</sup>

Federal H.R. 3884 – Marijuana Opportunity Reinvestment Act of 2019 or the MORE Act of 2019  
This bill would decriminalize marijuana and remove it from the list of scheduled substances under the Controlled Substances Act therefore eliminating criminal penalties for any person who manufactures, distributes, or possesses marijuana. The bill would replace the statutory names of marijuana and marihuana to cannabis, establish a trust fund to support various programs and services for individuals and business in communities affected by drugs, and impose a 5% tax on cannabis products. It requires revenues be deposited to a trust fund and makes Small Business Administration (SBA) loans and services available to legitimate cannabis related businesses and service providers. The bill prohibits the denial of federal public benefits as well as the denial of benefits and protections under immigration laws based on a marijuana event, including conduct or conviction. The MORE Act establishes a process to expunge convictions and conduct sentencing review hearings related to federal marijuana offenses. The vote was postponed in September of 2020.<sup>77</sup>

Federal Legislation: Marijuana Opportunity Reinvestment and Expungement Act

The MORE Act, federal legislation passed in the U.S. House of Representatives, would remove marijuana as a “scheduled” drug under the Controlled Substances Act. The bill would decriminalize marijuana.<sup>78</sup> This legislation was received in the Senate and read twice and referred to Committee on Finance on April 1, 2022.

Federal H.R. 3617-Cannabis Administration and Opportunity Act

The bill would decriminalize marijuana at the federal level and would require several federal agencies to enact rules and regulations of the marijuana industry. The bill would legalize marijuana by removing it from the Controlled Substances Act (CSA). This bill would increase the percentage of THC marijuana allowed in industrial hemp from 0.3% to 0.7%. The CAO would include the THC isomers in that total, including delta-9 THC. It would also expunge criminal records of lower-level marijuana convictions which includes prosecutions from May 1971, though the passage of the bill. Introduced on July 21, 2022 and headed to subcommittee(s).<sup>79</sup>

Federal H.R. 8454-Medical Marijuana and Cannabidiol Research Expansion Act

Under this bill, the application process for research would be simplified and encourages the Food and Drug Administration (FDA) to develop marijuana-derived medicines. The bill also requires the Department of Health and Human Services to report on possible benefits and harms of marijuana use to Congress. This would occur without changing the Schedule I status or legalizing marijuana. This bill passed through The House of Representatives on July 26, 2022.<sup>80</sup>

## **Availability**

Marijuana, in all of its various forms, is the most widely available scheduled controlled substance in California, in both wholesale and retail quantities as well as in the legal and illegal markets. As of 2020, California growers, including foreign nationals with grow sites in California, produced approximately 15.5 million pounds of marijuana annually<sup>81</sup>. While California only consumes about 2.5 million pounds or 16% of the gross California marijuana crops, the overwhelming majority of which is grown in Northern California. It is distributed by independent growers, legal and illegal dispensaries.

**Active California Marijuana Licenses**

Distributor	1,254
Distributor Transport Only	189
Retail Storefront	1,067
Retail Nonstorefront	475
Microbusiness	376
Testing Laboratory	50
Event Organizer	61

Source: California Bureau of Cannabis Control

Numbers as of August 9, 2022

## **California Marijuana Taxation**

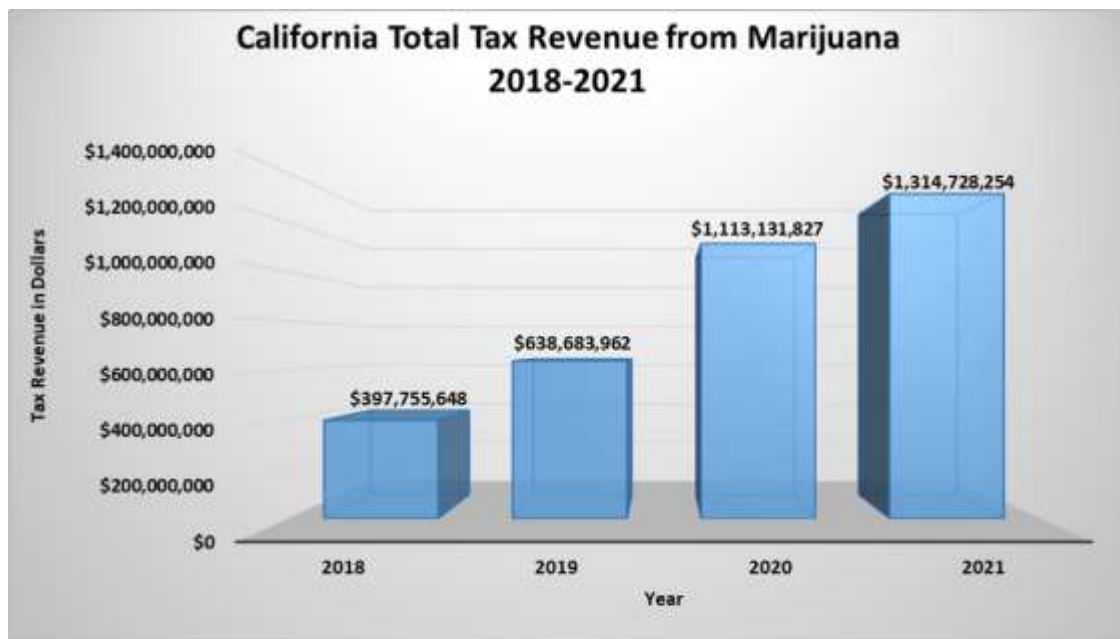
When California legalized recreational marijuana, it granted cities the flexibility to regulate cannabis or prohibit it. Approximately 62% of California's municipalities do not allow retail sales.<sup>82</sup> Consequently, it can be difficult to find licensed marijuana sellers who do not complain about burdens imposed on them by the state, specifically taxes. California recently raised the cannabis excise and cultivation taxes, which many store owners and licensed growers protest as counter-productive if the state wants the industry to survive. The price of operating legally exceeds the cost of operating without a license. For current operating costs visit the Department of Cannabis Control of California at <https://cannabis.ca.gov/applicants/application-license-fees/>. It has been stated that the illegal marijuana grows in Northern California have gotten worse as illicit marijuana sales force licensed operations out of business.<sup>83</sup> As of June 2021, the Bureau of Cannabis Control had issued a total of 7,548 active cultivation licenses.<sup>84</sup>

California charges growers state taxes in the amount of \$10.08 per ounce of dried marijuana flowers, \$3.00 per ounce of dry marijuana leaves and \$1.41 per ounce of fresh marijuana plants.<sup>85</sup> The state also requires retailers to charge customers a 15 % tax on any product sold. These taxes contribute to an increase in sales of illegal marijuana on the black market.<sup>86</sup>

The California Cannabis Advisory Committee stated in their annual report that California's marijuana industry was the world's largest legal market in 2021.<sup>87</sup> The Newsom administration implemented numerous COVID-19 protections and budget investments (grant opportunities) to assist legal marijuana farmers who were unable to compete with the illicit marijuana market. Legal marijuana store fronts, like liquor stores, were considered essential and remained open during this time.

### Marijuana Tax Revenue

The California Department of Tax and Fee Administration (CDTFA) reported revenue numbers for 2021 as \$679.5 million in excise tax, \$166.2 million in cultivation tax, and \$469.1 million in sales tax.<sup>88</sup> Since 2018, total tax revenues from marijuana have increased by 230% in California.



Source: <https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=CannabisTaxRevenues>

As of August 8, 2022

#### **NOTE:**

- MULTI-YEAR COMPARISONS ARE GENERALLY BETTER INDICATORS OF TRENDS. ONE-YEAR FLUCTUATIONS DO NOT NECESSARILY REFLECT A NEW TREND.
- THIS REPORT WILL CITE DATASETS WITH TERMS SUCH AS "MARIJUANA-RELATED". THAT DOES NOT NECESSARILY PROVE THAT MARIJUANA WAS THE CAUSE OF THE INCIDENT.

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<sup>1</sup> Meier, Madeline H.; Avshalom, Caspi; Ambler, Anthony; Harrington, HonaLee; Houts, Renate; Keefe, Richard S.E.; McDonald, Kay; Ward, Aimee; Poulton, Richie and Moffitt, Terrie E. Edited by Michael I. Posner. "Persistent Cannabis Users show Neuropsychological Decline from Childhood to Midlife." *Proc Natl Acad Sci USA*. 2012; 109:E2657-2664 [www.pnas.org/cgi/doi/10.1073/pnas.1206820109](http://www.pnas.org/cgi/doi/10.1073/pnas.1206820109) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3479587/>

<sup>2</sup> Office of the Attorney General. California Department of Justice. "Guidelines for the Security and Non-Diversion of Cannabis Grown for Medical Use." August, 7, 2019. <https://oag.ca.gov/system/files/attachments/press-docs/MEDICINAL%20CANNABIS%20Guidelines.pdf>

<sup>3</sup> Freisthler, Bridget; Kepple, Nancy J.; Simms, Revel; and Martin, Scott E. "Evaluating Medical Marijuana Dispensary Policies: Spatial Methods for the Study of Environmentally-Based Interventions." *Am J Community Psychol*. DOI: 10.1007/s10464-012-9542-6 UCLA March 2013 <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3683594/>

<sup>4</sup> Cannabis.net. The LA Dilemma – Los Angeles Has 900 Legal Dispensaries and 2,800 Illegal Trap Shop Dispensaries" Posted by Joseph Billions January 21, 2022. <https://cannabis.net/blog/opinion/the-la-dilemma-los-angeles-has-900-legal-dispensaries-and-2800-illegal-trap-shop-dispensaries>

<sup>5</sup> Public Policy Institute of California, Just the facts, "California's Attitudes toward Marijuana Legalization." [www.ppic.org/main/publication.asp?i=1150](http://www.ppic.org/main/publication.asp?i=1150)

<sup>6</sup> Medical Cannabis Cultivation Program, "Summary of the California Department of Food and Agriculture's Role in Implementing the Medical Cannabis Regulation and Safety Act." <https://static.cdfa.ca.gov/MCCP/document/MCCP%20Factsheet%20Summary-%20California.pdf>

<sup>7</sup> CA.GOV, California State Board of Equalization, February 2016. [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160SB643](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB643)

<sup>8</sup> BALLOTPEdia. California Proposition 64, Marijuana Legalization (2016). [https://ballotpedia.org/California\\_Proposition\\_64,\\_Marijuana\\_Legalization\\_\(2016\)](https://ballotpedia.org/California_Proposition_64,_Marijuana_Legalization_(2016))

<sup>9</sup> Harris/Bricken. Bricken, Hilary. "AB 133 is the Cannabis Technical Fix Bill California Needs." September 17, 2017. <https://harrisbricken.com/cannalawblog/ab-133-is-the-cannabis-technical-fix-bill-california-needs/>[https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=201720180AB133](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB133)

<sup>10</sup> California Legislative Information. [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=202120220AB1793](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1793)

<sup>11</sup> McGrath, Jennifer, "California Cannabis Bills Introduced in the California Legislature." <https://www.jennifermcgrath.com/california-cannabis-law-legislative-update/california-cannabis-bills-2019-california-legislature/>

<sup>12</sup> Ibid

<sup>13</sup> Ibid

<sup>14</sup> Ibid

<sup>15</sup> California Legislative Information. [https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=201920200AB1810](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200AB1810)[https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=201920200AB1810](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200AB1810)

<sup>16</sup> McGrath, Jennifer, "California Cannabis Bills Introduced in the California Legislature." <https://www.jennifermcgrath.com/california-cannabis-law-legislative-update/california-cannabis-bills-2019-california-legislature/>

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<sup>17</sup> Ibid  
<sup>18</sup> Ibid  
<sup>19</sup> Ibid  
<sup>20</sup> Ibid  
<sup>21</sup> Ibid  
<sup>22</sup> Ibid  
<sup>23</sup> Ibid  
<sup>24</sup> Ibid  
<sup>25</sup> Ibid

<sup>26</sup> MMLG. Blog. October 1, 2020. "Newsom Signs Cannabis Bills into Law." [https://mmlg.com/newsom-signs-new-california-cannabis-law/#:~:text=AB%201872%20\(The%20Tax%20Freeze,up%20rate%20for%20one%20year.](https://mmlg.com/newsom-signs-new-california-cannabis-law/#:~:text=AB%201872%20(The%20Tax%20Freeze,up%20rate%20for%20one%20year.)

<sup>27</sup> California Legislative Information. [http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201920200AB1458](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB1458)

<sup>28</sup> California Legislative Information. [http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201920200SB1244](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200SB1244)

<sup>29</sup> Open states <https://openstates.org/ca/bills/20192020/AB1948/>

<sup>30</sup> Open states <https://openstates.org/ca/bills/20192020/AB2094/>

<sup>31</sup> CA.gov Propositions 65 Your Right to Know. [Cannabis \(Marijuana\) Smoke - Proposition 65 Warnings Website](#)

<sup>32</sup> Open States <https://openstates.org/ca/bills/20212022/AB384/>

<sup>33</sup> California Governor Signs Bill Creating Department of Cannabis Control, July 12, 2021 [https://www.jdsupra.com/legalnews/california-governor-signs-bill-creating-1040940/#:~:text=California%20Governor%20Signs%20Bill%20Creating%20Department%20Of%20Cannabis%20Control,-Jonathan%20Dolgin&text=On%20July%2012%2C%202021%2C%20California,of%20Cannabis%20Control%20\(DCC\).](https://www.jdsupra.com/legalnews/california-governor-signs-bill-creating-1040940/#:~:text=California%20Governor%20Signs%20Bill%20Creating%20Department%20Of%20Cannabis%20Control,-Jonathan%20Dolgin&text=On%20July%2012%2C%202021%2C%20California,of%20Cannabis%20Control%20(DCC).)

<sup>34</sup> TrackBill, California SB160. <https://trackbill.com/bill/california-senate-bill-160-department-of-cannabis-control-licensure-appellations-of-origin-trade-samples/1971504/>

<sup>35</sup> TrackBill.com <https://trackbill.com/bill/california-assembly-bill-1305-the-medicinal-and-adult-use-cannabis-regulation-and-safety-act-exemptions/2043677/>

<sup>36</sup> Law Offices of Jennifer McGrath <https://www.jennifermcgrath.com/california-cannabis-law-legislative-update/california-cannabis-bills-2021-california-legislature/>

<sup>37</sup> Fast Democracy <https://fastdemocracy.com/bill-search/ca/20212022/bills/CAB00021517/>

<sup>38</sup> Law Offices of Jennifer McGrath <https://www.jennifermcgrath.com/california-cannabis-law-legislative-update/california-cannabis-bills-2021-california-legislature/>

<sup>39</sup> Ibid

<sup>40</sup> Open States <https://openstates.org/ca/bills/20212022/SB292/>

<sup>41</sup> Open States <https://openstates.org/ca/bills/20212022/AB1138/>

<sup>42</sup> Open States <https://openstates.org/ca/bills/20212022/AB1222/>

<sup>43</sup> California Legislative Information [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=202120220SB544](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB544)



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- <sup>44</sup> California Legislative Information, [https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=202120220SB73](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB73)
- <sup>45</sup> National Law Review California Passes Hemp Bill into Law, Food and Drug Law at Keller and Heckman. <https://www.natlawreview.com/article/california-passes-hemp-bill-law#:~:text=On%20October%206%2C%202021%2C%20California,things%2C%20contain%20less%20than%200.3%25>
- <sup>46</sup> Open States <https://openstates.org/ca/bills/20212022/AB527/>
- <sup>47</sup> Manzuri Law <https://manzurilaw.com/everything-you-need-to-know-about-the-cannabis-related-bills-in-the-2022-california-legislative-session/>
- <sup>48</sup> Everything <https://manzurilaw.com/everything-you-need-to-know-about-the-cannabis-related-bills-in-the-2022-california-legislative-session/>
- <sup>49</sup> Open States <https://openstates.org/ca/bills/20212022/AB1014/>
- <sup>50</sup> California Legislative Information. [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=202120220AB2506](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB2506)
- <sup>51</sup> Manzuri Law <http://manzurilaw.com> <https://manzurilaw.com/everything-you-need-to-know-about-the-cannabis-related-bills-in-the-2022-california-legislative-session/>
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- <sup>54</sup> Open States <https://openstates.org/ca/bills/20212022/AB1656/>
- <sup>55</sup> Manzuri Law <https://manzurilaw.com/everything-you-need-to-know-about-the-cannabis-related-bills-in-the-2022-california-legislative-session/>
- <sup>56</sup> Open States <https://openstates.org/ca/bills/20212022/AB1646/>
- <sup>57</sup> California Legislative Information. <https://leginfo.legislature.ca.gov/faces/home.xhtml> [https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=202120220SB988](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB988)
- <sup>58</sup> Law Offices of Jennifer McGrath <https://www.jennifermcgrath.com/california-cannabis-law-legislative-update/california-cannabis-bills-2022-california-legislature/ab-2728-unlawful-cannabis-activity-penalties/>
- <sup>59</sup> Manzuri Law <https://manzurilaw.com/everything-you-need-to-know-about-the-cannabis-related-bills-in-the-2022-california-legislative-session/>
- <sup>60</sup> Manzuri Law <https://manzurilaw.com/everything-you-need-to-know-about-the-cannabis-related-bills-in-the-2022-california-legislative-session/>
- <sup>61</sup> Open States <https://openstates.org/ca/bills/20212022/AB1894/>
- <sup>62</sup> Open States <https://openstates.org/ca/bills/20212022/AB1954/>
- <sup>63</sup> California Legislative Information, [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=202120220AB2150](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB2150)
- <sup>64</sup> California Legislative Information. [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=202120220AB2925](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB2925)



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- <sup>65</sup> California Legislative Information. [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=202120220SB1097](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1097)
- <sup>66</sup> California Legislative Information. [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=202120220AB2188](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB2188)
- <sup>67</sup> California Legislative Information. [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=202120220AB1706](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1706)
- <sup>68</sup> Manzuri Law <https://manzurilaw.com/everything-you-need-to-know-about-the-cannabis-related-bills-in-the-2022-california-legislative-session/>
- <sup>69</sup> California Legislative Information. [https://leginfo.ca.gov/faces/billTextClient.xhtml?bill\\_id=202120220SB1148](https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB1148)
- <sup>70</sup> California Legislative Information, [https://leginfo.ca.gov/faces/billTextClient.xhtml?bill\\_id=202120220AB195](https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB195)
- <sup>71</sup> Department of Justice Archives <https://www.justice.gov/archives/opa/blog/memorandum-selected-united-state-attorneys-investigations-and-prosecutions-states>
- <sup>72</sup> Ibid
- <sup>73</sup> U.S. Department of Justice, Office of the Deputy Attorney General, “Memorandum for all United States Attorneys.” <http://dfi.wa.gov/documents/banks/cole-memo-08-29-13.pdf>
- <sup>74</sup> Ibid
- <sup>75</sup> Department of Justice Archives <https://www.justice.gov/opa/pr/justice-department-issues-memo-marijuana-enforcement>
- <sup>76</sup> U.S. Food and Drug Administration. Hemp Production and 2018 Farm Bill. July, 25, 2019. <https://www.fda.gov/news-events/congressional-testimony/hemp-production-and-2018-farm-bill-07252019>
- <sup>77</sup> CONGRESS.GOV <https://www.congress.gov/bill/116th-congress/house-bill/3884>
- <sup>78</sup> Congress.Gov, <https://www.congress.gov/bill/117th-congress/house-bill/3617>
- <sup>79</sup> Congress.Gov, <https://www.congress.gov/bill/117th-congress/house-bill/3617?q=%7B%22search%22%3A%5B%223617%22%2C%223617%22%5D%7D&s=3&r=3>
- <sup>80</sup> Congress.Gov, <https://www.congress.gov/bill/117th-congress/house-bill/8454?q=%7B%22search%22%3A%5B%22Federal+H.R.+8454%22%2C%22Federal%22%2C%22H.R.%22%2C%228454%22%5D%7D&s=2&r=1>
- <sup>81</sup> Fuller, Thomas. “Now for the Hard Part: Getting Californian’s to Buy Legal Weed.” *The New York Times*, Jan. 2, 2019. <https://www.nytimes.com/2019/01/02/us/buying-legal-weed-in-california.html>
- <sup>82</sup> CA.GOV ,Department of Cannabis Control, Cannabis laws, Where cannabis businesses are allowed <https://www.bcc.ca.gov/>
- <sup>83</sup> Fuller, Thomas. “Getting Worse, Not Better”: Illegal Pot Market Booming in California Despite Legalization,” *The New York Times*, April 27, 2019. <https://www.nytimes.com/2019/04/27/us/marijuana-california-legalization.html>.
- <sup>84</sup> Cannabis cultivation licenses, by state U.S. 2021 <https://www.statista.com/statistics/1108194/cannabis-cultivation-licenses-by-state-us/>
- <sup>85</sup> California Department of Tax and Fee Administration, Tax Guide for Cannabis Business ([www.cdtfa.ca.gov/](http://www.cdtfa.ca.gov/))

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<sup>86</sup> Petek, Gabriel. Legislative Analyst's Office. "How High? Adjusting California's Cannabis Taxes." 2019. <https://lao.ca.gov/Publications/Report/4125> [How High? Adjusting California's Cannabis Taxes](#)

<sup>87</sup> California Cannabis Advisory Committee, 2021 Annual Report. <https://cannabis.ca.gov/wp-content/uploads/sites/2/2021/12/CAC-Annual-Report-2021.pdf>

<sup>88</sup> Cannabis Tax Revenues <https://www.cdtfa.ca.gov/dataportal/charts.htm?url=CannabisTaxRevenues>

<sup>89</sup> Rep. Peters Introduces Bill to Tackle Danger, Damage Caused by Banned Pesticides on Federal Lands <https://scottpeters.house.gov/media-center/press-releases/rep-peters-introduces-bill-to-tackle-danger-damage-caused-by-banned>

## SECTION ONE: *Potency and Price of Marijuana*

There appears to be two contributing factors to the increase in potency: 1. Cultivators breeding cannabis plants specifically for higher THC concentration, and 2. Concentrates and other high potency products make up a large part of the cannabis market in part due to consumer demand.<sup>1</sup>

### Key Findings:

- ❖ Nationally, the average potency of tetrahydrocannabinol (THC), the primary psychoactive found in marijuana concentrates has risen from 13.23% in 1995 to 53.63% in 2019. This represents an increase of over 300%.
- ❖ Nationally, the average potency of tetrahydrocannabinol (THC), the primary psychoactive found in raw marijuana flower, has risen from 3.96% in 1995 to 13.85% in 2019. This represents an increase of nearly 250%.
- ❖ The price of a pound (lb.) of marijuana in California can vary from \$100 to \$2000 depending on THC potency level.

### Definitions:

**Tetrahydrocannabinol (THC):** The chemical responsible for most of marijuana's psychoactive effects. It acts much like the cannabinoid chemicals, i.e., endocannabinoids, made naturally by the body.

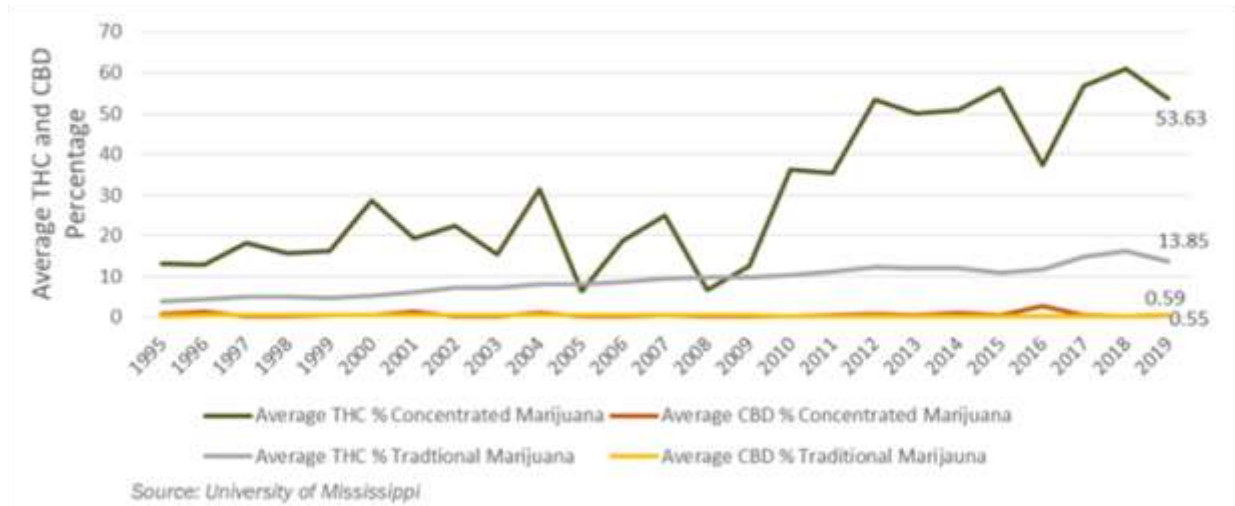
**Delta 8 THC:** Usually manufactured from hemp-derived cannabidiol (CBD). While CBD does not have any intoxicating effects, delta-8 THC has similar psychoactive properties to delta-9 THC, but generally less potent.

**Delta 9 THC:** The major naturally occurring intoxicating component of the cannabis plant.

**Marijuana Concentrate:** A highly potent tetrahydrocannabinol (THC) concentrated substance such as shatter, wax, distillates and oils.

**Cannabidiol (CBD):** The second most prevalent of the active ingredients of marijuana. CBD is a non-psychoactive component derived from the marijuana (cannabis) plant.

## Average THC and Cannabidiol Potency of Traditional and Concentrated Marijuana, 1995-2019



Source: Drug Enforcement Administration (DEA), 2020 National Threat Assessment

- Nationally, the average THC content of marijuana has increased steadily over the years. The average THC potency of traditional marijuana was approximately 4% in 1995. As of 2019, its potency had risen to approximately 13.8%. Marijuana concentrates averaged a THC potency of approximately 13% in 1995 and had risen to approximately 53.6% by 2019.

### California Marijuana Prices (as of March 2021)

<u>HIDTA</u>	<u>Mexican Marijuana</u>	<u>Domestic Marijuana</u>
San Diego Imperial Valley	\$200-\$600	\$800-\$1,500
Los Angeles	\$100-\$400	\$700-\$2,000
Central Valley		\$1200-\$1400
Northern California	\$100-\$400	\$700-\$2,000

Source: Law Enforcement Reporting System

- The price of a pound (lb.) of marijuana in California can vary from \$100 to \$2000 depending on THC potency level.

<sup>1</sup> Petek, Gabriel. Legislative Analyst's Office, "How High? Adjusting California's Cannabis Taxes." 2019 [www.lao.ca.gov](http://www.lao.ca.gov).

## SECTION TWO: *Vaping*

### Key Findings:

- ❖ Nationally, any lifetime vaping use has decreased from 2020 to 2021: 8<sup>th</sup> grade decreased from 24.1% to 17.5%, 10<sup>th</sup> grade decreased from 41% to 29.7% and 12<sup>th</sup> grade decreased from 47.2% to 40.5%.
- ❖ Nationally in 2021, the daily use of nicotine vaping is higher than the daily use of smoking tobacco across all grade levels: 1.10% vs. .04% in 8<sup>th</sup> grade, 2.5% vs. .8% in 10<sup>th</sup> grade and 5.4% vs. 2% in 12<sup>th</sup> grade.
- ❖ Nationally, the 30-day prevalence of marijuana (non-vaping), and cigarette use decreased across 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> graders from 2017 to 2021, with the exception of vaping marijuana in all grades in 2021, which increased from 1.6% to 2.9% in 8<sup>th</sup>, 4.3% to 8.4% in 10<sup>th</sup> and 4.9% to 12.4% in 12<sup>th</sup> graders.
- ❖ From 2017 to 2020, national past month marijuana vaping use more than doubled among college and non-college students.
- ❖ In California between 2017-2019, 6% of 7<sup>th</sup> graders surveyed reported vaping as their main mode of (marijuana) consumption while 9<sup>th</sup> and 11<sup>th</sup> graders favored smoking (marijuana).

### Definitions:

**Monitoring the Future (MTF):** This study/survey is funded by research grants from the National Institute on Drug Abuse (NIDA), a part of the National Institutes of Health (NIH). MTF is an ongoing study of behaviors, attitudes and values of American secondary school students, college students and young adults.

**The California Healthy Kids Survey (CHKS):** The largest statewide survey of resiliency, protective factors, risk behaviors, and school climate in the nation. This survey is administered in California every other year to 7<sup>th</sup>, 9<sup>th</sup> and 11<sup>th</sup> grade students in most public school districts.

**EVALI:** An E-cigarette or vaping product use associated lung injury; an inflammatory response in the lungs triggered by inhaled substances. Peaks were seen between June and September of 2019, with subsequent reduction in trends since then.

## Key Facts About E-Cigarette, or Vaping, Products

### Important notes:

1. E-liquids can contain nicotine, THC, CBD, flavors, or other solvents.
2. Marijuana herb, hash oil, dab wax are used with vaporizers.



Source: Centers for Disease Control and Prevention (CDC) U.S. Department of Health and Human Services

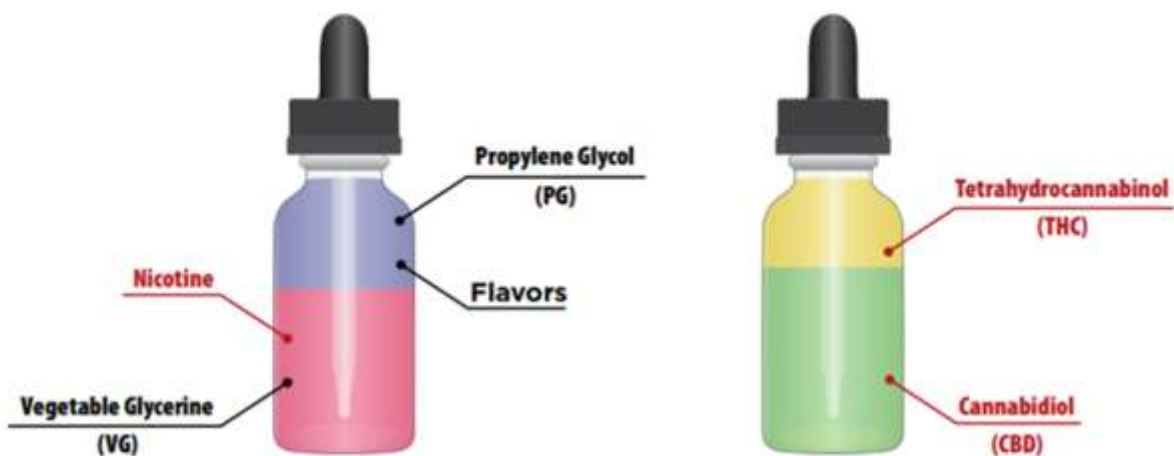
## E-Liquid



### E-Liquid

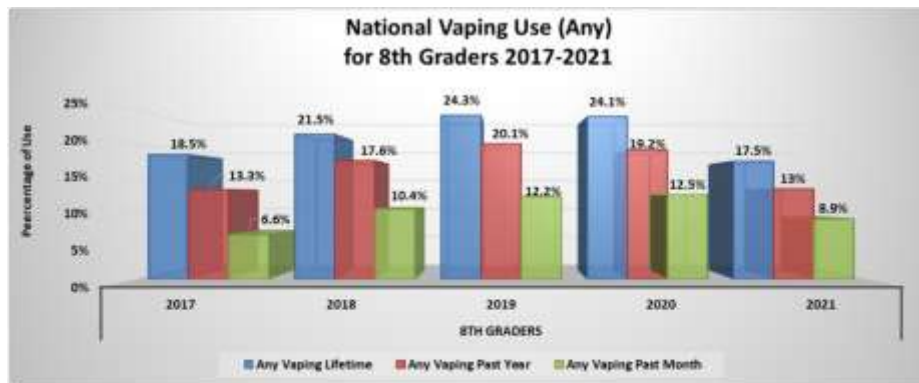
- E-liquid is the liquid that is converted into an aerosol by an e-cigarette, or vaping, product. It is typically a mixture of water, food grade flavoring, a choice of nicotine levels, cannabis (THC, CBD), propylene glycol (PG) or vegetable glycerin (VG).
- PG and VG are humectants used in e-liquid to produce aerosols that simulate combustible tobacco cigarette smoke.
- The ratio of PG and VG in the e-liquid can change based on whether flavor (higher levels of PG) or plume (higher levels of VG) is desired.

### REGULAR E-LIQUID VS. CANNABIS E-LIQUID

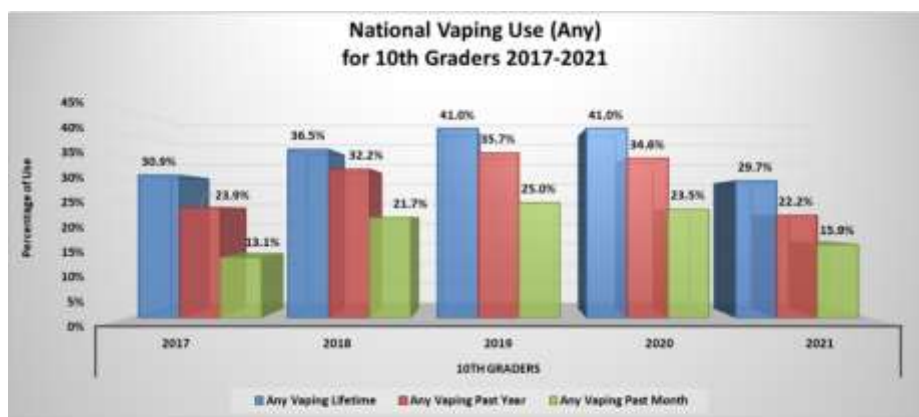


Source: Centers for Disease Control and Prevention (CDC) U.S. Department of Health and Human Services

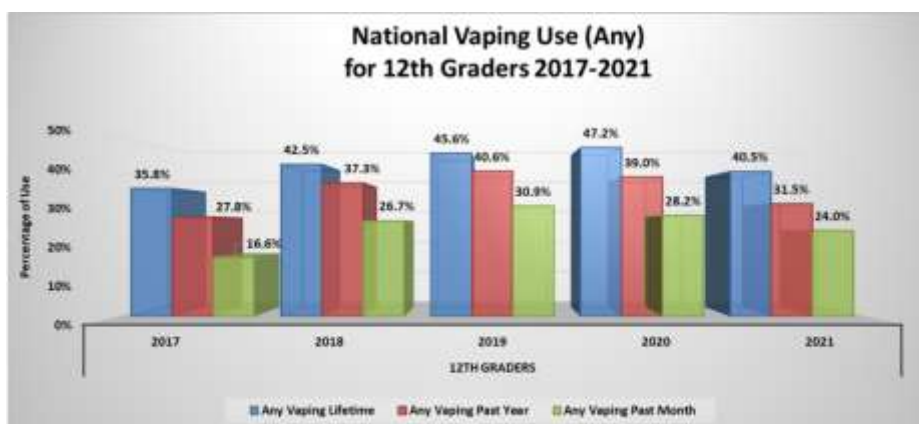




Source: Monitoring the Future study: Trends in Prevalence of Various Drugs for 8th Graders, 10th Graders and 12th Graders; 2017-2021

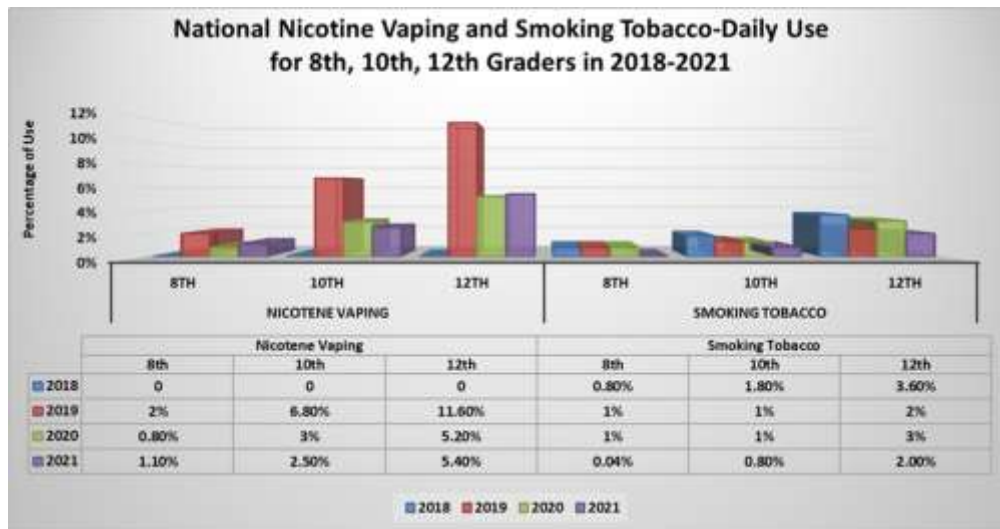


Source: Monitoring the Future study: Trends in Prevalence of Various Drugs for 8th Graders, 10th Graders and 12th Graders; 2017-2021



Source: Monitoring the Future study: Trends in Prevalence of Various Drugs for 8th Graders, 10th Graders and 12th Graders; 2017-2021

- ❖ Nationally, any lifetime vaping use has decreased from 2020 to 2021: 8<sup>th</sup> grade decreased from 24.1% to 17.5%, 10<sup>th</sup> grade decreased from 41% to 29.7% and 12<sup>th</sup> grade decreased from 47.2% to 40.5%.

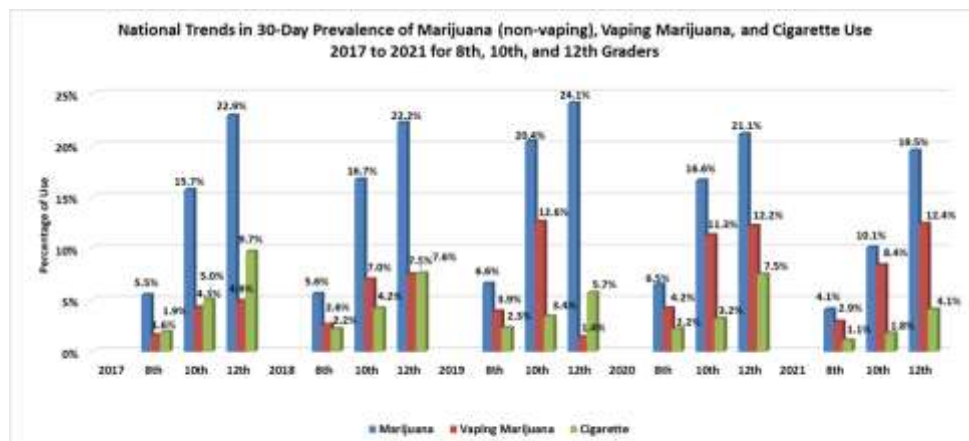


Source: Monitoring the Future Study

Note: 0 means not collected at year 2018

\* Data collection stopped prematurely due to COVID-19 pandemic. Completed surveys represent about 25% of the size of a typical years' data collection. Results were gathered from a broad geographic range and were statistically weighted to be nationally representative.

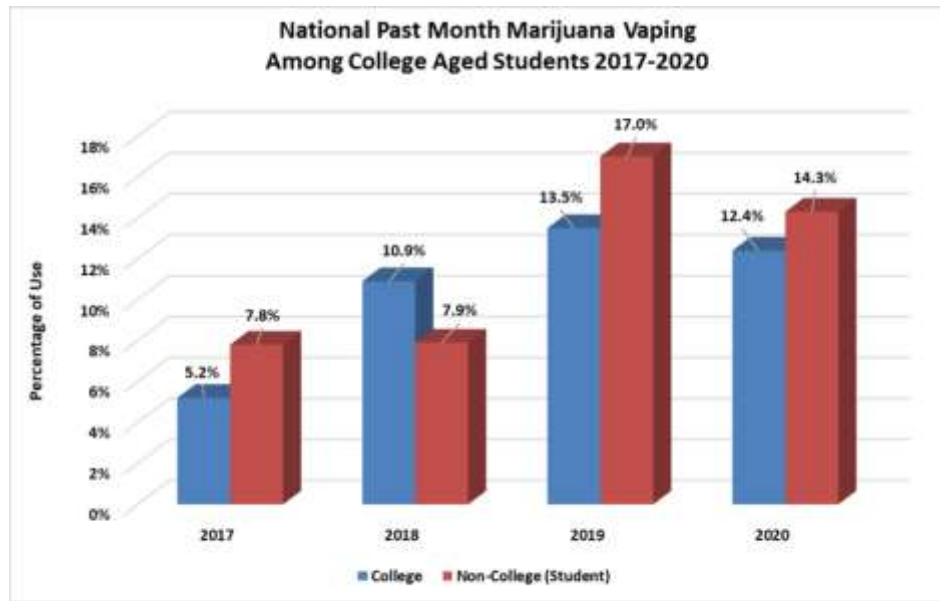
- ❖ Nationally in 2021, the daily use of nicotine vaping is higher than the daily use of smoking tobacco across all grade levels: 1.10% vs. .04% in 8<sup>th</sup> grade, 2.5% vs. .8% in 10<sup>th</sup> grade and 5.4% vs. 2% in 12<sup>th</sup> grade.



Source: Monitoring the Future national survey Results on Drug Use 1975-2021 Overview, Key Findings on Adolescent Drug Use. Ann Arbor Institute for Social Research, University of Michigan. Johnston, L.D., Miech, R.A., O'Malley, P.M., Bachman, J.G., Schulenberg, J.E., & Patrick, M.E. (2022).

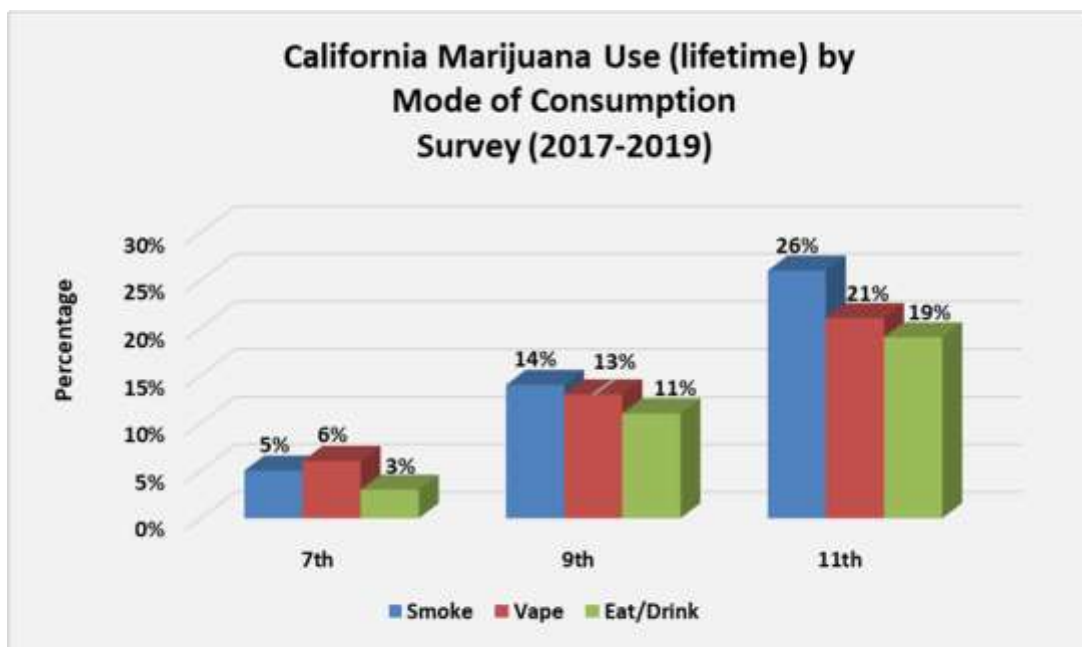
- ❖ Nationally, the 30-day prevalence of marijuana (non-vaping), and cigarette use decreased across 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> graders from 2017 to 2021, with the exception of vaping marijuana

in all grades in 2021, which increased from 1.6% to 2.9% in 8<sup>th</sup>, 4.3% to 8.4% in 10<sup>th</sup> and 4.9% to 12.4% in 12<sup>th</sup> graders.



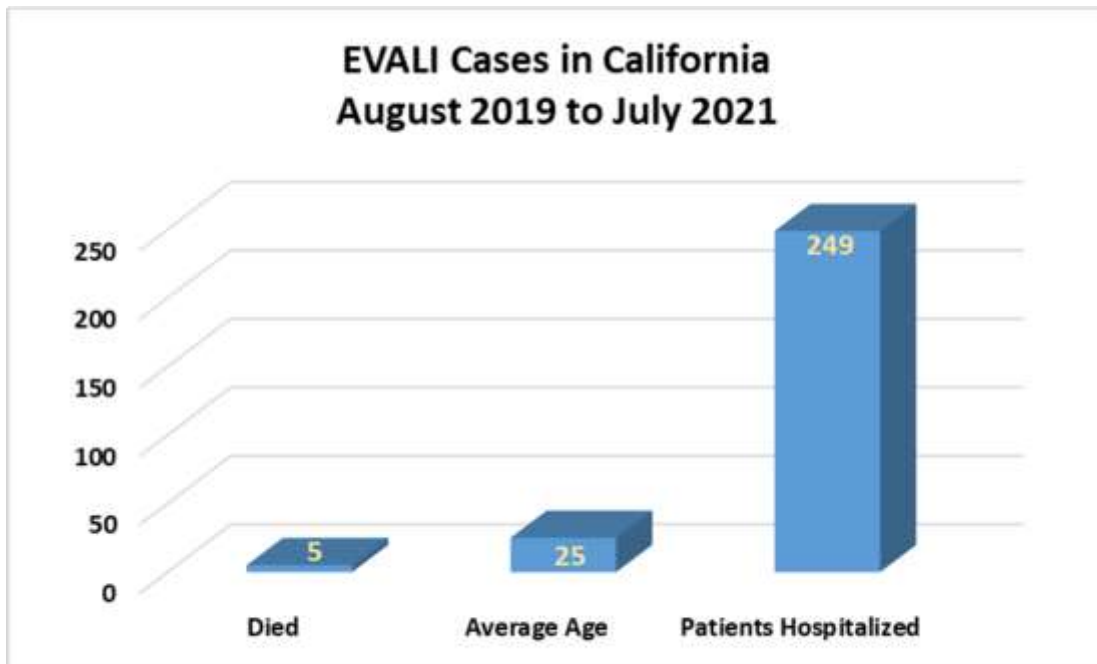
Source: Monitoring the Future College Students and Adults Ages 19-60

- ❖ From 2017 to 2020, national past month marijuana vaping use more than doubled among college and non-college students.



Source: Biennial Statewide California Healthy Kids Survey, 2017-2019

- ❖ In California between 2017-2019, 6% of 7<sup>th</sup> graders surveyed reported vaping as their main mode of (marijuana) consumption while 9<sup>th</sup> and 11<sup>th</sup> graders favored smoking (marijuana).



Source: California Department of Public Health (CDPH) EVALI Weekly Report (as of January 4, 2022)

## *SECTION THREE: California Youth Marijuana Use Ages 12-17*

### **Key Findings**

- ❖ California youth have predominantly had a lower perception of risk of smoking marijuana once a month, compared to the national average (2014-2020).
- ❖ Nationally in 2018, vaping (any substance) surpassed alcohol and marijuana use for 8th and 10th graders.
- ❖ From 2018 to 2020, California's rank increased nationally in past month usage of marijuana by 12-17 year-olds (by state).
- ❖ In California, individuals ages 12 and older, continue to have a higher rate of past month use of marijuana (2015-2020).
- ❖ 12 to 17 year olds continue to report using marijuana over cigarettes both nationally and in California.
- ❖ Students enrolled in non-traditional schools show a higher prevalence of marijuana use in most categories of past month use except for males in grade 11 (1 day and 3-9 days).
- ❖ According to CHKS, California Past 30-day marijuana use has continued to decrease since 2011-2013, in grades 7<sup>th</sup>, 9<sup>th</sup> and 11<sup>th</sup>.
- ❖ California lifetime use of drugs and alcohol for 7<sup>th</sup>, 9<sup>th</sup> and 11<sup>th</sup> grades has been decreasing since the 2011-2013 survey period.
- ❖ Drugs continue to be among the leading reasons for California public school expulsions. (2016-2020).

## **Definitions:**

**Monitoring the Future (MTF):** This study/survey is funded by research grants from the National Institute on Drug Abuse (NIDA), a part of the National Institutes of Health (NIH). MTF is an ongoing study of behaviors, attitudes and values of American secondary school students, college students and young adults.

**Substance Abuse and Mental Health Services Administration (SAMHSA):** A branch of the U.S. Department of Health and Human Services.

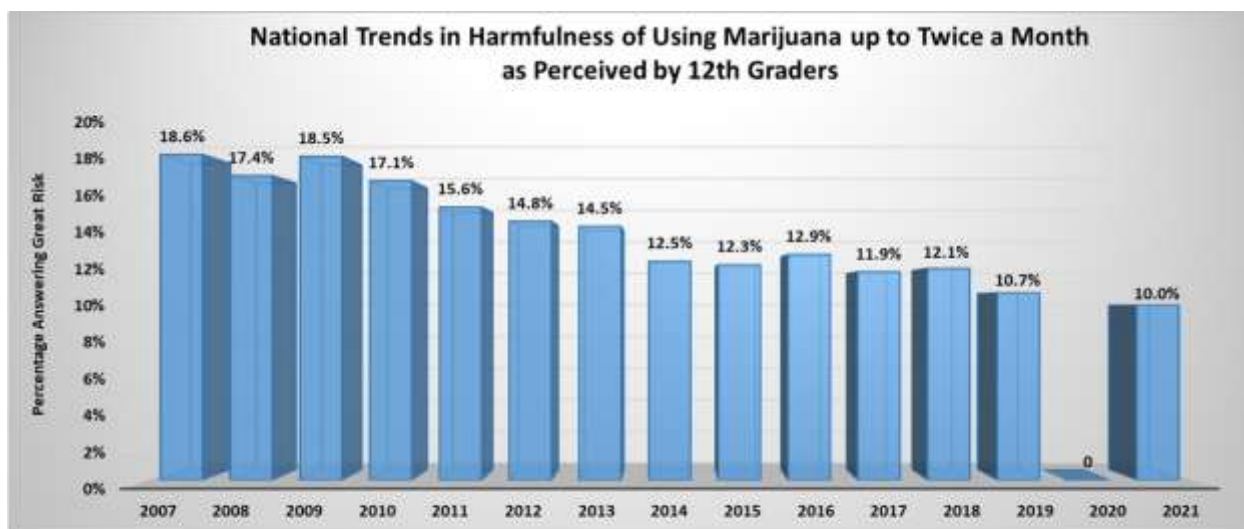
**National Survey on Drug Use and Health (NSDUH):** Provides annual information on tobacco, alcohol, drug use, mental health outcomes and other health-related issues in the United States associated to substance use.

**The California Healthy Kids Survey (CHKS):** The largest statewide survey of resiliency, protective factors, risk behaviors, and school climate in the nation. This survey is administered in California every other year to 7<sup>th</sup>, 9<sup>th</sup> and 11<sup>th</sup> grade students in most public school districts.

**Non-Traditional School:** A school that exists for the distinct purpose to serve students who have unique instructional needs that are not adequately addressed in a traditional classroom setting.

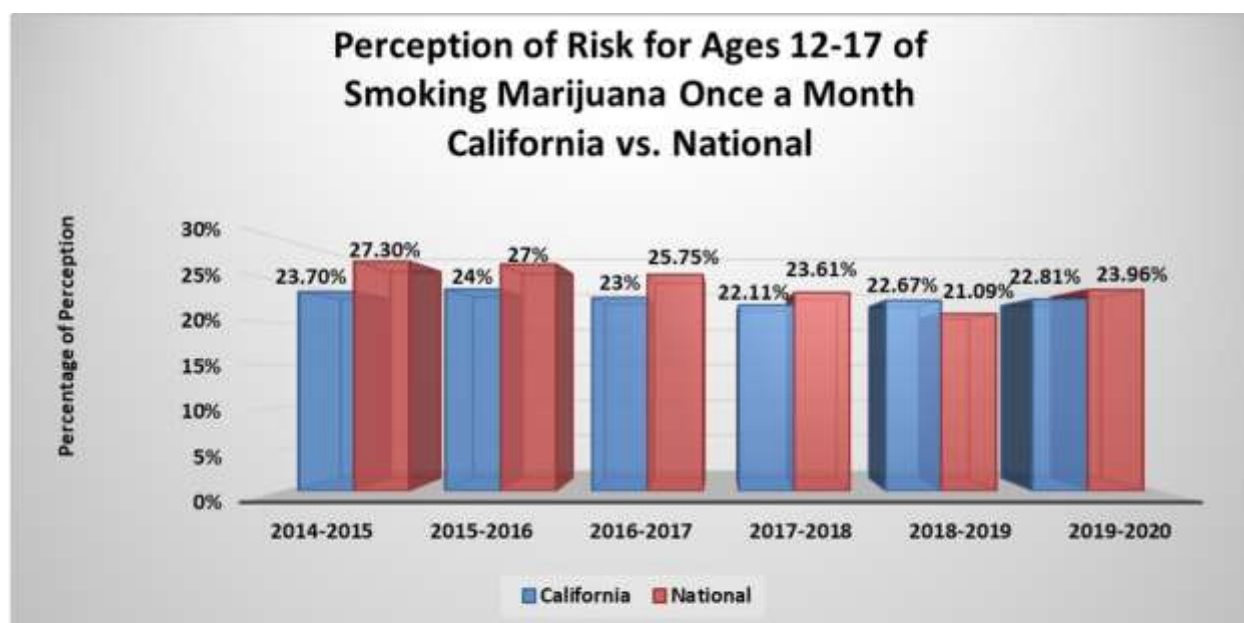
**Ed-Data:** A Partnership of the California Department of Education, EdSource and Fiscal Crisis and Management Assistance Team/California School Information Services (FCMAT/CSIS) designed to offer educators, policy makers, the legislature, parents and the public quick access to timely and comprehensive data about K-12 education in California.





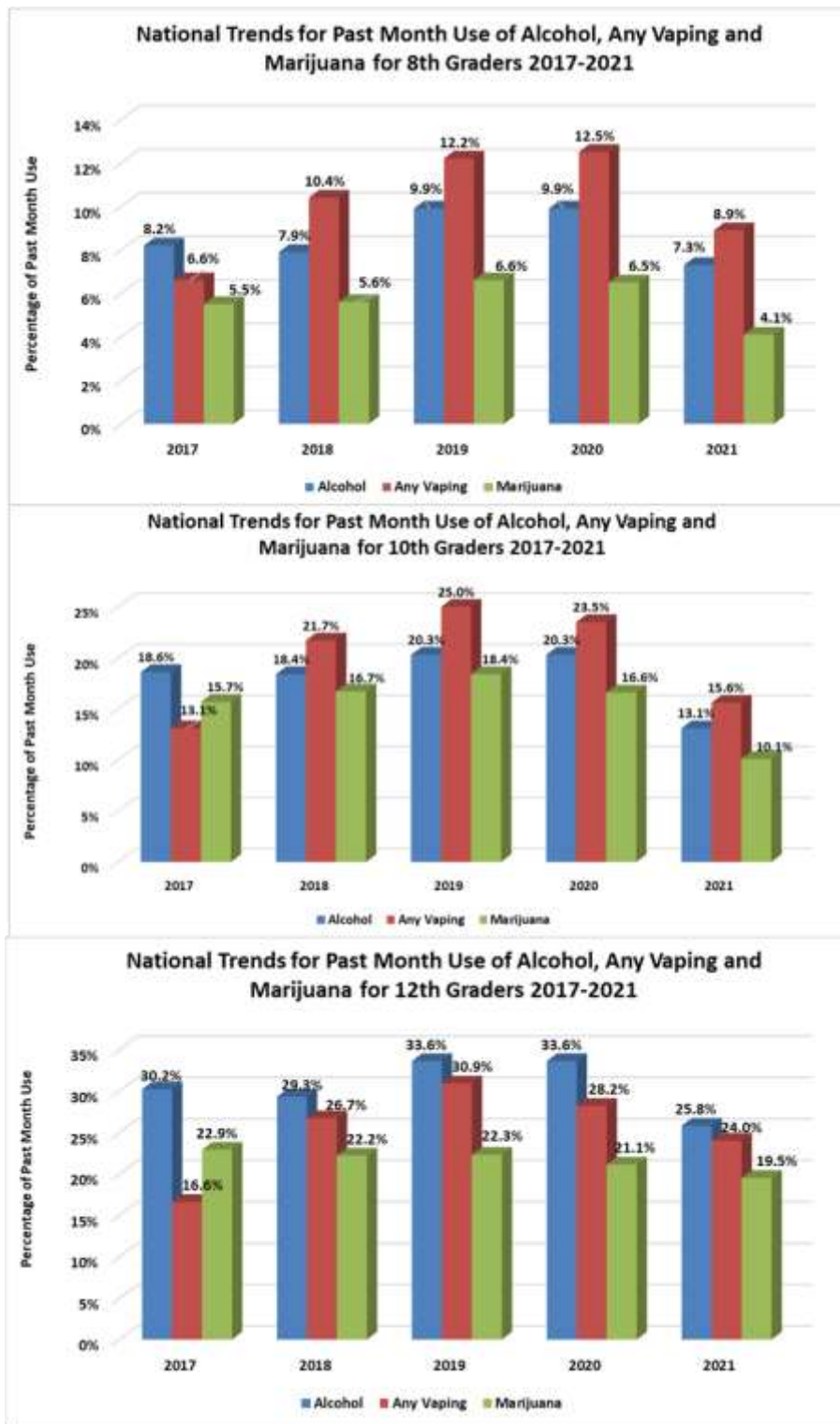
Source: Monitoring the Future study

Note: 0 for 2020 due to "Estimates not presented due to insufficient data"



Source: Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health 2014 to 2020

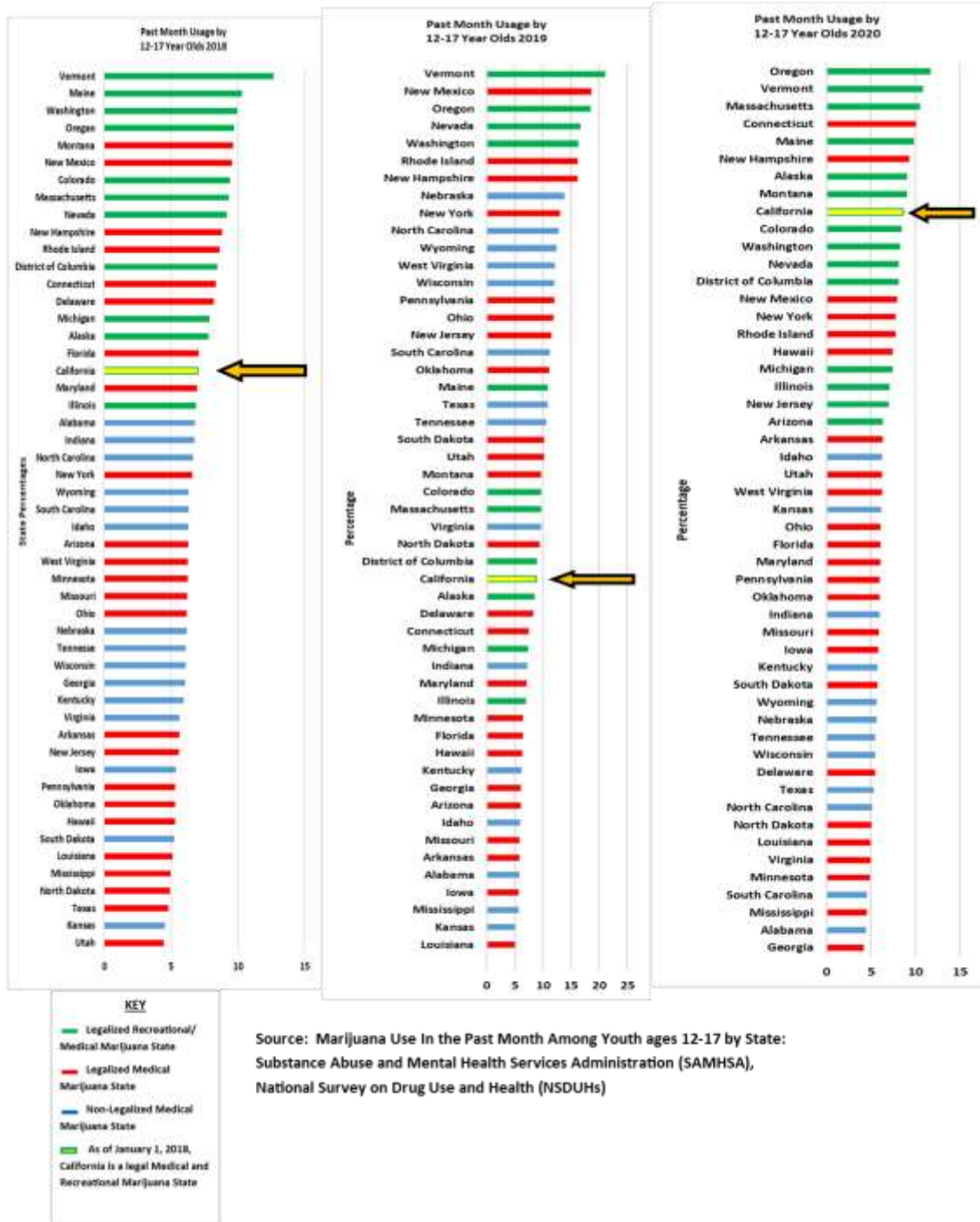
- ❖ California youth have predominantly had a lower perception of risk of smoking marijuana once a month, compared to the national average (2014-2020).



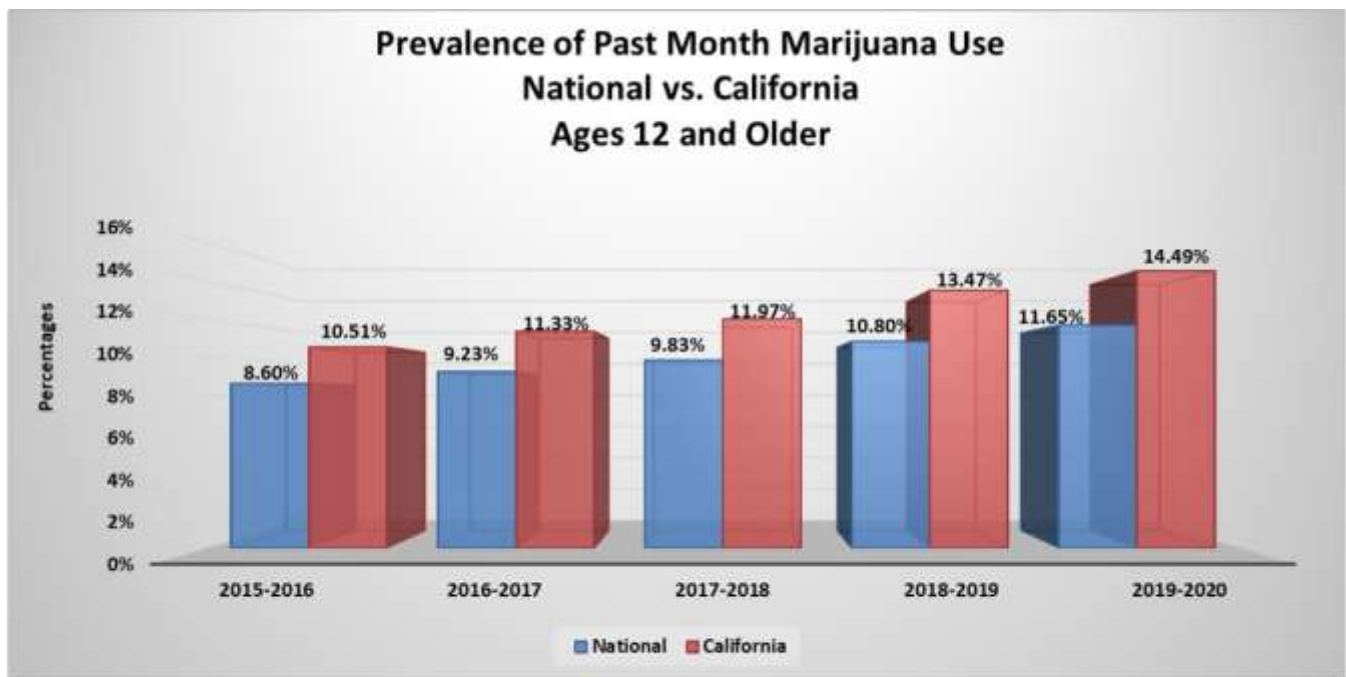
Source: Monitoring the Future Study 2022

- ❖ Nationally in 2018, vaping (any substance) surpassed alcohol and marijuana use for 8th and 10th graders.

## National Ranking by State of Past Month Use Ages 12-17, 2018-2020

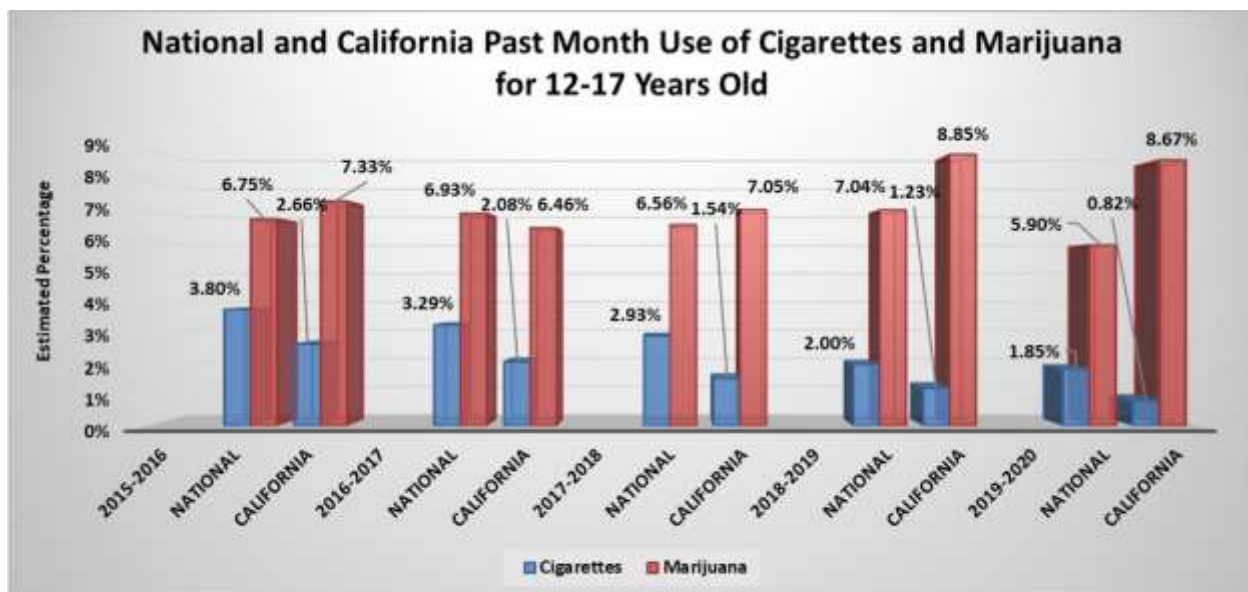


- ❖ From 2018 to 2020, California's rank increased nationally in past month usage of marijuana by 12-17 year-olds (by state).



Source: Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2020

- ❖ In California, individuals ages 12 and older, continue to have a higher rate of past month use of marijuana (2015-2020).



Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, SAMHSA, 2019 and 2020 Quarters 1 and 4.

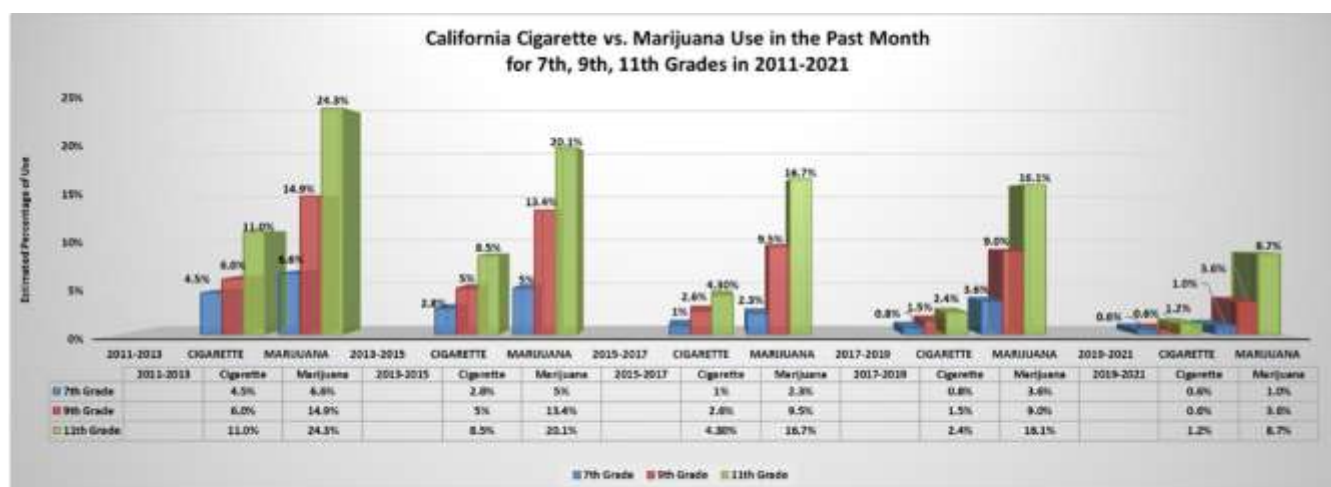
- ❖ 12 to 17 year olds continue to report using marijuana over cigarettes both nationally and in California.

## Past Month Marijuana Use by Gender and Grade, 2017-2019

California	Percent											
	Female						Male					
	0 Days	1 Day	2 Days	3-9 Days	10-19 Days	20-30 Days	0 Days	1 Day	2 Days	3-9 Days	10-19 Days	20-30 Days
Grade 7	96.6%	1.4%	0.7%	0.6%	0.3%	0.4%	96.3%	1.6%	0.6%	0.5%	0.4%	0.6%
Grade 9	89.3%	3.4%	2.2%	2.2%	1.0%	1.9%	91.1%	2.5%	1.6%	1.8%	1.0%	2.1%
Grade 11	84.6%	4.2%	3.0%	3.5%	1.8%	2.8%	83.7%	3.8%	2.5%	3.3%	1.9%	4.8%
Non-Traditional	67.2%	7.5%	4.0%	8.0%	3.2%	10.1%	76.2%	3.1%	2.9%	2.5%	1.7%	13.5%

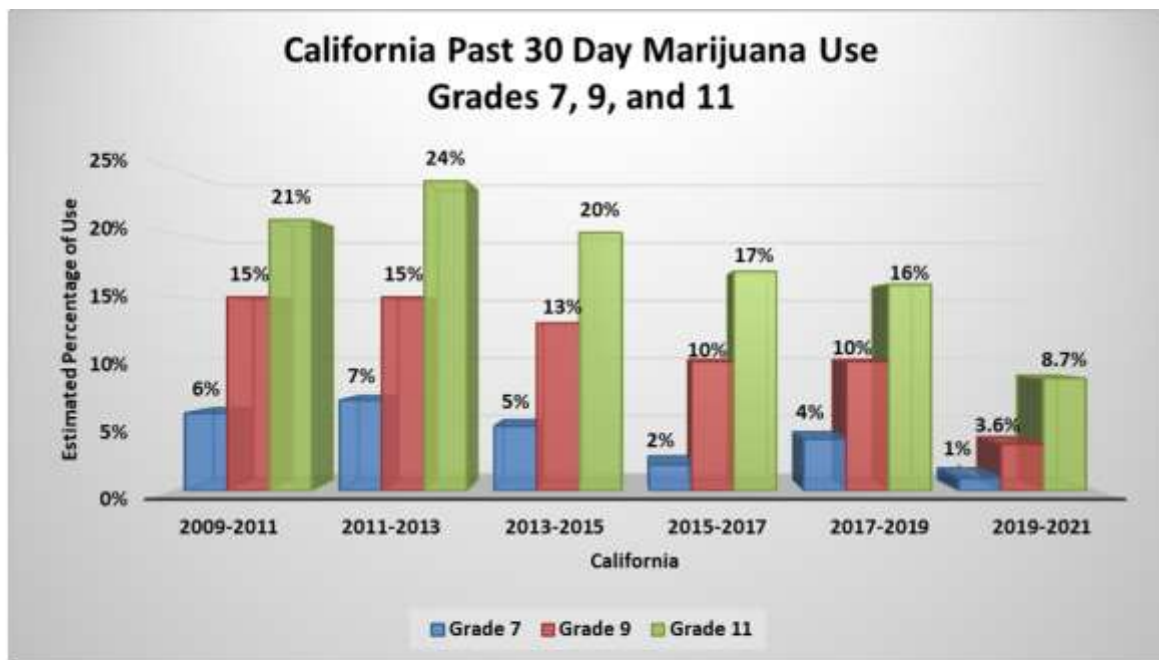
Source: The California School Climate, Health and Learning Survey (CalSCHLS) System– Query CalSCHLS

- ❖ Students enrolled in non-traditional schools show a higher prevalence of marijuana use in most categories of past month use except for of males in grade 11 (1 day and 3-9 days).



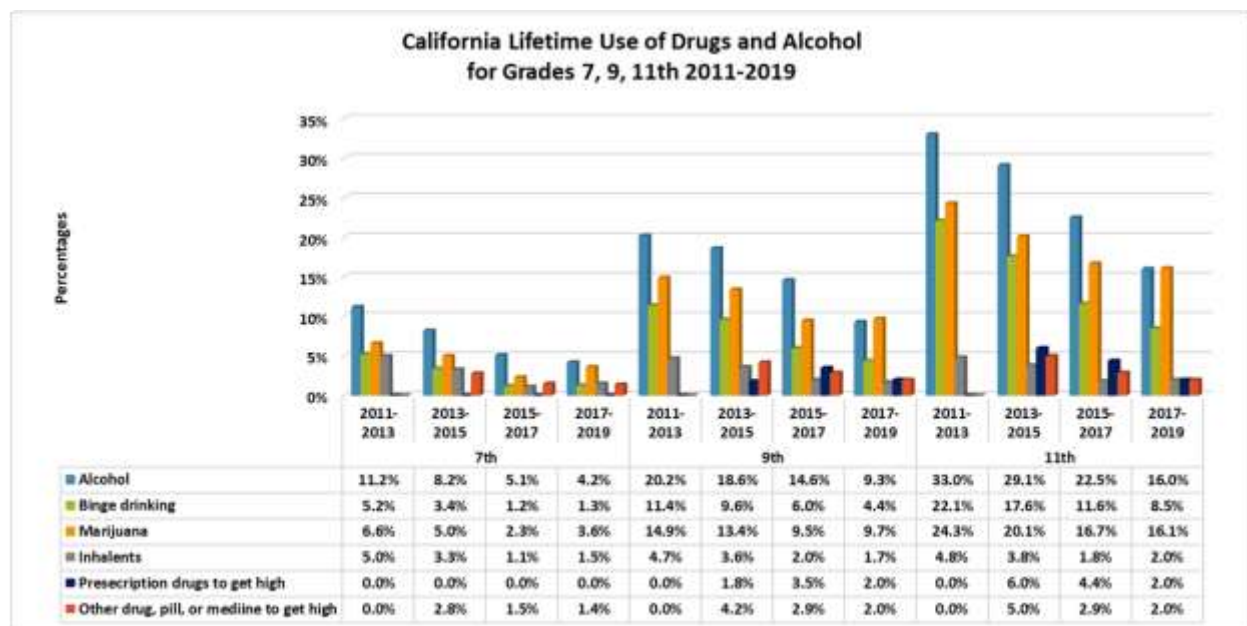
Source: California Healthy Kids Survey (CHKS). Kidsdata.org, California Student Survey (WestED) 2021





Source: California Healthy Kids Survey (CHKS), Kidsdata.org. California Student Survey for 2009-2011 through 2019-2021

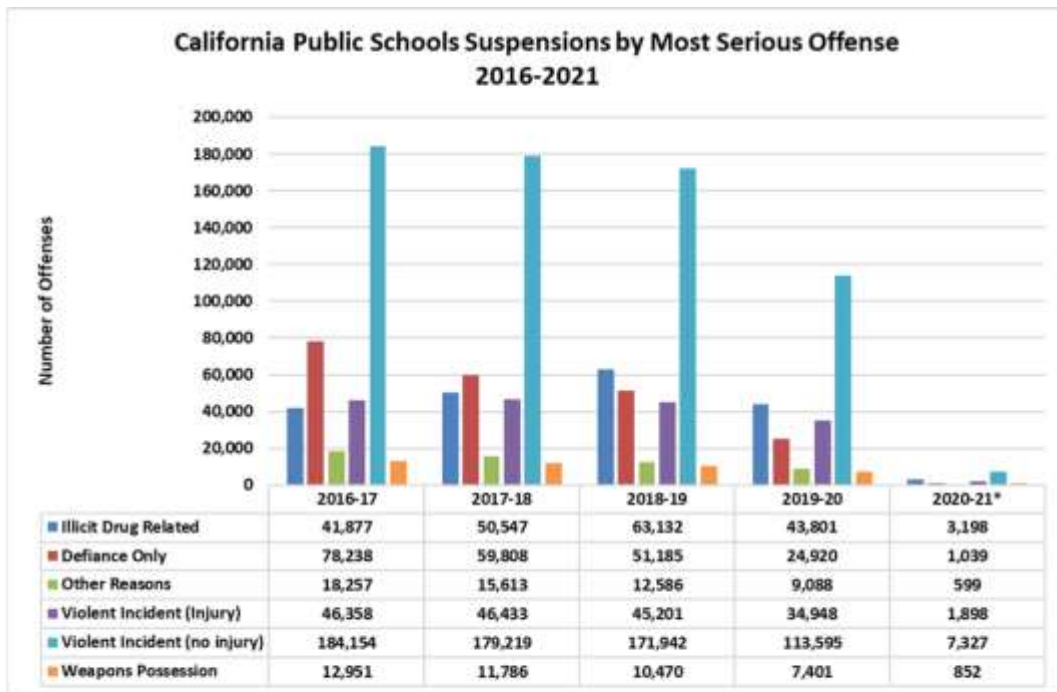
- ❖ According to CHKS, California Past 30-day marijuana use has continued to decrease since 2011-2013, in grades 7<sup>th</sup>, 9<sup>th</sup> and 11<sup>th</sup>.



Source: California Healthy Kids Survey (CHKS) Kidsdata.org California Student Survey (WestEd), 2011-2019

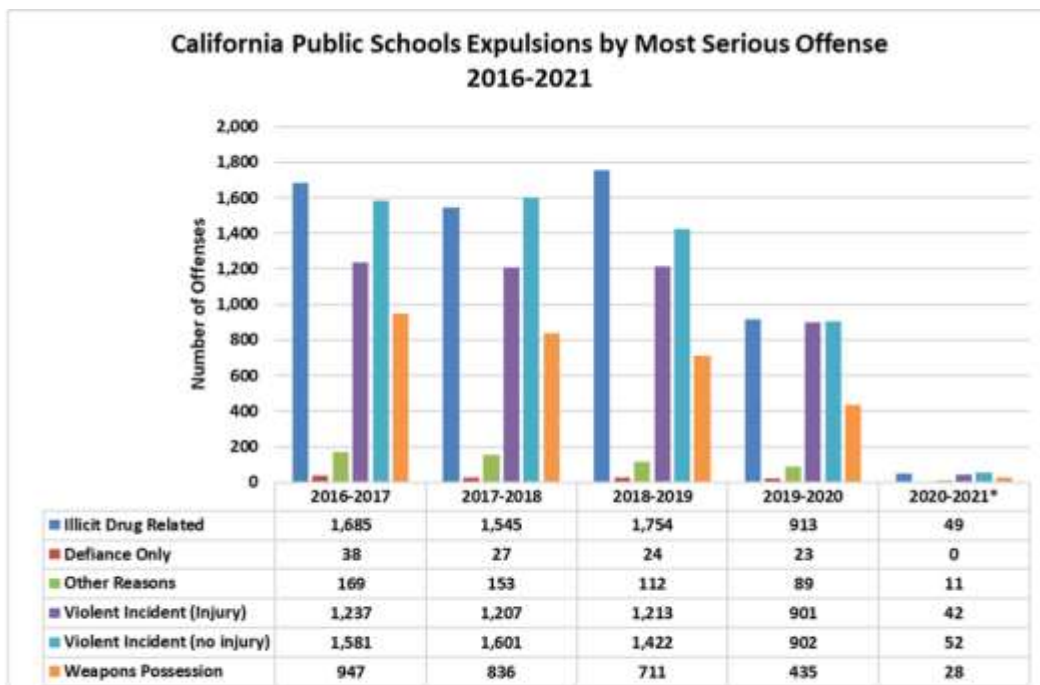
- ❖ California lifetime use of drugs and alcohol for 7<sup>th</sup>, 9<sup>th</sup> and 11<sup>th</sup> grades has been decreasing since the 2011-2013 survey period.





Source: EdData-State Profile– California 2021: Suspension Count Report (California Department of Education)

\*2020-2021 Education was delivered primarily virtually due to COVID-19.



Source: EdData-State Profile– California 2021: Suspension Count Report (California Department of Education)

\*2020-2021 Education was delivered primarily virtually due to COVID-19.

- ❖ Drugs continue to be among the leading reasons for California public school expulsions (2016-2020).

## ***SECTION FOUR: California Marijuana Use Ages 18-25***

### **Key Findings**

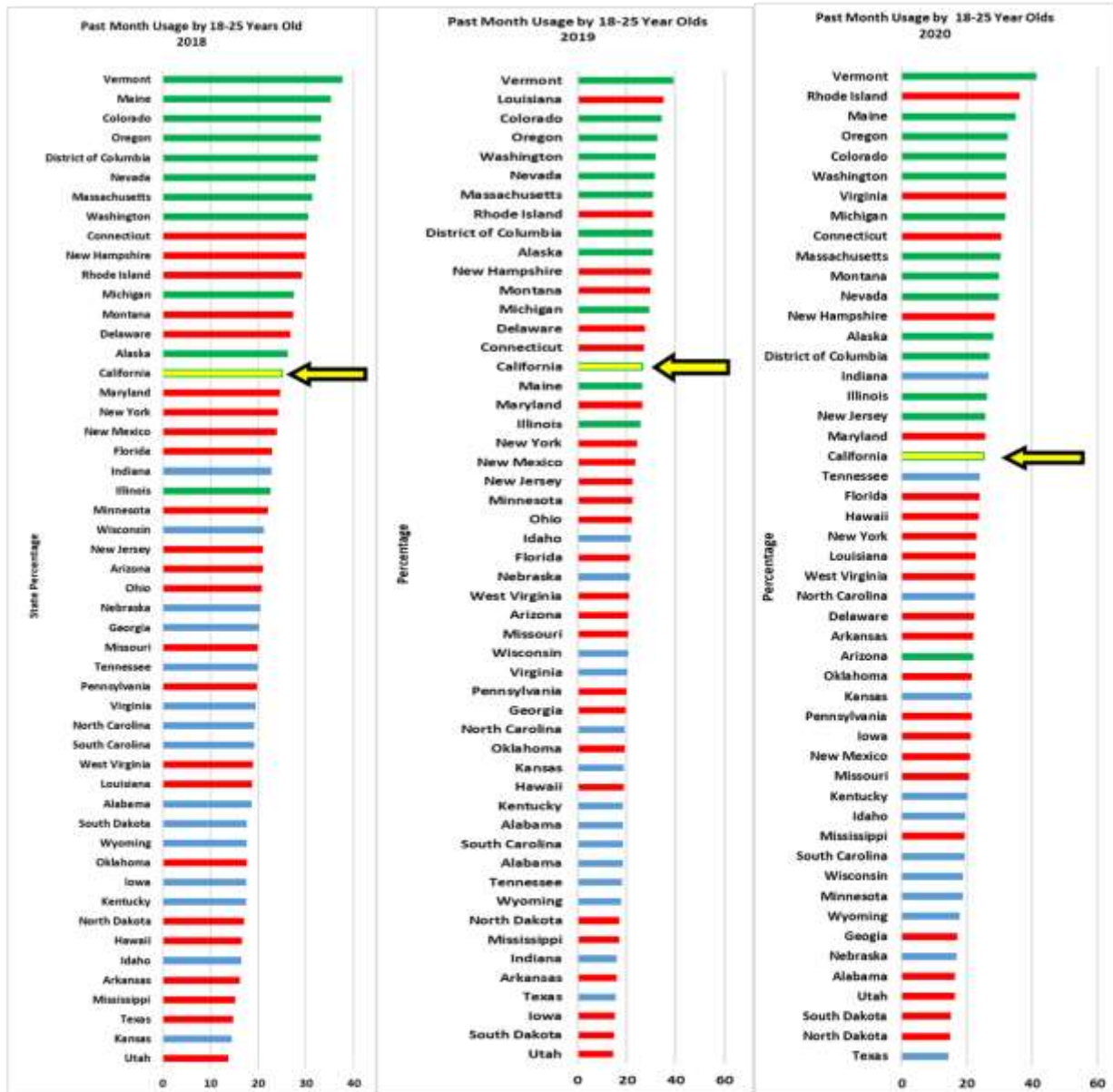
- ❖ Since 2015-2016, California's marijuana use by 18 to 25 year olds continued to surpass their use of cigarettes.

### **Definitions:**

**Substance Abuse and Mental Health Services Administration (SAMHSA):** A branch of the U.S. Department of Health and Human Services.

**National Survey on Drug Use and Health (NSDUH):** Provides annual information on tobacco, alcohol, drug use, mental health outcomes and other health-related issues in the United States associated to substance use.

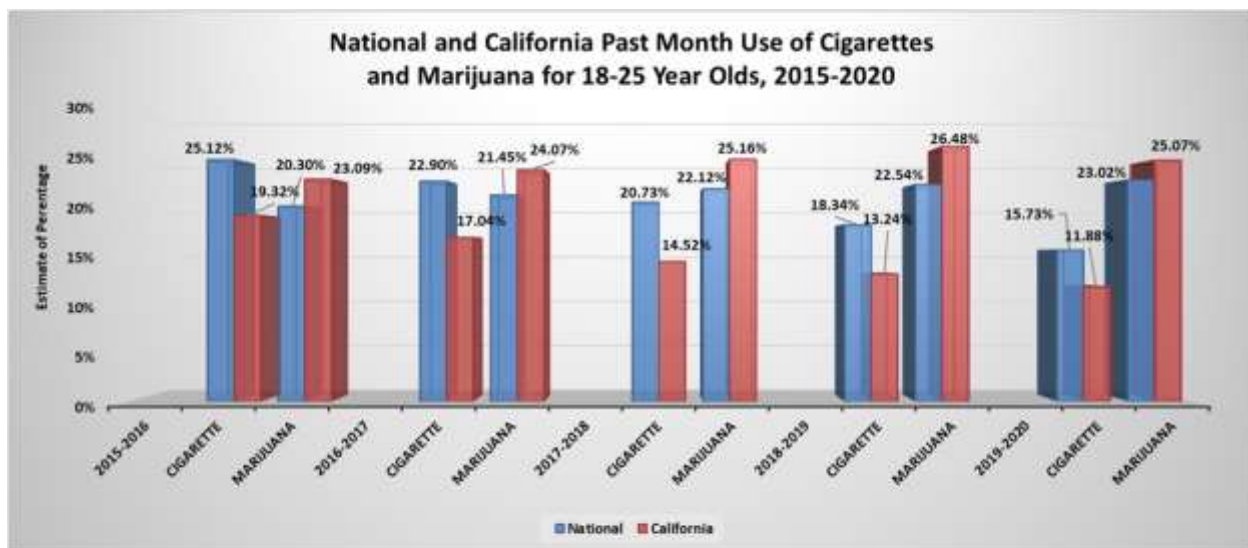
## National Ranking by State of Past Month Use Ages 18-25, 2018-2020



### KEY

- Legalized Recreational/ Medical Marijuana State
- Legalized Medical Marijuana State
- Non-Legalized Medical Marijuana State
- As of January 1, 2018, California is a legal Medical and Recreational Marijuana State

Source: Marijuana Use In the Past Month Among ages 18-25 by State: Substance Abuse and Mental Health Services Administration (SAMHSA), National Survey on Drug Use and Health (NSDUHs)



Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, SAMHSA, 2019 and Quarters 1, and 4, 2020

- ❖ Since 2015-2016, California's marijuana use by 18 to 25 year olds continued to surpass their use of cigarettes.

## *SECTION FIVE: California Marijuana Use Ages 26 and Older*

### **Key Findings**

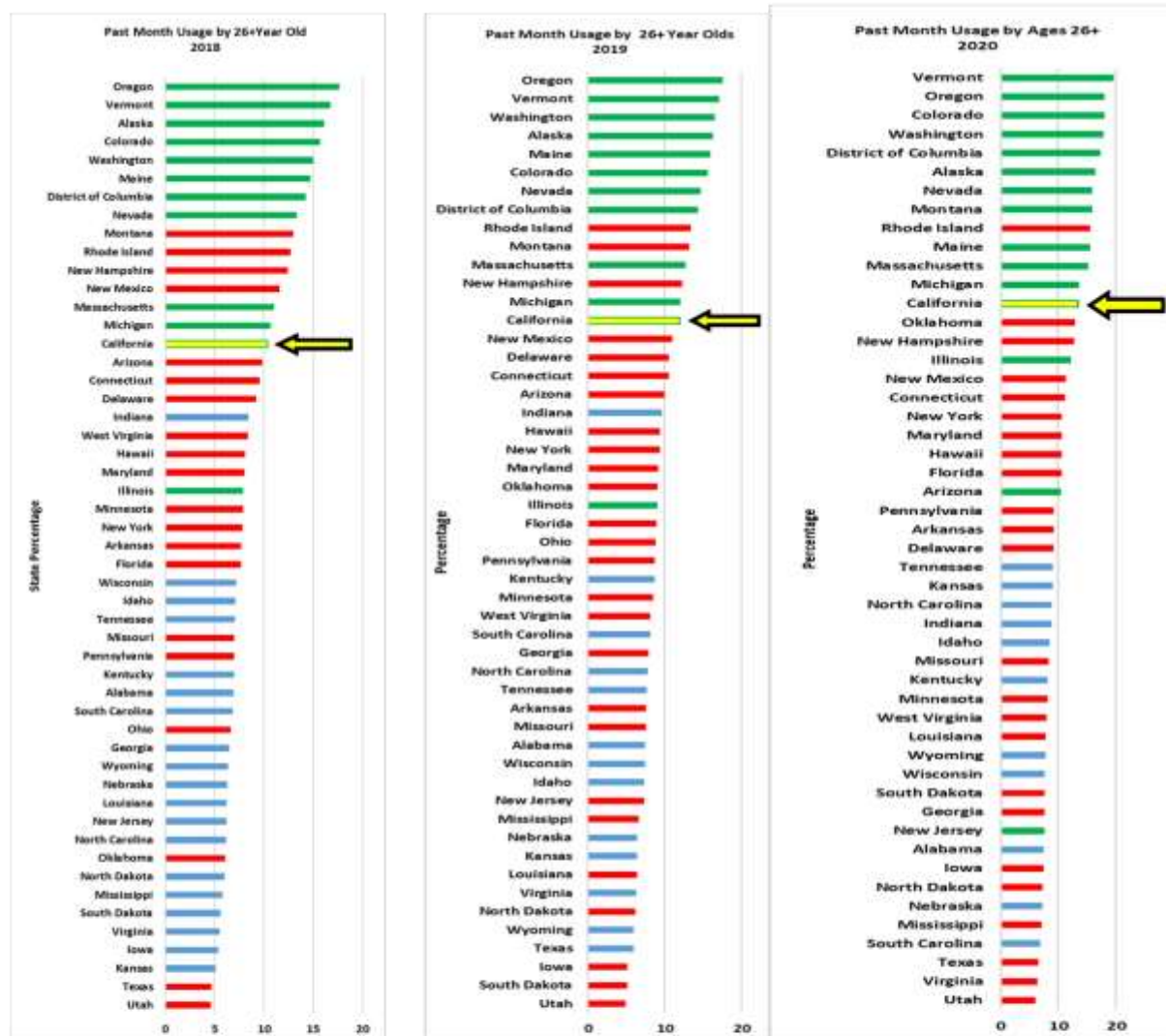
- ❖ In 2019-2020, California's marijuana and cigarette use for individuals 26 years and older was lower than the national average.

### **Definitions:**

**Substance Abuse and Mental Health Services Administration (SAMHSA):** A branch of the U.S. Department of Health and Human Services.

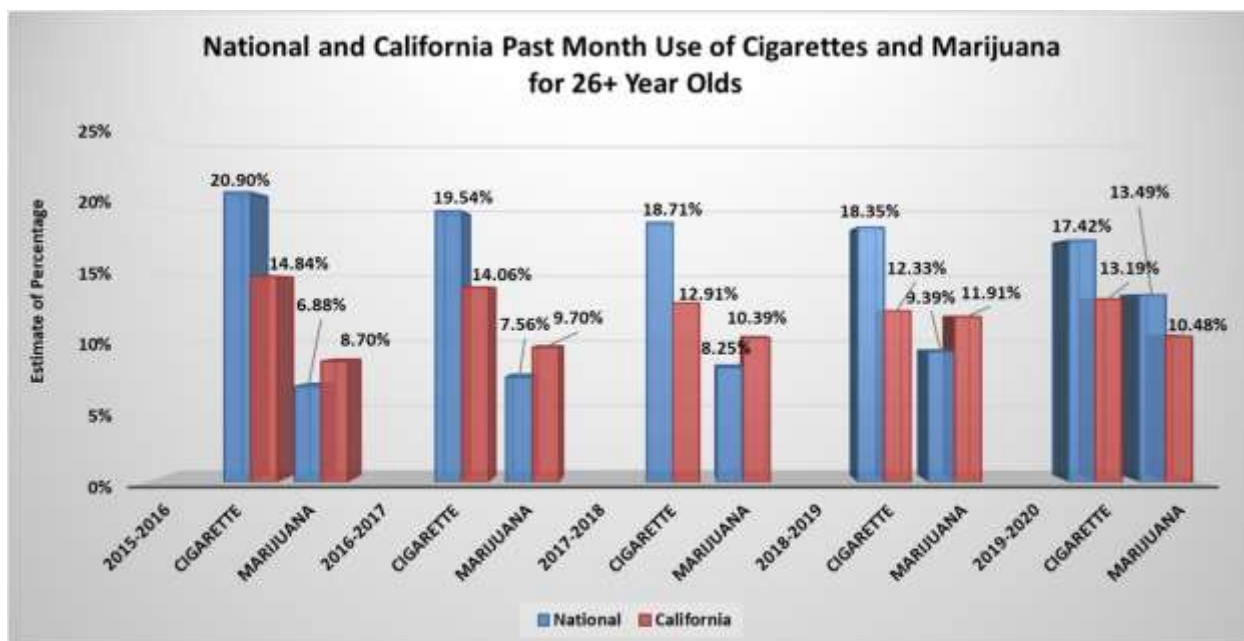
**National Survey on Drug Use and Health (NSDUH):** Provides annual information on tobacco, alcohol, drug use, mental health outcomes and other health-related issues in the United States associated to substance use.

## National Ranking by State of Past Month Use Ages 26 and Older, 2018-2020



Source: Marijuana Use in the Past Month Among ages 26 and Older by State: Substance Abuse and Mental Health Services Administration (SAMHSA), National Survey on Drug Use and Health (NSDUHs)





Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, SAMHSA, 2019 and 2020 Quarters 1 and 4.

- ❖ In 2019-2020, California's marijuana and cigarette use for individuals 26 years and older was lower than the national average.

## *SECTION SIX: California Arrests for Drug Sales, DUI, Possession of Cannabis While Driving and Arrest Data*

### **Key Findings**

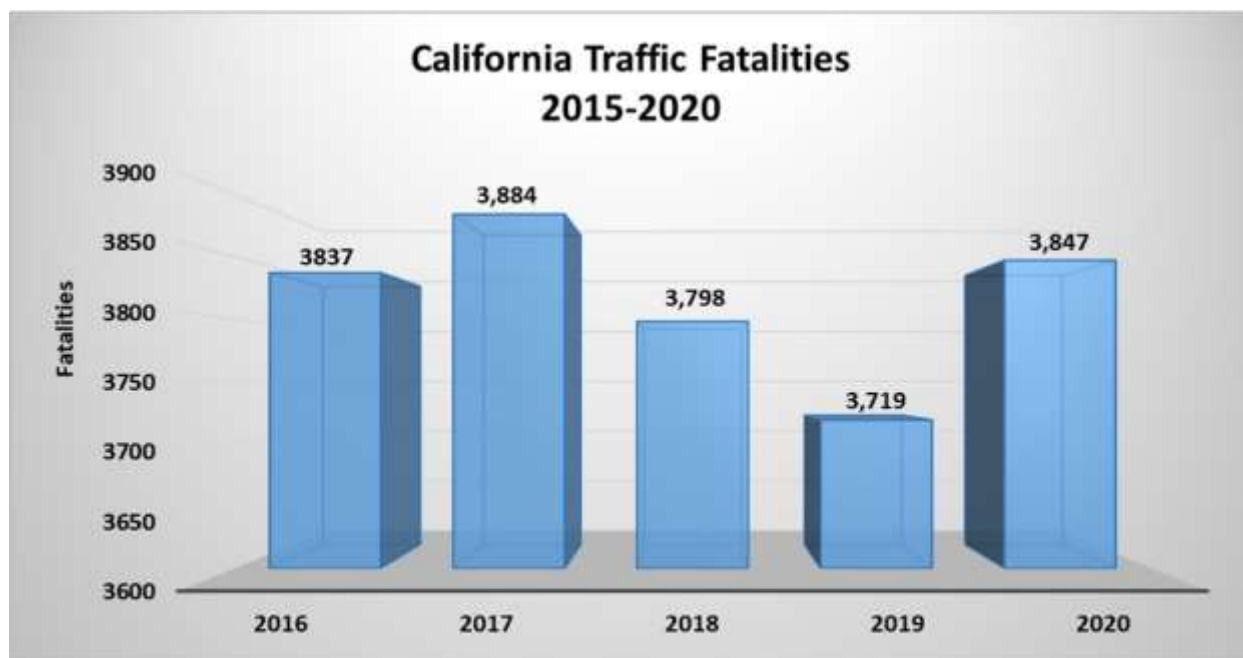
- ❖ In California, the percentage of driver fatalities testing positive for legal and/or illegal drugs increased from 43% in 2018 to 50% in 2019.
- ❖ In California, juvenile arrests in all categories have continued to decrease from 2015 to 2020.
- ❖ In California, arrests for the sale of marijuana has decreased from 2015 (8,368) to 2020 (1,274).

### **Definitions:**

**California Highway Patrol (CHP):** A state law enforcement agency who has jurisdiction over all California highways and have jurisdiction over city roads and can conduct law enforcement procedures.

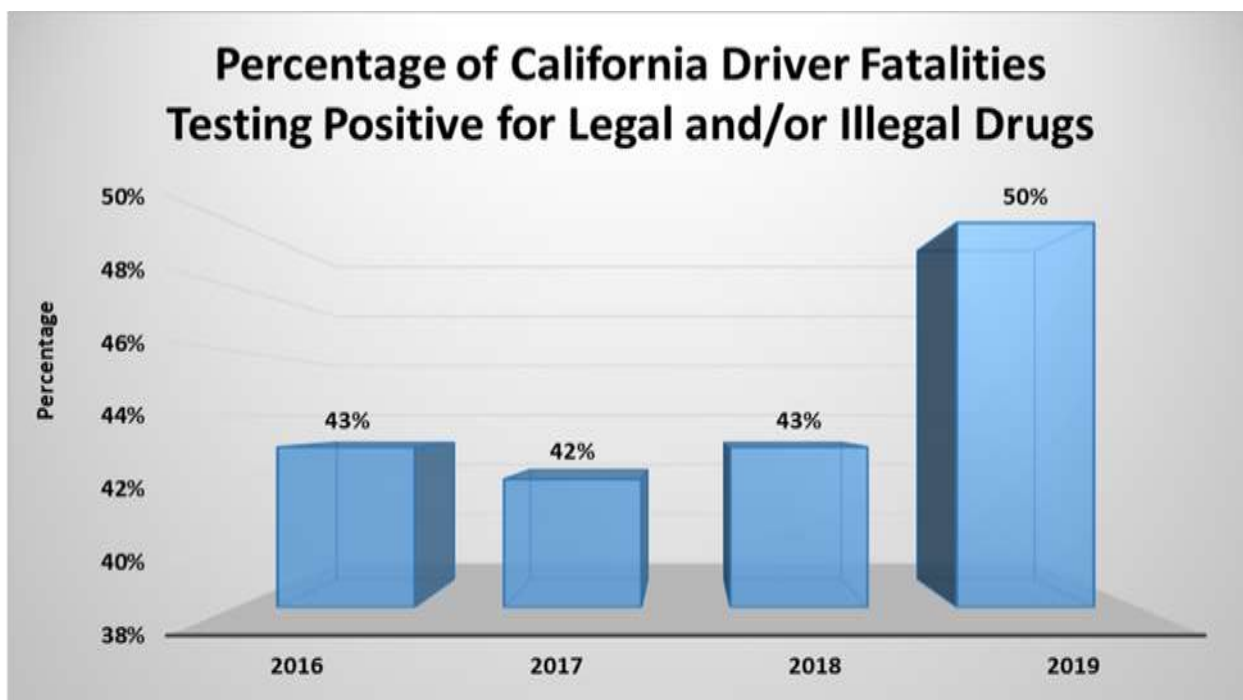
**Federal Bureau of Investigations (FBI), Uniform Crime Reporting (UCR), U.S. Department of Justice (USDOJ), Crime Data Explorer (CDE):** The FBI's UCR program generates reliable statistics for use in law enforcement and also provides information for students of criminal justice, researchers, the media and the public. The CDE is an interactive online tool used to understand the data collected by the UCR.

**California Office of Traffic Safety:** OTS takes a leadership role in efforts to make California roadways safe for all users. Through thoughtful, forward-thinking, and data-driven selection of grants to local and state agencies, OTS provides an effective means of reducing fatalities, injuries, and economic losses resulting from crashes.



Source: California Annual Report 2020, California Office of Traffic Safety.

Note: 2020 data is a projected number.



Source: California Annual Report 2020, California Office of Traffic Safety

- ❖ In California, the percentage of driver fatalities testing positive for legal and/or illegal drugs increased from 43% in 2018 to 50% in 2019.

## **California Offenses Involving Driving Under the Influence of Any Drug and Possession of Cannabis While Driving, 2014-2021**

### **CALIFORNIA VEHICLE CODE 23222(B)-**

(1) Except as authorized by law, a person who has in their possession on their person, while driving a motor vehicle upon a highway or on lands, as described in subdivision (c) of Section 23220, a receptacle containing cannabis or cannabis products, as defined by Section 11018.1 of the Health and Safety Code, which has been opened or has a seal broken, or loose cannabis flower not in a container, is guilty of an infraction punishable by a fine of not more than one hundred dollars (\$100).

(2) Paragraph (1) does not apply to a person who has a receptacle containing cannabis or cannabis products that has been opened, has a seal broken, or the contents of which have been partially removed, or to a person who has a loose cannabis flower not in a container, if the receptacle or loose cannabis flower not in a container is in the trunk of the vehicle.

### **CALIFORNIA VEHICLE CODE 23152(F)-**

It is unlawful for a person who is under the influence of any drug to drive a vehicle.

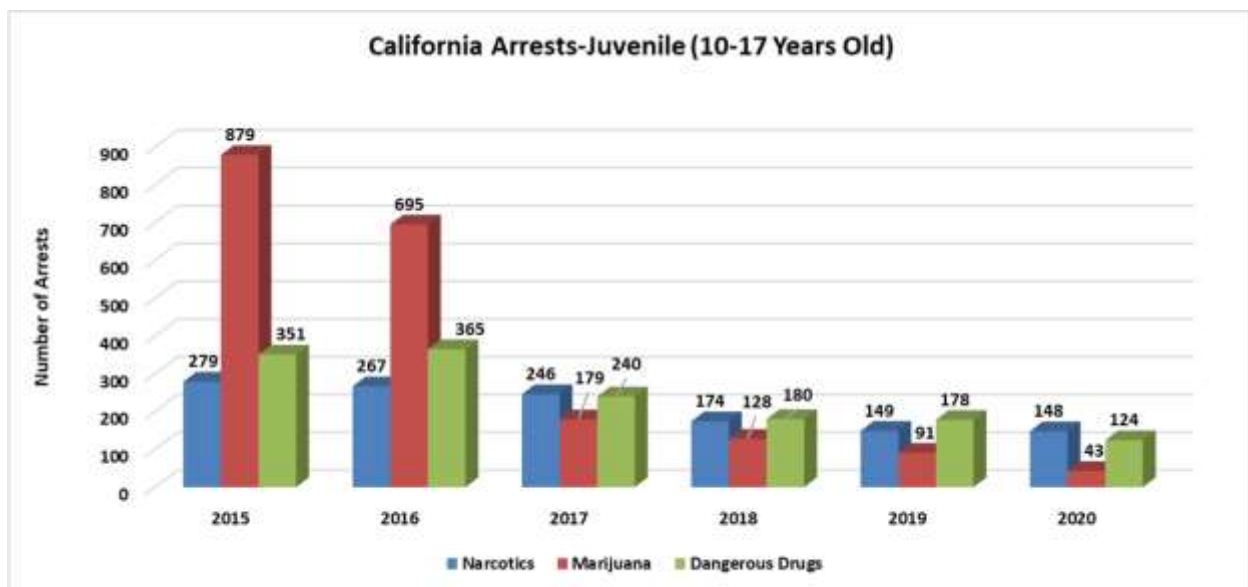
Statewide CHP Violation Counts	23152(f) CVC Total	23152(f) CVC Arrests	23152(g) CVC Total	23152(g) CVC Arrests	23222(b) CVC Total	23222(b) CVC Arrests
2014	No Data	No Data	No Data	No Data	1,922	436
2015	No Data	No Data	No Data	No Data	1,573	338
2016	No Data	No Data	No Data	No Data	1,255	223
2017	No Data	No Data	No Data	No Data	289	28
2018	No Data	No Data	No Data	No Data	1,274	67
2019	4,277	3,750	1,258	1,128	1,415	162
2020*	5,233	4,459	1,365	1,183	1,422	159
2021*	4,589	3,919	1,313	1,141	1,181	122

Source: CHP Dashboard Reporting

\*Indicates provisional data as of June 2022.

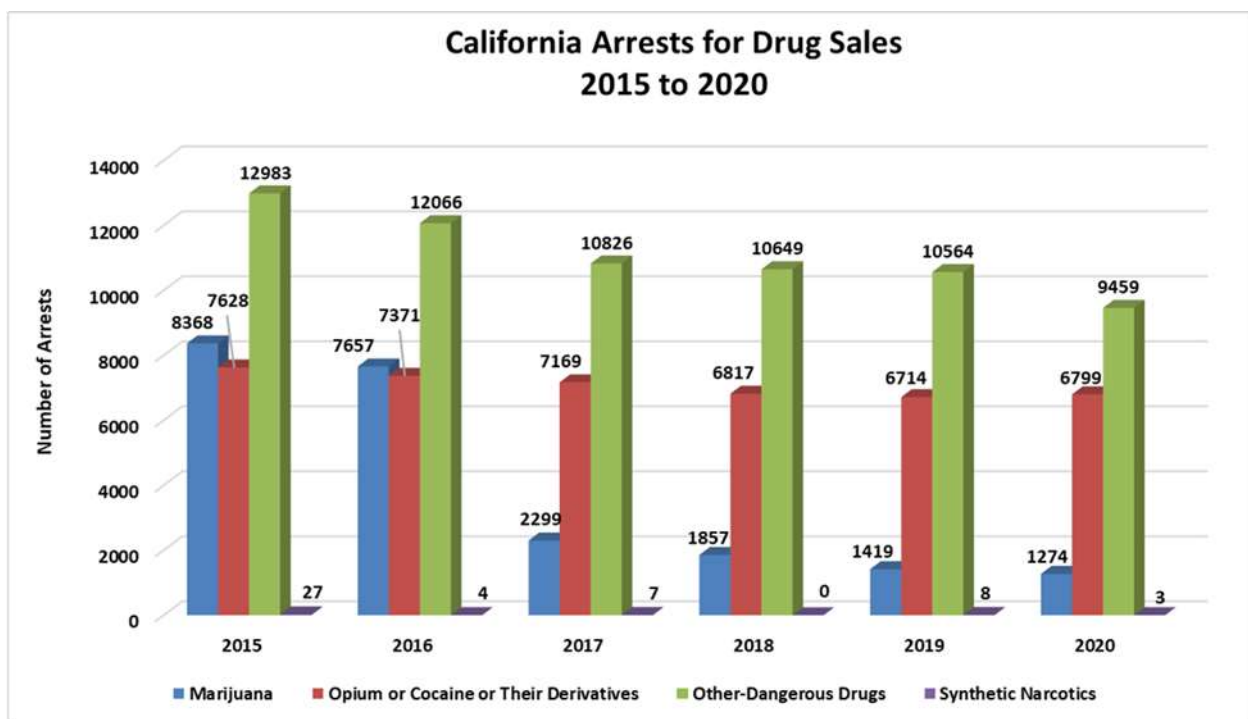
All data provided above reflects CHP citations and does not reflect Allied Agency.

Note: 23152(F)CVC commenced July 1st, 2018 therefore no data was collected prior to 2019.



Source: Uniform Crime Reporting, Federal Bureau of Investigation, U.S. Department of Justice, Crime Data Explorer

- ❖ In California, juvenile arrests in all categories have continued to decrease from 2015 to 2020.



Source: Uniform Crime Reporting, Federal Bureau of Investigations, U.S. Department of Justice, Crime Data Explorer

- ❖ In California, arrests for the sale of marijuana has decreased from 2015 (8,368) to 2020 (1,274).

# 2021 Adult Arrestee Drug Use in the San Diego Region



JULY 2022

Research findings from the Criminal Justice Clearinghouse

## Background

This CJ Bulletin, 2021 Adult Arrestee Drug Use in the San Diego Region, is one in a series highlighting findings from data collected as part of the San Diego County Substance Abuse Monitoring (SAM) program. As part of this project, arrestees are approached (using a random sampling method) within 48 hours of their booking into jail. If the arrestee is available and willing to participate in a confidential interview, she/he/they is/are asked a series of questions related to her/his/their drug use history and to provide a urine sample for drug testing. In 2021, 227 male arrestees were interviewed at the Central Jail and 80 female arrestees at Las Colinas. Of these 307 arrestees, 305 (99%) completed the interview and provided a valid urine sample for analysis. At the end of the interview, 7% responded affirmatively when asked in a new question added in 2021 if they remembered doing this interview before.

Figure 1

**Greater percentage of adult males testing positive for a drug in 2021**



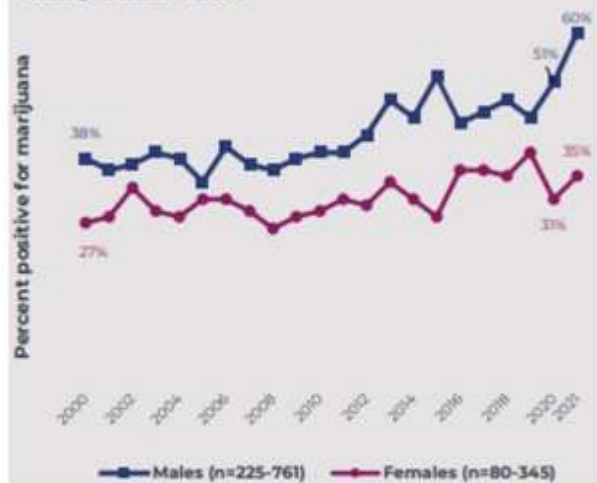
Note: Prior to 2013 and since 2015, percent positive was based on marijuana, meth, cocaine, opiates, and PCP. In 2013 and 2014, the PCP test was replaced with a test for alcohol.

Source: SANDAG SAM Program, 2021



Figure 4

### Three in five males test positive for marijuana in 2021



Source: SANDAG SAM Program, 2021

### Takeaway

Regardless of why someone is booked into jail, substance use is an issue for many arrestees, with the majority testing positive for at least one drug. Among polydrug users, meth and marijuana were used more than any other drug combination. Almost two in three arrestees testing positive for marijuana also tested positive for another drug.

### How does history of drug use vary by drug type?

**Marijuana** was the drug most commonly tried by arrestees (89%) and also was tried at the earliest age (15.1) – about five years earlier than any other drug. Those who used it in the past 30 days used it an average of 18.0 days (Table 1). Males were significantly more likely than females to report using marijuana in the past 12 months (78% versus 65%) and to have tried it for the first time at an earlier age (14.5 versus 16.9).

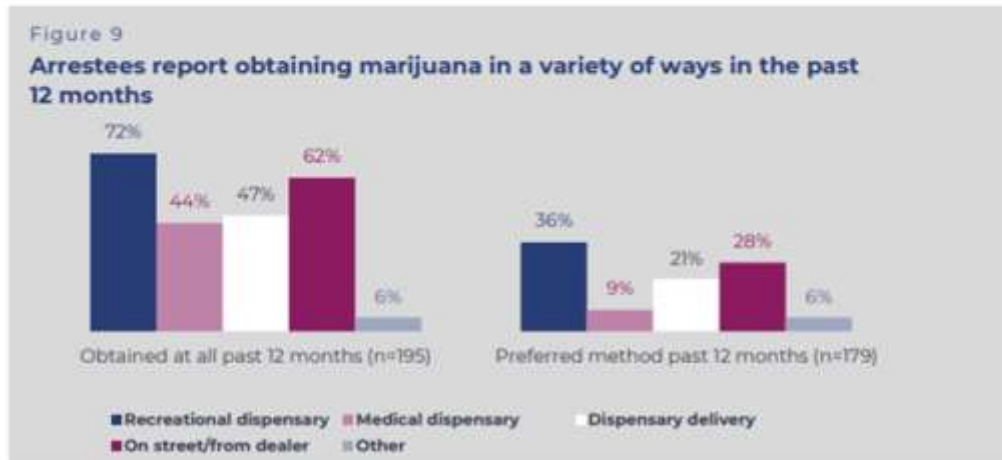
#### Self-reported drug use history varies by drug

How many have ever tried?	What was the average age at first use?	Of those who've tried it, how many used in the last year?	Of those who used in the past 30 days, how many days did they use on average?
89% marijuana	15.1 marijuana	74% marijuana	18.0 marijuana
63% meth	20.9 meth	81% meth	18.1 meth
61% cocaine	19.9 cocaine	27% cocaine	4.0 cocaine
31% heroin	22.4 heroin	46% heroin	12.4 heroin
27% crack	21.8 crack	25% crack	9.5 crack

Source: SANDAG SAM Program, 2021



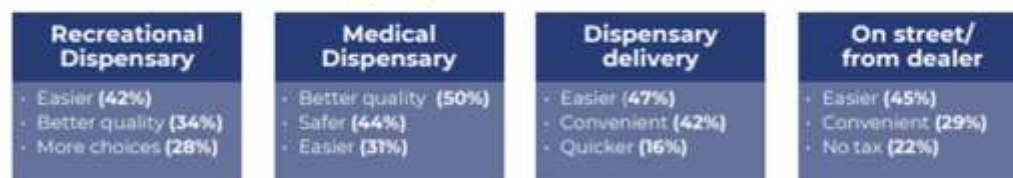
- Around two-thirds (68%) of arrestees reported they obtained marijuana in more than one way in 2021, with 32% saying they had just one preferred way. Of those who said they just obtained it only one way, the most common was illegally on the street (42%), followed by a recreational dispensary (32%), medical dispensary (18%), and delivery from a dispensary (8%).
- As Figure 9 shows, the two most common ways to obtain marijuana over the past 12 months (regardless of how many methods were used) were at a recreational dispensary (72%) and on the street (62%). When asked their preferred method, 36% said a recreational dispensary, followed by 28% saying on the street.



Source: SANDAG SAM Program, 2021

- When asked the reasons behind their preferred method, among the top choices for recreational and medical dispensaries, and dispensary delivery, was that it was easier or had better quality. Other most common choices were that it was safer and convenient. Those who preferred buying it on the street most often noted it was easier, convenient, and less expensive because there was no tax (Figure 10).

**Figure 10**  
**Preferred means of obtaining marijuana most often tied to convenience and ease**



Source: SANDAG SAM Program, 2021

For Full SANDAG CJ Bulletin, 2021 Adult Arrestee Drug Use in the San Diego Region, July 2022, please visit: [https://www.sandag.org/uploads/publicationid/publicationid\\_4856\\_32446.pdf](https://www.sandag.org/uploads/publicationid/publicationid_4856_32446.pdf)

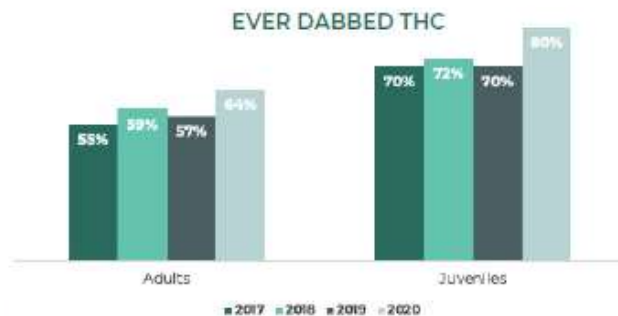


## MARIJUANA USE AMONG SAN DIEGO ARRESTEES: FOUR YEARS OF DATA POST-PROPOSITION 64

In 2016, with the passage of Proposition 64 (which legalized the recreational use of marijuana in California for individuals 21 years of age and older), a marijuana addendum was added to Substance Abuse Monitoring (SAM) questionnaires. These additional questions related to how marijuana was used, marijuana use and driving, and the perceived benefits of use, among other topics. This CJ Flash highlights results from 2020, as well as comparisons to 2017 through 2019 when noteworthy.<sup>1</sup>

### Highlight 1

Dabs are concentrated doses of cannabis made by extracting THC using a solvent. The result is a sticky oil that is heated on a hot surface (such as a nail) and inhaled. In 2020, four-fifths (80%) of juveniles said they had ever dabbled THC, significantly more than adults (64%). The use of dabbing is a concern because of the higher concentration of the drug that can be consumed and how quickly the high can happen, as well as the risk of explosions when THC is extracted for dabbing.



### Highlight 2

Almost nine in ten (89%) juveniles reported ever vaping THC in 2020, as did 71% of adults. These percentages were higher than those reported in the three previous years. In 2019, the U.S. Food and Drug Administration issued warnings related to vaping any products that contain THC.



<sup>1</sup> In 2020, the marijuana addendum was completed with 229 individuals (194 adults and 35 juveniles), in 2019 with 357 individuals (283 adults and 74 juveniles), in 2018 with 366 individuals (277 adults and 89 juveniles), and in 2017 with 378 (301 adults and 77 juveniles). More information is available about the SAM program at [sandag.org/cj](https://sandag.org/cj).

### Highlight 3

Two-thirds (66%) of adults and 44% of juveniles in 2020 said they think the potency of marijuana has increased since they started using it. Adults were significantly more likely to report marijuana had gotten stronger over time, which is not surprising considering they have most likely been using it for a longer period of time.

Think the potency of marijuana has increased since they started using it



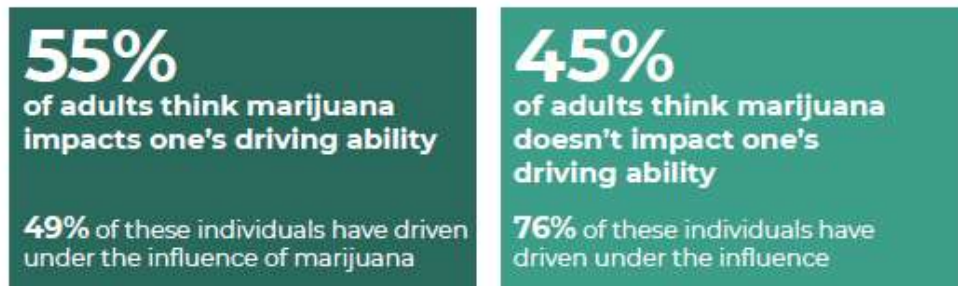
### Highlight 4

Around 1 in 7 arrestees (11%) said they use marijuana with another drug, most often meth (54%).



### Highlight 5

In 2020, 55% of adult arrestees thought that marijuana could impact someone's driving ability and 45% thought it didn't. Of the adults who thought marijuana could impact one's driving ability, 49% reported driving under the influence. Of those who thought it didn't impact one's driving, 76% had driven under the influence.







## SUBSTANCE USE AND OTHER RISK FACTORS OF YOUTH BOOKED IN 2020

As part of the SANDAG Substance Abuse Monitoring (SAM) program, adults and youth are interviewed in local detention facilities within 48 hours of being booked. In addition to answering confidential and anonymous questions regarding their drug use history and other risk factors, a voluntary urine sample that cannot be tied back to any particular individual is also requested which enables the compilation of regional drug use trends over time. With the release of data from the youth interviews that were conducted in 2020,<sup>1</sup> this CJ Flash highlights some of the key findings from this most recent report.

### Highlight 1

Three in five (60%) of the youth interviewed in 2020 tested positive for at least one drug,<sup>2</sup> with marijuana being the drug of choice (56% positive). As Table 1 shows, more youth had tried alcohol, compared to marijuana, but more youth reported marijuana was the first drug they had ever tried. Additionally, the average age of first use for marijuana was lower, a greater percentage had used it in the past 30 days, and of those who had used it in the past month, the frequency of use was greater. Youth were also more likely to report that marijuana was "very easy" or "easy" to obtain and to perceive less harm associated with its use.

Table 1

**Self-Reported Use and Youth Perception of Alcohol and Marijuana, 2020**

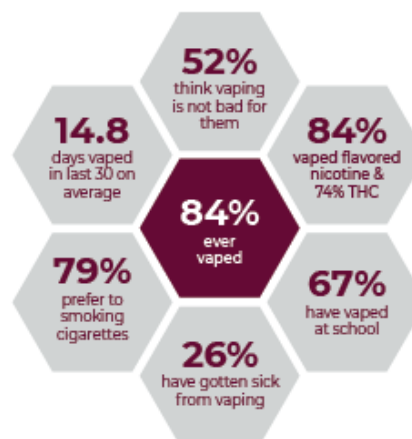
	Alcohol	Marijuana
Ever tried	94%	88%
First substance ever used	38%	46%
Average age first use	12.0	11.6
Used in past 30 days (if ever used)	64%	80%
Average number of days used in past 30 (if used)	8.1	18.6
Perceive as "very easy" or "easy" to obtain	74%	100%
Perceive as "extremely" or "very" bad for users	36%	20%

### Highlight 2

Vaping, or e-cigarettes, involve a liquid being heated into an aerosol that the user can inhale. Vaping has increased dramatically over the past five years and as the U.S. Surgeon General has noted,<sup>3</sup> youth today are more likely to vape than adults and vape than smoke cigarettes. In 2020, 84% of the youth interviewed said they had ever vaped, most often flavored nicotine, but also THC. Over three-quarters (79%) said they prefer vaping to smoking cigarettes, two-thirds (67%) said they had vaped at school, around one-quarter (26%) said they had gotten sick from vaping, and just over half (52%) said vaping was "not at all" or "only a little bit" bad for them. On average, the youth who had vaped said they did so about every other day (mean of 14.8 days in the past 30).

Figure 1

**Self-Reported Vaping History and Youth Perception of Vaping, 2020**



<sup>1</sup> The first half of the SAM interviews in 2020 were conducted prior to the stay-at-home order and the second half were able to be conducted virtually to ensure the safety of the youth and project staff. It should also be noted that this methodological change, as well as new policies that promoted alternatives to detention that limited who could be booked into Juvenile Hall should be considered when reviewing these results and how they may be different from prior years. A total of 50 youth was interviewed and provided a urine sample for testing in 2020.

<sup>2</sup> The drugs tested for included marijuana, opiates, cocaine/crack, methamphetamine, and PCP.

<sup>3</sup> For more information about vaping and the risks of e-cigarettes, visit <https://e-cigarettes.surgeongeneral.gov/>

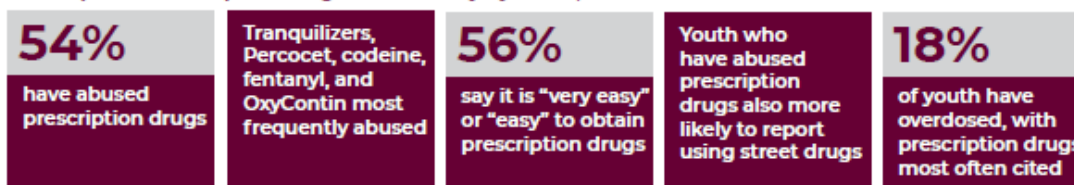


## Highlight 3

As Figure 3 shows, just over half (54%) of the youth interviewed reported ever abusing prescription drugs. Of these 27 youth who said they had, the most commonly abused prescription drugs included tranquilizers (e.g., Xanax, Valium, Rophypnol/Roachas), followed by Percocet, codeine, fentanyl, and OxyContin. Fifty-six percent (56%) said it was "very easy" or "easy" to obtain the drugs and those who reported abusing prescription drugs were also significantly more likely to report using street drugs. In addition, almost one in five (18%) said they had ever overdosed on a drug (up from 9% in 2019), with prescription drugs most often cited for the overdose. Five of the nine youth who had ever overdosed also said they had been given naloxone.

Figure 3

Self-Reported Prescription Drug Abuse History by Youth, 2020



## Highlight 4

With fewer youth being detained, it is important to understand from a prevention and intervention point of view the underlying risk factors that these youth have. A review of the risks reported by interviewed youth included a family history of justice system involvement and contact with the Child Welfare System (CWS), running away from home, and foster care placement. Many of the youth also shared a history of truancy and mental health issues, including suicidal thoughts.

Figure 4

Self-Reported Youth Risk Factors, 2020

<b>86%</b> history of truancy
<b>71%</b> parental criminal history
<b>54%</b> have run away from home
<b>48%</b> previous CWS contact
<b>46%</b> have had a mental health diagnosis
<b>44%</b> in foster care
<b>26%</b> have thought about killing themselves

Information from the SAM project, while not reflective of the general population, provides valuable information on current and past risky behaviors of some of our most vulnerable youth. San Diego County's juvenile justice stakeholders are committed to transforming the entire system to align with the best practices in the field, which emphasizes avoiding detention of youth when safe for the public and the youth. In support of these changes, these results offer important information to raise the awareness of the challenges this population is grappling with in order to help target appropriate interventions.

## SECTION SEVEN: *Public Health*

### Key Findings

- ❖ Cannabidiol-related (CBD) exposure calls to Poison Control increased nationally from 2014 (3) to 2021 (5,222).
- ❖ National E-Cigarette (vaping) and nicotine exposure calls to Poison Control from 2011 (269) to 2021 (5358) has increased by 1892%.
- ❖ National marijuana edibles exposure calls to Poison Control for ages 0-12 from 2016 (187) to 2021 (4329) has increased by 2215%.
- ❖ In California in 2021, the highest number of marijuana exposure calls to Poison Control Centers were for individuals 5 years of age and under.
- ❖ Nationally in 2021, marijuana was the most prevalent drug present in alcohol-related polysubstance emergency department visits (30.6%).
- ❖ Nationally in 2021, alcohol was the most prevalent drug present in marijuana-related polysubstance emergency department visits (5,274).
- ❖ Nationally in 2021, 45.2 % of marijuana-related emergency department visits were individuals between the ages of 26-44.
- ❖ From 2016 (125,418) to 2020 (219,441), California Emergency Department visits and admissions for any related marijuana use has increased by 75%.
- ❖ From 2008 (2,030) to 2020 (13,568) there was a 568% increase in California emergency department visits and admissions for primary marijuana use.
- ❖ From 2008 (1,988) to 2020 (12,703) there was a 539% increase in California emergency department visits for primary marijuana use.

## **Definitions:**

**Hospital Stay/Hospitalization:** Admission to a hospital for treatment.

**Emergency Department:** The department of a hospital responsible for the provision of medical and surgical services to patients arriving at the hospital in need of immediate care.

**Primary Diagnosis:** Describes the diagnosis that was the most serious and/or resource-intensive during the hospitalization or inpatient encounter.

**Office of Statewide Health Planning and Development (OSHPD):** California's Office of Statewide Health Planning and Development collects and disseminates information about California's healthcare infrastructure.

**American Association of Poison Control Centers:** The American Association of Poison Control Centers represents the nation's 55 poison centers.

**Drug Abuse Warning Network (DAWN):** A nationwide public health surveillance system that captures data on emergency department (ED) visits related to recent substance use and misuse directly from the electronic health records of participating hospitals.

**California Poison Control System:** Provides immediate, free and expert treatment advice and referral over the telephone in case of exposure to poisonous or toxic substances.

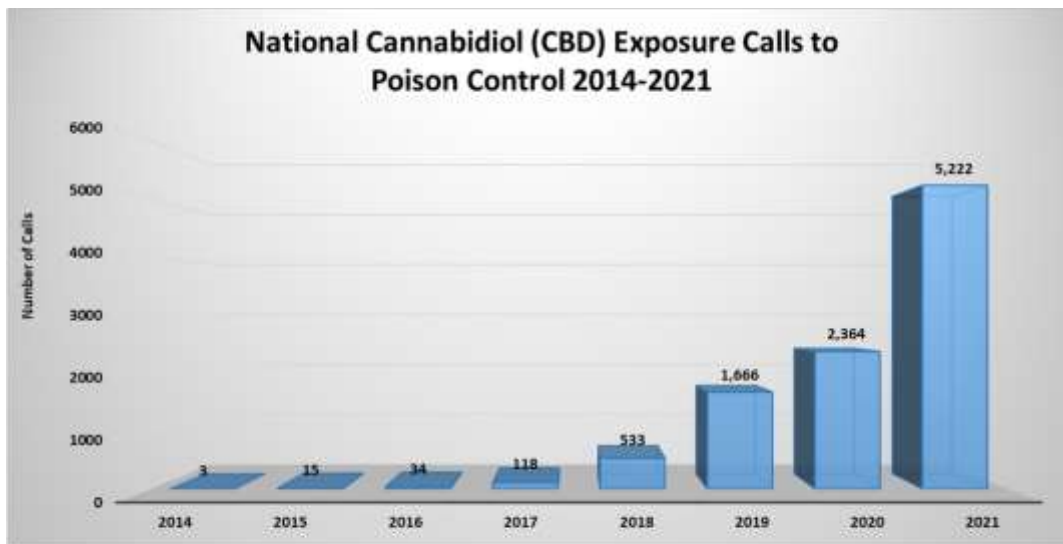
**The International Classification of Diseases (ICD):** A system used by physicians and other healthcare providers to classify and code all diagnoses, symptoms and procedures recorded in conjunction with hospital care in the United States. ICD-10 replaced ICD-9 as of October 1, 2014.

**Commercialization:** The process of managing or running something principally for financial gain.

**Legalization:** The action of making something that was previously illegal permissible by law.

**Rady Children's Hospital-San Diego:** A nonprofit, 511 bed pediatric-care facility dedicated to excellence in care, research and teaching.

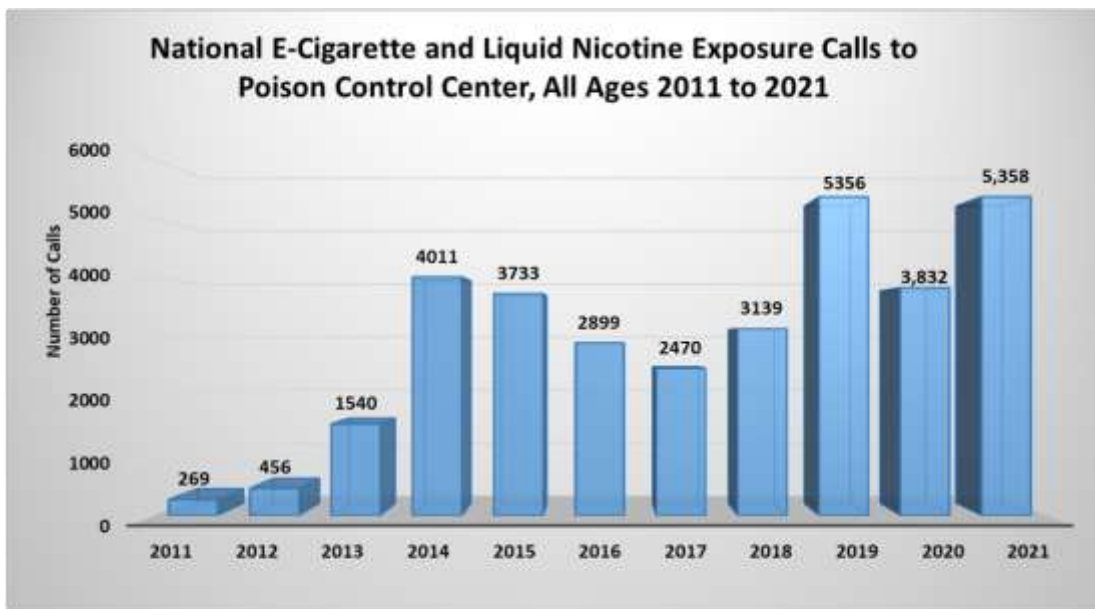




Source: National Poison Data Systems, American Association of Poison Control Centers

Note: Data collected as of May 20, 2022. Numbers may change as cases are closed or additional information is received.

- ❖ Cannabidiol-related (CBD) exposure calls increased nationally from 2014 (3) to 2021 (5,222).

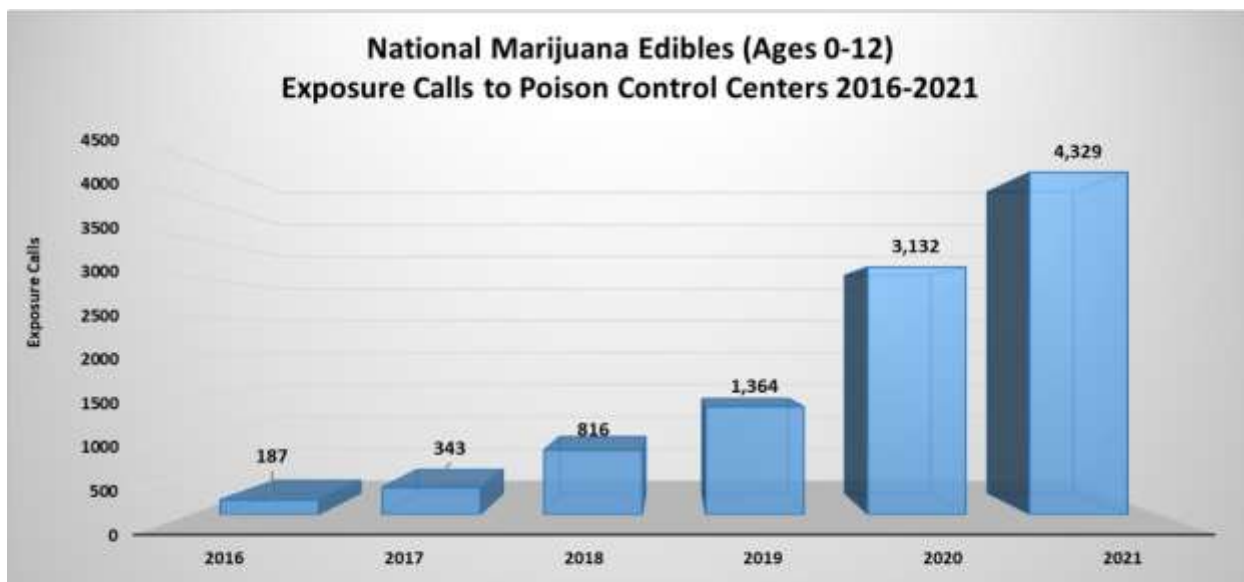


Source: National Poison Data Systems, American Association of Poison Control Centers

Note: Data collected as of May 31, 2022. Numbers may change as cases are closed or additional information is received.

- ❖ National E-Cigarette (vaping) and nicotine exposure calls from 2011 (269) to 2021 (5358) has increased by 1891%.

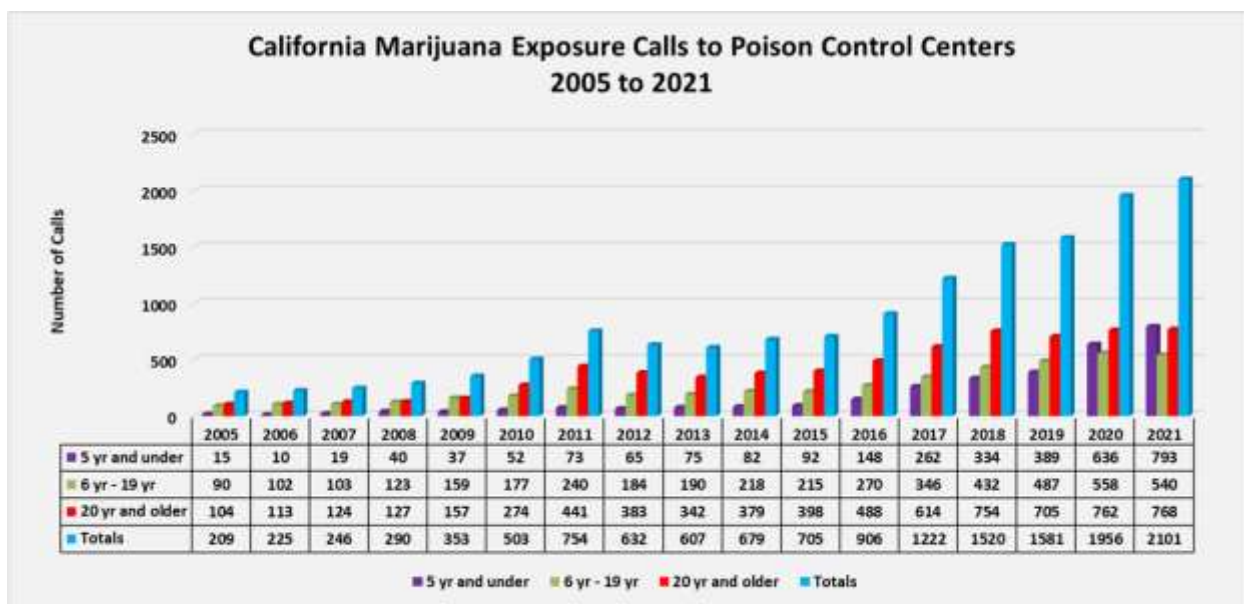
You can reach your local poison control center by calling the Poison Help Hotline: 1-800-222-1222.



Source: Association of Poison Control Centers

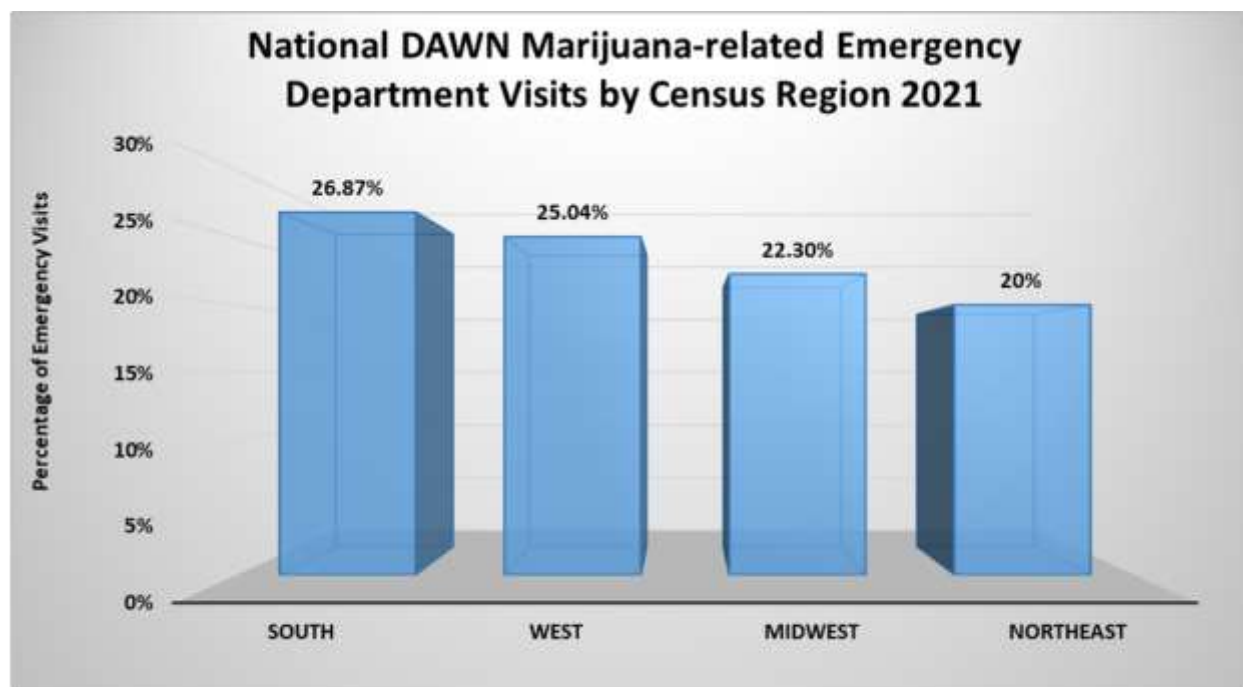
Note: Data collected as of June 6, 2022. Numbers may change as cases are closed or additional information is received.

- ❖ National marijuana edibles exposure calls for ages 0-12 from 2016 (187) to 2021 (4329) has increased by 2215%.

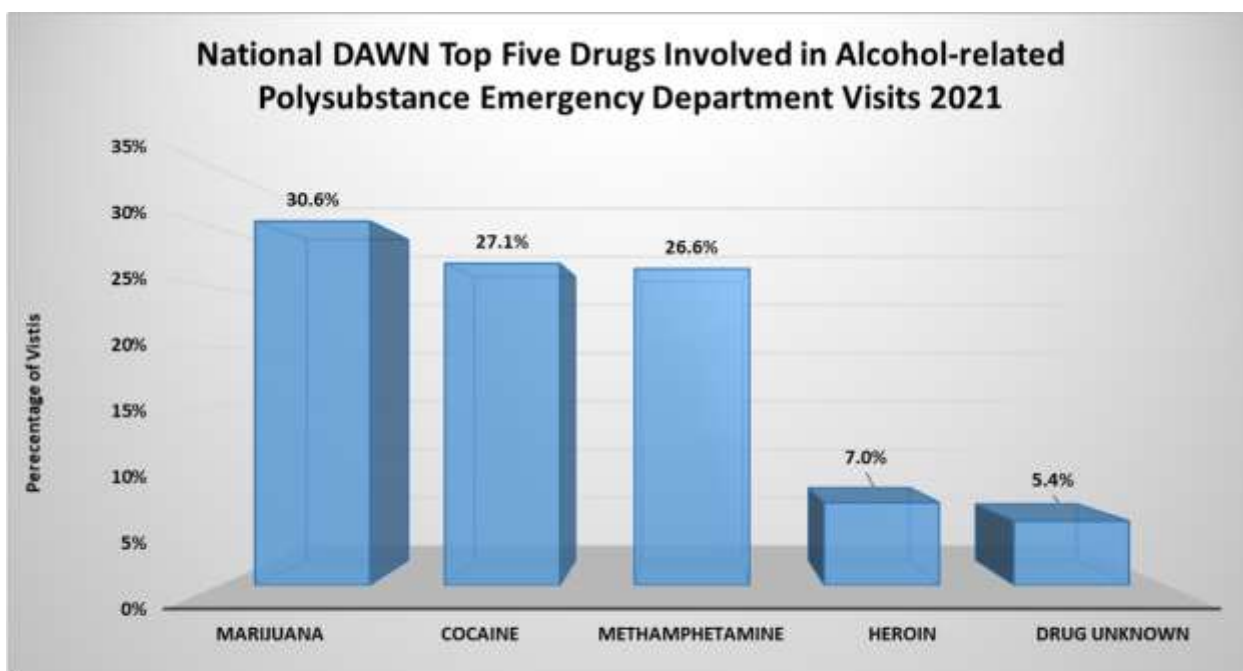


Source: California Poison Control System, San Diego Division

- ❖ In California in 2021, the highest number of marijuana exposure calls to Poison Control Centers were for individuals 5 years of age and under.

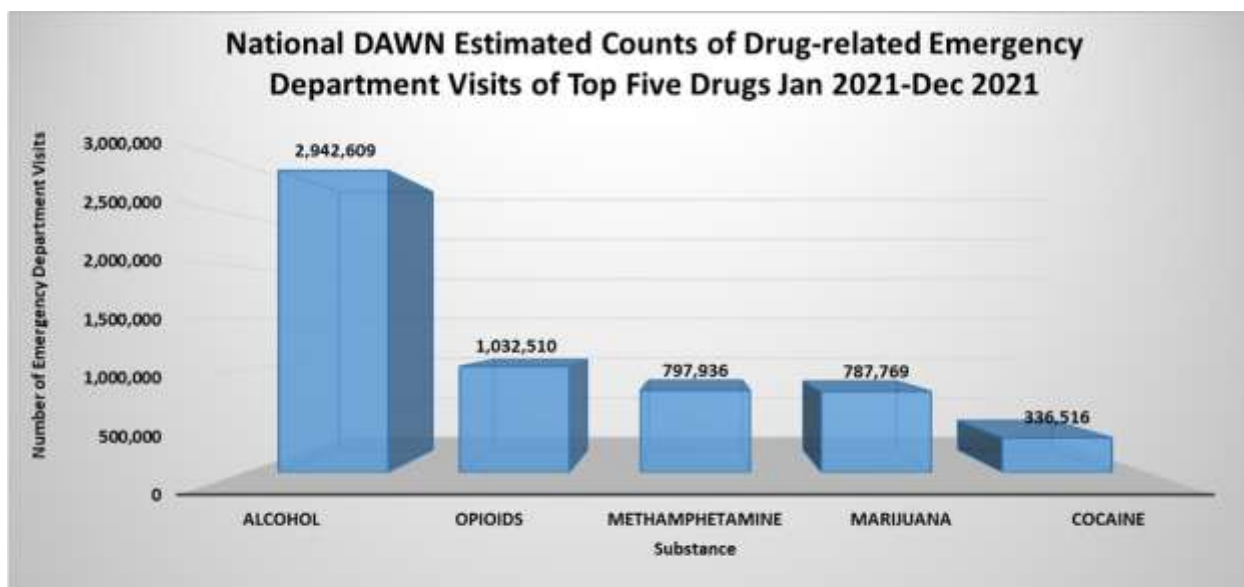


Source: Drug Abuse Warning Network (DAWN), Preliminary Findings from Drug-Related Emergency Department Visits, 2021

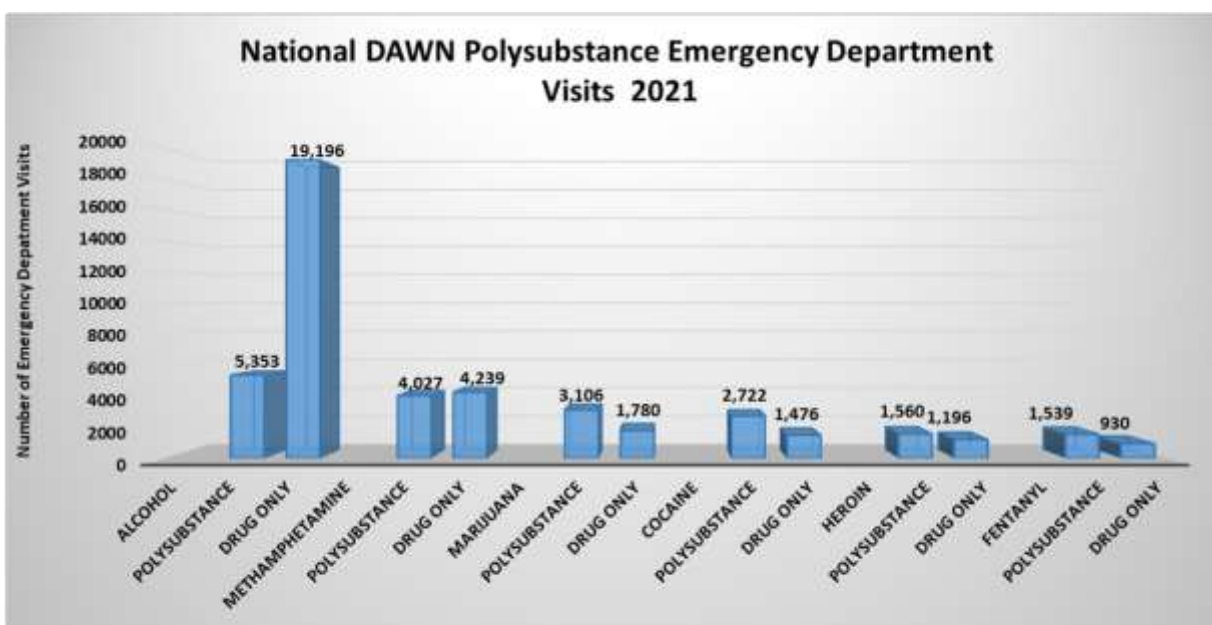


Source: Drug Abuse Warning Network (DAWN), Preliminary Findings from Drug-Related Emergency Department Visits, 2021

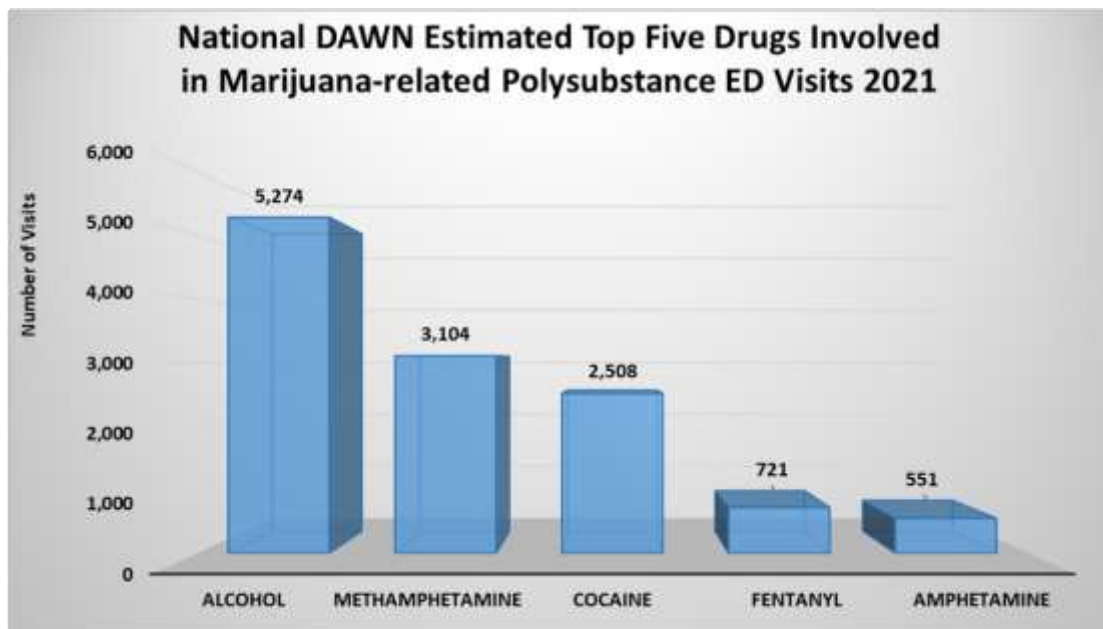
- ❖ Nationally in 2021, marijuana was the most prevalent drug present in alcohol-related polysubstance emergency department visits (30.6%).



Source: Drug Abuse Warning Network (DAWN), Preliminary Findings from Drug-Related Emergency Department Visits, 2021

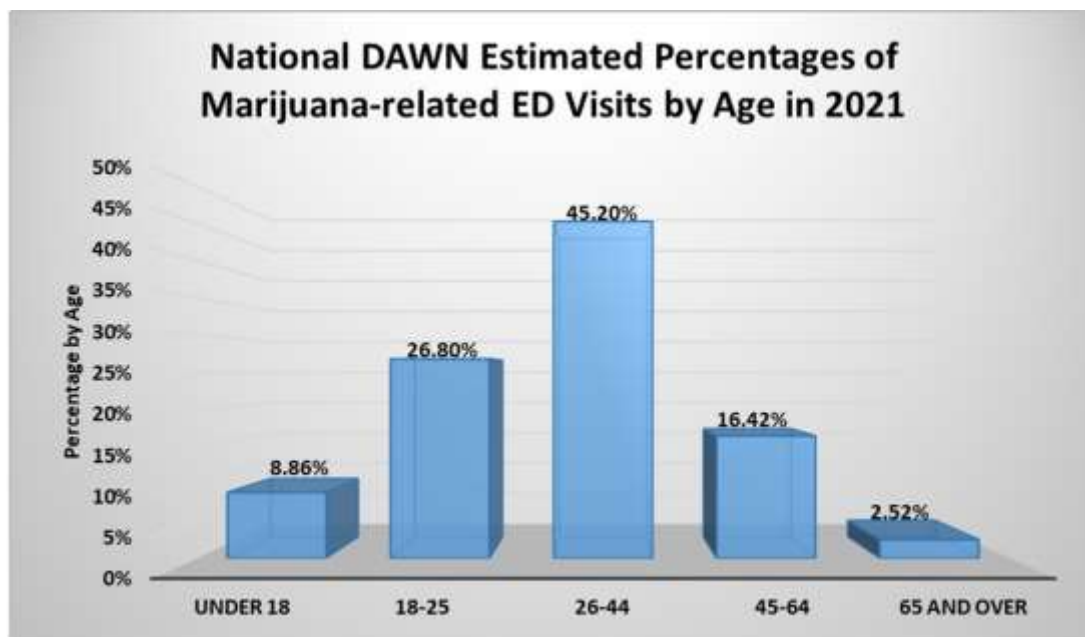


Source: Drug Abuse Warning Network (DAWN), Preliminary Findings from Drug-Related Emergency Department Visits, 2021



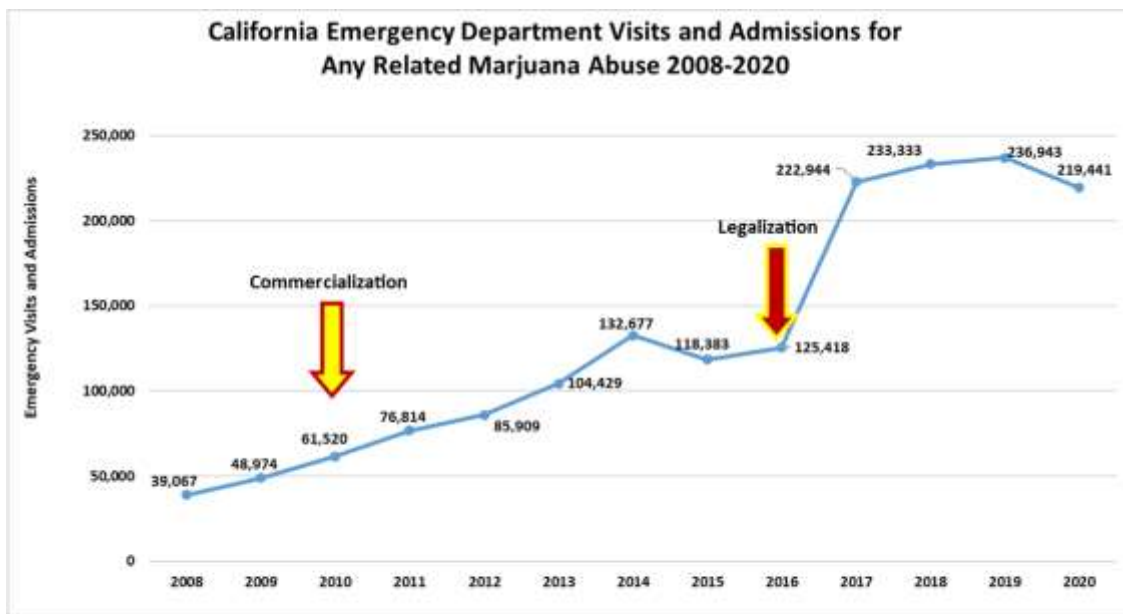
Source: Drug Abuse Warning Network (DAWN), Preliminary Findings from Drug-Related Emergency Department Visits, 2021

- ❖ Nationally in 2021, alcohol was the most prevalent drug present in marijuana-related polysubstance emergency department visits (5,274).



Source: Drug Abuse Warning Network (DAWN), Preliminary Findings from Drug-Related Emergency Department Visits, 2021

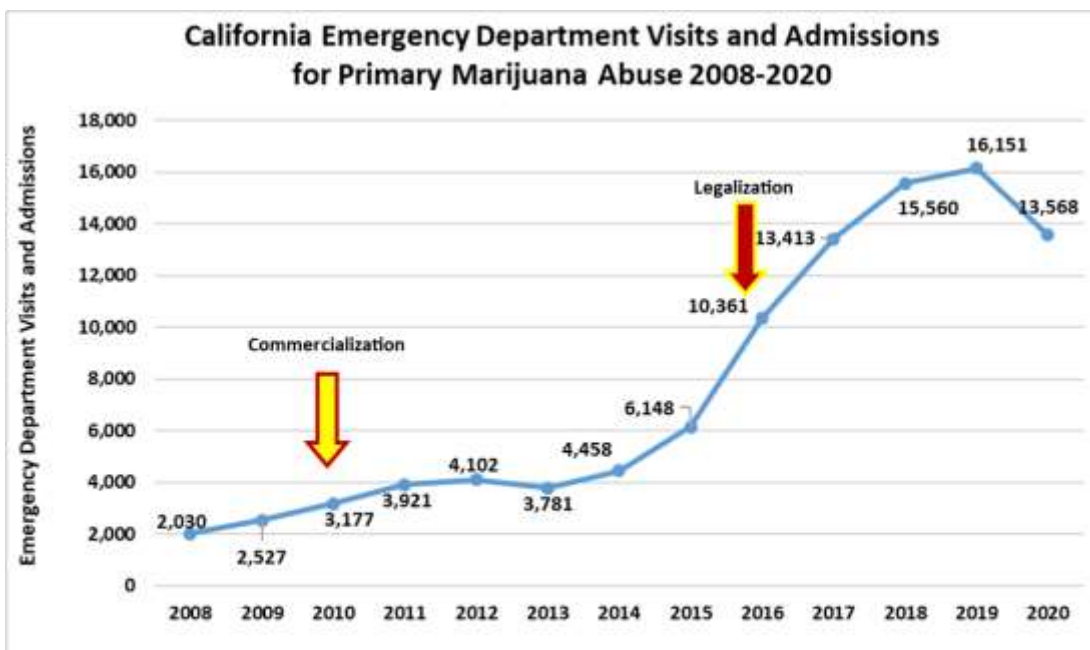
- ❖ Nationally in 2021, 45.2 % of marijuana-related emergency department visits were individuals between the ages of 26-44.



Source: Patient Discharge Data and Emergency Department Data, 2008-2020, Office of Statewide Planning and Development, ICD-10 (Primary or Secondary), F12 or T40.7 Initial Encounter (Cannabis).

Note: ICD-10 replaced ICD-9 as of October 1, 2014.

- ❖ From 2016 (125,418) to 2020 (219,441), California Emergency Department visits and admissions for any related marijuana use has increased by 75%.

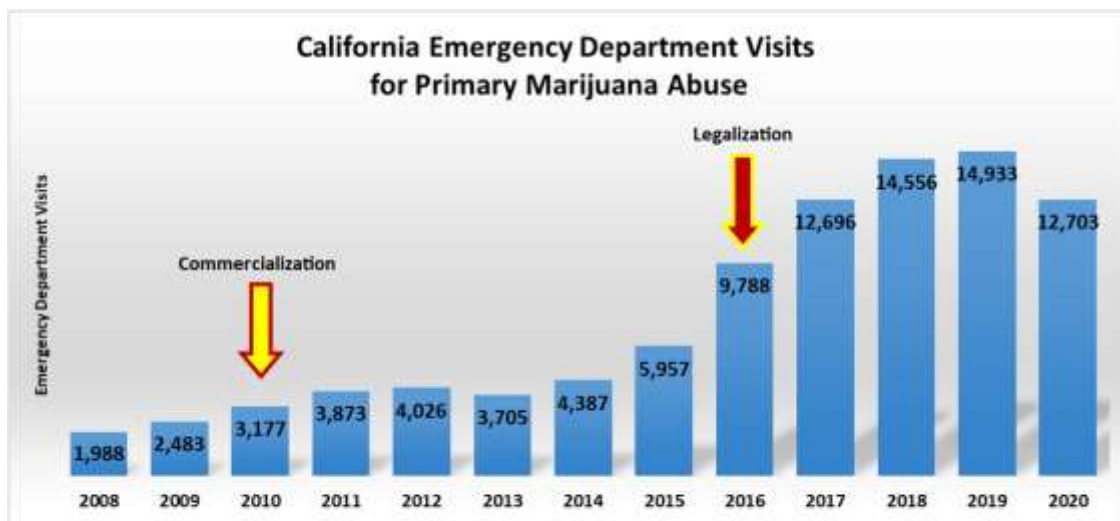


Source: Patient Discharge Data and Emergency Department Data, 2008-2020, Office of Statewide Planning and Development, ICD-10 (Primary or Secondary), F12 or T40.7 Initial Encounter (Cannabis).

Note: ICD-10 replaced ICD-9 as of October 1, 2014.

- ❖ From 2008 (2,030) to 2020 (13,568) there was a 568% increase in California emergency department visits and admissions for primary marijuana use.





Source: Patient Discharge Data and Emergency Department Data, 2008-2020, Office of Statewide Planning and Development, ICD-10 (Primary or Secondary), F12 or T40.7 Initial Encounter (Cannabis).

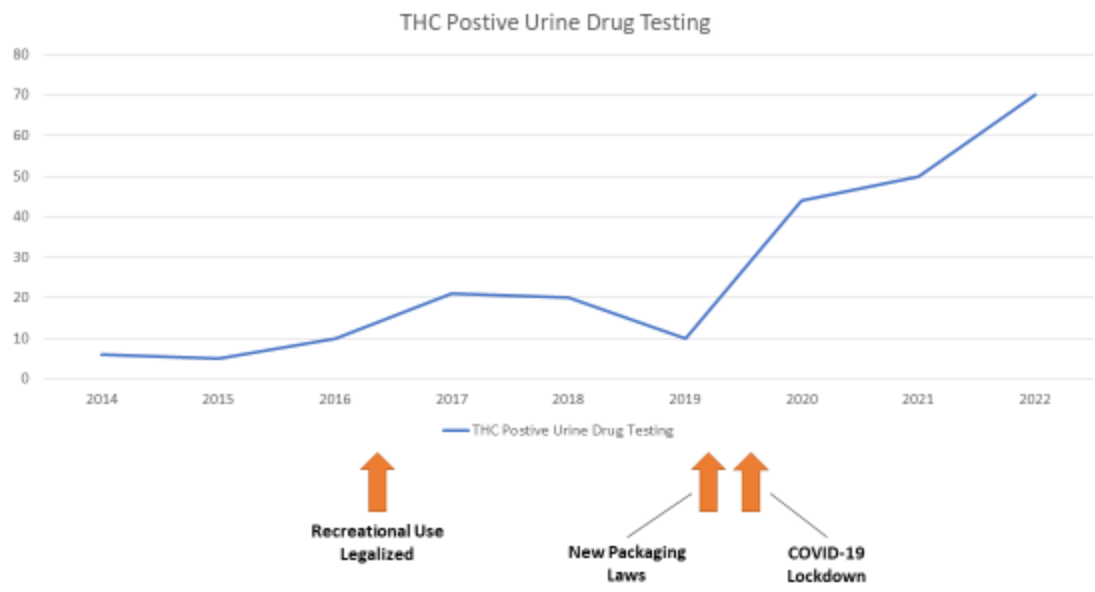
Note: ICD-10 replaced ICD-9 as of October 1, 2014.

- ❖ From 2008 (1,988) to 2020 (12,703) there was a 539% increase in California emergency department visits for primary marijuana use.

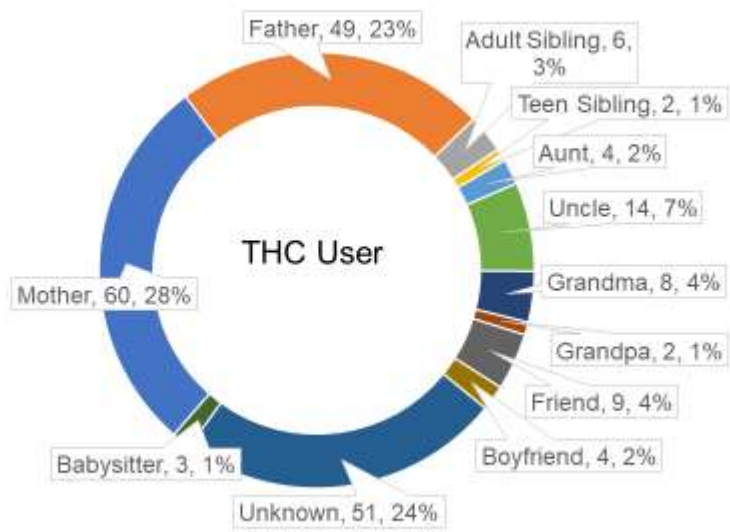
## Analysis of THC positive urine drug screens at Rady Children's Hospital

### Dataset Overview

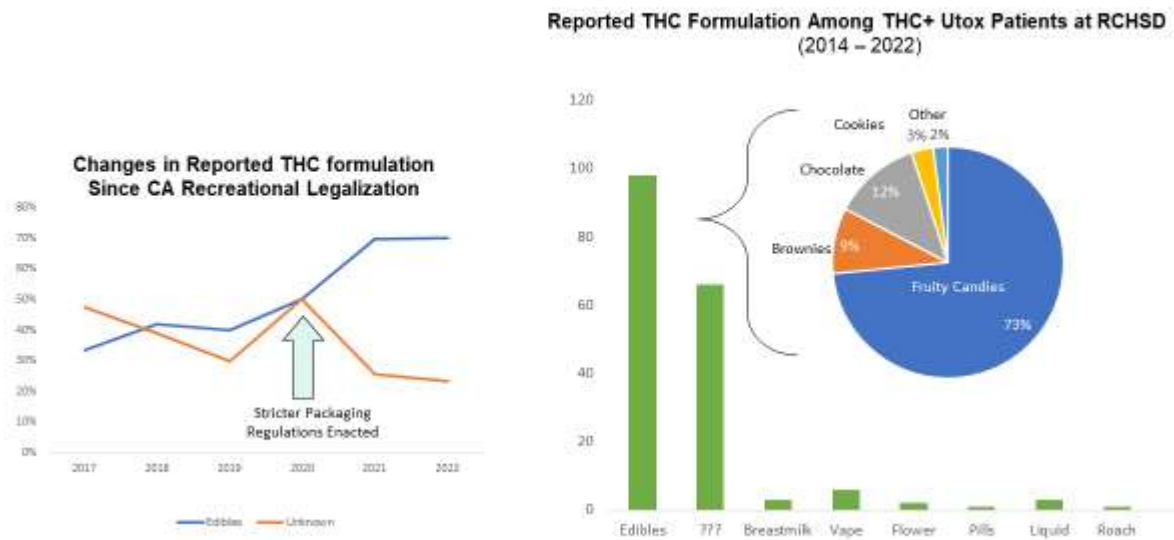
- Analysis of 238 children
- Average age of ingestion of THC products: 3 years old
- 58% of children who ingest THC need to be hospitalized
- Exponential increase in ingestions since the start of COVID-19 pandemic



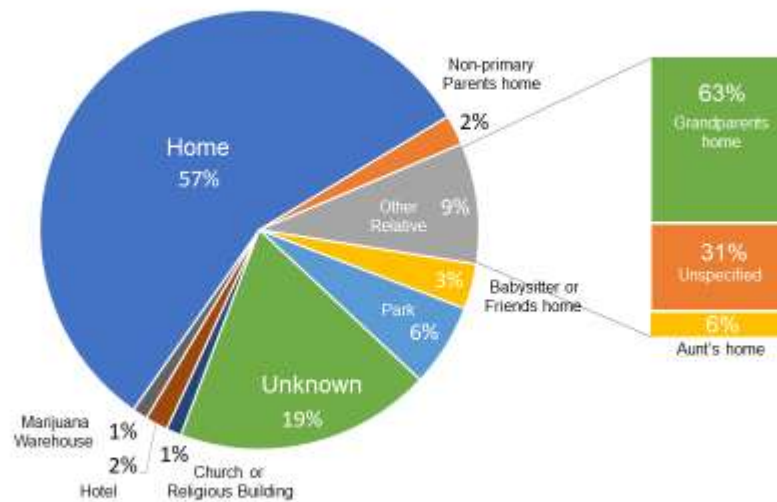
#### Who Report Using THC products



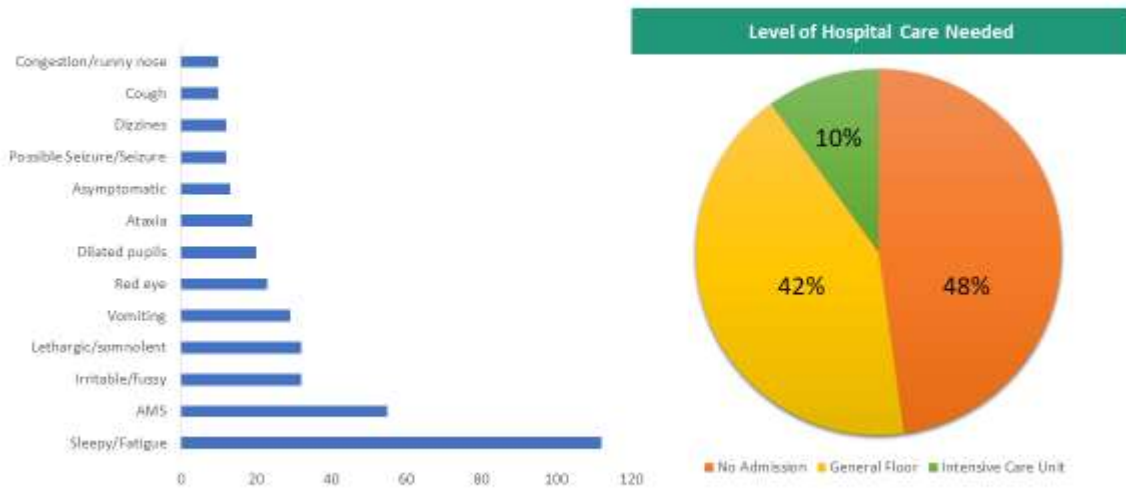
## Formulation



## Overall Reported Location of THC Exposure



### Symptoms and disposition of young children who ingest THC products



**Rady Children's**  
Hospital San Diego

**Analysis of THC Positive Urine at RCHSD from 2014-2022**

Preliminary Data and Trends

Alexandra Dubinin and Dr. Natalie Laub, MD

## SECTION EIGHT: Treatment

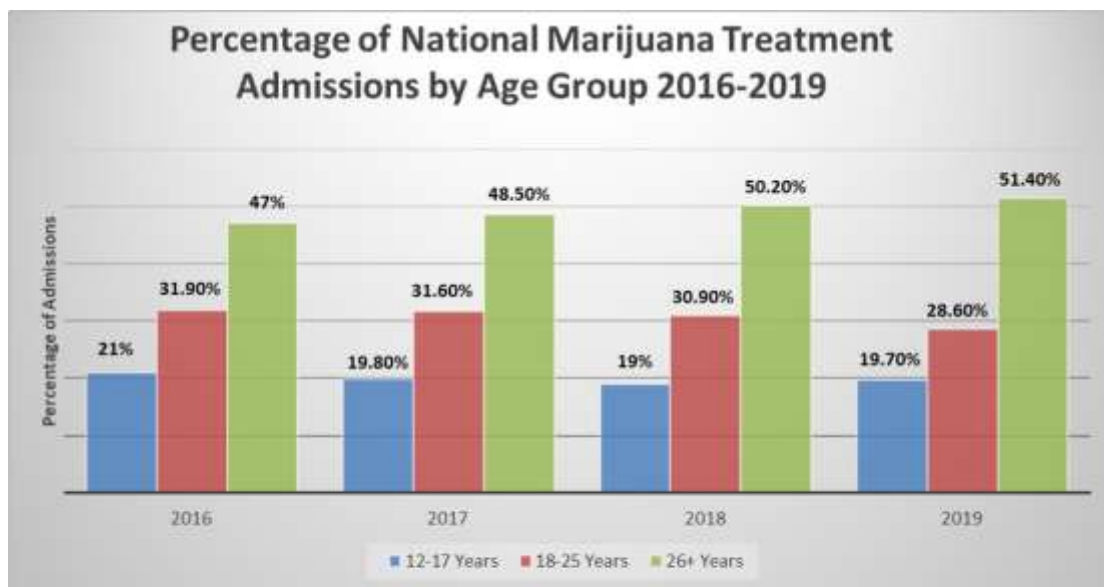
### Key Findings

- ❖ Nationally from 2016 to 2019, the highest percentage of marijuana treatment admissions were amongst those 26 years and older.
- ❖ In California in 2020, 44.4% of marijuana treatment admissions were amongst those 26 years of age and older compared to 51.4% nationally.

### Definitions:

**Substance Abuse and Mental Health Services Administration (SAMHSA):** A branch of the U.S. Department of Health and Human Services.

**Treatment Episode Data Set (TEDS):** Compiles client-level data for substance abuse treatment admissions from State Agency data systems. State data systems collect data from facilities about their admissions to treatment and discharges from treatment. TEDS is an admission-based system, but it does not include all admissions.

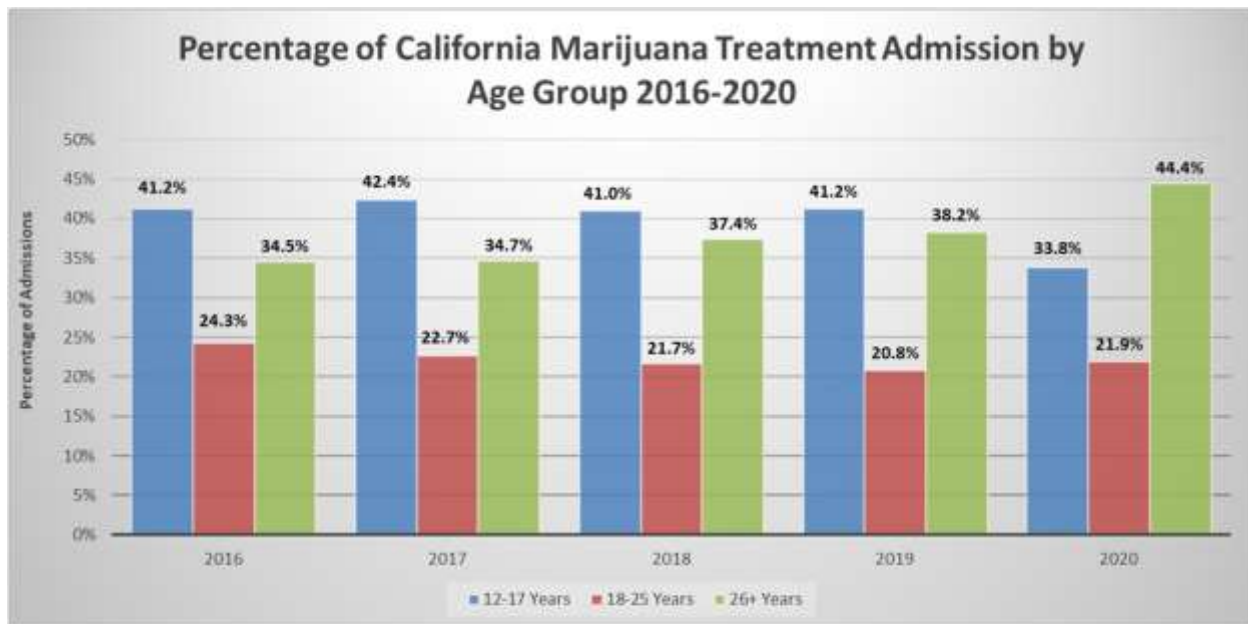


Source: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration (SAMHSA), Treatment Episode Data Set (TEDS).

Note: Numbers based on administrative data reported by states to TEDS through January 3, 2022.

- ❖ Nationally from 2016 to 2019, the highest percentage of marijuana treatment admissions were amongst those 26 years and older.

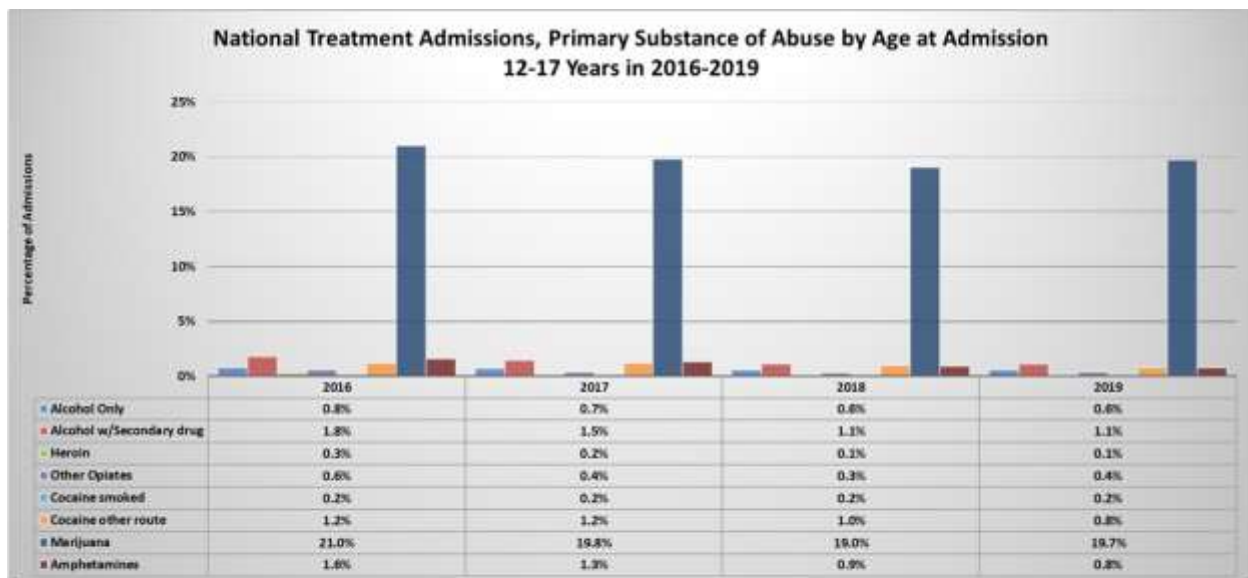




Source: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration (SAMHSA), Treatment Episode Data Set (TEDS).

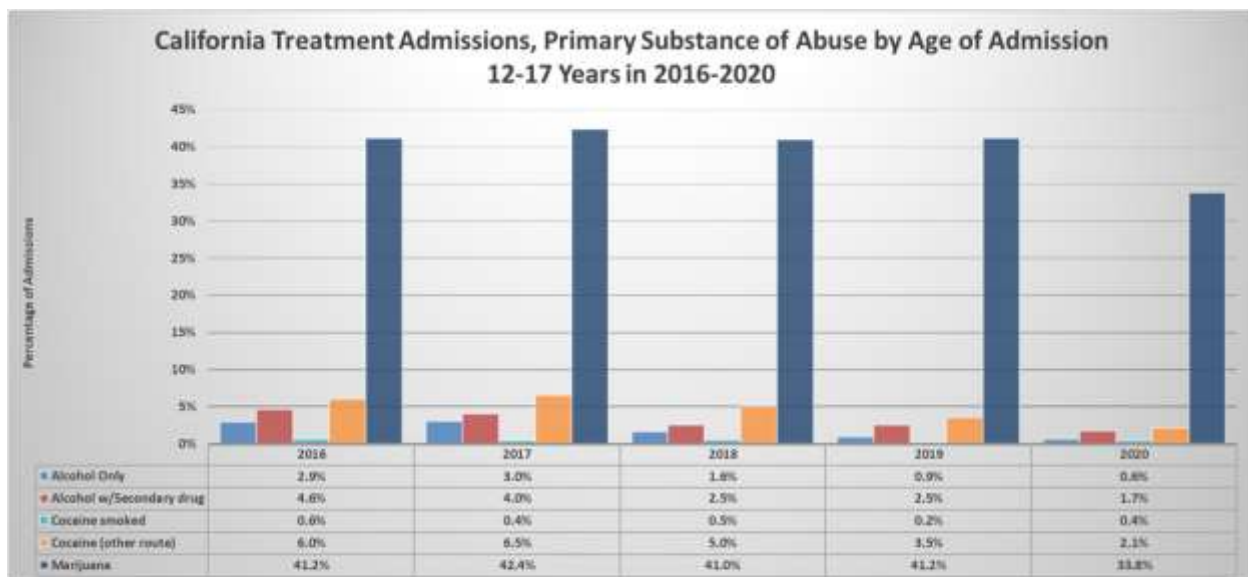
Note: Numbers based on administrative data reported by states to TEDS through January 3, 2022.

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Source: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration (SAMHSA), Treatment Episode Data Set (TEDS).

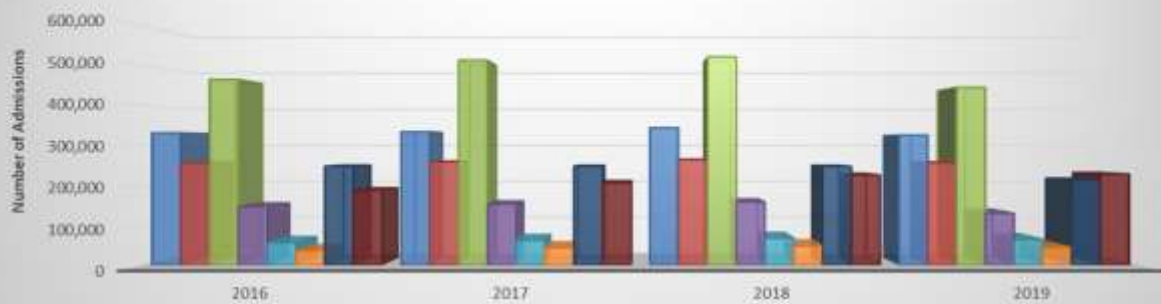
Note: Numbers based on administrative data reported by states to TEDS through January 3, 2022.



Source: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration (SAMHSA), Treatment Episode Data Set (TEDS).

Note: Numbers based on administrative data reported by states to TEDS through January 3, 2022.

### National Treatment Admissions by Primary Substance of Abuse Ages 12 and Older, 2016-2019

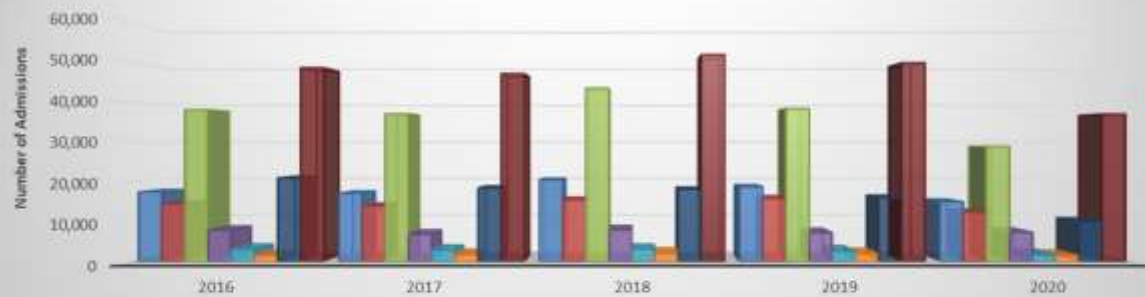


	2016	2017	2018	2019
Alcohol Only	331,382	334,172	344,206	325,933
Alcohol w/Secondary drug	255,993	258,682	263,653	256,485
Heroin	465,389	513,472	521,941	445,677
Other Opiates	146,636	151,878	157,550	129,593
Cocaine smoked	56,492	62,051	67,394	64,303
Cocaine other route	35,544	42,393	47,660	43,676
Marijuana	247,807	247,122	247,138	212,914
Amphetamines	187,107	205,963	225,542	228,047

Source: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration (SAMHSA), Treatment Episode Data Set (TEDS).

Note: Insufficient data available for 2020.

### California Treatment Admissions by Primary Substance of Abuse Ages 12 and Older, 2016-2020



	2016	2017	2018	2019	2020
Alcohol Only	17,471	17,112	20,486	18,778	14,969
Alcohol w/Secondary drug	14,479	13,893	15,447	15,812	12,343
Heroin	38,113	37,142	43,573	38,474	28,932
Other Opiates	7,807	6,792	7,924	7,207	7,299
Cocaine smoked	3,035	2,801	3,010	2,581	1,737
Cocaine other route	1,459	1,667	2,023	1,900	1,415
Marijuana	20,992	18,427	18,122	15,988	9,991
Amphetamines	48,711	47,232	52,018	49,958	37,078

Source: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration (SAMHSA), Treatment Episode Data Set (TEDS).

## *SECTION NINE: Diversion, Eradication and Related Crime*

### Key Findings

- ❖ California law enforcement officers routinely seize weapons from individuals arrested at illicit cannabis cultivation sites.
- ❖ California eradicates more illicit cannabis cultivation sites than any other state; it seizes more illicitly cultivated cannabis plants than any other state; it arrests more individuals associated with illicit cultivation; and it seizes more weapons from illicit cultivation sites than any other state in the country.
- ❖ In CY 2020, there were 4,151 total eradicated outdoor grow sites and 1,286 total eradicated indoor grow sites in the United States reported to the DCE/SP. Of these, California accounted for approximately 41% of the country's reported sites with 1,533 eradicated outdoor grow sites and 680 eradicated indoor grow sites.
- ❖ In CY 2020, California seized 1,713 weapons from illicit cannabis sites, which is 54% of the total number of weapons seized from illicit cannabis sites throughout the country and reported to DCE/SP.
- ❖ In CY 2021, there were 4,658 total eradicated outdoor grow sites and 1,195 total eradicated indoor grow sites in the United States reported to the DCE/SP. Of these, California accounted for approximately 53% of the country's reported sites with 2,445 eradicated outdoor grow sites and 647 eradicated indoor grow sites.
- ❖ In CY 2021, California seized 8,908 weapons from illicit cannabis sites, which is 85% of the total number of weapons seized from illicit cannabis sites throughout the country and reported to DCE/SP.
- ❖ In 2020 and 2021, most illegal marijuana plant seizures occurred on private land (trespass grows).
- ❖ There was a spike in marijuana eradication seizures during the 2009 and 2010 CAMP seasons that coincided with the commercialization of marijuana.

- ❖ In 2021, 83% of illegal marijuana plant seizures by the San Diego MET occurred on private land. Of those, 40% of illegal marijuana cultivation on private land occurred at outdoor grows.
- ❖ Between June 20 2022, and July 3, 2022, Marijuana Enforcement Team (MET) along with San Bernardino County Sheriff's Department, seized 54,111 marijuana plants and 10,956 pounds of processed marijuana.
- ❖ Marijuana was the most seized drug (in pounds) by U.S. Border Patrol from FY19-FY21.
- ❖ Marijuana was the most seized drug (in pounds) by Nationwide Air and Marine Operations in FY21.

### **Definitions:**

**Domestic Cannabis Suppression/Eradication Program (DCS/EP):** A nationwide law enforcement program initiated by the Drug Enforcement Administration to target drug trafficking organizations involved in illicit cannabis cultivation and provide funding for eradication programs.

**Campaign Against Marijuana Planting (CAMP):** A program operated by the State of California Department of Justice, CAMP is a High Intensity Drug Trafficking Area (HIDTA) supported initiative consisting of local, state and federal agencies that work to eradicate large scale illegal marijuana cultivations from public and private lands.

**Infrastructure Removal:** Removing elemental cultivation infrastructure during the marijuana eradication process such as propane tanks, toxicants, tubing and car batteries.

**High Intensity Drug Trafficking Area (HIDTA):** The High Intensity Drug Trafficking Areas (HIDTA) program, created by Congress with the Anti-Drug Abuse Act of 1988, assists federal, state, local, and tribal law enforcement agencies operating in areas determined to be critical drug-trafficking regions of the United States.

**San Diego Marijuana Enforcement Team (MET):** A San Diego County Sheriff's Department team of investigators that conduct criminal investigations on illegal marijuana cultivation, illicit dispensaries, psilocybin mushroom cultivation, and THC Extraction Lab. MET was created in January of 2021.

**Los Angeles Regional Criminal Information Clearinghouse (LA CLEAR):** Funded by the Los Angeles HIDTA, LA CLEAR provides strategic investigative research and post seizure analysis; tactical case support analysis, electronic surveillance and operational support; as well as training and conference opportunities for the LA HIDTA.

**Operation Hammer Strike:** A countywide operation in San Bernardino County, developed August 2021, to combat the illegal cultivations within our county. Started with 1,381 Known Grow locations within the County and consists of deputies that were formed by special funding from the Board of Supervisors.

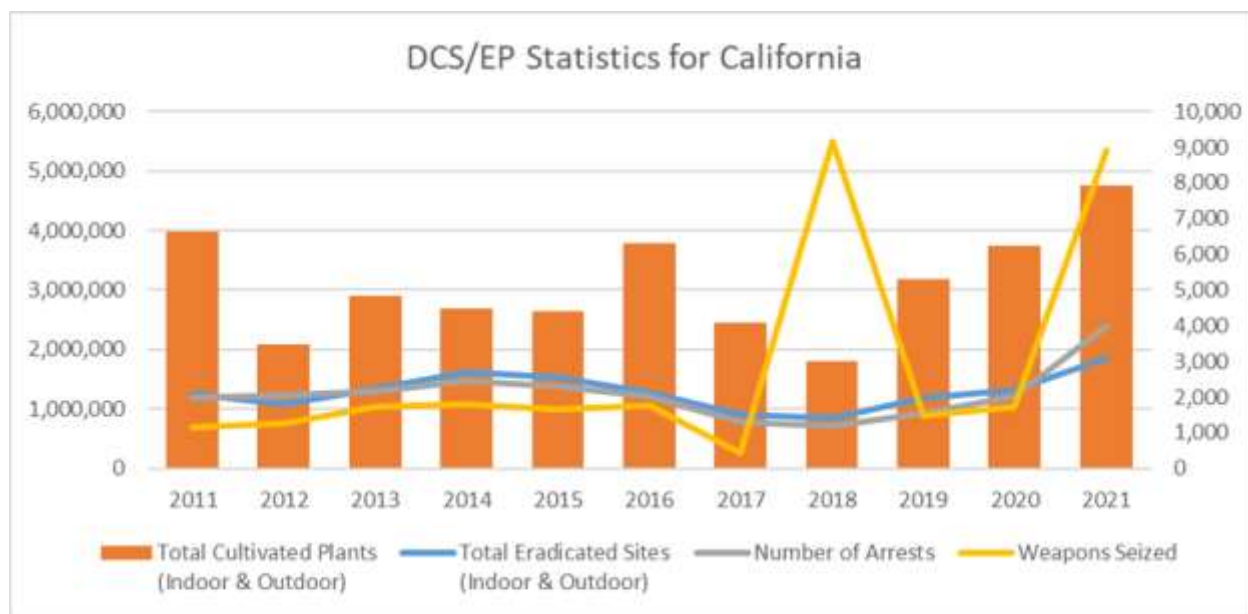
**U.S. Customs and Border Protection (CBP):** One of the world's largest law enforcement organizations and is charged with keeping terrorists and their weapons out of the U.S. while facilitating lawful international travel and trade. CBP takes a comprehensive approach to border management and control, combining customs, immigration, border security and agricultural protection into one coordinated and supportive activity.

**Office of Field Operations (OFO):** The largest component in CBP and is responsible for border security-including anti-terrorism, immigration, anti-smuggling, trade compliance, and agriculture protection-while simultaneously facilitating the lawful trade and travel at U.S. ports of entry.

**United States Border Patrol (USBP):** A federal law enforcement agency under CBP responsible to safeguard the borders, protect the American people and enhance the nation's economic prosperity.

**Air and Marine Operations (AMO):** Run out of CBP, AMO deploys aircraft and maritime vessels to air and marine branches and units throughout the country to provide rapid air and marine response capabilities.





**Source: Domestic Cannabis Suppression/Eradication Program, Drug Enforcement Administration**  
**([www.dea.gov/operations/eradication-program](http://www.dea.gov/operations/eradication-program))**

2020 FINAL DOMESTIC CANNABIS ERADICATION/SUPPRESSION PROGRAM STATISTICAL REPORT								
State	Total Eradicated Outdoor Grow Sites	Total Cultivated Plants Outdoor	Total Eradicated Indoor Grow Sites	Total Cultivated Plants Indoor	Total Cultivated Plants (Outdoor & Indoor)	Bulk Processed Marijuana (Pounds)	Number Of Arrests	Weapon Seizure
Alabama	34	1,796	5	190	1,986	130	34	40
Arizona	14	3,992	2	7	3,999	2,003	59	48
Arkansas	11	554	0	0	554	0	4	0
California	1,533	3,027,676	680	712,692	3,740,368	159,806	2,010	1,713
Colorado	1	16,436	0	0	16,436	0	6	0
Connecticut	28	193	41	220	413	931	55	50
Florida	8	95	9	338	433	248	5	2
Georgia	58	1,928	1	20,000	21,928	664	77	61
Hawaii	12	534	0	0	534	62	3	16
Idaho	3	38	1	78	116	0	4	2
Illinois	8	1,496	2	19	1,515	27	10	0
Indiana	263	59,855	130	6,210	66,065	14,887	631	186
Kansas	0	143	2	0	143	5,943	358	8
Kentucky	494	408,917	42	465	409,382	0	473	151
Louisiana	14	352	28	5,775	6,127	1,865	132	114
Maryland	58	745	24	293	1,038	4,425	49	36
Massachusetts	3	682	12	3,852	4,534	1,781	1	0
Michigan	29	2,937	55	6,536	9,473	1,591	44	123
Mississippi	36	455	8	119	574	4,746	87	0
Missouri	7	189	2	296	485	250	0	151
Nebraska	30	1	5	42	43	5,682	161	20
Nevada	1	503	19	8,702	9,205	26	23	5
New Jersey	0	0	3	1,400	1,400	48	6	1
New York	293	4,715	32	670	5,385	66	165	42
North Carolina	31	635	4	154	789	77	7	29
Ohio	532	14,485	26	788	15,273	1,551	17	29
Oklahoma	2	15,497	1	2,385	17,882	2,237	110	13
Oregon	0	0	1	14,000	14,000	47,000	0	0
Pennsylvania	35	1,042	7	138	1,180	1,281	10	66
Puerto Rico	0	0	1	1,000	1,000	0	0	0
South Carolina	12	325	2	0	325	730	0	1
Tennessee	286	54,485	3	46	54,531	1	34	0
Texas	4	156	0	0	156	0	3	0
Virginia	92	5,273	13	1,172	6,445	312	23	60
Washington	50	37,363	45	41,481	78,844	3,212	93	113
West Virginia	151	47,109	16	1,385	48,494	88	69	8
Wisconsin	18	437	64	469	906	1,770	122	102
Wyoming	0	1	0	0	1	1,756	107	3
Totals	4,151	3,711,040	1,286	830,922	4,541,962	265,196	4,992	3,193

- ❖ In CY 2020, there were 4,151 total eradicated outdoor grow sites and 1,286 total eradicated indoor grow sites in the United States reported to the DCE/SP. Of these, California accounted for approximately 41% of the country's reported sites with 1,533 eradicated outdoor grow sites and 680 eradicated indoor grow sites.
- ❖ In CY 2020, California seized 1,713 weapons from illicit cannabis sites, which is 54% of the total number of weapons seized from illicit cannabis sites throughout the country and reported to DCE/SP.

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State	Total Eradicated Outdoor Grow Sites	Total Cultivated Plants Outdoor	Total Eradicated Indoor Grow Sites	Total Cultivated Plants Indoor	Total Cultivated Plants (Outdoor & Indoor)	Bulk Processed Marijuana (Pounds)	Number Of Arrests	Weapon Seizure
Alabama	26	25,614	6	38	25,652	111	28	6
Arizona	7	4,315	4	0	4,315	1,883	56	11
Arkansas	15	581	0	0	581	1	18	31
California	2,445	3,987,073	647	778,664	4,765,737	647,035	3,988	8,908
Connecticut	15	110	32	167	277	183	97	88
Florida	36	2,636	1	0	2,636	2,156	1	32
Georgia	35	1,485	5	32	1,517	928	60	55
Hawaii	29	5,462	1	300	5,762	4,589	1	0
Idaho	1	2	2	1	3	325	3	2
Illinois	8	103	3	30	133	195	8	1
Indiana	239	29,308	73	2,486	31,794	7,817	609	255
Kansas	6	1,529	2	0	1,529	6,556	63	31
Kentucky	497	316,562	51	1,059	317,621	0	523	175
Louisiana	4	37	33	1,545	1,582	1,786	100	167
Maryland	68	411	34	691	1,102	3,526	133	119
Massachusetts	1	0	0	0	0	2	1	0
Michigan	7	691	36	6,168	6,859	4,050	16	46
Mississippi	43	571	5	371	942	2,748	89	4
Missouri	14	379	6	167	546	38	12	8
Nebraska	11	192	1	0	192	7,261	145	51
Nevada	1	4	16	5,682	5,686	13	11	7
New Hampshire	1	3,264	0	0	3,264	0	0	0
New Jersey	7	1,375	0	0	1,375	3,609	21	7
New York	258	3,652	21	163	3,815	25	16	10
North Carolina	1	24	5	0	24	16,054	10	23
Ohio	455	20,094	16	1,078	21,172	1,199	12	109
Oklahoma	8	79,982	25	78,142	158,124	10,332	205	44
Pennsylvania	8	88	9	119	207	323	11	57
South Carolina	8	99	1	0	99	4,589	6	4
Tennessee	169	17,112	7	630	17,742	2,726	21	3
Texas	1	7,922	2	86	8,008	0	1	0
Virginia	104	1,644	1	0	1,644	293	4	10
Washington	12	3,931	34	43,655	47,586	3,977	82	11
West Virginia	107	86,956	28	679	87,635	639	47	15
Wisconsin	11	1,360	88	482	1,842	7,393	154	84
Wyoming	0	115	0	0	115	1,559	54	1
Totals	4,658	4,604,683	1,195	922,435	5,527,118	743,920	6,606	10,375

Source: Domestic Cannabis Suppression/Eradiation Program, Drug Enforcement Administration ([www.dea.gov/operations/eradication-program](http://www.dea.gov/operations/eradication-program))

- ❖ In CY 2021, there were 4,658 total eradicated outdoor grow sites and 1,195 total eradicated indoor grow sites in the United States reported to the DCE/SP. Of these, California accounted for approximately 53% of the country's reported sites with 2,445 eradicated outdoor grow sites and 647 eradicated indoor grow sites.
- ❖ In CY 2021, California seized 8,908 weapons from illicit cannabis sites, which is 85% of the total number of weapons seized from illicit cannabis sites throughout the country and reported to DCE/SP.

### **Anecdotal Evidence of Violent Incidents Related to Marijuana Cultivation and/or Trafficking**

Oftentimes, it is difficult for a police officer to determine whether a violent crime occurred because of a dispute over marijuana. Even if marijuana is present at the scene of a violent crime, it is not necessarily the motivation for the crime. Consequently, California law enforcement agencies do not keep statistics specifically on marijuana-related violence.

Compounding the issues relating to marijuana (legal or otherwise), cannabis businesses in California continue to lack access to many common banking services since it remains an illegal substance under federal law. This necessitates all-cash transactions and complicates income storage options, making business owners and their property vulnerable to criminal groups. Human targets, such as growers, laborers, and employees who transported large sums of cash or marijuana, were at increased risk of being assaulted, robbed, or victims of other violent crimes.

Nonetheless, marijuana-related violence does occur as anecdotal evidence shows:

On **November 17, 2021**, three subjects, two of whom were armed with semi-automatic handguns, robbed a marijuana dispensary in Martinez, CA when a delivery driver arrived at the dispensary to deliver product.<sup>1</sup>

On **September 9, 2021**, a man was shot and killed during an altercation in his home in Stanislaus County where there was also an illicit marijuana grow. The Stanislaus County Sheriff's Office's SWAT responded to the callout and reported that it looked like the homicide happened during an attempted marijuana robbery. The suspect, who was found on the scene, was held without bail on one count of murder.<sup>2</sup>

In **June 2021**, two of three defendants pleaded guilty to charges of conspiracy to commit robbery and conspiracy to commit kidnapping, two years after they were indicted on charges of planning a \$3 million robbery of a marijuana-related cash shipment in Northern California. The subjects plotted to kidnap a courier for a large-scale marijuana grower and force him to disclose the location of \$3 million in cash, which was stashed at a property in Humboldt County.<sup>3</sup>

On **March 15, 2021**, a northern California man was kidnapped at knifepoint and beaten during a pre-arranged marijuana sale in Mendocino County. The two subjects demanded all the victim's marijuana, money, and other drugs in his possession before he was allowed to leave.<sup>4</sup>

On **November 3-4, 2020**, dozens of individuals traveled in vehicle caravans throughout Northern California's Bay Area to rob local businesses, often at gunpoint. Targeted businesses were primarily marijuana dispensaries.<sup>5, 6</sup> Incidents involved an officer-involved shooting after three officers were struck by a vehicle. A security guard for a marijuana manufacturing business was also shot while exchanging gunfire with armed robbers.<sup>7</sup>

On **September 27, 2020**, three individuals were robbed during an apparent marijuana sale/purchase transaction near Covelo, CA. Two of the victims were subsequently kidnapped by the subjects. The subjects, armed with assault weapon-style rifles and dressed in body armor, led law enforcement on a high-speed chase before they were apprehended. Two individuals were shot during the incident.<sup>8, 9</sup>

On **September 8, 2020**, seven people were shot to death at a suspected illegal marijuana growing operation in the unincorporated Aguanga area of Riverside County. Upon arrival, the police found a woman with multiple gunshot wounds. The woman was later pronounced dead at the hospital. A search of the property revealed six additional victims, all suffering from gunshot wounds. All six of those victims also died from their wounds. During a news briefing, Sheriff Chad Bianco described the location as a "very large, very extensive" illegal marijuana growing operation with upwards of 20 people living on the property. More than 1,000 pounds of marijuana, several hundred marijuana plants and a cannabis oil lab were found at the location. Bianco said the packaged product alone had a street value of \$1 million to \$5 million.

On **May 31, 2020**, dozens of subjects, some of whom were armed, coordinated robberies across the East Bay. Targeted businesses included a marijuana grow operation in Oakland, CA; its security guards had to barricade themselves inside the business.<sup>10, 11</sup>

On **October 23, 2020**, El Dorado County Sheriff's Office Deputy Brian Ishmael and an off-duty officer from San Joaquin County Sheriff's Office responded to a burglary at an illegal marijuana grow in rural Somerset, CA. Deputy Ishmael was shot and killed while the off-duty deputy was wounded. Two suspects were wounded and taken into custody by responding officers. The 911



caller was also arrested as it turned out he was a business partner of the shooters. Police arrested four subjects. They were charged federally with first and second-degree murder as well as conspiracy to grow marijuana. The state also charged them for first-degree murder and assault with a firearm as well as second-degree murder of a peace officer. Further investigation revealed that a subject in Mexico with possible cartel ties contracted the marijuana grow.<sup>12</sup>

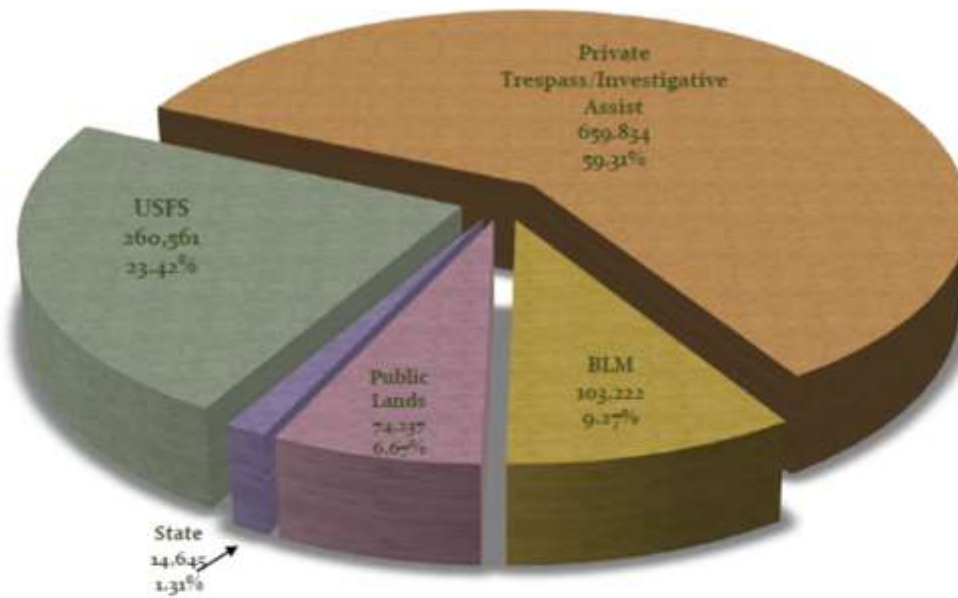
On **August 27, 2020**, police officers found three Asian women tied up and one dead Asian male at an illegal marijuana site in the Mt. Shasta Vista area. The attackers had robbed the site of marijuana. The police found guns on the side of a road nearby and used evidence from that to identify the killer. In April 2021, the North State Major Investigations Team and the Sacramento County Sheriff's Department arrested Alvin THAO of Sacramento for the murder. THAO reportedly has ties to a gang.<sup>13</sup>

On **July 20, 2020**, Kern County Sheriff's Officers found a man stabbed to death at a dispensary in E. Bakersfield. The suspect pleaded no contest to voluntary manslaughter and was sentenced to 12 years.<sup>14</sup>

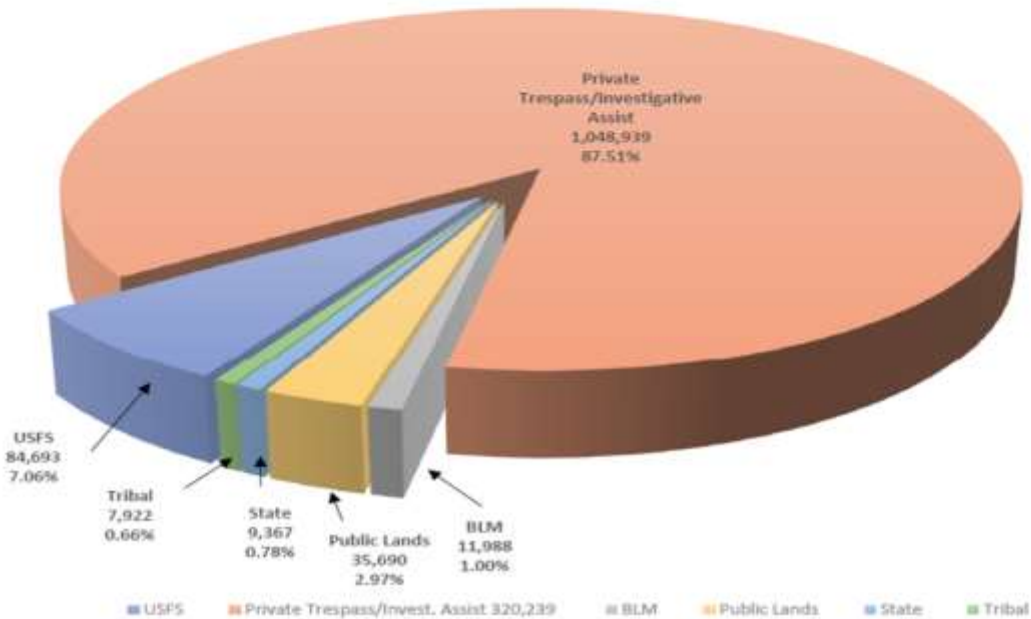
On **June 22, 2020**, the Stanislaus County Sheriff's Office rescued a man from an illegal marijuana grow in Del Puerto Canyon who had been shot two days previously when several armed gunmen attacked and robbed the grow.<sup>15</sup>



2020 CAMP Plant Seizures By Land Owner



2021 CAMP Plant Seizures By Land Owner



Source: California Department of Justice, Bureau of Investigation

- ❖ In 2020 and 2021, most illegal marijuana plant seizures occurred on private land (trespass grows).



### Historical Seizure Data

Year	Arrests	Weapons Seized	Processed Marijuana Seized (Lbs.)
2021	292	165	180,293.9
2020	140	174	64,958.93
2019	148	168	50,930
2018	52	110	41,465
2017	35	35	8,696
2016	45	51	6,811
2015	86	56	10,688
2014	67	38	9,704
2013	56	63	6,500
2012	25	40	3,798
2011	46	72	Not available**
2010*	107	108	Not available**

NOTE: \* The seasons of 2009 – 2010 were focus operation years during which large scale operations and manpower were focused on the Central Valley for periods of two to three weeks

\*\* Statistics for Processed Marijuana were not maintained until the 2012 season

Source: Campaign Against Marijuana Planting 2021 Report

## INFRASTRUCTURE REMOVAL 2021 / 2020

# Of Nets	Infrastructure (Tons)	Acres affected	RESTRICTED USE and UNKNOWN POISONS (Gallons)	Fertilizers (Tons)	Pesticides Common (Gallons)	Water Line (Miles)	Propane Tanks (20 gal)	Car Batteries	Dams/ Reservoirs Removed
60	33.53	9,181	27	37.87	89	294.5	583	57	110
229	25.42	6,552.2	22.7	12.28	100.81	405.5	261	47	192

\* Includes eradicated marijuana removal

### 33.53 Tons of Infrastructure Removed - 2021

25.42 Tons of Infrastructure Removed - 2020

19.28 Tons of Infrastructure Removed - 2019

18.80 Tons of Infrastructure Removed - 2018

27.50 Tons of Infrastructure Removed - 2017

105.30 Tons of Infrastructure Removed - 2016

24.47 Tons of Infrastructure Removed - 2015

33.97 Tons of Infrastructure Removed - 2014

### 294.5 Miles of Waterline Removed - 2021

405.5 Miles of Waterline Removed - 2020

760.5 Miles of Waterline Removed - 2019

145.2 Miles of Water Line Removed - 2018

652.2 Miles of Water Line removed - 2017

315.5 Miles of Water Line Removed - 2016

65.20 Miles of Water Line Removed - 2015

### 89 Gallons of Pesticides - 2021

100.8 Gallons of Pesticides - 2020

52.46 Gallons of Pesticides - 2019

26 Gallons of Pesticides - 2018

123.3 Gallons of Pesticides - 2017

311.5 Gallons of Pesticides - 2016

198.56 Lbs. of Pesticides - 2015

### 27 Gallons of Restricted Use and Unknown Poisons - 2021

22.7 Gallons of Restricted Use and Unknown Poisons - 2020

17.66 Gallons of Restricted Use and Unknown Poisons - 2019

8.90 Gallons of Restricted Use and Unknown Poisons - 2018

13.50 Gallons of Restricted Use and Unknown Poisons - 2017

23.10 Gallons of Restricted Use and Unknown Poisons - 2016

23.61 Gallons of Restricted Use and Unknown Poisons - 2015

Source: Campaign Against Marijuana Planting 2021 Report



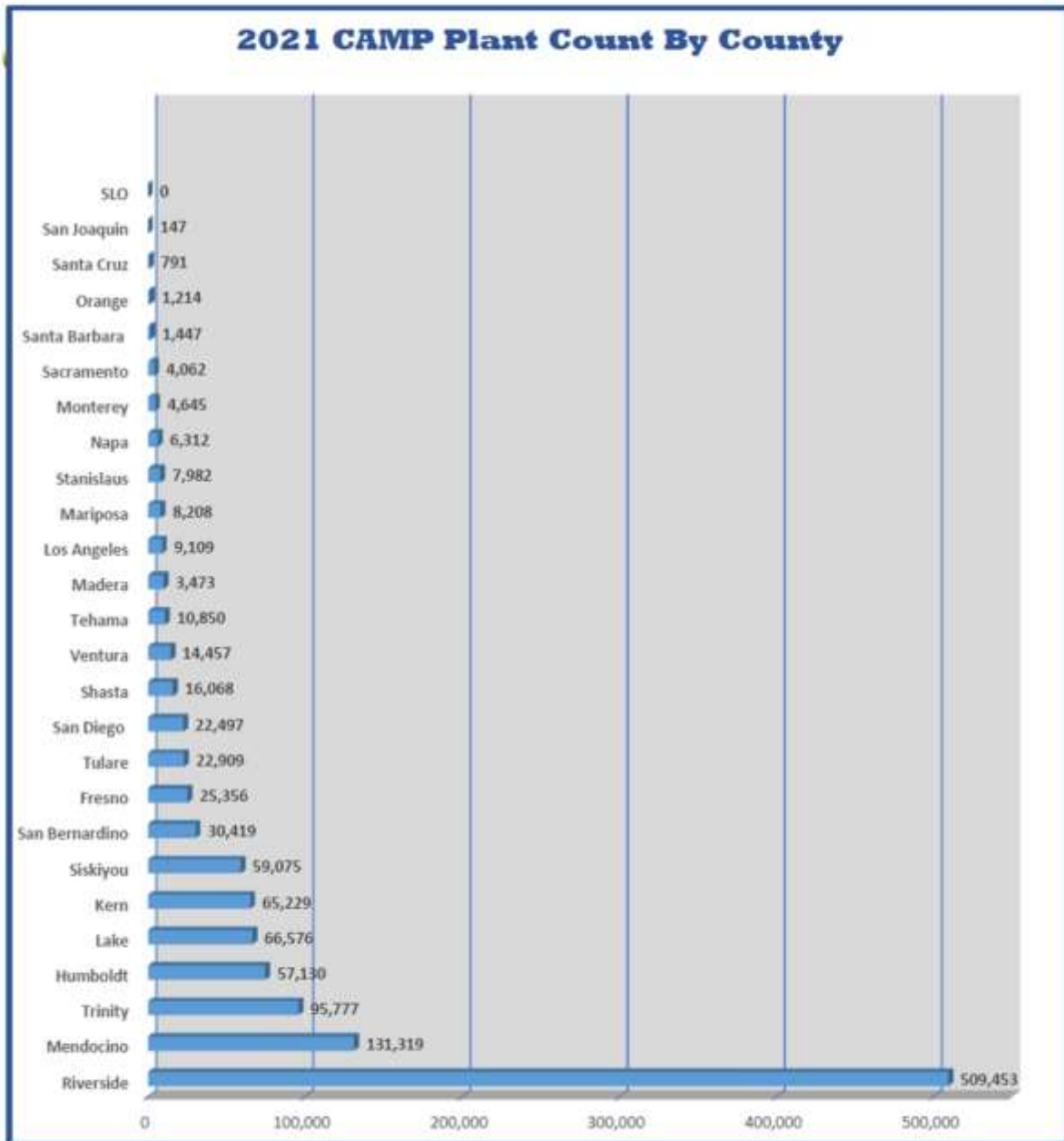


Source: Campaign Against Marijuana Planting 2020 Report





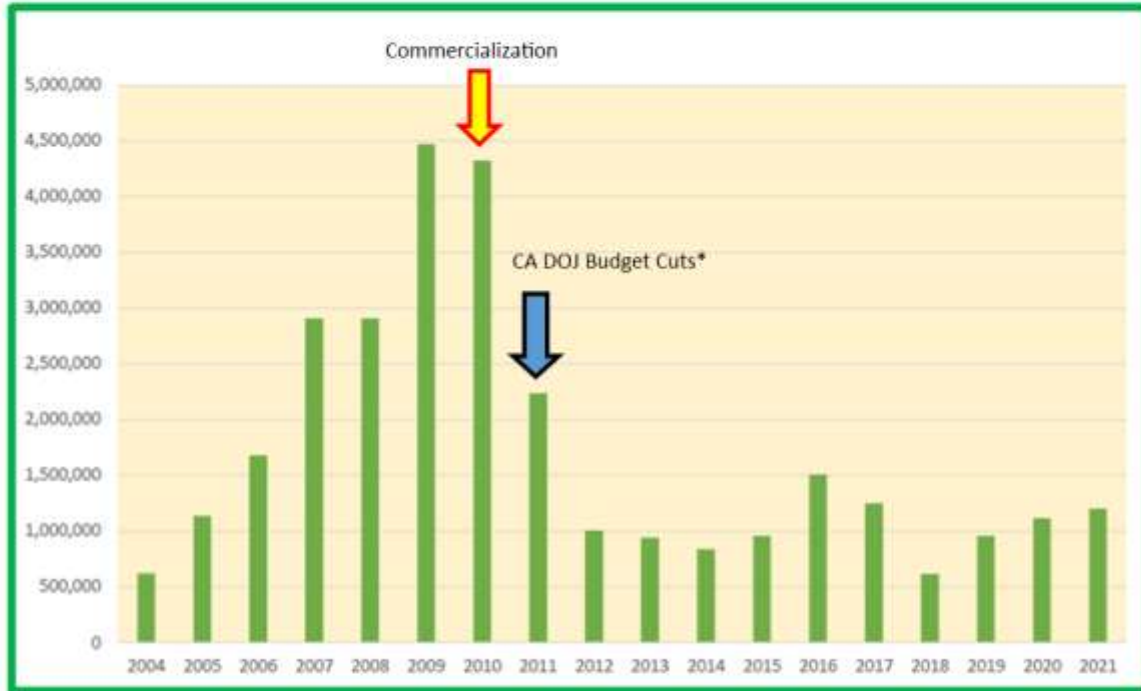
2021 CAMP Seizure Data



Source: Campaign Against Marijuana Planting 2021 Report



## CAMP Eradication History 2004-2021



2004	621,315	2013	939,722
2005	1,134,692	2014	836,596
2006	1,675,681	2015	956,898
2007	2,905,021	2016	1,505,371
2008	2,905,232	2017	1,246,715
2009	4,463,917	2018	614,267
2010	4,320,314	2019	953,459
2011	2,234,152	2020	1,112,499
2012	1,004,461	2021	1,198,599

Source: Campaign Against Marijuana Planting 2021 Report

\* In 2011, the California Department of Justice endured budget cuts resulting in the elimination of the Bureau of Narcotic Enforcement (BNE), directly affecting the CAMP operations.

- ❖ There was a spike in marijuana eradication seizures during the 2009 and 2010 CAMP seasons that coincided with the commercialization of marijuana.

San Diego Marijuana Enforcement Team (MET): A San Diego County Sheriff's Department team of investigators that conduct criminal investigations on illegal marijuana cultivation, illicit dispensaries, psilocybin mushroom cultivation, and THC Extraction Lab. MET was created in January of 2021.

Marijuana Cultivation					
	Cases	Guns	Arrests	Plants	Processed Marijuana
2021	42	29	9	89,240	6,291 lbs.
Indoor Grows				24	
Outdoor Grows				18	

- ❖ In 2021, 83% of illegal marijuana plant seizures by the San Diego MET occurred on private land. Of those, 40% of illegal marijuana cultivation on private land occurred at outdoor grows.



Operation Hammer Strike was a countywide operation in San Bernardino County that was initiated in August 2021 (with a starting count of at least 1,381 known grow locations) and

continued until August 2022 with the ultimate mission being to combat illegal cultivation. Through supported efforts and special funding from the Board of Supervisors, the San Bernardino County Sheriff's Marijuana Enforcement Team (MET) increased their resources to 28 personnel/deputies with some being temporary positions allocated from other stations.



Operation Hammer Strike was a collaborative effort between the District Attorney's Office and Code Enforcement with support from the California Department of Fish and Wildlife. Additional enforcement support and assistance was provided by the California Environmental Protection Agency (CalEPA) and the Lahontan Regional Water Board. Additionally, one of the Major Investigative Teams worked directly with the DA's Office to prosecute property owners having multiple grow locations within the County.



❖ **Total Stats for Operation Hammer Strike (August 2021 to August 2022):**

- 1,087 – Total Search Warrants
- 1,379 – Suspects Arrested
- 1,496,906 – Cannabis Plants Seized
- 194,821 (97.4 tons) pounds – Processed Marijuana
- 79,803 grams (175.9 pounds) – Concentrated Cannabis
- 363 – Firearms Seized
- \$3,631,667.00 – Cash Seized
- 8,871 – Greenhouse Eradications
- 52 – Mitigated Electrical Bypass (Severe Fire Hazard)
- 33 – THC Extraction Lab
- 17 – Stolen Vehicles Recovered
- 335.4 - Grams of Cocaine / Methamphetamine
- 24 – Emergency Hazardous Waste Removals for Banned Pesticides

❖ **Total Wholesale Product Value of Cannabis Seized:**

- Approximately \$1,037,794,890. This amount is based on the low estimated street value.

**Impacts**





Positive impacts as a result of MET are reduction in crime towards residents, strengthened public support, eradication of polluters, a reduction in grow sites from 1,381 to 682, and a decrease in known locations by over 40% which cleared out the Morongo Basin list. Additionally, in an effort to better serve and protect the community members in the surrounding area who continue to be negatively impacted by these illegal activities, the DA's Office also focused their enforcement efforts on the environmental crimes associated with illegal cultivation. With coordination assistance from CalEPA, the DA's Office filed 38 environmental felony enhancements under HSC Section 11358(d)(3) in 2021 and 206 environmental felony enhancements in 2022. In order to accommodate the additional workload, the DA's Office increased their staffing resources as well.

When Operation Hammer Strike came to an end in August 2022, the Board of Supervisors continued to support the Sheriff's Office and the community members they serve by funding additional positions on MET which resulted in an increase of two (2) permanent teams of seven (7).

### **Concerns/Challenges**

- ❖ State legislation is not changing quickly enough. Illegal cultivation needs to be a felony.
- ❖ Repeat offenders are starting to become an issue due to the lack of "teeth" in enforcement with current state laws.
- ❖ Public health impacts to our communities' and wasteful and unreasonable use of public resources (i.e., water).
- ❖ Environmental impacts from chemical releases of improperly stored pesticides (including banned pesticides), fertilizers, fuel/oil spills, and other chemical unknowns.
- ❖ Illegal marijuana growers masking themselves as commercial hemp cultivators. Within a 9-month period, San Bernardino County MET investigated 12-locations registered as commercial hemp cultivation facilities:
  - All 12 locations were confirmed to be cultivating marijuana illegally.
  - All product was determined to contain greater than .03% THC content.

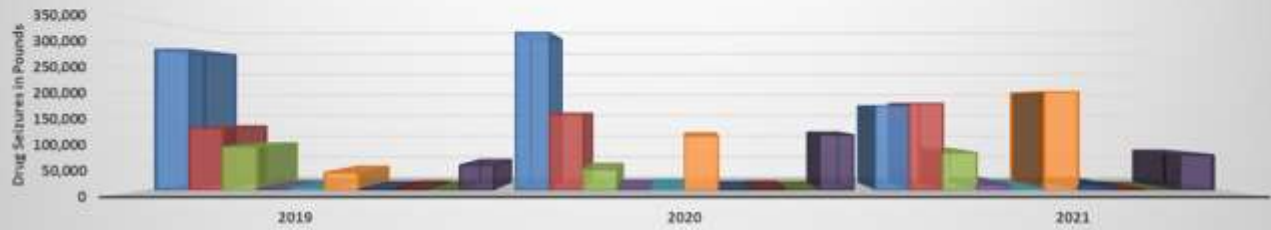
### **Case Spotlight: Underground Bunker**

On March 4, 2022, at 0720 hours, the San Bernardino County Marijuana Enforcement Team (MET) responded to an underground bunker on the 46200 block of Palma Vista Rd., Newberry Springs regarding an illegal marijuana cultivation. The location was set up to avoid detection from the Sheriff's Department, was 230ft x 60ft and was hidden 15ft below ground level. 20 separate grow rooms were discovered that were divided into multiple growing rooms, processing rooms, and storage. 6,208 Plants were found with a 3.4-million-dollar product in wholesale value.



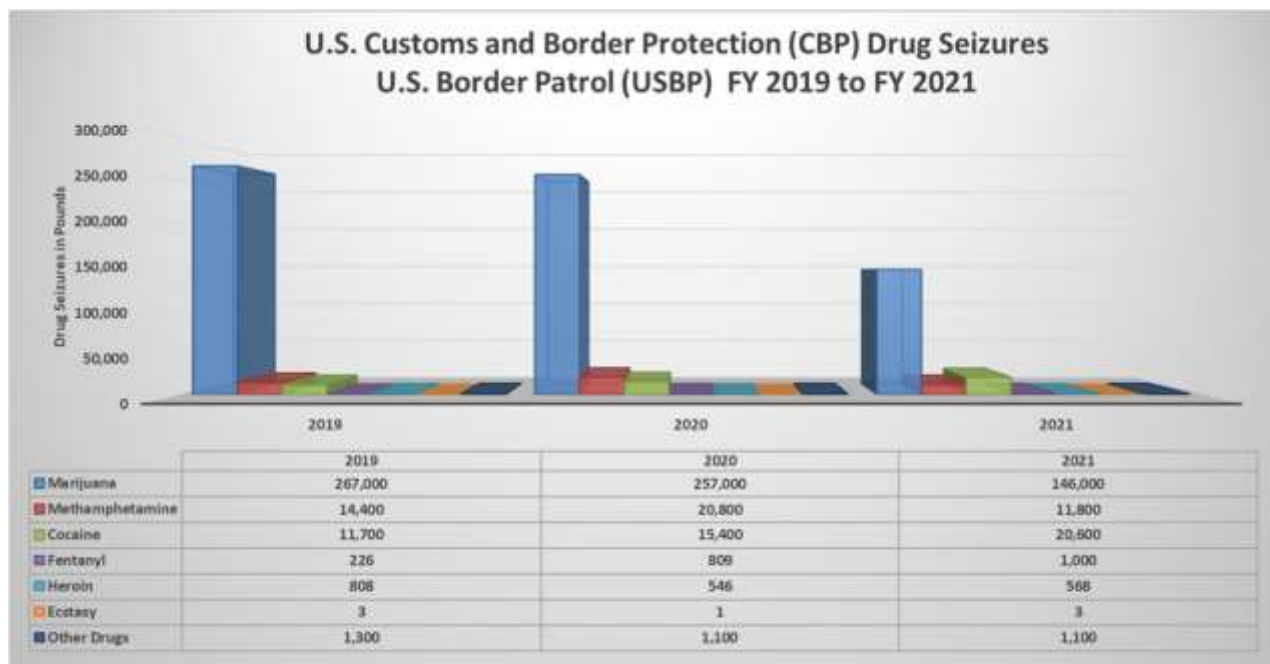


**U.S. Customs and Border Protection,  
Office of Field Operation (OFO)  
Nationwide Drug Seizures  
FY 2019 to FY 2021**



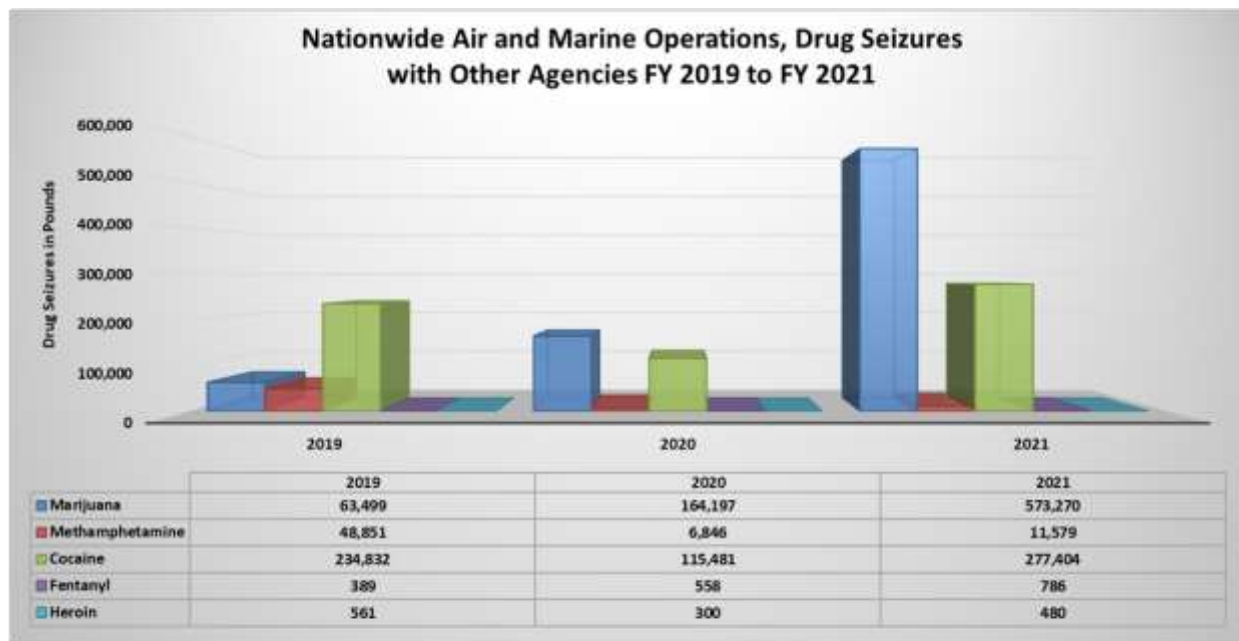
	2019	2020	2021
Marijuana	290,000	325,000	174,000
Methamphetamine	128,000	157,000	179,000
Cocaine	89,500	42,600	77,100
Fentanyl	2,600	4,000	10,200
Heroin	5,400	5,200	4,800
Khat (Catha Edulis)	36,300	112,000	203,000
Ketamine	953	1,100	10,800
Ecstasy	2,200	2,100	1,200
LSD	560	725	38
Other Drugs	51,500	114,000	72,800

Source: USBP and OFO Official year end reporting for FY19-FY21. USBP and OFO month end reporting for FY22 to date. Data was current as of 4/5/2022. U.S. Customs and Border Protection, U.S. Border Patrol and Office of Field Operation (OFO) Nationwide Drug Seizures 2019-2021.



Source: Southwest Border U.S. Customs and Border Protection Drug Seizures FY 2019 to FY 2021. Current as of 9/20/2022

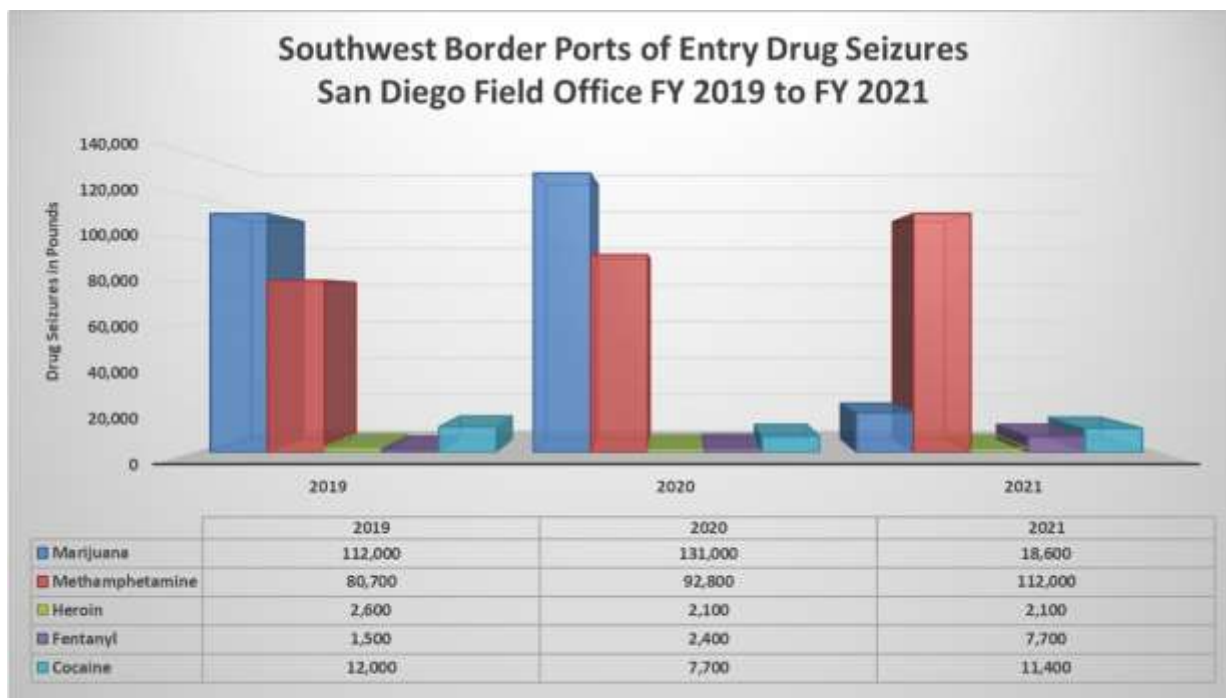
- ❖ Marijuana was the most seized drug (in pounds) by U.S. Border Patrol from FY19-FY21.



Source: U.S. Customs and Border Protection (CBP) Drug Seizures, Air and Marine Operations (AMO) Weight (lbs.) and Count of Drug Seizure Events with Other Agencies by Fiscal Year 9FY).

Note: AMO Official year end reporting for FY19-FY21. AMO month end reporting to date, data is current as of 6/9/22.

- ❖ Marijuana was the most seized drug (in pounds) by Nationwide Air and Marine Operations in FY21.



Source: U.S. Customs and Border Protection Southwest Border, San Diego Field Office FY19 to FY21.

<sup>1</sup> (U) Online Article; KRON4; Date Published 18 November 2021; “Marijuana dispensary robbed in Martinez”; Date Accessed 21 July 2022; <https://www.kron4.com/news/bay-area/marijuana-dispensary-robbed-in-martinez/>.

<sup>2</sup> The Modesto Bee [www.modbee.com/news/local/crime/article254138033.html](http://www.modbee.com/news/local/crime/article254138033.html)

<sup>3</sup> (U) Online Article; The Mercury News; Date Published 26 June 2021; “‘But then you need to walk up and kill everybody?’ Two plead guilty to plotting \$3 million robbery, kidnapping for ransom of Northern California marijuana grower”; Date Accessed 21 July 2022; <https://www.mercurynews.com/2021/06/26/but-then-you-need-to-walk-up-and-kill-everybody-two-plead-guilty-to-plotting-3-million-robbery-kidnapping-for-ransom-of-ca-marijuana-grower/>.

<sup>4</sup> (U) Online Article; The Mercury News; Date Published: 15 March 2021; “Police: Northern California man kidnapped, beaten during marijuana sale”; Date Accessed 21 July 2022; <https://www.mercurynews.com/2021/03/15/mcso-ukiah-man-kidnapped-beaten-during-marijuana-sale-in-covelo/>.

<sup>5</sup> (U) Online Article; San Francisco Chronicle; Date Published: 06 November 2020; “East Bay on alert for ‘caravans’ of armed looters”; Date Accessed: 21 July 2022; <https://www.sfchronicle.com/crime/article/East-Bay-remains-on-alert-for-caravans-of-15707947.php>.

<sup>6</sup> (U) Online Article; SF Gate; Date Published: 5 November 2020; “San Francisco Bay Area businesses warned of convoys of heavily armed thieves”; Date Accessed: 21 July 2022; <https://www.sfgate.com/news/bayarea/article/Police-Chief-Says-Caravans-Of-Armed-Thieves-15706214.php>.

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<sup>7</sup> (U) Online Article; KTVU staff; Date Published: 05 November 2020; "Oakland police fatally shoot 20-year-old; say 'violent caravans' struck 10 businesses in 4 hours"; Date Accessed: 21 July 2022; <https://www.ktvu.com/news/oakland-police-fatally-shoot-20-year-old-say-violent-caravans-struck-10-businesses-in-4-hours>.

<sup>8</sup> (U) During the incident, law enforcement did not discharge their weapons.

<sup>9</sup> (U) Media Advisory/News Release; Mendocino County Sheriff's Office; Date Published: 28 September 2020; "MCSO Press Release: Case #2020-23920 UPDATE #1"; Date Accessed: 21 July 2022; [https://us12.campaign-archive.com/?u=d58e8d47c32727a999b3dde01&id=6869bcaeb2&fbclid=IwAR2eT2zvHol\\_8Vxtt1UvKUHCz71k36utMmJl\\_291dgODgfmXKdSRxS0tcrY](https://us12.campaign-archive.com/?u=d58e8d47c32727a999b3dde01&id=6869bcaeb2&fbclid=IwAR2eT2zvHol_8Vxtt1UvKUHCz71k36utMmJl_291dgODgfmXKdSRxS0tcrY).

<sup>10</sup> (U) Online Article; The Daily Beast; Date Published: 04 June 2020; "Organized Thieves Use Protests As Cover to Raid Weed Dispensaries"; Date Accessed: 21 July 2022; [Organized Thieves Use Protests As Cover to Raid Weed Dispensaries \(thedailybeast.com\)](https://www.thedailybeast.com/organized-thieves-use-protests-as-cover-to-raid-weed-dispensaries).

<sup>11</sup> (U) Online Article; The San Francisco Chronicle; Date Published: 03 June 2020; "Caravans of cars full of looters — it's not something East Bay police see every day"; Date Accessed: 21 July 2022; <https://www.sfchronicle.com/bayarea/philmatier/article/Caravans-of-cars-full-of-looters-it-s-not-15312328.php>.

<sup>12</sup> Officer Down Memorial Page <https://odmp.org/officer/24266-deputy-sheriff-brian-david-ishmael>

<sup>13</sup> The Siskiyou Daily News <https://siskiyoudaily.com/story/news/2021/05/08/arrest-made-2020-siskiyou-county-murder-illegal-cannabis-grow-site/5000196001/>

<sup>14</sup> KGET [www.kget.com/news/crime-watch/man-gets-12-years-for-deadly-stabbing-near-bakersfield-marijuana-dispensary/](https://www.kget.com/news/crime-watch/man-gets-12-years-for-deadly-stabbing-near-bakersfield-marijuana-dispensary/)

<sup>15</sup> Daily Mail [www.dailymail.co.uk/news/article-8460085/Man-rescued-helicopter-two-days-shotrobbery-illegal-marijuana-grow.html](https://www.dailymail.co.uk/news/article-8460085/Man-rescued-helicopter-two-days-shotrobbery-illegal-marijuana-grow.html)

## SECTION TEN: *THC Extraction Labs*

### Key Findings

- ❖ There were 194 reported clan lab incidents in California in 2019. Out of the 194 reported labs, 72.6% were honey Oil/THC extraction (141), followed by 9.3% precursor chemicals (18).
- ❖ There were 132 reported clandestine (clan) lab incidents in California in 2020. Out of the 132 reported labs, 64% were honey Oil/THC extraction (82), followed by 19% methamphetamine (24).

### Definitions:

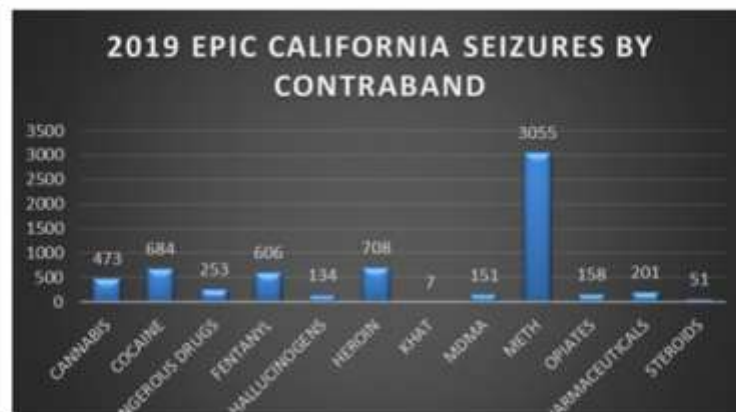
**Clandestine “Clan” Lab:** A place where preparation of illegal substances takes place. These ‘labs’ are used to manufacture drugs, explosives and even biological or chemical weapons.

**Western States Information Network (WSIN):** The information network for Alaska, Washington, Oregon, California and Hawaii that contributes information to the Regional Information Sharing Systems Program (RISS).

**El Paso Intelligence Center (EPIC):** EPIC offers tactical, operational and strategic intelligence support to Federal, State, local, tribal and international law enforcement organizations.



## California Clan Lab-Related Incidents 2019



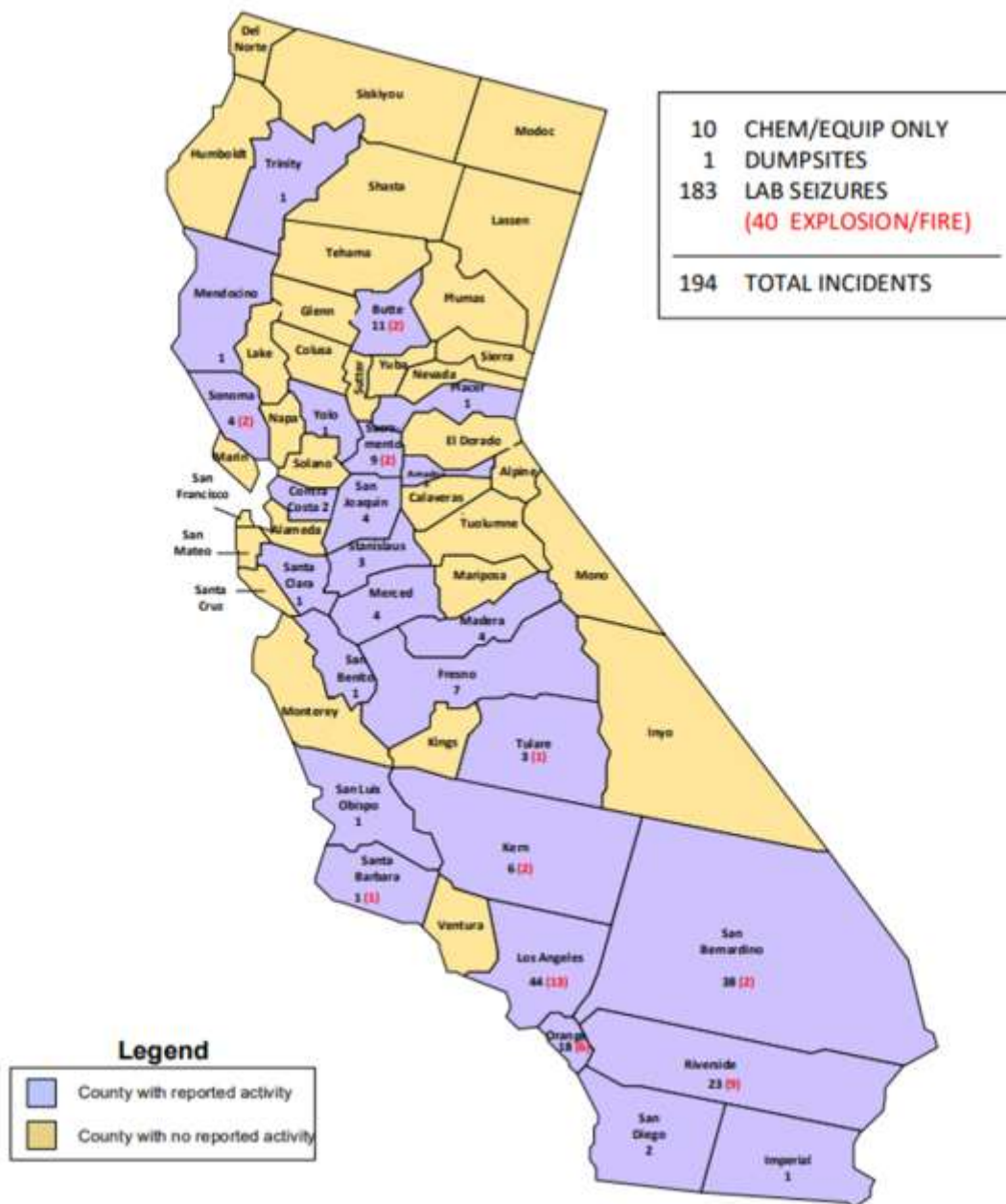
COUNTY	CHEMICAL/ EQUIPMENT ONLY	DUMPSITE	LAB SEIZURE	TOTAL INCIDENTS	EXPLOSION/ FIRE
AMADOR	-	-	3	3	-
BUTTE			11	11	2
CONTRA COSTA	-	-	2	2	-
FRESNO			7	7	
IMPERIAL	-		1	1	-
KERN	-		6	6	2
LOS ANGELES			44	44	13
MADERA	-	-	4	4	
MENDOCINO	-	-	1	1	
MERCED	2	-	2	4	
ORANGE	6	1	11	18	6
PLACER	-	-	1	1	-
RIVERSIDE			23	23	9
SACRAMENTO			9	9	2
SAN BENITO	1			1	
SAN BERNARDINO	-		38	38	2
SAN DIEGO			2	2	-
SAN JOAQUIN			4	4	
SAN LUIS OBISPO		-	1	1	
SANTA BARBARA	-	-	1	1	1
SANTA CLARA	1	-		1	-
SONOMA		-	4	4	2
STANISLAUS	-		3	3	-
TRINITY			1	1	
TULARE	-	-	3	3	1
YOLO	-		1	1	-
<b>TOTAL</b>	<b>10</b>	<b>1</b>	<b>183</b>	<b>194</b>	<b>40</b>

Analyst's Note: Clan lab stats were captured on July 1, 2020. These stats were gathered from WSIN, EPIC, and LACLEAR.

Source: WSIN 2019 Year end Report

- ❖ There were 194 reported clan lab incidents in California in 2019. Out of the 194 reported labs, 72.6% were honey Oil/THC extraction (141), followed by 9.3% precursor chemicals (18).

## CALIFORNIA CLAN LAB-RELATED INCIDENTS 2019



Source: WSIN 2019 Year end Report



"Other" lab seizures include counterfeit prescription pills, GMA, synthetic marijuana, hallucinogenic mushrooms, urine extraction, and steroids.

#### CLAN LAB-RELATED INCIDENTS

County	CHEMICAL/ EQUIPMENT ONLY	DUMPSITES	LAB SEIZURES	TOTAL INCIDENTS	EXPLOSION/ FIRE
ALAMEDA	1	0	1	2	1
AMADOR	0	0	1	1	0
BUTTE	0	0	2	2	1
CONTRA COSTA	0	0	1	1	0
FRESNO	0	0	3	3	1
KERN	0	0	7	7	1
KINGS	0	0	1	1	0
LOS ANGELES	0	3	27	30	1
MERCED	1	0	3	4	0
ORANGE	6	1	11	18	4
RIVERSIDE	0	0	22	22	4
SACRAMENTO	0	0	2	2	0
SAN BERNARDINO	0	0	24	24	5
SAN DIEGO	0	0	2	2	0
SAN LUIS OBISPO	0	0	2	2	2
SAN MATEO	0	0	1	1	0
SANTA CLARA	0	0	1	1	0
SHASTA	0	0	1	1	0
SOLANO	0	0	1	1	0
SONOMA	0	0	2	2	2
TRINITY	0	0	1	1	0
TULARE	0	0	3	3	0
YUBA	0	0	1	1	0
<b>TOTAL</b>	<b>8</b>	<b>4</b>	<b>129</b>	<b>132</b>	<b>22</b>

There were 132 reported clan lab incidents in California for 2020. Out of the 132 reported labs, the most reported labs were honey oil/THC extraction (82) 64%, followed by methamphetamine (24) 19%.

**Analyst's Note:**  
Clan lab stats were captured on May 5, 2021. These stats were gathered from WSIN, EPIC, and LA CLEAR.

Source: WSIN 2020 Year end Report

- ❖ There were 132 reported clandestine (clan) lab incidents in California in 2020. Out of the 132 reported labs, 64% were honey Oil/THC extraction (82), followed by 19% methamphetamine (24).



# SECTION ELEVEN: *Environmental Impacts of Marijuana Cultivation*

Update Provided by Dr. Greta Wengart, MS, PhD

## Key Findings

- ❖ Outdoor marijuana grows consume an estimated 29.4 million gallons of water per year.
- ❖ Researchers estimate over 1.4 million pounds of fertilizers and toxicants used annually at outdoor marijuana grow sites in California.

Integral Ecology Research Center: IERC is a non-profit organization dedicated to the research and conservation of wildlife and their ecosystems. Founded in 2004, IERC has conducted and continues research on several sensitive wildlife species, with the ultimate goal of providing knowledge and understanding towards the conservation of these species and their habitats. Our projects cover many different habitats, from alpine settings to old-growth coastal forests to deserts and tropical jungles. Our research entails a wide range of species from ...

- big cats
- elusive forest carnivores
- sensitive stream amphibians
- endangered invertebrates
- to wildlife and zoonotic diseases

Through our programs, we hope to provide the most current and scientifically accurate ecological information that will help wildlife managers, educators, researchers, and politicians implement well-informed conservation measures for wildlife species and promote biological diversity world-wide.

## IERC Mission Statement

To perform ecological research and compile, organize, and disseminate the results of this research in order to increase scientific knowledge for the public, advance the management and conservation of wildlife species and their communities, and enhance overall ecosystem health and conservation.





## Northern Spotted and Barred Owl Project

- Exposure to rodenticides in Northern Spotted and Barred Owls on remote forest lands in Northwestern California: evidence of food web contamination.
- N. Spotted owls: 7 of 10 (70%)
- Rodents Tested: 36  
All Negative
- Barred Owls Tested: 84  
34 of 84 (40%) Positive for greater than 1 AR

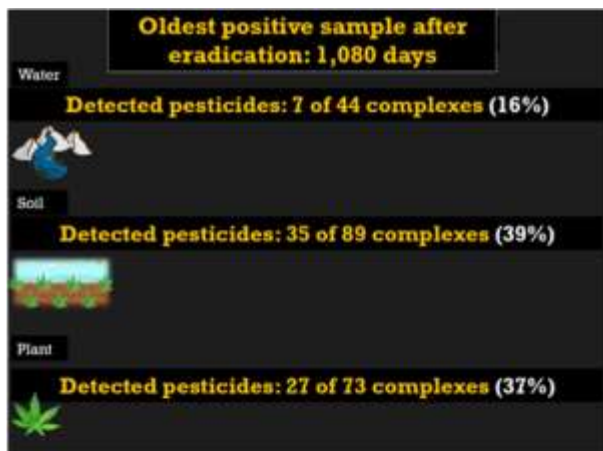


## Documentation Objectives

- Establish a robust and safe protocol to document a site
- Water use and diversion amounts
- Mapping of area of cultivation
- Amount and types of pesticides and fertilizers
- Soil and water sampling
- Native and cannabis plant sampling







Outdoor marijuana grow sites consume an estimated 29.4 million gallons of water per year.

- In June 2021, California declared a state of emergency in several Northern California counties.
- Illicit cannabis grows threaten diminished watersheds already impacted by drought conditions.
- New research estimates each plant needs 900 gallons of water per plant per season.
- Water is diverted from its natural course, drying up native streams.

Researchers estimate over 1.4 million pounds of fertilizers and toxicants used annually at outdoor marijuana grow sites in California.

- The use of anticoagulant rodenticides at outdoor marijuana grow sites kills' wildlife.
- In California, 82% of the sites tested positive for Carbofuran or some other restricted pesticide.
- Carbofuran is manufactured in the U.S. but banned due to its toxicity.
- ◊ Toxicity persists throughout the food web.
- Carbofuran found at grow sites is smuggled from Mexico.
- Growers poach native wildlife for food.

### Carbofuran



- Banned for ALL legal uses in the United States, Canada and the European Union.
- Banned for its high toxicity to humans and the environment.
- ¼ Teaspoon can kill an African Lion
- Brand names differ (Furan, QuFuran, Furadan etc..)

Mean Amount of Fertilizer and Toxicants <b>per</b> Cultivation Location	
Soluble Fertilizer kgs (lbs)	1,268 lb
Liquid Fertilizer L (oz)	1,353 oz
Carbamates	48 oz
Organophosphates	82 oz
Pyrethroids	206 oz
Neonicotinoids	21 oz
Avermectins	90 oz
1 <sup>st</sup> Gen ARs kgs (lbs)	17 lb
2 <sup>nd</sup> Gen ARs	9 lb
Neurotoxicant Rodenticides	8.7 lb
Phosphides	4.4 lb

### Cannabis, Soil and Water Project Objectives:

- Test for toxicants that pose both environmental and human health risks (73 different pesticides).
- Soil
- Water (plus nutrient loading)
- Native vegetation and cannabis



### Cannabis and Wildlife Behavior Project:

- Identify the wildlife species using these sites.
- Monitor whether restoration efforts affect wildlife visitation.
- Are species that normally would avoid each other encouraged to interact?
- In campsites, trash dumps, and trails.

## Cannabis and Wildlife Behavior Project Magnitude of the Dataset

- Number of Photos/Videos Captured to Date (December 2018)

162,436

- Number of Species Detected

59

- Minimum Number of Camera Trap Nights:

+ 17,858

Over 30 Cameras still deployed, more data coming in!

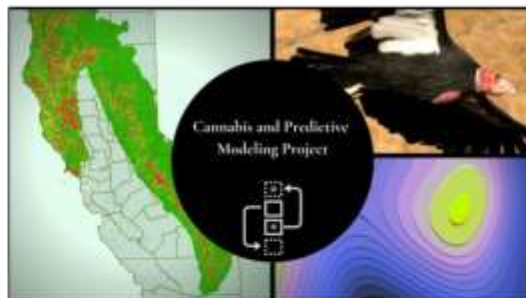
## Preliminary Results

- Wildlife visitation is higher at grow sites than control sites
- Wildlife visitation decreases significantly after reclamation



## Cannabis and Small Mammals Project Site Locations: 2014-2019

- Five sites for a three year study
- Eight sites trapped for one year
- Total trap nights completed: 7,520
- Projected total trap nights: 12,480



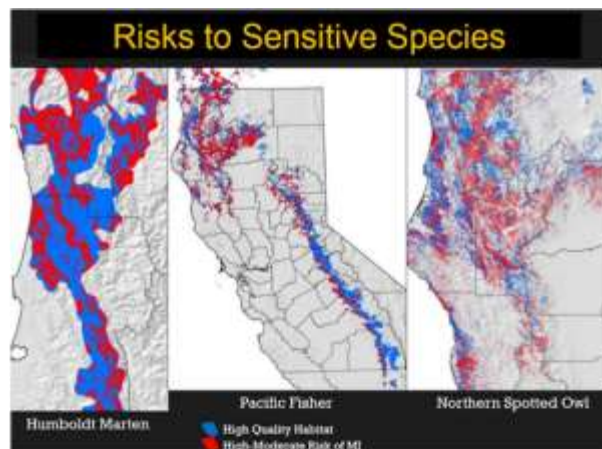
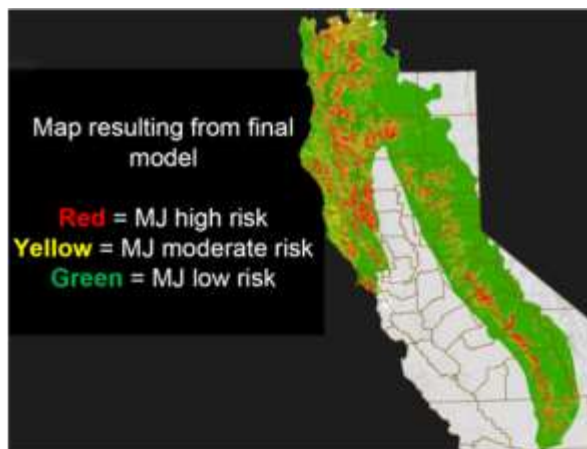
How can we determine the full extent of impact without knowing where all the sites are:

- Close, unique collaboration with law enforcement
- Received law-enforcement sensitive data on grow sited locations (2004-2018) from a multi-agency collaborative.

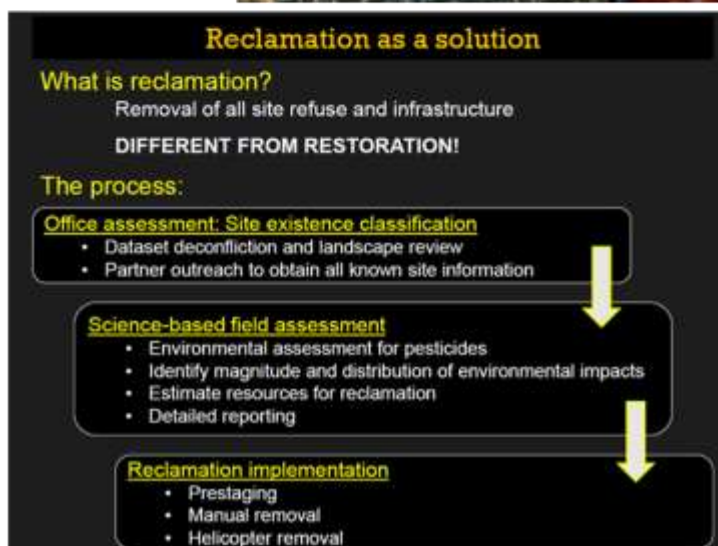
## MAXENT (maximum entropy) modeling

- Use data to predict grow activity within sensitive species' habitats
- Use landscape features that growers might choose
- Identify the habitat areas for these species most at risk
- Overlay risk maps with habitat maps for these species





- Overlap between designated Humboldt marten Conservation Areas and moderate-high likelihood of cultivation = 39%
- Overlap between high quality fisher habitat and moderate-high likelihood of cultivation = 48%
- In southern Sierra Nevada, 81 of 83 fisher home ranges overlapped high-risk area
- Overlap between high quality northern spotted owl habitat and moderate-high likelihood of cultivation = 48%



- Data clearly show that if you reclaim a site, growers do not reoccupy that location.
- 2014-2019: Reclaimed 183 sites = **0% Reoccupation**

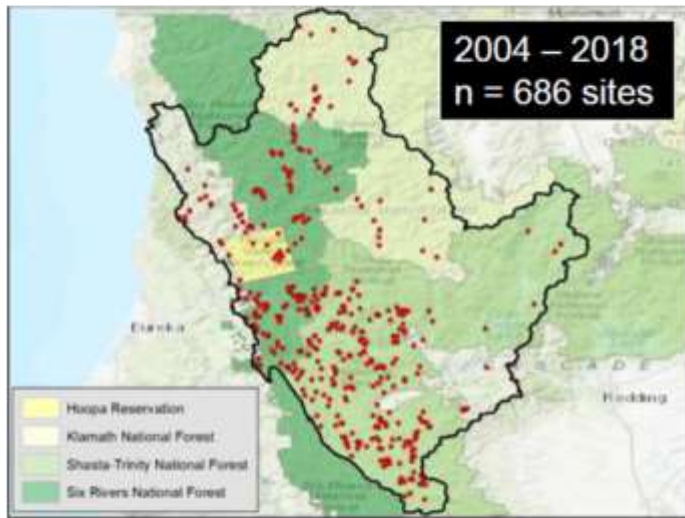
## CDFW Cannabis Restoration Grant

### Summary

- \$1.06 million (\$400k to in wages to local organizations)
- Implementation interval: January 2018-January 2020
- Project location: Klamath Basin
  - ◊ 3 National Forests plus Hoopa Valley Indian Reservation

### Goals

- Develop and refine protocols for assessment and reclamation
  - ◊ Inform the development of future large reclamation programs
- Reclaim at least 170 sites



### Science-based Field Assessments

#### The Need

- HazMat identification and safety determination
  - Toxicological samples for pesticides ( $9.06 \pm 0.73$  per site)
    - Environmental (soil and dead wildlife)
    - Anthropogenic (sprayers, containers, others)
- Determine spatial extent of site and mode of reclamation
- Labor and aviation asset estimates



#### Requirements

- Personnel Time =  $14.2 \pm 1.47$  hours on-site per assessment
- Total Cost per Site: **\$3372 - \$4615** (NOT including travel)
  - Includes 8 – 10 toxicology samples per site @ \$300/ sample

[DTSC's Emergency Response Unit \(ERU\)](#) provides statewide response to releases and potential releases of hazardous substances that pose an acute threat to public health and/or the environment, including clandestine drug labs. The ERU interacts with a number of other state, federal, and local agencies in carrying out these emergency response activities.

The ERU also responds to local agency requests for DTSC assistance on emergency hazardous waste removals from illegal/clandestine drug labs, banned pesticides at illegal marijuana grows, and other hazardous materials (hazmat) emergencies. See below for the number of emergency hazardous waste removals that DTSC's ERU assisted local law enforcement agencies with in 2021 and 2022 (to date).

<p style="text-align: center;"><b><a href="#">DTSC Emergency Response Unit</a></b></p> <p style="text-align: center;"><b>Statewide Emergency Hazardous Waste (HW) Removals</b></p> <p style="text-align: center;"><b><i>CY 2021 and 2022 (January 1, 2022, to September 30, 2022)</i></b></p>		
<b>Emergency Removal Program</b>	<b>Number of HW Removals</b>	<b>Total Cost of HW Removals</b>
<p><b><a href="#">Off-Highway Emergency Removals</a></b></p> <p><b><i>Illegal Cultivation Sites Only</i></b></p>	<p><b>2021:</b> 21</p> <p><b>2022:</b> 17</p>	<p><b>2021:</b> \$22,323</p> <p><b>2022:</b> \$30,933</p>
<p><b><a href="#">Illegal Drug Lab Removals</a></b></p> <p><b><i>THC Extraction Labs Only</i></b></p>	<p><b>2021:</b> 45</p> <p><b>2022:</b> 21</p>	<p><b>2021:</b> \$246,037</p> <p><b>2022:</b> \$238,018</p>

Source: California Environmental Protection Agency



# Appendix A



## AMERICAN NONSMOKERS' RIGHTS FOUNDATION

### Secondhand Marijuana Smoke

"Smoke is smoke. Both tobacco and marijuana smoke impair blood vessel function similarly. People should avoid both, and governments who are protecting people against secondhand smoke exposure should include marijuana in those rules."

*-Matthew Springer, cardiovascular researcher and Associate Professor of Medicine, University of California, San Francisco*

#### Facts about secondhand marijuana smoke:

- Marijuana smoke is created by burning components of plants in the genus Cannabis.
- Secondhand marijuana smoke is a complex chemical mixture of smoke emitted from combusted marijuana and the smoke that is exhaled by the user.
- Secondhand marijuana smoke contains fine particulate matter that can be breathed deeply into the lungs.
- Secondhand marijuana smoke contains many of the same cancer-causing substances and toxic chemicals as secondhand tobacco smoke. Some of the known carcinogens or toxins present in marijuana smoke include: acetaldehyde, ammonia, arsenic, benzene, cadmium, chromium, formaldehyde, hydrogen cyanide, isoprene, lead, mercury, nickel, and quinoline.<sup>i</sup>
- Marijuana smoke contains tetrahydrocannabinol (THC), the active chemical in cannabis.

#### Health risks of exposure to secondhand marijuana smoke:

Since marijuana is illegal under federal law, there have been a limited number of studies examining health risks associated with marijuana use and exposure in the United States. Health risks from primary and secondhand smoke exposure may also be difficult to determine as marijuana is often used in combination with tobacco.

However, peer-reviewed and published studies do indicate that exposure to secondhand marijuana smoke may have health and safety risks for the general public, especially due to its similar composition to secondhand tobacco smoke.

- Secondhand smoke from combusted marijuana contains fine particulate matter that can be breathed deeply into the lungs,<sup>ii</sup> which can cause lung irritation, asthma attacks, and makes respiratory infections more likely. Exposure to fine particulate matter can exacerbate health problems especially for people with respiratory conditions like asthma, bronchitis, or COPD.<sup>iii</sup>
- Particulate levels from secondhand marijuana smoke are even higher than particulate levels from secondhand tobacco smoke. A study comparing indoor particulate matter 2.5 (PM2.5) levels from secondhand marijuana smoke and secondhand tobacco smoke concluded that "the average PM2.5 emission rate of the pre-rolled marijuana joints was found to be 3.5 times the average emission rate of Marlboro tobacco cigarettes, the most popular US cigarette brand." **Smoking a marijuana joint indoors can produce extremely high indoor PM2.5 concentrations, thereby exposing the public and workers to dangerous secondhand marijuana smoke emissions.**<sup>iv</sup>

- On-site consumption of cannabis using electric vaporizers, vape pens, and dab rigs produces a chemical aerosol that pollutes indoor air to unhealthy levels. This diminished air quality was observed when marijuana was not being combusted on-site. Researchers measured high levels of PM2.5 inside a marijuana retailer that allowed vaporizing, dabbing, and vaping marijuana - but did not allow smoking of marijuana or tobacco.<sup>v</sup>
- Researchers at the University of California at Berkeley studying fine particulate matter exposure found that cannabis bong smoking in the home generated **4 times greater PM2.5 concentrations** than cigarette or tobacco hookah (waterpipe) smoking.<sup>vi</sup>
- Significant amounts of mercury, cadmium, nickel, lead, hydrogen cyanide, and chromium, as well as 3 times the amount of ammonia, are found in mainstream marijuana smoke than is in tobacco smoke.<sup>vii</sup>
- In 2009, the California Office of Environmental Health Hazard Assessment added marijuana smoke to its Proposition 65 list of carcinogens and reproductive toxins, also known as the Safe Drinking Water and Toxic Enforcement Act of 1986. It reported that at least 33 individual constituents present in both marijuana smoke and tobacco smoke are Proposition 65 carcinogens.<sup>viii, ix</sup>
- Secondhand smoke from marijuana has many of the same chemicals as smoke from tobacco, including those linked to lung cancer.<sup>x</sup>
- Secondhand marijuana exposure impairs blood vessel function. Published studies on rats show that thirty minutes of exposure to secondhand marijuana smoke at levels comparable to those found in restaurants that allow cigarette smoking led to substantial impairment of blood vessel function. Marijuana smoke exposure had a greater and longer-lasting effect on blood vessel function than exposure to secondhand tobacco smoke.<sup>xi</sup>
- One minute of exposure to marijuana SHS substantially impairs endothelial function in rats for at least 90 minutes, considerably longer than comparable impairment by tobacco SHS. The findings in rats suggest that SHS can exert similar adverse cardiovascular effects regardless of whether it is from tobacco or marijuana.<sup>xii</sup>
- Secondhand marijuana smoke and secondhand tobacco smoke is similar in many ways. More research is needed, but the current body of science shows that both tobacco and marijuana smoke have similar chemical composition and suggests that they may have harmful cardiovascular health effects, such as atherosclerosis (partially blocked arteries), heart attack, and stroke.<sup>xiii</sup>
- Particle concentrations from dabbing and vaporizing cannabis can create levels of indoor air pollution similar as those seen in extreme air pollution events like wildfires and severe industrial pollution. Exposure at these concentrations can cause cardiovascular and respiratory disease.<sup>xiv</sup>
- People who are exposed to secondhand marijuana smoke can have detectable levels of THC (tetrahydrocannabinol) in their blood and urine.<sup>xv</sup>
- Marijuana also can be contaminated with mold, insecticides or other chemicals that may be released in secondhand smoke.<sup>xvi</sup>

#### **Including Marijuana Smoking in Smokefree Public Place and Workplace Laws:**

- Everyone has the right to breathe smokefree air. Smokefree policies are designed to protect the public and all workers from exposure to the health hazards caused by exposure to secondhand tobacco smoke. The same should be true for secondhand marijuana smoke.
- The percent of U.S. adults who use marijuana more than doubled from 4.1% to 9.5% between 2001-2002 and 2012-2013,<sup>xvii</sup> which may also indicate an increase in exposure to secondhand marijuana smoke.
- The American Society for Heating, Refrigeration, and Air Conditioning Engineering (ASHRAE) is the organization that develops engineering standards for building ventilation systems. ASHRAE now bases its ventilation standard for acceptable indoor air quality on an environment that is completely free from secondhand tobacco smoke, secondhand marijuana smoke, and emissions from electronic smoking devices.<sup>xviii</sup>
- To protect public health, improve consistency, and aid enforcement, smokefree laws for public places and workplaces should include tobacco as well as marijuana, whether it is smoked or aerosolized. Allowing marijuana smoking in places where smoking is now prohibited could undermine laws that protect the public from exposure to secondhand smoke. The Tobacco Control Legal Consortium issued an informative brief on [Lessons from Tobacco Control for Marijuana Regulation](#).<sup>xx</sup>
- Smokefree policies provide incentives to quit smoking, help denormalize smoking behavior, and are particularly effective among youth and young adults who are vulnerable to visual cues and social norms of smoking. It is likely that smokefree policies for marijuana will have a similar effect.
- As of July, 2022, 869 localities and 35 states/territories/commonwealths restrict marijuana use in some or all smokefree spaces. Of these, 468 localities and 21 states/territories/commonwealths prohibit smoking and vaping of recreational and medical marijuana in one or more of the following venues: non-hospitality workplaces, restaurants, bars, and/or gambling facilities.

#### **Maintaining the Smokefree Gain from Industry Interference:**

- The tobacco industry is setting its sights on the commercialization of marijuana and pushing for on-site consumption to once again normalize smoking and vaping in public, undermining decades of smokefree protections. Creating transparency about the relationships between the cannabis industry, related industries, and policymakers is essential to ensure appropriate regulation of cannabis products.
- An observational study found that nearly half of lobbyists did not disclose that they represented the cannabis industry or interests, which makes it difficult for people to track the industry's activity and spending. As the study notes, "The cannabis industry has an interest in creating a regulatory environment which maximizes profits at the cost of public health, similar to the tobacco, alcohol, and food industries." It is imperative for public health advocates to educate policymakers and the public about the cannabis industry's well-funded lobbying activities that aim to promote their profits over the public's wellbeing.

**In the interest of public health, the use of combustible or aerosolized marijuana should be prohibited wherever tobacco smoking is prohibited.**



## ANR Foundation's Position on Exposure to Secondhand Marijuana Smoke:

Marijuana smoke is a form of indoor air pollution. Therefore, ANR, our lobbying organization, includes marijuana within the definition of smoking, and all of our model laws and policies include a prohibition on smoking marijuana wherever smoking of tobacco products is not allowed. Our organization does not have a position on whether marijuana should be legalized; we are committed to smokefree protections from secondhand smoke from tobacco products, marijuana and aerosol from electronic smoking devices.

**Nobody should have to breathe secondhand marijuana smoke at work, in public, or where they live.** We want healthy, smokefree air for workers and the public, products like marijuana and electronic smoking devices (which can be used to "vape" a wide range of substances, including marijuana and hash oil) must not be used in smokefree environments where others are forced to breathe the secondhand emissions.

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