

ARIZONA HIGH INTENSITY DRUG TRAFFICKING AREA



Marijuana Legalization in Arizona: A Baseline Report

Published August 2022



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INTRODUCTION

Purpose of Report

The purpose of this report is to examine data about the use of marijuana and its impact on the public health and safety of Arizona citizens and communities from the enactment of Proposition 203, the Arizona Medical Marijuana Act, in December 2012, to the implementation of Proposition 207, the Smart and Safe Arizona Act, in January 2021. This report provides a retrospective baseline analysis of marijuana use and its impact on crime and social and health indicators before legalizing adult marijuana use under Proposition 207. This report sets the stage for future reports to examine what changes occur in these indicators in the years following the legalization of marijuana in Arizona.

Arizona Marijuana Legislation

PROPOSITION 203

On November 2, 2010, Arizona voters passed Proposition 203, the Arizona Medical Marijuana Act (AMMA), hereinafter referred to as Proposition 203, making Arizona the 15th state to adopt a medical marijuana law. Key provisions of the law allow for a qualified patient registered with the Arizona Department of Health Services (ADHS) or their designated caregiver on behalf of the patient to purchase up to 2.5 ounces of marijuana within a 14-day period from a licensed non-profit medical marijuana dispensary. The qualified patient must be an Arizona resident with a valid Arizona identification card and must have one of the qualifying debilitating medical conditions defined by Proposition 203. A qualified patient or their designated caregiver is permitted to cultivate up to 12 marijuana plants if the patient resides more than 25 miles from a medical marijuana dispensary, and the ADHS granted marijuana cultivation rights

PROPOSITION 207

On November 3, 2020, Arizona voters approved Proposition 207, the Smart and Safe Arizona Act, hereinafter referred to as Proposition 207, making Arizona the 15th state to ratify the adult use of marijuana. Key provisions of the law allow for the personal possession of one ounce or less of marijuana, except that not more than five grams of marijuana may be in the form of marijuana concentrate by adults ages 21 and older; lawful cultivation of up to 6 marijuana plants at a primary residence and not more than 12 marijuana plants at a single residence where two or more adults reside at one time; and the state and local taxation of revenue generated from commercial marijuana sales.

On January 22, 2021, approximately three months after Proposition 207 was approved, adult use marijuana sales commenced in Arizona.

EXECUTIVE SUMMARY

Marijuana Legalization in Arizona

MEDICAL/ADULT MARIJUANA USE: TIMELINE

- On November 2, 2010, Arizona voters passed Proposition 203, making Arizona the 15th state to adopt a medical marijuana law. Two years later, on December 6, 2012, the first medical marijuana dispensary opened in Arizona.
- On June 7, 2019, Governor Doug Ducey signed Senate Bill 1494 requiring that independent third-party and state-certified laboratories test marijuana and marijuana products for unsafe levels of microbial contamination, heavy metals, pesticides, herbicides, fungicides, residual solvents, and other contaminants.
- On November 3, 2020, Arizona voters approved Proposition 207, making Arizona the 15th state to ratify the adult use of marijuana. On January 22, 2021, approximately three months after Proposition 207 was approved, adult marijuana sales commenced in Arizona.
- As of June 30, 2021, 124 adult use dispensaries were in operation; these dispensaries are dual-licensed to sell both adult use and medical marijuana.
- When Proposition 207 is fully implemented, 169 marijuana dispensaries will be open throughout Arizona, and over 520 marijuana dispensing, manufacturing, and cultivation facilities will be operational in Arizona.

PROPOSED BENEFITS OF PROPOSITION 207

A review of Proposition 207 suggests the following benefits:

- Creates a safe and regulated environment to purchase marijuana and does not expose buyers to criminal actors in the illicit drug market.

- Will make marijuana safer to use because marijuana and marijuana products will be free of contaminants.
- Will generate millions of dollars in new tax revenue which will be provided to community colleges, law enforcement agencies, along with fire departments, state and local transportation programs, and the Arizona Attorney General's Office.
- Tax revenue generated will be distributed from a Justice Reinvestment Fund to public behavioral health programs, substance use prevention and treatment programs, workforce development programs, and industry-specific technical assistance to economically isolated communities.
- Supports the restorative justice process by eliminating low-level marijuana arrests and the expungement of eligible marijuana-related criminal records.
- Mandates the creation of the Social Equity Ownership Program to promote the ownership of marijuana dispensaries and testing facilities by individuals from marginalized communities that have been disproportionately impacted by marijuana laws.
- Protects children by requiring the packaging of marijuana products be child-proof and labeled; bans advertising of marijuana products towards children; and bans the sale of marijuana products that resemble candy.



Marijuana Use in Arizona

MARIJUANA USE IN ARIZONA

- According to the National Survey on Drug Use and Health (NSDUH), past year marijuana use increased 36% in the 12 and older age group between 2011-2012 and 2018-2019.
- According to the NSDUH, past month (30-day) marijuana use increased 53% in the 12 and older age group between 2011-2012 and 2018-2019.
- The NSDUH reported that between 2011-2012 and 2018-2019, past year marijuana use increased 3% in the 18-25 age group and increased 68% in the 26 and over age group.
- According to the NSDUH, between 2011-2012 and 2018-2019, past month marijuana use increased 21% in the 18-25 age group and increased 89% in the 26 and over age group.

ARIZONA YOUTH SURVEY (AYS) – MARIJUANA USE BY 8th, 10th, AND 12th GRADE STUDENTS

- According to the Arizona Youth Survey (AYS), lifetime marijuana use reported by students in the 8th, 10th, and 12th grades decreased 4% between 2012 and 2020.
- The AYS also reported that from 2012 through 2020, students in the 8th, 10th, and 12th grades who engaged in 30-day marijuana use decreased 10%.
- In 2020, the AYS found the primary modes for students in the 8th, 10th, and 12th grades to obtain marijuana were from friends, followed by a drug dealer.
- The AYS data indicates students in the 8th, 10th, and 12th grades reporting 30-day marijuana use and receiving marijuana from a medical marijuana cardholder increased 121%, from 9.2% in 2012 to 20.3% in 2020.

MARIJUANA USE BY ARIZONA 8th, 10th, AND 12th GRADE STUDENTS: PRE COVID-19 DATA (2012-2018)

- According to the AYS, lifetime marijuana use by students in the 8th, 10th, and 12th grades

increased 1%, from 29.3% in 2012 to 29.7% in 2018.

- The AYS data reveals that past 30-day marijuana use by students in the 8th, 10th, and 12th grades increased 5% overall, from 14.9% in 2012 to 15.7% in 2018.

Marijuana Potency

- According to the National Center for Natural Products Research at the University of Mississippi, the delta-9-tetrahydrocannabinol (THC) potency of marijuana samples seized from the illicit drug market in the United States increased 17%, from 12.27% in 2012 to 14.35% in 2019.
- During April 25-26, 2022, an online review of marijuana products sold at 10 Arizona dispensaries showed THC potency could range anywhere from 2% to 99%.

Public Health

MARIJUANA USE AND PREGNANCY

- The number of Substance Exposed Newborns Program (SEN) cases reported to the Department of Child Safety (DCS) increased 81%, from 2,140 in 2012 to 3,872 in 2020.
- SEN cases with a positive drug test increased 134%, from 932 in 2012 to 2,184 in 2020. During the same period, SEN reporting indicates positive parental tests for marijuana increased 166%, from 592 to 1,572.

ILLICIT DRUG USE AND CHILD ABUSE AND MALTREATMENT

- The Arizona Families F.I.R.S.T. (Families in Recovery Succeeding Together - AFF) program was established to address adverse alcohol and drug abuse conditions in families where allegations of child maltreatment were associated with parental substance abuse.
- From State Fiscal Year (SFY) 2016 to SFY 2019, approximately 92.6%, or 22,952 individuals, prior to referral to the AFF program had one or more substantiated child maltreatment reports.

- Between SFY 2018 and SFY 2020, the data indicates that 90% (18,938) of the AFF participants who completed the substance abuse assessment needed substance abuse treatment. Additionally, AFF participants reporting 30-day marijuana use increased from 45% to 54%.
- According to the Arizona Child Fatality Review Program (CFR), marijuana was a direct or contributing factor in the death of a child, and the child was the user, increased 64%, from 33 deaths in 2019 to 54 deaths in 2020.

MARIJUANA AND HOMICIDE

- An examination of the Arizona Violent Death Reporting System (Arizona-VDRS) data indicates homicide victims testing positive for THC increased 108%, from 25 in 2015 to 52 in 2016.
- The Arizona-VDRS data shows the overall percentage of homicide victims with a positive drug toxicology and testing positive for THC increased 54% between 2015 and 2016. In 2015, 193 homicide victims tested positive for at least one drug, and 25 victims (13%) tested positive for THC. In 2016, 260 victims tested positive for at least one drug, and 52 victims (20%) tested positive for THC.
- An examination of the Maricopa County Office of the Medical Examiner (MME) data reveals homicide victims testing positive for THC increased 48%, from 105 in 2019 to 155 in 2020.
- The MME data indicates the overall percentage of homicide victims with a positive drug toxicology and testing positive for THC increased 17% between 2019 and 2020. In 2019, the MME handled 228 homicide cases with a positive drug test, and 105 victims (46%) tested positive for THC. In 2020, the MME office handled 289 homicide cases with a positive drug test, and 155 victims (54%) tested positive for THC.

MARIJUANA AND SUICIDE

- According to the 2016 Arizona-VDRS, 715 suicide victims underwent toxicology testing, and 68.1%, or 487 victims, tested positive for at least one drug. Only 176 victims were tested for THC; of those, 14.8%, or 26 victims, tested

positive for THC.

- An examination of MME data indicates suicide victims testing positive for THC increased 23%, from 132 in 2019 to 162 in 2020.
- According to MME data, the overall percentage of suicide victims with a positive drug toxicology and testing positive for THC increased 30% from 2019 to 2020. In 2019, the MME handled 492 cases with a positive drug test, and 132 victims (27%) tested positive for THC. In 2020, the MME handled 458 cases with a positive drug test, and 162 victims (35%) tested positive for THC.

Health Care Utilization

MARIJUANA EMERGENCY ROOM ADMISSIONS

- According to the Arizona Department of Health Services (ADHS), marijuana-induced emergency room (ER) admissions increased 267% between 2012 and 2020 in Arizona. Additionally, ER admissions for marijuana-induced poisonings increased 165% between 2012 and 2020.

MARIJUANA POISON EXPOSURE CALLS

- According to the Arizona Poison and Drug Information Center and Banner Poison and Drug Information Center, marijuana poison exposure calls increased 203% between 2017 and 2020.
- The Arizona Poison and Drug Information Center and Banner Poison and Drug Information Center reported that from 2017 to 2020, marijuana-related poison exposure calls for children under the age of 12 increased 198%.
- According to the Arizona Poison and Drug Information Center and Banner Poison and Drug Information Center, between 2017 and 2020, marijuana edible poison exposure calls increased 371% in Arizona.
- From 2017 through 2020, the Banner Poison and Drug Information Center responded to 280 calls for marijuana edible poisonings,

of which 36% (100 calls) involved infants and toddlers 0-5 years of age.

- From 2018 through 2020, the Arizona Poison and Drug Information Center and Banner Poison and Drug Information Center received 105 poison exposure calls for Cannabidiol (CBD) products.
- From 2018 through 2020, the Banner Poison and Drug Information Center responded to 81 calls for CBD poisonings, of which 47% (38 exposure calls) involved children 0-12 years of age.
- According to the American Society for the Prevention of Cruelty to Animals (ASPCA), Animal Poison Control Center, marijuana poison exposure cases for all animal species in Arizona increased 329%, from 38 calls in 2015 to 163 calls in 2020.

TREATMENT EPISODE DATASET: TREATMENT ADMISSIONS

- Between 2012 and 2019, marijuana treatment admissions reported to the Treatment Episode Dataset (TEDS) decreased 27%.

Motor Vehicle Crashes and Impaired Driving

MOTOR VEHICLE CRASHES AND FATALITIES

- According to the Arizona Department of Transportation (ADOT), the number of persons killed in fatal motor vehicle crashes increased 29%, from 821 deaths in 2012 to 1,057 deaths in 2020.
- According to the Fatality Analysis Reporting System (FARS), fatal traffic crashes involving a driver testing positive for THC in Arizona increased 109%, from 33 in 2012 to 69 in 2019.
- According to Arizona State Trauma Registry (ASTR) motor vehicle and motorcycle total trauma case volume, occupants testing positive for THC increased from 7.57% in 11,235 cases in 2013 to 11.53% in 12,188 cases in 2020.
- An examination of the ASTR data for occu-

pants (driver and passenger) in motor vehicle and motorcycle trauma incidents indicates occupants testing positive for THC increased 65%, from 850 in 2013 to 1,405 occupants in 2020.

- According to ASTR motor vehicle and motorcycle total trauma case volume, drivers testing positive for THC increased from 7.65% in 7,738 cases in 2013 to 12.32% in 8,664 cases in 2020.
- The ASTR driver data for motor vehicle and motorcycle trauma incidents reveals the number of drivers testing positive for THC increased 80%, from 592 in 2013 to 1,067 in 2020.

MARIJUANA AND IMPAIRED DRIVING

- The Governor's Office of Highway Safety (GOHS) reported that arrests for driving under the influence (DUI) of drugs, to include THC, increased 81%, from 4,511 in 2012 to 8,187 arrests in 2020.
- The Arizona Department of Public Safety (DPS), Scientific Analysis Bureau, provides forensic services to DPS and other law enforcement agencies in Arizona. From 2018 through 2020, positive blood toxicology submissions from DPS and other law enforcement agencies to the Scientific Analysis Bureau for THC decreased by 1%, from 1,568 submissions to 1,553 submissions.
- Between 2018 and 2020, positive blood toxicology submissions from DPS and other Arizona law enforcement agencies to the Scientific Analysis Bureau for THC in combination with other drugs increased 7%, from 2,564 submissions to 2,737.
- The number of cannabinoids (THC, Hydroxy-THC, and Carboxy-THC) positive toxicology tests processed by the Mesa Police Department, Forensic Services Laboratory, decreased 38%, from 952 cases in 2017 to 589 in 2020.
- According to the Phoenix Police Department, Laboratory Services Bureau, positive toxicology tests for cannabinoids (THC, Hydroxy-THC, and Carboxy-THC) increased 5%, from 661 positive tests in SFY 2019-2020 to 694 in SFY 2020-2021.

- Positive THC toxicology tests processed by the Phoenix Police Department Laboratory Services Bureau remained stable at 538 in SYF 2019-2020 and 538 in SFY 2020-2021.
- An analysis conducted by the Phoenix Police Department, Laboratory Services Bureau, indicates the average concentrate of THC in blood samples increased 6%, from 6.9 nanograms per milliliter (ng/mL) in SFY 2019-2020 to 7.3 ng/mL in SFY 2020-2021.

Marijuana Use and the Arizona Workforce

PROPOSITION 207 AND THE WORKPLACE

- Proposition 207 creates no special protections for employment applicants who are adult marijuana users.
- Arizona employers may continue to prohibit employees from using, selling, possessing, and being impaired by marijuana in the workplace and while on duty.

WORKFORCE DRUG TESTING

- According to the Quest Diagnostics Multi-Year Analysis Report, marijuana positive tests in the United States workforce increased 29%, from 2.4% in 2015 to 3.1% in 2019.
- Quest Diagnostics workforce testing data shows the marijuana positivity rate in Arizona increased 200%, from 1.1% in 2012 to 3.3% in 2020.

Marijuana in Schools

- According to the AYS, 8th, 10th, and 12th grade students obtaining marijuana at school increased 36%, from 11.1% in 2012 to 15.1% in 2020.
- According to the AYS, 8th, 10th, and 12th grade students reporting being drunk or high (drugs) at school decreased from 19.8% in 2012 to 13.2% in 2020.

Marijuana and the Juvenile Justice System

JUVENILE COURT REFERRALS FOR MARIJUANA POSSESSION

- According to Arizona's Juvenile Court Counts, juvenile possession of marijuana court referrals decreased 15%, from 1,682 in SFY 2016 to 1,430 in SFY 2020.

JUVENILE COURT REFERRALS FOR MARIJUANA POSSESSION: PRE COVID-19 DATA (SFY 2016 – SFY 2019)

- According to Arizona's Juvenile Court Counts, juvenile possession of marijuana court referrals increased 3%, from 1,682 in SFY 2016 to 1,737 referrals in SFY 2019.

DRUGS, FELONY, AND MISDEMEANOR JUVENILE COURT REFERRALS

- According to Arizona's Juvenile Court Counts, juvenile court referrals for drugs, both felony and misdemeanor offenses, decreased 17%, from 3,382 in SFY 2016 to 2,804 in SFY 2020.

DRUGS, FELONY, AND MISDEMEANOR JUVENILE COURT REFERRALS: PRE-COVID-19 DATA (SFY 2016 – SFY 2019)

- Arizona's Juvenile Court Counts data indicates juvenile court referrals for drugs, both felony and misdemeanor offenses, increased 2%, from 3,382 referrals in SFY 2016 to 3,465 in SFY 2019.

Marijuana and the Opioid Epidemic

RELATIONSHIP BETWEEN MEDICAL MARIJUANA AND OPIOIDS

- Proponents of medical marijuana maintain that marijuana access is associated with reduced rates of opioid-related mortality and may be an effective pain relief substitute for opioid pain relievers.

- In 2019, a research paper entitled “Association between Medical Cannabis Laws and Opioid Overdose Mortality has Reversed Over Time” reported that states with medical marijuana laws have experienced higher than expected opioid overdose death rates.
- The research evidence suggests medical marijuana users are at higher risk for both prescription and nonmedical prescription drug use when compared to non-users of medical marijuana.

OPIOID DEATHS AND CONTROLLED SUBSTANCES PRESCRIPTION MONITORING PROGRAM

- According to the Arizona Department of Health Services (ADHS), opioid overdose deaths (heroin, prescription opioids, synthetic opioids) increased 198%, from 454 deaths in 2012 to 1,351 in 2019.
- According to the Controlled Substances Prescription Monitoring Program (CSPMP), opioid prescriptions dispensed in Arizona decreased 20%, from 5,034,089 in 2012 to 4,020,027 prescriptions in 2019.

MARIJUANA AND CHRONIC PAIN

- The number of qualified medical marijuana patient cardholders increased 1,710%, from 16,313 in 2011 to 295,295 in 2020.
- In 2020, approximately 94% (276,449) of qualified cardholders claimed chronic pain as one of the unique debilitating conditions justifying an Arizona medical marijuana card.
- Medical marijuana distribution increased by over 3,000%, from 2,701 kilograms in 2013 to 85,670 kilograms in 2020.
- Marijuana edibles distribution increased 69%, from 1,340 kilograms in 2015 to 2,260 kilograms in 2020.

Marijuana and the Illicit Market

PROPOSITION 207 AND CRIME

Proponents of Proposition 207 believe marijuana legalization will decrease crime in several ways:

- Creates a safe and regulated environment to purchase marijuana and does not expose buyers to criminal actors in the illicit market.
- Decreases the burden on law enforcement to investigate low-level marijuana offenses and frees up resources to address violent crime and serious property crime.
- Diverts marijuana production and sales from drug trafficking organizations to the legal market and, over time, this will diminish the size and scope of illicit market and reduce crime.

PROPOSITION 203: UNLICENSED MARIJUANA DISPENSARIES AND ILLEGAL MARIJUANA CULTIVATION

- Since the implementation of Proposition 203, open-source reporting documents the existence of an underground marijuana market consisting of non-authorized marijuana dispensaries, marijuana delivery services, marijuana clubs, marijuana co-ops, and farmer’s markets, all engaged in illegal, for-profit marijuana distribution activities.

MARIJUANA ARRESTS IN ARIZONA

- According to the Crime in Arizona Report, arrests for marijuana possession decreased 22%, from 15,001 arrests in 2012 to 11,661 in 2019. Further examination indicates 49% of the arrestees were from minority groups in 2012 compared to 57% in 2019. Minority groups are operationally defined as Black, American Indian, Asian, Hispanic, and Pacific Islander.
- According to the Crime in Arizona Report, marijuana sale or manufacture arrests decreased 64%, from 1,499 arrests in 2012 to 544 in 2019. Further examination indicates 63% of the arrestees were from minority groups in 2012 compared to 64% in 2019. Minority groups are operationally defined as Black, American Indian, Asian, Hispanic, and Pacific Islander.

Illicit Market Marijuana and Marijuana Product Seizures 2016-2020

- Marijuana seizures by the Arizona HIDTA Initiatives decreased 94%, from 305,472 kilograms in 2016 to 16,835 kilograms in 2020.
- Illicit market domestically produced marijuana is marijuana cultivated in Arizona and/or imported from California and, to a lesser extent, from other Western states where adult marijuana use is legal.
- From 2017 through 2020, domestically produced marijuana seized by the Arizona HIDTA Initiatives decreased 55%, from 2,215 kilograms to 999 kilograms.
- The number of indoor marijuana plants seized by the Arizona HIDTA Initiatives decreased 33%, from 3,336 in 2016 to 2,249 plants in 2020.
- Arizona HIDTA seizure data indicates illicit market marijuana edible products seized in Arizona are primarily diverted from California and, to a lesser extent, other Western states where adult marijuana use is legal.
- Marijuana edible seizures by the Arizona HIDTA Initiatives increased from 5 kilograms in 2016 to 92 kilograms in 2020.
- Arizona HIDTA seizure data indicates illicit market hash oil seized in Arizona is primarily diverted from California and, to a lesser extent, from other Western states where adult marijuana use is legal.
- Seizures of hash oil by the Arizona HIDTA Initiatives increased 101%, from 172 kilograms in 2017 to 346 kilograms in 2020.
- The Arizona HIDTA Initiatives seized 38,113 illicit market vaping cartridges in 2019 and an additional 26,222 vaping cartridges in 2020.
- Indoor marijuana cultivation sites and high-grade marijuana are the targets of home invasions in Arizona.
- Crime incident data for operational marijuana dispensaries in Tucson, Arizona, indicates a

total of 51 criminal offenses involving robbery, burglary, larceny, and motor vehicle theft occurred at the dispensary or the adjacent parking lot between 2015 and 2020.

- Crime incident data for operational marijuana dispensaries in Phoenix, Arizona, indicates a total of 30 criminal offenses involving robbery, burglary, and theft occurred at the dispensary address between 2015 and 2020.

Proposition 207: Economic Impact

- During CY 2021, the Arizona Department of Revenue estimated taxable sales for combined marijuana and marijuana product sales under Proposition 207 and Proposition 203 is approximately \$1.35 billion.
- During CY 2021, the Arizona Department of Revenue received approximately \$217.5 million in taxes from marijuana and marijuana product sales under Propositions 203 and 207.
- During CY 2021, approximately \$96.4 million was distributed from the Smart and Safe Arizona fund by the Office of the Arizona State Treasurer under the guidelines of Proposition 207.

MEDICAL/ADULT MARIJUANA USE: TIMELINE

Arizona Medical Marijuana Act: Proposition 203

On November 2, 2010, Arizona voters passed ballot initiative, Proposition 203, making Arizona the 15th state to adopt a medical marijuana law. Under Proposition 203, the Arizona Department of Health Services (ADHS) is designated as the agency responsible for issuing medical marijuana identification cards for qualifying patients, assigned caregivers, and dispensary agents. The ADHS is also responsible for selecting, registering, and overseeing medical marijuana dispensaries.

In accordance with Proposition 203, non-profit medical marijuana dispensaries shall register with the ADHS. The ADHS may not issue more than 1 non-profit medical marijuana dispensary registration certificate for every 10 pharmacies registered under section 32-1929 that have obtained a pharmacy permit from the Arizona Board of Pharmacy and operate in the state. At this time, the cap for non-profit medical marijuana dispensary registration certificates is 130. As per A.A.C. R9-17-304, dispensary registration certificate applicants must submit an application in a Department-provided format (Dispensary Registration Certificate Application)¹.

Under Proposition 203 provisions, medical marijuana patients must be an Arizona resident with a valid Arizona identification card and must have one of the qualifying debilitating medical conditions as diagnosed by a licensed physician (a doctor of medicine, osteopathy, naturopathic medicine, or homeopathy). Qualifying health conditions are Cancer, Glaucoma, HIV/AIDS, Hepatitis C, Amyotrophic Lateral Sclerosis, Crohn's disease, Post Traumatic Stress Disorder, and agitation of Alzheimer's disease. In addition, a chronic or debilitating disease or medical condition that produces any of the following cachexia or wasting syndrome, severe and chronic pain, severe nausea, seizures, and severe and persistent muscle spasms.

Proposition 203 allows for medical marijuana patients or their designated caregivers to purchase up to 2.5 ounces of marijuana within a 14-day period from a licensed non-profit medical marijuana dispensary. Additionally, medical

marijuana patients can grow up to 12 marijuana plants for themselves if they reside more than 25 miles from a medical marijuana dispensary and marijuana cultivation rights was requested and granted during the application process. In 2019, the Arizona Supreme Court ruled the Proposition 203 definition of marijuana included resin and hashish in quantities that could be produced from 2.5 ounces of dried marijuana.

According to Proposition 203, an approved patient caregiver has cultivation rights if the residence of the patient is farther than 25 miles from a medical marijuana dispensary and the authorization to cultivate was requested and approved during the application process. A qualifying caregiver may have up to 5 medical marijuana patients and cultivate up to 12 marijuana plants per patient.

Between November 2011 and December 2020, the number of Arizona Medical Marijuana cards issued for qualifying patients increased by 1,710%, from 16,313 reported in 2011 to 295,295 reported in 2020². Approximately 94% (276,449) of the qualifying patients claim chronic pain as one of the unique debilitating conditions justifying a medical marijuana card. According to the Arizona Medical Marijuana Program, December 2020 End of Year Report, young adults between the ages of 18 and 30 are the largest group of active cardholders and represent roughly 28% of medical marijuana patients, followed by ages 31-40 accounting for 23% of patients.³

On December 6, 2012, the first licensed medical marijuana dispensary opened in Arizona. As of December 2020, approximately 353 tons of marijuana and marijuana products have been distributed under Proposition 203 to medical marijuana patients in Arizona.⁴

Proposition 205: Arizona Marijuana Legalization Initiative

On November 8, 2016, the Arizona Marijuana Legalization Initiative did not pass, as 1,300,344 (51.32%) of the voters did not support Proposition 205 compared to 1,233,323 (48.68%) voting in

favor of the initiative. The proposition would have allowed adults over 21 to possess up to one ounce of marijuana; cultivate up to 6 marijuana plants; and purchase marijuana from state-licensed facilities. Under Proposition 205, the Department of Marijuana Licenses and Control and a seven-member Marijuana Commission appointed by the Governor would have been created to oversee the distribution of adult use marijuana.

Senate Bill 1494: Marijuana; Testing; Advisory Council; Library

On June 7, 2019, Governor Doug Ducey signed Senate Bill 1494 requiring that medical marijuana dispensaries must submit marijuana and marijuana products to third party and state-certified laboratories to test for unsafe levels of microbial contamination, heavy metals, pesticides, herbicides, fungicides, residual solvents, and other contaminants.⁵ Moreover, these laboratories are responsible for testing the potency of representative samples of marijuana and marijuana products for THC and other cannabinoids.⁶ According to SB 1494, medical marijuana dispensaries must display a sign in a conspicuous location that notifies patients of their right to receive the certified laboratory test results for marijuana and marijuana products for medical use. As such, marijuana dispensaries will provide test results to a registered qualifying patient or designated caregiver immediately on request.⁷

Proposition 207: Smart and Safe Arizona Act

On November 3, 2020, Arizona voters approved Proposition 207 by 1,956,440 votes (60.03%); 1,302,458 (39.97%) of the voters opposed the proposition. Proposition 207 legalizes the use, production, sale, possession, and consumption of marijuana for all adults 21 years or older. The proposition legalizes the possession of one ounce or less of marijuana, except that not more than five grams of marijuana may be in the form of marijuana concentrate. An adult is permitted to cultivate up to 6 marijuana plants at a primary residence and not more than 12 marijuana plants at a single residence where two or more adults reside.

Proposition 207 does not authorize an adult to smoke marijuana in a public place or operate any motorized vehicle while impaired by mari-

juana. Proposition 207 establishes that any person possessing greater than 1 ounce of marijuana, but less than 2.5 ounces of marijuana, of which not more than 12.5 grams is in the form of marijuana concentrate, can be charged with a petty offense.

Under the provisions of Proposition 207, employers retain the right to maintain a drug and alcohol-free workplace. In addition, adult use marijuana sales are subject to a 16% Marijuana Excise Tax and Transaction Privilege Tax imposed by the county and city where the dispensary operates. The delivery of marijuana for adult use is permitted pending the development and implementation of rules and regulations by the ADHS.

Proposition 207: Dispensary Network

According to Arizona Legislative Council, "Proposition 207 requires the ADHS to adopt rules to regulate marijuana, marijuana products, marijuana establishments and marijuana testing in this state, including marijuana testing facilities, licensing, and renewal fees, security requirements, cultivating, processing and manufacturing requirements, tracking, testing, labeling and packaging requirements (which would include child-resistant packaging), delivery, acceptable forms of government-issued identification required for purchases, the potency of edible marijuana products and to create a Social Equity Ownership Program to address ownership and operation by individuals from communities disproportionately impacted by previous marijuana law enforcement."⁸

A marijuana establishment is an entity licensed by the ADHS to operate a single retail location at which the licensee may sell marijuana to adults 21 years or older. A dual licensed entity that holds both a non-profit medical marijuana dispensary registration certificate and a marijuana establishment license may sell adult use and medical marijuana from a single retail location. Currently, the cap for medical marijuana dispensary registration certificates and adult use marijuana establishment licenses is 130. As of June 30, 2021, 124 adult use dispensaries were in operation; these dispensaries are dual licensed to sell both adult use and medical marijuana.⁹ Dual licensed marijuana dispensaries are allowed to have two off-site grow sites, one for medical marijuana and one for adult marijuana use, and one marijuana product manufacturing facility.¹⁰

Table 1 – Differences Between Medical Marijuana and Adult Marijuana Use		
Law	Medical Marijuana	Adult Marijuana Use
Age Limit	No Age Limit. However, there are different card types depending on the age of the patient.	Adults 21 years of age or older.
Purchase Limits	No more than 2.5 ounces in a 14-day period. Monitored via Medical Marijuana Dispensary Card via the Medical Marijuana Verification System.	One ounce or less of marijuana, except that not more than 5 grams may be in the form of marijuana concentrate. No time requirement controlling the purchase of marijuana.
Possession	The qualified patient is allowed to possess the allowed amount of marijuana.	A person who possesses an amount of marijuana greater than [1 ounce or less of marijuana, except that not more than 5 grams of marijuana may be in the form of marijuana concentrate], but not more than 2.5 ounces of marijuana, of which not more than 12.5 grams is in the form of marijuana concentrate, is guilty of a petty offense.
Public Use	Not Allowed.	Not Allowed.
Impaired Driving	Not Allowed.	Not Allowed.
Buying/Selling	Qualifying patients or caregivers purchase medical marijuana from a nonprofit medical marijuana dispensary. Medical marijuana can only be sold by a licensed nonprofit medical marijuana dispensary.	Adults 21 years of age or older may only purchase from a licensed marijuana establishment. Only licensed marijuana establishments may sell marijuana for adult use.
Cultivation	Under specific guidelines, cultivation may be allowed.	Under specific guidelines, cultivation is permitted for adults 21 or older.
Taxes	Transactional privilege tax only.	16% marijuana excise tax and the transactional privilege tax on all sales.
Employment	An employee has some protections from discrimination as a registered qualified patient.	The employer retains the right to maintain a drug and alcohol-free workplace.
Delivery	Allowed.	Delivery of adult use is allowed once ADHS adopts rules permitting and regulating delivery.
Source: Arizona Department of Health Services		

In April 2021, the ADHS issued 13 adult use marijuana licenses in rural counties with fewer than two non-profit medical marijuana dispensaries.¹¹ On April 8, 2022, the ADHS awarded 26 adult use marijuana establishment licenses under the Social Equity Ownership Program via a random drawing.¹² Licenses issued to underserved rural counties and under the Social Equity Ownership Program do not count against the cap of 130 non-profit medical marijuana dispensary registration certificates and adult use marijuana establishment licenses as guided by the pharmacy permit ratio.¹³ When fully implemented, 169 marijuana dispensaries will be open throughout Arizona, and over 520 marijuana dispensing, manufacturing, and cultivation facilities will be operational to support marijuana distribution under Proposition 203 and Proposition 207.¹⁴

As of July 2021, 14 certified marijuana testing laboratories were operational under Senate Bill 1494. Currently, there is no limit on the number of operational marijuana testing laboratories in Arizona.¹⁵

Proposed Benefits of Proposition 207

INTRODUCTION

Proponents of Proposition 207 claim the proposition will add millions of dollars of new tax revenue to the Arizona economy; create thousands of new jobs; free up scarce law enforcement resources to target violent crime; and put an end to the endemic racial disparities in drug law enforcement.¹⁶

WILL PHASE OUT THE ILLICIT DRUG MARKET AND MAKE MARIJUANA SAFE TO USE

Advocates of Proposition 207 maintain the strict regulation and oversight of the manufacture and distribution of marijuana will begin to eliminate the illicit marijuana market and decrease crime.¹⁷ Moreover, proponents assert that people buying marijuana on the street have no way of knowing if what they are ingesting is contaminated with mold, pesticides, or other harmful substances.¹⁸ Additionally, legalization will make marijuana safer to use because of rigorous testing protocols designed to ensure marijuana and marijuana products are free of contaminants.¹⁹

On June 23, 2021, and November 11, 2021, ADHS laboratory auditors determined during routine inspections of independent third-party laboratories that marijuana samples tested positive for *Salmonella* or *Aspergillus*.²⁰ In addition, marijuana samples that tested positive for *Salmonella* or *Aspergillus* were reported to dispensaries as free of contaminants. *Salmonella* bacteria are shed through feces and symptoms can include diarrhea, fever, and abdominal cramps. Most healthy people recover within a few days without specific treatment.²¹ *Aspergillosis* is an infection caused by mold (fungus) affecting the respiratory system. Individuals with weakened immune systems can experience serious to life-threatening symptoms if the infection spreads from the lungs to other parts of the body.²² A voluntary recall of 19 marijuana products was conducted due to possible contamination.²³

WILL PROMOTE A MORE EFFICIENT AND FAIR CRIMINAL JUSTICE SYSTEM

The law supports the restorative justice process by eliminating low-level marijuana arrests and the disproportionate incarceration of minority offenders.²⁴ Those convicted of low-level personal use amounts (i.e., less than 2.5 ounces of marijuana, not more than 12.5 grams of concentrate, not more than 6 marijuana plants at a primary residence, and marijuana paraphernalia) can petition to have their records expunged which will open employment and educational opportunities for these individuals.²⁵ It is hoped Proposition 207 will promote a more efficient and fair criminal justice process.²⁶

WILL INCREASE TAX REVENUE AND CREATE MORE JOBS

Supporters estimate millions of dollars of new tax revenue will be generated from adult use marijuana sales.²⁷ Tax revenue generated from Proposition 207 will be directed from the Smart and Safe Arizona Fund to community colleges; law enforcement agencies; fire departments; state and local transportation programs; and the Arizona Attorney General's Office for the enforcement of regulations governing adult marijuana use.²⁸

Tax revenue will also be dispersed through the Justice Reinvestment Fund to public behavioral health programs; substance use prevention and treatment programs; workforce development programs; civil rights and expungement programs; and industry-specific technical assistance or mentoring services to economically disadvantaged communities disproportionately impacted by high arrest and incarceration rates.²⁹ The fund will provide grants to programs designed to address the underlying causes of crime and reduce drug-related arrests and the prison population in Arizona.³⁰

PROMOTES SOCIAL EQUITY

Proposition 207 creates a Social Equity Ownership Program to promote the ownership of marijuana dispensaries and testing facilities by individuals from marginalized communities that have been disproportionately impacted by marijuana laws. As of March 2022, the ADHS had received more than 1,500 applications for Social Equity Licenses.³¹ On April 8, 2022, the ADHS awarded 26 adult use marijuana licenses via a random drawing under the program.³² In addition, the ADHS has trained approximately 2,700 people on several aspects of operating a marijuana business, such as marijuana business practices and fundraising, regulatory compliance, marijuana product marketing, and strategic growth strategies.³³

CHILD PROTECTION PROVISIONS

Supporters maintain Proposition 207 protects children by requiring the packaging of marijuana products be child-proof and labeled; bans advertising of marijuana products towards children; and bans the sale of marijuana products that resemble candy.³⁴ Further, marijuana products must be placed in child-resistant packaging on exit from a

commercial marijuana dispensary to prevent accidental poisoning incidents.³⁵

KEY FINDINGS

Adult Marijuana Use: Timeline

- On November 2, 2010, Arizona voters passed Proposition 203, making Arizona the 15th state to adopt a medical marijuana law. Two years later, in December 2012, the first medical marijuana dispensary opened in Arizona.
- On June 7, 2019, Governor Doug Ducey signed Senate Bill 1494 requiring that state-certified and independent third-party laboratories test marijuana and marijuana products for unsafe levels of microbial contamination, heavy metals, pesticides, herbicides, fungicides, residual solvents, and other contaminants.
- On November 3, 2020, Arizona voters approved Proposition 207, making Arizona the 15th state to ratify adult marijuana use. On January 22, 2021, approximately three months after Proposition 207 was approved, adult use marijuana sales commenced in Arizona.
- As of June 30, 2021, 124 adult use dispensaries were in operation; these dispensaries are dual-licensed to sell both adult use and medical marijuana.
- When Proposition 207 is fully implemented, 169 marijuana dispensaries will be open throughout Arizona, and over 520 marijuana dispensing, manufacturing, and cultivation facilities will be operational in Arizona.

Proposed Benefits of Proposition 207

- Under the law, it is believed the strict regulation and oversight of the manufacture and distribution of marijuana will produce the following benefits:
 - Begin to eliminate the illicit marijuana market and decrease crime.

- Make marijuana safer to use because marijuana and marijuana products will be free of contaminants.
- Support the restorative justice process by eliminating low-level marijuana arrests and the expungement of eligible marijuana-related criminal records.
- Generate millions of dollars in new tax revenue which will be provided to community colleges, law enforcement agencies, along with fire departments, state and local transportation programs, and the Arizona Attorney General's Office.
- Tax revenue will be distributed from a Justice Reinvestment Fund to public behavioral health programs, substance use prevention and treatment programs, workforce development programs, and industry-specific technical assistance to economically isolated communities.
- Mandate the creation of Social Equity Ownership Program to promote the ownership of marijuana dispensaries and testing facilities by individuals from marginalized communities that have been disproportionately impacted by marijuana laws.
- Protect children by requiring the packaging of marijuana products be child-proof and labeled, ban advertising of marijuana products towards children, and ban the sale of marijuana products that resemble candy.

MARIJUANA USE IN ARIZONA

National Survey on Drug Use and Health: Arizona Prevalence Estimates 2011-2019

INTRODUCTION

The National Survey on Drug Use and Health (NSDUH) is a nationwide population-based survey that provides current data on alcohol, drug, and tobacco use, mental health, and other health-related issues at the national, state, and substate levels. Information from the *NSDUH* is used to help estimate the extent of substance use and mental illness among different age groups and determine the need for treatment services. The *NSDUH* began in 1971 and is sponsored by the Substance Abuse and Mental Health Services Administration (SAMSHA). The *NSDUH* is conducted every year in

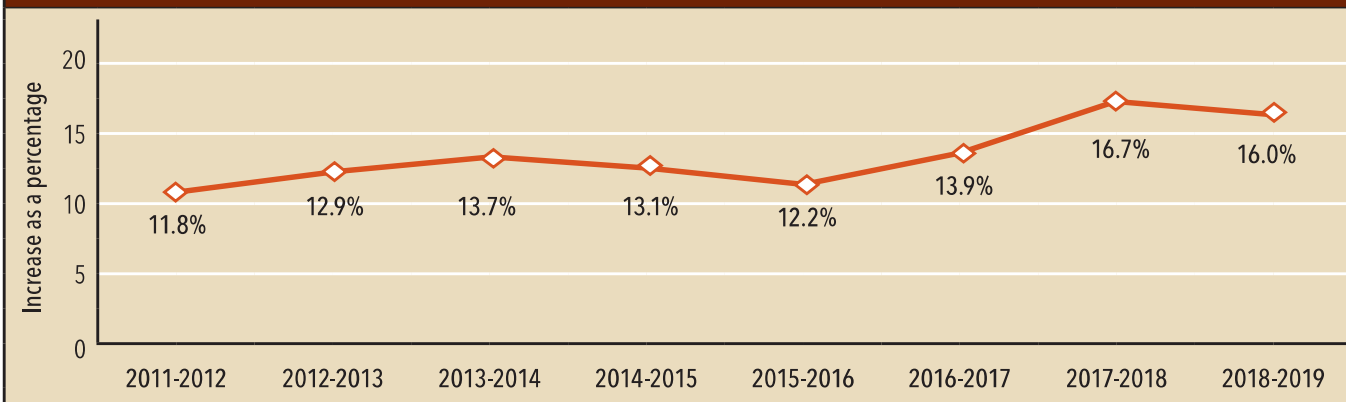
all 50 states and the District of Columbia.³⁶

The following section, data from the *NSDUH*, is used to examine the percentage (prevalence) of marijuana use in Arizona and how these estimates have changed since the enactment of Proposition 203.

NSDUH: PAST YEAR MARIJUANA USE

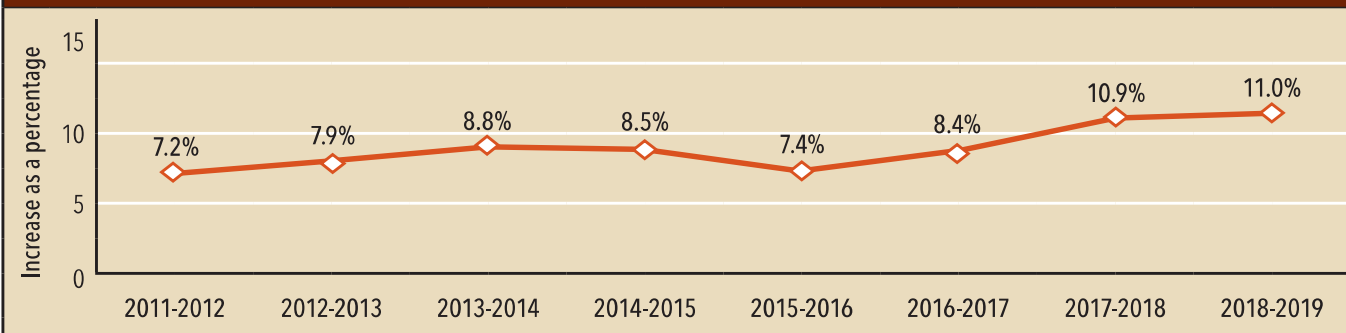
Between 2011-2012 and 2018-2019, past year marijuana use increased 36% in the 12 and older age group, from 11.8% in 2011-2012 to 16.0% in 2018-2019. The largest increase was observed in the 26 and over age group, as past year marijuana use increased 68%; followed by the 18-25 age group, which posted a 3% increase.³⁷ At the same time, past year marijuana use decreased 12% in the 12-17 age group, from 14.4% in 2011-2012 to 12.7% in 2018-2019.³⁸

Chart 1 – National Survey on Drug Use and Health: Past Year Marijuana Use in Arizona



Source: National Survey on Drug Use and Health Prevalence Estimates: 2011-2019

Chart 2 – National Survey on Drug Use and Health: Past Month Marijuana Use in Arizona



Source: National Survey on Drug Use and Health Prevalence Estimates: 2011-2019

NSDUH: PAST MONTH (30-DAY) MARIJUANA USE

Between 2011-2012 and 2018-2019, past month marijuana use increased 53% in the 12 and older age group, from 7.2% to 11.0%. The 26 and over age group reported the largest increase in past month marijuana use at 89%, from 5.3% in 2011-2012 to 10.0% in 2018-2019. During the same period, the 18-25 age group posted a 21% increase in past month use, from 17.2% to 20.8%. Interestingly, past month marijuana use decreased 29% in the 12-17 age group, from 8.4% to 6.0%, during this period.³⁹

NSDUH: INITIATION OF MARIJUANA USE IN ARIZONA

The *NSDUH* collects data on the age of the onset of first marijuana use in the past year. In the future, this data will provide a baseline to assess the impact of Proposition 207 on the age and onset of first marijuana use.⁴⁰

Over the past decade, the age and onset of first marijuana use have remained stable or decreased slightly across demographic groups in Arizona. In 2018-2019, *NSDUH* prevalence data indicates that 2.4% in 12 and older age group reported using marijuana for the first time compared to 2.0% reporting first use in 2011-2012. From 2011-2012 through 2018-2019, first-time marijuana use reported by the 12-17 age group decreased from 6.5% to 6.0%; and first-time use remained stable for the 18-25 age group at 7.6% and 7.4%, respectively.⁴¹

Arizona Youth Survey (AYS) State Report 2012-2020

INTRODUCTION

The *Arizona Youth Survey (AYS)* administers a statewide survey every two years to assess the prevalence and frequency of Arizona 8th, 10th, and 12th grade students' involvement in substance use, gangs, delinquency, and other problem behaviors. This data provides insight into the relationship between adverse childhood experiences, risk and protective factors, and deviant behavior.

DATA LIMITATIONS DUE TO COVID-19

Many of the survey questions in the 2020 AYS were carried over from previous versions of the survey; therefore, it is possible to construct trends in student responses by comparing data from prior surveys. The researchers note behaviors in the 2020 AYS may be lower for reasons specific to this survey year. First, the portion of the 2020 sample that took the survey in the Fall 2020 are slightly younger on average than the students that took the survey in Spring 2020. Second, behavioral changes may be present in the Fall 2020 student responses due to COVID-19 restrictions and school closures limiting peer social interactions where deviant behaviors commonly take place. Finally, students who were enrolled in online learning during the Fall 2020 administration were not given the survey.

Due to the impact of COVID-19 on the administration of the 2020 survey and the smaller sample size, pre-COVID-19 data from the 2018 AYS will also be included in this analysis to ensure complete reporting and analysis of the data for the reader.

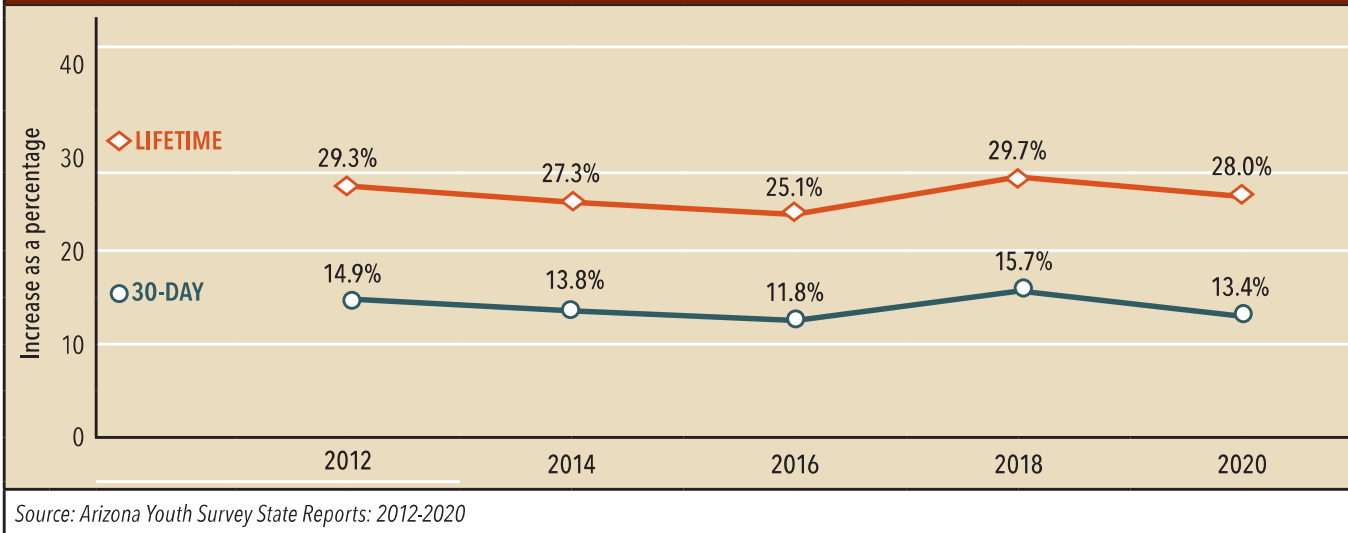
AYS: LIFETIME MARIJUANA USE

According to the AYS, lifetime marijuana use by students in the 8th, 10th, and 12th grades decreased 4%, from 29.3% in 2012 to 28% in 2020. An examination of pre-COVID-19 AYS data shows lifetime marijuana use by students increased slightly, from 29.3% in 2012 to 29.7% in 2018.⁴²

AYS: PAST MONTH (30-DAY) MARIJUANA USE

The AYS reported students in the 8th, 10th, and 12th grades who engaged in 30-day marijuana use decreased 10%, from 14.9% in 2012 to 13.4% in 2020.⁴³ An examination of pre-COVID-19 AYS data reveals that past 30-day marijuana use by students increased 5% overall, from 14.9% in 2012 to 15.7% in 2018.⁴⁴

Chart 3 – Arizona Youth Survey: Lifetime and 30-Day Marijuana Use



MARIJUANA CONCENTRATES USE: LIFETIME AND PAST MONTH (30-DAY) USE

According to the 2020 AYS, the lifetime use of marijuana concentrates by students in the 8th, 10th, and 12th grades increased from 2018 through 2020. Lifetime marijuana concentrates use increased 6%, from 23.4% in 2018 to 24.9% in 2020. Conversely, an examination of past 30-day marijuana concentrates use by students revealed a 10% decrease, from 12.3% in 2018 to 11.1% in 2020.⁴⁵ The reader should note that longitudinal data for this survey question was not available before 2018.

AYS: MODES OF OBTAINING MARIJUANA

The following section details how Arizona students in the 8th, 10th, and 12th grades who used marijuana in the past 30-days obtained marijuana.

Question: If during the past 30 days you used marijuana, how did you get it?

“FROM FRIENDS”

Receiving marijuana from friends continues to be the most frequent method for students involved in past 30-day marijuana use to obtain marijuana. In 2012, 64.6% of students in the survey received marijuana from friends compared to 57.0% in

2020. An examination of pre-COVID-19 data indicates 67% of the students in 2018 reported receiving marijuana from friends, which is a 4% increase over the 64.6% of students in the 2012 survey.

“BOUGHT MARIJUANA FROM A DRUG DEALER”

According to the 2020 AYS, the second most popular method for students to obtain marijuana was from a drug dealer. The data suggests 30.2% of students in the survey reporting past 30-day marijuana use purchased marijuana from a drug dealer.⁴⁶ Of note, longitudinal data for this survey question was not available before 2020.

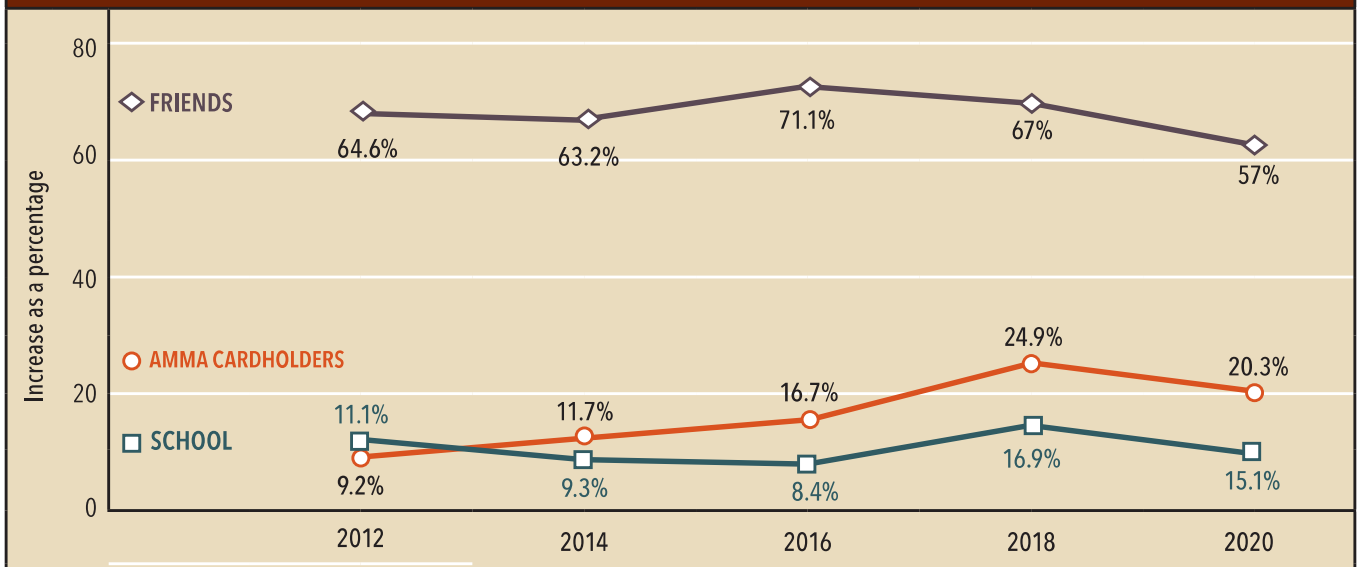
“FROM SOMEONE WITH A MEDICAL MARIJUANA CARD”

An examination of AYS data reveals students involved in past 30-day marijuana use are increasingly receiving marijuana from medical marijuana cardholders. In 2012, 9.2% of students reporting past 30-day marijuana use received marijuana from a cardholder compared to 20.3% in 2020, a 121% increase. An examination of pre-COVID-19 data shows the number of students receiving marijuana from a medical marijuana cardholder increased 171%, from 9.2% in 2012 to 24.9% in 2018.⁴⁷

“BOUGHT MARIJUANA FROM A DISPENSARY”

According to the AYS, students involved in past 30-day marijuana use also purchased marijuana from a dispensary. In 2018, 10.5% of the students

Chart 4 – Arizona Youth Survey: Where Marijuana Is Obtained



Source: Arizona Youth Survey State Reports: 2012-2020

purchased marijuana from an Arizona dispensary compared to 10.6% in 2020.⁴⁸ During both the 2018 and 2020 surveys, 4.8% of the students reported purchasing marijuana from a dispensary located outside Arizona.⁴⁹ Of note, longitudinal data for this survey question was not available before 2018.

“AT SCHOOL”

According to the AYS, students receiving marijuana at school posted significant increases in 2020. From 2012 through 2020, students obtaining marijuana at school increased 36%, from 11.1% to 15.1%. An examination of pre-COVID-19 data indicates students obtaining marijuana at school increased 52%, from 11.1% in 2012 to 16.9% in 2018.⁵⁰

AYS: PERCEPTIONS OF THE RISK AND HARM ASSOCIATED WITH MARIJUANA USE

The following section details findings from the AYS regarding 8th, 10th, and 12th grade students’ perceptions of the risks and harms associated with marijuana use. An examination of longitudinal changes in youth perceptions of marijuana use may assist stakeholders in predicting future drug use for the development of drug prevention and

education programs. The period of analysis was limited to 2016 through 2020 due to changes in the AYS survey questions prior to 2016.

According to the survey, student perceptions of moderate or great risk of harming themselves by using marijuana once or twice remained stable at 31.8% in 2016 compared to 31.4% in 2020. According to the AYS, student perceptions of parents who feel it would be wrong or very wrong to smoke marijuana decreased slightly, from 90.5% in 2016 to 88.4% in 2020. Additionally, student perceptions of peer disapproval (wrong or very wrong) of marijuana use remained stable at 65.4% in 2016 compared to 65.2% in 2020.⁵¹

The perceived level of great risk of trying marijuana once or twice decreased slightly, from 17.1% of the students in 2016 believing they were at high risk of harming themselves compared to 16.9% in 2020. Moreover, students who think people who smoke marijuana regularly are at great risk for harm increased from 26.0% in 2016 to 28.8% in 2020. Conversely, student perceptions of individuals engaged in regular marijuana use and were at no risk of harming themselves decreased from 28.7% in 2016 to 26.6% in 2020.⁵²

KEY FINDINGS

Marijuana Use in Arizona

- According to the *NSDUH*, past year marijuana use increased 36% in the 12 and older age group between 2011-2012 and 2018-2019.
- According to the *NSDUH*, past month (30-day) marijuana use increased 53% in the 12 and older age group between 2011-2012 and 2018-2019.
- When examining population subgroups, *NSDUH* prevalence estimates indicate the highest percentage of marijuana use (past year and past month) were observed in the 18-25 and 26 and older age groups.
- The *NSDUH* reported that between 2011-2012 and 2018-2019, past year marijuana use increased 3% in the 18-25 age group and increased 68% in the 26 and over age group.
- According to the *NSDUH*, between 2011-2012 and 2018-2019, past month marijuana use increased 21% in the 18-25 age group and increased 89% in the 26 and over age group.

Marijuana Use by Arizona 8th, 10th, and 12th Grade Students

- According to the *Arizona Youth Survey (AYS)*, lifetime marijuana use reported by students in the 8th, 10th, and 12th grades decreased 4% between 2012 and 2020.
- The *AYS* also reported that from 2012 through 2020, students in the 8th, 10th, and 12th grades who engaged in 30-day marijuana use decreased 10%.
- According to the *AYS*, lifetime marijuana concentrates use by students in the 8th, 10th, and 12th grades increased 6%, from 23.4% in 2018 to 24.9% in 2020.
- The *AYS* reported that past 30-day marijuana concentrates use by students in the 8th, 10th, and 12th grades decreased 10%, from 12.3% in 2018 to 11.1% in 2020.

- In 2020, the *AYS* found the primary modes for students in the 8th, 10th, and 12th grades to obtain marijuana were from friends, followed by a drug dealer.
- The *AYS* data indicates students in the 8th, 10th, and 12th grades reporting 30-day marijuana use and receiving marijuana from a medical marijuana cardholder increased 121%, from 9.2% in 2012 to 20.3% in 2020.

Marijuana Use by Arizona 8th, 10th, and 12th Grade Students: Pre COVID-19 Trend Data (2012-2018)

- According to the *AYS*, lifetime marijuana use by students in the 8th, 10th, and 12th grades increased slightly, from 29.3% in 2012 to 29.7% in 2018.
- The *AYS* data reveals that past 30-day marijuana use by students in the 8th, 10th, and 12th grades increased 5% overall, from 14.9% in 2012 to 15.7% in 2018.
- According to the *AYS*, 67.4% of the students in 2018 reported receiving marijuana from friends, a 4% increase over the 64.6% of students in the 2012 *AYS*.

DATA LIMITATIONS

Marijuana Use in Arizona

The *NSDUH* survey is limited to civilian non-institutionalized individuals. The survey excludes active-duty military and institutionalized individuals in hospitals, prisons, residential drug treatment, and nursing homes. The exclusion of these sub-samples may underreport marijuana use in Arizona.⁵³

Arizona Youth Survey (AYS) - Marijuana Use by 8th, 10th, and 12th Grade Students

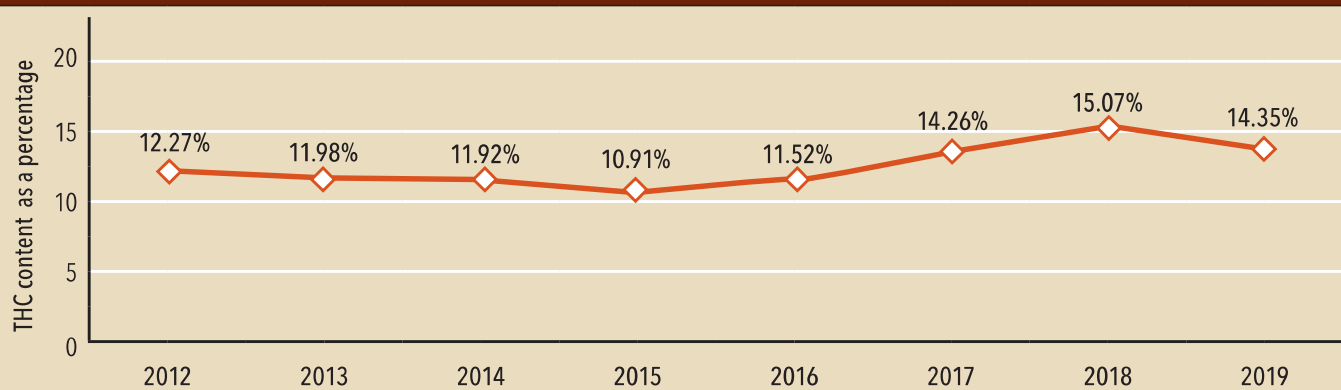
The *AYS* is administered to students in the classroom setting. The sample excludes students suspended or expelled from school. Therefore, students who may be at increased risk for drug use and other deviant behaviors are not in the survey sample.

MARIJUANA POTENCY

The National Center for Natural Products Research at the University of Mississippi monitors the potency of marijuana products seized in the illegal drug market in the United States. Samples are submitted for analysis by the Drug Enforcement Administration (DEA) and by state and local law enforcement agencies. Samples tested are classified into one of three categories: cannabis

(marijuana plant material); hashish (dried resin); and hash oil (extract). From 1995 through 2019, the average THC content of the samples increased 262%, from 3.96% to 14.35%.⁵⁴ During the period covered by this report, the average THC content of marijuana samples increased 17%, from 12.27% in 2012 to 14.35% in 2019.⁵⁵

Chart 5 – Average THC Content in Marijuana Samples in the United States



Source: National Center for Natural Products Research, University of Mississippi

THC Potency: Marijuana Concentrates

Marijuana concentrates contain high concentrations of THC, and they have become popular with marijuana users in the United States. Marijuana concentrates are made in commercial settings primarily using a CO2 extraction process, and in residential settings, several methods, including dry ice, water-based processing and solvents such as butane.⁵⁶ Solvent-based products average between 54-69% THC, and in some cases, concentrates can exceed 90% THC.⁵⁷ Moreover, non-solvent-based extraction methods produce concentrates with an average THC level between 39%-60%.⁵⁸

THC Product Potency: Marijuana Dispensaries

A variety of adult use marijuana products sold at Arizona dispensaries contain high levels of THC. During April 25-26, 2022, the Arizona HIDTA conducted an online review of products advertised on 10 websites for dispensaries located in Phoenix and Tucson, Arizona.⁵⁹ The dispensary Websites referred to advertised products as strains and classified products as either "Sativa," "Indica," or "Hybrid."⁶⁰ The advertised amount of THC contained in products is detailed as a percentage, and for edible products, the dose amount is measured in milligrams.⁶¹ The dispensary Websites contain a disclaimer advising that adult use marijuana products contain THC and other cannabinoids.

Table 2 – Adult Use THC Product Potency: Marijuana Dispensaries

Product	THC POTENCY*		
	Sativa Strain	Indica Strain	Hybrid Strain
Marijuana Flower	11%-27%	10%-30%	7%-28%
Pre-Rolled Marijuana Joints	11%-45%	11%-46%	9%-47%
Concentrates	48%-92%	34%-94%	7%-95%
Edibles	9mg-500mg	5mg-335mg	0.45mg-1,000mg
Vaporizers	2%-99%	3%-99%	3%-99%
<p><i>*THC percentages were rounded to the nearest whole number.</i></p> <p><i>Source: Ten Dispensaries in Phoenix and Tucson, as of April 25-26, 2022</i></p>			

KEY FINDINGS

Marijuana THC Potency

- From 1995 through 2019, the THC content of the marijuana samples submitted to the National Center for Natural Products Research increased 262%, from 3.96% to 14.35%.
- According to the National Center for Natural Products Research, the THC content of marijuana samples obtained in the illegal drug market in the United States increased 17%, from 12.27% in 2012 to 14.35% in 2019.
- During April 25-26, 2022, an online review of marijuana products sold at 10 Arizona dispensaries showed THC potency could range anywhere from 2% to 99%.

MARIJUANA AND PUBLIC HEALTH

Introduction

Given the approval of Proposition 203 in 2010 and the ratification of Proposition 207 in 2020, monitoring the potential impact of marijuana use is vital for protecting the public health of Arizona's citizens and communities. Moreover, identifying potential emerging public health threats linked to Proposition 207 is vital for proactive drug treatment and drug prevention program development. Additionally, current marijuana use data is essential for assessing public health program investments in Arizona communities.

Marijuana Use and Pregnancy

The research evidence shows pregnant women who use alcohol, tobacco, or other drugs may increase risks to the health and development of their unborn babies.⁶² Some of the complications of prenatal substance exposure include prematurity, low birth weight, withdrawal symptoms, growth deficiencies, and irritability.⁶³

According to the Centers for Disease Control and Prevention (CDC), some research evidence suggests marijuana use during pregnancy is associated with an elevated risk for lower birth weight, preterm delivery, developmental delays, and learning disabilities.⁶⁴ Studies suggest marijuana use during pregnancy may affect prenatal brain development and be related to future problems with attention, memory, and problem-solving skills in children.⁶⁵

Research suggests cannabinoids and other chemicals found in marijuana can be passed from a mother to her infant through breast milk.⁶⁶ These cannabinoids and chemicals have the potential to affect a variety of neurodevelopment processes in the infant.⁶⁷

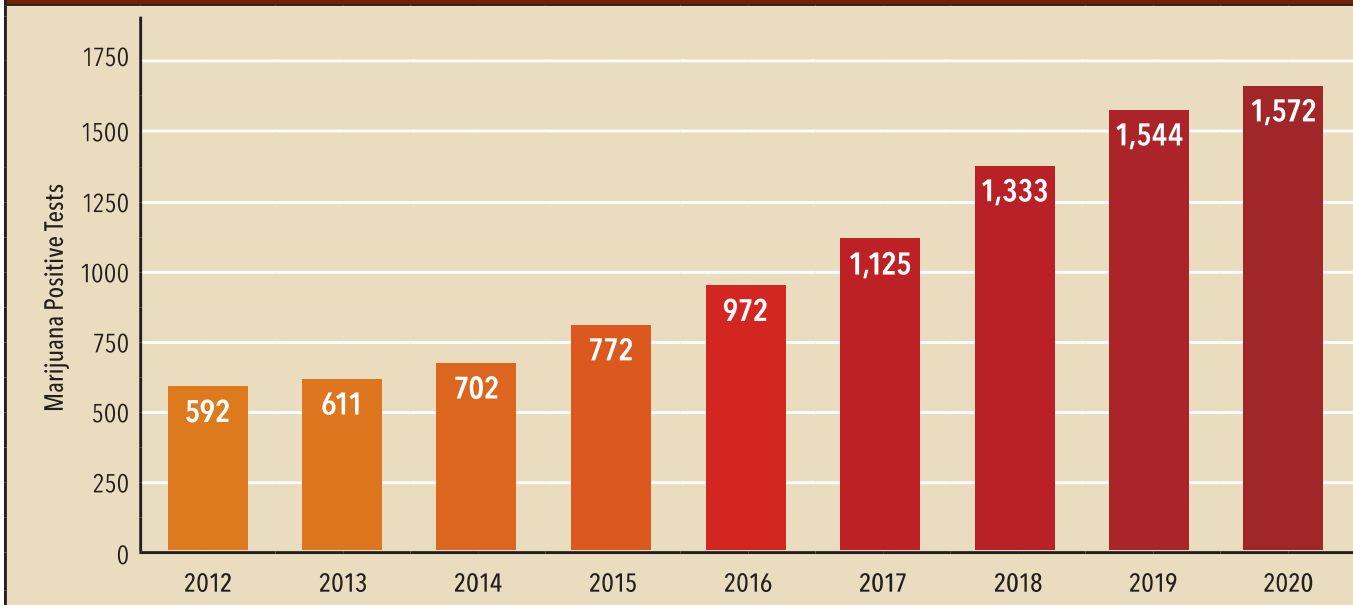
MANDATORY REPORTING OF SUBSTANCE EXPOSED NEWBORNS PROGRAM (SEN)

The Mandatory Reporting of Substance Exposed Newborns program (SEN) requires that after a newborn physical assessment or a positive toxicology screen, a health care professional who believes a newborn may be affected by alcohol or drugs must immediately report this information to the Department of Child Safety (DCS).⁶⁸

Per Arizona law A.R.S. § 8-8-201(25)(c), "The determination that a newborn was exposed prenatally to a drug or substance (that was not the result of a medical treatment administered to the mother or the newborn infant) shall be based on one or more of the following: clinical indicators in the prenatal period, including maternal and newborn presentation; history of substance use or abuse; medical history; results of toxicology or other laboratory tests on the mother or newborn infant; or diagnosis by a health professional of an infant under one year of age with clinical findings consistent with fetal alcohol syndrome or fetal alcohol effects."⁶⁹

SEN cases reported to DCS increased 81%, from 2,140 cases in 2012 to 3,872 in 2020.⁷⁰ Moreover, the number of SEN cases with a positive drug test increased 134%, from 932 in 2012 to 2,184 in 2020. During the same period, SEN reporting indicates parental positive tests for marijuana increased 166%, from 592 to 1,572.⁷¹

Chart 6 – Positive Marijuana Toxicology Tests: Arizona Substance Exposed Newborn Cases



Source: Arizona Department of Child Safety, Substance Exposed Newborns Program, as of September 2021

Illicit Drug Use and Child Abuse and Maltreatment

Based on combined 2009 to 2014 *NSDUH* data, an annual average of 8.7 million children aged 17 or younger lived in households in the United States with at least one parent who had a Substance Use Disorder (SUD).⁷² The research demonstrates children of parents with a SUD were more likely to experience physical abuse, emotional abuse, and neglect when compared to children living with parents that do not have a SUD.⁷³ The data indicates not all children living in households with a SUD will be abused or maltreated; however, these children are at increased risk for abuse and maltreatment.⁷⁴

ARIZONA FAMILIES F.I.R.S.T. (AFF) PROGRAM

The research has established a strong relationship between substance abuse and child maltreatment. The Arizona Families F.I.R.S.T. (AFF) program was established to address adverse alcohol and drug abuse conditions in families where allegations of child maltreatment were associated with parental substance abuse.

From SFY 2016 to SFY 2019, approximately 92.6% or 22,952 individuals prior to referral to the AFF program had one or more substantiated child maltreatment reports.⁷⁵ Additionally, approximately 74.2% or 18,393 individuals at the time of referral to the AFF program had one or more substantiated reports of child maltreatment.⁷⁶

From SFY 2018 to SFY 2020, 21,048 AFF participants completed a substance abuse assessment on self-reported past 30-day alcohol/drug use.⁷⁷ The data indicates 90% (18,938) of the AFF participants who completed the assessment needed substance abuse treatment. Additionally, AFF participants reporting marijuana use in the past 30 days increased from 45% in SFY 2018 to 54% SFY 2020.⁷⁸ The most frequently reported substances in 2020 were marijuana/hashish, followed by methamphetamine, alcohol, heroin/morphine, cocaine/crack cocaine, and other opiates/synthetics.⁷⁹

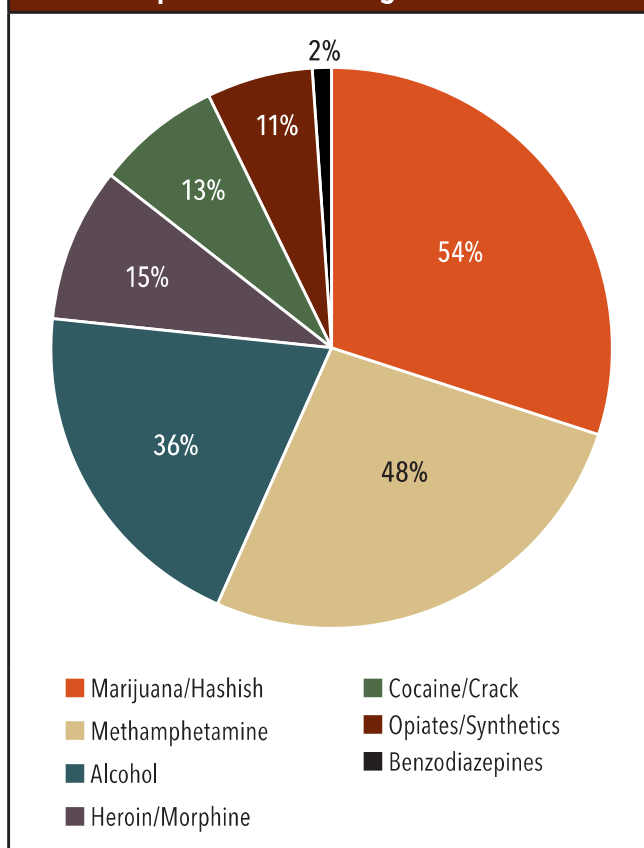
Of note, **Table 3** and **Chart 7** detail total self-reported AFF participant responses, which may include reporting more than one substance used in the past 30 days or completing more than one substance abuse assessment during the reporting period.

Table 3 – Arizona AFF Participants Self-Reported Substance Use

Substances	2018	2019	2020
Marijuana/Hashish	45%	39%	54%
Methamphetamine	46%	36%	48%
Alcohol	30%	25%	36%
Heroin/Morphine	12%	12%	15%
Cocaine/Crack	12%	8%	13%
Opiates/Synthetics	7%	6%	11%
Benzodiazepines	2%	1%	2%

Source: Arizona Department of Child Safety, Arizona Families F.I.R.S.T. Annual Evaluation Report SFY 2020

Chart 7 – Arizona AFF Participants Self-Reported Illicit Drug Use: SFY 2020



Source: Arizona Department of Child Safety, Arizona Families F.I.R.S.T. Annual Evaluation Report SFY 2020

ARIZONA CHILD FATALITY REVIEW PROGRAM

The Arizona Child Fatality Review Program (CFR) conducts a comprehensive review of all child deaths (0-17 years of age) to identify the cause and contributing factors of the death and determine if the child's death could have been prevented. The data is limited to 2019 and 2020 because of changes in the reporting of substances found as causing or contributing to the death of a child. Prior to 2019, marijuana was a stand-alone category. In 2019, marijuana deaths were divided into "Decedent Child User" and "Other Child or Adult User" categories.

Between 2019 and 2020, child deaths increased from 777 deaths in 2019 to 838 in 2020.⁸⁰ The mortality rate per 100,000 children increased 8%, from 47.2 in 2019 to 51.0 in 2020.⁸¹ The child mortality rate has increased over the past two years, and the number of preventable deaths has also increased.⁸² In 2019, 341 child deaths were determined to have been preventable compared to 396 deaths in 2020, a 16% increase.⁸³ In 2020, four of the most common CFR preventable deaths were motor vehicle crashes, poisonings, firearms injuries, and suffocation.⁸⁴

The CFR program defines substance use related deaths as, "Substance use was found as a direct or contributing factor leading to child deaths. The substances used could include illegal drugs, prescription drugs, and/or alcohol. To identify substance use as a factor, each case was reviewed to determine if any individual involved in the death of a child used substances such as illegal drugs, prescription drugs, and/or alcohol. The individual could have been the child's parent or caretaker, an acquaintance, stranger, or the child and the substance use occurred proximate to the time of the incident leading to the death."⁸⁵

According to the 2019 CFR, there were 119 substance use related deaths compared to 157 deaths in 2020, a 32% increase.⁸⁶ In 2020, the top three causes of substance use related child deaths were poisoning (66), firearm injury (22), and motor vehicle crashes (21).⁸⁷

From 2019 to 2020, marijuana caused or contributed to the death of a child, and the child was the user, increased 64%, from 33 deaths in 2019 to 54 deaths in 2020.⁸⁸ During the same period, other

child or adult user causing or contributing to the death of a child in marijuana cases decreased 8%, from 25 to 23 deaths.⁸⁹ Of note, more than one substance and/or more than one user may have been involved in the child's death.

Marijuana, Homicides, and Suicides

INTRODUCTION

The following section, data on the presence of THC in suicide and homicide deaths, was received from the Maricopa County Office of the Medical Examiner (MME) and the Arizona Violent Death Reporting System (Arizona-VDRS).

The Arizona-VDRS follows the CDC definition of violent death as used by all states for reporting to the National Violent Death Reporting System (NVDRS). The Arizona-VDRS collects homicide and suicide data from multiple sources: death certificates issued by the ADHS; police reports obtained from investigating agencies; and autopsy reports from medical examiner offices.

The MME serves the fourth most populated county in the nation and is Arizona's largest medical examiner office. Therefore, this report uses the MME suicide and homicide THC positive case data as a sampling frame.

A positive toxicology test for THC at the time of death does not prove causal evidence of marijuana as a contributor to suicide or homicide. Therefore, additional research is needed to determine the strength of the relationship between marijuana and violent death because the presence of THC in homicide and suicide victims is increasing.

MARIJUANA AND HOMICIDES

An examination of the Arizona-VDRS data indicates homicide victims testing positive for THC increased 108%, from 25 in 2015 to 52 victims in 2016.⁹⁰ Additionally, the overall percentage of homicide victims with a positive drug toxicology and testing positive for THC increased 54% between 2015 and 2016.⁹¹ In 2015, 193 homicide victims tested positive for at least one drug, and 25 victims (13%) tested positive for THC.⁹² In 2016, 260 victims tested positive for at least one drug, and 52 victims (20%) tested positive for THC.⁹³ For this report, Arizona-VDRS data for THC positive homicide cases was available for 2015 and 2016.

An examination of the MME data reveals homicide victims testing positive for THC increased 48%, from 105 in 2019 to 155 victims in 2020.⁹⁴ Moreover, the overall percentage of homicide victims with a positive drug toxicology and testing positive for THC increased 17% between 2019 and 2020. In 2019, the MME handled 228 homicide cases with a positive drug test, and 105 victims (46%) tested positive for THC.⁹⁵ In 2020, the MME office handled 289 homicide cases with a positive drug test, and 155 victims (54%) tested positive for THC.⁹⁶ For this report, MME data for THC positive homicide cases was available for 2019 and 2020.

MARIJUANA AND SUICIDE

According to the 2016 Arizona-VDRS, 715 suicide victims underwent toxicology testing, and 68.1% or 487 victims tested positive for at least one drug. Only 176 victims were tested for marijuana; of those, 14.8% or 26 victims tested positive for THC.⁹⁷ For this report, Arizona-VDRS data for THC positive suicide cases was available for 2016.

According to MME data, the number of suicide victims testing positive for THC increased 23%, from 132 in 2019 to 162 victims in 2020.⁹⁸ Additionally, the overall percentage of suicide victims with a positive drug toxicology and testing positive for THC increased 30% from 2019 to 2020. In 2019, the MME handled 492 cases with a positive drug test, and 132 victims (27%) tested positive for THC.⁹⁹ In 2020, 458 cases had a positive drug test, and 162 victims (35%) tested positive for THC.¹⁰⁰ For this report, MME data for THC positive suicide cases was available for 2019 and 2020.

KEY FINDINGS

Marijuana Use and Pregnancy

- The number of SEN cases reported to the DCS increased 81%, from 2,140 cases in 2012 to 3,872 cases in 2020.
- The number of SEN cases with a positive drug test increased 134%, from 932 in 2012 to 2,184 in 2020. During the same period, SEN reporting indicates parental positive tests for marijuana increased 166%, from 592 to 1,572.

Illicit Drug Use and Child Abuse and Maltreatment

- Based on combined 2009 to 2014 NSDUH data, an annual average of 8.7 million children aged 17 or younger live in households in the United States with at least one parent who had a SUD.
- From July 1, 2016, to June 30, 2019, approximately 92.6% of the Arizona Families F.I.R.S.T. AFF program participants had at least one substantiated child maltreatment report before enrolling in the program.
- From SFY 2018 to SFY 2020, 90% of the AFF participants who completed the drug use assessment were identified as needing drug treatment.
- From SFY 2018 to SFY 2020, AFF participants reporting 30-day marijuana use increased from 45% to 54%.
- According to the CFR, marijuana as a direct or contributing factor in the death of a child, and the child was the user, increased 64%, from 33 deaths in 2019 to 54 deaths in 2020.

Marijuana and Homicide

- An examination of the Arizona-VDRS data indicates homicide victims testing positive for THC increased 108%, from 25 in 2015 to 52 victims in 2016.
- The Arizona-VDRS data shows the overall percentage of homicide victims with a positive drug toxicology and testing positive for THC increased 54% between 2015 and 2016. In 2015, 193 homicide victims tested positive for at least one drug, and 25 victims (13%) tested positive for THC. In 2016, 260 victims

tested positive for at least one drug, and 52 victims (20%) tested positive for THC.

- An examination of MME data reveals homicide victims testing positive for THC increased 48%, from 105 in 2019 to 155 victims in 2020.
- The MME data indicates the overall percentage of homicide victims with a positive drug toxicology and testing positive for THC increased 17% between 2019 and 2020. In 2019, the MME handled 228 homicide cases with a positive drug test, and 105 victims (46%) tested positive for THC. In 2020, the MME office handled 289 homicide cases with a positive drug test, and 155 victims (54%) tested positive for THC.

Marijuana and Suicide

- According to the 2016 Arizona-VDRS, 715 suicide victims underwent toxicology testing, and 68.1%, or 487, victims tested positive for at least one drug. Only 176 victims were tested for THC; of those, 14.8%, or 26 victims, tested positive for THC.
- An examination of MME data shows the number of suicide victims testing positive for THC increased 23%, from 132 in 2019 to 162 victims in 2020.
- According to MME data, the overall percentage of suicide victims with a positive drug toxicology and testing positive for THC increased 30% from 2019 to 2020. In 2019, the MME handled 492 cases with a positive drug toxicology, and 132 victims (27%) tested positive for THC. In 2020, the MME handled 458 cases with a positive drug toxicology, and 162 victims (35%) tested positive for THC.

DATA LIMITATIONS

Marijuana Use, Homicide, and Suicide

Toxicology testing shows an increase in the prevalence of THC in homicide and suicide victims. However, the presence of THC at death does not establish causal evidence of marijuana as a contributor to the homicide or suicide. The role of marijuana as a risk factor for homicide victimization and suicide requires additional research.

MARIJUANA AND HEALTH CARE UTILIZATION

Introduction

Baseline data from emergency room admissions, drug poisonings, and drug treatment admissions are essential indicators to assess the future health consequences associated with Proposition 207.

Marijuana-Induced Emergency Room Admissions

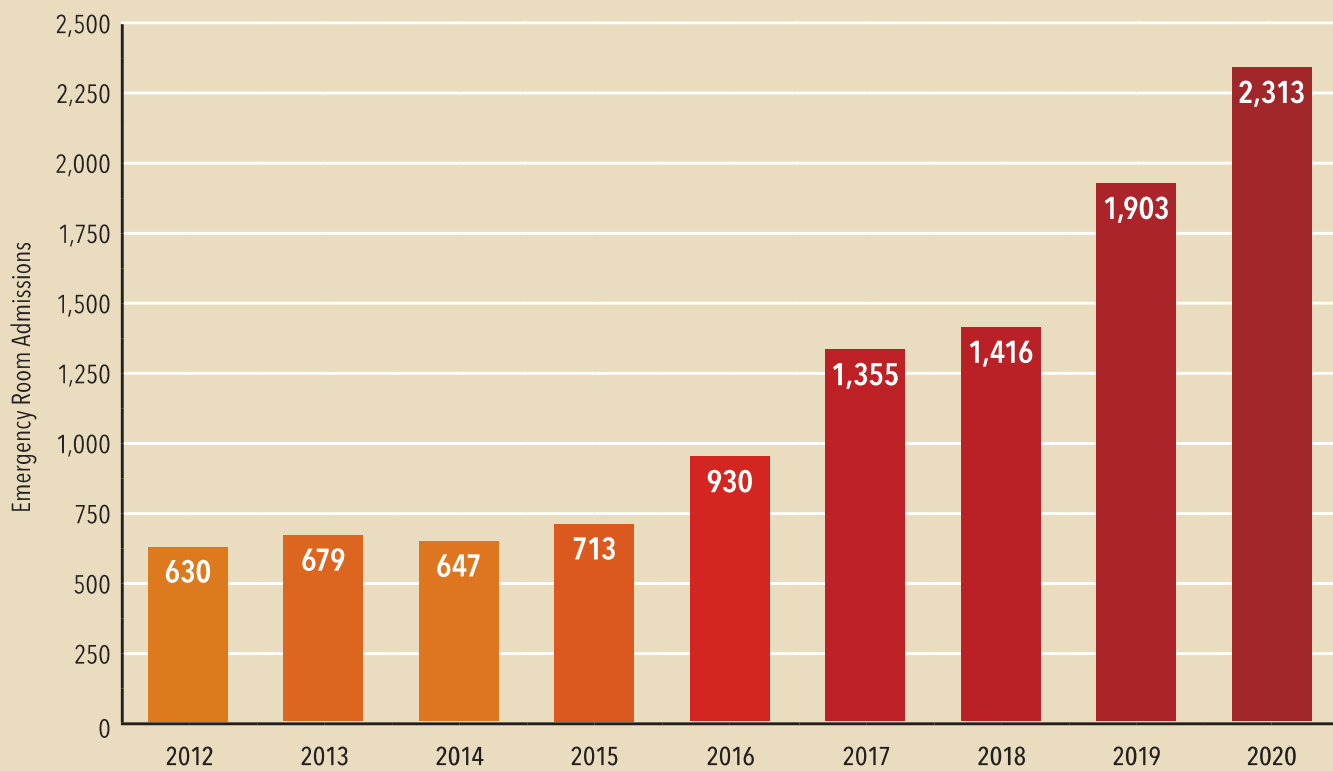
The emergency room (ER) data below is all reported marijuana-induced ER admissions in Arizona. According to the ADHS, a marijuana-induced ER admission is when marijuana is determined to be the primary and direct contributor for the admission. The data indicates marijuana-induced ER admissions increased 267%, from 630 ER admissions in 2012 to 2,313 in 2020.¹⁰¹

Marijuana-Induced Poisoning Emergency Room Admissions

Symptoms associated with acute marijuana toxicity (i.e., poisoning) are difficulty with coordination, decreased muscle strength, decreased hand steadiness, unsteady blood pressure, lethargy, decreased concentration, slowed reaction time, and slurred speech.¹⁰² More severe symptoms associated with marijuana poisoning are confusion, amnesia, delusions, hallucinations, anxiety, rapid heart rate, nausea, and agitation.¹⁰³

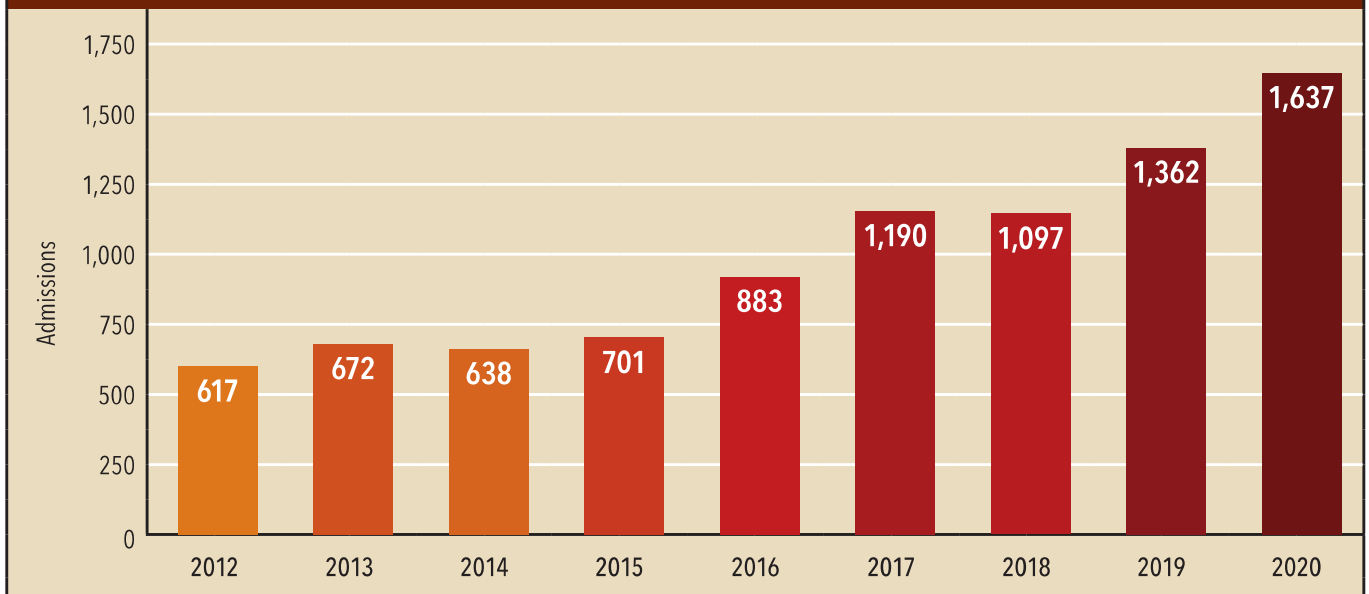
The following ER marijuana-induced poisoning data is a subset of all ER marijuana admissions for all age groups. According to the ADHS, a marijuana-induced ER poisoning admission is when marijuana is determined to be the primary and direct contributor for the admission. Marijuana-induced poisoning admissions increased 165%, from 617 admissions in 2012 to 1,637 in 2020.¹⁰⁴

Chart 8 – Marijuana-Induced Emergency Room Admissions in Arizona



Source: Arizona Department of Health Services, Bureau of Public Health Statistics, as of August 2021

Chart 9 – Marijuana-Induced Poisoning: Emergency Room Admissions in Arizona



Source: Arizona Department of Health Services, Bureau of Public Health Statistics, as of August 2021

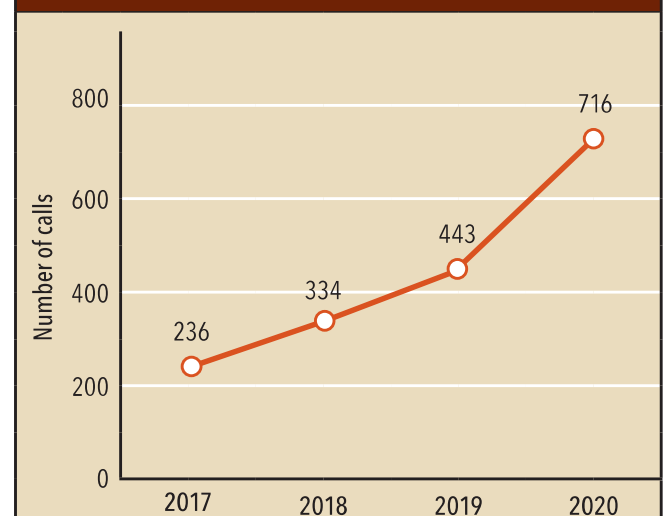
Marijuana Poison Exposure Calls

The Arizona Poison and Drug Information Center, University of Arizona, and Banner Poison and Drug Information Center, Banner Health, provide poison control services to all 15 counties in Arizona. The Arizona Poison and Drug Information Center and Banner Poison and Drug Information Center are staffed with an array of poison control experts. A poison exposure call involves a caller in a poisoning or suspected poisoning event; based upon the information provided, the poison control center will provide poison related emergency treatment advice and/or emergency referral assistance, if needed. Both centers are available for poison exposure calls 24 hours a day and 365 days a year.

According to the Arizona Poison and Drug Information Center and Banner Poison and Drug Information Center, marijuana-related poison exposure calls increased 203%, from 236 calls in 2017 to 716 in 2020.¹⁰⁵ Additionally, marijuana-related poison calls for children under 12 increased 198%, from 55 calls in 2017 to 164 in 2020. Marijuana poison exposure calls in the 13-19 age group increased 85% from 2017 to 2020. When compared to other

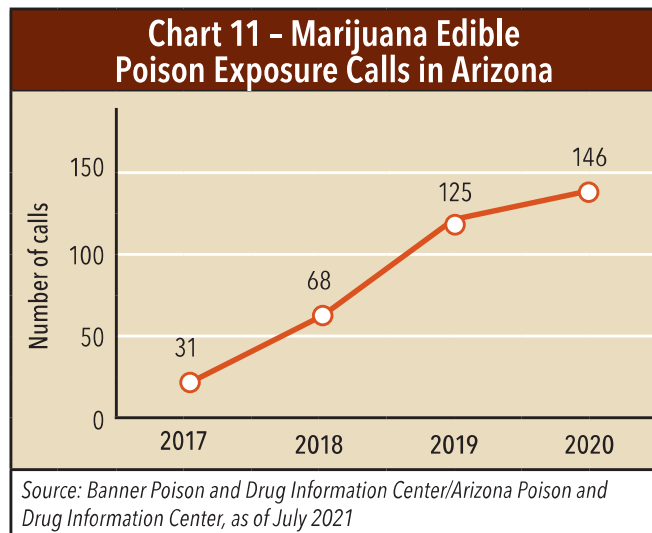
age groups, the 13-19 age group recorded the largest number of marijuana-related poison exposure calls.¹⁰⁶

Chart 10 – Marijuana Poison Exposure Calls in Arizona



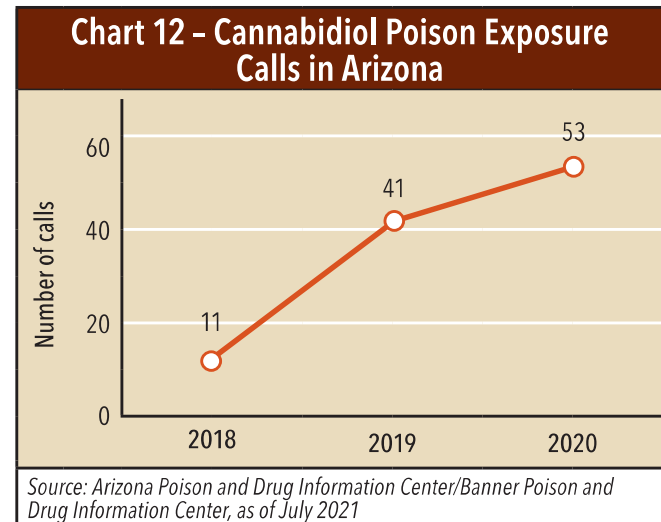
Source: Banner Poison and Drug Information Center/Arizona Poison and Drug Information Center, as of July 2021

According to the Arizona Poison and Drug Information Center and Banner Poison and Drug Information Center, from 2017 through 2020, poison exposure calls for marijuana edible products increased 371%, from 31 calls in 2017 to 146 in 2020.¹⁰⁷ During this period, the Banner Poison and Drug Information Center responded to 280 calls for marijuana edible poisonings, of which 36% (100 calls) involved infants and toddlers 0 to 5 years of age.¹⁰⁸



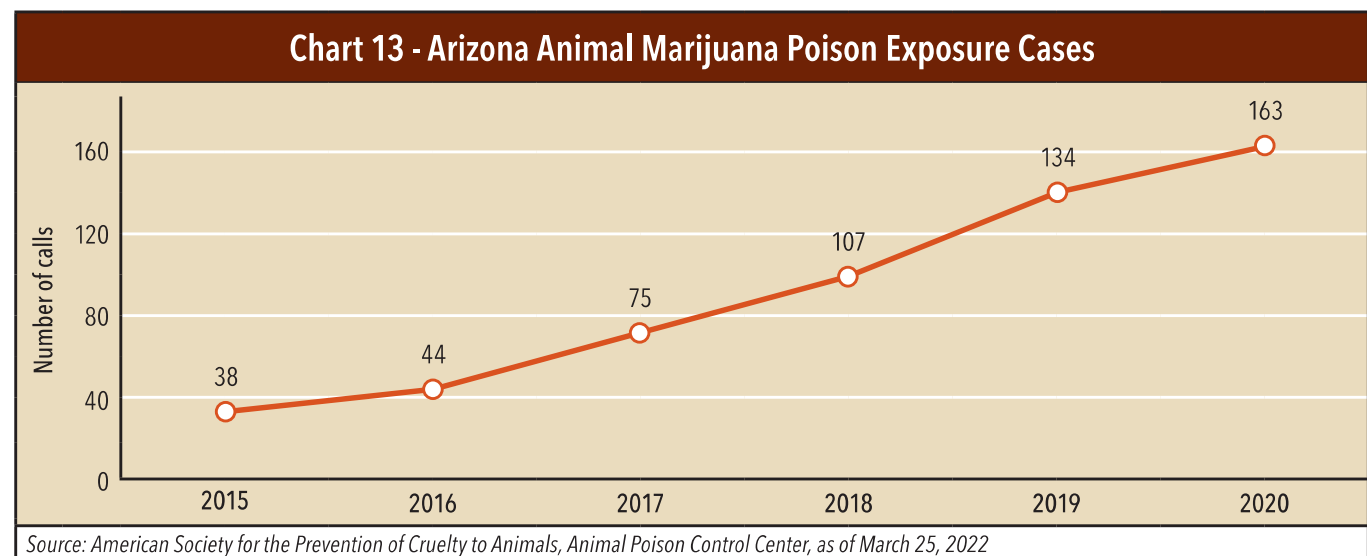
From 2018 through 2020, the Arizona Poison and Drug Information Center and Banner Poison and Drug Information Center received 105 calls for Cannabidiol (CBD) product poisonings.¹⁰⁹ During this period, the Banner Poison and Drug Informa-

tion Center responded to 81 calls for CBD poisonings, of which 47% (38 calls) involved children 0-12 years of age.¹¹⁰ The second most affected demographic group was adults 50 and over; this group was responsible for 23% of the total CBD poisoning calls.¹¹¹



According to the American Society for the Prevention of Cruelty to Animals (ASPCA), Animal Poison Control Center, marijuana poison exposure cases for all animal species in Arizona increased 329%, from 38 cases in 2015 to 163 cases in 2020.¹¹²

Cats and dogs are particularly vulnerable to marijuana exposure. Marijuana is toxic to cats and dogs. Cats and dogs can be poisoned by inhaling secondhand marijuana smoke, eating edibles, or



ingesting marijuana.¹¹³ The physical symptoms of marijuana poisoning are difficulty with coordination, hyperactivity, excessive drooling, and urinary incontinence.¹¹⁴ More severe symptoms associated with marijuana poisoning are tremors, seizures, and coma.¹¹⁵ Marijuana poisonings are rarely fatal; however, ingesting foods such as chocolate, which is toxic to cats and dogs, in combination with marijuana in rare cases can cause death.¹¹⁶

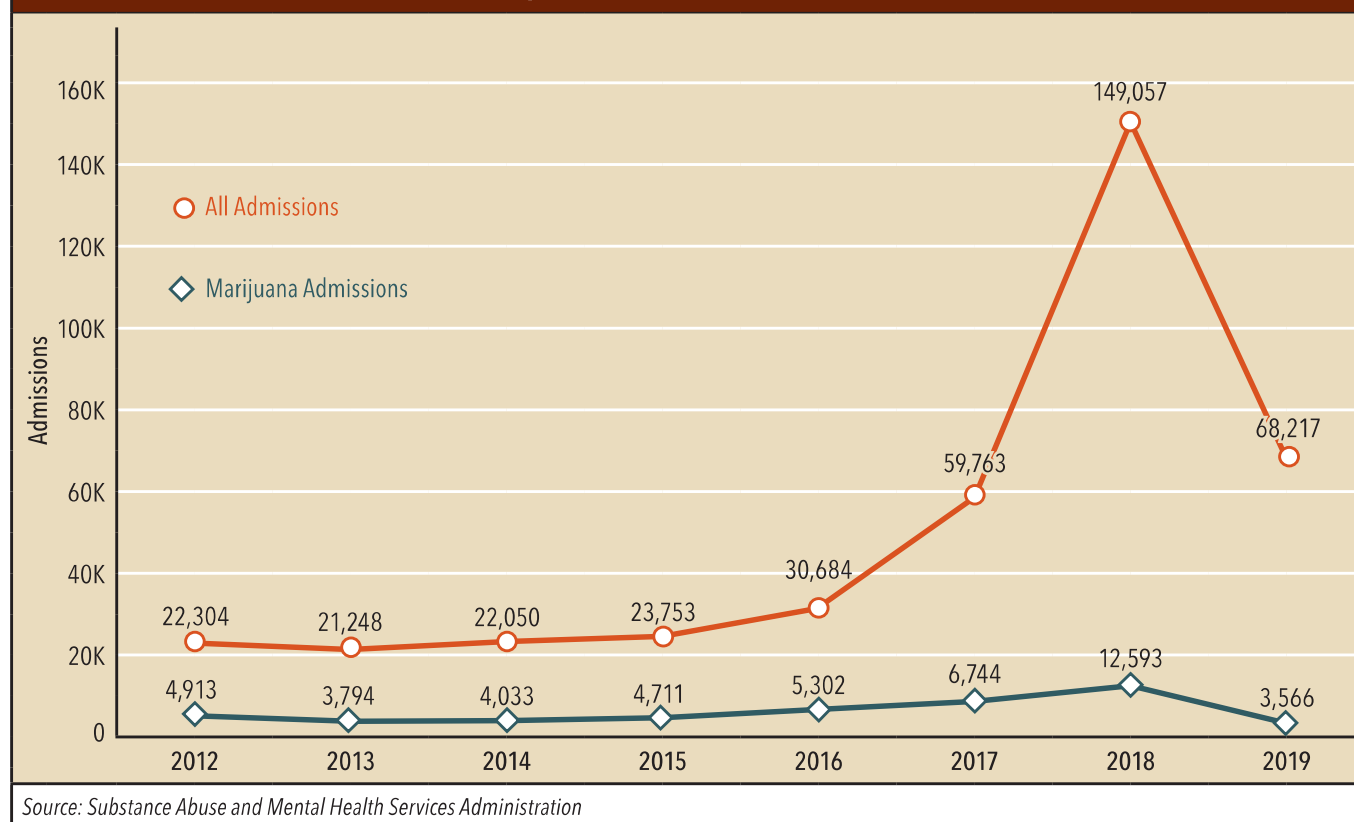
Marijuana Drug Treatment Admissions

The Treatment Episode Data Set (TEDS) collects client-level data for substance abuse treatment admissions and discharges from state agency systems. TEDS tracks the client's primary, secondary, and tertiary substance abuse problems for

treatment. TEDS is an admission-based system and does not include treatment admissions to programs that do not receive state or other public funding.

The number of substance abuse treatment admissions increased by 206%, from 22,304 in 2012 to 68,217 in 2019.¹¹⁷ During the same period, marijuana treatment admissions decreased 27%, from 4,913 in 2012 to 3,566 in 2019.¹¹⁸ Marijuana as a percentage of all treatment admissions peaked at 22% in 2012 and decreased to 5% in 2019.¹¹⁹ The number of marijuana treatment admissions peaked at 12,593 in 2018, but only accounted for 8% of all treatment admissions during this period.¹²⁰

Chart 14 – Treatment Episode Dataset: Arizona Treatment Admissions



KEY FINDINGS

Marijuana Emergency Room Admissions

- Marijuana-induced ER admissions increased 267% between 2012 and 2020 in Arizona. From 2012 through 2020, ER admissions for marijuana-induced poisonings increased 165% in Arizona.

Marijuana Poison Exposure Calls

- According to the Arizona Poison and Drug Information Center and Banner Poison and Drug Information Center, marijuana poison exposure calls increased 203% between 2017 and 2020.
- According to the Arizona Poison and Drug Information Center and Banner Poison and Drug Information Center, between 2017 and 2020, marijuana edible poison exposure calls increased 371% in Arizona.
- The Arizona Poison and Drug Information Center and Banner Poison and Drug Information Center reported that from 2017 to 2020, marijuana-related poison exposure calls for children under the age of 12 increased 198%.
- According to the Banner Poison and Drug Information Center, marijuana exposure calls reported in the 13-19 age group increased 85% from 2017 through 2020. The 13-19 age group recorded the greatest number of marijuana-related poison exposure calls compared to other age groups.
- From 2017 through 2020, the Banner Poison and Drug Information Center responded to 280 calls for marijuana edible poisonings, of which 36% (100 calls) involved infants and toddlers 0-5 years of age.
- From 2018 through 2020, the Arizona Poison and Drug Information Center and Banner Poison and Drug Information Center received 105 poison exposure calls for CBD products.
- From 2018 through 2020, the Banner Poison and Drug Information Center responded to 81 calls for CBD poisonings, of which 47% (38 exposure calls) involved children 0-12 years of age.

- According to the ASPCA, Animal Poison Control Center, marijuana poison exposure cases for all animal species in Arizona increased 329%, from 38 calls in 2015 to 163 calls in 2020.

Treatment Episode Dataset: Treatment Admissions

- Between 2012 and 2019, marijuana treatment admissions reported to TEDS decreased 27%.

DATA LIMITATIONS

Marijuana-Induced Hospital Admissions

Marijuana-induced hospital admission information is an essential indicator to assess the impact of Proposition 207 on health care utilization in Arizona. Marijuana-induced hospital admission data was not available for this report. In the future, this data should be available to fully assess the health consequences linked to Proposition 207.

Marijuana Use Disorder Hospital and Emergency Room Admissions

Emergency room and hospital admission information for marijuana use disorder is an essential indicator to assess the impact of Proposition 207 on health care utilization in Arizona. Marijuana use disorder hospital and emergency room admission data was not available for this report.

Marijuana Drug Treatment Admissions

TEDS collects client-level data for substance admissions and discharges from state agency systems. TEDS does not include all drug treatment programs in Arizona. TEDS does not include private pay and federal treatment facilities. Moreover, TEDS does not measure the demand for treatment or identify individuals suffering from substance use disorder waiting for treatment. Based upon these data gaps, TEDS may underestimate marijuana use and the need for drug treatment services in Arizona.¹²¹

Marijuana-Induced Deaths

Currently, data is needed to determine the strength of the relationship between marijuana use and cause-specific mortality in Arizona. This data will need to assess the frequency and duration of marijuana use on occupational injuries and deaths, motor vehicle crash injuries and deaths, and health care and overdose injuries and deaths, across different demographic groups of marijuana users.

MOTOR VEHICLE CRASHES AND IMPAIRED DRIVING

Baseline data regarding the relationship between motor vehicle crashes and THC driver impairment is vital for assessing the impact of Proposition 207 on highway safety in Arizona.

In the following section, data for fatal motor vehicle crashes was obtained from the Arizona Department of Transportation. THC related crash and trauma data was sourced from the National Highway Traffic Safety Administration, Fatality Analysis Reporting System, and Arizona State Trauma Registry.

Motor Vehicle Crashes and Fatalities

Marijuana is the most frequently detected drug (other than alcohol) in crash-involved drivers.¹²² The research demonstrates marijuana affects the skills required for safe driving. Marijuana slows driver reaction time and impairs psychomotor skills.¹²³ Current marijuana use also impairs cognitive functions related to decision-making and problem-solving.¹²⁴ Research shows the higher the level of THC in the blood, the greater the level

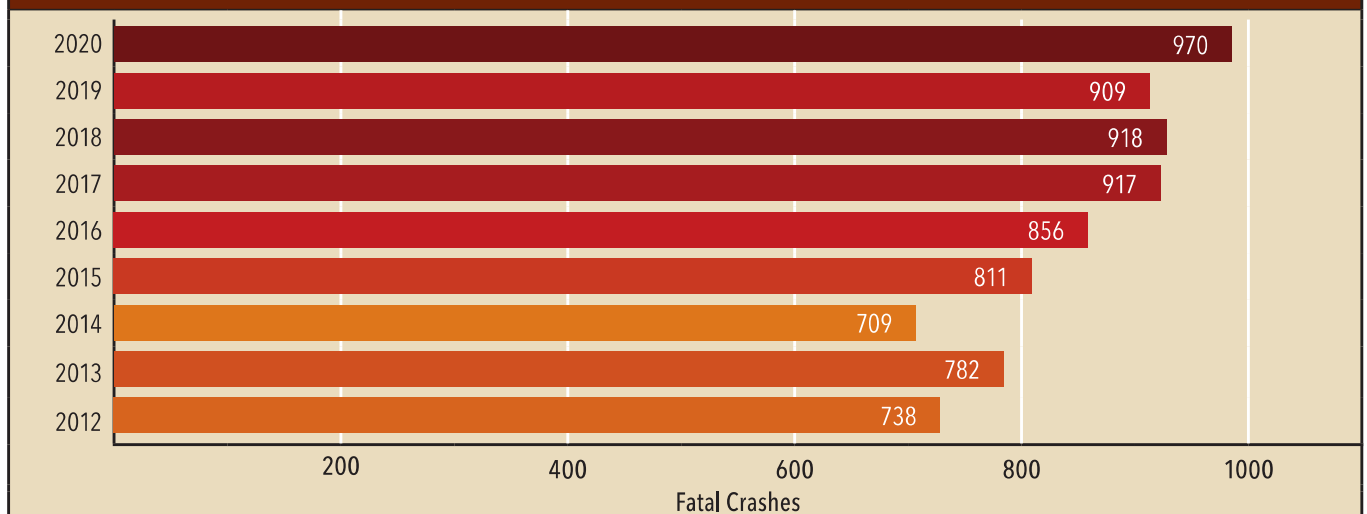
of driver impairment.¹²⁵ Moreover, the simultaneous use of marijuana and alcohol augments the absorption of THC in the blood and increases driver impairment.¹²⁶

Research on marijuana use and driver THC intoxication in vehicle crashes has produced some contrasting findings. Research evidence shows drivers with current marijuana use and high blood THC levels are at an increased crash risk.¹²⁷ According to the research, past marijuana use by the driver does not increase crash risk because THC metabolites can remain in the user's system for days and weeks after use and may not be evidence of driver impairment.¹²⁸

ARIZONA DEPARTMENT OF TRANSPORTATION

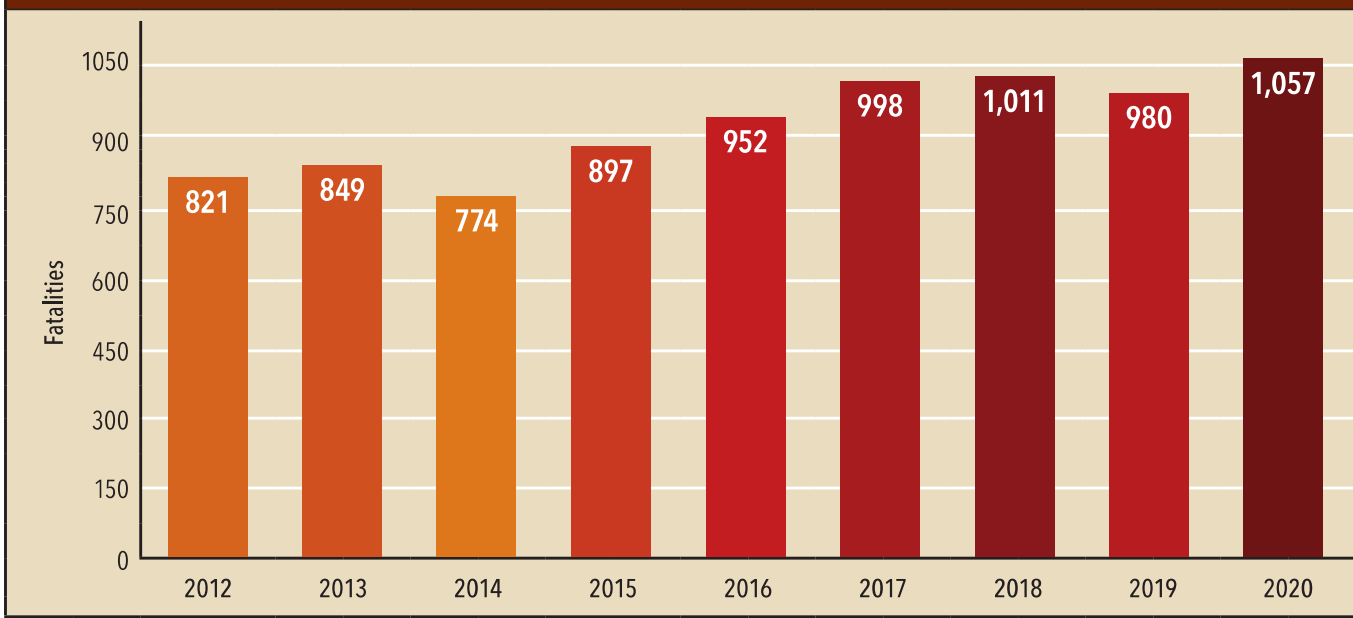
According to the Arizona Department of Transportation (ADOT), fatal motor vehicle crashes increased 31%, from 738 in 2012 to 970 in 2020. During the same period, the number of persons killed in fatal motor vehicle crashes increased 29%, from 821 deaths to 1,057.¹²⁹

Chart 15 - Fatal Crashes in Arizona



Source: Arizona Department of Transportation

Chart 16 – Persons Killed in Fatal Crashes in Arizona



Source: Arizona Department of Transportation

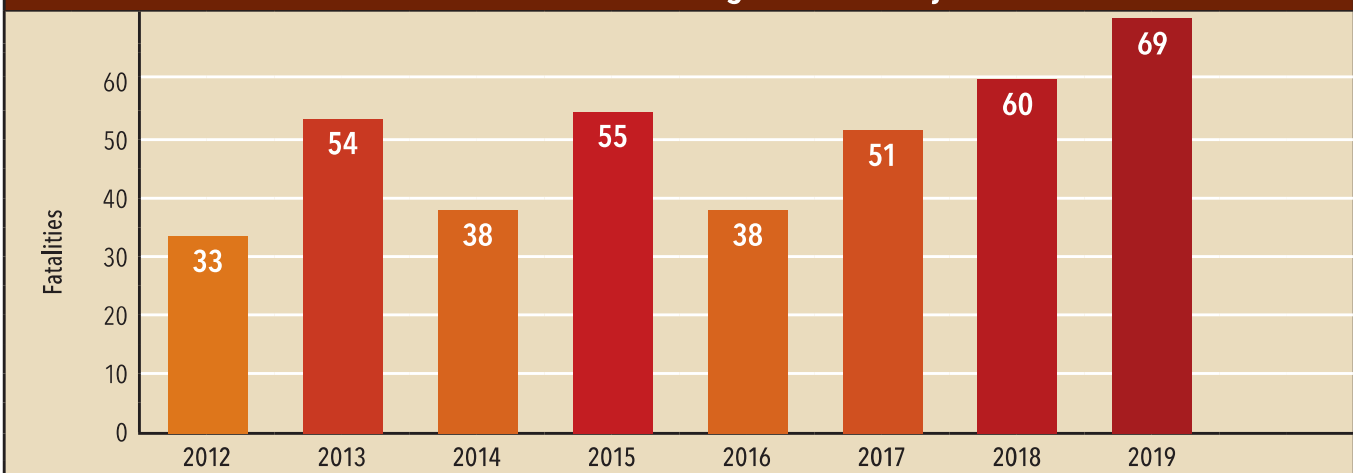
HIGHWAY TRAFFIC SAFETY ADMINISTRATION/FATALITY ANALYSIS REPORTING SYSTEM (FARS)

The National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS), is a nationwide census regarding fatal injuries suffered in motor vehicle traffic crashes. According to FARS, fatal traffic crashes involving a driver testing positive for THC in Arizona increased 109%, from 33 in 2012 to 69 in 2019.¹³⁰

ARIZONA STATE TRAUMA REGISTRY (ASTR)

The Bureau of Emergency Medical Services and Trauma System, State Trauma Advisory Board 2021 Annual Report, states, "The Bureau of Medical Services and Trauma System is responsible for collecting, analyzing, and reporting on data obtained from designated trauma centers and participating emergency medical services (EMS) agencies to enhance the EMS and Trauma system in Arizona."¹³¹ In 2020, 48 hospitals

Chart 17 – Traffic Fatalities and Positive Drug Tests for Marijuana/THC in Arizona



Source: National Highway Traffic Safety Administration, as of October 2021

provided data to the ASTR. The ASTR is a database of patient demographics, injuries, care, and patient outcomes. The ASTR collects data on injured patients to support trauma incident analysis and research.¹³²

An examination of the ASTR data for occupants (driver and passenger) in motor vehicle and motorcycle trauma incidents indicates occupants testing positive for THC increased 65%, from 850 in 2013 to 1,405 in 2020.¹³³ According to ASTR motor vehicle and motorcycle total trauma case volume, occupants testing positive for THC increased from 7.57% in 11,235 cases in 2013 to 11.53% in 12,188 cases in 2020.¹³⁴

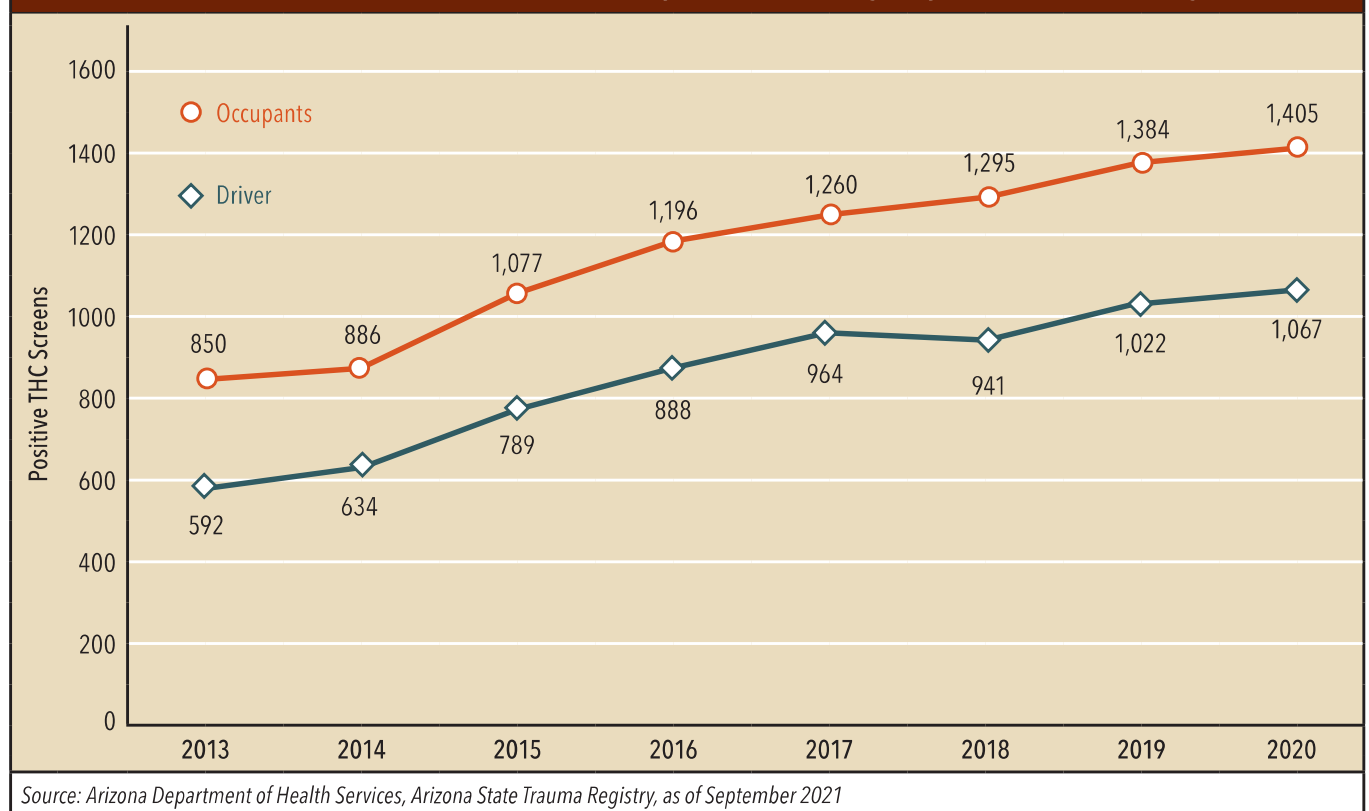
The ASTR driver data for motor vehicle and motorcycle trauma incidents reveals drivers testing positive for THC increased 80%, from 592 in 2013 to 1,067 in 2020.¹³⁵ Compared with ASTR trauma case volume for motor vehicle and motorcycle cases, drivers testing positive for THC increased from 7.65% in 7,738 cases in 2013 to 12.32% in 8,664 cases in 2020.¹³⁶

The ASTR drug toxicology data is limited for assessing the driver's level of impairment at the time of the trauma incident.¹³⁷ According to the ASTR, the driver may have used marijuana anytime within the 30-day window before the trauma event and may not have had an active THC metabolite in their system.¹³⁸ Moreover, a positive toxicology test for THC for the passenger is not related to the ASTR trauma setting or outcome.¹³⁹

Marijuana and Impaired Driving

The following section details data regarding drug DUI arrests from the Governor's Office of Highway Safety. Additionally, blood toxicology data for the prevalence of THC in blood samples from DUI and other criminal investigations is summarized in this section. Blood toxicology data was provided by the Arizona Department of Public Safety, Scientific Analysis Bureau, Mesa Police Department, Forensic Services Laboratory, and Phoenix Police Department, Laboratory Services Bureau.

Chart 18 – Arizona Motor Vehicle and Motorcycle Trauma Registry: Positive THC Drug Screens



MARIJUANA IMPAIRED DRIVING LAWS

The basic Driving Under the Influence (DUI) law, 28 A.R.S. § 1381, makes it illegal to drive or be in actual physical control, "While under the influence of intoxicating liquor, any drug, a vapor releasing substance containing a toxic substance or any combination of liquor, drugs or vapor releasing substances if the person is impaired to the slightest degree."¹⁴⁰ Arizona law makes it illegal to drive or be in actual physical control of the vehicle with marijuana and its active metabolite THC in the blood stream.

In 2014, the Arizona Supreme Court ruled in *State v. Shilgevorkyan* that an active metabolite, such as THC, which can cause impairment must be present for the driver to be charged with a DUI.¹⁴¹ The Arizona Supreme Court stated, "Drivers cannot be convicted of a DUI offense based merely on the presence of a non-impairing metabolite that may reflect the prior usage of marijuana."¹⁴² The Court was unconvinced the mere presence of a metabolite, which can remain in the blood stream for 30 days, is evidence of impairment. The Court record also reflected that Carboxy-THC, the only metabolite found in the defendant's blood, does not cause impairment.¹⁴³

Pursuant to Proposition 207, A.R.S. § 36-2852(B), notwithstanding any other law, a person with metabolites or components of marijuana in the person's body is guilty of violating section 28-1381-**Driving or actual physical control while under the influence**, only if the person is also impaired to the slightest degree. Proposition 207 requires the State must prove, beyond a reasonable doubt, that the driver is impaired to the slightest degree by THC.¹⁴⁴

Under Proposition 207, A.R.S. § 36-2852(C), notwithstanding any other law, the odor of marijuana or burnt marijuana does not by itself constitute reasonable articulable suspicion of a crime. This subsection does not apply when a law enforcement officer is investigating a DUI offense.¹⁴⁵

GOVERNOR'S OFFICE OF HIGHWAY SAFETY

The Governor's Office of Highway Safety (GOHS) reported arrests for driving under the influence (DUI) of drugs increased 81%, from 4,511 arrests in 2012 to 8,187 in 2020.¹⁴⁶ The GOHS DUI data does not identify DUI drug arrests by drug type, and these statistics reflect DUI arrests for all drugs, to include marijuana.¹⁴⁷

Chart 19 - Arizona Drug Impaired Driving Arrests

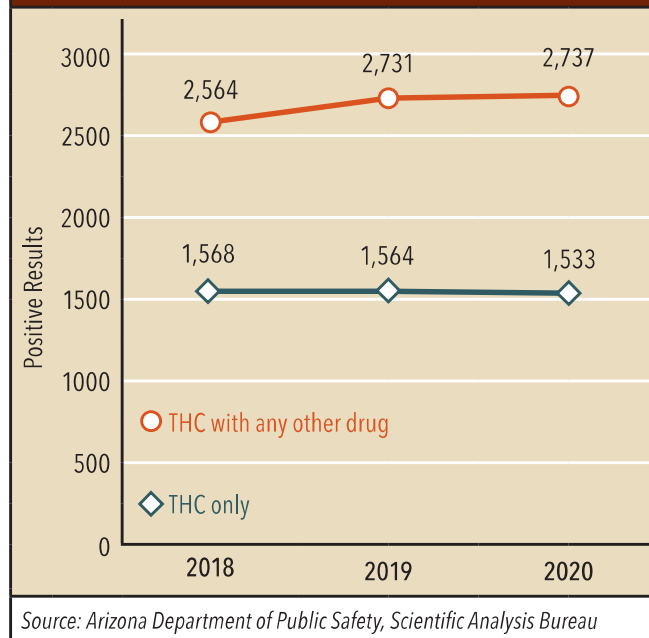


Source: Governor's Office of Highway Safety, as of August 12, 2021

THE ARIZONA DEPARTMENT OF PUBLIC SAFETY, SCIENTIFIC ANALYSIS BUREAU

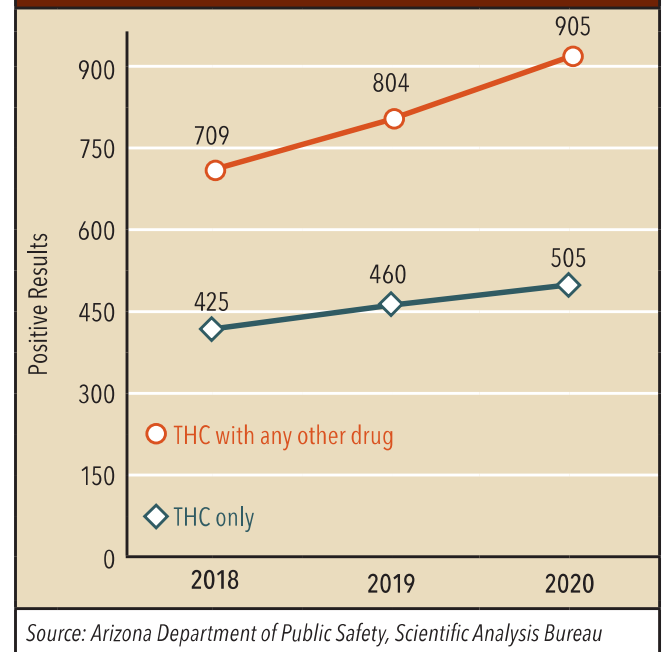
The Arizona Department of Public Safety (DPS), Scientific Analysis Bureau, provides forensic services to DPS and other law enforcement agencies in Arizona. According to the Scientific Analysis Bureau, the number of blood toxicology submissions by DPS and other Arizona law enforcement agencies increased 6%, from 15,100 in 2018 to 16,020 in 2020.¹⁴⁸ During this period, the number of THC only positive toxicology tests submitted by DPS, and other law enforcement agencies decreased 1%, from 1,568 to 1,553. Positive toxicology test submissions by DPS and other law enforcement agencies for THC in combination with other drugs increased 7%, from 2,564 to 2,737.¹⁴⁹ Interestingly, the DPS and other law enforcement agency positive toxicology submissions for THC in combination with alcohol decreased 16%, from 103 positive tests in 2018 to 87 in 2020.¹⁵⁰

Chart 20 – DPS and Other Law Enforcement Agency Positive Blood Toxicology Tests for THC



Blood toxicology submissions by DPS only increased 17%, from 3,940 in 2018 to 4,617 in 2020. During this period, DPS THC only positive toxicology tests increased 19%, from 425 to 505.¹⁵¹ Additionally, DPS positive toxicology tests for THC in combination with other drugs increased 28%, from 709 to 905 tests.¹⁵² Moreover, DPS THC and alcohol positive toxicology tests decreased 53%, from 32 in 2018 to 15 in 2020.¹⁵³

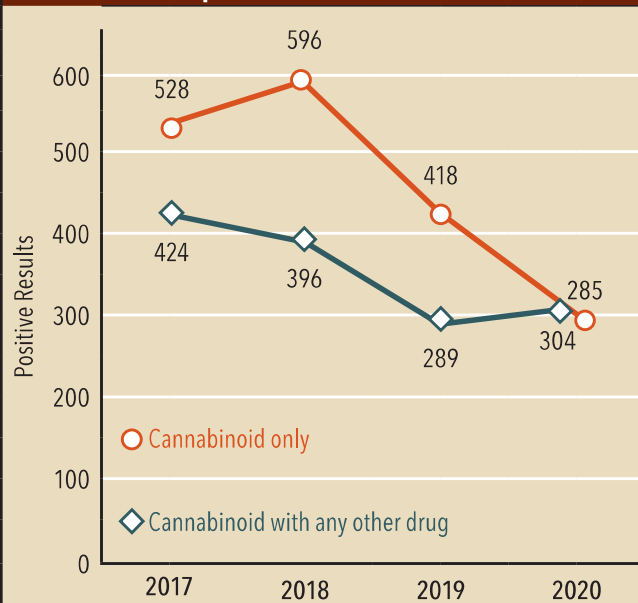
Chart 21 – DPS Positive Blood Toxicology for THC: DPS Scientific Analysis Bureau



MESA POLICE DEPARTMENT, FORENSIC SERVICES LABORATORY

According to the Mesa Police Department, Forensic Services Laboratory, the number of cannabinoid (THC, Hydroxy-THC, and Carboxy THC) positive tests decreased 38%, from 952 cases in 2017 to 589 in 2020.¹⁵⁴ The number of blood toxicology cannabinoid (THC, Hydroxy-THC, and Carboxy THC) only positive tests decreased 46%, from 528 positive tests in 2017 to 285 in 2020.¹⁵⁵ During this same period, cannabinoid (THC, Hydroxy-THC, and Carboxy THC) positive tests in combination with other drugs decreased 28%, from 424 to 304.¹⁵⁶

Chart 22 – Positive Blood Tests for Cannabinoids: Mesa Police Department/Forensic Services



Source: Mesa Police Department, Forensic Services

PHOENIX POLICE DEPARTMENT, LABORATORY SERVICES BUREAU

According to the Phoenix Police Department, Laboratory Services Bureau, positive blood toxicology tests for at least one drug increased 16%, from 1,043 tests in SFY 2019-2020 to 1,207 in SFY

2020-2021.¹⁵⁷ Positive tests for cannabinoids (THC, Hydroxy-THC, and Carboxy-THC) increased 5%, from 661 positive tests in SFY 2019 to 694 in SFY 2020.¹⁵⁸ During the same period, THC only positive toxicology tests remained unchanged at 538 cases, respectively.¹⁵⁹

An analysis of blood samples by the Laboratory Services Bureau reveals the average concentrate of THC in positive blood samples increased 6%, from 6.9 nanograms per milliliter (ng/mL) in SFY 2019-2020 to 7.3 ng/mL in SFY 2020-2021.¹⁶⁰

According to the Laboratory Services Bureau, during SFY 2019-2020 and SFY 2020-2021, 2,250 blood classifications tested positive for at least one drug.¹⁶¹ Of note, a blood classification may contain more than one drug. The data reveals 60% of the positive blood classifications were for marijuana.¹⁶² The most common analytes detected were THC, Hydroxy-THC, and Carboxy-THC. Central Nervous System stimulants made up 45% of the blood classifications.¹⁶³ The most common analytes identified were methamphetamine and cocaine. Moreover, narcotic analgesics accounted for 34% of the blood classifications. The most common analytes identified were fentanyl, heroin, morphine, oxycodone, hydrocodone, and tramadol.¹⁶⁴ Central Nervous System depressants accounted for 22% of the blood classifications. The most common analytes were Benzodiazepines and Barbiturates.¹⁶⁵

Table 4 - Laboratory Services Bureau: Drug Blood Classifications

Drug	SFY 2019-2020		SFY 2020-2021	
	Quantity	Percentage	Quantity	Percentage
Marijuana	661	63%	694	57%
CNS Stimulants	465	45%	557	46%
Narcotic Analgesics	316	30%	449	37%
CNS Depressants	252	24%	233	19%
Other Drug	42	4%	59	5%
Positive Blood Drug Cases with at Least One Drug	1,043		1,207	

Source: Phoenix Police Department, Laboratory Services Bureau

KEY FINDINGS

Motor Vehicle Crashes and Fatalities

- According to ADOT, fatal motor vehicle crashes increased 31%, from 738 in 2012 to 970 in 2020.
- According to ADOT, fatalities in motor vehicle crashes increased 29%, from 821 deaths to 1,057 between 2012 and 2020.
- According to FARS, fatal traffic crashes involving a driver testing positive for THC in Arizona increased 109%, from 33 in 2012 to 69 in 2019.
- An examination of the ASTR data for occupants (driver and passenger) in motor vehicle and motorcycle trauma incidents indicates occupants testing positive for THC increased 65%, from 850 in 2013 to 1,405 in 2020.
- According to ASTR motor vehicle and motorcycle total trauma case volume, occupants testing positive for THC increased from 7.57% in 11,235 cases in 2013 to 11.53% in 12,188 cases in 2020.
- The ASTR driver data for motor vehicle and motorcycle trauma incidents reveals the number of drivers testing positive for THC increased 80%, from 592 in 2013 to 1,067 in 2020.
- According to ASTR motor vehicle and motorcycle total trauma case volume, drivers testing positive for THC increased from 7.65% in 7,738 cases in 2013 to 12.32% in 8,664 cases in 2020.

Marijuana and Impaired Driving

- The GOHS reported arrests for driving under the influence (DUI) of drugs, to include THC, in Arizona increased 81%, from 4,511 arrests in 2012 to 8,187 in 2020.
- From 2018 through 2020, the number of positive blood toxicology submissions from DPS and other Arizona law enforcement agencies to the Scientific Analysis Bureau for THC only decreased 1%, from 1,568 to 1,553.
- Between 2018 and 2020, positive blood toxicology submissions from DPS and other Arizona law enforcement agencies to the Scientific Analysis Bureau for THC in combination with other drugs increased 7%, from 2,564 to 2,737.

- From 2018 and 2020, the number of DPS positive blood toxicology submissions to the Scientific Analysis Bureau for THC increased 19%, from 425 to 505.
- From 2018 to 2020, the number of DPS positive blood toxicology submissions for THC combined with other drugs increased 28%, from 709 to 905.
- The number of cannabinoid (THC, Hydroxy-THC, and Carboxy-THC) positive tests processed by the Mesa Police Department, Forensic Services Laboratory, decreased 38%, from 952 cases in 2017 to 589 in 2020.
- According to the Phoenix Police Department, Laboratory Services Bureau, positive tests for cannabinoids (THC, Hydroxy-THC, and Carboxy-THC) increased 5%, from 661 positive tests in SFY 2019-2020 to 694 in SFY 2020-2021.
- THC positive toxicology tests processed by the Phoenix Police Department, Laboratory Services Bureau, remained stable at 538 in SYF 2019-2020 and 538 in SFY 2020-2021.
- An analysis conducted by the Phoenix Police Department, Laboratory Services Bureau, indicates the average concentrate of THC in blood samples increased 6%, from 6.9 ng/mL in SFY 2019-2020 to 7.3 ng/mL in SFY 2020-2021.

DATA LIMITATIONS

Motor Vehicle Crashes and Fatalities

The ASTR and FARS data show whether a person had THC in their system and do not indicate the level of driver impairment at the trauma or crash event. The driver may have used marijuana anytime within the 30-day window before the crash or trauma event and may not have had an active THC metabolite in their system. Moreover, unlike alcohol, where the legal limit is 0.08 blood alcohol level, there is no set level on nanograms of THC where the driver is determined to be impaired.

Marijuana and Impaired Driving

The GOHS data does not identify DUI drug arrests by drug type and count DUI arrests for all drugs, including marijuana. Further, DUI prosecution and sentencing data is a current data gap for assessing marijuana-related impairment driving trends.

MARIJUANA USE AND THE ARIZONA WORKFORCE

Introduction

Research demonstrates there is a positive relationship between drug use impairment and workplace injuries and accidents.¹⁶⁶ Additionally, research findings show marijuana impairment increases employee absenteeism, turnover, and low employee productivity.¹⁶⁷

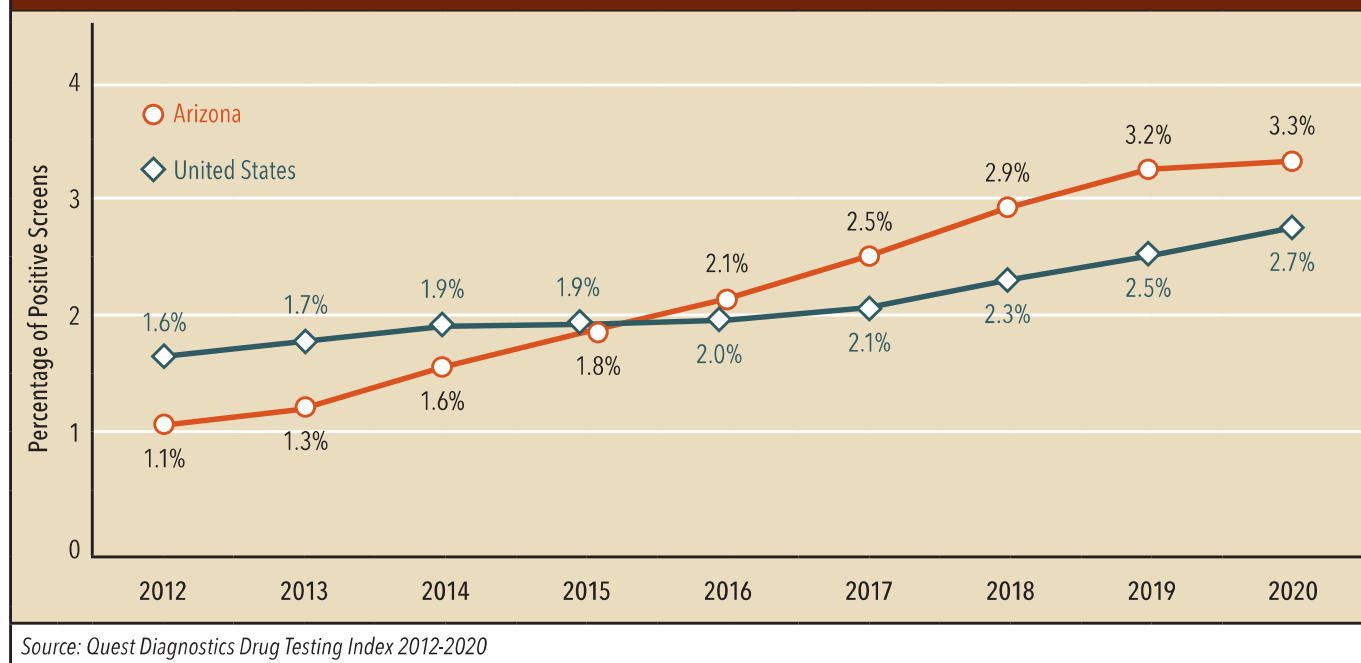
Proposition 207 creates no special protections for employment applicants being hired for a job. Proposition 207 states, "The law protects the right of employers to maintain a drug and alcohol-free workplace or affect the ability of employers to have workplace policies restricting the use of marijuana by employees or prospective employees."¹⁶⁸ Employers can prohibit employees from using, selling, possessing, and being impaired by marijuana in the workplace and while on duty.¹⁶⁹

Workforce Drug Testing

According to the Quest Diagnostics Multi-Year Analysis Report, marijuana continues to top the list as the most detected illicit substance in the United States workforce. The data shows positive marijuana employment drug testing increased 29%, from 2.4% in 2015 to 3.1% in 2019, in the United States workforce.¹⁷⁰ Additionally, the Western region of the United States recorded double-digit increases in positive workplace testing for marijuana.¹⁷¹ Marijuana positivity in the Western region increased 78%, from 2.3% in 2015 to 4.1% in 2019.¹⁷²

From 2012 through 2020, marijuana was the most detected illicit drug in the workforce in Arizona.¹⁷³ The workforce positivity rate for marijuana drug testing increased 200%, from 1.1% in 2012 to 3.3% in 2020.¹⁷⁴ In 2020, the marijuana positivity in the United States was 2.7% compared to 3.3% for Arizona.¹⁷⁵ According to employment drug testing data, marijuana continues to have a persistent presence in the Arizona workforce.¹⁷⁶

Chart 23 – Quest Diagnostics Drug Testing Index



KEY FINDINGS

Workforce Drug Testing

- Proposition 207 creates no special protections for employment applicants who are adult marijuana users being hired for a job.
- Employers may continue to prohibit employees from using, selling, possessing, and being impaired by marijuana in the workplace and while on duty.
- According to the Quest Diagnostics Multi-Year Analysis Report, marijuana positivity increased 29%, from 2.4% in 2015 to 3.1% in 2019, in the United States workforce.
- According to Quest Diagnostics, the workforce marijuana positivity rate in Arizona increased 200%, from 1.1% in 2012 to 3.3% in 2020.

DATA LIMITATIONS

Workforce Drug Testing

The Quest Diagnostics Drug Testing Index only reports on Arizona companies that use Quest Diagnostics drug testing services. Companies or private employers that do not utilize Quest Diagnostics for drug testing are not in the dataset.

MARIJUANA IN SCHOOLS

Introduction

Research evidence suggests consistent associations between marijuana use and reduced educational attainment (i.e., reduced chances of graduating from high school).¹⁷⁷ The research suggests high school students who use marijuana have lower educational attainment than their non-marijuana-smoking peers.¹⁷⁸ Additionally, students who used marijuana at school have lower grades, lower classroom participation, and more academic dishonesty than students who were marijuana users but did not use marijuana at school.¹⁷⁹ The research suggests there is a relationship between students who used marijuana daily before the age of 17 and higher high school dropout rates when compared to their non-marijuana-smoking peers.¹⁸⁰ The research indicates the relationship between marijuana use and poor academic achievement is similar for both males and females.¹⁸¹

Marijuana Use in School

According to the AYS, students receiving marijuana at school increased between 2012 and 2020. According to the AYS, the number of 8th, 10th, and 12th grade students receiving marijuana at school increased 36%, from 11.1% to 15.1%. An examination of pre-COVID-19 data indicates this number increased 52%, from 11.1% in 2012 to 16.9% of the students in 2018.¹⁸²

According to the AYS, 8th, 10th, and 12th grade students reporting being drunk or high (drugs) at school decreased from 19.8% in 2012 to 13.2% in 2020.¹⁸³

School Suspensions, Expulsions, and Law Enforcement Referrals/Arrests

According to the Arizona Department of Education, the Department does not collect or receive discipline data from Arizona School districts. Individual Arizona school districts disseminate disciplinary data to the United States Department of

Education, Office of Civil Rights, Civil Rights Data Collection Section (CRDC). The CRDC does not report on school-related drug disciplinary actions, law enforcement referrals, or drug related arrests in state disciplinary reports.

SCHOOL SUSPENSIONS AND EXPULSIONS

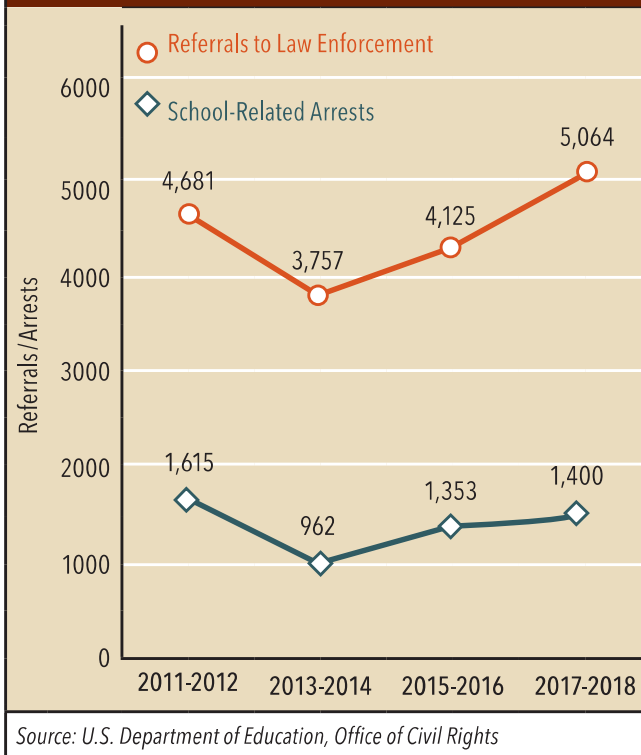
The number of Arizona public high school students with and without disabilities receiving only one or more out-of-school suspensions decreased 9%, from 66,746 students during the 2011-2012 school year to 60,885 students during the 2017-2018 school year.¹⁸⁴

Arizona public school students with and without disabilities receiving expulsions with and without educational services increased 23%, from 710 students in the 2011-2012 school year to 875 students in the 2017-2018 school year.¹⁸⁵ Relative to overall Arizona student enrollments, the number of expulsions has remained low during this period.¹⁸⁶

SCHOOL LAW ENFORCEMENT REFERRALS AND ARRESTS

The CRDC data indicates Arizona student referrals to law enforcement increased 8%, from 4,681 during the 2011-2012 school year to 5,064 referrals during the 2017-2018 school year.¹⁸⁷ During this period, school-related arrests decreased 13%, from 1,615 to 1,400.¹⁸⁸

**Chart 24 – Arizona Public Schools:
School-Related Arrests and Referrals to
Law Enforcement**



DATA LIMITATIONS

School Suspensions, Expulsions, and Law Enforcement Referrals/Arrests

According to the Arizona Department of Education, the Department does not collect or receive discipline data from Arizona school districts. Individual Arizona school districts disseminate disciplinary data to the United States Department of Education, Office of Civil Rights, Civil Rights Data Collection Section (CRDC). The CRDC does not report on school-related drug disciplinary actions, law enforcement referrals, or drug related arrests in state disciplinary reports.

KEY FINDINGS

Marijuana Use in School

- According to the AYS, the number of 8th, 10th, and 12th grade students obtaining marijuana at school increased 36%, from 11.1% in 2012 to 15.1% in 2020.
- An examination of pre-COVID-19 AYS data indicates the number of 8th, 10th, and 12th grade students obtaining marijuana at school increased 52%, from 11.1% in 2012 to 16.9% in 2018.
- According to the AYS, 8th, 10th, and 12th grade students reporting being drunk or high (drugs) at school decreased from 19.8% in 2012 to 13.2% in 2020.

School Suspensions, Expulsions, Law Enforcement Referrals, and Arrests

- Arizona public high school students receiving only one or more out-of-school suspensions decreased 9%, from 66,746 students during the 2011-2012 school year to 60,885 students during the 2017-2018 school year.
- Arizona public school students receiving expulsions with and without educational services increased 23%, from 710 students in the 2011-2012 school year to 875 students during the 2017-2018 school year.
- Arizona public school student referrals to law enforcement increased 8%, from 4,681 during the 2011-2012 school year to 5,064 referrals during the 2017-2018 school year.
- Arizona public school related arrests decreased 13%, from 1,615 during the 2011-2012 school year compared to 1,400 arrests during the 2017-2018 school year.

MARIJUANA AND THE JUVENILE JUSTICE SYSTEM

Arizona Juvenile Court Referrals

According to the *Arizona's Juvenile Court Counts, Statewide Statistical Information SFY 2020 Report*, juveniles formally enter the court system when a referral is made. Referrals are submitted to the County Attorney and allege the juvenile committed a delinquent or incorrigible act. Referrals can be made by police, parents, school officials, probation officers, other agencies, or individuals requesting that the juvenile court assume jurisdiction over a juvenile's conduct. For a referral to be made, the juvenile must be between 8 and 17 years of age. Referrals can be paper referrals used as citations or police reports or physical referrals where the juvenile is arrested by law enforcement. Multiple offenses can be included on a juvenile referral.¹⁸⁹

Due to the impact of COVID-19 on school closures and restrictions, juvenile court referral data from both SFY 2019 and SFY 2020 will be incorporated into this section to ensure complete reporting and analysis.

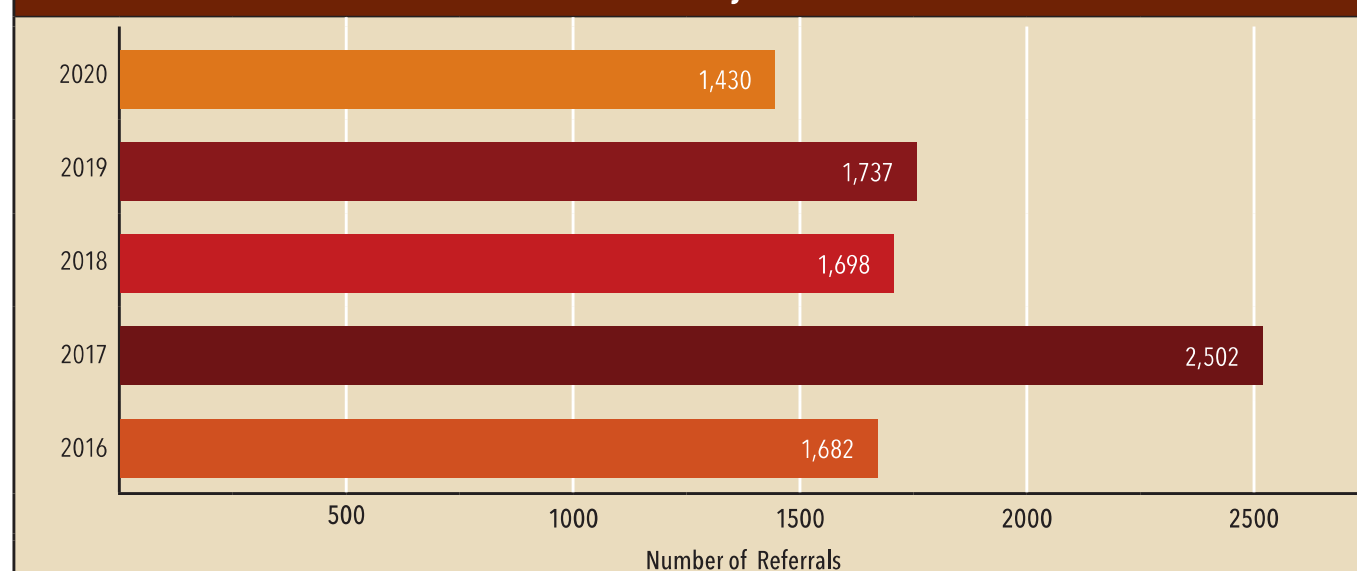
Possession of Marijuana Juvenile Court Referrals

From SFY 2016 to SFY 2020, juvenile possession of marijuana court referrals decreased 15%, from 1,682 referrals in SFY 2016 to 1,430 in SFY 2020.¹⁹⁰ The reader should note that COVID-19 restrictions and lockdowns went into effect during the fourth quarter of SFY 2020. An examination of pre-COVID-19 data indicates marijuana juvenile court referrals increased 3%, from 1,682 in SFY 2016 to 1,737 in SFY 2019.¹⁹¹

Drugs, Felony, and Misdemeanor Juvenile Court Referrals

From SFY 2016 to SFY 2020, juvenile court referrals for drugs, both felony and misdemeanor offenses, decreased 17%, from 3,382 to 2,804. An examination of Pre-COVID-19 data indicates court referrals increased 2%, from 3,382 in SFY 2016 to 3,465 in SFY 2019.¹⁹²

Chart 25 - Arizona Possession of Marijuana Juvenile Court Referrals



Source: Arizona's Juvenile Court Counts Reports SFY 2016-2020

KEY FINDINGS

Juvenile Court Referrals for Marijuana Possession

- According to *Arizona's Juvenile Court Counts*, juvenile possession of marijuana court referrals decreased 15%, from 1,682 in SFY 2016 to 1,430 in SFY 2020.
- Juvenile Court Referrals for Marijuana Possession: Pre COVID-19 Data (SFY 2016-SFY 2019)
- According to *Arizona's Juvenile Court Counts*, juvenile possession of marijuana court referrals increased 3%, from 1,682 in SFY 2016 to 1,737 in SFY 2019.

Drugs, Felony, and Misdemeanor Juvenile Court Referrals

- According to *Arizona's Juvenile Court Counts*, juvenile court referrals for drugs, both felony and misdemeanor offenses, decreased 17%, from 3,382 in SFY 2016 to 2,804 in SFY 2020.
- According to *Arizona's Juvenile Court Counts*, juvenile court referrals for drugs, both felony and misdemeanor offenses, increased 2%, from 3,382 in SFY 2016 to 3,465 in SFY 2019.

MARIJUANA AND THE OPIOID EPIDEMIC

Introduction

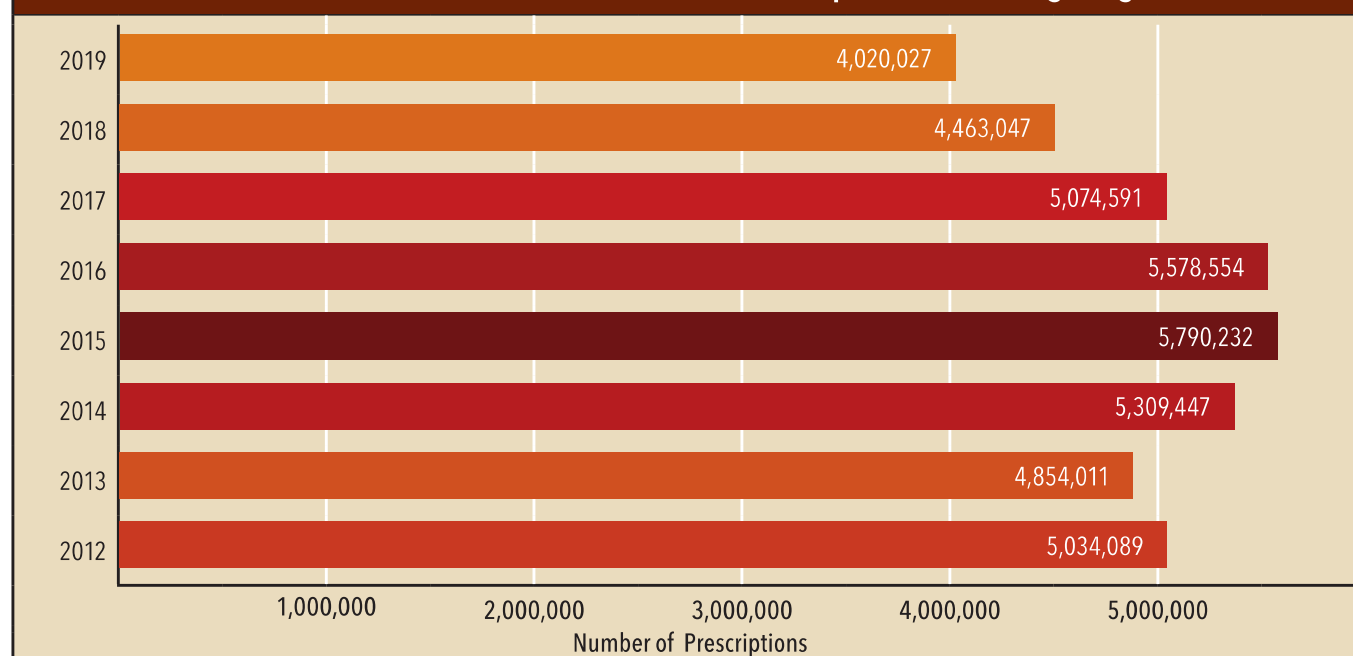
Proponents of medical marijuana maintain that marijuana access is associated with reduced rates of opioid-related mortality and may be an effective pain relief substitute for opioid pain relievers.¹⁹³ The National Institute on Drug Abuse (NIDA) funded a study published in 2014 that explored the relationship between medical marijuana laws and opioid mortality rates. The research found states with medical marijuana laws experienced slower rates of increase in opioid overdose deaths between 1999 and 2010.¹⁹⁴ The findings indicate states with medical marijuana laws had a 24.8% lower mean annual opioid mortality rate per 100,000 population when compared to states without medical marijuana laws.¹⁹⁵ It should be noted that at the time this study was released in 2014, the authors cautioned the association between opioid mortality and medical marijuana laws is speculative at best and relies on indirect evidence.¹⁹⁶

In 2019, a research paper entitled “Association

between Medical Cannabis Laws and Opioid Overdose Mortality has Reversed Over Time” replicated the study design of the 2014 NIDA-funded research. This study included seven extra years of data from 1999 through 2017. The study found the relationship between medical marijuana laws and opioid overdose mortality reversed as states with medical marijuana laws experienced a 22.7% increase in overdose deaths per 100,000 population.¹⁹⁷ These findings demonstrate a swing of over 40 percentage points from the findings of the 2014 report.

Recent research indicates medical marijuana use may compound illicit drug use behavior patterns.¹⁹⁸ For example, research suggests medical marijuana users were at higher risk for both prescription and nonmedical prescription drug use than non-users of marijuana.¹⁹⁹ Additionally, the research suggests an elevated association between medical marijuana and the nonmedical use of narcotic analgesics (pain killers), stimulants, and tranquilizers.²⁰⁰

Chart 26 – Arizona Controlled Substances Prescription Monitoring Program



Source: Arizona State Board of Pharmacy, Controlled Substances Prescription Monitoring Program, as of July 2021

Controlled Substance Prescription Monitoring Program and Opioid Deaths

According to the Arizona State Board of Pharmacy, Controlled Substances Prescription Monitoring Program (CSPMP), the number of opioid prescriptions dispensed in Arizona decreased 20%, from 5,034,089 in 2012 to 4,020,027 in 2019.²⁰¹

Despite a 20% decrease in opioid prescriptions from 2012 through 2019, opioid overdose deaths (heroin, prescription, synthetic opioids) increased 198%, from 454 deaths in 2012 to 1,351 in 2019.²⁰² According to the ADHS, prescription or synthetic opioids are currently the driving force behind rising opioid deaths in Arizona.²⁰³

Marijuana and Chronic Pain

The data shows opioid deaths in Arizona are increasing, while at the same time, medical mari-

juana use is increasing. The ADHS reporting indicates the number of qualified medical marijuana patient cardholders increased 1,710%, from 16,313 in 2011 to 295,295 in 2020.²⁰⁴ In 2020, approximately 94% (276,449) of qualified cardholders claimed chronic pain as one of the unique debilitating conditions justifying an Arizona Medical Marijuana card.²⁰⁵ Young adults between 18 and 30 are the largest group of active cardholders and represent approximately 28% (81,218) of qualified patients, followed by the 31-40 year age group representing approximately 23% (66,682) of qualified patients.²⁰⁶

Under Proposition 203, medical marijuana distribution increased by over 3,000%, from 2,701 kilograms in 2013 to 85,670 kilograms in 2020.²⁰⁷ Marijuana edible distribution increased 69%, from 1,340 kilograms in 2015 to 2,260 kilograms in 2020.²⁰⁸ Reporting of marijuana edibles in the ADHS medical marijuana end of year reports started in 2015.

Chart 27 – Opioid Deaths in Arizona

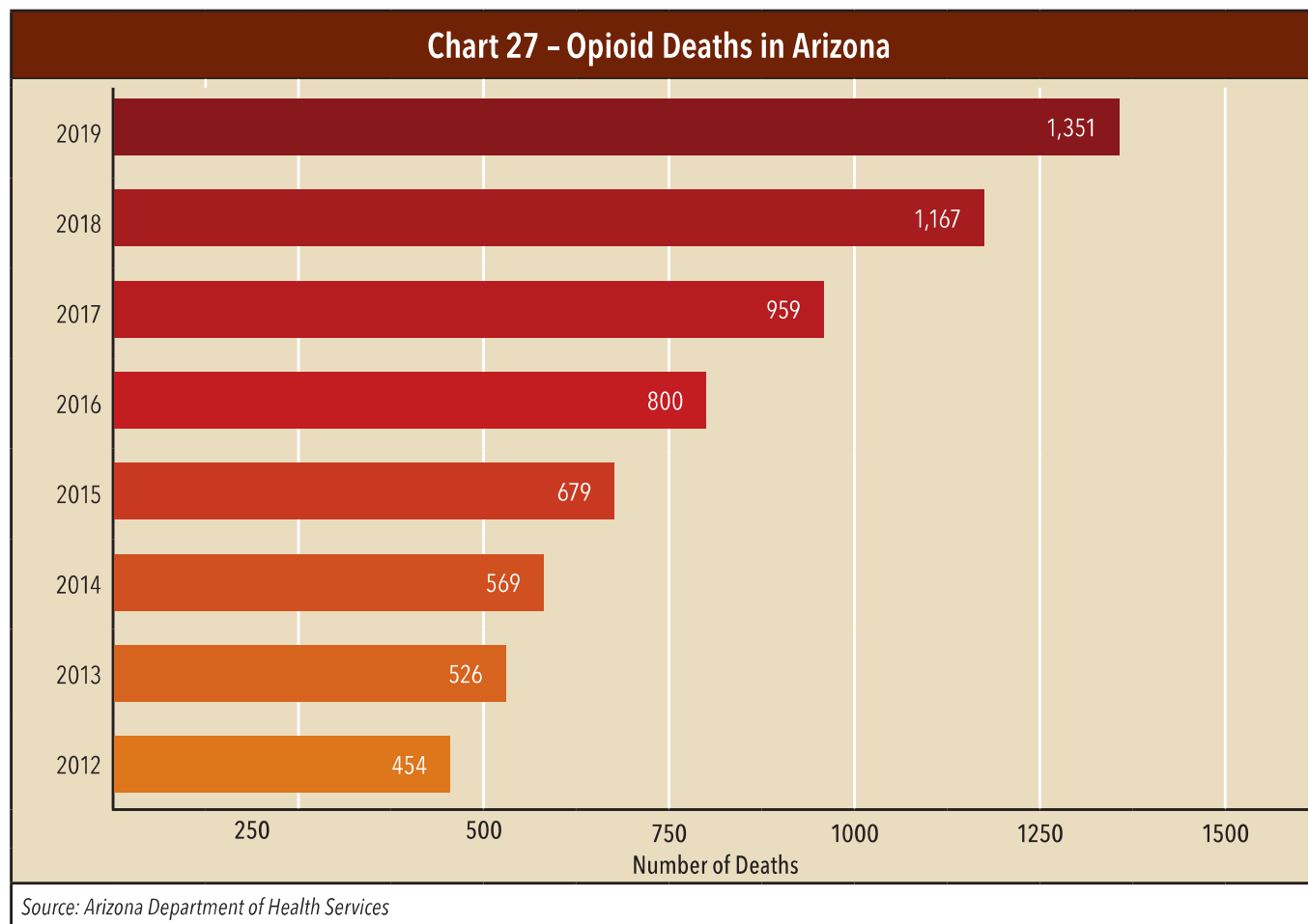
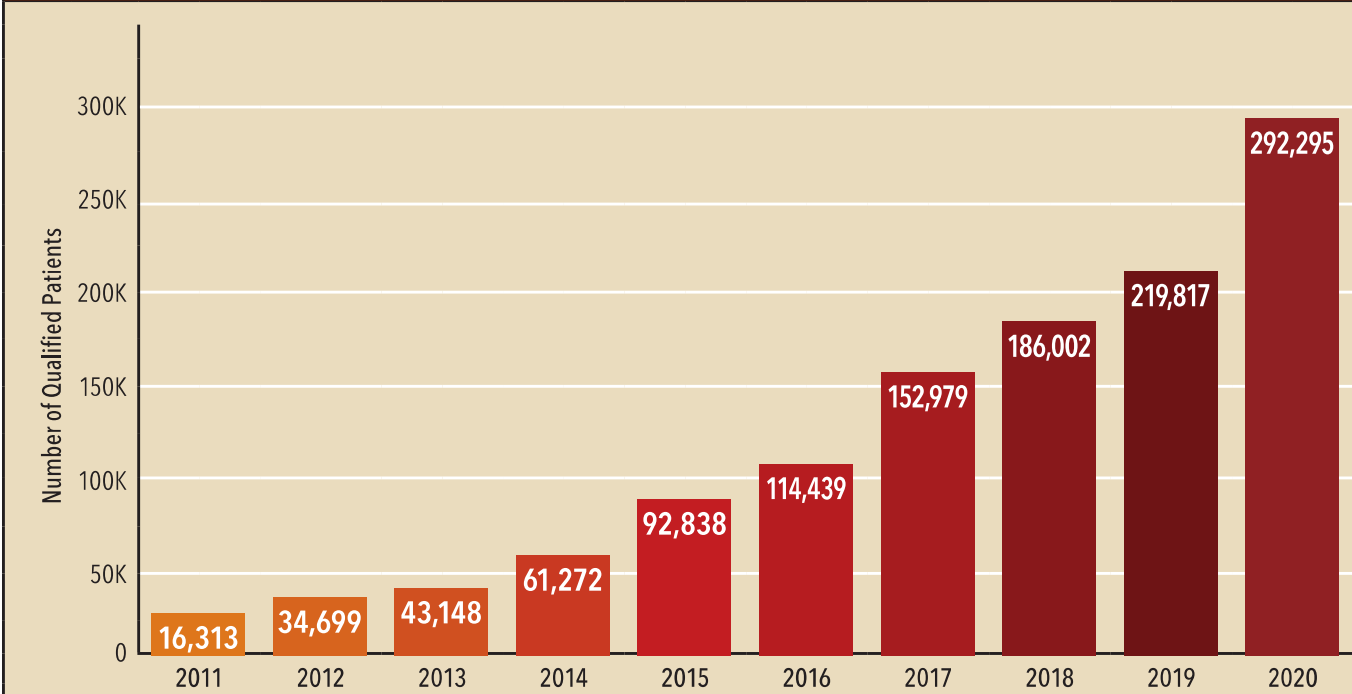
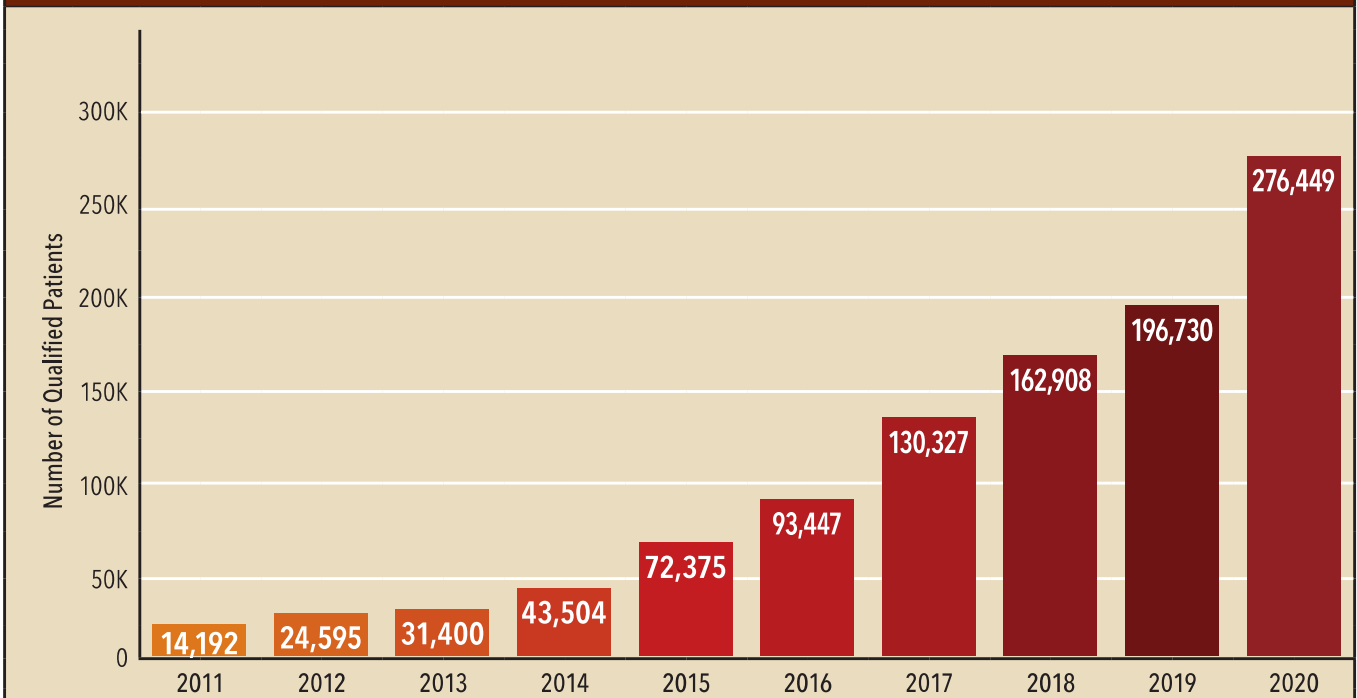


Chart 28 – Proposition 203: Qualified Patient Cardholders



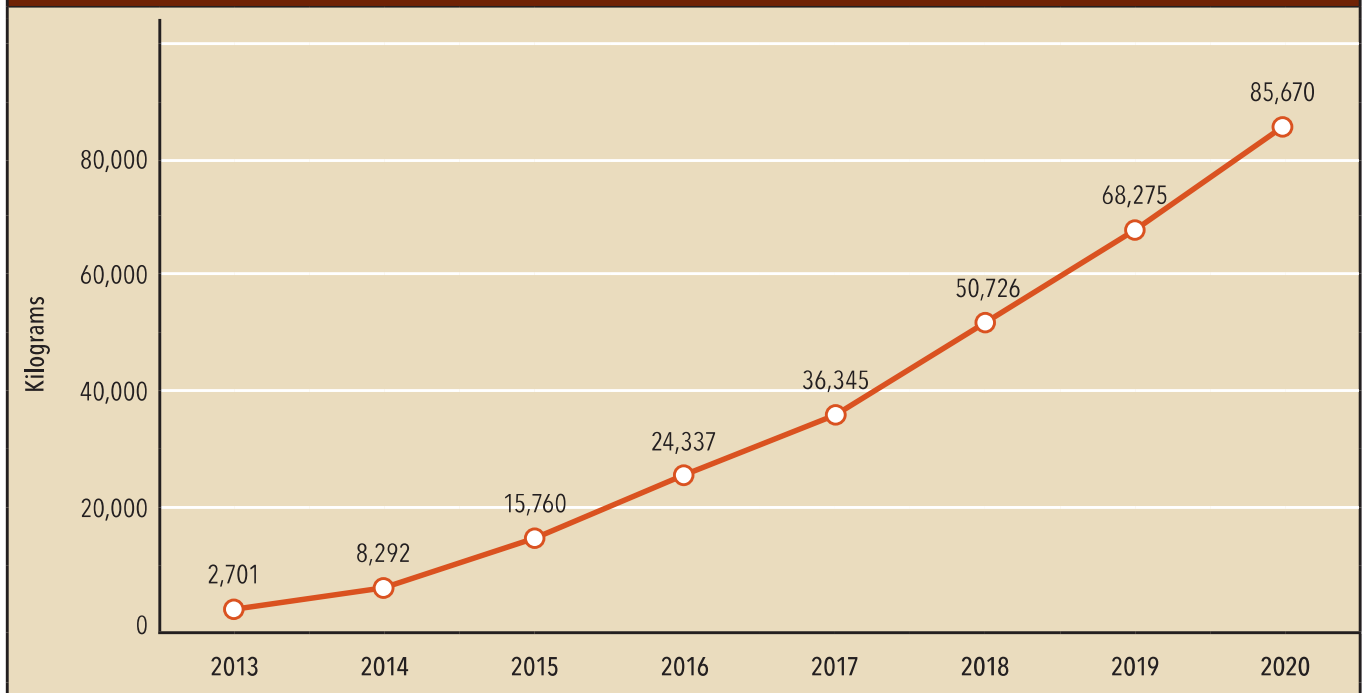
Source: Arizona Department of Health Services, Medical Marijuana Program Annual Reports

Chart 29 – Proposition 203: Chronic Pain Qualified Patient Cardholders



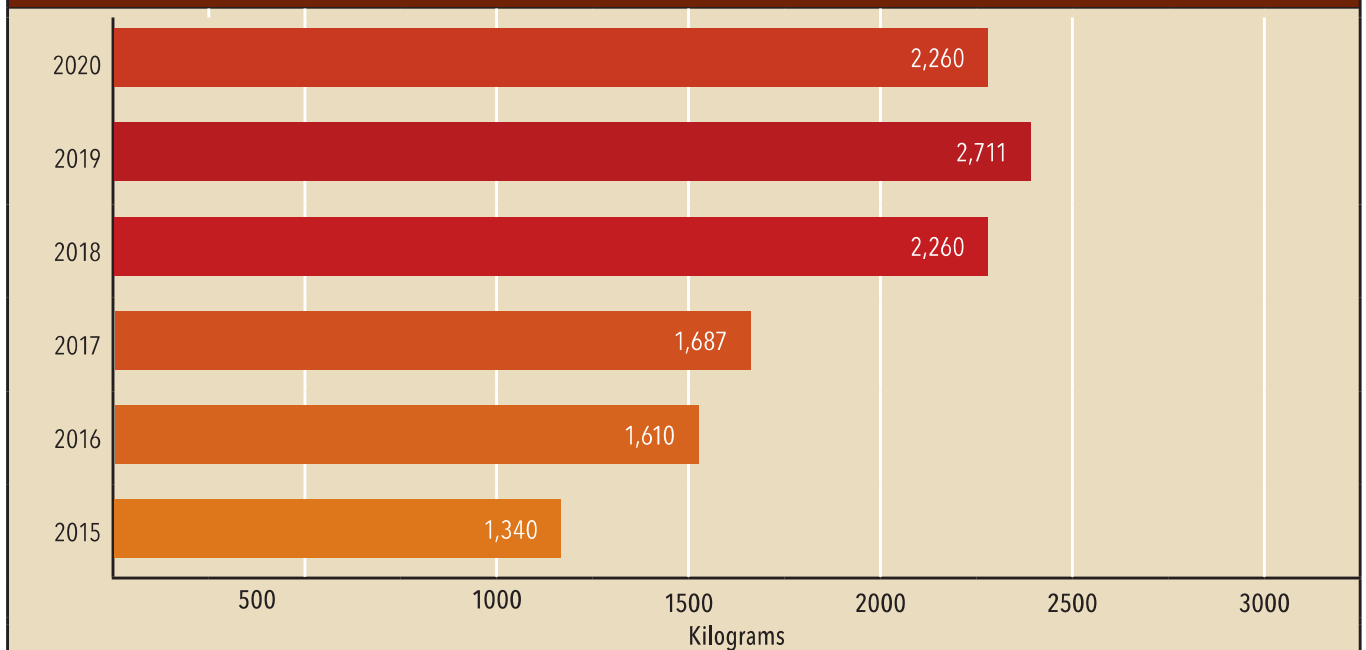
Source: Arizona Department of Health Services, Medical Marijuana Program Annual Reports

Chart 30 – Proposition 203: Marijuana Distribution in Kilograms*



Source: Arizona Department of Health Services, Medical Marijuana Program Annual Reports

Chart 31 – Proposition 203: Marijuana Edible Distribution in Kilograms*



Source: Arizona Department of Health Services, Medical Marijuana Program Annual Reports

*One kilogram equals 2.2 pounds.

KEY FINDINGS

Marijuana and Opioids

- Proponents of medical marijuana maintain that marijuana access is associated with reduced rates of opioid-related mortality and may be an effective pain relief substitute for opioid pain relievers.
- The research indicates expanding the availability and use of marijuana does not reduce opioid-related overdose deaths.
- Recent research findings reveal states with medical cannabis laws experienced higher than expected opioid overdose death rates.
- The research suggests medical marijuana users are at higher risk for prescription and nonmedical prescription drug use than non-users of medical marijuana.
- The research suggests a significant association between medical marijuana and nonmedical stimulant and tranquilizer use.

Opioid Deaths and the CSPMP

- Opioid overdose deaths (heroin, prescription opioids, synthetic opioids) increased 198%, from 454 deaths in 2012 to 1,351 in 2019 in Arizona.
- The number of opioid prescriptions dispensed in Arizona decreased 20%, from 5,034,089 in 2012 to 4,020,027 in 2019.

Marijuana and Chronic Pain

- The number of qualified medical marijuana patient cardholders increased 1,710%, from 16,313 in 2011 to 295,295 in 2020.
- In 2020, approximately 94% (276,449) of qualified cardholders claimed chronic pain as one of the unique debilitating conditions justifying an Arizona Medical Marijuana card.
- Medical marijuana distribution increased by over 3,000%, from 2,701 kilograms in 2013 to 85,670 kilograms in 2020.
- Marijuana edibles distribution increased 69%, from 1,340 kilograms in 2015 to 2,260 kilograms in 2020.

DATA LIMITATIONS

At this time, the impact of adult marijuana use on the distribution of medical marijuana and on qualified patient demographics is unknown. Baseline data will assist in assessing if adult use evolves into the dominant marijuana market and reduces or displaces the sale of marijuana for medical purposes in Arizona.

MARIJUANA AND THE ILLICIT MARKET

Proposition 207 and Crime

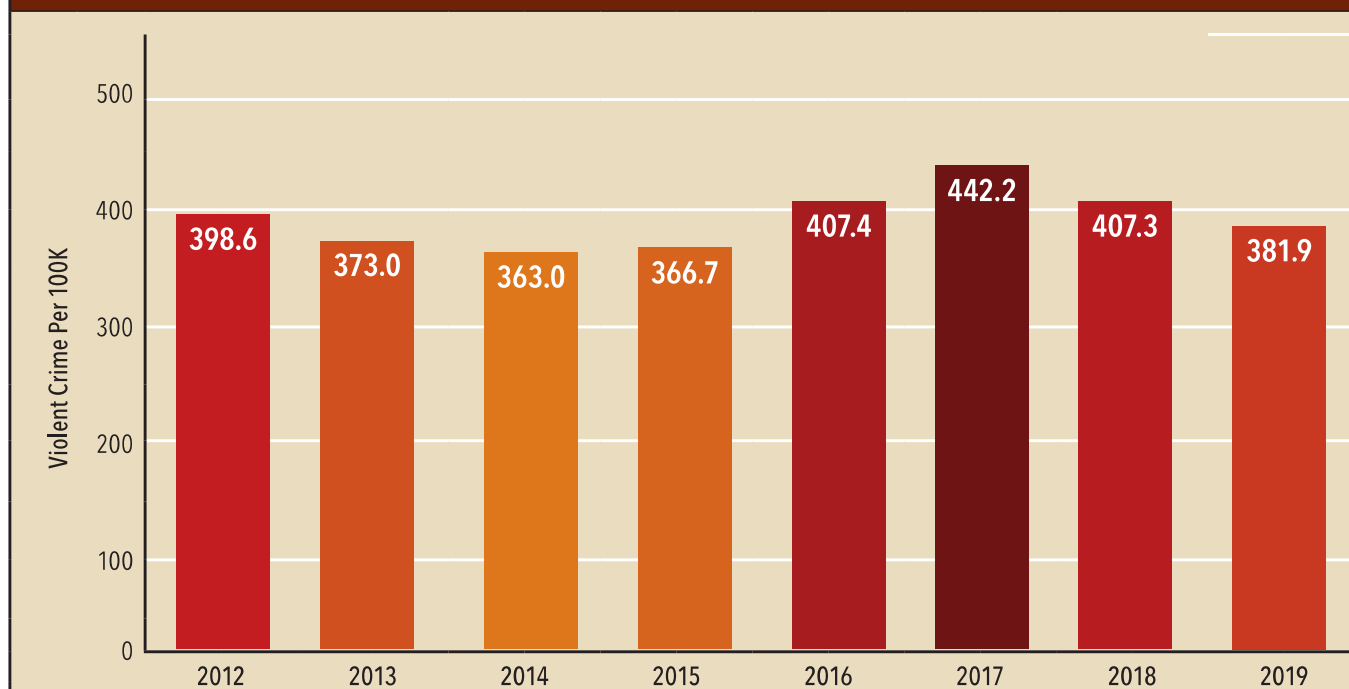
With the advent of legalized adult marijuana use, many believe crime will decrease in several ways. First, Proposition 207 will divert marijuana production and sales from drug trafficking organizations to the legal market; over time, this will diminish the size and scope of the illicit drug market and reduce crime.²⁰⁹ Second, Proposition 207 will create a safe and regulated environment to purchase marijuana and not expose buyers to criminal actors in the illicit market.²¹⁰ Third, Proposition 207 will decrease the burden on law enforcement to investigate low-level marijuana offenses and free up resources to address violent and more serious property crimes.²¹¹ Moreover, the allocation of law enforcement resources towards more serious crimes will make the criminal justice system more efficient and fair.²¹²

PROPOSITION 203: UNLICENSED MARIJUANA DISPENSARIES AND ILLEGAL MARIJUANA CULTIVATION

Since the implementation of Proposition 203, open-source law enforcement reporting has revealed the existence of an underground medical marijuana market consisting of non-authorized marijuana dispensaries, marijuana delivery services, marijuana clubs, marijuana co-ops, and farmer's markets, all engaged in illegal, for-profit marijuana distribution activities. These establishments try to appear legitimate by giving the appearance of operating under the guidelines and rules of Proposition 203, i.e., checking medical marijuana cards of customers. These establishments are not authorized by the ADHS to dispense marijuana.²¹³

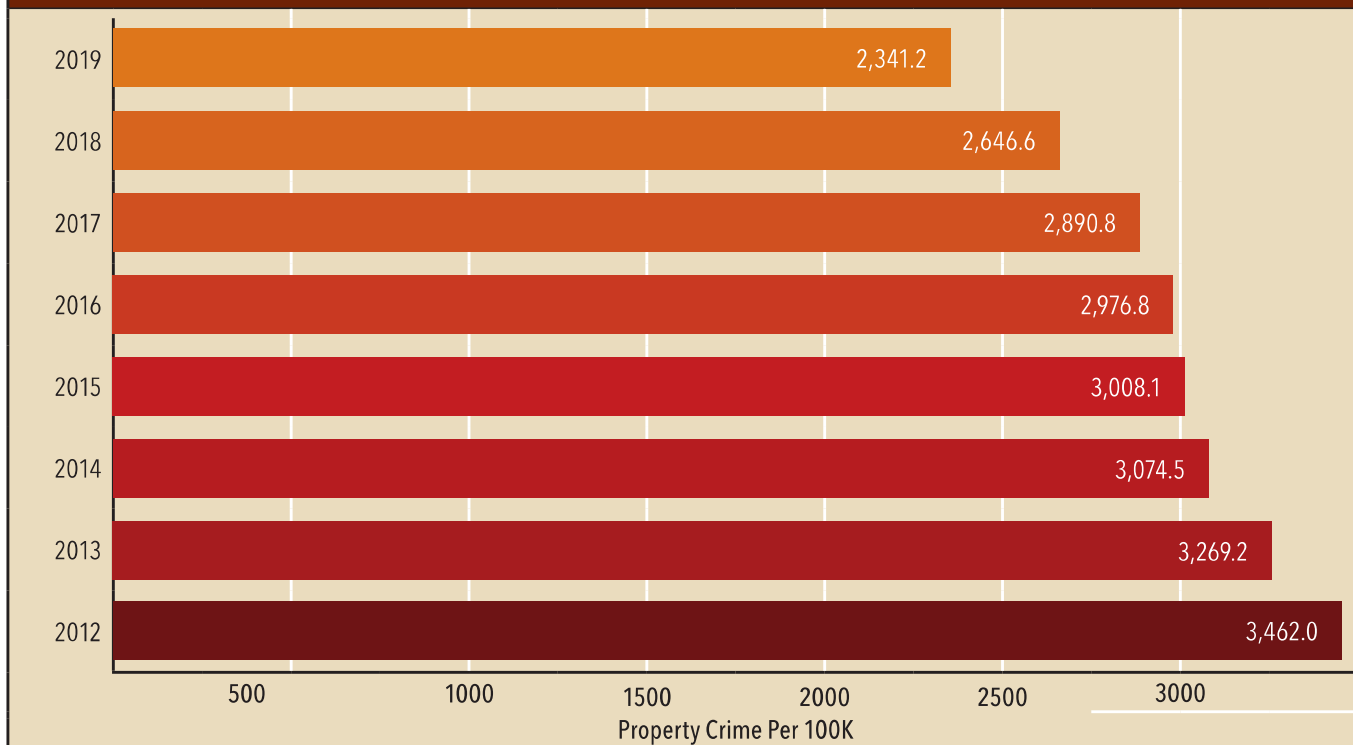
For example, on September 5, 2019, the Maricopa County Sheriff's Office arrested 14 suspects for operating an unlicensed illicit marijuana delivery service in Phoenix, Arizona.²¹⁴ Most of the illegal transactions were coordinated via the Internet, and payments for the marijuana were labeled as a "donation" instead of a sale to attempt to legiti-

Chart 32 – Arizona Violent Crime Rate



Source: Arizona Department of Public Safety, *Crime in Arizona Reports 2012-2019*

Chart 33 – Arizona Property Crime Rate



Source: Arizona Department of Public Safety, *Crime in Arizona Reports 2012-2019*

mize the illegal marijuana transaction under Proposition 203.²¹⁵

Since the implementation of Proposition 203, open-source information indicates law enforcement operations have successfully investigated unlawful marijuana trafficking outside the legal medical marijuana dispensary network. Investigations involving drug trafficking organizations operating in violation of the Proposition 203 have led to the arrest of drug traffickers and the seizure of marijuana, marijuana plants, marijuana-infused products, marijuana wax, currency, and weapons.²¹⁶

Some illegal marijuana cultivation sites are operated by medical marijuana cardholders. For example, on July 13, 2015, the Yavapai County Sheriff's Office arrested six suspects who were all Proposition 203 Medical Marijuana cardholders for operating an illegal marijuana cultivation operation.²¹⁷ Law enforcement seized 134 marijuana plants, firearms, and psilocybin mushrooms. The suspects exceeded the marijuana plant threshold and the 25-mile marijuana cultivation and dispensary radius guideline under Proposition 203.²¹⁸

Drug trafficking organizations operate outside

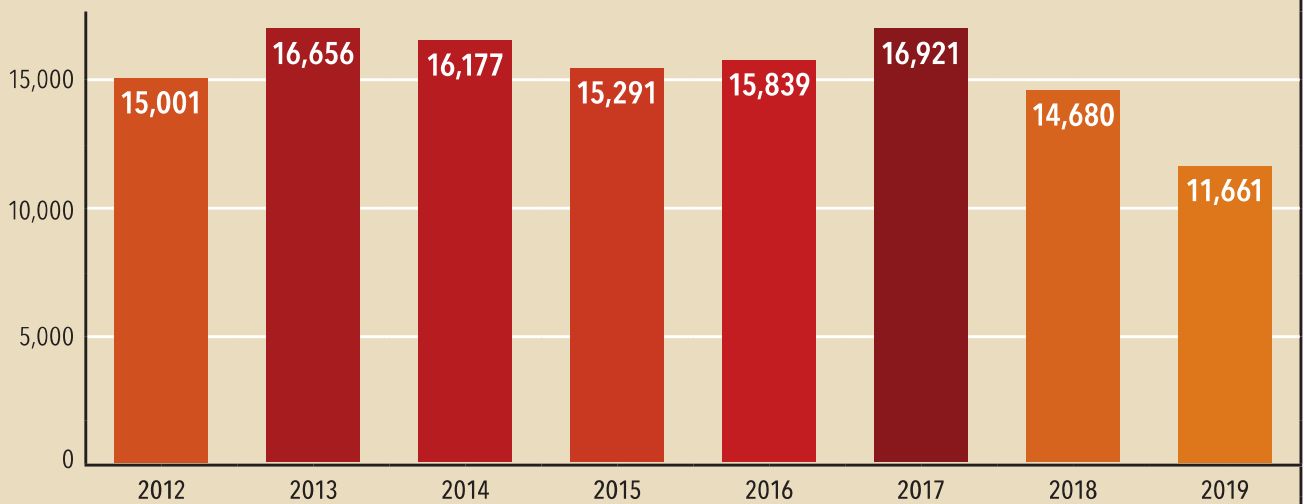
the medical marijuana distribution network. For example, on November 16, 2018, DPS arrested seven suspects in connection with two illegal marijuana cultivation sites in Northern Arizona.²¹⁹ The suspects were charged with numerous drug violations to include possession of marijuana for sale and production of marijuana for sale.²²⁰ During this investigation, 791 pounds of marijuana, 67 marijuana plants, 180 grams of THC wax, 107 grams of Lysergic Acid Diethylamide (LSD), and 4 firearms were seized.²²¹

CRIME IN ARIZONA: 2012-2019

According to the *Crime in Arizona Report*, violent crime in Arizona increased 5%, from 25,902 violent crimes in 2012 to 27,118 in 2019.²²² However, further examination reveals the violent crime rate per 100,000 residents decreased 4%, from 398.6 in 2012 to 381.9 in 2019.²²³

According to the *Crime in Arizona Report*, property crime in Arizona decreased 26%, from 224,996 property crimes in 2012 to 166,235 in 2019.²²⁴ Further examination reveals the rate of property crime in Arizona decreased 32%, from 3,462.0 in 2012 to 2,341.2 in 2019.²²⁵

Chart 34 – Arizona Marijuana Drug Possession Arrests



Source: Arizona Department of Public Safety, *Crime in Arizona Reports 2012-2019*

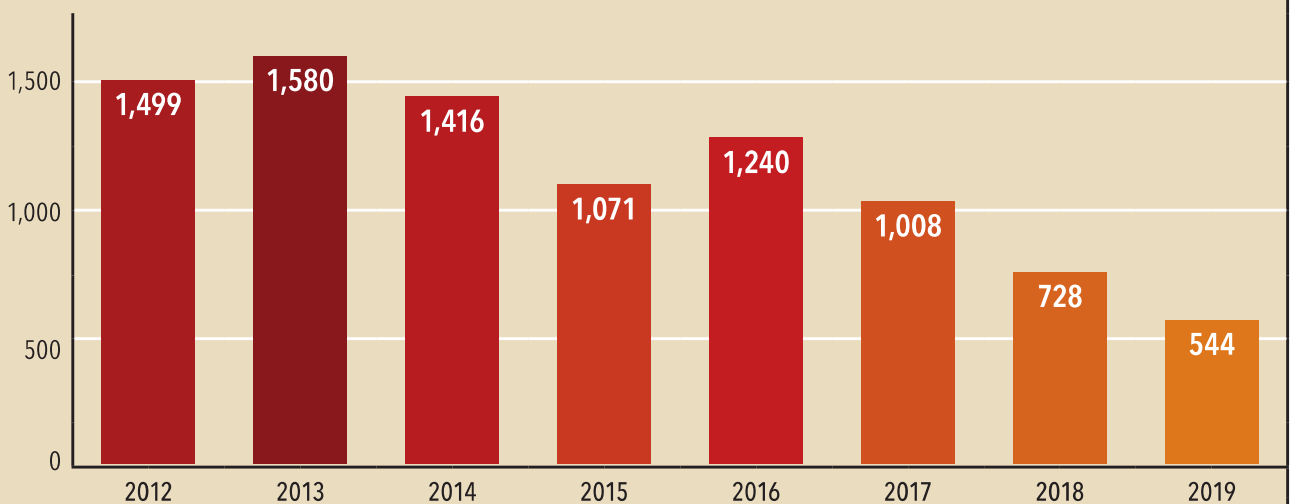
Marijuana Arrests in Arizona: 2012-2019

According to the *Crime in Arizona Report*, arrests for marijuana possession decreased 22%, from 15,001 arrests in 2012 to 11,661 in 2019.²²⁶ Further examination indicates 49% of the arrestees were from minority groups in 2012 compared to 57% in 2019.²²⁷ Minority groups are operationally defined

as Black, American Indian, Asian, Hispanic, and Pacific Islander.²²⁸

According to the *Crime in Arizona Report*, marijuana sale or marijuana manufacture arrests decreased 64%, from 1,499 in 2012 to 544 in 2019. In 2012, 63% of the arrestees were from minority groups compared to 64% in 2019.²²⁹ Minority groups are operationally defined as Black, American Indian, Asian, Hispanic, and Pacific Islander.²³⁰

Chart 35 – Arizona Marijuana Sale or Manufacture Arrests



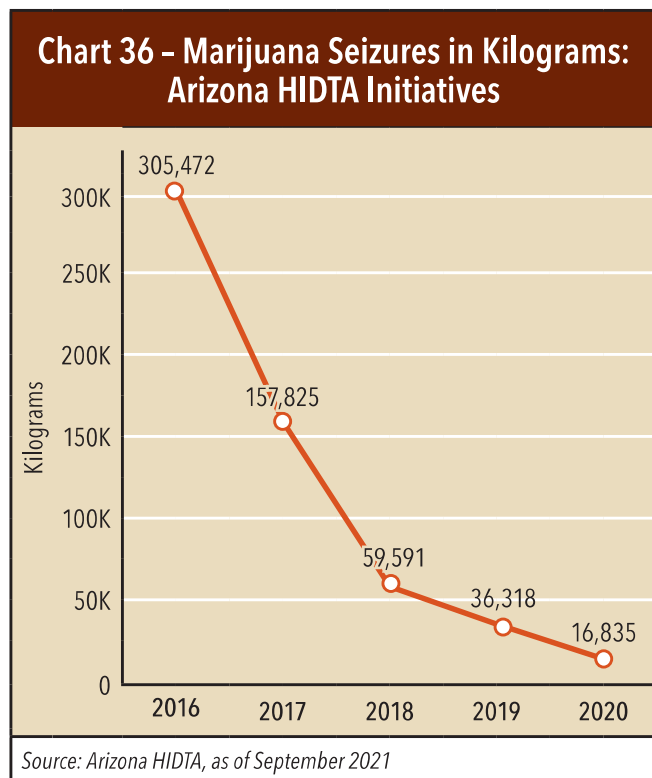
Source: Arizona Department of Public Safety, *Crime in Arizona Reports 2012-2019*

Arizona HIDTA Initiatives Illicit Market Marijuana and Marijuana Product Seizures: 2016-2020

Arizona HIDTA Initiative seizure data for marijuana and marijuana products is from 2016 through 2020, unless otherwise noted. This data will provide a baseline for seizure data in the Arizona illicit market prior to the enactment of Proposition 207. Seizure amounts are expressed in kilograms, and one kilogram is equivalent to 2.2 pounds.

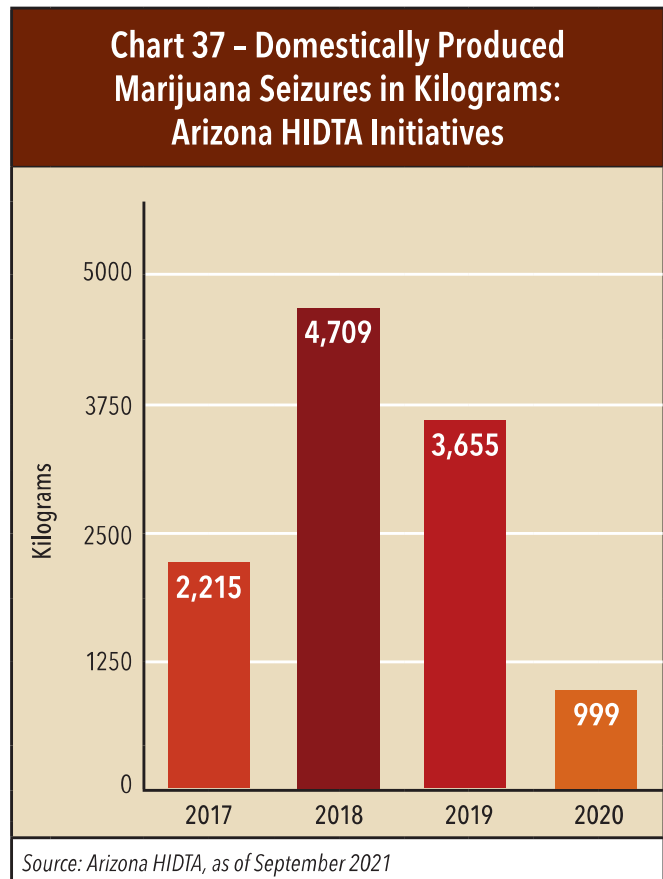
FOREIGN AND DOMESTIC SOURCE MARIJUANA

Marijuana seizures by the Arizona HIDTA Initiatives decreased 94%, from 305,472 kilograms in 2016 to 16,835 kilograms in 2020.²³¹



ILLICIT MARKET DOMESTICALLY PRODUCED MARIJUANA SEIZURES: 2017-2020

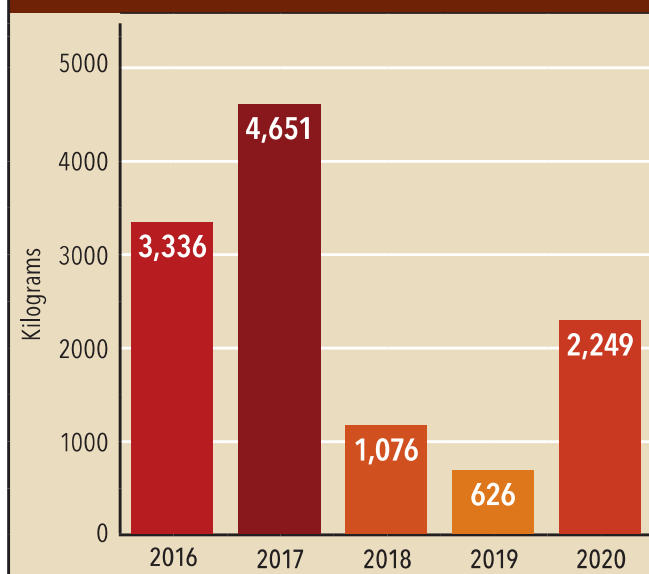
Illicit market domestically produced marijuana is marijuana cultivated in Arizona and/or imported from California and, to a lesser extent, from other Western states where adult marijuana use is legal.²³² From 2017 through 2020, domestically produced marijuana seized by the Arizona HIDTA Initiatives decreased 55%, from 2,215 kilograms to 999 kilograms.²³³



INDOOR MARIJUANA PLANT SEIZURES IN ARIZONA: 2016-2020

Arizona HIDTA seizure information indicates illegal indoor marijuana cultivation has occurred since the passage of Proposition 203. When examining five-year trends, the number of indoor marijuana plants seized by the Arizona HIDTA Initiatives has fluctuated. The number of indoor marijuana plants seized by the Arizona HIDTA Initiatives decreased 33%, from 3,336 plants in 2016 to 2,249 in 2020.²³⁴

Chart 38 – Indoor Marijuana Plant Seizures: Arizona HIDTA Initiatives

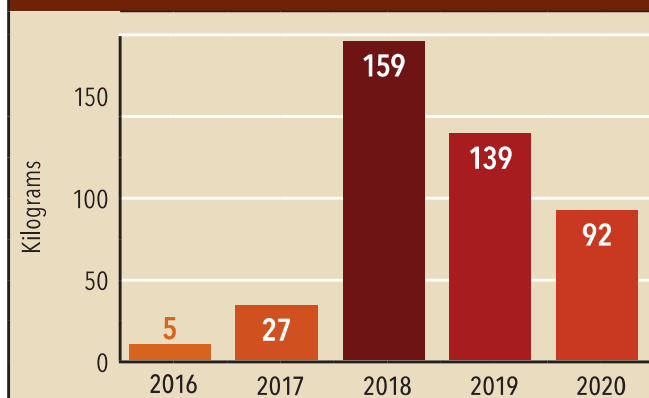


Source: Arizona HIDTA, as of September 2021

ILLICIT MARKET MARIJUANA PRODUCTS

Arizona HIDTA seizure data indicates illicit market marijuana edible products seized in Arizona are primarily diverted from California and, to a lesser extent, other Western states where adult marijuana use is legal.²³⁵ Marijuana edible seizures by the Arizona HIDTA Initiatives increased from 5 kilograms in 2016 to 92 kilograms in 2020.²³⁶ Seizure data indicates marijuana edible seizures spiked in 2018 and 2019, as 159 kilograms and 139 kilograms, respectively, were seized.²³⁷

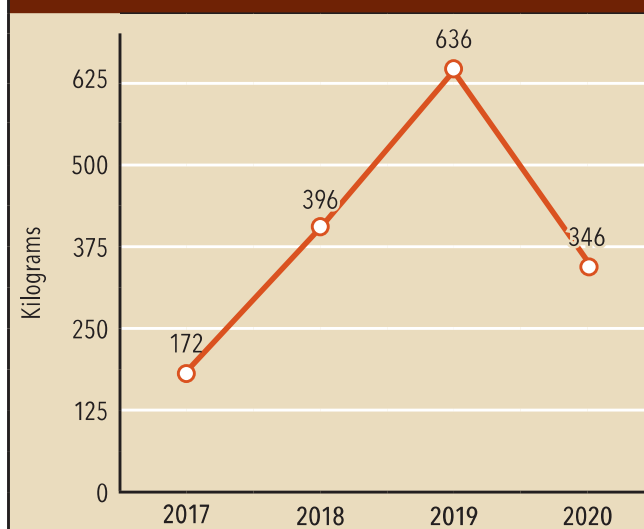
Chart 39 – Marijuana Edible Seizures in Kilograms: Arizona HIDTA Initiatives



Source: Arizona HIDTA, as of September 2021

Arizona HIDTA seizure data indicates illicit market hash oil seized in Arizona is primarily diverted from California and, to a lesser extent, from other Western states where adult marijuana use is legal.²³⁸ Seizures of hash oil by the Arizona HIDTA Initiatives increased 101%, from 172 kilograms in 2017 to 346 kilograms in 2020.²³⁹ Illicit market hash oil seizures spiked in 2019, as 636 kilograms were seized by the Arizona HIDTA Initiatives.²⁴⁰

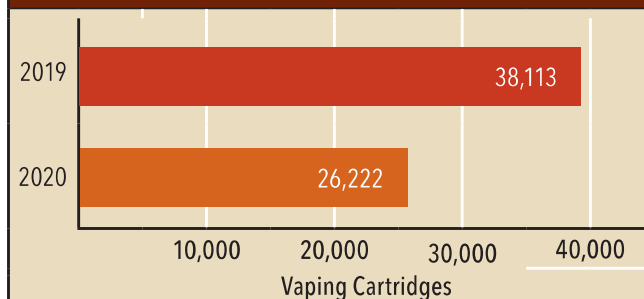
Chart 40 – Hash Oil Seizures in Kilograms: Arizona HIDTA Initiatives



Source: Arizona HIDTA, as of September 2021

Reporting demonstrates THC-infused vaping cartridges are popular with Arizona high school students. The Arizona HIDTA Initiatives seized 38,113 illicit market vaping cartridges in 2019 and an additional 26,222 in 2020.²⁴¹

Chart 41 – Illicit Market Vaping Cartridge Seizures: Arizona HIDTA Initiatives



Source: Arizona HIDTA, as of November 2021

MARIJUANA CONCENTRATES EXTRACTION

Proposition 207 allows for individuals 21 years of age or older to possess, use, purchase, transport, or process 1 ounce or less of marijuana, except not more than 5 grams may be in the form of marijuana concentrate. Proposition 207 states, "Possessing, consuming, purchasing, processing, manufacturing by manual or mechanical means, including sieving or ice water separation but excluding chemical extraction or chemical synthesis, or transporting one ounce or less of marijuana, except that not more than five grams of marijuana may be in the form of marijuana concentrate."²⁴² Proposition 207 excludes chemical extraction or synthesis to manufacture marijuana concentrates.

Open-source reporting indicates the butane extraction method to produce marijuana concentrates occurs in Arizona. Because this method uses flammable solvents, the process is highly unstable and a threat to law enforcement personnel and the public because of the elevated risk for fire and/or explosion. Several explosions and residential house fires in Arizona have been linked to the butane extraction process and the manufacture of marijuana concentrates.

For example, on December 24, 2017, the Maricopa County Sheriff's Office and Tempe Police Department seized a large-scale butane extraction laboratory, 300 pounds of marijuana, and 75 pounds of marijuana concentrates.²⁴³ In addition, officers located 20 gallons of butane in large canisters. Due to the amount of butane involved, residents located near the laboratory were evacuated.²⁴⁴

Marijuana-Related Home Invasions

Indoor marijuana cultivation sites and high-grade marijuana are the targets of home invasions in Arizona. Arizona HIDTA reporting shows criminal groups involved in home invasions range from disorganized and opportunistic to sophisticated and well-organized. Open-source information indicates social media is used to set up home invasions for the theft of drugs, to include marijuana and USC.

The number of home invasion incidents in Maricopa and Pima Counties reported to the Arizona HIDTA decreased 76%, from 276 in 2016 to 67 in 2020.²⁴⁵ An examination of pre-COVID-19 data shows home invasions decreased 36%, from 276 incidents in 2016 to 176 in 2019.²⁴⁶

Chart 42 - Home Invasions Maricopa and Pima Counties

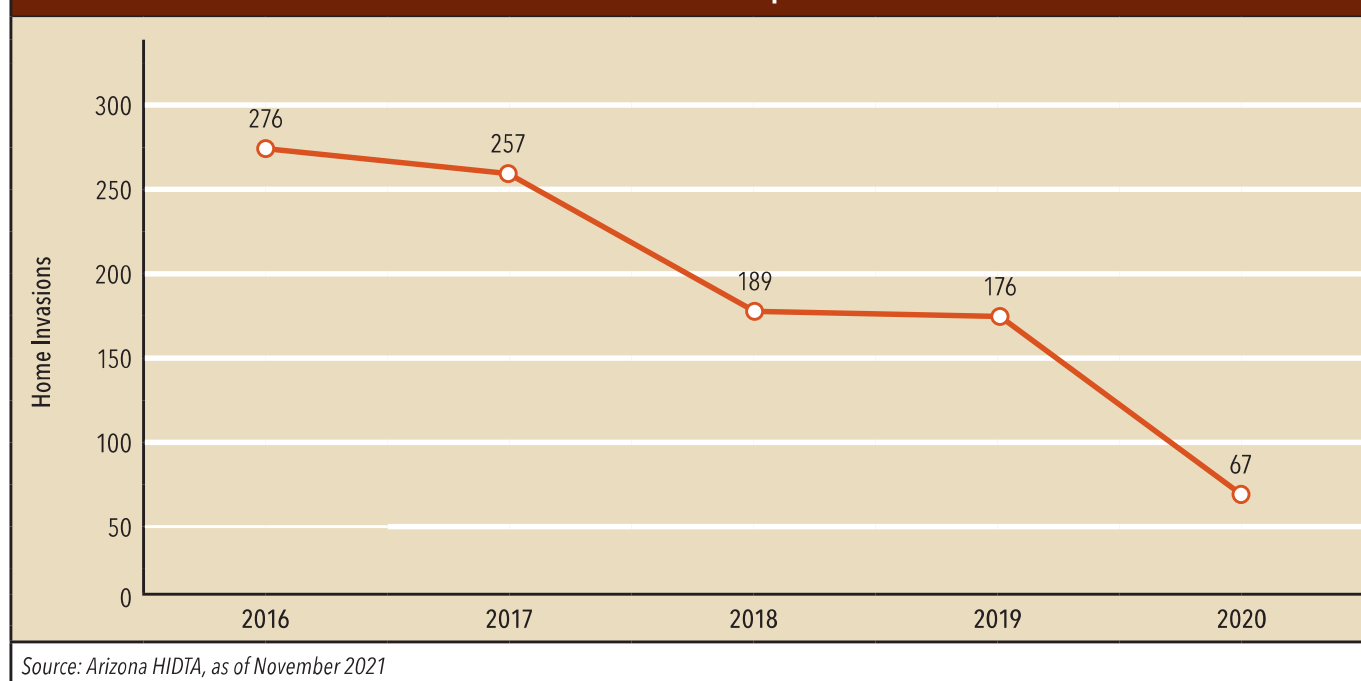


TABLE 5 – Crime Incidents: Marijuana Dispensaries in Tucson, Arizona

Description	2015	2016	2017	2018	2019	2020	Total
Robbery	2	2	--	–	–	–	4
Burglary	–	1	1	2	–	5	9
Larceny	5	2	4	8	6	8	33
Motor Vehicle Theft	–	2	2	1	–	–	5
Total	7	7	7	11	6	13	51

Source: Tucson Police Department, Analysis Division

Marijuana Dispensary Crime: 2015-2020

Opponents of Proposition 207 maintain dispensaries and related marijuana support establishments are targets for robberies, burglaries, and other criminal activity. Such claims are based upon the built-in risks inherent in legal marijuana dispensary operations. Marijuana dispensaries are high cash flow businesses. The inability of dispensaries to open regular business accounts means they can accumulate large sums of currency to store and transport from their establishments. Additionally, marijuana dispensaries store high-potency marijuana and marijuana products for which there is a high street demand, making the dispensary a natural target for crime. Moreover, the transportation of currency and marijuana products from a dispensary to a secondary marijuana establishment such as a cultivation site or manufacturing facility creates additional security concerns for dispensary owners.

The Arizona Administrative Code, Section R9-17-318-Security, details rules governing marijuana dispensary cultivation, transportation, and retail operations.²⁴⁷ Physical security and security devices are required to prevent and detect unauthorized intrusions into cultivation sites, retail sites, and manufacturing facilities. Additionally,

dispensary owners are required to develop security policies and procedures to deter the unauthorized removal of marijuana or marijuana products from the dispensary.

CRIME AND MARIJUANA DISPENSARIES IN TUCSON, ARIZONA

As of June 30, 2021, there were 14 operational marijuana dispensaries in Tucson, Arizona.²⁴⁸ An examination of crime incident data for these operational dispensaries indicates a total of 51 criminal offenses involving robbery, burglary, larceny, and motor vehicle theft have occurred at the dispensary or the adjacent parking lot and were reported to the Tucson Police Department between 2015 and 2020.²⁴⁹ During this period, larceny accounted for 65% of the offenses, followed by burglary at 18%, motor vehicle theft at 10%, and robbery offenses at 8%.²⁵⁰ Crime percentages were rounded to the nearest whole number and do not equal 100%.

CRIME AND ADULT MARIJUANA DISPENSARIES IN PHOENIX, ARIZONA

As of June 30, 2021, there were 35 operational marijuana dispensaries in Phoenix, Arizona.²⁵¹ An examination of crime incident data reported by dispensary addresses indicates a total of 30 criminal offenses involving robbery, burglary, and theft

TABLE 6 – Crime Incidents: Marijuana Dispensaries in Phoenix, Arizona

Description	2015	2016	2017	2018	2019	2020	Total
Robbery	–	–	1	–	–	1	2
Burglary	2	1	9	1	4	3	20
Theft	1	1	1	2	2	1	8
Total	3	2	11	3	6	5	30

Source: Phoenix Police Department, Crime Analysis and Research Unit

were reported to the Phoenix Police Department between 2015 and 2020.²⁵² During this period, burglary accounted for 67% of the offenses, followed by theft at 27% and robbery offenses at 7%.²⁵³ Crime percentages were rounded to the nearest whole number and do not equal 100%.

KEY FINDINGS

Proposition 207 and Crime

- Proponents of Proposition 207 believe marijuana legalization will decrease crime in several ways:
- Divert marijuana production and sales from drug trafficking organizations to the legal market and, over time, this will diminish the size and scope of illicit market and reduce crime.
- Create a safe and regulated environment to purchase marijuana and not expose buyers to criminal actors in the illicit market.
- Decrease the burden on law enforcement to investigate low-level marijuana offenses and free up resources to address violent crime and serious property crime.
- The allocation of law enforcement resources towards more serious crimes will make the criminal justice system more efficient and fair.

Proposition 203: Unlicensed Marijuana Dispensaries and Illegal Marijuana Cultivation

- Since the implementation of Proposition 203, open-source law enforcement reporting documents the existence of an underground marijuana market consisting of non-authorized marijuana dispensaries, marijuana delivery services, marijuana clubs, marijuana co-ops, and farmer's markets, all engaged in illegal, for-profit marijuana distribution activities.

Marijuana Arrests in Arizona

- According to the *Crime in Arizona Report*, arrests for marijuana possession decreased 22%, from 15,001 arrests in 2012 to 11,661 in 2019. Further examination indicates 49% of the arrestees were from minority groups in 2012 compared to 57% in 2019. Minority groups are operationally defined as Black, American Indian, Asian, Hispanic, and Pacific Islander.

- According to the *Crime in Arizona Report*, marijuana sale or manufacture arrests decreased 64%, from 1,499 arrests in 2012 to 544 in 2019. Further examination indicates 63% of the arrestees were from minority groups in 2012 compared to 64% in 2019. Minority groups are operationally defined as Black, American Indian, Asian, Hispanic, and Pacific Islander.

Illicit Market Marijuana and Marijuana Product Seizures 2016-2020

- Marijuana seizures by the Arizona HIDTA Initiatives decreased 94%, from 305,472 kilograms in 2016 to 16,835 kilograms in 2020.
- Illicit market domestically produced marijuana is marijuana cultivated in Arizona and/or imported from California and, to a lesser extent, from other Western states where adult marijuana use is legal.
- From 2017 through 2020, domestically produced marijuana seized by the Arizona HIDTA Initiatives decreased 55%, from 2,215 kilograms to 999 kilograms.
- The number of indoor marijuana plants seized by the Arizona HIDTA Initiatives decreased 33%, from 3,336 in 2016 to 2,249 plants in 2020.
- Arizona HIDTA seizure data indicates illicit market marijuana edible products seized in Arizona are diverted primarily from California and, to a lesser extent, other Western states where adult marijuana use is legal.
- Marijuana edible seizures by the Arizona HIDTA Initiatives increased from 5 kilograms in 2016 to 92 kilograms in 2020.
- Arizona HIDTA seizure data indicates illicit market hash oil seized in Arizona is diverted primarily from California and, to a lesser extent, from other Western states where adult marijuana use is legal.
- Seizures of hash oil by the Arizona HIDTA Initiatives increased 101%, from 172 kilograms in 2017 to 346 kilograms in 2020.

- Arizona HIDTA Initiatives seized 38,113 illicit market vaping cartridges in 2019 and an additional 26,222 vaping cartridges in 2020.
- Crime incident data for operational marijuana dispensaries in Tucson, Arizona, indicates a total of 51 criminal offenses involving robbery, burglary, larceny, and motor vehicle theft occurred within the dispensary or the adjacent parking lot between 2015 and 2020.
- Crime incident data for operational marijuana dispensaries in Phoenix, Arizona, indicates a total of 30 criminal offenses involving robbery, burglary, and theft occurred at the dispensary address between 2015 and 2020.

DATA LIMITATIONS

Marijuana Arrests in Arizona: 2012-2019

Currently, there is a need for arrestee drug testing data to provide time-sensitive information on marijuana use, crime, victimization, and interactions with law enforcement in Arizona.

Data is needed from Arizona probation agencies to determine how frequently marijuana testing is a condition of release and how frequently probationers violate terms of release resulting in rearrest and incarceration.²⁵⁴

Data is needed to determine if the decrease in marijuana arrests is related to the medical marijuana market or law enforcement directing resources to other drug and crime threats. In the future, this data can be an indicator of the impact of adult marijuana use on the illicit drug market in Arizona.

PROPOSITION 207: THE ECONOMIC IMPACT

Introduction

According to the *Joint Legislative Budget Committee, Fiscal Analysis Report*, Proposition 207 – Smart and Safe Arizona Act – established the Smart and Safe Arizona Fund, which receives monies from the 16% marijuana excise tax and license and registration fees. Before any distributions are made from the fund, state agencies responsible for implementation and operation of the Proposition would receive monies for costs associated with specific administrative requirements of Proposition 207:

- Arizona Department of Health Services: Implement and enforce regulations of the adult marijuana use industry.
- Arizona Department of Revenue: Collect the 16% excise tax on adult marijuana sales.
- Arizona Supreme Court: Process expungement petitions for certain marijuana offenses.
- Arizona DPS: Amend DPS criminal records based on expungement petitions granted by the Court.
- Arizona State Treasurer: Administration of the Smart and Safe Arizona Fund.

After administrative costs are paid, the remainder of the funds from the Smart and Safe Arizona Fund are distributed as follows: 33% to community colleges; 31.4% to local law enforcement and fire departments; 25.4% to the state and local transportation programs; 10% to the Justice Reinvestment Fund; and 0.2% to the Arizona Attorney General for enforcement.

The Proposition also requires a one-time transfer of \$45 million from the Medical Marijuana Fund for distribution as follows:

- \$19 million to the Department of Health Services, including:
- \$10 million for forming councils and programs to address public health concerns;

- \$2 million for enforcement of Proposition 207;
- \$4 million for distribution to non-profits to aid eligible individuals who petition for the expungement of minor marijuana offenses;
- \$2 million to the Department of Economic Security to develop a program to promote the ownership and operation of marijuana establishments by individuals from communities disproportionately impacted by the enforcement of marijuana laws; and
- \$1 million for non-profit education and community outreach related to Proposition 207.
- \$15 million to the Arizona Teachers Academy to provide grants to higher education students in exchange for teaching in Arizona schools after graduation.
- \$10 million to the Governor's Office of Highway Safety for grants to reduce impaired driving.
- \$1 million to the Smart and Safe Arizona Fund.

The transaction privilege tax (TPT) or sales tax is an additional tax levied on adult marijuana sales and will be distributed to the state, state general fund, local governments, and education programs.

MARIJUANA TAXABLE SALES AND TAX COLLECTION

During CY 2021, the Arizona Department of Revenue estimated taxable sales for combined marijuana and marijuana product sales under Proposition 207 and Proposition 203 is approximately \$1.35 billion.²⁵⁵ According to the ADHS, 74 tons of medical marijuana and medical marijuana products (edibles, concentrates, tinctures, vapes) were sold during CY 2021.²⁵⁶ The amount of adult use marijuana sold is not available for CY 2021.

Table 7 on the next page shows the Arizona Department of Revenue estimated taxable marijuana sales by month.

During CY 2021, the Arizona Department of Revenue received approximately \$217.5 million in taxes from marijuana and marijuana product sales under Proposition 203 and Proposition 207.²⁵⁷

Table 8 shows the tax revenue the Arizona Department has received and credited to the month when the marijuana sale occurred.

Period Covered	Adult Use	Medical Use	Excise Tax
January	\$7,370,460	\$42,140,608	\$11,391,615
February	\$32,726,058	\$54,407,670	\$39,333,580
March	\$51,637,626	\$73,002,817	\$55,859,226
April	\$54,042,050	\$72,954,539	\$58,954,783
May	\$52,847,270	\$70,167,001	\$59,370,986
June	\$50,943,608	\$64,856,547	\$56,750,401
July	\$54,434,279	\$71,162,585	\$58,794,904
August	\$51,913,105	\$65,594,704	\$57,907,138
September	\$52,563,291	\$62,940,506	\$57,776,157
October	\$59,662,334	\$65,651,406	\$63,436,902
November	\$61,647,720	\$61,473,186	\$64,052,047
December	\$63,828,579	\$53,489,171	\$67,195,458
TOTAL	\$593,616,380	\$757,840,739	\$650,823,197

Source: Office of Economic Research and Analysis, as of February 2022

Period Covered	Adult Use	Medical	Excise Tax	Total
January	\$622,970	\$3,533,881	\$1,822,658	\$5,979,509
February	\$2,792,686	\$4,558,386	\$6,293,373	\$13,644,444
March	\$4,363,644	\$6,146,992	\$8,937,476	\$19,448,112
April	\$4,545,716	\$6,095,393	\$9,432,765	\$20,073,874
May	\$4,466,032	\$5,873,855	\$9,499,358	\$19,839,244
June	\$4,313,847	\$5,437,738	\$9,080,064	\$18,831,649
July	\$4,586,497	\$5,965,265	\$9,407,185	\$19,958,947
August	\$4,377,548	\$5,473,476	\$9,265,142	\$19,116,166
September	\$4,439,202	\$5,257,405	\$9,244,185	\$18,940,792
October	\$5,006,697	\$5,471,952	\$10,149,904	\$20,628,553
November	\$5,167,174	\$5,119,495	\$10,248,328	\$20,534,997
December	\$5,320,275	\$4,479,523	\$10,751,273	\$20,551,071
TOTAL	\$50,002,287	\$63,413,360	\$104,131,712	\$217,547,360

Source: Arizona Department of Revenue, Office of Economic Research and Analysis, as of February 2022

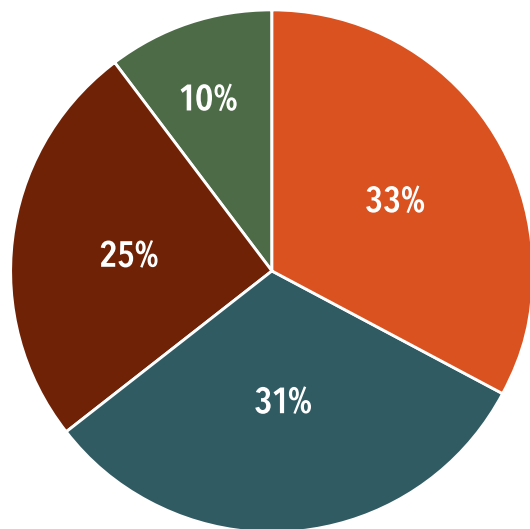
PROPOSITION 207: REVENUE DISTRIBUTION FROM THE SMART AND SAFE ARIZONA FUND

During CY 2021, approximately \$96.4 million was distributed from the Smart and Safe Arizona fund by the Office of the Arizona State Treasurer under the guidelines of Proposition 207.²⁵⁸ Approximately \$30.3 million from the fund was directed to Arizona law enforcement and to fire departments and fire districts throughout the state.²⁵⁹ In addition, community college districts received approximately \$31.8 million, and the Arizona Highway User Revenue Fund highway received approximately \$24.5 million from the fund.²⁶⁰ The Justice Reinvestment Fund received approximately \$9.6 million, and the Arizona Attorney General's Office received approximately \$192,959.²⁶¹

KEY FINDINGS

- During CY 2021, the Arizona Department of Revenue estimated taxable sales for combined marijuana and marijuana product sales is approximately \$1.35 billion.
- During CY 2021, the Arizona Department of Revenue received approximately \$217.5 million in taxes from marijuana and marijuana product sales.
- During CY 2021, approximately \$96.4 million was distributed from the Smart and Safe Arizona fund by the Office of the Arizona State Treasurer under the guidelines of Proposition 207.

Chart 43 – Smart and Safe Arizona Fund Distribution*, CY 2021



- **\$31.8 million** | Community College Districts
- **\$30.3 million** | Law Enforcement/Fire Departments and Districts
- **\$24.5 million** | Arizona Highway User Revenue Fund
- **\$9.6 million** | Justice Reinvestment Fund

*Fund Distribution percentages were rounded to the nearest whole number and do not equal 100%.

Source: Office of the Arizona State Treasurer, as of December 2021

APPENDICES

About the Arizona HIDTA

The Arizona HIDTA was established in 1990 as part of the Southwest Border Region, which includes California, New Mexico, and Texas. The Arizona HIDTA's mission is to facilitate, support, and enhance collaborative drug control efforts among law enforcement agencies and community-based organizations with a common voice and unified strategy and thereby significantly reduce the impact of illegal trafficking and use of drugs throughout Arizona.

By focusing on this mission, the Arizona HIDTA has evolved into a trusted counter-drug grant program that Arizona law enforcement agencies have come to rely upon to assess regional drug threats, facilitate the creation of cooperative strategies to address the threat, and to provide them with the necessary resources to enhance their effectiveness and efficiency as they implement the strategies.

The Arizona HIDTA coordinates and supports the efforts of more than 633 full-time and 185 part-time participants from 75 agencies throughout Arizona. Participating counties include Cochise, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, and Yuma.

Arizona Medical Marijuana Act

In November 2010, Arizona voters passed ballot initiative Proposition 203, making Arizona the fifteenth state to adopt a medical marijuana law. Proposition 203 went into effect on April 14, 2011. Under Proposition 203, ADHS is designated as the agency responsible for issuing medical marijuana identification cards for qualifying patients, designated caregivers, and dispensary agents. ADHS is also responsible for selecting, registering, and overseeing medical marijuana dispensaries. For the purposes of this report, term definitions relevant to Proposition 203 are delineated below:

- “Qualifying patient” is a person who has been diagnosed by a physician as having a debilitating medical condition; a qualifying patient may also be permitted to cultivate up to 12 plants.

- “Non-profit medical marijuana dispensary” is a not-for-profit entity that acquires, possesses, cultivates, manufactures, delivers, transfers, transports, supplies, sells, or dispenses marijuana or related supplies and educational materials to cardholders. A non-profit medical marijuana dispensary may receive payment for all expenses incurred in its operation.
- “Cultivation site” is the one additional location where marijuana may be cultivated, infused, or prepared for sale by and for a dispensary.
- “Designated caregiver” is a person who is at least 21 years of age; has agreed to assist with a patient’s medical use of marijuana; has not been convicted of an excluded felony offense; assists no more than five qualifying patients with the medical use of marijuana; may receive reimbursement for actual costs incurred in assisting a registered qualifying patient’s medical use of marijuana if the registered designated caregiver is connected to the registered qualifying patient through the department’s registration process. The designated caregiver may not be paid any fee or compensation for his or her service as a caregiver.
- “Cardholder” is a qualifying patient, a designated caregiver, or a non-profit medical marijuana dispensary agent that has been issued and possesses a valid registry identification card.²⁶²

Proposition 207: Smart and Safe Arizona Act

The full text of Proposition 207 filed with the Arizona Secretary of State on September 26, 2019, can be retrieved from:

[https://ballotpedia.org/Arizona_Proposition_207_Marijuana_Legalization_Initiative_\(2020\)](https://ballotpedia.org/Arizona_Proposition_207_Marijuana_Legalization_Initiative_(2020))

The Arizona Revised Statutes amended by Proposition 207 can be retrieved from:

<https://www.azleg.gov/>

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Sources

LOCAL, STATE, AND REGIONAL

State of Arizona

- Arizona Criminal Justice Commission
- Arizona Department of Child Safety
- Arizona Department of Education
- Arizona Department of Health Services
 - Bureau of EMS and Trauma System
 - Bureau of Public Health Statistics
- Arizona Department of Public Safety
 - Scientific Analysis Bureau
- Arizona Department of Revenue
 - Office of Economic Research and Analysis
- Arizona Department of Transportation
- Arizona Joint Legislative Budget Committee
- Arizona Judicial Branch
 - Research and Reporting Unit
- Arizona State Board of Pharmacy
- Arizona State University
 - Center for Violence Prevention and Community Safety
 - Morrison Institute for Public Policy
- Arizona Substance Abuse Partnership
- Governor's Office of Highway Safety

- Maricopa County Office of the Medical Examiner
- Mesa Police Department
 - Forensic Services
- Office of the State Treasurer Arizona
- Phoenix Police Department
 - Laboratory Services Bureau
 - Crime Analysis and Research Unit
- Tucson Police Department
 - Analysis Division
- University of Arizona
 - Arizona Poison and Drug Information Center

FEDERAL

- Centers for Disease Control and Prevention
- Executive Office of the President
 - Arizona HIDTA Investigative Support Center
 - High Intensity Drug Trafficking Areas Program
 - Office of National Drug Control Policy
- United States Department of Commerce
 - United States Census Bureau
- United States Department of Education
 - Office of Civil Rights
- United States Department of Health and Human Services
 - Center for Behavioral Health Statistics and Quality
 - Substance Abuse and Mental Health Services Administration
 - Treatment Episode Data Set
- United States Department of Justice
 - Drug Enforcement Administration
- United States Department of Transportation
 - National Highway Traffic Safety Administration
- United States National Institute on Drug Abuse

OTHER

- American Association for Clinical Chemistry
- Banner Health
 - Banner Poison and Drug Information Center
- National Academy of Sciences
- National Organization for the Reform of Marijuana Laws
- Quest Diagnostic
- University of Mississippi
 - National Center for Natural Products Research

Endnotes

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