

Impacts of Marijuana Legalization in Colorado

A Report Pursuant to Senate Bill 13-283

October 2018



Colorado Department of Public Safety
Division of Criminal Justice
Office of Research and Statistics

700 Kipling St., Denver, Colorado 80215
<https://www.colorado.gov/dcj-ors>



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Prepared by

Jack K. Reed, Statistical Analyst
Office of Research and Statistics

Stan Hilkey, Executive Director, Department of Public Safety
Joe Thome, Director, Division of Criminal Justice
Kim English, Research Director, Office of Research and Statistics

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EXECUTIVE SUMMARY

In 2013, following the passage of Amendment 64 which allows for the retail sale and possession of marijuana, the Colorado General Assembly enacted Senate Bill 13-283. This bill mandated that the Division of Criminal Justice in the Department of Public Safety conduct a study of the impacts of Amendment 64, particularly as these relate to law enforcement activities. This report seeks to establish and present the baseline measures for the metrics specified in S.B. 13-283 (C.R.S. 24-33.4-516.)

The information presented here should be interpreted with caution. The majority of the data should be considered baseline and preliminary, in large part because data sources vary considerably in terms of what exists historically. Consequently, it is difficult to draw conclusions about the potential effects of marijuana legalization and commercialization on public safety, public health, or youth outcomes, and this may always be the case due to the lack of historical data. Furthermore, the measurement of available data elements can be affected by very context of marijuana legalization. For example, the decreasing social stigma regarding marijuana use could lead individuals to be more likely to report use on surveys and also to health workers in emergency departments and poison control centers, making marijuana use appear to increase when perhaps it has not. Finally, law enforcement officials and prosecuting attorneys continue to struggle with enforcement of the complex and sometimes conflicting marijuana laws that remain. In sum, then, the lack of pre-commercialization data, the decreasing social stigma, and challenges to law enforcement combine to make it difficult to translate these preliminary findings into definitive statements of outcomes.

Recognizing the challenges involved in interpreting the data presented here, the following is a summary of findings:

Public Safety

Arrests

- The total number of marijuana arrests decreased by 52% between 2012 and 2017, from 12,709 to 6,153. Marijuana possession arrests, which make up the majority of all marijuana arrests, were cut in half (-54%). Marijuana sales arrests decreased by 17%. Arrests for marijuana production increased appreciably (+51%). Marijuana arrests that were unspecified, meaning the specific reason for the arrest was not noted by law enforcement, went down by 45%.
 - The number of marijuana arrests decreased by 56% for Whites, 39% for Hispanics, and 51% for Blacks. The marijuana arrest rate for Blacks (233 per 100,000) was nearly double that of Whites (118 per 100,000) in 2017.
 - Nine large Colorado counties (Adams, Arapahoe, Boulder, Douglas, El Paso, Jefferson, Larimer, Mesa, and Weld) showed a decrease in marijuana arrests, ranging between -8% (Boulder) and -67% (Adams). The average decline across these nine counties was -46%.

- Separate data provided by the Denver Police Department's Data Analysis Unit indicates an 81% decrease in total marijuana arrests, from 1,605 in 2012 to 302 in 2017.
 - The most common marijuana industry-related crime in Denver was burglary, accounting for 59% of marijuana crime related to the industry in 2017.

Court filings

- The number of marijuana-related court filings declined 55% between 2012 and 2017, from 11,753 to 5,288.
 - The number of cases with a marijuana-related felony as the top charge declined initially (986 in 2012 to 418 in 2014) but rebounded to near pre-legalization levels (907 in 2017).
 - This contrasts with the decline in misdemeanors (down 13%) and petty offenses (down 62%) between 2012 and 2017.
 - Filings fell by 1% for juveniles 10 to 17 years old, by 28% for young adults 18 to 20 years old, and by 67% for adults ages 21 or older.
- In terms of organized crime, the number of court filings charged with the Colorado Organized Crime Control Act (C.R.S.18-17.104) that were linked to some marijuana charge increased from 31 in 2012 to 119 in 2017.
 - The types of charges associated with COCCA filings that increased most were manufacturing of marijuana or marijuana products (25 to 142) and possession of marijuana with intent to sell (32 to 124).

Traffic Safety

- The increase in law enforcement officers who are trained in recognizing drug use, from 129 in 2012 to 214 in 2018, can increase drug detection rates apart from any changes in driver behavior.
- Traffic safety data were obtained from a number of different sources. Please note that traffic safety data may be incomplete because law enforcement officers may determine that alcohol is impairing the driver, and therefore additional (time consuming and costly) drug testing may not be pursued.
- The total number of DUI citations issued by the Colorado State Patrol (CSP) decreased from 5,705 in 2014 to 4,849 in 2017. The prevalence of marijuana or marijuana-in-combination identified by Patrol officers as the impairing substance increased from 12% of all DUIs in 2014 to 15% in 2017.

- In 2016, the most recent data available, 27,244 cases were filed in court that included a charge of driving under the influence; 17,824 of these were matched with either a breath or blood test.¹
 - Of these, 3,946 had blood samples screened for the presence of marijuana: 2,885 cases (73.2%) had a positive cannabinoid screen and a follow-up confirmation for other cannabis metabolites, and 47.5% detected Delta-9 THC at 5.0 ng/mL or above.
- According to CDOT, the number of fatalities in which a driver tested positive for Delta-9 THC at or above the 5.0 ng/mL level declined from 52 (13% of all fatalities) in 2016 to 35 in 2017 (8% of all fatalities).
 - The number of fatalities with cannabinoid-only or cannabinoid-in-combination positive drivers increased 153%, from 55 in 2013 to 139 in 2017.
 - However, note that the detection of any cannabinoid in blood is not an indicator of impairment but only indicates presence in the system. Detection of Delta-9 THC, one of the primary psychoactive metabolites of marijuana, may be an indicator of impairment.
- A 2017 survey conducted by the Colorado Department of Public Health and Environment found that 3.0% of adults reported driving within two-to-three hours of using marijuana in the past-30 days, while 19.7% of recent marijuana users reported this behavior.

Probationers testing positive

- The proportion of 18 to 25 year-old probationers testing positive for THC increased, from 32% in 2012 and 41% in 2017. The proportion of 36 and older probationers testing positive for THC also increased, from 14% in 2012 to 21% in 2017.

Illegal cultivation on public land

- The number of plants seized on public lands increased. There were 80,926 plants seized in 2017, up 73% from 46,662 in 2012.

Diversion to other states

- The Colorado Information Analysis Center (CIAC), located in the Department of Public Safety, compiled data from the El Paso Intelligence Center (EPIC), manages a database in which law enforcement agencies can voluntarily report drug seizures. The number of seizures for Colorado-sourced marijuana reported to EPIC increased from 286 in 2012 to 608 in 2017.
 - The types of marijuana products seized has changed over time, with marijuana concentrates accounting for 26% of seizures and edibles accounting for another 16% in

¹ Please see http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf for more information.

2017. In 2012, both of those categories combined accounted for 10% of marijuana seizures reported to EPIC.

Public Health

Adult usage rates

- The Colorado Behavioral Risk Factor Surveillance System (BRFSS) is a statewide telephone survey conducted by the Colorado Department of Public Health and Environment (CDPHE). In 2014, the BRFSS was expanded to include questions about marijuana use.
 - In 2017, 15.5% of adults reported marijuana use in the past 30 days, compared to 13.6% in 2014, a significant increase. Also, in 2017, 7.6% reported daily or near daily use. This compares to 6.0% in 2014, a significant increase.
 - Males have significantly higher past 30-day use (19.8%) than females (11.2%).
 - Adults ages 18-25 reported the highest past 30-day usage rates (29.2%), followed by 26-34 year olds (26.4%), 35-64 year olds (12.5%), and those 65 years and older (5.6%).
- According to the National Survey on Drug Use and Health, administered by the federal Substance Abuse and Mental Health Services Administration, the prevalence rates for marijuana use in the past 30 days increased for young adults (18- to 25-years old), from 21.2% in 2005/06 (pre-commercialization) to 31.2% in 2013/14 (post-commercialization), but stabilized at 32.2% in 2015/16. Reported 30-day marijuana use by adults ages 26 years and older increased from 5% in 2005/06 to 14% in 2015/16.

Hospitalizations and emergency department visits

- The Colorado Department of Public Health and Environment (CDPHE) analyzed data from the Colorado Hospital Administration (CHA) with these findings:
 - Hospitalization rates (per 100,000 hospitalizations) with possible marijuana exposures, diagnoses, or billing codes increased from 803 per 100,000 before commercialization (2001-2009) to 2,696 per 100,000 after commercialization (January 2014-September 2015). The period from October 2015-December 2015 indicated another increase, but due to changes in coding systems, variable structures, and policies at CHA, the numbers for 2016 are considered preliminary by CDPHE.
 - The period of retail commercialization showed an increase in emergency department visits, from 739 per 100,000 ED visits (2010–2013) to 913 per 100,000 ED visits (January 2014–September 2015). There was no definitive trend during the period October 2015-December 2015 and, due to changes in coding systems, variable structures, and policies at CHA, these figures for 2016 are considered preliminary by CDPHE.

Poison control

- The number of calls to poison control mentioning human marijuana exposure increased over the past 10 years. There were 45 calls in 2006 and 222 in 2017. Between 2014 and 2017, the frequency of calls reporting human marijuana exposure stabilized.

Youth Impacts

Usage rates

- Data on youth marijuana use was available from two sources. The Healthy Kids Colorado Survey (HKCS), with 47,146 high school and 6,704 middle school students responding in 2017, and the National Survey on Drug Use and Health (NSDUH), with about 512 respondents in 2015/16.
 - HKCS results indicate no significant change in past 30-day use of marijuana between 2013 (19.7%) and 2017 (19.4%). Also, in 2017, the use rates were not different from the national 30-day use rates reported by the Youth Risk Behavior Survey.² In 2017, 19.4% of Colorado high school students reported using marijuana in the past 30-days compared to 19.8% of high school students nationally that reported this behavior.
 - The 2017 HKCS found that marijuana use increases by grade level, with 11.0% of 9th graders, 17.7% of 10th graders, 23.7% of 11th graders, and 25.7% of 12th reporting use in the past 30-days.
 - The 2015/16 NSDUH, with many fewer respondents compared to HKCS, indicated a gradual increase in youth use from 2006/07 (9.1%) to 2013/14 (12.6%); however, the last two years showed decreased use, with 9.1% reporting use in 2015/16. The NSDUH showed that youth use of marijuana in Colorado (9.1%) was above the national average (6.8%).

Arrests

- The number of juvenile marijuana arrests decreased 16%, from 3,168 in 2012 to 2,655 in 2017. The rate of juvenile marijuana arrests per 100,000 decreased from 583 in 2012 to 453 in 2017 (-22%).
 - The number of White juvenile arrests decreased from 2,146 in 2012 to 1,703 in 2017 (-21%).
 - The number of Hispanic juvenile arrests decreased from 767 in 2012 to 733 in 2017 (-4%).
 - The number of Black juvenile arrests decreased from 202 in 2012 to 172 in 2017 (-15%).

² The YRBS is the comparable survey overseen nationally by the Centers for Disease Control and Prevention.

Probationers testing positive

- Data from the state Division of Probation Services indicated that the proportion of 10- to 14-year-olds testing positive for THC one or two times increased from 19% in 2012 to 23% in 2014, while the proportion testing positive three or more times increased from 18% to 25%. The proportion of 15- to 17-year-olds testing positive one or two times went down slightly, from 26% in 2012 to 25% in 2014, while those testing positive three or more times increased from 23% to 25%.

School suspension/expulsion rates

- Data from the Colorado Department of Education show that that drug suspension rates increased from 391 (per 100,000 registered students) in the 2008-09 school year to 551 in 2010-11. The drug suspension rate fluctuated somewhat since then and was 507 in the 2017-18 school year. The drug expulsion rate was 65 (per 100,000 registered students) in the 2008-09 school year, increasing to 91 in 2010-11, and then decreasing to 38 by 2017-18.
 - School discipline data for 2017-18 indicated that marijuana accounted for 22% of all expulsions and 24% of all law enforcement referrals in Colorado public schools.
 - Note that Senate Bill 12-046 and House Bill 12-1345 targeted reform of “zero tolerance” policies in schools, and appear to have decreased expulsions, suspensions, and referrals to law enforcement.³

Drug-endangered children

- To assess drug-endangered children, as required in S.B. 13-283, data from CDPHE’s Child Health Survey (targeting parents with children ages 1-14) was obtained.
 - Of parents with children ages 1–14 who responded to the survey, 6.9% reported some type of marijuana product around the house. When asked about where it was kept, 92% reported storing it in a location the child cannot access.

Additional Information

- In May 2018, 3,101 licensed marijuana businesses were registered in Colorado. Nearly 70% of the licenses for marijuana businesses were concentrated in the counties of Denver (1,226), El Paso (370), Pueblo (303), and Boulder (216).
- Total revenue from taxes, licenses, and fees increased from \$67,594,325 in 2014 to \$247,368,474 in 2017 (+266%). Excise tax revenue dedicated to school capital construction assistance was \$40,000,000 in 2017 and an additional \$27,752,968 was dedicated to the public school fund.

³ See Rosa, J., Krueger, J., and Severson, A. (May 2015). *Moving from Zero Tolerance to Supportive School Discipline Practices*. Office of Dropout Prevention and Student Re-engagement, Colorado Department of Education.

- In April 2018, there were 88,946 individuals registered as medical marijuana cardholders. The most common conditions reported were severe pain (93%), muscle spasms (31%), and severe nausea (14%).

Summary. Again, please note that fundamental measurement challenges interfere with our ability to confidently interpret the information presented here. As previously discussed, legalization may result in reports of increased use, which may be a function of the decreased stigma and legal consequences associated with use rather than actual changes in use patterns. Likewise, those reporting to poison control, emergency departments, or hospitals may feel more comfortable discussing their recent use or abuse of marijuana for purposes of treatment. Finally, complex and sometimes conflicting laws have caused law enforcement officials and prosecuting attorneys to modify policies and practices that cannot be disentangled from available data. For these reasons, it is critical to avoid ascribing changes in many social indicators solely to marijuana legalization.

SECTION ONE: INTRODUCTION

This section provides a brief overview of the statutory mandate behind this report, data limitations, data sources and analytical approaches. It also describes federal and state marijuana laws, including the federal responses to Colorado’s Amendment 64 which was passed by voters in 2012.

Background, Limitations and Methods

In 2013, following the passage of Amendment 64 allowing for the retail sale and possession of marijuana, the Colorado General Assembly enacted Senate Bill 13-283. This bill mandated that the Division of Criminal Justice in the Department of Public Safety conduct a study of the impacts of Amendment 64, particularly as these relate to law enforcement activities. This report seeks to present the measures for the metrics specified in S.B. 13-283 (C.R.S. 24-33.4-516). These metrics, which guide the structure of this report and the data elements analyzed, are presented in Table 1.

Table 1. Data collection requirements of Senate Bill 2013-283

Statutory Category	Statutory Definition
Impacts on Public Safety	
Marijuana-Initiated Contacts by Law Enforcement	Marijuana-initiated contacts by law enforcement, broken down by judicial district and by race and ethnicity
Marijuana Criminal Arrest Data	Marijuana arrest data, including amounts of marijuana with each arrest, broken down by judicial district and by race and ethnicity
Marijuana-Related Traffic Accidents	Traffic accidents, including fatalities and serious injuries related to being under the influence of marijuana
Out-of-State Diversion	Diversion of marijuana out of Colorado
Marijuana Site Operational Crime Statistics	Crime occurring in and relating to the operation of marijuana establishments
Marijuana Transfer Using Parcel Services	Utilization of parcel services for the transfer of marijuana
Probation Data	Probation data
Outdoor Marijuana Cultivation	Outdoor marijuana cultivation facilities
Money Laundering	Money laundering relating to both licensed and unlicensed marijuana
Organized Crime	The role of organized crime in marijuana

Impacts on Youth	
Comprehensive School Data	Comprehensive school data, both statewide and by individual school, including suspensions, expulsions, and police referrals related to drug use and sales, broken down by specific drug categories
Drug Endangered Children	Data related to drug-endangered children, specifically for marijuana
Diversion to Minors	Diversion of marijuana to persons under twenty-one years of age
Impacts on Public Health	
Data on Emergency Room Visits and Poison Control	Data on emergency room visits related to the use of marijuana and the outcomes of those visits, including information from Colorado Poison Control Center
Monitor Health Effects of Marijuana (Colorado Department of Public Health and Environment)	Monitor changes in drug use patterns, broken down by race and ethnicity, and the emerging science and medical information relevant to the health effects associated with marijuana use.
	The Department shall appoint a panel of health care professionals with expertise in cannabinoid physiology to monitor the relevant information. The panel shall provide a report by January 31, 2015, and every two years thereafter to the State Board of Health, the Department of Revenue, and the general assembly. The Department shall make the report available on its website.
	The panel shall establish criteria for studies to be reviewed, reviewing studies and other data, and making recommendations, as appropriate, for policies intended to protect consumers of marijuana or marijuana products to the general public.
	The Department may collect Colorado-specific data that reports adverse health events involving marijuana use from the all-payer claims database, hospital discharge data, and behavioral risk factors.
Source: Derived from Rebound Solutions (2014), <i>Marijuana data discovery and gap analysis summary report</i> , at https://cdpsdocs.state.co.us/ors/docs/resources/MarijuanaDataDiscoveryandGapAnalysis.pdf .	

Data limitations

It is critical to state at the outset that important caveats must be considered prior to drawing firm conclusions about the impacts of marijuana legalization. First, it is not possible to definitively separate the change in marijuana laws from other changes that have occurred in Colorado, both societal and

legal. Second, changes in reported marijuana use may be the result of decreased social stigma and legal ramifications. For example, an adult may be more willing to divulge marijuana use upon admission to an emergency department now that it is legal. Third, legalization has heightened awareness of the need to gather data on marijuana and, in some cases, has led to improvements in data collection that then make analyzing historical trends difficult. For example, the Colorado Department of Transportation improved its data collection systems on fatal crashes, allowing for better analysis of current data but has made some of the historical data not comparable. For these reasons, we caution readers about gaps in data that impede our comprehensive understanding of the impact of the legalization of retail marijuana in Colorado.

Data Sources

The information presented in this report was compiled from data made available from the following entities:

Colorado State Government

- Colorado Attorney General’s Office, Peace Officer Standards and Training
- Colorado Department of Education
- Colorado Department of Human Services, Office of Behavioral Health
- Colorado Department of Local Affairs, Office of Demography
- Colorado Department of Public Health and Environment, Center for Health and Environmental Data
- Colorado Department of Public Health and Environment, Disease Control and Environmental Epidemiology Division
- Colorado Department of Public Health and Environment, Laboratory Services Division
- Colorado Department of Public Health and Environment, Marijuana Health Monitoring and Research Program
- Colorado Department of Public Health and Environment, Prevention Services Division
- Colorado Department of Public Safety, Colorado Bureau of Investigation
- Colorado Department of Public Safety, Colorado Information Analysis Center
- Colorado Department of Public Safety, Colorado State Patrol
- Colorado Department of Public Safety, Division of Criminal Justice
- Colorado Department of Revenue, Marijuana Enforcement Division
- Colorado Department of Revenue, Taxation Division
- Colorado Department of Transportation
- Colorado Governor’s Office of State Planning and Budgeting
- Colorado Judicial Branch, Court Services Division
- Colorado Judicial Branch, Probation Services Division

Municipal and Private

- Chematox Laboratory

- City and County of Denver, Office of Marijuana Policy
- Coalition of Colorado Alcohol and Drug Educators
- Colorado Hospital Association
- Denver County Court
- Denver Police Department
- Rocky Mountain Poison and Drug Center

Federal

- Rocky Mountain High Intensity Drug Trafficking Area
- U.S. Bureau of Land Management
- U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration
- U.S. Department of Justice, Drug Enforcement Administration
- U.S. Forest Service
- U.S. National Park Service

Data Collection Methodology

The data were collected and analyzed in several ways. First, many entities provide public information on agency websites in the form of reports, briefing papers, and downloadable spreadsheets (e.g., the National Survey on Drug Use and Health). When this was the case, the analysis was conducted by Division of Criminal Justice (DCJ) researchers, and links to the original source material are provided in footnotes. Second, summary data were analyzed and provided by several entities; this information was made available for this report and is not published elsewhere (e.g., CDPHE’s analysis of marijuana users who report driving after consuming). Third, several entities provided individual-level, nonpublic data (e.g., CBI’s arrest data), and these data were analyzed by DCJ researchers. All analyses and graphic presentations were sent to the original data sources for review to ensure the information is accurately represented.

Brief History of Marijuana Laws

Federal Law

The Federal Controlled Substances Act (CSA)⁴ classifies marijuana as a Schedule I drug. Drugs classified as Schedule I are considered the most dangerous class of drugs with no currently accepted medical use and a high potential for abuse. Some examples of other Schedule I drugs include heroin, MDMA (ecstasy, Molly), LSD, mescaline (peyote), and psilocybin (mushrooms).

The Schedule I classification puts state laws legalizing medical or recreational marijuana at odds with the CSA. As of July 2018, there were nine states plus the District of Columbia allowing for the sale of recreational marijuana in addition to medical marijuana, 22 states allowing only medical marijuana, 15

⁴ 21 U.S.C. § 811.

states allowing cannabidiol⁵ exclusively, and four states that do not allow any legal cannabis products.⁶ The widespread growth of medical marijuana legalization over the past 20 years has put an increasing number of states, including Colorado, in conflict with the CSA. Figures 1-3 give snapshots of state marijuana laws at three different points in time to demonstrate the evolution of legalization.

Colorado Laws

The following bullets reflect five distinct eras in both the legal status and commercial availability of marijuana in Colorado:

- Prior to 2000: Illegal to possess or grow.
- 2000–2009: Amendment 20 approved and medical marijuana is legalized. Colorado Department of Public Health and Environment (CDPHE) issues registry identification cards to individuals who have received recommendations from a doctor that marijuana will help a debilitating medical condition. It is legal to possess up to two ounces and grow 6 plants (or more with doctor's recommendation) with a registry identification card. No regulated market exists. Individual grow operations or caregiver grow operations limited to five patients is allowed.
- 2010–2012: Medical marijuana is commercialized and regulated with licensed dispensaries, grow operations, and product manufacturers open in jurisdictions allowing these types of businesses.
- 2013: Amendment 64 takes effect. Personal possession and grow limits for recreational marijuana are in place but sales are not commercialized. Medical continues as a regulated, commercial market.
- 2014 to present:⁷ Recreational and medical marijuana fully regulated and commercialized. Licensed retail stores open January 1, 2014.

Amendment 20

In 2000, Colorado passed Amendment 20 allowing those suffering from certain debilitating medical conditions to grow and possess a limited amount of marijuana with a doctor's recommendation that it may help their condition.⁸ Patients are required to register with the Colorado Department of Public Health and Environment (CDPHE) and obtain a registry identification card that indicates their status as a certified medical marijuana patient. The list of conditions eligible for a card includes cachexia, cancer, glaucoma, HIV/AIDS, muscle spasms, post-traumatic stress disorder, seizures, severe nausea, and severe

⁵ Cannabidiol (CBD) is a nonpsychoactive substance derived from cannabis with potential medical uses. For a review of some relevant research, see Scuderi, C. et al. (2009). Cannabidiol in medicine: a review of its therapeutic potential in CNS disorders, *Phytotherapy Research*, 23 (5), 597-602.

⁶ National Conference of State Legislatures, *State Medical Marijuana Laws* (2018), <http://www.ncsl.org/research/health/state-medical-marijuana-laws.aspx>.

⁷ Others group 2010–2013 as the era of medical commercialization and do not differentiate 2013 as it did not increase the availability of marijuana in the commercial market.

⁸ Colo. Const. Art. XVIII, § 14. Additional information can be accessed at Ballotpedia, Colorado Medical Use of Marijuana, Initiative 20 (2000), [https://ballotpedia.org/Colorado_Medical_Use_of_Marijuana,_Initiative_20_\(2000\)](https://ballotpedia.org/Colorado_Medical_Use_of_Marijuana,_Initiative_20_(2000)).

A detailed review of the history of medical marijuana in Colorado and the recent status of the medical marijuana code can be found in the Colorado Department of Regulatory Agencies' *2014 Sunset Review: Colorado Medical Marijuana Code*, available at <https://drive.google.com/a/state.co.us/file/d/0B8bNvcf083ydTFpkdVRwdnhTazQ/view>.

pain. Amendment 20 provides an affirmative defense from prosecution for cardholders who are allowed to grow six plants (three mature, three immature) and possess up to two ounces of finished product, unless a doctor determines that additional marijuana is needed to treat a patient's condition. Patients can choose to grow their own marijuana or designate a caregiver to grow it for them.

Initially, a caregiver was limited to growing medical marijuana for five patients and his/herself if he/she was a medical marijuana cardholder. The justification for this limit was challenged in Denver District Court, and was overturned.⁹ In 2009, the Colorado Board of Health rejected the five-patient limit for caregivers. That same year, the U.S. Department of Justice issued what is known as the Ogden Memo (see Appendix A), which gave guidance to U.S. Attorneys regarding prosecution for marijuana offenses. Specifically, the Ogden Memo told U.S. Attorneys that they should not "focus federal resources in your States on individuals whose actions are in clear and unambiguous compliance with existing state laws providing for the medical use of marijuana."¹⁰ The combination of the Court decision, the Board of Health's rejection of the five-patient caregiver limit, and the Ogden Memo set the stage for the commercialization of medical marijuana. In 2010, two laws were passed: a medical marijuana code was promulgated by the Legislature through the passage of House Bill 10-1284, which established a regulatory structure within the Colorado Department of Revenue (DOR) and the Colorado Department of Public Health and Environment (CDPHE); and Senate Bill 10-109, which clarified the definition of a "bona fide physician patient relationship." The Marijuana Enforcement Division (MED) was created within DOR to license and regulate the medical marijuana industry in Colorado.¹¹

The commercialization of medical marijuana followed and the number of patients registered with CDPHE increased dramatically, from about 5,000 in 2009 to almost 119,000 in 2011. The number of registered patients dropped to 88,143 as of July 2018.

Amendment 64

Prior to the passage of Amendment 64 in 2012, Initiative 44 was put on the ballot in 2006 in an attempt to legalize the possession of one ounce or less of marijuana for adults 21 and older. The initiative failed, with 59% of Colorado voters saying no to the question of allowing possession and use.¹² In 2012, a more expansive initiative was placed on the ballot that would not simply allow for possession but would create the first legal marketplace for recreational marijuana in the world. Amendment 64 passed, with 55% of voters saying yes to the question.¹³

⁹ *Lagoy v. Colorado*, 2007 CV 6089 (Denver County District Court, 2nd Judicial District, November 15, 2007; Denver County District Court, 2nd Judicial District, November 5, 2009).

¹⁰ U.S. Department of Justice (2009). Ogden memo: Investigations and prosecutions in states authorizing the medical use of marijuana, at <http://www.justice.gov/sites/default/files/opa/legacy/2009/10/19/medical-marijuana.pdf>.

¹¹ Medical Marijuana Code: C.R.S. 12-43.3-101 *et seq.* For additional information on the MED, see <https://www.colorado.gov/enforcement/marijuanaenforcement>.

¹² Ballotpedia, Colorado Marijuana Possession, Initiative 44 (2006), available at [https://ballotpedia.org/Colorado_Marijuana_Possession,_Initiative_44_\(2006\)](https://ballotpedia.org/Colorado_Marijuana_Possession,_Initiative_44_(2006)).

¹³ Ballotpedia, Colorado Marijuana Legalization Initiative, Amendment 64 (2012), [https://ballotpedia.org/Colorado_Marijuana_Legalization_Initiative,_Amendment_64_\(2012\)](https://ballotpedia.org/Colorado_Marijuana_Legalization_Initiative,_Amendment_64_(2012)).

Amendment 64 allows for individuals 21 years or older to grow up to six plants (three mature and three immature) and keep all of marijuana produced on the same premises, possess up to one ounce of marijuana, and give away without remuneration up to one ounce of marijuana to someone 21 years or older. It also instructed Colorado's Marijuana Enforcement Division to create rules, regulations, and licenses to allow for the first recreational marijuana marketplace by July 1, 2013. This included rules for licensing, ownership, security, labeling, production control, reduction of diversion, health and safety standards, advertising, and privacy guarantees. These rules resulted in the Retail Marijuana Code.¹⁴

The MED began accepting applications for retail stores on October 1, 2013. At that time applicants needed to have a current medical marijuana license to be eligible for a retail license. The first stores opened on January 1, 2014.¹⁵

Additional rule-making was conducted by the Department of Revenue, Department of Public Health and Environment, Department of Agriculture, and the Department of Regulatory Affairs to clarify a variety of issues that have arisen with the advent of the first legal marijuana marketplace.¹⁶ Examples include issues regarding pesticide application, testing for mold and solvents, THC homogeneity in manufactured products, among others.

Federal Response

In the wake of Amendment 64 and other recreational legalization efforts throughout the country, in 2013 the United States Department of Justice (USDOJ) issued what is known as the Cole Memo (see Appendix B).¹⁷ This gave guidance to U.S. Attorneys across the country. The Cole Memo set forth USDOJ's enforcement priorities, including:

1. Preventing distribution of marijuana to minors
2. Preventing revenue from going to criminal enterprises, gangs, and cartels
3. Preventing diversion of marijuana from states where it is legal under state law in some form to other states
4. Preventing state-authorized marijuana activity from being used as a cover or pretext for the trafficking of other illegal drugs or other illegal activity
5. Preventing violence and the use of firearms in the cultivation and distribution of marijuana
6. Preventing driving under the influence of drugs (DUID) and exacerbation of other adverse public health consequences associated with marijuana use
7. Preventing growth on public lands with attendant public safety and environmental damages
8. Preventing marijuana possession or use on federal property

¹⁴ Retail Marijuana Code: C.R.S. 12-43.4-101 *et seq.* at <https://www.colorado.gov/pacific/enforcement/laws-constitution-statutes-and-regulations-marijuana-enforcement>.

¹⁵ For a detailed review of the history of the regulation of retail marijuana see Department of Regulatory Agencies (2015), *2015 sunset review: Colorado retail marijuana code*, at <https://drive.google.com/file/d/0B8bNvcf083ydSlh4NWtHTjFoa2s/view>.

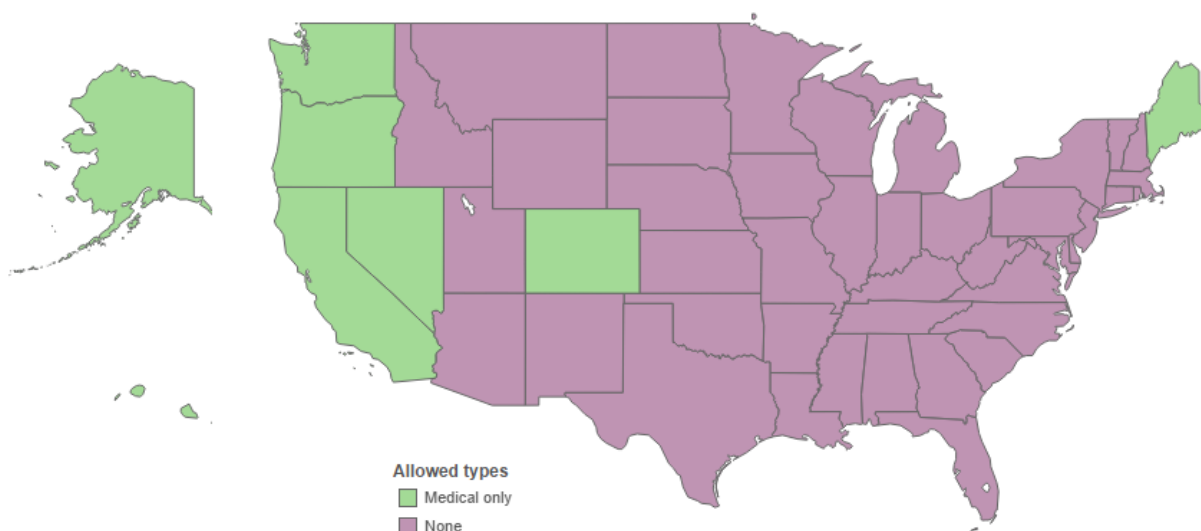
¹⁶ A compendium of amendments, statutes, and rules is available in the *Colorado marijuana laws and regulations 2017* (2018). LexisNexis: Charlottesville, VA. This publication is updated annually to reflect changes in statutes and rules.

¹⁷ U.S. Department of Justice (2013). *Cole memo: Guidance regarding marijuana enforcement*, at <http://www.justice.gov/iso/opa/resources/3052013829132756857467.pdf>.

The General Accounting Office (GAO) reported in 2015 that USDOJ’s Office of the Deputy Attorney General was monitoring the effects of marijuana legalization in two ways.¹⁸ First, according to the GAO report, “U.S. Attorneys prosecute cases that threaten federal marijuana enforcement priorities and consult with state officials about areas of federal concern, such as the potential impact on enforcement priorities of edible marijuana products. Second, officials reported they collaborate with DOJ components, including the Drug Enforcement Administration (DEA) and other federal agencies, including the Office of National Drug Control Policy, and assess various marijuana enforcement-related data these agencies provide.” The GAO report indicated that the USDOJ has not documented its monitoring approach, leading to a gap in knowledge about state-level adherence to the Cole memo. In Colorado, the Rocky Mountain High Intensity Drug Trafficking Area (RMHIDTA), funded by the Office of National Drug Control Policy, is tracking the impact of marijuana legalization in the state and has produced five reports of findings.¹⁹

Attorney General Jeff Sessions rescinded the Cole Memo on January 4, 2018 and gave full discretion on the investigation and prosecution of marijuana offenses to the U.S. Attorneys’ offices. This means that a case no longer must include violations of Cole Memo factors before it is pursued for Federal prosecution.

Figure 1. State marijuana legalization status, 2000

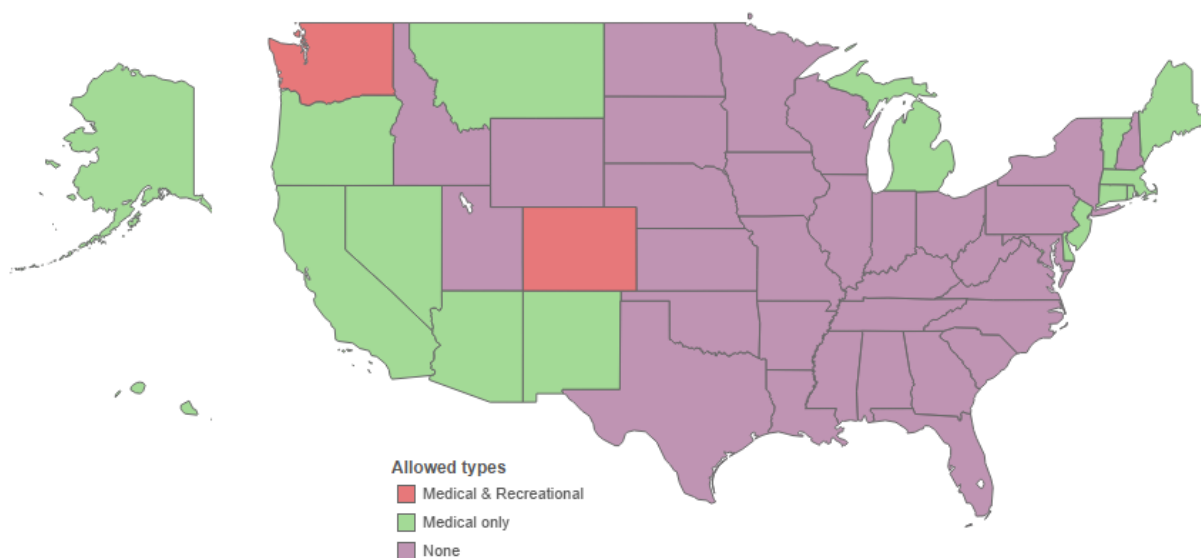


Source: National Conference of State Legislatures, at <http://www.ncsl.org/research/health/state-medical-marijuana-laws.aspx>.

¹⁸ U.S. Government Accountability Office (2015). *State Marijuana Legalization: DOJ Should Document its Approach to Monitoring the Effects of Legalization*, available at <http://www.gao.gov/products/GAO-16-1>.

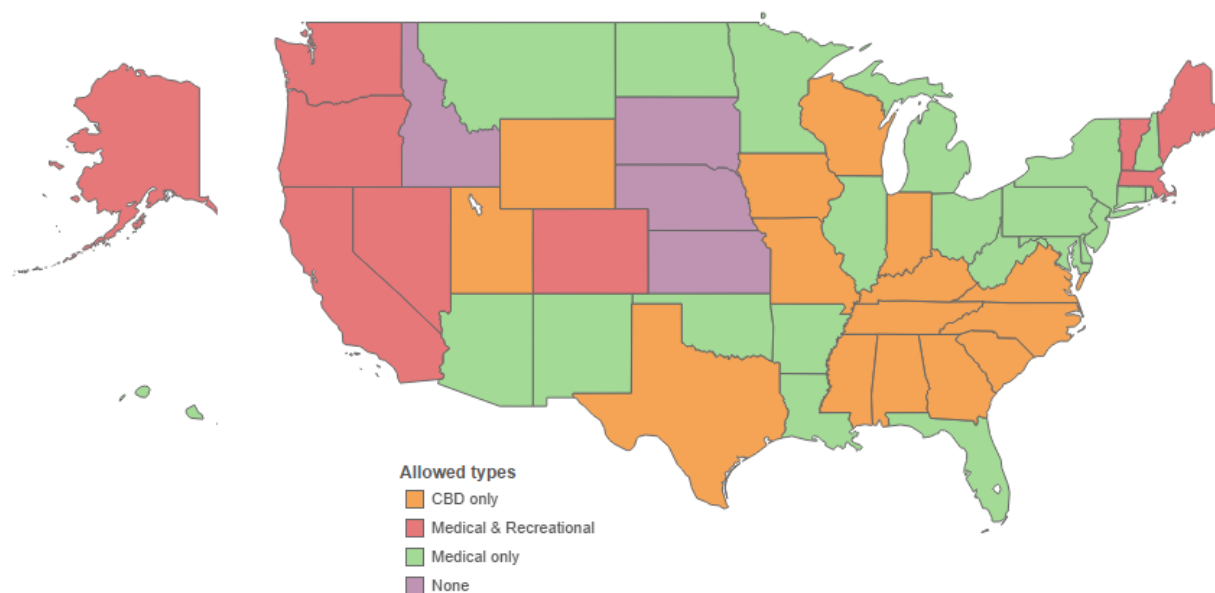
¹⁹ RMHIDTA (2017). *The Legalization of Marijuana in Colorado: The Impact*, at <http://www.rmhidta.org/html/FINAL%202017%20Legalization%20of%20Marijuana%20in%20Colorado%20The%20Impact.pdf>.

Figure 2. State marijuana legalization status, 2012



Source: National Conference of State Legislatures, at <http://www.ncsl.org/research/health/state-medical-marijuana-laws.aspx>.

Figure 3. State marijuana legalization status, 2018



Source: National Conference of State Legislatures, at <http://www.ncsl.org/research/health/state-medical-marijuana-laws.aspx>.

Organization of this report

Section Two focuses on the public safety impacts of marijuana legalization while Section Three presents information concerning public health and behavioral services. Section Four presents impacts on youth, and Section Five provides additional information that may be of interest to the reader.

Summary

This report presents data from multiple sources in an effort to provide information for assessing the impact of the commercialization of marijuana on public safety, public health, behavioral services, and youth access in Colorado, drawing from a myriad of data sources. It is critical to remember that important data limitations exist, and these issues are discussed throughout the report. The history of marijuana laws in Colorado, along with the Ogden and Cole Memos, reflect the dynamic environment in which regulations and enforcement are critical components. The impact of Amendment 64 on public safety is the focus of the next section.

SECTION TWO: IMPACT ON PUBLIC SAFETY

Overview

The potential impacts to public safety from the legalization of marijuana were of concern to the legislature, law enforcement officials, district attorneys, and other public safety stakeholders across the state. Since no jurisdiction had yet legalized marijuana for recreational purposes, the public safety impacts were unknown. The Cole Memo (see Appendix B; Section One provides a description of this memo) provided guidance on several public safety impacts of concern to the U.S. Department of Justice. The specific public safety areas of interest addressed in Senate Bill 2013-183 (see Section One for a description of this bill), some of which were influenced by the Cole Memo, included:

- Marijuana-initiated law enforcement contacts
- Marijuana arrests
- Crime around marijuana establishments
- Marijuana-related traffic accidents and DUID
- Organized crime and money laundering
- Probation infractions
- Illegal cultivation on public land
- Diversion out of state
- Transfer using parcel services

Data Collection Challenges

Meeting the reporting requirements of Senate Bill 2013-183 remains challenging. For example, “marijuana-initiated law enforcement contacts,” a data point mandated in the bill, is not a term used by any law enforcement agency, nor is contact data (for any purpose) collected systematically by law enforcement agencies. Further, S.B. 13-283 required contact data to be disaggregated by race/ethnicity, and it is not known how a law enforcement officer would determine race/ethnicity of individuals involved in a marijuana-initiated contact. In sum, this information does not exist and therefore cannot be included in this analysis.

Information on arrests is available, but only from 2012 due to improvements in data reporting. The National Incident Based Reporting System (NIBRS) is part of the Federal Bureau of Investigation’s data collection system, and is managed locally by the Colorado Bureau of Investigation. NIBRS has significantly more information than the Uniform Crime Reporting (UCR) system, including information about drug type, which is not available in UCR data. Colorado became a “NIBRS compliant” state in 2012, with nearly all agencies reporting greater details on crime incidents. For this reason, information concerning Colorado arrests related to marijuana offenses is unavailable for analysis prior to 2012.

Data on crime around marijuana establishments are not collected in any central repository, but the Denver Police Department began a process in 2012 to assess whether such crime was a significant problem, and this information is reported below.

Likewise, information on diversion of marijuana out of state and transfer using parcel services is not collected in any central location. Additionally, with an enhanced focus on marijuana, it is possible that law enforcement agencies, becoming more aware of the issue, would increase interdiction efforts, potentially resulting in an increase in seizures which may or may not be related to an actual increase in diversion.

Significant challenges exist in the collection of information on traffic accidents and driving under the influence. The state statute on impaired driving does not differentiate between driving under the influence of alcohol and driving under the influence of drugs. Further, there is no central repository for toxicology results from drivers that would allow for an examination of impaired driving throughout the state. The current data system that collects information on roadway fatalities does not capture the specific toxicology results that would indicate impairment, does not consistently capture information on surviving drivers involved in fatalities, and is limited to testing results from three drugs detected in the driver's system.

S.B. 13-283 mandates the analysis of "probation data." To this end, probationer drug tests associated with marijuana use were analyzed,²⁰ but the State Judicial Branch's database does not capture whether an infraction or revocation was marijuana-related or even related to drugs in general.

Despite significant challenges in meeting all of the statute's reporting requirements, data that are available were analyzed to help inform stakeholders about these issues.

Offenses and Arrests²¹

Data on marijuana arrests and offenses for the period 2012–2017 were obtained from the Colorado Bureau of Investigation's (CBI) National Incident-Based Reporting System (NIBRS) database. The NIBRS database includes detailed information on arrests and offenses, which the previous UCR summary reporting system did not provide. Colorado became fully NIBRS compliant in 2012, which limits the years of historical data available for analysis.

Marijuana Arrests

Overall

The total number of marijuana arrests decreased by 56% between 2012 and 2017, from 12,709 to 6,153 (Table 2). Marijuana possession arrests, which make up the majority of all marijuana arrests, were cut by more than half (-59%). Marijuana sales arrests decreased by 17%, while arrests for marijuana production increased markedly (+51%). Marijuana arrests that were unspecified, meaning the specific reason for the arrest was not provided by law enforcement, went down by 45%. The arrest rates per 100,000 adult

²⁰ Juvenile probation data is presented in Section Four: Impacts on Youth.

²¹ While offenses and arrests are related, they are not the same and may display different patterns. An offense is counted when a crime is reported to law enforcement, regardless of whether there is an arrest. For example, there may be a reported burglary with no related arrest. An arrest is a response to a crime, and there may be multiple arrests for a single offense. For example, one robbery committed by two suspects can result in two arrests.

population followed similar trends, with the possession rate down 59%, sales down 24%, and production up 38%.

Age Group

Between 2012 and 2017, a 78% reduction in arrests occurred for those ages 21 and older for whom marijuana possession of one ounce or less is now legal (Table 2). This compares with a 37% reduction in the 18- to 20-year-old group who may legally possess only when they have a medical marijuana card. Juveniles between the ages of 10 and 17 showed a 16% decrease in the number of marijuana arrests. In 2017, juveniles accounted for over four in ten (43%) of all marijuana arrests compared to 25% in 2012. For details on arrest type, see Appendix C, Table 4.

The age group with the highest arrest rate in 2017 was 18- to 20-year-olds, at 908 per 100,000 18- to 20-year-olds in the population (Table 3). This was double the juvenile rate (453) and nearly 30 times higher than the rate for those 21 or older (34).

Race/Ethnicity

The decrease in the number of marijuana arrests by race/ethnicity was greatest for White arrestees (-56%) compared to Hispanics (-39%) and Blacks (-51%). The marijuana arrest rate for Whites (118 per 100,000) and Hispanics (133 per 100,000) was comparable, but the marijuana arrest rate for Blacks (233 per 100,000) was nearly double that that for Whites (Table 3). (For details on arrest type, see Appendix C, Table 3.)

Gender

Between 2012 and 2017 the number of males arrested for marijuana offenses (Table 2) decreased 55% compared to a decline of 38% for females. The arrest rate for males (189 per 100,000) was more than triple that for females (59 per 100,000) (Table 3). For details on arrest type, see Appendix C, Table 5.

Table 2. Marijuana arrests in Colorado, 2012–2017

	Number arrested for marijuana offenses					
	2012	2013	2014	2015	2016	2017
Total	12,709	6,359	6,902	6,728	6,250	6,153
Age group						
10 to 17	3,168	3,030	3,325	2,956	2,615	2,655
18 to 20	3,307	2,241	2,221	2,064	2,026	2,099
21 or older	6,234	1,088	1,356	1,708	1,609	1,399
Race						
White	9,207	4,377	4,499	4,375	4,129	4,069
Hispanic	2,340	1,328	1,552	1,541	1,414	1,423
Black	957	547	712	655	539	467
Other	205	107	139	157	168	194
Gender						
Male	10,331	5,155	5,445	5,324	4,859	4,681
Female	2,378	1,204	1,457	1,404	1,391	1,472
Drug crime type*						
Sales	301	224	229	175	221	251
Smuggling	6	5	0	4	8	3
Possession	11,361	5,407	5,962	5,982	5,454	5,154
Production	179	111	175	192	256	271
Unspecified	1,120	766	653	526	439	621
Arrest type^						
On-view arrest	3,059	1,209	1,120	1,074	1,313	1,353
Warrant arrest	804	329	330	282	411	367
Summons/citation	8,846	4,821	5,452	5,372	4,526	4,433

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System, analyzed by the Division of Criminal Justice.

*A person can be charged with more than one drug offense. The totals for drug crime type are slightly larger than the count of total people arrested.

^On-view are custodial arrests without a warrant or previous incident report. Warrants are custodial arrests based on a warrant or previous incident report. Summons/citations are non-custodial arrests where a citation is given to the person and they are instructed to appear in court at a later date.

Table 3. Marijuana arrest rates in Colorado, 2012–2017

	Marijuana arrest rate (per 100,000)					
	2012	2013	2014	2015	2016	2017
Total	282	139	148	141	129	124
Age group						
10 to 17	583	550	595	519	453	453
18 to 20	1,491	998	992	917	891	908
21 or older	167	29	35	43	40	34
Race						
White	283	133	135	130	121	118
Hispanic	266	145	164	156	138	133
Black	533	298	379	340	274	233
Other	107	54	68	73	75	84
Gender						
Male	459	225	234	224	200	189
Female	106	52	62	59	57	59
Drug crime type*						
Sales	7	5	5	4	5	5
Smuggling	0	0	0	0	0	0
Possession	251	118	128	126	112	104
Production	4	2	4	4	5	5
Unspecified	25	17	14	11	9	13
Arrest type^						
On-view arrest	68	26	24	23	27	27
Warrant arrest	18	7	7	6	8	7
Summons/citation	196	105	117	113	93	90

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System; Colorado State Demography Office Data, <https://demography.dola.colorado.gov/data/>. Analyzed by the Division of Criminal Justice.

Note: Rates are calculated using data obtained from the Colorado State Demography Office. The rates for total arrests, arrests by drug crime type, and arrest type are calculated based on the total population 10 years of age and older. Rates for specific age groups are calculated based on the population in that age group. Rates by race/ethnicity and gender are calculated based on the population 10 years of age and older in those respective race/ethnicity and gender categories.

*A person can be charged with more than one drug offense. The totals for drug crime type are slightly larger than the count of total people arrested.

^On-view are custodial arrests without a warrant or previous incident report. Warrants are custodial arrests based on a warrant or previous incident report. Summons/citations are non-custodial arrests where a citation is given to the person and they are instructed to appear in court at a later date.

County

Nine large Colorado counties (Adams, Arapahoe, Boulder, Douglas, El Paso, Jefferson, Larimer, Mesa, and Weld) showed a decrease in marijuana arrests between 2012 and 2017, ranging between -8% (Boulder) and -67% (Adams). The average decrease in these nine counties was -43% (see Appendix C, Tables 1 and 2). Pueblo showed a 61% increase in arrests, but the number increased by 14 arrests, from 23 in 2012 to 37 in 2017. Denver's reported marijuana arrest data for 2012 and 2013 was incomplete due to separate jail arrest and citation systems. Cite and release data were not reported to the Colorado Bureau of Investigation until July 2013. Additionally, the 2014 arrest data reported by the Denver Police Department include a non-criminal civil citation, which resulted in an over-reporting of marijuana

arrests for that year. The county-level data in Appendix C presenting this information should be interpreted with caution. Separate data provided by the Denver Police Department's Data Analysis Unit indicated an 81% decrease in total marijuana arrests, from 1,605 in 2012 to 302 in 2017 (Appendix C, Table 13).

Agency

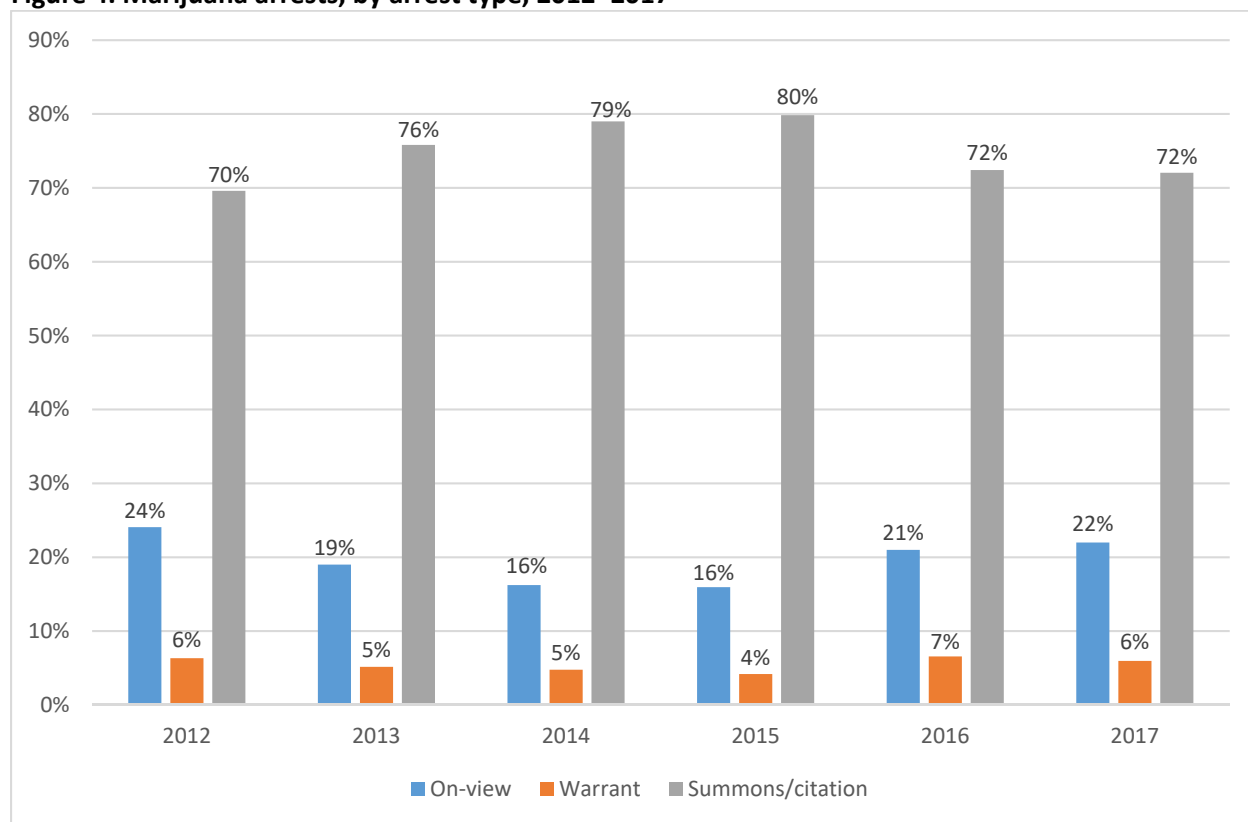
The trends for each agency reporting marijuana arrests to the National Incident Based Reporting System (NIBRS) are presented in Appendix C, Table 12. Nearly all large departments reported decreases in marijuana arrests. The biggest decreases occurred in the Boulder Police Department (-89%), Adams County Sheriff's Office (-86%), and El Paso Sheriff's Office (-84%). The University of Colorado Police Department–Boulder experienced a 23% increase in arrests (see Appendix C, Table 2). Also, please see the note regarding Denver in the previous paragraph.

Arrest Type

There are three general arrest types reported by law enforcement in NIBRS. *On-view* are custodial arrests without a warrant or previous incident report. *Warrants* are custodial arrests based on a warrant or previous incident report. *Summons/citations* are non-custodial arrests where a citation is issued and the person is instructed to appear in court at a later date. As can be seen in Figure 4, after legalization the proportion of arrests that resulted in a summons or citation increased 10% between 2012 and 2015, and on-view arrests decreased by 8%. This trend reversed in 2016 and 2017 when the ratio of on-view to summons/citation arrests was back to pre-legalization levels.

Table 4 presents detailed data on the different types of marijuana arrests by age, race/ethnicity, and gender. Juveniles under 18 were more likely to receive a summons/citation (82%) than an on-view arrest (14%) or a warrant arrest (4%). Young adults 18-20 years old were also more likely to receive a summons/citation (78%) than an on-view arrest (18%) or a warrant arrest (4%). Adults 21 years or older were almost equally likely to get an on-view arrest (44%) as a summons/citation (43%). Whites were less likely to experience an on-view arrest (18%) than Hispanics (25%) or Blacks (39%). Males were arrested on-view (23%) at a slightly higher rate than females (18%).

Figure 4. Marijuana arrests, by arrest type, 2012–2017



Source: Colorado Bureau of Investigation, National Incident-Based Reporting System. Analyzed by the Division of Criminal Justice.

Note: On-view are custodial arrests without a warrant or previous incident report. Warrants are custodial arrests based on a warrant or previous incident report. Summons/citations are non-custodial arrests.

Table 4. Marijuana arrests, by arrest type and demographics, 2012–2017

	2012	2013	2014	2015	2016	2017
Total						
N arrests	12,709	6,359	6,902	6,728	6,250	6,153
On-view	24%	19%	16%	16%	21%	22%
Warrant	6%	5%	5%	4%	7%	6%
Summons/citation	70%	76%	79%	80%	72%	72%
Age group						
10 to 17 years						
N arrests	3,168	3,030	3,325	2,956	2,615	2,655
On-view	10%	11%	11%	11%	15%	14%
Warrant	4%	3%	3%	3%	3%	4%
Summons/citation	86%	85%	86%	86%	82%	82%
18 to 20 years						
N arrests	3,307	2,241	2,221	2,064	2,026	2,099
On-view	18%	20%	17%	17%	18%	18%
Warrant	5%	5%	4%	3%	5%	4%
Summons/citation	77%	75%	79%	80%	77%	78%
21 years or older						
N arrests	6,234	1,088	1,356	1,708	1,609	1,399
On-view	34%	39%	28%	23%	35%	44%
Warrant	8%	11%	10%	7%	13%	13%
Summons/citation	57%	50%	63%	69%	52%	43%
Race						
White						
N arrests	9,207	4,377	4,499	4,375	4,129	4,069
On-view	23%	18%	16%	15%	17%	18%
Warrant	6%	5%	5%	4%	6%	5%
Summons/citation	71%	77%	80%	80%	77%	76%
Hispanic						
N arrests	2,340	1,328	1,552	1,541	1,414	1,423
On-view	27%	20%	17%	17%	26%	25%
Warrant	7%	5%	5%	5%	8%	8%
Summons/citation	65%	74%	77%	79%	67%	67%
Black						
N arrests	957	547	712	655	539	467
On-view	30%	23%	18%	17%	38%	39%
Warrant	6%	3%	5%	2%	5%	6%
Summons/citation	65%	74%	77%	80%	57%	55%
Other race						
N arrests	205	107	139	157	168	194
On-view	25%	17%	12%	20%	30%	36%

	2012	2013	2014	2015	2016	2017
Warrant	8%	8%	6%	6%	7%	5%
Summons/citation	67%	75%	83%	74%	63%	60%
Gender						
Male						
N arrests	10,331	5,155	5,445	5,324	4,859	4,681
On-view	25%	20%	18%	17%	22%	23%
Warrant	6%	5%	5%	5%	7%	6%
Summons/citation	69%	75%	77%	79%	71%	70%
Female						
N arrests	2,378	1,204	1,457	1,404	1,391	1,472
On-view	21%	15%	11%	13%	16%	18%
Warrant	6%	4%	3%	3%	5%	5%
Summons/citation	73%	81%	86%	84%	79%	77%

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System. Analyzed by the Division of Criminal Justice.

Note: On-view are custodial arrests without a warrant or previous incident report. Warrants are custodial arrests based on a warrant or previous incident report. Summons/citations are non-custodial arrests.

Offense Location

NIBRS captures information on the place an offense was reported to have occurred. There are 57 categories, including public transportation, bars, convenience stores, homes, parks/playgrounds, parking lots, primary/secondary schools, colleges, among others. Data for offenses grouped by place are presented in Table 5 and data for all places may be found in Appendix D.

Overall, the number of offenses decreased by 52%, from 12,798 in 2012 to 6,182 in 2017. The locations showing the largest drops were highway/road/street (-72%), retail site/bank/restaurant/bar (-49%), and private buildings (-42%). The locations with an increased number of offenses were college/university (+56%), elementary/secondary school (+13%), and private workplace (+10%).

Table 5. Marijuana offenses, by location type, 2012–2017

Location type	2012	2013	2014	2015	2016	2017
Total	12,798	5,989	6,531	6,535	6,244	6,182
Highway/road/street	6,799	2,227	2,196	2,221	2,057	1,937
Elementary/secondary school	1,010	1,390	1,655	1,355	1,239	1,144
Private building	1,636	611	706	727	848	864
Public space	1,401	780	950	1,034	908	810
College/university	519	448	465	600	572	809
Other	572	225	267	261	291	249
Retail site/bank/restaurant/bar	441	211	194	227	216	223
Private workplace	78	49	55	61	72	86
Public building	84	48	43	49	41	60
Secondary School/university (historical)	258	0	0	0	0	0

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System data. Analyzed by the Division of Criminal Justice.

Note: The location type of Secondary School/University (historical) was split up into specific categories of Elementary/Secondary School and College/University partway through 2012. It is not possible to determine the specific location in the historical data and so it is presented separately here.

Marijuana Seizures

Seizures of marijuana are reported in NIBRS using the property field. The quantity of marijuana is noted, either by weight, liquid volume, dosage units, or number of plants.²² The type of marijuana seized, such as flower/bud, concentrates, edibles, oils, etc. is not indicated. Additionally, sometimes the quantity of seized marijuana is not reported. Table 6 presents a trend of the quantity of marijuana seized and the number of reports. The weight of marijuana seized initially decreased, from 7,696.5 pounds in 2012 to 3010.2 pounds in 2014, but rebounded in 2017 when over 10,000 pounds of marijuana was seized. The liquid volume of seizures has fluctuated greatly, from a low 0.8 gallons in 2014 to a high of 41.4 gallons in 2017. The number of dosage units has also fluctuated, from a low of 431.0 in 2013 to a high of 31,131.4 in 2014, with 5,243.0 dosage units reported seized in 2017. The number of total plants seized followed a trend similar to the weight seized, with an initial decrease of plants seized in 2012 (28,283.5 plants to 2013 (1,228), and then an increase in 2017 to 25,254 plants.

²² The possible weight categories include grams, kilograms, ounces, or pounds. Liquid volume includes milliliters, liters, fluid ounces, or gallons. Dosage units are individual items, such as edibles. Plants are physical plants seized.

Table 6. Quantity of marijuana seized and number of reported seizures, by measurement type, 2012–2017

Quantity seized		2012	2013	2014	2015	2016	2017
Total weight-pounds	Amount	7,696.5	3,364.0	3,010.2	5,103.4	5,145.3	10,358.2
	N reports	11,762	5,183	5,077	4,623	4,614	4,889
Total volume-gallons	Amount	14.9	0.9	0.8	60.0	6.0	41.4
	N reports	12	2	3	10	14	10
Total dosage units	Amount	1,631.8	431.0	31,131.4	592.4	8,778.8	5,243.0
	N reports	169	50	60	90	130	199
Total plants	Amount	28,283.5	1,228.0	2,839.7	4,000.0	10,076.0	25,254.7
	N reports	115	26	22	21	64	95
Not reported	Amount	NA	NA	NA	NA	NA	NA
	N reports	398	555	772	900	582	399

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System data. Analyzed by the Division of Criminal Justice.

Note: See Appendix E for a description of the quantity and number of seizures by county.

Marijuana Court Case Filings

The Colorado State Judicial Branch's data system²³ was queried for marijuana cases filed²⁴ between 2008 and 2017. The State Judicial data system captures information from county and district courts statewide, with the exception of Denver County Court. The data include information on statute, charge description, charge classification, judicial district, defendant age, and defendant race.²⁵ The charges were categorized according to the text entered into the charge description field. Filings data are based on a calendar year.

The number of marijuana-related case filings declined 47% between 2012 and 2017, from 9,923 to 5,288 (Table 7).²⁶ The number of cases with a felony as the top charge declined initially (986 in 2012 to 418 in 2014) but have since rebounded to near pre-legalization levels (907 in 2017). This contrasts with the decline in misdemeanors (-13%) and petty offenses (-62%) between 2012 and 2017.

The age of defendants is grouped into three categories. Between 2012 and 2017, case filings declined 1% in the 10- to 17-year-old group; in the 18- to 20-year-old group, filings declined 28%; in the 21 and older age group, filings declined 67%. Males saw a 49% drop in total marijuana cases filed while females experienced a 37% decline from 2012 to 2017.

²³ Misdemeanor and petty offense charges from the City and County of Denver are not entered in the State Judicial database and are therefore presented in a separate table. Felony charges from Denver are included.

²⁴ This includes charges under C.R.S. 12-43.4-901, 18-8-203, 18-13-122, 18-18-406 (excluding the subsections for synthetics and salvia), 18-18-414, and 42-4-1305.5.

²⁵ Judicial's race category does not consistently capture whether a defendant's ethnicity is Hispanic and will not be used here. For example, upon examining the data for 2017, only 7% of defendants were characterized as Hispanic compared to 21% of the general population and 23% of the marijuana arrestee population.

²⁶ The overall totals and totals for those under 21 are higher than in the 2016 version of this report due to the addition of a minor in possession charge that was not included in the original 2016 query.

The charge of marijuana possession underwent a change in 2014 with the addition of the specific charge of *possession of marijuana under the age of 21*. Consequently, examining the trend in possession filings requires adding both of these charges together prior 2015 since that was the first full year the new charge was consistently used.

Between 2012 and 2017, possession offenses dropped 54% (9,475 to 4,339), possession with intent to distribute increased 61% (464 to 745), distribution dropped 9% (438 to 398), manufacture increased 42% (467 to 661), and conspiracy increased 45% (168 to 243). There was a 20% increase between 2015 and 2017 (2,927 to 3,502).

Table 7. Marijuana cases filed and charges, by classification, category, and age group, 2008–2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total cases filed	11,753	10,902	10,108	9,791	9,923	4,041	4,619	4,934	4,913	5,288
Total charges filed*	18,183	14,222	11,518	11,123	11,238	4,845	5,515	6,544	6,891	7,477
Average number of charges per case	1.5	1.3	1.1	1.1	1.1	1.2	1.2	1.3	1.4	1.4
Age group										
10-17 years old	1,754	1,616	1,640	1,544	1,624	1,492	1,532	1,766	1,496	1,607
18-20 years old	3,093	2,785	2,451	2,456	2,381	1,491	1,579	1,610	1,621	1,710
21 years or older	6,880	6,484	6,002	5,777	5,901	1,049	1,502	1,548	1,786	1,949
Gender										
Male	9,748	9,085	8,348	8,048	8,114	3,315	3,724	3,888	3,933	4,125
Female	1,965	1,792	1,726	1,719	1,787	706	859	1,013	960	1,129
Unknown	40	25	34	24	22	20	36	33	20	34
Highest marijuana charge classification										
Felony	1,431	1,412	1,347	1,017	986	627	418	581	789	907
Misdemeanor	778	694	637	628	594	406	531	428	427	472
Petty offense	9,543	8,790	8,122	8,143	8,340	2,932	2,831	3,229	3,006	3,196
Traffic	0	0	0	0	0	76	837	694	690	713
Unknown	1	3	1	1	3	0	2	2	1	0
Charge type*										
Conspiracy	96	142	178	208	168	126	71	112	179	243
Distribution	440	440	455	428	438	401	305	323	351	398
Manufacture	320	331	464	460	467	169	141	329	564	661
Other	5,745	1,917	23	5	10	5	1	2	3	4
Possession	10,651	10,417	9,580	9,279	9,475	3,477	2,659	1,295	883	837
Possession under age of 21						3	731	2,927	3,306	3,502
Possession with intent to distribute	823	823	643	547	464	328	284	470	609	745
Possession-consumption in vehicle				1	10	95	1,012	874	830	856
Public consumption	108	152	175	195	206	241	311	212	166	231

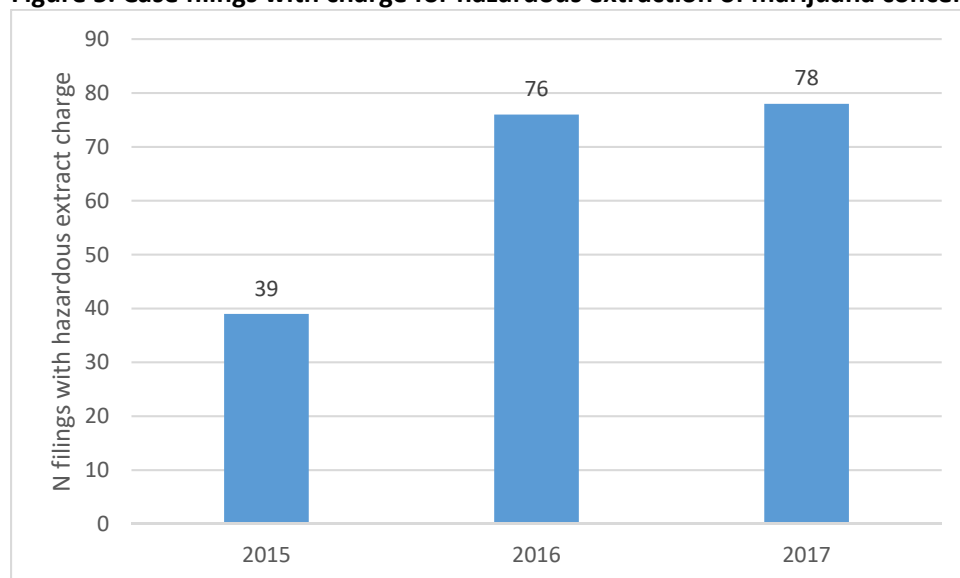
Source: Data provided by the Colorado State Judicial Branch, analyzed by the Division of Criminal Justice.

Note: This analysis does not include data from the City and County of Denver.

* The charge category presents all charges, not just the top charge on the cases filed. The numbers in the charge type section of this table will sum to the value in the *Total charges filed* row.

The number of court case filings for manufacturing concentrate (such as hash oil, wax, shatter) using an inherently hazardous substance, such as butane (C.R.S. 18-18-406.6, effective date July 1, 2015), is presented in Figure 5. There were 76 filings of manufacturing concentrates in 2016 and 78 in 2017.

Figure 5. Case filings with charge for hazardous extraction of marijuana concentrates, 2015–2017



Source: Colorado State Judicial Branch, analyzed by the Division of Criminal Justice.

Note: The law making the hazardous extraction of concentrates illegal went into effect July 1, 2015.

The Denver County Court, which processes petty offenses and misdemeanors, does not provide data to the State Judicial data system, and so this information is presented separately below. The number of marijuana filings in Denver County Court decreased over time, from 1,174 in 2014 to 739 in 2017, a reduction of 37% (Table 8). The only charge type showing an increase were offenses within 1,000 feet of schools.

Table 8. Misdemeanor and petty offense filings for marijuana in Denver County Court, by charge, 2014–17

Offense Charge	2014	2015	2016	2017
Total	1,174	1,192	965	739
Minor in possession	371	297	212	192
Public consumption	484	548	453	294
Offenses within 1,000 feet of schools ^a	24	120	107	113
Offenses on/within one block of 16 th St. Mall ^{a,b}	138	48	15	11
Offenses in parks or recreational facilities ^a	157	179	178	129

Source: Data provided by City and County of Denver, Office of Marijuana Policy.

^a Offenses include consumption, use, display, transfer, distribution, sale, or the grows of marijuana.

^b The 16th Street Mall is an open-air pedestrian mall located in downtown Denver that has a substantial number of restaurants and shops.

Organized Crime Charges

The number of court case filings in which the Colorado Organized Crime Control Act (COCCA) was charged in conjunction with a marijuana charge is presented in Table 9. One case filing can be associated with multiple charges, so the sum of charges will exceed the number of filings. The number of COCCA filings has increased significantly, from 31 in 2012 to 119 in 2017. The types of charges associated with COCCA filings that increased most were manufacturing of marijuana or marijuana products (25 to 142) and possession of marijuana with intent to sell (32 to 124).

Table 9. Marijuana case filings associated with Colorado Organized Crime Control Act, 2008-17

	N COCCA case filings	Marijuana charges associated with COCCA case					
		Conspiracy	Manufacture	Distribution	Possession with intent to sell	Possession	Other
2008	3	0	2	4	1	0	0
2009	8	2	1	2	5	4	0
2010	18	30	42	33	10	1	6
2011	15	77	9	32	34	1	0
2012	31	56	25	43	32	4	0
2013	15	21	26	24	1	4	1
2014	1	0	0	0	1	0	0
2015	40	61	107	58	60	8	0
2016	81	72	109	93	77	10	0
2017	119	135	142	127	124	6	0

Source: Colorado State Judicial Branch, analyzed by the Division of Criminal Justice.

Note: A single case filing can be associated with multiple charges, so the sum of charges will exceed the number of filings.

Crime Around Marijuana Establishments

The number of crimes around marijuana establishments is difficult to measure. Colorado does not have a statewide database that places all reported crimes at a specific location. The Denver Police Department began a project to review all reported crime to determine if there was a clear connection or relationship to marijuana. Additionally, the project identifies whether the crime was related to the marijuana industry or not.

The total number of industry-related crimes remained stable and made up a very small portion of overall crime in Denver (Table 10). The most common industry-related crime was burglary, which accounted for 59% of all industry-related crime in 2017. There has been concern that, due to the cash-only nature of the industry, robbery would be prevalent but this has not been the case.

The number of nonindustry-related marijuana crimes was small and remained stable. Burglary accounted for 40% of nonindustry-related crime in 2017, followed by robbery at 29% (Table 10).

Table 10. Marijuana Crime in Denver, 2012–2017²⁷

	2012	2013	2014	2015	2016	2017
Industry						
Robbery	2	4	7	5	3	6
Aggravated assault	1	0	0	1	0	0
Other person	3	7	8	3	0	3
Burglary	134	102	114	117	170	80
Theft	14	14	24	26	19	17
Trespassing	1	2	2	4	3	4
Criminal mischief	20	19	14	14	10	12
Forgery/fraud	0	1	1	1	2	3
Arson	1	0	0	1	1	0
Drug	0	1	1	11	6	2
Other	1	4	2	3	0	8
Total	177	154	173	186	214	135
Non-industry						
Robbery	19	20	27	23	17	14
Aggravated assault	3	6	5	3	6	1
Other person	1	4	7	8	2	7
Burglary	17	30	39	20	22	19
Theft	10	12	19	15	8	4
Trespassing	1	1	1	0	1	0
Criminal mischief	1	3	0	0	2	1
Forgery/fraud	0	0	0	0	0	0
Arson	0	0	0	0	0	1
Drug	1	1	3	1	1	1
Other	0	3	2	2	0	0
Total	53	80	103	72	59	48
Total						
Robbery	21	24	34	28	20	20
Aggravated assault	4	6	5	4	6	1
Other person	4	11	15	11	2	10
Burglary	151	132	153	137	192	99
Theft	24	26	43	41	27	21
Trespassing	2	3	3	4	4	4
Criminal mischief	21	22	14	14	12	13
Forgery/fraud	0	1	1	1	2	3
Arson	1	0	0	1	1	1
Drug	1	2	4	12	7	3
Other	1	7	4	5	0	8
Total	230	234	276	258	273	183
Total criminal offenses in Denver	NA	NA	61,276	64,317	65,368	66,000

Source: Denver Open Data Catalog, Crime Marijuana, at <https://www.denvergov.org/opendata/dataset/city-and-county-of-denver-crime-marijuana>. Retrieved 6/6/2018; updated by source 2/27/2018. Denver Police Department Crime Statistics. <https://www.denvergov.org/content/denvergov/en/police-department/crime-information/crime-statistics-maps/crime-statistics-archives.html>

²⁷ Note from the Denver Police Department: "Data in this file are crimes reported to the Denver Police Department which, upon review, were determined to have clear connection or relation to marijuana. These data do not include police reports for violations restricting the possession, sale, and/or cultivation of marijuana. This dataset is based upon the National Incident Based Reporting System (NIBRS) which includes all victims of person crimes and all crimes within an incident. The data is dynamic, which allows for additions, deletions and/or modifications at any time, resulting in more accurate information in the database. Due to continuous data entry, the number of records in subsequent extractions are subject to change. Industry-related crimes involve marijuana and licensed marijuana facilities. These reported crimes are committed against the licensed industry or by the industry itself. Non-Industry crimes are crimes reported where marijuana is the primary target in the commission of these crime but the marijuana has no readily apparent tie to a licensed operation." The Denver Police Department changed its data system in 2013, therefore crime data prior to that time is not comparable.

Traffic Safety

Driving Under the Influence²⁸

Detection Issues

It is difficult to gauge the scope of DUID for a number of reasons. First, there is no criminal charge that specifies that the driver is impaired by drugs instead of, or in combination with, alcohol. The current statute applies to driving under the influence of alcohol, drugs, or a combination of the two.²⁹ Second, there is no central repository of toxicology results that would allow for an analysis of trends. Third, at a traffic stop, law enforcement may choose not to pursue additional toxicology testing if the driver is exhibiting indicia of impairment from alcohol. The additional time and cost required for further toxicology testing may not be considered worthwhile if the burden of proof for impairment is already being met by a BAC (blood alcohol content) level.

Colorado established a limit of 5 ng/mL of Delta 9-THC in whole blood that creates a permissible inference that a “defendant was under the influence of one or more drugs.”³⁰ After an arrest, if the officer has probable cause to believe the suspect is impaired by drugs and/or alcohol,³¹ the officer may transfer the suspect to a location where blood can be drawn for further toxicology screening. The Delta-9 THC level in blood decreases rapidly in the first hour after use, then gradually thereafter, making prompt testing critical.³²

Importantly, the findings below should be considered in light of the fact that the number of peace officers who have been trained to identify driving impairment from drugs other than alcohol has increased substantially in recent years. In 2012 there were 129 peace officers statewide trained as Drug Recognition Experts (DREs) and by June of 2018 there were 214. Additionally, hundreds of additional peace officers have also received training in Advanced Roadside Impaired Driving Enforcement (ARIDE).

Figure 6 depicts results from a study that examined Delta-9 THC concentration, subjective high, and performance of subjects.³³ It shows that THC concentration peaks early, but the impairing effects on driving-related performance tasks and subjective high continue long after the peak concentration. This suggests that there are performance deficits that follow the peak of THC concentration. Furthermore, high THC concentration in whole-blood does not perfectly correspond to impairment.

²⁸ In 2017 the Colorado General Assembly enacted House Bill 1315, mandating the Division of Criminal Justice (DCJ) in the Colorado Department of Public Safety collect and analyze specific data regarding driving under the influence of drugs and alcohol. It includes a requirement to report on the number of convictions with evidentiary test results indicating impairment by alcohol, marijuana, Schedule I drugs (C.R.S., 18-18-203), other drugs, or any combination of these. This report is available at http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf. Much of the information presented in this section is excerpted from this report.

²⁹ C.R.S. 42-4-1301.

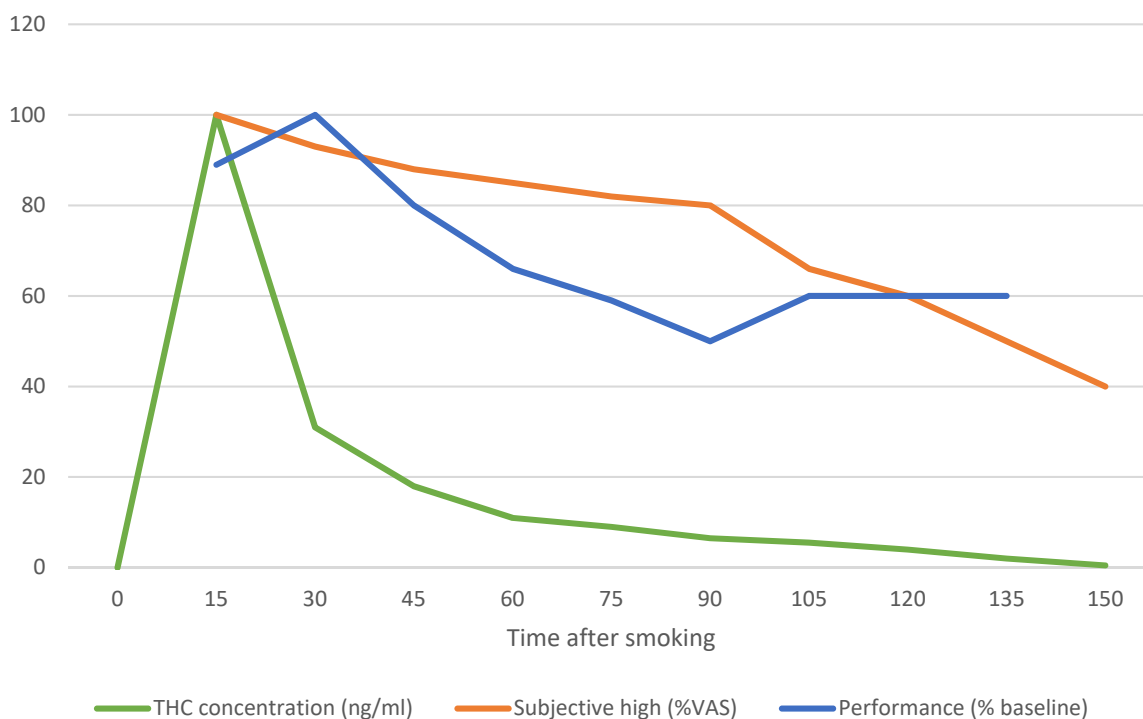
³⁰ C.R.S. 42-4-1301 (6)(a)(IV).

³¹ An officer may also transport a suspect for blood screening when alcohol is the only substance suspected. There are evidentiary breath alcohol testers available to law enforcement that are easy to administer and that are available in jails and some police stations.

³² Atha, M. (2000). *Blood and urine drug testing for cannabinoids*, available at <http://www.idmu.co.uk/pdfs/drugtest.pdf>.

³³ Berghaus et al. 1998, Sticht and Käferstein 1998, and Robbe 1994 as cited in Compton, R. (2017, July). *Marijuana-Impaired Driving - A Report to Congress*. (DOT HS 812 440). Washington, DC: National Highway Traffic Safety Administration.

Figure 6. Time course of Delta-9 THC concentration, subjective high, and performance



Source: Berghaus et al. (1998); Sticht and Käferstein (1998); and Robbe (1994) as cited in Compton (2017).

Further compounding the problem of linking whole blood concentrations of THC with impairment is the context of individual consumption. Karschner et al. (2009) found that chronic cannabis users had measurable concentrations of Delta-9 THC during a seven-day abstinence period. The highest level observed at the conclusion of the seven days was 3.0 ng/mL, as a result of THC being stored in fat and its ability to slowly release from the tissue.³⁴ This becomes a problem for frequent and medicinal users who may continuously have THC detectable in their blood without noticeable impairing effects.

Despite the complicated relationship between the pharmacokinetics of cannabis and impairment, there have been developments in oral fluid (OF) roadside tests to detect cannabis. The benefits of this exam are many, but there are also many caveats. The Society of Forensic Toxicologists indicated that OF concentrations of THC were correlated with blood levels after three hours, and one study found that passive exposure to cannabis may result in a positive OF screen.^{35,36} In a review of the literature, NHTSA

³⁴ Experimental protocol with abstinence monitored, not self-reported, on 25 subjects. See Karschner, E. L., Schwilke, E. W., Lowe, R. H., Darxin, D., Pope, H. G., Hering, R., Lud Cadet, J., & Huestis, M. A. (2009). Do Δ^9 -tetrahydrocannabinol concentrations indicate recent use in chronic cannabis users? *Addiction*, 104(12), 2041-2048. doi: 10.1111/j.1360-0443.2009.02705.x.

³⁵ See Oral Fluid FAQs document from the Society of Forensic Toxicologists at http://www.soft-tox.org/files/2017_OF_FAQ.pdf.

³⁶ Passive, non-smoking, participants showed some presence of THC in OF, but at much lower levels than observed for actively smoking participants and under extreme secondhand exposure. See Cone, E. J., Bigelow, G. E., Hermann, E. S., Mitchell, J. M., LoDico, C., Flegel, R., & Vandrey, R. (2015). Nonsmoker exposure to secondhand cannabis smoke. III. Oral fluid and blood drug concentrations and corresponding subjective effects. *Journal of Analytical Toxicology*, 39, 497-509. doi:10.1093/jat/bkv070.

indicated that these screening devices “have not been shown to be completely reliable and accurate” in its 2017 *Marijuana-Impaired Driving* report.³⁷ THC concentrations in OF fluid are known to have large variability among occasional and heavy users. Furthermore, the peak of THC concentration varies depending on the method of consumption, with higher concentrations and an initial spike in concentration when smoked as opposed to when ingested.

Marijuana and Driving

The information in this section was excerpted from the study of impaired driving published pursuant to HB 17-1315, which analyzed data for 2016.³⁸ In 2016, cannabis screens were conducted for 3,946 of the 27,244 case filings (approximately 14.5%). Of these, about a quarter (26.9%, n=1,061) of test results indicated that no cannabinoids were detected.³⁹ However, the 26.9% figure may be an underestimate because there is not always a record that indicates a cannabinoid screen was performed, even if marijuana metabolites were found. For example, in cases when the 9-panel drug screen does not return any positive results, it is not possible to confirm that a drug toxicology screen existed. Efforts are underway to obtain additional data to avoid this issue in future analyses.

Among those cases with a positive cannabinoid screen, 73.1% (n=2,885) were further confirmed for cannabis metabolites,⁴⁰ establishing the presence of Delta-9 THC, the primary psychoactive ingredient in marijuana (Table 11). The presence of Delta-9 THC typically indicates recent use of cannabis. Quantitative values of Delta-9 THC ranged from 1.0 ng/mL to 73.0 ng/mL, with a median of 5.9 and a mean of 8.7 ng/mL.

Table 11 shows that, for those 2,885 cases that had a positive cannabinoid screen and a follow-up confirmation for cannabis metabolites, 13.7% of cannabis metabolite confirmations did not detect Delta-9 THC and 47.5% detected Delta-9 THC at 5.0 ng/mL or above.

³⁷ Compton, R. (2017, July). *Marijuana-Impaired Driving - A Report to Congress*. (DOT HS 812 440). Washington, DC: National Highway Traffic Safety Administration. See <https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812440-marijuana-impaired-driving-report-to-congress.pdf>.

³⁸ Bui, B. & Reed, J. (2018). *Driving under the influence of drugs and alcohol: A report pursuant to House Bill 17-1315*. Lakewood, CO: Colorado Division of Criminal Justice. Available at http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf

³⁹ This is an enzyme-linked immunosorbent assay (ELISA) screen that primarily targets THC-COOH.

⁴⁰ The confirmation test is done via liquid chromatography tandem mass spectrometry.

Table 11. Delta-9 THC groups for those with THC confirmation tests (2016)

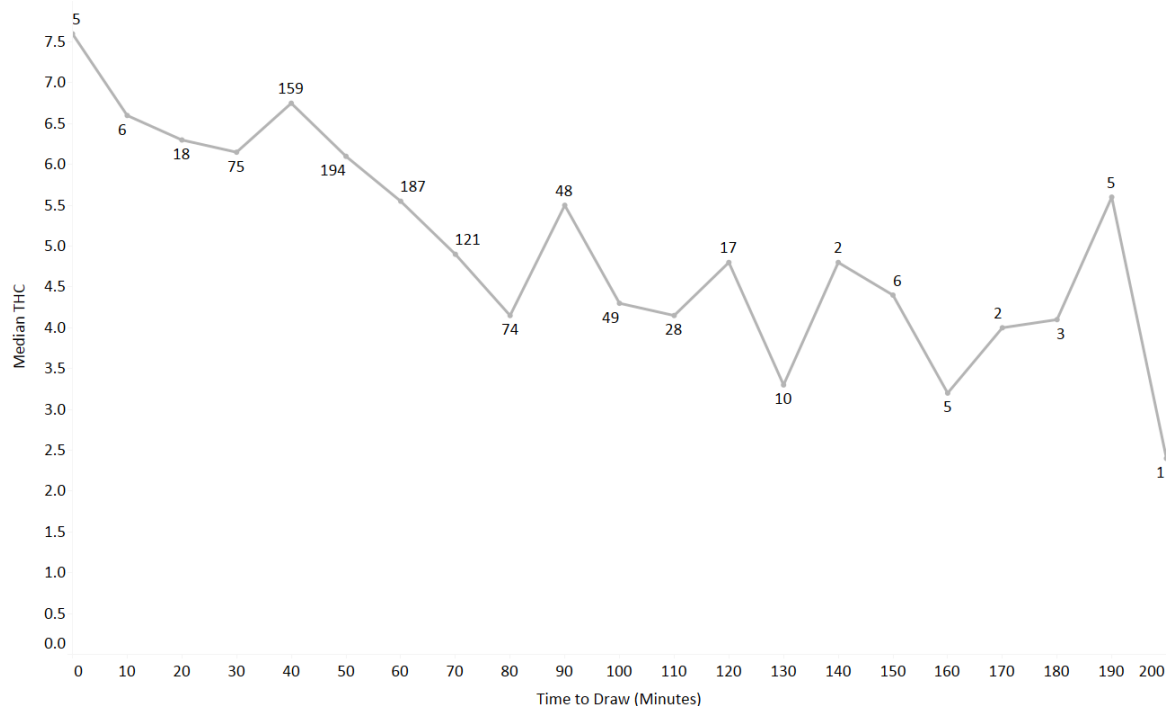
THC level	CBI		ChemaTox		Total	
	n	%	n	%	n	%
Not Detected	114	9.1%	282	17.3%	396	13.7%
Present but <1.0	40	3.2%	50	3.1%	90	3.1%
1.0 - 4.9	425	33.9%	605	37.1%	1,030	35.7%
5.0+	674	53.8%	695	42.6%	1,369	47.5%
Total	1,253	100.0%	1,632	100.0%*	2,885	100.0%

*Sum is greater than 100.0% due to rounding.

Source: State Judicial Department, Denver County Court, CBI, and ChemaTox, analyzed by the Division of Criminal Justice. Excerpted from: Bui, B. & Reed, J. (2018). *Driving under the influence of drugs and alcohol: A report pursuant to House Bill 17-1315*. Lakewood, CO: Colorado Division of Criminal Justice. http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf

Time to Marijuana Test

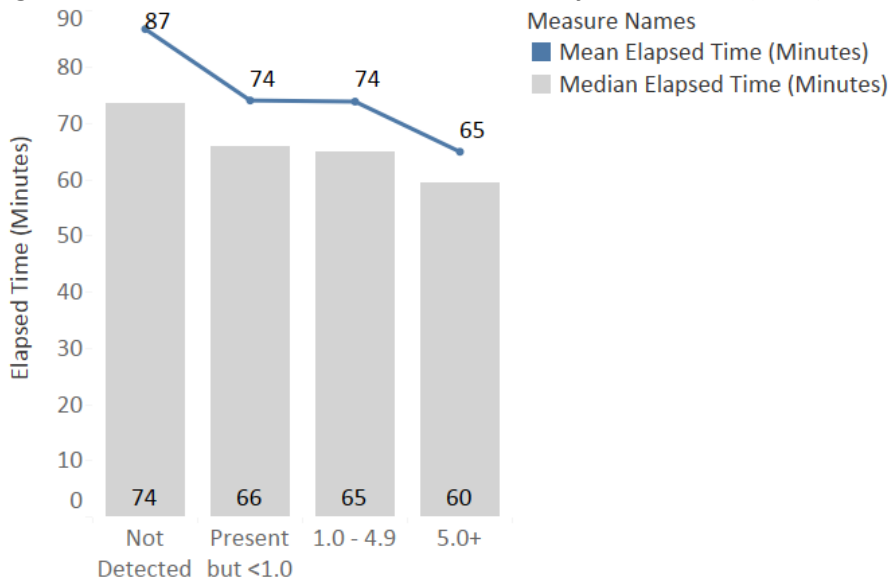
Time to blood draw by median Delta-9 THC values can be seen in Figure 7, including the number of cases at each time interval. Cases with an elapsed time of more than 200 minutes were excluded from the analysis. The majority of tests were completed at the 40- to 60-minute time intervals. Figure 7 reflects that Delta-9 THC levels were higher when the elapsed time to blood draw was shorter, reflecting the dissipation of Delta-9 THC levels in the blood.

Figure 7. Median Delta-9 THC value by time to test and number of cases (2016)

Source: State Judicial Department, Denver County Court, and ChemaTox, analyzed by the Division of Criminal Justice. Excerpted from: Bui, B. & Reed, J. (2018). *Driving under the influence of drugs and alcohol: A report pursuant to House Bill 17-1315*. Lakewood, CO: Colorado Division of Criminal Justice. http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf

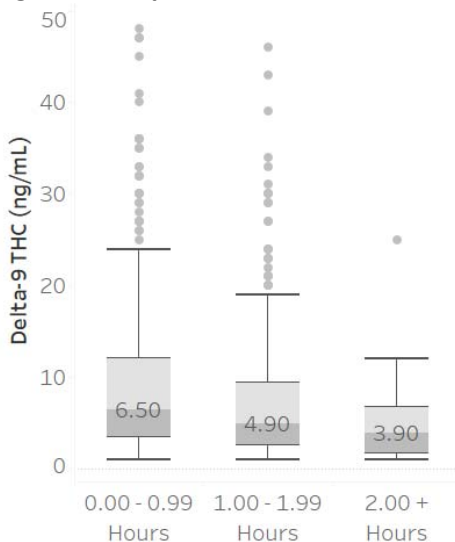
Figure 8 depicts the mean and median elapsed time for cases with a positive cannabinoid screen along with offense time, draw time, and positive values of Delta-9 THC. The median and mean of the elapsed time for each Delta-9 THC bin decreases as the THC values increase. This aligns with evidence in the research literature that suggests Delta-9 THC peaks early and then quickly dissipates, as also reflected in Figure 6. The same pattern is shown in Figure 9.

Figure 8. Mean and median Delta-9 THC value by time-to-test (2016)



Source: State Judicial Department, Denver County Court, and ChemaTox, analyzed by the Division of Criminal Justice. Excerpted from: Bui, B. & Reed, J. (2018). *Driving under the influence of drugs and alcohol: A report pursuant to House Bill 17-1315*. Lakewood, CO: Colorado Division of Criminal Justice. http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf

Figure 9. Boxplot of Delta-9 THC distribution and time-to-test categories (2016)



Source: State Judicial Department, Denver County Court, and ChemaTox, analyzed by the Division of Criminal Justice. Excerpted from: Bui, B. & Reed, J. (2018). *Driving under the influence of drugs and alcohol: A report pursuant to House Bill 17-1315*. Lakewood, CO: Colorado Division of Criminal Justice. http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf

Common Charges Associated with Marijuana

A total of 5,773 final non-DUI offense charges were associated with the presence of Delta-9 THC in 2016.⁴¹ Similar to those charges associated with alcohol, the top three charges were careless driving (n=547), failure to display proof of insurance (n=495), and lane usage violation (n=431). Over 400 charges (n=402) were associated with speeding and, of these, 52.7% (n=212) had only Delta-9 THC present (data not presented). These speeding charges are contrary to anecdotes that cannabis users drive slower to compensate for deficits in driving-related skills.

Alcohol and Marijuana in Combination

Table 12 shows both BAC cases, cannabinoid screens, and Delta-9 THC cases as a proportion of all DUI case filings, including case filings with no toxicology test match. The latter filings are included in Table 12 to show the frequency that cases were NOT tested when BAC is 0.08+. Specifically, 89.3% (n=12,163) of cases with BAC at 0.08+ were not further screened for cannabinoids while 56.2% (n=273) of cases with BAC < 0.05 were screened for cannabinoids. The most case filings with both alcohol and THC tests fell in the categories with BAC values of 0.08+ and Delta-9 THC values between 1.0 and 4.9 ng/mL (n=431).

Table 12. BAC group, cannabinoid screen, and THC group test outcome (2016)

BAC	No Cannabinoid Screen	No Cannabinoid Detected	Delta-9 THC Confirmation Tests				Sum
			Not Detected	Present but <1.0	1.0 - 4.9	5.0+	
Not Detected	49	132	40	6	78	124	429
< 0.05	273	37	18	6	64	88	486
0.05 - 0.079	1,224	42	16	4	64	39	1,389
0.08 +	12,163	482	172	37	431	330	13,620
No BAC test	9,589	363	150	37	393	788	11,320
Total	23,298	1,061	396	90	1,030	1,369	27,244

Source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD, analyzed by the Division of Criminal Justice. Excerpted from: Bui, B. & Reed, J. (2018). *Driving under the influence of drugs and alcohol: A report pursuant to House Bill 17-1315*. Lakewood, CO: Colorado Division of Criminal Justice. http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf

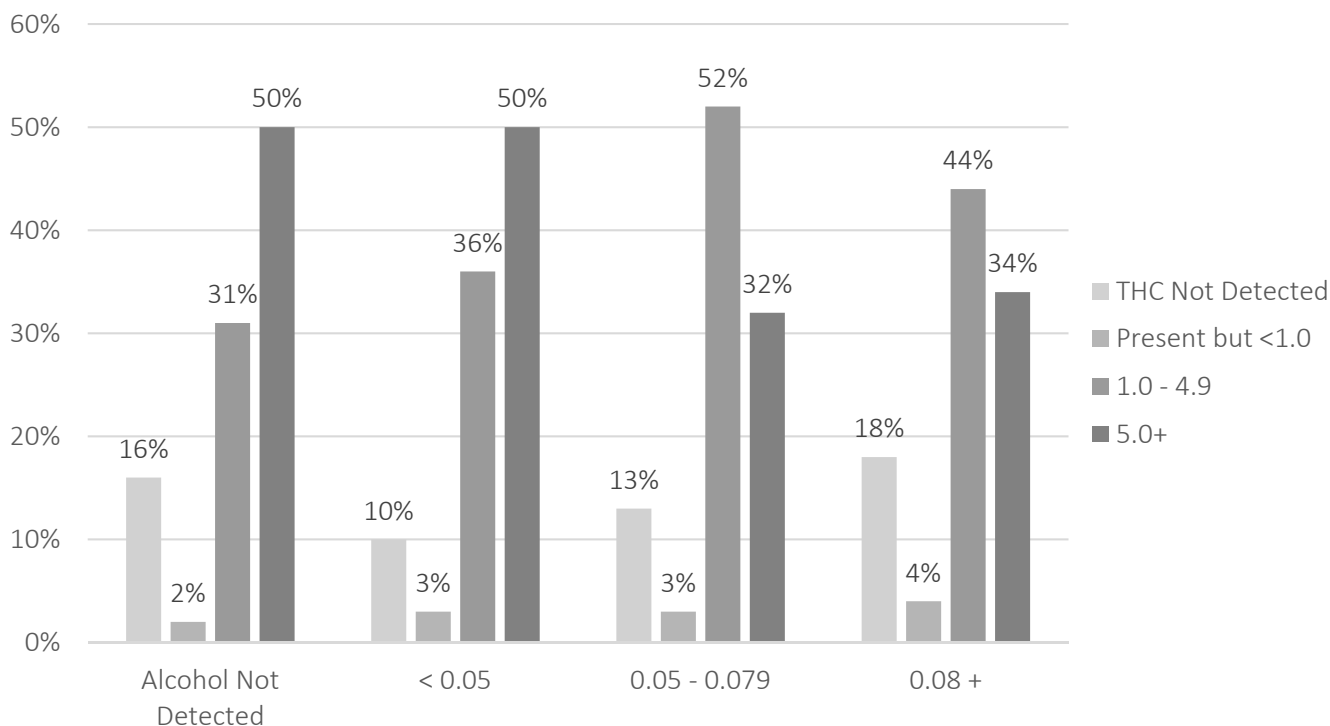
Figure 10 shows only cases that were tested for alcohol and had a THC confirmation (n=1,517). Approximately half (52.0%, n=64) of those with a BAC level between 0.05 and 0.079 had Delta-9 THC values ranging from 1.0 to 4.9 ng/mL, while less than half (44.0%, n=431) with a BAC that was greater than or equal to 0.08 were in that same THC group. Of those with no alcohol detected and a THC confirmation, about 50% (n=124) had 5.0+ ng/mL of Delta-9 THC blood level. The same was true for those with alcohol detected at less than 0.05 (50.0%, n=88).

Overall, the majority (70.0%, n=1,063) of defendants who were tested for both alcohol and marijuana tested positive for both substances. It is important to note again that these figures likely underrepresent the presence of marijuana and other drugs because, during a traffic stop, officers may confirm the

⁴¹ See Bui, B. & Reed, J. (2018), *Driving under the influence of drugs and alcohol: A report pursuant to House Bill 17-1315*, Appendix M: Top 20 Common Final Charges Associated with Delta-9 THC Presence. Available at http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf.

presence of alcohol above the *per se* limit and stop further testing at that point.

Figure 10. BAC group by THC group bar graph (2016)



Source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD, analyzed by the Division of Criminal Justice. Excerpted from: Bui, B. & Reed, J. (2018). *Driving under the influence of drugs and alcohol: A report pursuant to House Bill 17-1315*. Lakewood, CO: Colorado Division of Criminal Justice. http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf

Polydrug use

In this analysis, "drugs" are presented in three categories: alcohol, THC, and "other drug," which includes illicit drugs and prescription drugs. Of the 17,824 cases where toxicology tests were conducted for alcohol as well as other drugs, the vast majority (86.4%, n=15,395) of suspects were found to have one drug present, while 12.7% (n=2,264) cases had more than one drug present (see Table 13). A very small percentage (0.9%, n=165) of toxicology results showed no drug detected -- i.e., no alcohol, THC or other drugs. Polydrug use is the detection of any amount of two or more drugs in a toxicology test. Again, please note that polydrug use is likely underrepresented because, when alcohol is obviously present, many officers do not request further drug testing due to the cost and time associated with additional testing.

Keeping in mind that this may be an underestimate, nevertheless, 12.7% (n=2,264) of cases with toxicology findings in 2016 had more than one drug present (see Table 13). Other drugs included illicit drugs and prescription drugs. A very small percentage (0.9%, n=165) of toxicology results showed no drug detected, while 86.4% (n=15,395) of suspects were found to have one drug present.

Alcohol was the primary substance detected for those with one drug present, followed by marijuana and, finally, other drugs. Of those cases with only one drug present, 91.3% of cases had alcohol only present compared to 6.2% of cases with only marijuana present. However, note that not all alcohol tests had a drug screen and not all drugs are included in a drug screen.

When further examining the 12.7% of cases with polydrug use, 36.6% were a combination of alcohol and marijuana and 20.7% involved marijuana and an additional drug. Another 10.3% of polydrug cases involved alcohol, marijuana, and at least one other drug. Almost half (46.9%) of all polydrug records had both alcohol and Delta-9 THC present. Additionally, 15.5% of the 2,264 polydrug cases had no alcohol or marijuana use reported (see Table 13).

Again, these results should be interpreted cautiously because of the practice of limited drug testing when the presence of alcohol is obvious to the arresting officer.

Table 13. Presence of any drug and polydrug use (2016)

Drug Count	Drug(s) Detected	n	% Subtotal	% Total
No Drug	None Detected	165	100.0%	0.9%
One Drug	Alcohol Only	14,052	91.3%	78.8%
	THC Only	957	6.2%	5.4%
	Single Other Drug	386	2.5%	2.2%
	Subtotal	15,395	100.0%	
Polydrug	Alcohol and THC	829	36.6%	4.7%
	Alcohol and Other	380	16.8%	2.1%
	THC and Other	469	20.7%	2.6%
	Alcohol, THC, and Other(s)	234	10.3%	1.3%
	Polydrug Not Alcohol or THC	352	15.5%	2.0%
	Subtotal	2,264	100.0%	
Total			17,824	100.0%

Source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD, analyzed by the Division of Criminal Justice. Excerpted from: Bui, B. & Reed, J. (2018). *Driving under the influence of drugs and alcohol: A report pursuant to House Bill 17-1315*. Lakewood, CO: Colorado Division of Criminal Justice. At http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf

Marijuana and DUI Dispositions

Table 14 shows the dispositions of DUI charges with a Delta-9 THC confirmation test (n=2,676). As with the previous table, this information includes all other charges that were amended, but does not show the specific disposition of final charges that were not DUI charges. The highest proportion of guilty dispositions occurred for those in the '5.0+ ng' (74.7%, n=947) category.

Overall, more than half of all cases in each THC category had a disposition of guilty. However, three out of the four THC categories had dismissal rates of around 20.0% while one, the '5.0+ ng' group, had a dismissal rate of only 9.7%.

Table 14. Disposition of DUI charges by THC group (2016)

Disposition	Not Detected		Present but <1.0ng		1.0 - 4.9ng		5.0+ng	
	n	%	n	%	n	%	n	%
Guilty	266	73.5%	57	65.5%	641	66.8%	947	74.7%
Deferred	8	2.2%	7	8.0%	65	6.8%	120	9.5%
Deferred Dismissed	3	0.8%	1	1.1%	29	3.0%	42	3.3%
Diversion							2	0.2%
Dismissed	79	21.8%	19	21.8%	196	20.4%	123	9.7%
Not Guilty							11	0.9%
Non-DUI Disposition**	6	1.7%	3	3.4%	28	2.9%	23	1.8%
Total	362	100.0%	87	100.0%*	959	100.0%*	1268	100.0%*

*Sum is greater than 100.0% due to rounding.

**Aggregated dispositions for final charges that were not DUIs.

Source: State Judicial Department, Denver County Court, CBI, and ChemaTox, analyzed by the Division of Criminal Justice. Excerpted from: Bui, B. & Reed, J. (2018). *Driving under the influence of drugs and alcohol: A report pursuant to House Bill 17-1315*. Lakewood, CO: Colorado Division of Criminal Justice. http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf

Alcohol, Marijuana, and DUI Court Dispositions

Median BAC and Delta-9 THC values by court disposition can be seen in Table 15. A median BAC of 0.15 and a median THC of 5.9 ng/ml were found across dispositions. Guilty dispositions had medians of 0.16 and 6.3 for BAC and THC, respectively. Dispositions of dismissed cases had medians of 0.08 and 3.9 for BAC and THC, respectively.

Table 15. Median BAC and median Delta-9 THC by disposition (2016)

Disposition	BAC		Delta-9 THC	
	Median	Case Count*	Median	Case Count**
Guilty	0.16	12,254	6.3	1,583
Deferred	0.10	701	7.2	185
Deferred Dismissed	0.10	522	5.5	71
Diversion	0.13	22	15.5	2
Dismissed	0.08	972	3.9	318
Not Guilty	0.17	40	9.7	11
Not Proven	0.12	2		
Non-DUI Disposition***	0.07	166	4.7	51
Overall	0.15	14,679	5.9	2,221

*Includes those with dispositions and a quantitative value for BAC.

** Includes those with dispositions and a quantitative value for Delta-9 THC.

***Aggregated dispositions for final charges that were not DUIs.

Source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD, analyzed by the Division of Criminal Justice. Excerpted from: Bui, B. & Reed, J. (2018). *Driving under the influence of drugs and alcohol: A report pursuant to House Bill 17-1315*. Lakewood, CO: Colorado Division of Criminal Justice. http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf

Dispositions of ‘Guilty’, ‘Deferred’, and ‘Deferred Dismissed’ were combined to find overall conviction rates for the various categories of BAC and Delta-9 THC presence (Table 16). Final non-DUI charges were included in the analysis, but a guilty disposition for a non-DUI charge was not counted as a DUI conviction. This analysis involved of 1,431 case filings with results for both alcohol and Delta-9 THC. Only 38 of these toxicology results indicated no alcohol or marijuana was present. A little over a quarter of all cases that had dispositions and tests for both alcohol and Delta-9 THC fell in the 0.08+ BAC Group and in the 1.0 – 4.9 THC Group (28.2%, n=403).

Generally, in 2016, conviction rates were the highest for BAC values of 0.08+ (93.2% to 95.9%). This was followed by conviction rates for Delta-9 THC values of 5.0+ ng/mL with rates ranging from 84.3% to 95.9%. These findings suggest that convictions are more common at the *per se* level for alcohol and at the permissible inference level for Delta-9 THC.

Table 16. BAC group and Delta-9 THC group conviction rate of final DUI charges (2016)

BAC level	THC level								Grand Total
	Not Detected		Present but <1.0		1.0 - 4.9		5.0+		
	Total Cases	Conviction Rate	Total Cases	Conviction Rate	Total Cases	Conviction Rate	Total Cases	Conviction Rate	
Not Detected	38	63.2%*	6	50.0%	70	57.1%	115	84.3%	229
< 0.05	16	50.0%	5	20.0%	63	60.3%	85	88.2%	169
0.05 - 0.079	14	92.9%	4	75.0%	60	81.7%	34	85.3%	112
0.08 +	162	93.2%	36	94.4%	403	94.8%	320	95.9%	921
Grand Total	230		51		596		554		1431

*Final non-DUI charges were included in the analysis.

Source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD, analyzed by the Division of Criminal Justice. Excerpted from: Bui, B. & Reed, J. (2018). *Driving under the influence of drugs and alcohol: A report pursuant to House Bill 17-1315*. Lakewood, CO: Colorado Division of Criminal Justice.

http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf

Toxicology

A total of ten labs are currently certified by the CDPHE to perform toxicology testing for DUI/DUID purposes. Only two of the 10 labs routinely perform blood drug analysis for DUI/DUID where a fatality has not occurred; these are the Colorado Bureau of Investigation and ChemaTox Laboratory, Inc.

ChemaTox is a private lab based in Boulder that performs screenings for more than 160 law enforcement agencies. In 2016, Chematox performed 3,208 toxicology screenings, and in the first eight months of 2017 it performed 2,399 (Table 17). Of those 5,607 during the two-year period, 62% tested positive on the initial cannabinoid screen for metabolites of THC, which can be present for weeks after consumption. Of those that tested positive on the initial screen, about 80% tested positive for psychoactive Delta-9 THC at 1ng/mL or greater.

Table 17. Toxicology screening for cannabinoids and Delta-9 THC by ChemaTox Lab, 2013–2017

Year	Total screens	% positive cannabinoid screens	% Delta-9 THC 1ng/mL or higher
2013	4,333	58%	63%
2014	4,371	65%	67%
2015	3,798	63%	79%
2016	3,208	63%	79%
2017*	2,399	60%	81%

* January-August 2017.

Source: Sara Urfer, Chematox Laboratory.

Colorado State Patrol

The Colorado State Patrol (CSP) accounted for about 20% of all arrests for driving under the influence in Colorado in 2016.⁴² CSP began collecting information on the perceived impairing substance(s) of drivers at the beginning of 2014. CSP has the most drug recognition experts of any law enforcement agency in the state, with 65 (9% of all sworn personnel) as of June 2018. These factors combine to make CSP a good agency to use as a benchmark for issues related to impaired driving in Colorado.

According to the data collected by the State Patrol, the total number of reported DUIs dropped 15% between 2014 (5,705) and 2017 (4,849) (Table 18). Summonses in which alcohol was the only substance decreased by 949 (-20%). The number of summonses in which marijuana or marijuana-in-combination was recorded increased by 35 (5%) between 2014 and 2017. The prevalence of marijuana or marijuana-in-combination (marijuana only, marijuana and alcohol, and marijuana and other drugs) as the perceived impairing substance increased from 12% of all DUIs in 2014 to 15% in 2017.

Table 18. Driving under the influence citations issued by Colorado State Patrol, by perceived impairing substance, 2014–2017

	2014		2015		2016		2017	
	N	%	N	%	N	%	N	%
Total DUI citations	5,705	100%	4,898	100%	4,605	100%	4,849	100%
Alcohol only	4,820	84%	4,042	83%	3,610	78%	3,871	80%
Marijuana only	359	6%	335	7%	388	8%	335	7%
Marijuana & alcohol	213	4%	210	4%	239	5%	216	4%
Marijuana & other drugs	112	2%	107	2%	153	3%	168	3%
Other drugs	201	4%	204	4%	245	5%	259	5%
Total marijuana citations	684	12%	652	13%	780	17%	719	15%

Source: Data provided by the Colorado State Patrol.

Note: Substance is based on trained trooper perception and may not reflect results from toxicology tests.

⁴² Colorado Bureau of Investigation (2017). *Crime in Colorado, 2016*.

Local Police Departments

The Denver Police Department began collecting data on DUID in 2013 (Table 19). The number of cases of driving under the influence of marijuana or marijuana-in-combination was small but increased from 33 in 2013 to 63 in 2017. In 2013, these accounted for 1.1% of all DUI citations in Denver and in 2017 these accounted for 3.3% of all DUI citations.

Table 19. Driving under the influence citations issued by Denver Police Department, by impairment reason, 2013–2017

	2013	2014	2015	2016	2017
DUI Total	2,896	2,619	2,532	2,262	1,895
DUI Drugs	84	129	148	122	119
Marijuana	33	66	73	63	63
Other drugs	51	63	75	59	56

Note: Marijuana includes marijuana alone or in combination with alcohol or other drugs. Other includes other drugs alone or in combination with alcohol.

Source: Denver Office of Excise and License (2018).

The Aurora Police Department also provided data regarding driving under the influence of marijuana. In 2017, 9.2% of DUI citations involved a driver who tested positive for Delta-9 THC (Table 20).

Table 20. Driving under the influence citations issued by Aurora Police Department, by marijuana involvement, 2014–2017

	2014	2015	2016	2017
DUI Total	1,995	1,684	1,374	1,386
Marijuana confirmed	60	72	178	128

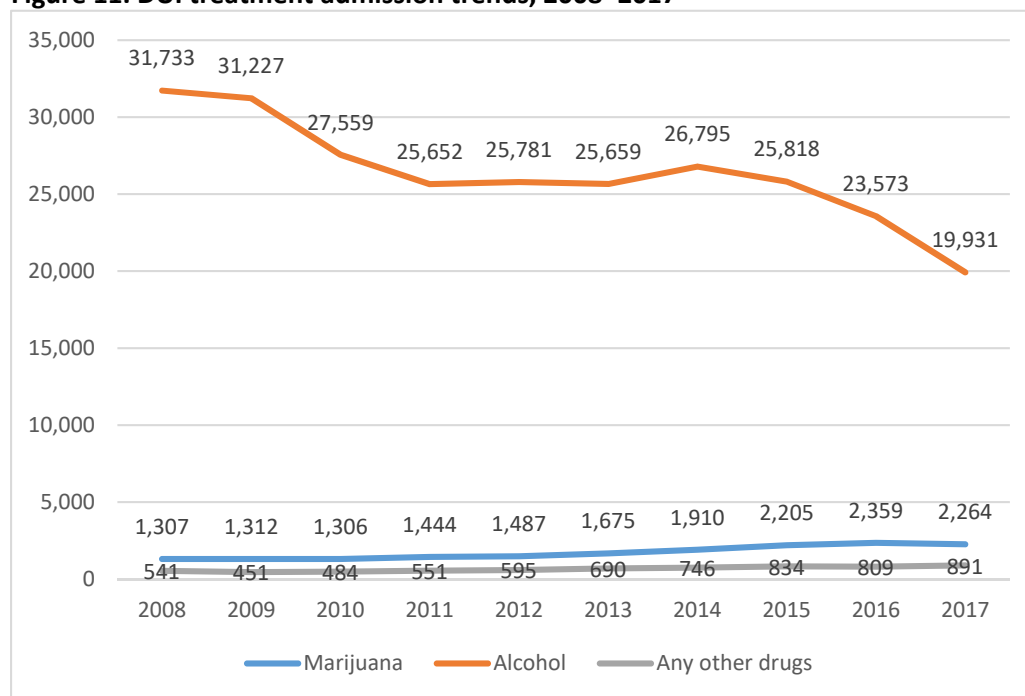
Note: "Marijuana confirmed" indicates a positive toxicology test for Delta-9 THC.

Source: Aurora Police Department (2018).

Mandated Treatment for Driving Under the Influence

Drivers convicted of driving under the influence in Colorado are mandated to attend approved treatment classes before their driver's license privilege can be reinstated. When they are admitted into treatment, the primary drug of abuse is captured in the Drug/Alcohol Coordinated Data System (DACODS). Admissions for DUI treatment where alcohol was reported as the primary drug dropped 23% from 2002 to 2017 (Figure 11). In that same period, admissions in which marijuana was the primary drug increased by 52%.

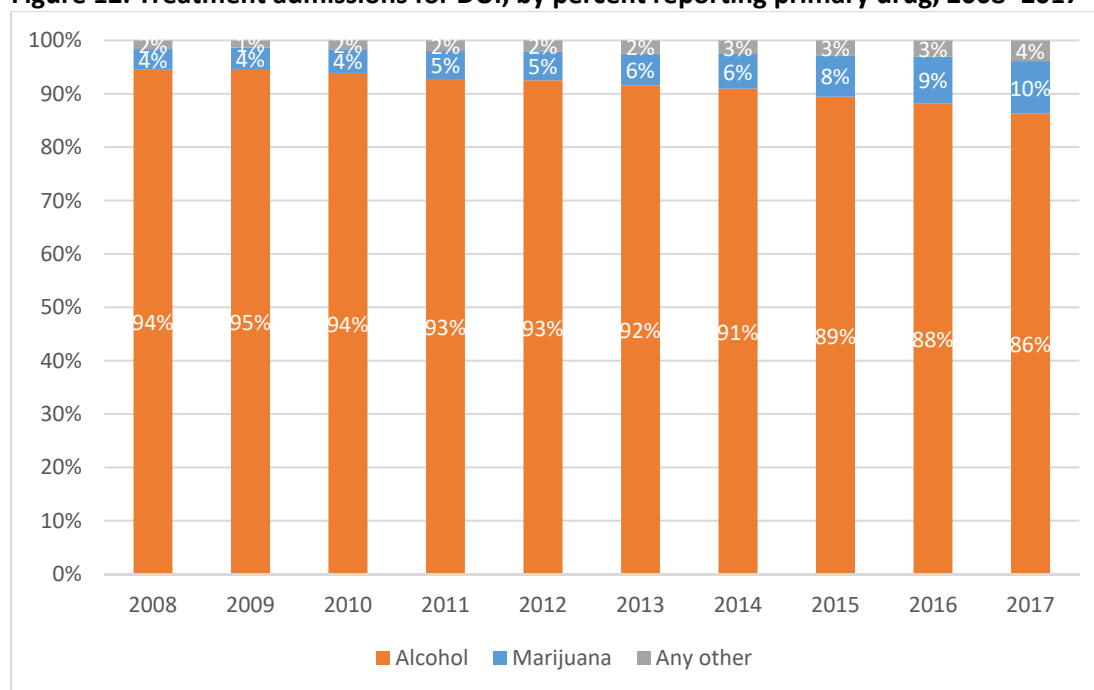
Figure 11. DUI treatment admission trends, 2008–2017



Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System, analyzed by the Division of Criminal Justice.

The proportion of individuals participating in DUI treatment with alcohol as the primary drug declined from 93% in 2012 to 86% in 2017. During that same time, clients reporting marijuana as their primary drug increased from 5% to 10% of DUI admissions (Figure 12).

Figure 12. Treatment admissions for DUI, by percent reporting primary drug, 2008–2017

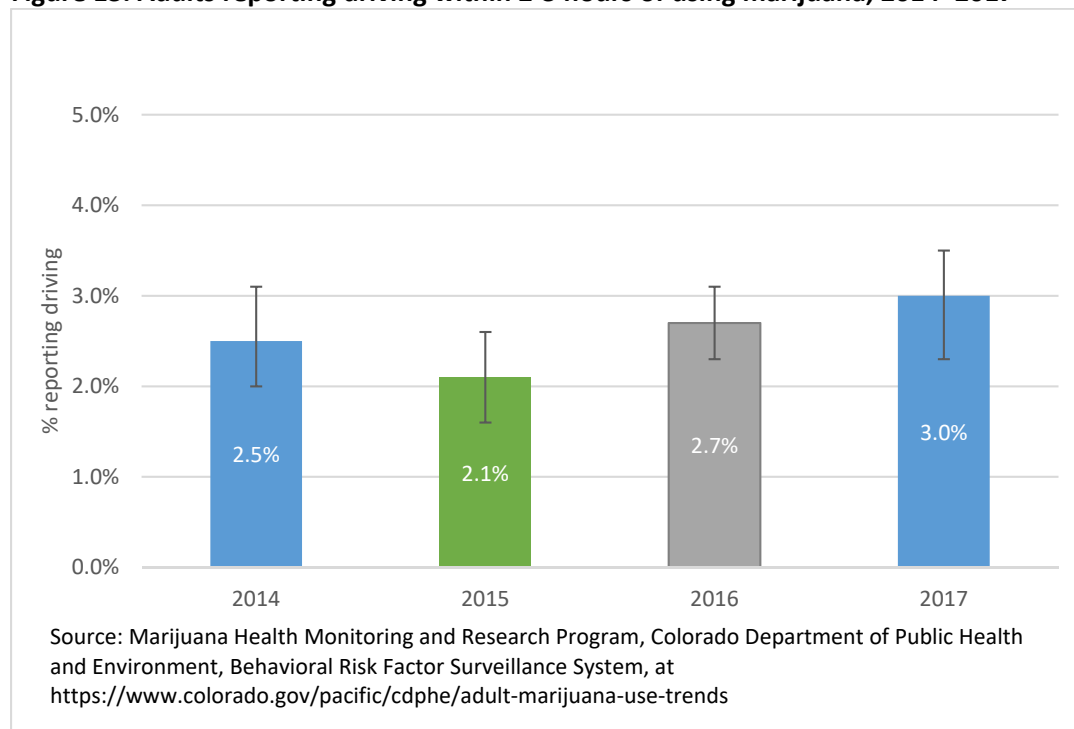


Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System, analyzed by the Division of Criminal Justice.

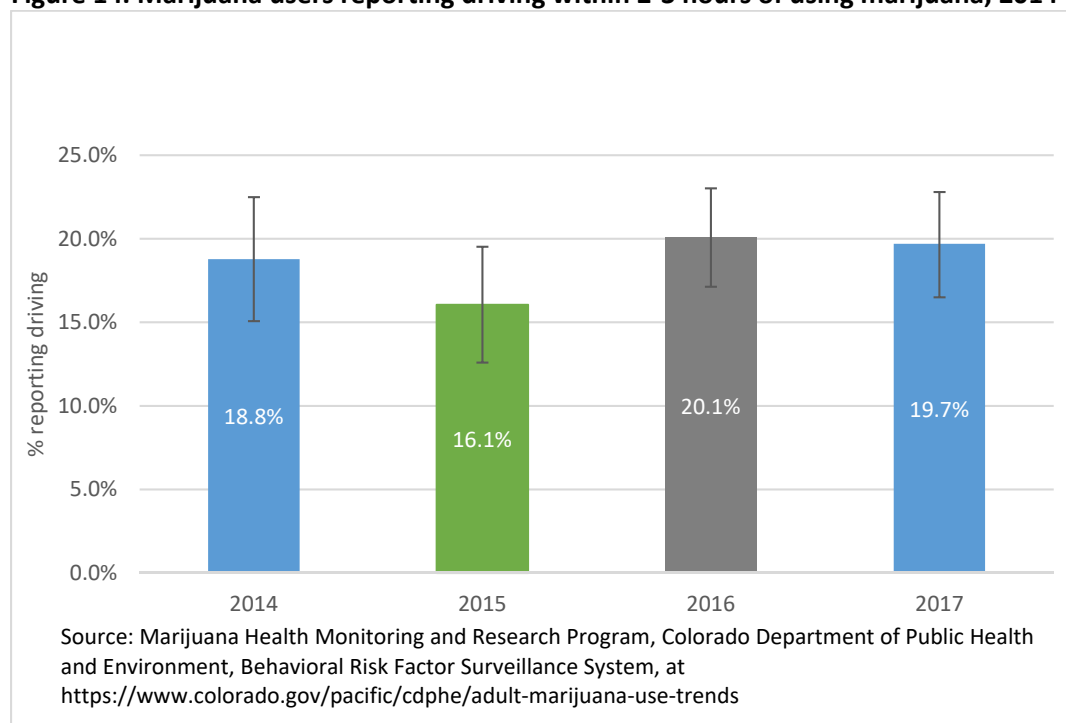
Reported Driving Behavior

Driving within two- to three-hours of marijuana use is a behavior asked about on the Behavioral Risk Factor Surveillance System survey.⁴³ Between 2% and 3% of adults reported driving within two- to three-hours of using marijuana, and there was no statistically significant change in this behavior between 2014 and 2017 (Figure 13). Figure 14 presents the results for those who reported current use of marijuana, with between 16% and 20% of adult users reporting driving within two- to three-hours of using marijuana. Again, there was no change in this finding over time.

Figure 13. Adults reporting driving within 2-3 hours of using marijuana, 2014–2017



⁴³ For more information on this survey, please see Section Three: Impact on Public Health and Behavioral Health Services.

Figure 14. Marijuana users reporting driving within 2-3 hours of using marijuana, 2014–2017

Fatality Analysis Reporting System

The Fatality Analysis Reporting System (FARS) is a program administered federally by the National Highway Traffic Safety Administration and statewide by the Colorado Department of Transportation (CDOT). FARS contains data derived from a census of fatal traffic crashes within the 50 states, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a traffic way customarily open to the public and must result in the death of at least one person (occupant of a vehicle or a non-motorist) within 30 days of the crash.

The FARS database includes 143 data elements that characterize the crash, the vehicles, and the people involved.⁴⁴ FARS includes information from toxicology testing of drivers and others involved in the crash when available. For the period of 2013-2017, the percentage of drivers tested for drugs remained consistent, at between 45% and 47%, according to information provided by CDOT. The status of the driver has an impact on testing prevalence, with 88% of deceased drivers tested compared to 18% of living drivers in 2017. This limits conclusions that can be drawn about the prevalence of DUI in Colorado.

Additionally, in 2013, the Rocky Mountain High Intensity Drug Trafficking Area (RMHIDTA) began working with CDOT to enhance the collection of toxicology data. In 2012, 9% of drivers had a drug test

⁴⁴ National Highway Traffic Safety Administration (2014), Fatality Analysis Reporting System, at <http://www-nrd.nhtsa.dot.gov/Pubs/811992.pdf>.

conducted, but the results were not reported to CDOT. The partnership between CDOT and RMHIDTA, where additional contact was made with coroners or law enforcement to obtain results, has virtually eliminated this problem of missing data. This improvement in the completeness of Colorado's FARS data, however, makes comparisons to years prior to 2013 difficult.

The type of testing reported also precludes making any definitive statements about driver impairment. The primary compound in cannabis that produces psychoactive effects is Delta-9-THC, which begins to dissipate in blood rapidly after consumption. There are other active metabolites of THC (11-OH-THC) which dissipate quickly and inactive metabolites (THC-COOH) that are detectable in blood for longer periods of time.⁴⁵ It is not always possible to tell in the FARS data if the test detected psychoactive Delta-9-THC or the other metabolites of THC.

Information regarding the number of fatalities, drivers, and crashes, and the prevalence of drug and alcohol testing, is presented in Table 21. A little less than half of drivers (45%-47%) involved in fatal crashes were tested for alcohol and/or drugs. However, in about two-thirds of crashes there was at least one driver tested.

The number and percent of fatalities where the driver was impaired at a BAC \geq .08 is presented in Table 22. In 2017, a little over one-quarter (26%) of fatalities occurred when a driver was legally impaired by alcohol. The percent of fatalities with drivers who tested positive for Delta-9 THC at the 5 ng/mL level was 8% in 2017, down from 13% in 2016 (Table 23). It should be noted that the improved reporting for the specific level of Delta-9 THC occurred in 2016, which makes comparison to prior years invalid.

⁴⁵ Huestis, M., Henningfield, J., and Cone, E. (1992). Blood cannabinoids I: Absorption of THC and formation of 11-OH-THC and THC-COOH during and after marijuana smoking, *Journal of analytical toxicology*, 16, 276-282. Available at https://www.researchgate.net/publication/21817925_Blood_cannabinoids_I_absorption_of_THC_and_formation_of_11-OH-THC_and_THC-COOH_during_and_after_marijuana_smoking

Table 21. Colorado roadway fatalities' testing summary, 2013–2017

	2013	2014	2015	2016	2017
Fatalities	481	488	546	608	648
Fatalities with at least one driver drug tested	313	318	369	403	439
% fatalities with at least one driver drug tested	65%	65%	68%	66%	68%
Fatalities with at least one driver alcohol tested	345	338	391	414	448
% fatalities with at least one driver alcohol tested	72%	69%	72%	68%	69%
Drivers	627	684	787	880	940
Drivers drug tested	294	310	361	386	439
% drivers drug tested	47%	45%	46%	45%	47%
Drivers alcohol tested	337	339	397	408	455
% drivers alcohol tested	54%	50%	50%	46%	48%
Crashes	431	451	506	558	600
Crashes with at least one driver drug tested	274	286	334	357	396
% crashes with at least one driver drug tested	64%	63%	66%	64%	66%
Crashes with at least one driver alcohol tested	304	305	356	369	405
% crashes with at least one driver alcohol tested	71%	68%	70%	67%	68%

Source: Colorado Department of Transportation, Data Intelligence Group, Toxicology Data (2018).

Note: There is overlap in drivers tested for both alcohol and drugs.

Table 22. Colorado fatalities with drivers BAC \geq .08, 2013–2017

	2013	2014	2015	2016	2017
Total fatalities	481	488	546	608	648
N fatalities driver BAC \geq .08	142	160	151	161	177
% fatalities driver BAC \geq .08	30%	33%	28%	27%	27%

Source: National Highway Traffic Safety Administration, *Traffic Safety Facts: State Alcohol-Impaired Driving Estimates*.

Notes: a) NHTSA statistically imputes BAC results for drivers with missing tests, which allows them to base percentages on all fatalities rather than just those with a reported test.

Table 23. Colorado fatalities with driver's Delta-9 THC level \geq 5ng/ml, 2016–2017

	2016	2017
Fatalities with at least one driver drug tested	403	439
N fatalities driver Delta-9 THC level \geq 5ng/ml	52	35
% fatalities driver Delta-9 THC level \geq 5ng/ml	13%	8%

Source: Colorado Department of Transportation, Data Intelligence Group, Toxicology Data (2018).

Notes: A) Percentages are based only on fatal crashes where at least one driver in the crash was drug tested; B) Delta-9 THC level established in C.R.S. 42-4-1301 (6)(a) (IV) states "If at such time the driver's blood contained five nanograms or more of delta 9-tetrahydrocannabinol per milliliter in whole blood, as shown by analysis of the defendant's blood, such fact gives rise to a permissible inference that the defendant was under the influence of one or more drugs."

Reporting by CDOT regarding whether a driver in a fatal crash tested positive for a cannabinoid has been consistent since 2013. It is important to remember that presence of a cannabinoid does not indicate impairment from marijuana. The number of drivers testing positive for cannabinoid-only or cannabinoid-in-combination increased from 47 in 2013 to 133 in 2017 (Figure 15). The number of drivers in fatal crashes testing positive for cannabinoid-only increased from 18 to 48 during that same period. The percentage of drug-tested drivers who tested positive for some cannabinoid (alone or in combination with some other drug) increased from 16% in 2013 to 30% in 2017. However, only about half of all drivers involved in fatal crashes were tested for drugs.

The number of fatalities in which the driver tested positive for cannabinoid-only or cannabinoid-in-combination increased from 55 in 2013 to 139 in 2017 (Figure 16). The number of fatalities in which the driver tested positive for cannabinoid-only increased from 23 in 2013 to 46 in 2017. The percentage of all fatalities with a cannabinoid positive (alone or in combination) driver increased from 18% in 2013 to 32% in 2017. Again, it should be noted that only about half of all drivers were tested for drugs.

In 2016, CDOT improved data collection on the specific metabolites present in the blood of drivers, especially Delta-9 THC. Figure 17 presents the 2016 and 2017 data on drivers with Delta-9 THC detected in their blood. The number of drivers with *any* detectable Delta-9 THC increased from 71 (18.4% of tested drivers) in 2016 to 88 (20.0% of tested drivers) in 2017. However, when the drivers who test positive at the 5 ng/mL level were examined separately, there were 45 (11.7% of tested drivers) who tested positive at the 5 ng/mL⁴⁶ level in 2016 and 33 (7.5% of tested drivers) in 2017.

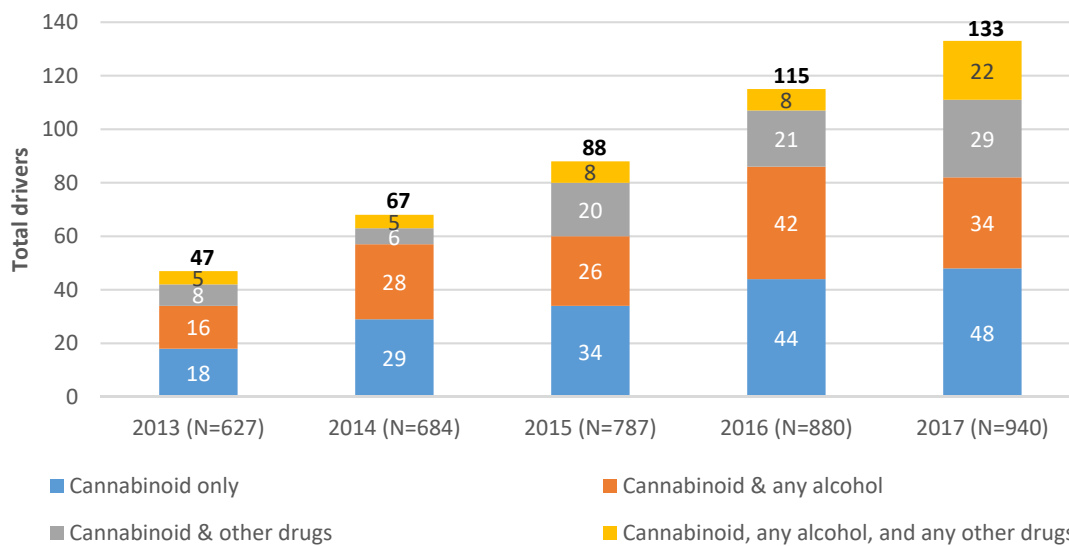
The number of fatalities where a driver tested positive for *any* Delta-9 THC increased from 77 in 2016 to 97 in 2017 (Figure 18). Fatalities where the driver tested positive at or above the 5 ng/mL level decreased from 52 in 2016 to 35 in 2017.

It should be noted that a recent study found that the annual changes in overall fatality rate for Colorado was similar to a group of control states pre- and post-legalization.⁴⁷

⁴⁶ Delta-9 THC level established in C.R.S. 42-4-1301 (6)(a) (IV) states "If at such time the driver's blood contained five nanograms or more of delta 9-tetrahydrocannabinol per milliliter in whole blood, as shown by analysis of the defendant's blood, such fact gives rise to a permissible inference that the defendant was under the influence of one or more drugs."

⁴⁷ Aydelotte, J. et al. (2017). Crash fatality rates after recreational marijuana legalization in Washington and Colorado. *American Journal of Public Health, 107*(8), 1329-1331.

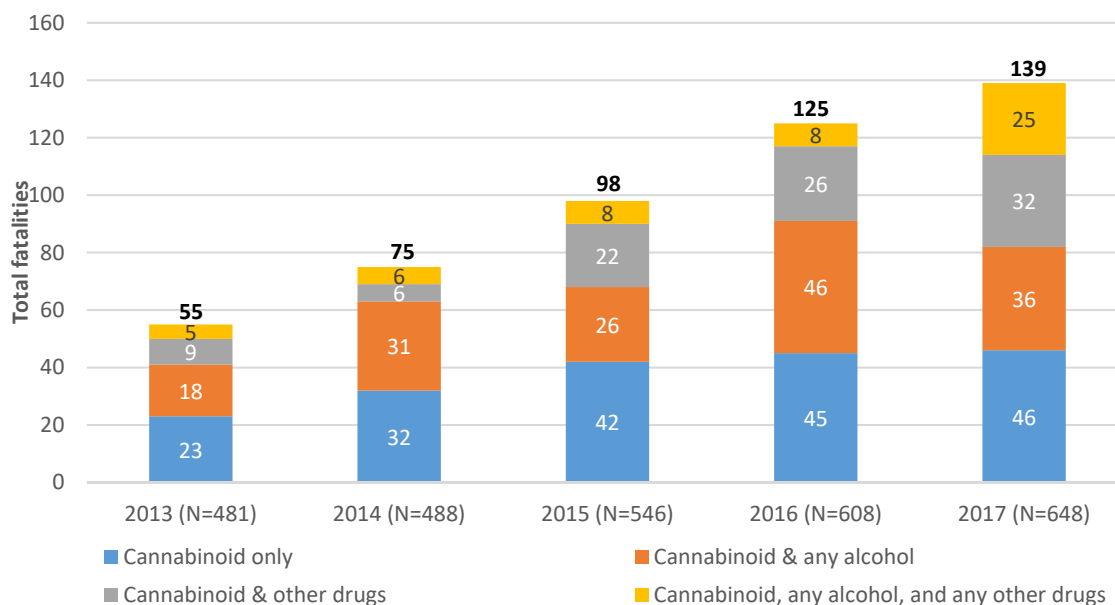
Figure 15. Colorado drivers in fatal crashes involving cannabinoids, 2013–2017



Source: Colorado Department of Transportation, Data Intelligence Group, Toxicology Data (2018).

Note: A) Numbers are based on toxicology results for drivers tested for drugs after a crash. See Table 21 for number and percent of drivers tested each year; B) the presence of a cannabinoid does not necessarily indicate recent use of marijuana or impairment.

Figure 16. Colorado fatalities involving drivers testing positive for cannabinoids, 2013–2017



Source: Colorado Department of Transportation, Data Intelligence Group, Toxicology Data (2018).

Note: A) Numbers are based on toxicology results where at least one driver was tested for drugs after a crash; see Table 21 for number and percent of drivers tested each year; B) the presence of a cannabinoid does not necessarily indicate recent use of marijuana or impairment.

Figure 17. Colorado: Drug tested drivers in fatal crashes, by Delta-9 THC level, 2016–2017

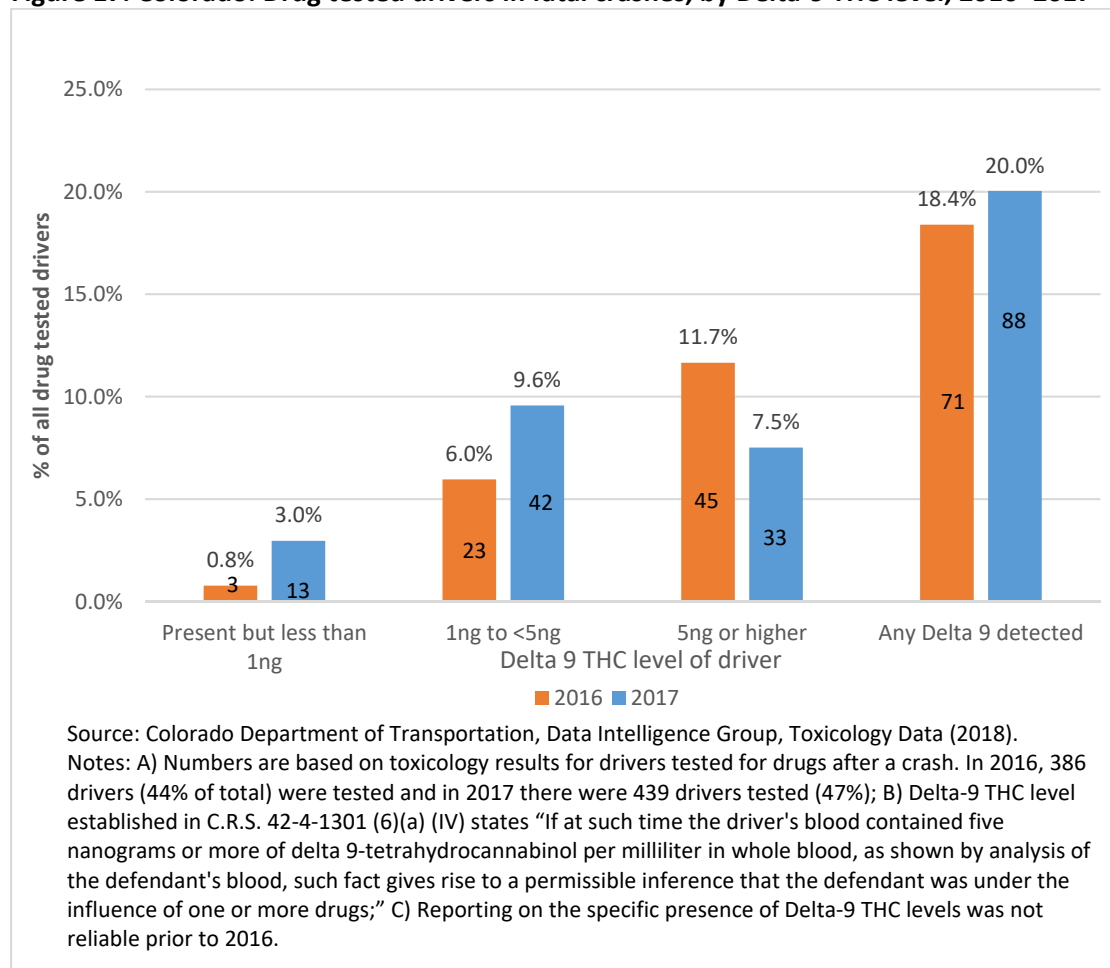
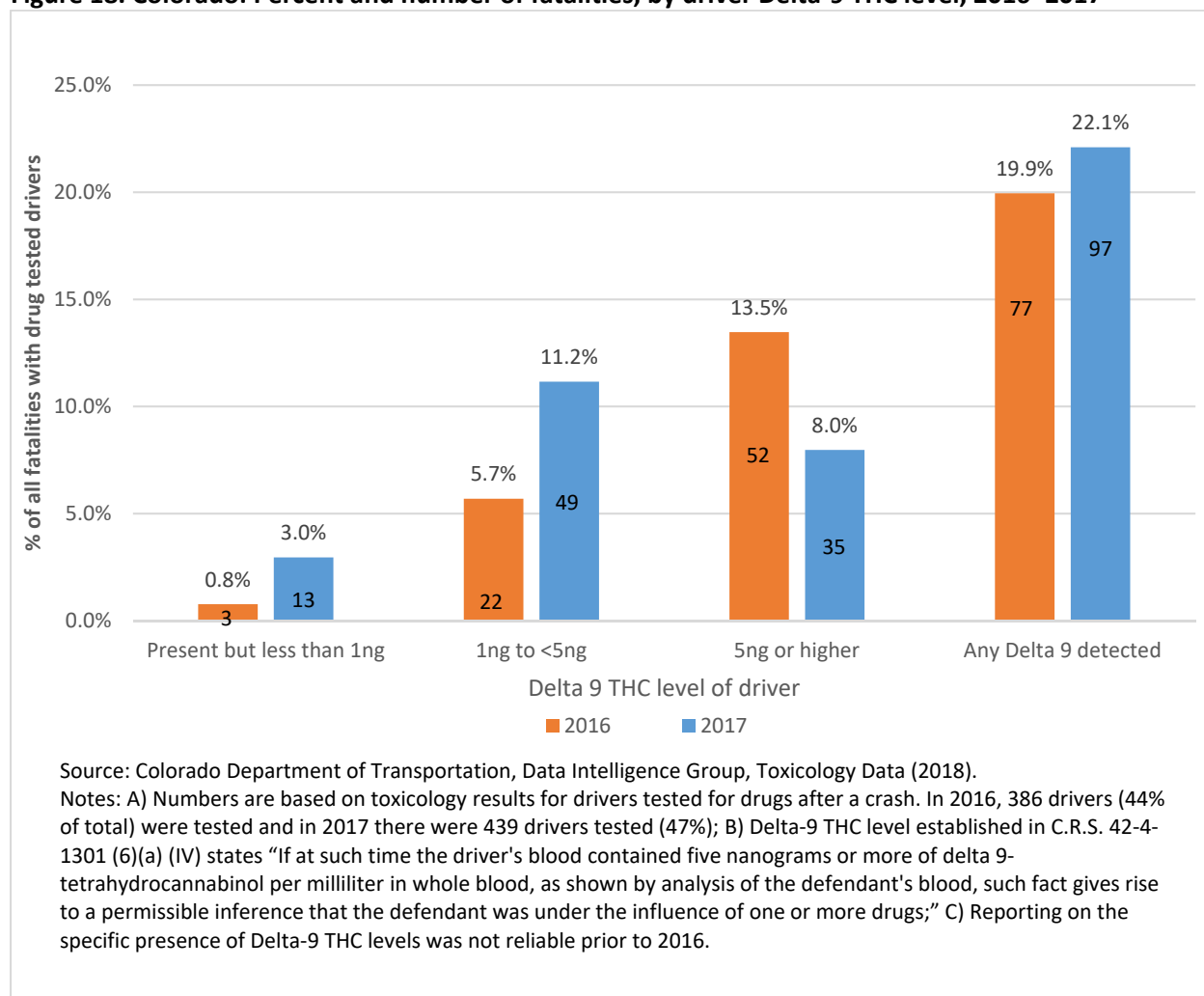


Figure 18. Colorado: Percent and number of fatalities, by driver Delta-9 THC level, 2016–2017

Law Enforcement Training to Detect Impairment

Three training programs were administered in fiscal year 2016 using the Marijuana Tax Revenue Funds allocated from Senate Bill 14-215 to Peace Officer Standards and Training (POST) for law enforcement training. Training data were provided by the State of Colorado's Department of Law for the period July 1, 2014, through June 30, 2016.⁴⁸

A Drug Recognition Expert (DRE) is a peace officer trained to recognize, document and articulate impairment in drivers who are under the influence of drugs other than, or in addition to, alcohol. The course to become a DRE is 56 hours, the DRE instructor course is an additional 24 hours, and an annual eight-hour update is required. In fiscal year 2016 training was completed by 23 DREs, 17 DRE instructors; 94 DREs attended the required update training (Table 24). As of June 2018, a total of 214 DREs were certified statewide (Figure 19), an increase from 32 in 2006 and 129 in 2012. The Colorado State Patrol

⁴⁸ For additional information on marijuana trainings supplied by POST, see <https://www.coloradopost.gov/training/marijuana-training-law-enforcement>.

(61) and Denver Police Department (27) have the greatest number of DREs. (For a complete summary of agency training see Appendix G.)

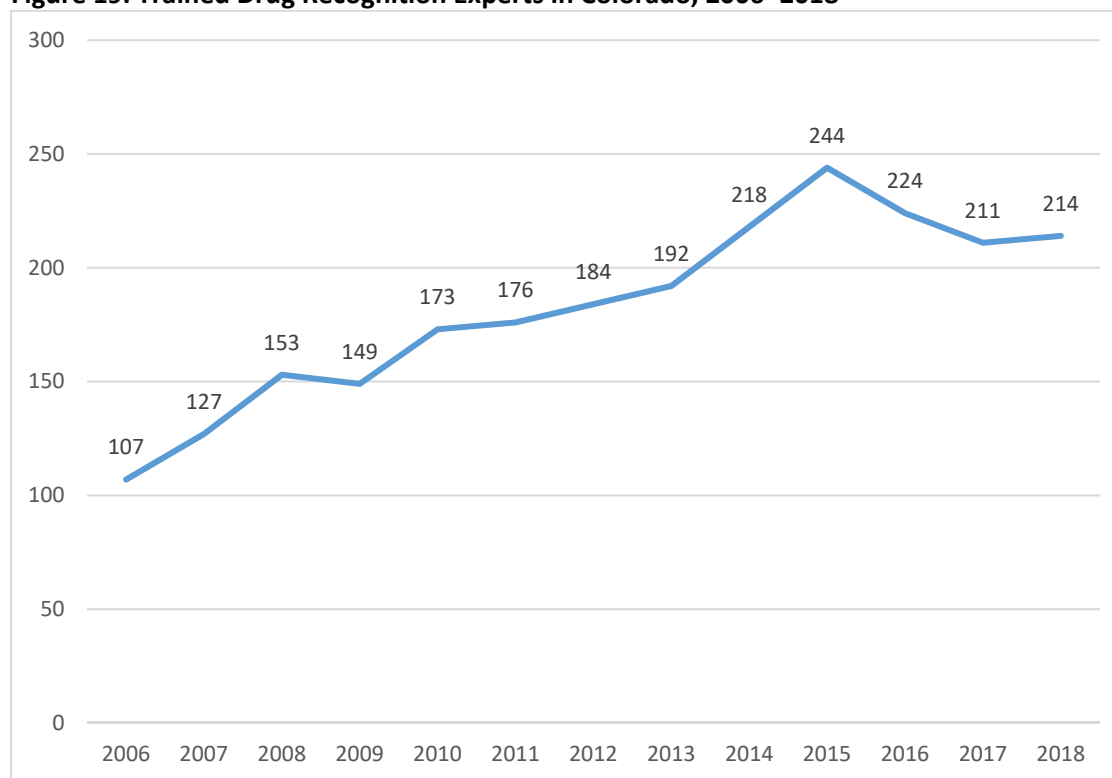
The Advanced Roadside Impaired Driving Enforcement (ARIDE) program was created to address the gap in training between the Standardized Field Sobriety Testing and the Drug Recognition Expert program. ARIDE bridges the gap between these two programs by providing officers with general knowledge related to drug impairment and by promoting the use of DREs. ARIDE training is 16 hours long. In fiscal year 2016, ARIDE training was completed by 136 peace officers (Table 24).

The Introduction to Marijuana for Law Enforcement (Marijuana 101) course is designed to clarify legal issues for peace officers. Topics covered include potential lawsuits, the difference between Amendments 20 and 64, changes to possession charges and limits, the meaning of caregiver and medical marijuana patient, how marijuana has changed the way law enforcement conducts and develops probable cause for a search, how to query a medical marijuana card on the Colorado Crime Information Center database, and investigations. This course allows the peace officers attending to participate in scenario-based training and gain an understanding of marijuana laws. In fiscal year 2016 this training was provided to 1,575 peace officers and 135 school resource officers (Table 24). POST also hosted a marijuana education conference that included 372 attendees from law enforcement agencies from across the country.

Table 24. Law enforcement impaired driving training funded by Marijuana Cash Tax Fund

Training type	FY 2015		FY 2016	
	Number of classes	Number officers trained	Number of classes	Number officers trained
Drug Recognition Expert				
Operator	3	56	4	23
Instructor	2	17	2	17
Annual update	2	160	2	94
ARIDE	35	562	15	136
Marijuana for Law Enforcement				
Law enforcement	103	2,256	106	1,575
School Resource Officers	1	70	11	135
Train the Trainer	2	14		
Sobriety checkpoint training			15	97
DUI report writing			14	
Marijuana conference				372 attendees

Source: Colorado Attorney General's Office, Peace Officer Standards and Training.

Figure 19. Trained Drug Recognition Experts in Colorado, 2006–2018

Source: Colorado Department of Transportation.

Probationer Drug Test Results

Colorado's Probation Departments conduct drug tests on adult probationers. The frequency of testing is determined by assessment, court orders, and other case-related information. There is no link between probationer drug testing results and probation status so it is not known if changes in drug use patterns are affecting probation violations. Additionally, in 2016 a bill was passed that gave judge's the ability to determine if there is "any material evidence, that a prohibition against the possession or use of medical marijuana is necessary and appropriate to accomplish the goals of sentencing."⁴⁹ It is unknown if the number of probationers using medical marijuana was sufficient to effect the testing trends after 2016.

Table 25 presents information on the percentage of probationers tested who were positive for THC, categorized by the number of times they tested positive in a year. The percent of the 18- to 25-year-old group who tested positive for THC one or two times decreased from 21% in 2012 to 18% in 2017 but those testing positive three times or more nearly doubled, from 12% in 2012 to 23% in 2017. The 26- to 35-year-old group showed a similar trend, with the percent testing positive just one or two times unchanged at 13%, while those testing positive three or more times increased from 7% in 2012 to 18% in 2017. The percentage of the 36 and older group testing positive once or twice remained unchanged from 2012 to 2017 at 9%. The proportion testing positive three or more times increased from 5% in 2012 to 12% in 2017.

⁴⁹ C.R.S 18-1.3-204(VIII)(A).

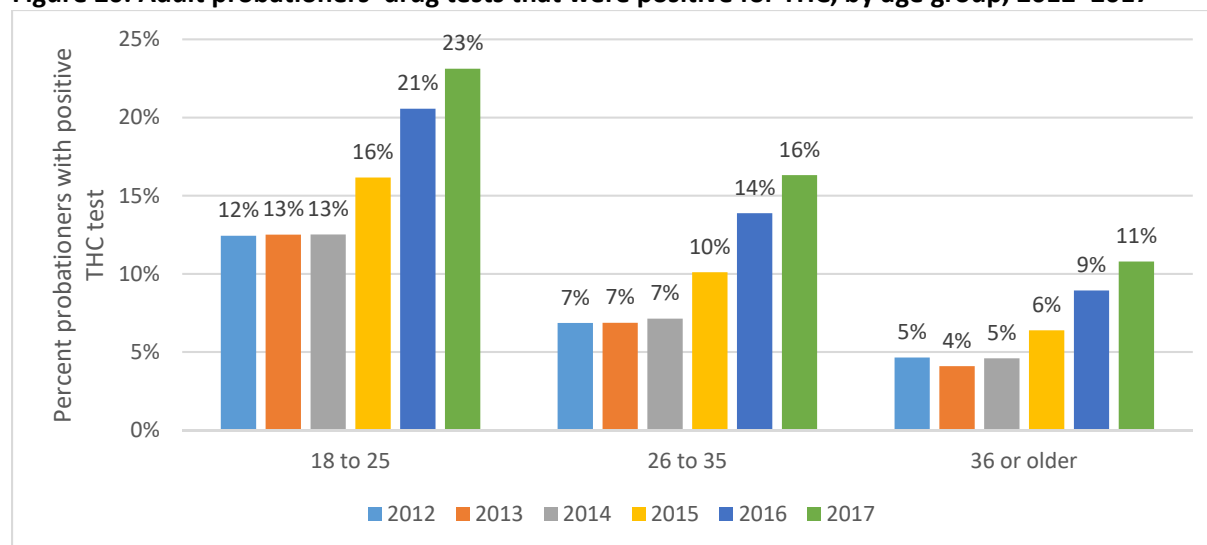
Table 25. Adult probationer drug test results for THC, by age group and number of times positive in a year, 2012-17

Age group	Test results	2012	2013	2014	2015	2016	2017
18 to 25 years	N tested	17,231	15,983	18,832	17,845	16,916	16,305
	0 times positive	68%	69%	66%	64%	61%	58%
	1-2 times positive	21%	18%	18%	18%	18%	18%
	3 times or more positive	12%	12%	16%	19%	21%	23%
26 to 35 years	N tested	15,851	16,192	21,290	21,582	21,944	22,078
	0 times positive	79%	81%	79%	75%	72%	69%
	1-2 times positive	13%	12%	11%	12%	12%	13%
	3 times or more positive	7%	8%	10%	12%	15%	18%
36 years or older	N tested	16,594	17,561	23,543	24,016	23,937	24,324
	0 times positive	86%	88%	86%	84%	81%	78%
	1-2 times positive	9%	8%	8%	8%	9%	9%
	3 times or more positive	5%	5%	7%	8%	10%	12%

Note: Percentages may not sum to 100 due to rounding.

Source: Data provided by Colorado State Judicial Department, analyzed by the Division of Criminal Justice.

The percent of all drug tests that were positive for THC increased across all adult age groups (Figure 20). For 18- to 25-year-olds, 12% of tests were positive in 2012 and 23% were positive in 2017. For 26- to 35-year-olds, 7% of tests were positive in 2012, which more than doubled to 16% in 2017. The percent of drug tests for those 36 years or older also doubled, from 5% in 2012 to 11% in 2017.

Figure 20. Adult probationers' drug tests that were positive for THC, by age group, 2012–2017

Source: Data provided by Colorado State Judicial Department, analyzed by the Division of Criminal Justice.

Illegal Cultivation on Public Lands

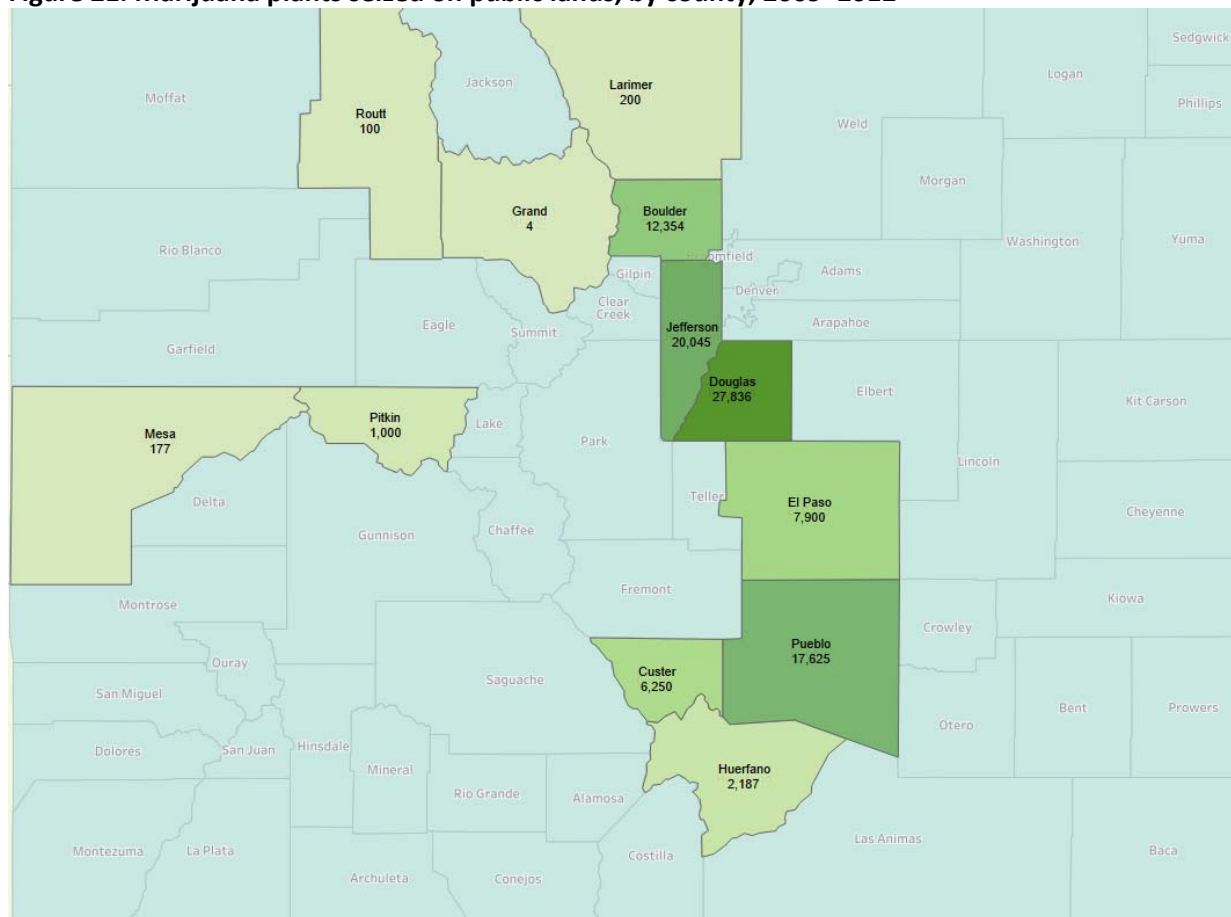
Data from the National Forest Service, Bureau of Land Management, National Park Service, and the Colorado Division of Parks and Wildlife was obtained to determine what enforcement actions have been undertaken regarding cultivation of marijuana on public lands. The number of growing operations and plants seized shows no discernible trend (Table 26). Prior to legalization, the year with the greatest activity was 2012, with 11 grow operations seized, accounting for approximately 46,622 plants. Recent data indicated an increase in illegal growing activity on public lands, with 63,602 plants seized in 2016 and 80,826 in 2017. Two maps, Figures 21 and 22, show the number of grow operations and plants seized from 2009–2012 and 2013–2017. In the period 2013–2017, the most plants seized were in Custer, Pueblo, and Huerfano Counties.

Table 26. Marijuana plants seized on public land, by agency, 2009–2017

Year	Grows seized	Plants seized			Total number of plants
		National Forest Service	Bureau of Land Management	National Park Service	
2009	8	29,200	177	4	29,381
2010	5	15,665	0	0	15,665
2011	4	3,970	0	0	3,970
2012	11	46,662	0	0	46,662
2013	3	4,980	0	0	4,980
2014	4	4,484	0	0	4,484
2015	6	22,830	2,200	0	25,030
2016	8	63,602	0	0	63,602
2017	22	71,626	9,200	0	80,826

Source: Data provided by National Forest Service, National Park Service, and Bureau of Land Management, analyzed by the Division of Criminal Justice.

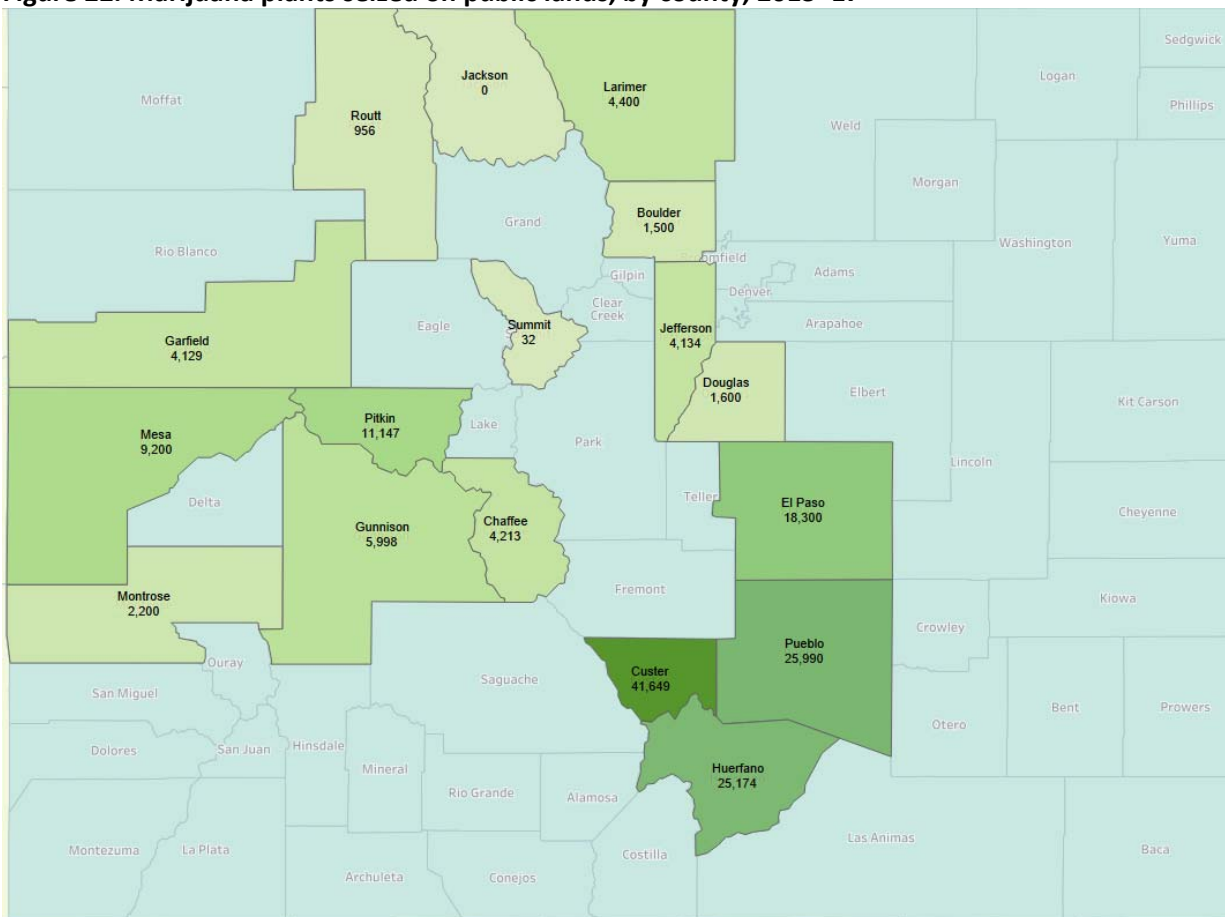
Figure 21. Marijuana plants seized on public lands, by county, 2009–2012



Source: Data provided by National Forest Service, National Park Service, and Bureau of Land Management, analyzed by the Division of Criminal Justice.

Note: Darker shaded areas indicate a higher number of plants eradicated.

Figure 22. Marijuana plants seized on public lands, by county, 2013–17



Source: Data provided by National Forest Service, National Park Service, and Bureau of Land Management, analyzed by the Division of Criminal Justice.

Note: Darker shaded areas indicate a higher number of plants eradicated.

Drug Enforcement Administration Cannabis Eradication Program

The Drug Enforcement Administration (DEA) initiated the Domestic Cannabis Eradication/Suppression Program (DCE/SP), which is the only nationwide law enforcement program that exclusively targets drug trafficking organizations (DTOs) involved in cannabis cultivation. Through its nationwide cannabis eradication efforts, the DEA provides resources to support the 128 state and local law enforcement agencies that actively participate in the program. This assistance allows for the enhancement of already aggressive eradication enforcement activities throughout the nation.

The number of outdoor plants destroyed decreased from 26,020 in 2011 to 2,630 in 2014. However, the number of outdoor plants eradicated increased in both 2015 (26,545) and 2016 (23,823), indicating more federal involvement in marijuana eradication (Table 27). The number of indoor plants seized has not shown a consistent trend but reached a recent peak in 2016 when 18,010 plants were seized

indoors. The number of arrests climbed over the past three years as well as the number of weapons seized (Table 27).

Table 27. Drug Enforcement Administration cannabis eradication/suppression program in Colorado, 2006–2017

Year	Outdoor grow sites	Outdoor plants	Indoor grow sites	Indoor plants	Bulk processed marijuana (pounds)	Number of arrests	Weapons seized	Assets seized (value)
2006	14	3,819	47	3,667	1,727	193	19	\$932,679
2007	31	2,498	45	2,430	57	143	29	\$903,944
2008	17	5,564	29	24,469	64	36	0	\$3,094,240
2009	28	29,655	7	235	62	5	0	\$12,500
2010	7	6,331	50	5,492	0	60	0	\$153,674
2011	16	26,020	3	4	125	11	0	\$15,626
2012	3	21,235	7	2,069	515	9	47	\$354,325
2013	2	5,562	19	11,042	1,636	2	11	\$257,938
2014	3	2,630	18	5,426	381	6	23	\$2,066,855
2015	6	26,545	2	527	159	14	0	\$0
2016	13	23,823	78	18,010	3,659	15	66	\$2,320,552
2017	9	2,059	37	3,706	3,550	24	79	\$475,412

Source: U.S. Department of Justice, Drug Enforcement Administration. Cannabis Eradication, at <http://www.justice.gov/dea/ops/cannabis.shtml>, *Sourcebook of Criminal Justice Statistics*, at <http://www.albany.edu/sourcebook>

Diversion Out of State

The amount of marijuana diverted out of Colorado is difficult to estimate, because a relatively small percentage of black market drugs are seized according to law enforcement officials. There is also no central database to which all law enforcement agencies report drug seizures and the originating state of the drug. The Colorado Information Analysis Center (CIAC), in the Department of Public Safety, is developing a comprehensive overview of where and how marijuana is being diverted out of Colorado. At present, staff is working to identify data sources that can reliably report on marijuana that is diverted from Colorado to other states. Currently, the best data available on diversion out of the state comes from the National Seizure System maintained by the El Paso Intelligence Center (EPIC). EPIC is an organization that provides intelligence and operational support to law enforcement agencies at all levels. EPIC has a data portal where law enforcement can enter information about drug seizures (among other things) including state of origin, state of interdiction, and destination state.

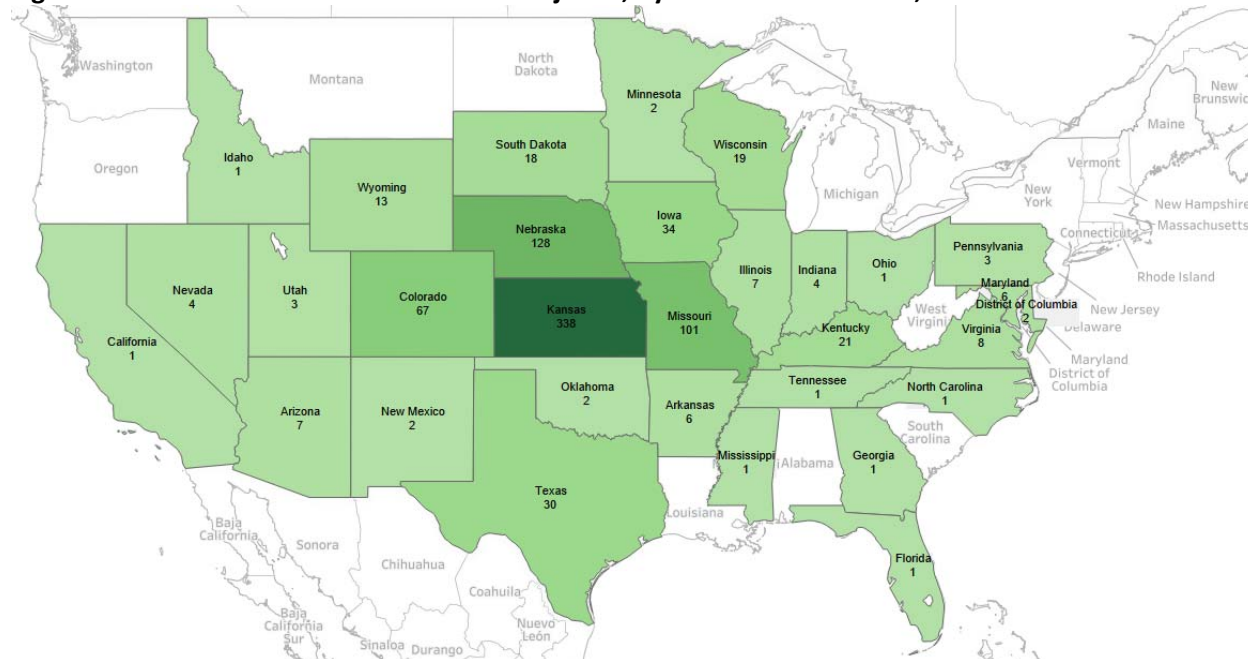
Interdiction state is the focus here because that is where the law enforcement impact of the seizure occurs and the information is the most reliable. The number of seizures reported increased from 2012 (286) to 2015 (768) but then declined, with 608 seizures reported to EPIC in 2017 (Table 28). Law enforcement agencies in Kansas and Nebraska intercepted 65% of the Colorado-sourced marijuana reported to EPIC in 2017, similar to prior years. Seizures used to be almost exclusively of marijuana flower, with that accounting for 90% of reported seizures in 2012. By 2017, 58% of seizures were for flower, 26% were for concentrates/hash, and 16% were for edibles (Table 28).

Table 28. Seizures of Colorado-sourced marijuana, by type, 2010–2017

Year	Marijuana type seized				Total
	Flower/bud	Concentrate/ hashish	Edibles	Other	
2010	216	9	0	0	225
2011	299	24	0	3	326
2012	257	26	2	1	286
2013	265	38	4	2	309
2014	373	86	9	0	468
2015	503	160	103	2	768
2016	444	129	97	3	673
2017	351	157	100	0	608

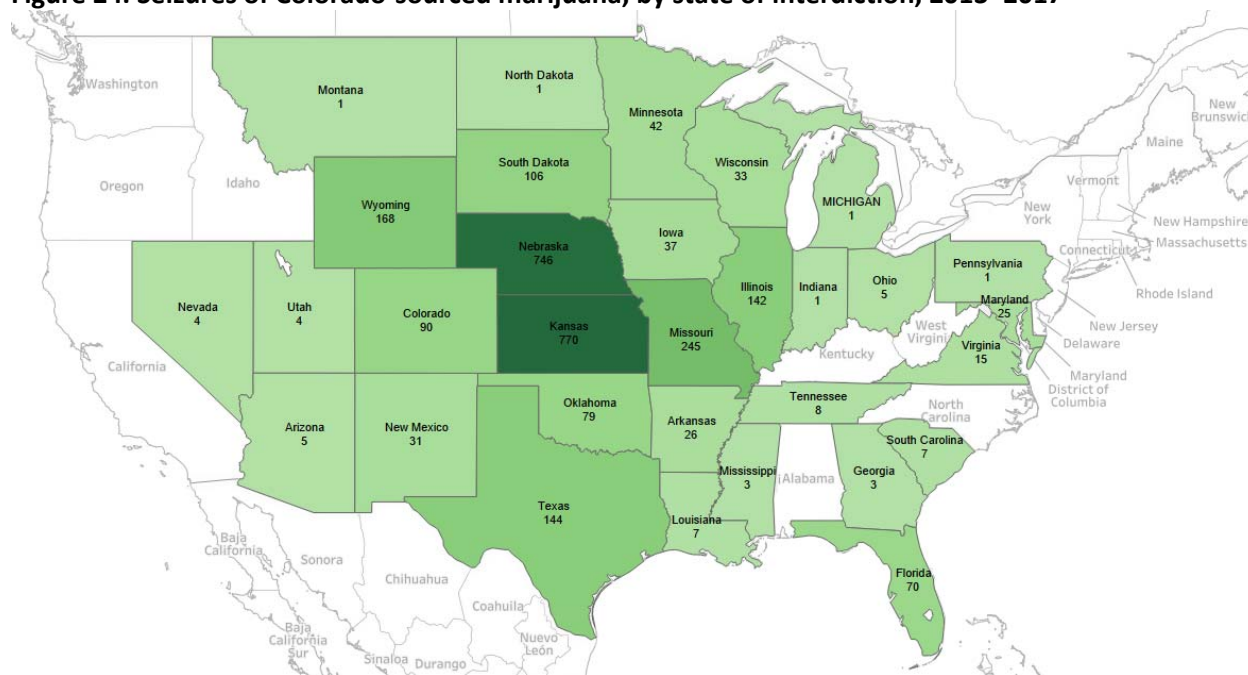
Source: Colorado Information Analysis Center, data extracted from National Seizure System.

The seizures reported to EPIC have always been most likely to occur in the states bordering or near Colorado, particularly Kansas, Nebraska, and Wyoming (Figures 23 and 24).

Figure 23. Seizures of Colorado-sourced marijuana, by state of interdiction, 2010–2012

Source: Colorado Information Analysis Center, data extracted from National Seizure System.

Figure 24. Seizures of Colorado-sourced marijuana, by state of interdiction, 2013–2017



Source: Colorado Information Analysis Center, data extracted from National Seizure System.

Transfer Using Parcel Services

The United States Postal Inspection Service reported the number of seizures to the Rocky Mountain High Intensity Drug Trafficking Area (RMHIDTA) organization. Table 29 presents the trend from 2010 through 2017, which indicates regular increases in both the number of parcels and amount of marijuana products seized.

Table 29. Marijuana Seizures by United States Postal Inspection Service, 2010–2017

Year	N parcels seized	Pounds seized
2010	15	57.2
2011	36	68.2
2012	158	262.0
2013	207	493.1
2014	320	469.9
2015	581	1247.0
2016	854	1725.5
2017	1,009	2,001.0

Source: Rocky Mountain High Intensity Drug Trafficking Area (2018). *The Legalization of Marijuana in Colorado: The Impact, Volume 5*.

Note: Data provided to RMHIDTA from the United States Postal Inspection Service.

SECTION THREE: IMPACT ON PUBLIC HEALTH AND BEHAVIORAL HEALTH SERVICES

Overview

This section summarizes several sources of data to examine the impact of marijuana legalization on public health and behavioral health services in Colorado. The Department of Public Health and Environment (CDPHE) monitors environmental and public health for the state and is statutorily mandated to measure and report on public health impacts. CDPHE produces a report every two years that provides an in-depth understanding of the public health concerns in the state; the next report is expected in January 2019.

CDPHE is required by statute to monitor marijuana use patterns and potential marijuana adverse health effects. To this end, CDPHE uses the Behavioral Risk Factor Surveillance System (BRFSS), the National Survey of Drug Use and Health (NSDUH), a long-term survey conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA), and data provided by the Colorado Hospital Association and the Rocky Mountain Poison and Drug Center.

The American College Health Association administers the National College Health Assessment, an annual survey of college students that asks a few questions about marijuana. These data are discussed below.

Data provided by the Colorado Department of Human Services, Office of Behavioral Health, inform two treatment topics in this section. The first focuses on licensed facilities that report treatment admissions in which marijuana is listed as the client's primary drug of abuse. The second reviews trends in the frequency of use by clients in treatment for marijuana abuse.

Adult Usage

Behavioral Risk Factor Surveillance System

The Colorado Behavioral Risk Factor Surveillance System (BRFSS), sponsored by the Centers for Disease Control and Prevention, is a telephone survey of adults 18 and older that monitors lifestyles and behaviors related to the leading causes of mortality and morbidity. In recent years, health professionals and the public have become increasingly aware of how such lifestyle factors as cigarette smoking, being overweight, sedentary lifestyle, and the nonuse of seat belts contribute to injury, illness, and death.⁵⁰

In 2014, questions were added to the Colorado BRFSS regarding lifetime and past 30-day marijuana use, age of first use, and whether respondents drove after recent use. In 2015, questions were added to estimate methods and frequency of marijuana use, and respondents' perception of harm from use. In 2016, the questions about lifetime use and age of first use were removed. By continuing collection of

⁵⁰ Additional information on the Colorado BRFSS can be accessed at <https://www.colorado.gov/pacific/cdphe/adult-marijuana-use-trends>.

these data over time, CDPHE will be able to monitor any changes in marijuana use patterns among Colorado adults.

In 2017, the BRFSS survey included 9,802 respondents throughout Colorado. Results were weighted to represent 4,384,556 Colorado adults 18 years and older. The BRFSS and other sample-based surveys employ weights to account for the fact that information is obtained from a sample and used to represent the larger population. The weights account for sampling design, nonparticipants, and adjustments in age, sex, education, marital status, home ownership, telephone source (landline or cell phone), region, and race/ethnicity to match the sample with the population. Some questions were only asked of those respondents who reported current marijuana use.

Marijuana use remained stable from 2014 to 2016, at 13.5%. In 2017, use significantly increased to 15.5% of Colorado adults reported using marijuana in the past 30 days (Figure 25).

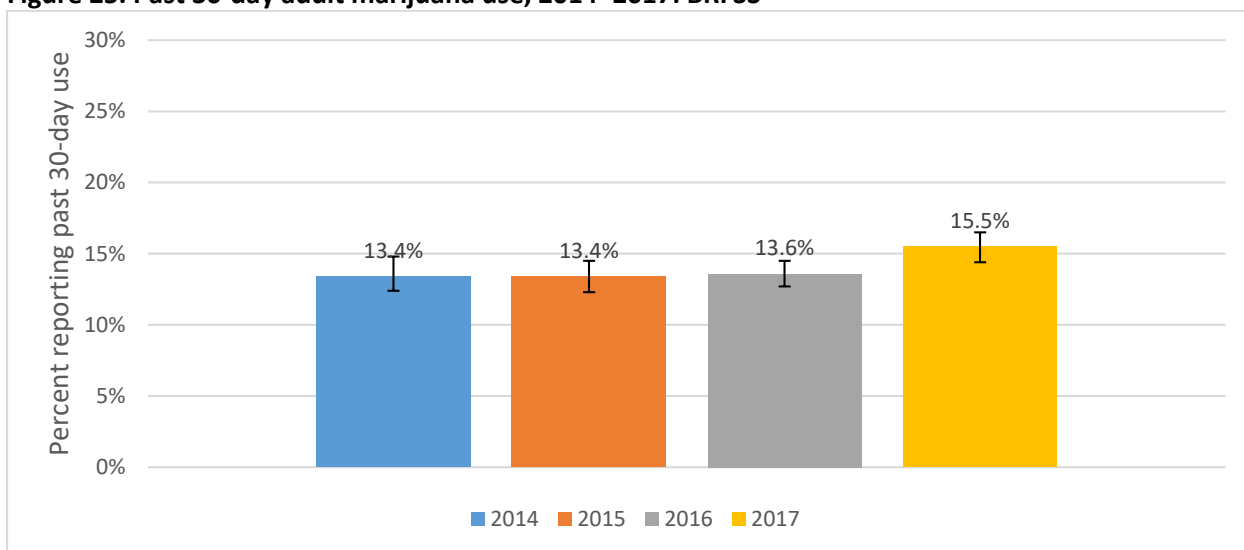
Prevalence of marijuana use differed by age and gender. In 2017, more males reported current (past 30-day) use of marijuana (19.8%) than females (11.2%). Current use for males increased significantly from 2016 (16.4%) to 2017 (19.8%), but female use remained stable (Figure 26).

Figure 27 presents trend data for past 30-day marijuana use stratified by age group. In 2017, past 30-day marijuana use among 18- to 25-year-old respondents (29.2%) was not significantly different from 26- to 34-year-olds (26.4%). However, both of those age groups reported significantly higher past 30-day use compared 35- to 64-year-olds (12.5%) and those 65 and older (5.6%). There was no significant difference in reported use for 18- to 25-year-olds or 35- to 64-year-olds from 2014 to 2017. However, reported use for those ages 26 to 34 years significantly increased from 2016 (19.4%) to 2017 (26.4%)

Past 30-day marijuana use did not significantly differ by race/ethnicity (Figure 28). There were small, nonsignificant differences between Blacks reporting past 30-day marijuana use (13.1%) in 2017 and Whites (16.1%) and Hispanics (14.4%). There was no significant change from 2014 to 2017 among racial/ethnic groups.

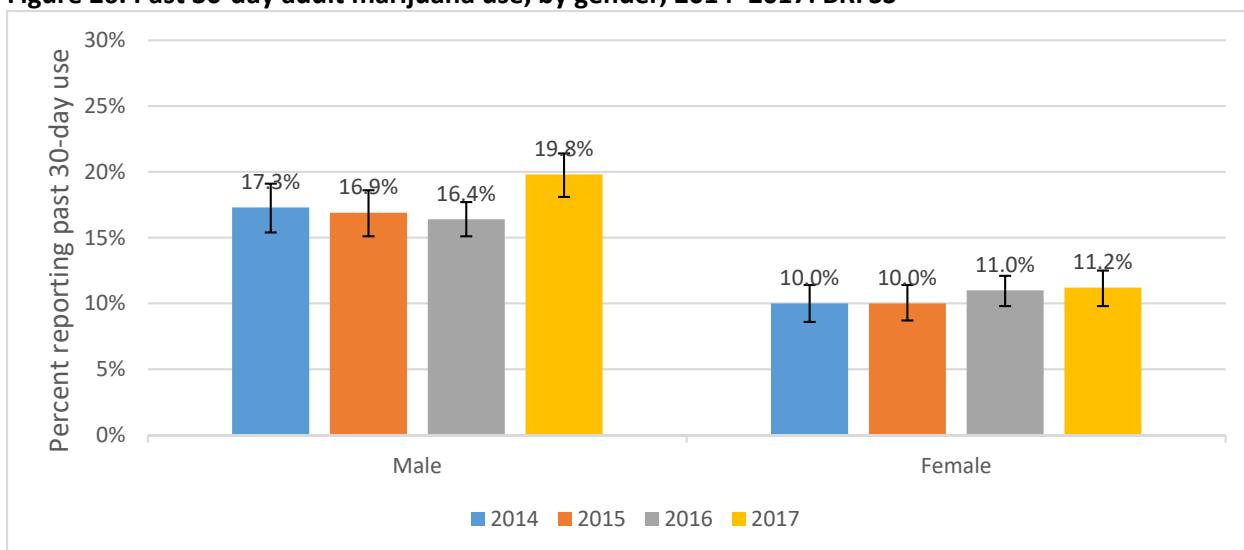
Sexual orientation was related to past 30-day marijuana use (Figure 29). In 2017, 34.7% of those who identified their sexual orientation as gay, lesbian, or bisexual reported use in the past 30 days compared to 14.5% for those who identified as heterosexual. From 2016 to 2017, there was a significant increase in use among those who identify as gay, lesbian, or bisexual, from 22.5% to 34.7% (Figure 29).

Figure 25. Past 30-day adult marijuana use, 2014–2017: BRFSS



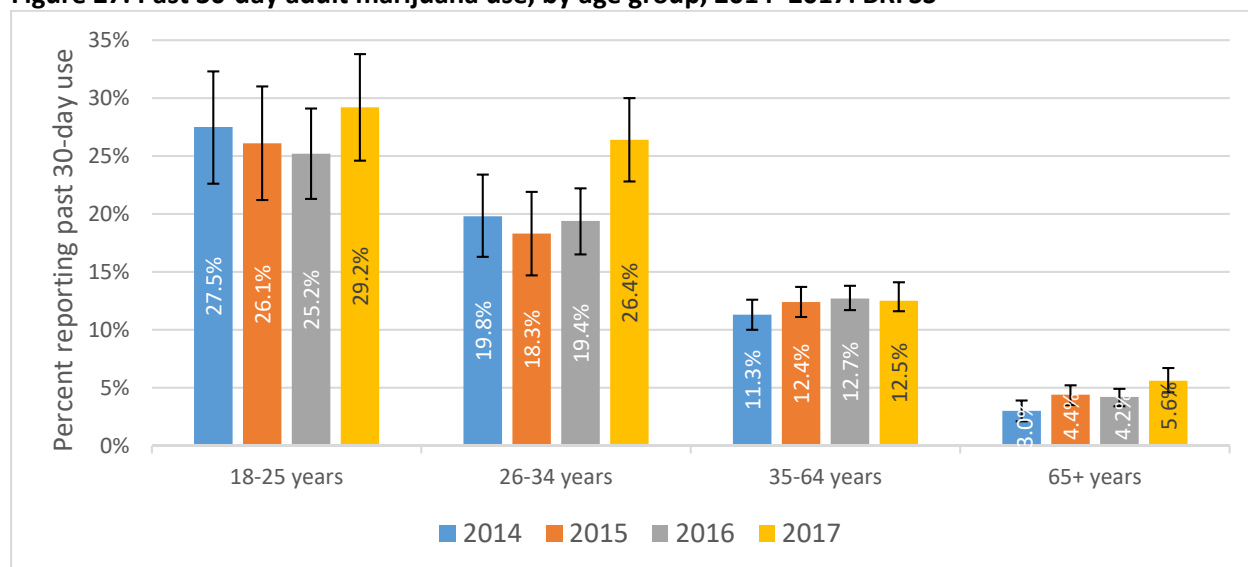
Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment.

Figure 26. Past 30-day adult marijuana use, by gender, 2014–2017: BRFSS



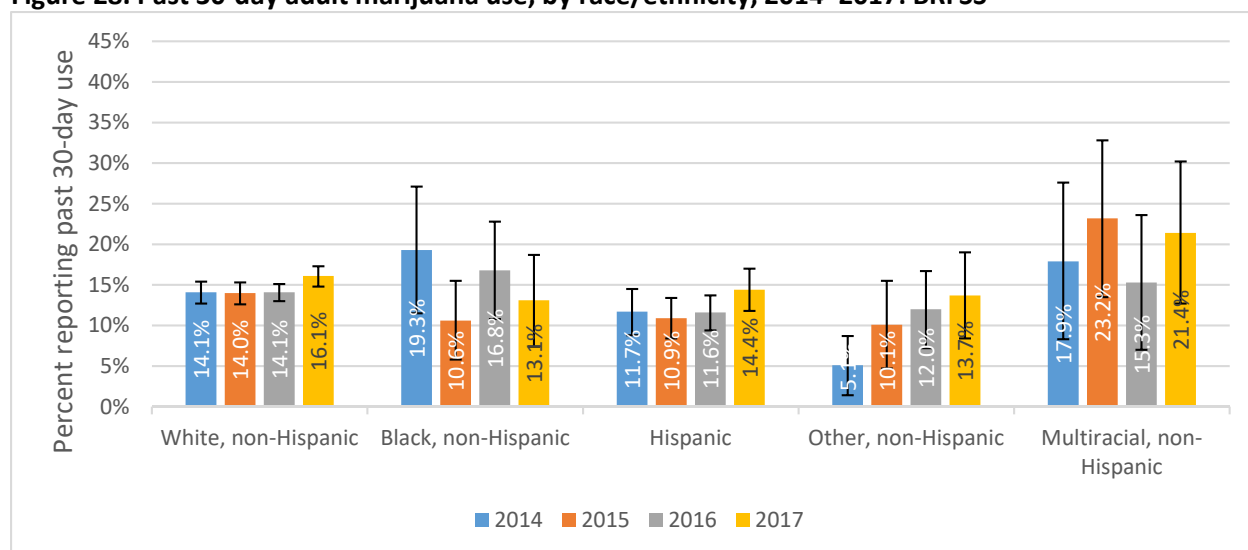
Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment.

Figure 27. Past 30-day adult marijuana use, by age group, 2014–2017: BRFSS



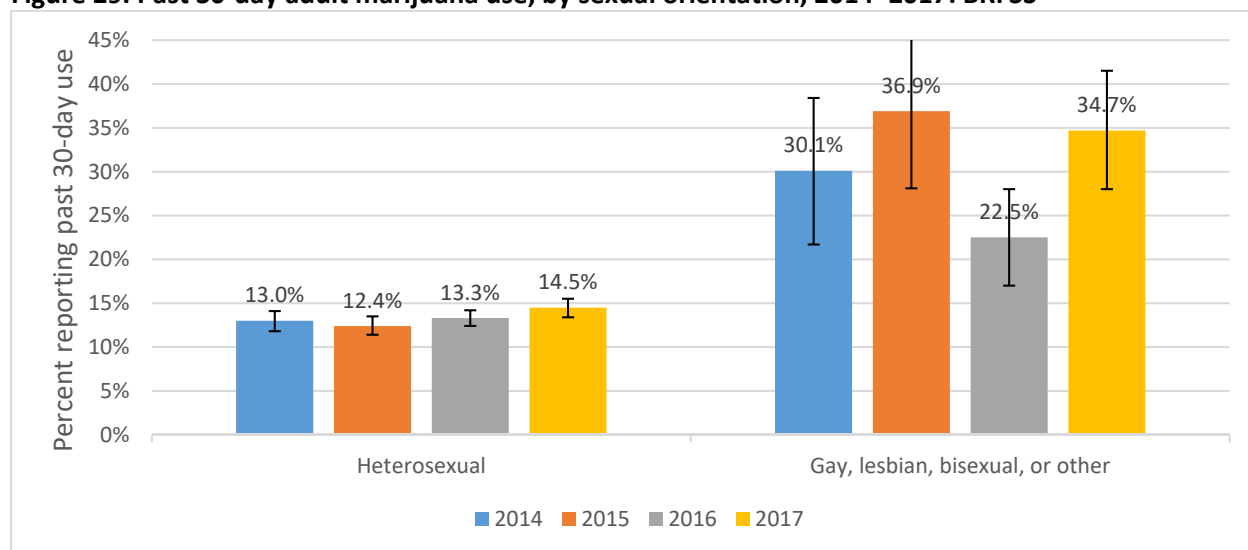
Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment.

Figure 28. Past 30-day adult marijuana use, by race/ethnicity, 2014–2017: BRFSS



Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment.

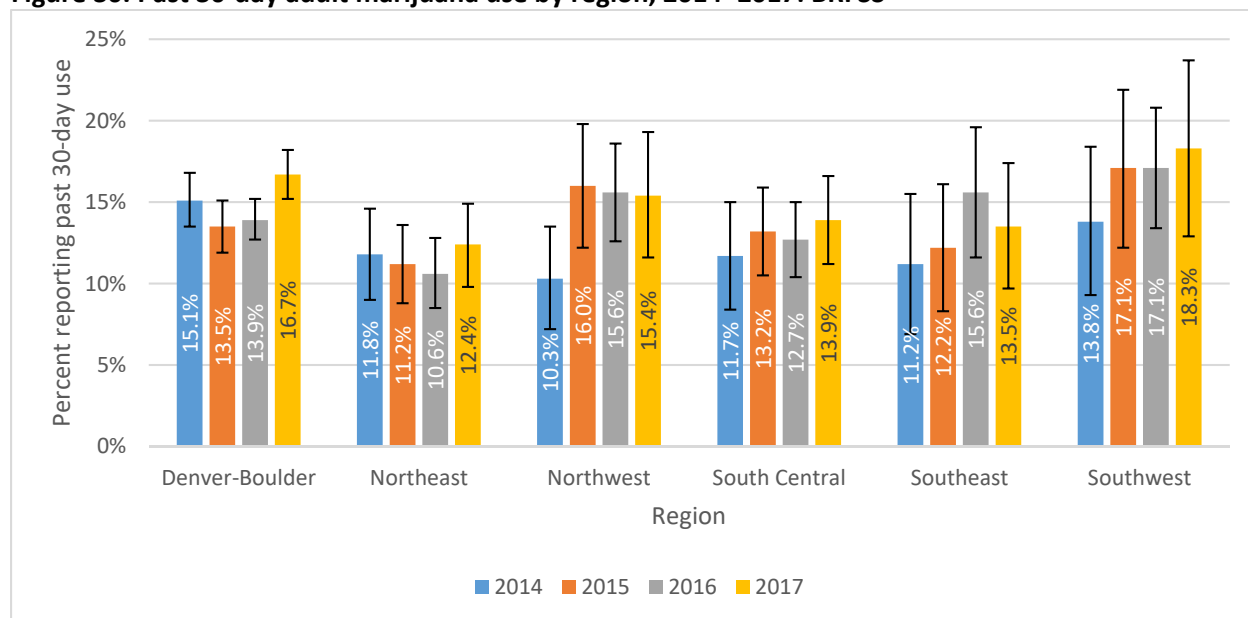
Figure 29. Past 30-day adult marijuana use, by sexual orientation, 2014–2017: BRFSS



Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment.

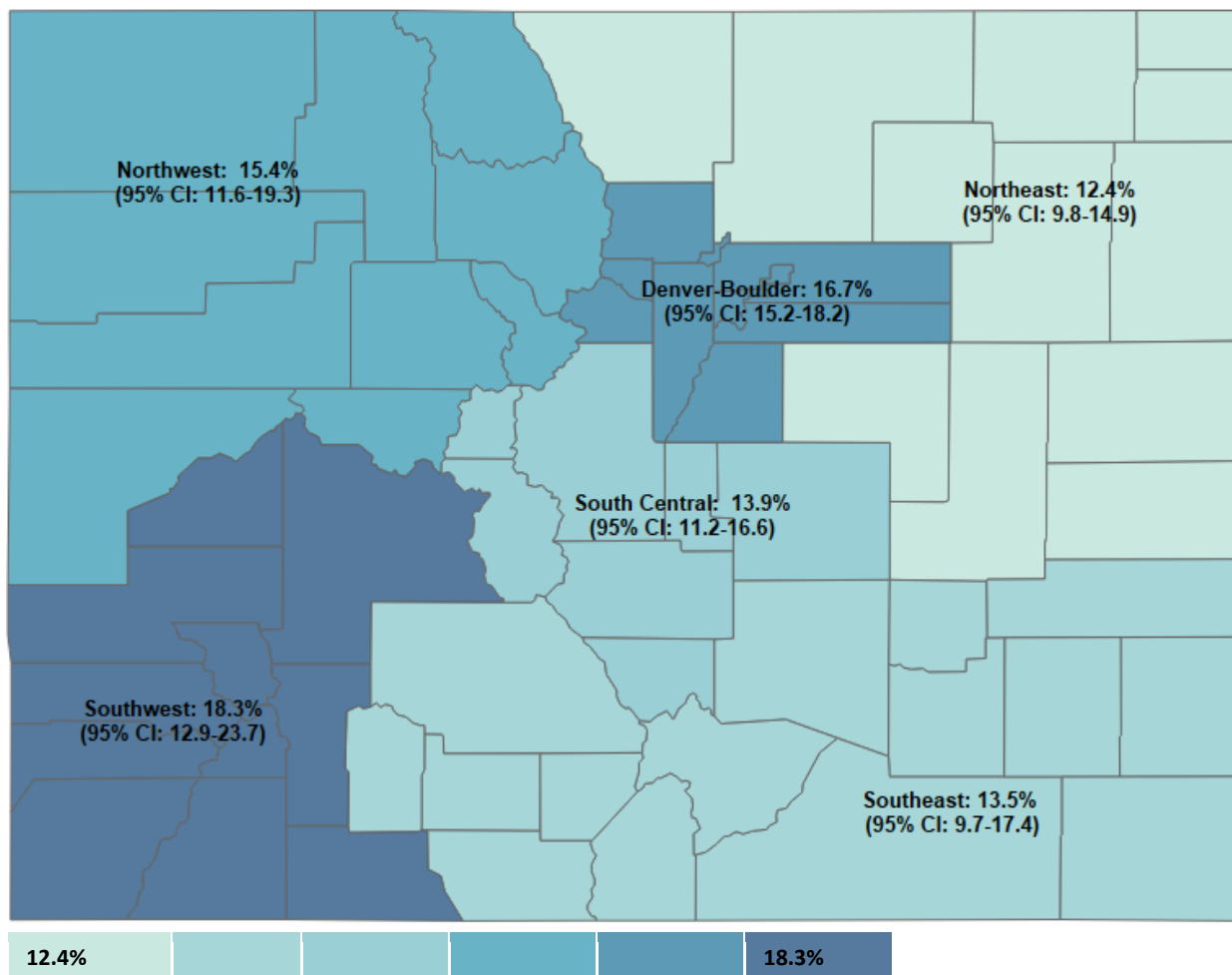
The geographic BRFSS marijuana use estimates for Colorado are presented in two ways. Annual data were grouped into six regions (Figure 31), while county-level data for 2014 through 2017 were only available as a four-year average (Figure 32). The trends within each region from 2014 through 2017 are presented in Figure 30, and 2017 data are presented in a map in Figure 31. In 2017, the region with the lowest rate was the Northeast (12.4%) while the highest usage rates were in the Southwest (18.3%) (Figure 30).

Figure 30. Past 30-day adult marijuana use by region, 2014–2017: BRFSS



Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment.

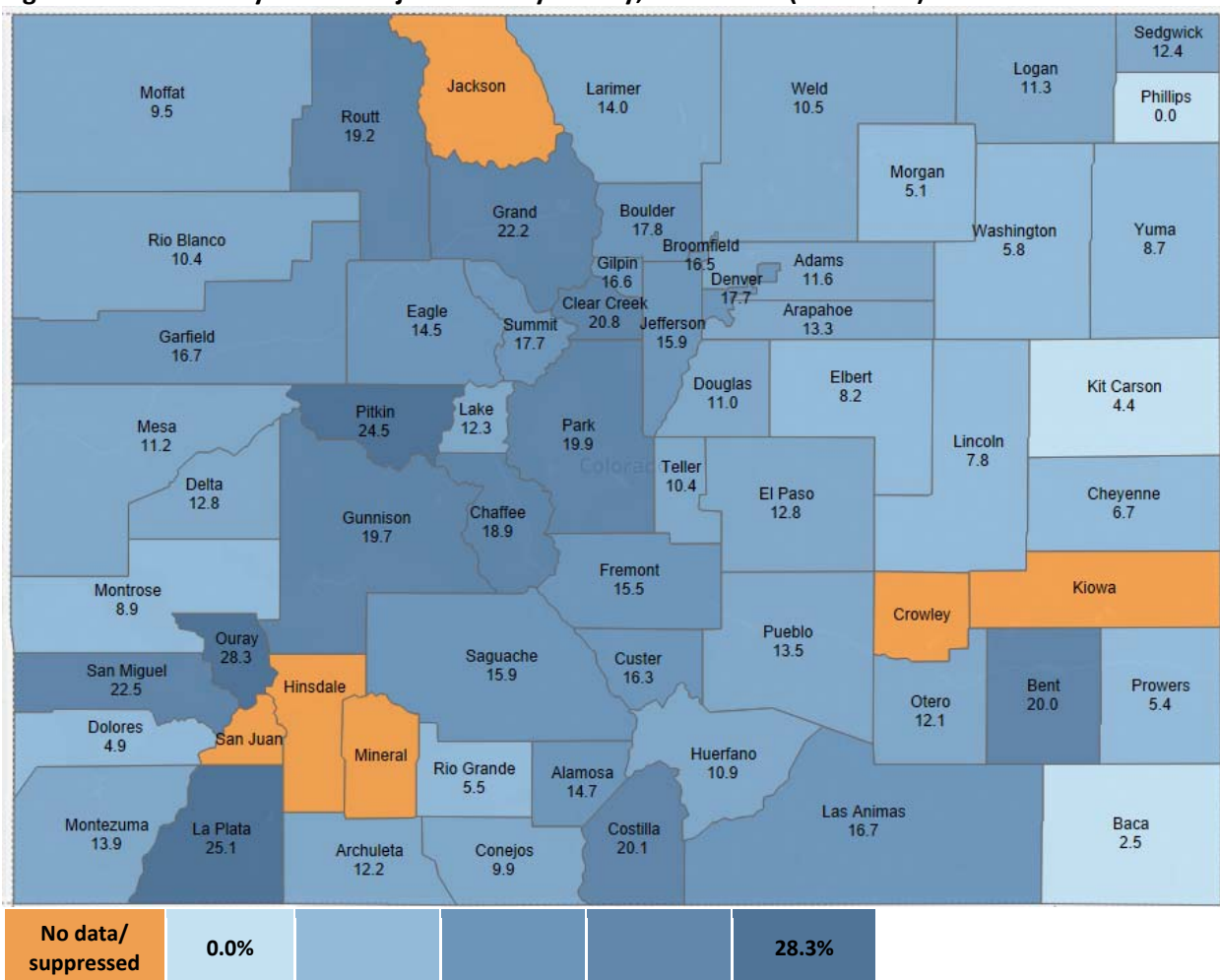
Figure 31. Past 30-day adult marijuana use, 2017: BRFSS



Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment.

County-level estimates of past 30-day marijuana use are presented in Figure 32. Due to the relatively small number of responses in each county, the results are combined for the four-year period from 2014 to 2017. The counties with the three highest past 30-day marijuana use were Ouray (28.3%), La Plata (25.1%), and Pitkin (24.5%). The counties with the lowest past 30-day marijuana use were Philips (0.0%), Baca (2.5%), and Kit Carson (4.4%).

Figure 32. Past 30-day adult marijuana use by county, 2014–2017 (combined): BRFSS



Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment.

Note: Counties shaded in orange either had no data reported or did not have enough responses over the four-year period to develop reliable estimates.

National Survey on Drug Use and Health

The Substance Abuse and Mental Health Services Administration (SAMHSA) conducts the annual National Survey on Drug Use and Health (NSDUH).⁵¹ NSDUH is the primary source of information on the prevalence, patterns, and consequences of alcohol, tobacco, and illegal drug use and abuse and mental disorders in the U.S. civilian, noninstitutionalized population, age 12 and older. The survey generates estimates at the national, state, and sub-state levels. NSDUH is state-based, with an independent, multistage area probability sample within each state and the District of Columbia. SAMHSA produces state-level estimates from a two-year rolling average. This means that each year actually represents two

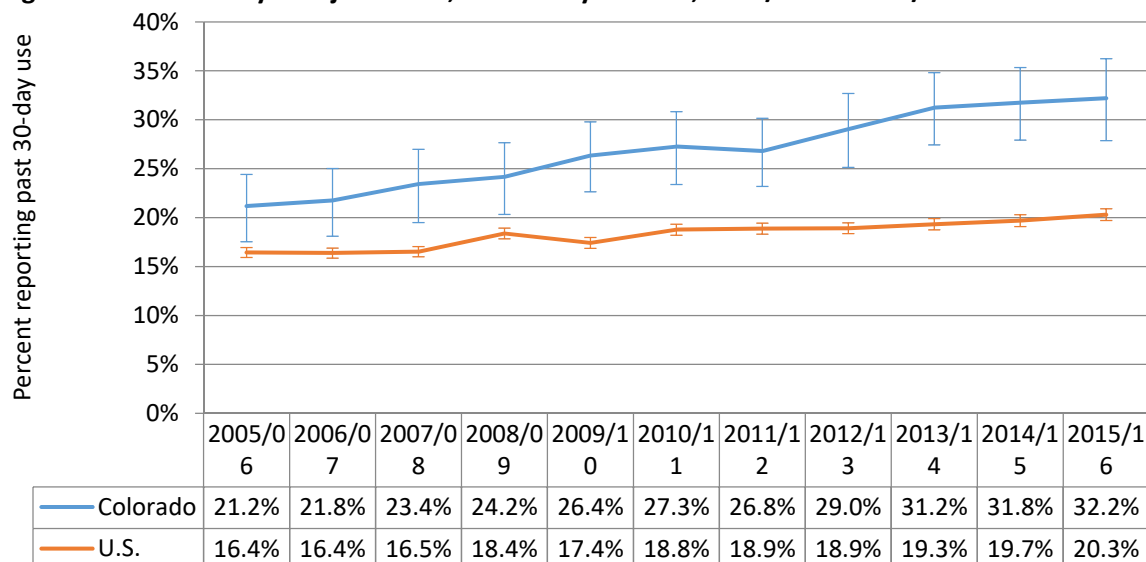
⁵¹ Descriptions of NSDUH derived from information available at <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>.

years of data. The two-year prevalence rates for Colorado residents 18 and older were based on weighted estimates from 1,200 to 1,400 survey respondents.⁵²

Young Adult Trends (18- to 25-Year-Olds)

Past 30-day marijuana use increased significantly for young adults (18- to 25-year-olds), from 21.2% in 2005/2006 to 31.2% in 2013/2014 but stabilized since legalization, with 32.2% reporting use in 2015/2016 (Figure 33). Figure 34 shows the prevalence of past 30-day marijuana use by state, which indicates that young adult use in Colorado was significantly higher than in most other states.⁵³ The increase in marijuana use contrasts with a decline in cigarette use (down from 40.1% to 25.6%). Use of other illicit drugs was stable at around 9% during this same period (Figure 35). Alcohol use did not change appreciably, with usage rates at approximately 64% to 70% during this period (Figure 35).

Figure 33. Past 30-day marijuana use, 18- to 25-year-olds, 2005/2006–2015/2016: NSDUH

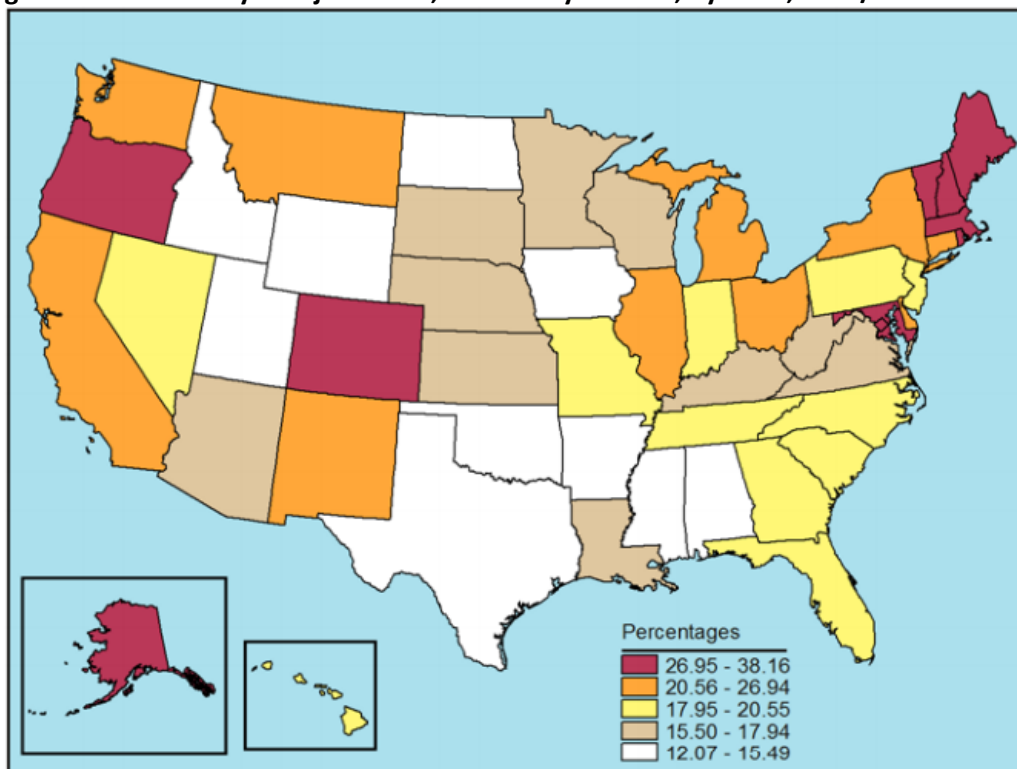


Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, at <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>.

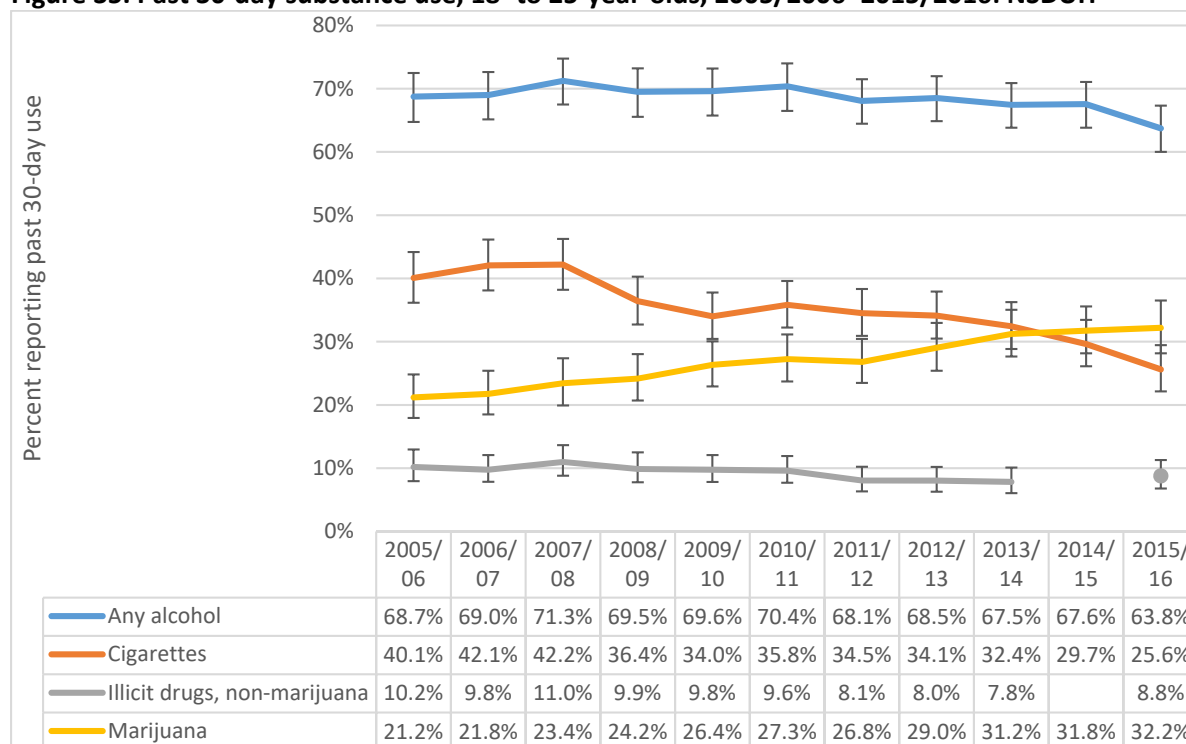
⁵² The exact number of survey respondents varies by year but has varied between 1,200 and 1,400 for the period 2005/06 to 2015/16. See the Substance Abuse and Mental Health Services Administration, 2015-2016 National Survey on Drug Use and Health: Guide to State Tables and Summary of Small Area Estimation Methodology, Table C-10, at <https://www.samhsa.gov/data/report/2015-2016-nsduh-guide-state-tables-and-summary-sae-methodology>

⁵³ See the Substance Abuse and Mental Health Services Administration, 2015-2016 National Survey on Drug Use and Health: P-value Tables for a detailed statistical comparison of states, at <https://www.samhsa.gov/data/report/p-value-tables-0>

Figure 34. Past 30-day marijuana use, 18- to 25-year-olds, by state, 2015/2016



Source: Substance Abuse and Mental Health Services Administration (2018), National Survey on Drug Use and Health, 2015-16 National Survey on Drug Use and Health National Maps of Prevalence Estimates, by State. See <https://www.samhsa.gov/data/sites/default/files/NSDUHsaeMaps2016/NSDUHsaeMaps2016.pdf>

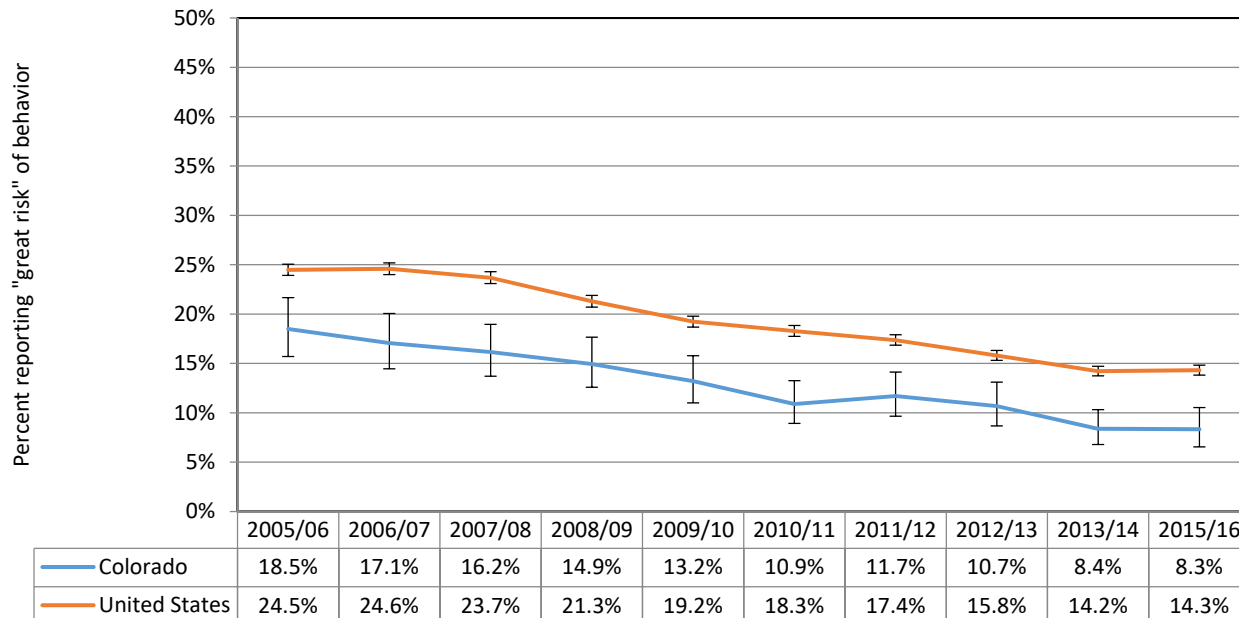
Figure 35. Past 30-day substance use, 18- to 25-year-olds, 2005/2006–2015/2016: NSDUH

Source: Substance Abuse and Mental Health Services Administration, *National Survey on Drug Use and Health*, at <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>.

Note: NSDUH did not produce an estimate for illicit drugs other than marijuana in 2014/15.

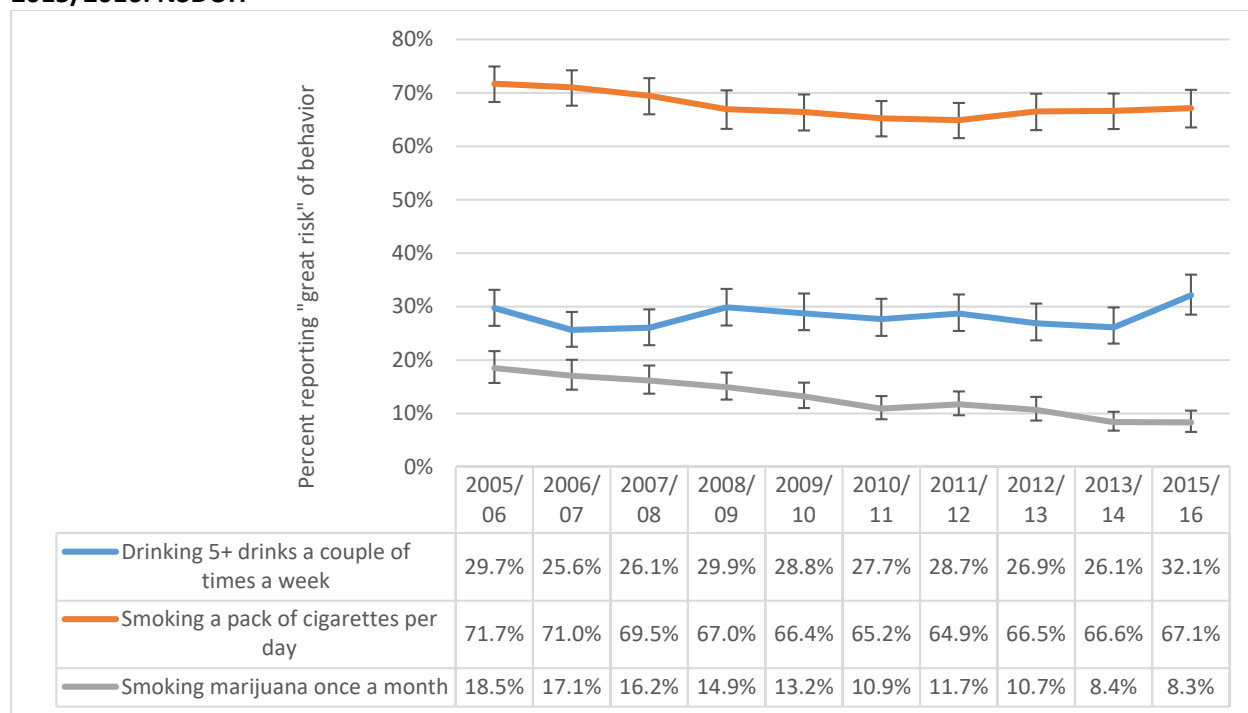
The perception of great risk from once-per-month marijuana use decreased significantly in young adults in Colorado, from 18.5% to 8.3% in the period from 2005/2006 to 2015/2016 (Figure 36). The national average also went down significantly, from 24.5% to 14.3%. The perception of risk among Colorado residents has been lower than the national average and both have decreased over time. The gap between the nation's perception of risk and Colorado's has remained relatively stable at between 5% and 6%. The perception of great risk for smoking a pack of cigarettes a day or regular binge drinking has remained generally stable, and higher than the risk perception of once-per-month marijuana use (Figure 37).

Figure 36. Perception of great risk for using marijuana once a month, 18- to 25-year-olds, 2005/2006–2015/2016: NSDUH



Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, at <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>

Figure 37. Perception of great risk for using various substances, 18- to 25-year-olds, 2005/2006–2015/2016: NSDUH

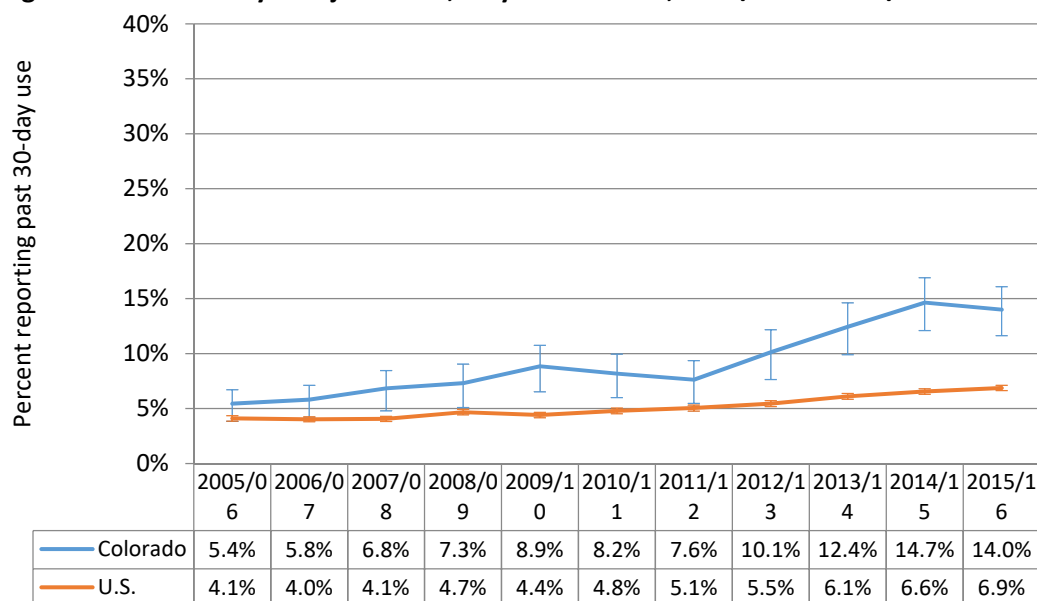


Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, at <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>.

Adult Trends (26 Years or Older)

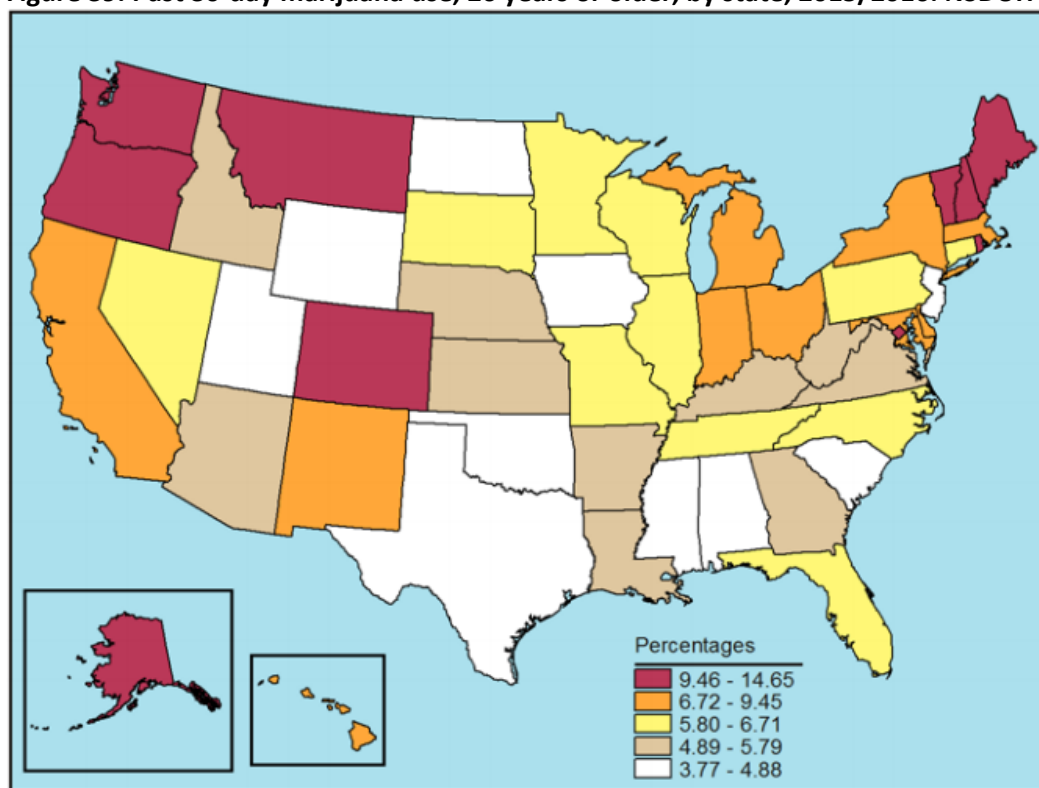
Reported past 30-day marijuana use by adults in Colorado increased considerably from 5.4% in 2005/2006 to 14.0% in 2015/2016 (Figure 38). The prevalence of past 30-day marijuana use in 2015/2016 was significantly higher than past 30-day use from 2005/06 to 2012/13, but has not changed since 2014/2015. When compared to national figures on past 30-day marijuana use, Colorado showed a consistently higher prevalence of recent marijuana use. Adult use also increased significantly at the national level, but the gap between the two rates widened from about a 1% difference in 2005/2006 to a more than 7% difference in 2015/2016. A map comparing the past 30-day use of those 26 years and older by state can be seen in Figure 39. Colorado had a higher prevalence of past 30-day use among adults compared to most other states. The prevalence trends for alcohol, cigarette, and other illicit drug use showed no appreciable changes over this same period (Figure 40). The prevalence of past 30-day marijuana use (14.0%) was significantly lower than alcohol use (62.1%) or cigarette use (19.8%).

Figure 38. Past 30-day marijuana use, 26 years or older, 2005/2006–2015/2016: NSDUH



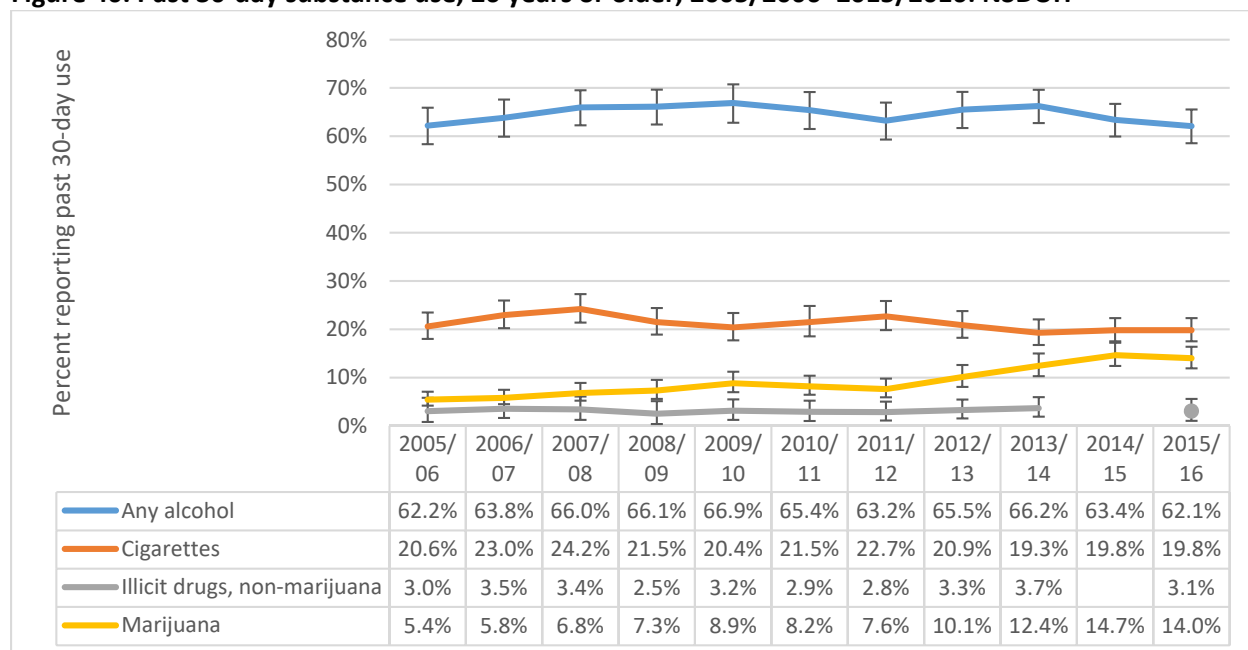
Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, at <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>

Figure 39. Past 30-day marijuana use, 26 years or older, by state, 2015/2016: NSDUH



Source: Substance Abuse and Mental Health Services Administration (2018), National Survey on Drug Use and Health, 2015-16 National Survey on Drug Use and Health National Maps of Prevalence Estimates, by State. See <https://www.samhsa.gov/data/sites/default/files/NSDUHsaeMaps2016/NSDUHsaeMaps2016.pdf>

Figure 40. Past 30-day substance use, 26 years or older, 2005/2006–2015/2016: NSDUH

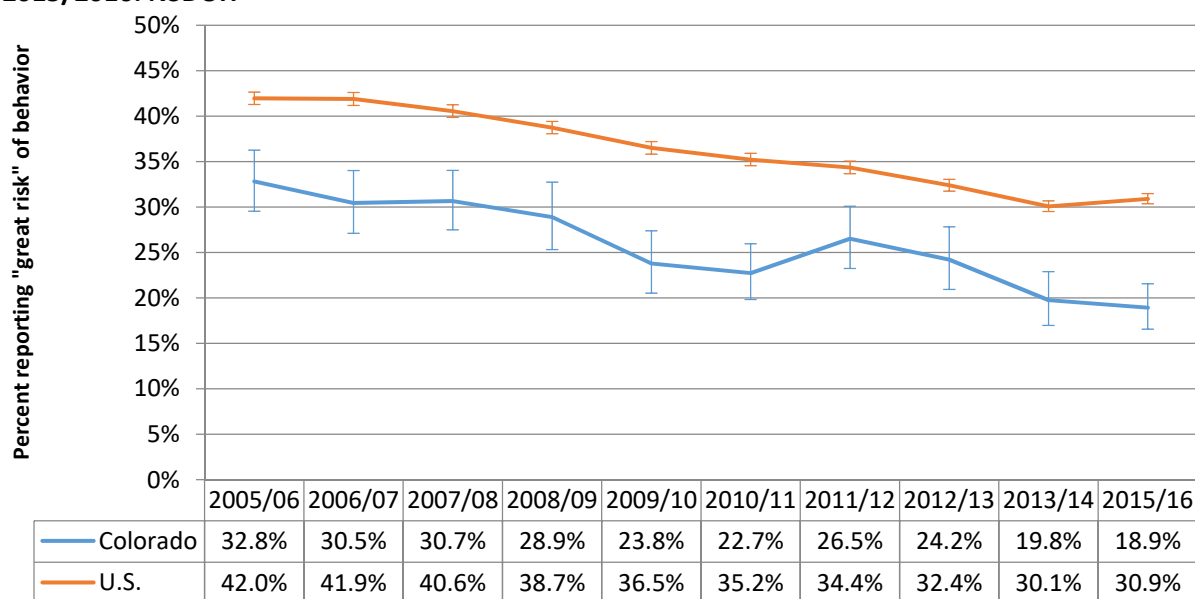


Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, at <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>

Note: NSDUH did not produce an estimate for illicit drugs other than marijuana in 2014/15.

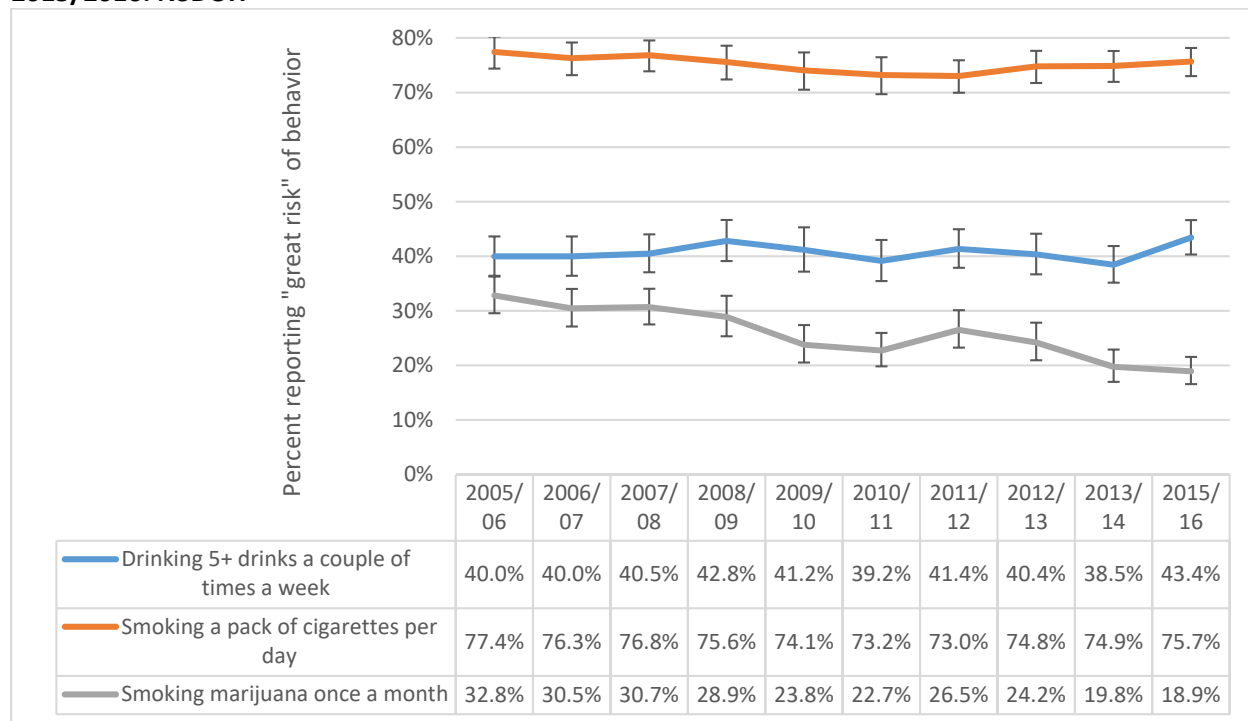
The perceived risk by adults from using marijuana once a month showed a significant decrease in Colorado, from 32.8% in 2005/2006 to 18.9% in 2015/2016 (Figure 41). The perception of great risk at the national level also decreased significantly, from 42.0% in 2005/2006 to 30.9% in 2015/2016. The gap between the nation's perception of risk and Colorado's has remained relatively stable over time. The perception of great risk for smoking a pack of cigarettes a day or regular binge drinking remained stable (Figure 42).

Figure 41. Perception of great risk for using marijuana once a month, 26 years or older, 2005/2006–2015/2016: NSDUH



Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, at <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>.

Figure 42. Perception of great risk for using various substances, 26 years or older, 2005/2006–2015/2016: NSDUH

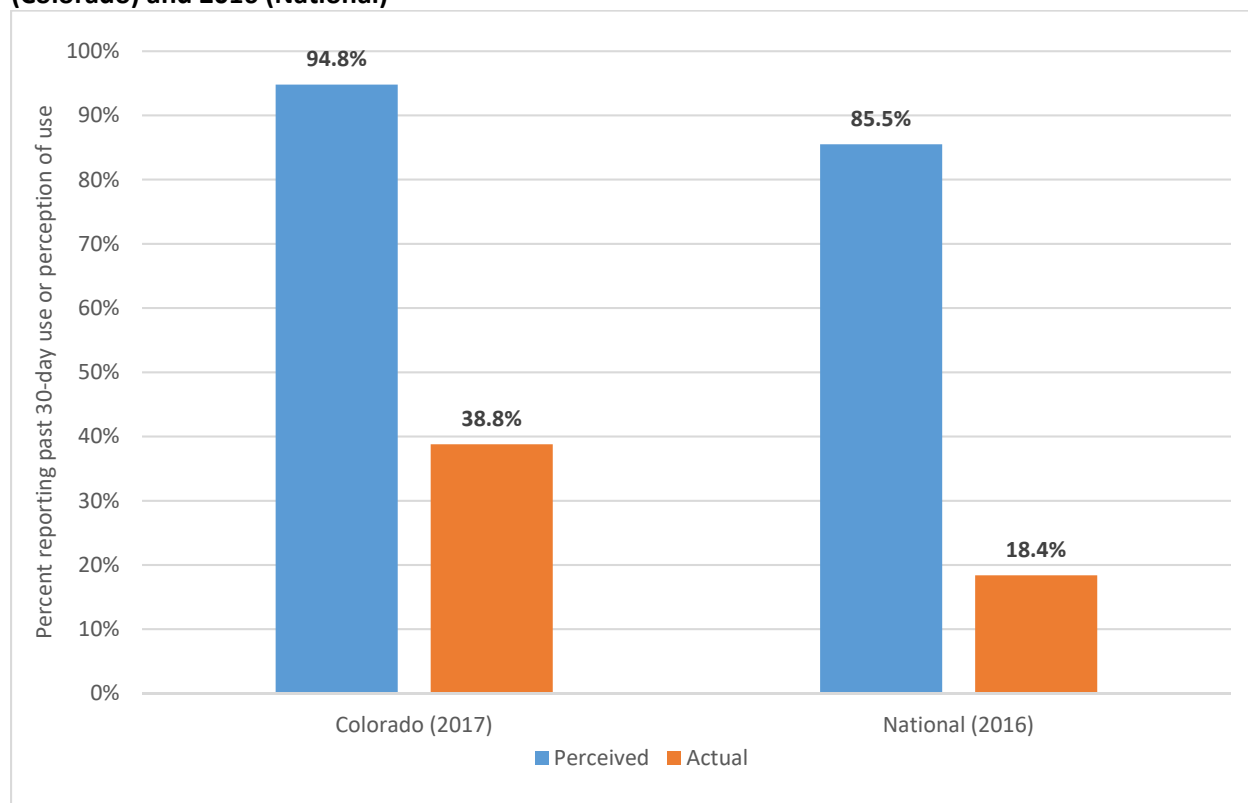


Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>

National College Health Assessment

The National College Health Assessment is an annual survey of universities and colleges that aims to collect data on physical and mental health, behavioral risk factors, sexual behavior, and drug use. Figure 43 presents reported 30-day marijuana use by Colorado college students compared to their perception of use by other students. While 94.8% of college students believed other students were current marijuana users, only 38.8% reported use in the past 30 days. The perception of use was comparable to the national figure of 85.5% but current use by Colorado college students was more than 20% higher than the national average.

Figure 43. Reported past 30-day marijuana use compared to perceived use by college students, 2017 (Colorado) and 2016 (National)



Source: Coalition of Colorado Campus Alcohol and Drug Educators (2017), National College Health Assessment survey.

Hospitalizations and Emergency Department Visits

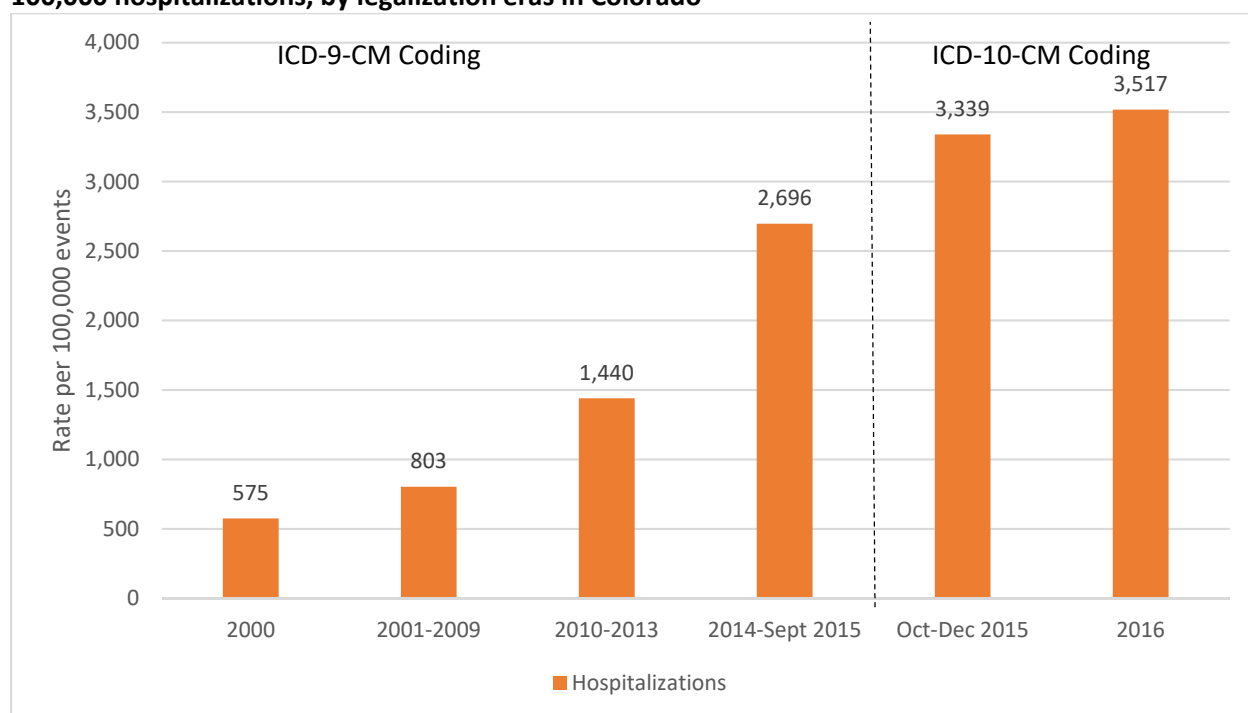
CDPHE analyzed data provided by the Colorado Hospital Association (CHA) and categorized hospitalizations and emergency department visits for possibly marijuana involvement. The International Classification of Diseases, Clinical Modification, Volume 9 (ICD-9-CM) discharge diagnosis codes were used to determine possible marijuana involvement from January 2000-September 2015. The revised International Classification of Diseases, Clinical Modification, Volume 10 (ICD-10-CM) discharge diagnosis coding system was used from October 2015-December 2016. Due to changes in coding systems, variable structures, and policies at CHA, the marijuana numbers for 2016 are considered by CDPHE to be preliminary. CDPHE is exercising caution in the interpretation of these data during this coding transition. Final interpretations of results were not expected until October 2018, at which time they will be made publicly available on CDPHE's website. Use of these codes does not mean that the encounter was motivated by marijuana exposure, but simply that it was a possibility.

The four ICD-9-CM codes used are: 305.2-Marijuana (Cannabis Abuse); 304.3-Marijuana (Cannabis Dependence); 969.6-Poisoning by psychodysleptics (hallucinogens); and E854.1-Accidental poisoning by psychodysleptics (hallucinogens). For the purposes of 969.6 and E854.1, hallucinogens can include cannabis, LSD, mescaline, and psilocybin (mushrooms). There are 53 separate codes for cannabis events

in the ICD-10-CM coding system. All ICD-10-CM codes are specific to cannabis and include cannabis poisonings, use, abuse, and dependence. Inclusion of at least one marijuana related ICD-9/10-CM code in the up to 30 listed discharge diagnosis codes qualified the encounter as a possible marijuana exposure, diagnosis, or simply a billing code.

The findings presented in Figure 44 reflect four different eras of legalization in Colorado. In 2000 (prior to medical legalization), the rate was 575 hospitalizations with possible marijuana indications per 100,000 hospitalizations. This increased significantly during the era when medical marijuana was legalized but not commercialized (2001–2009), rising to 803 such hospitalizations per 100,000. The era of medical marijuana commercialization (2010–2013) reflected another significant jump, to 1,440 per 100,000 hospitalizations. The era of retail commercialization (2014–September 2015) again showed another significant increase, to 2,696 possible marijuana-related hospitalizations per 100,000.⁵⁴ The period from October 2015–December 2015 indicated another increase, but caution should be used in interpreting these results due to the changes in coding schemes.

Figure 44. Rates of hospitalizations with possible marijuana exposures, diagnoses, or billing codes per 100,000 hospitalizations, by legalization eras in Colorado



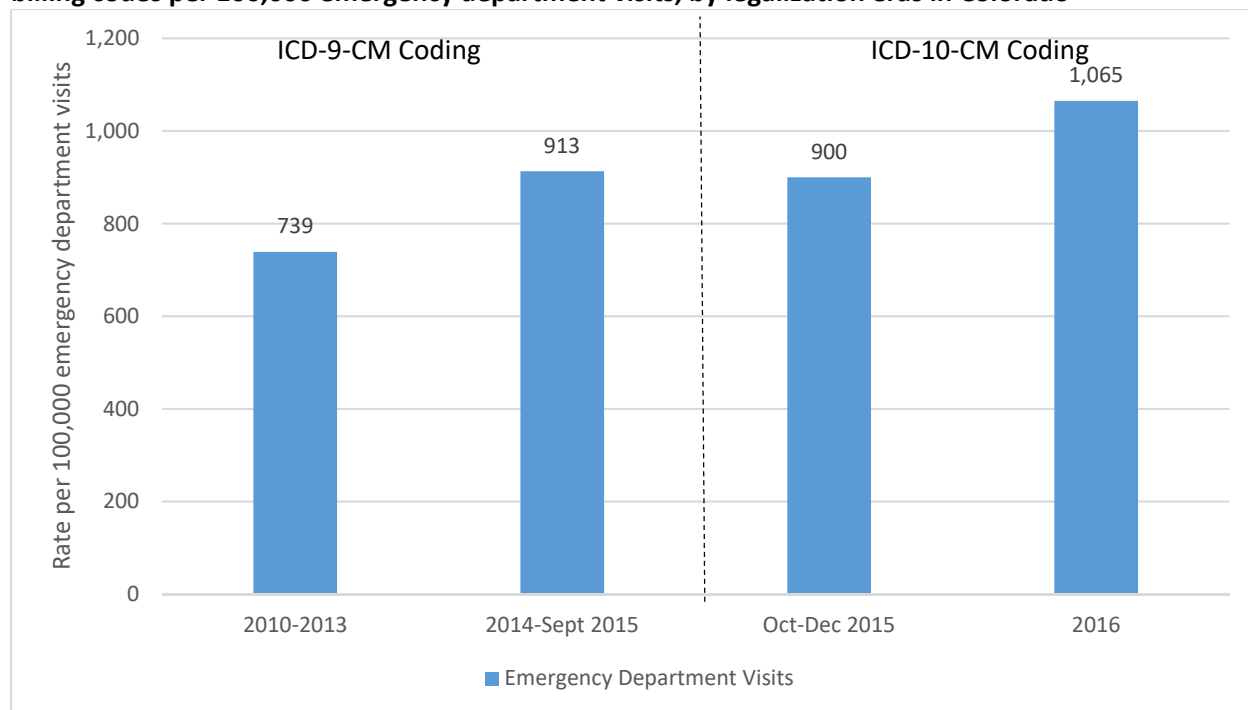
Source: Data provided by Colorado Hospital Association with analysis provided by Colorado Department of Public Health and Environment, Marijuana Health Monitoring Program.

Notes: (1) An individual can be represented more than once in the data; therefore, the rate is hospitalizations with marijuana codes per 100,000 total hospitalizations. (2) The period from October 2015 onward should be interpreted with caution due to the changes in coding schemes.

⁵⁴ Updated data for emergency department visits and hospitalizations will be released after publication of this report, along with the comprehensive update of the *Monitoring Health Concerns Related to Marijuana in Colorado* report. See <https://www.colorado.gov/pacific/cdphe/marijuana-health-report> for additional information and updates.

The data on Emergency Department (ED) visits are limited due to changes in reporting methods from the period prior to 2010 (Figure 45). The period of retail commercialization showed a significant increase in ED visits with possible marijuana indications, from 739 per 100,000 (2010–2013) to 913 per 100,000 ED visits (2014–September 2015). The period from October 2015 onward should be interpreted with caution due to the changes in coding schemes.

Figure 45. Rates of emergency department visits with possible marijuana exposures, diagnoses, or billing codes per 100,000 emergency department visits, by legalization eras in Colorado



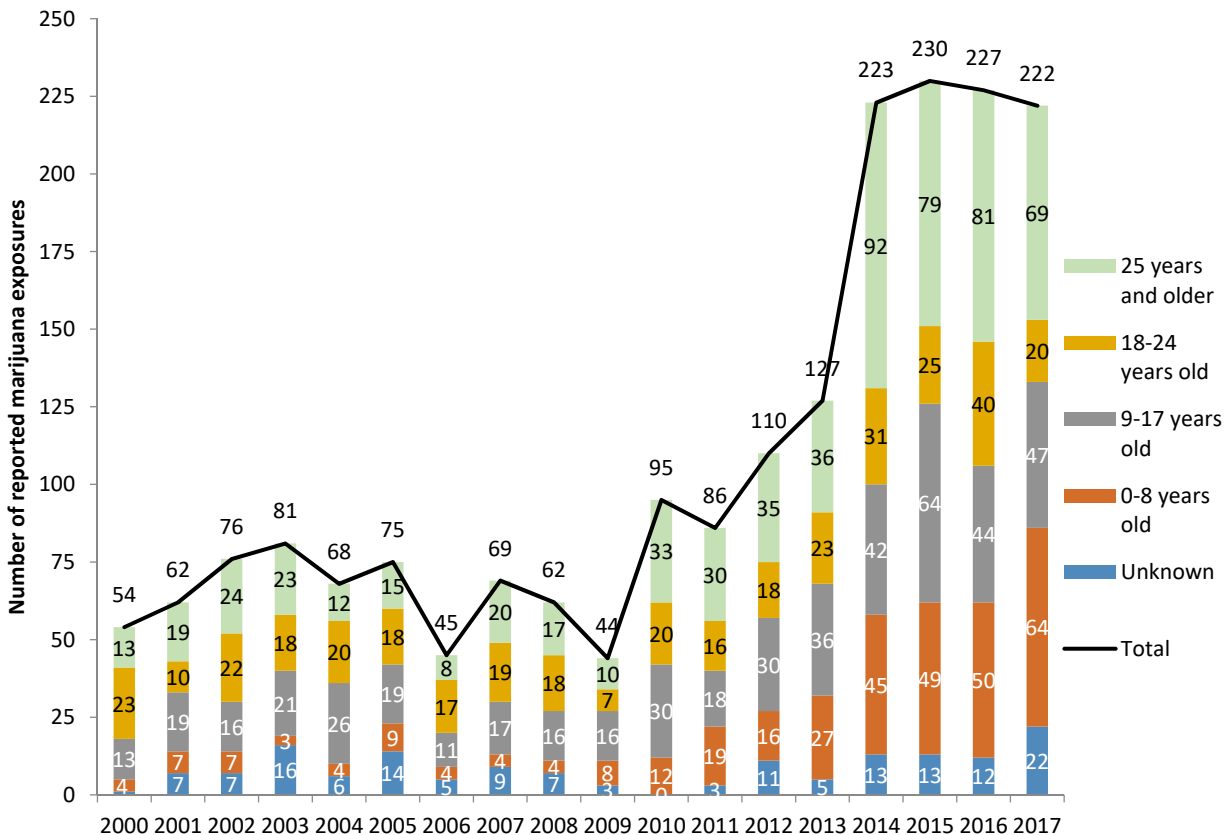
Source: Data provided by Colorado Hospital Association with analysis provided by Colorado Department of Public Health and Environment, Marijuana Health Monitoring Program.

Notes: (1) An individual can be represented more than once in the data; therefore, the rate is emergency department visits with marijuana codes per 100,000 total emergency department visits. (2) The period from October 2015 onward should be interpreted with caution due to the changes in coding schemes.

Poison Control

The Rocky Mountain Poison and Drug Center (RMPDC) provided data on marijuana exposures to CDPHE for analysis. The number of human exposures reported to poison control mentioning marijuana increased immediately after the legalization of recreational marijuana (Figure 46), with 110 calls in 2012 and 223 in 2014. These increases stabilized during 2014-2017. The initial increases occurred across all age groups, with the biggest jumps occurring in the 8-year-old and younger age group (16 in 2012 to 64 in 2017), and the 25 and older group (35 in 2012 to 69 in 2017). The total increases were most notable in two years: 2010 (+51 from 2009) and 2014 (+98 from 2013). However, from 2014 to 2017 no notable changes were seen in the overall number of exposures.

Figure 46. Human marijuana exposures reported to Rocky Mountain Poison and Drug Center, by age group, 2000–2017



Source: Colorado Department of Public Health & Environment (2018), at <https://www.colorado.gov/pacific/cdphe/marijuana-health-effects-poison-center-calls>

Note: Human marijuana exposures reported to RMPDC were determined by the presence of the generic code “Marijuana-0083000” from the National Poison Data System.

The RMPDC began collecting additional data about marijuana exposures in mid-2014. Table 30 presents the types of marijuana exposures by type of marijuana and age group. Notably, the percentage of edible marijuana products exposures increased from 37% (n = 84) in 2015 to 45% in 2017 (n = 100). The majority of exposures in children eight years old and younger concerned edible marijuana products, which accounted for two thirds of reported marijuana exposures in this age group.

Table 30. Human marijuana exposures reported to Rocky Mountain Poison and Drug Center, by age group and marijuana type, 2015-2017

Age group	Total reports	Percent of each marijuana type			
		Smokeable Marijuana	Edible Marijuana	Other Marijuana	Cannabidiol
All ages					
2015	230	54.8%	36.5%	8.3%	0.4%
2016	227	52.0%	37.4%	8.8%	1.8%
2017	222	38.7%	45.0%	14.0%	2.3%
0 to 8 years old					
2015	49	40.8%	51.0%	8.2%	0.0%
2016	50	30.0%	62.0%	8.0%	0.0%
2017	64	23.4%	65.6%	10.9%	0.0%
9 to 17 years old					
2015	64	64.1%	28.1%	6.3%	1.6%
2016	44	61.4%	31.8%	4.5%	2.3%
2017	47	59.6%	27.7%	12.8%	0.0%
18 to 24 years old					
2015	25	68.0%	28.0%	4.0%	0.0%
2016	40	60.0%	30.0%	7.5%	2.5%
2017	20	35.0%	20.0%	45.0%	0.0%
25 to 34 years old					
2015	79	54.4%	32.9%	12.7%	0.0%
2016	81	54.3%	29.6%	13.6%	2.5%
2017	69	39.1%	43.5%	10.1%	7.2%

Source: Colorado Department of Public Health and Environment (2018), at <https://www.colorado.gov/pacific/cdphe/marijuana-health-effects-poison-center-calls>

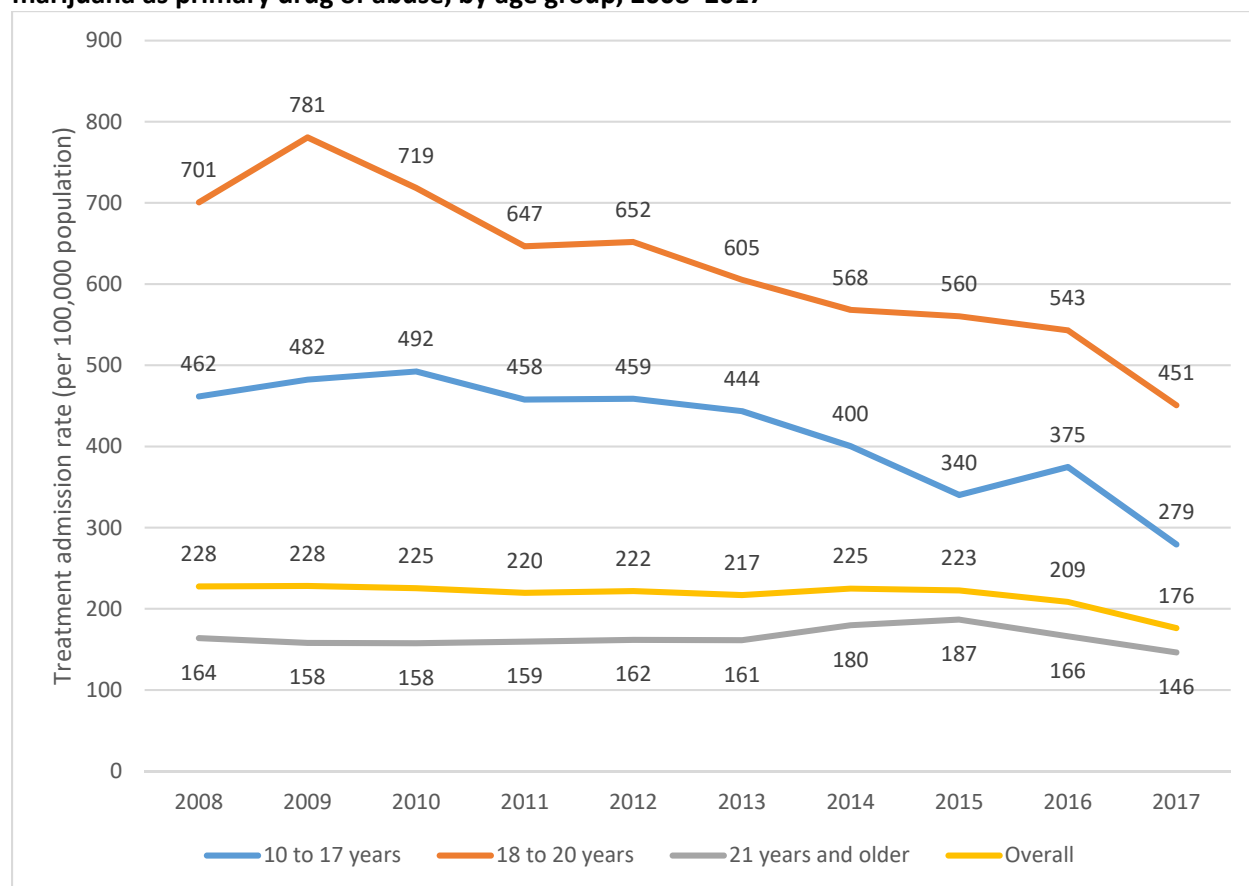
Note: The data on specific type of marijuana were not collected until July 2014, consequently the information in this table only covers the period from 2015-2017.

Treatment Trends

The Colorado Department of Human Services, Office of Behavioral Health (OBH), is required to collect and report substance use treatment data from licensed providers as a requirement of SAMHSA (Substance Abuse and Mental Health Service Administration) funding. The data are entered into OBH's Drug/Alcohol Coordinated Data System (DACODS) and are the source of the information provided below. These data include the top three drugs of abuse, demographic characteristics, referral source, referral reason, time in treatment, client residence, and more.

Treatment admission rates (per 100,000 population) and number of admissions with marijuana as the primary drug of abuse, broken out by age, are detailed in Figures 47 and 48.^{55,56} (For purposes of comparability across age groups, rates are presented.) The overall treatment admission rate for those reporting marijuana as the primary drug has decreased, from 222 in 2012 to 176 in 2017. The treatment admission rate decreased for those under 18, from 459 in 2012 to 279 admissions per 100,000 population in that age group in 2017 (Figure 47). The admission rate also decreased for those in the 18–20 age group, from 652 admissions per 100,000 in 2012 to 451 in 2017. Patients 21 or over initially showed a slight increase in treatment rates, but the rates then declined, from 162 per 100,000 in 2012 to 146 in 2017.

Figure 47. Treatment admission rate (per 100,000 population in each age group) for those reporting marijuana as primary drug of abuse, by age group, 2008–2017

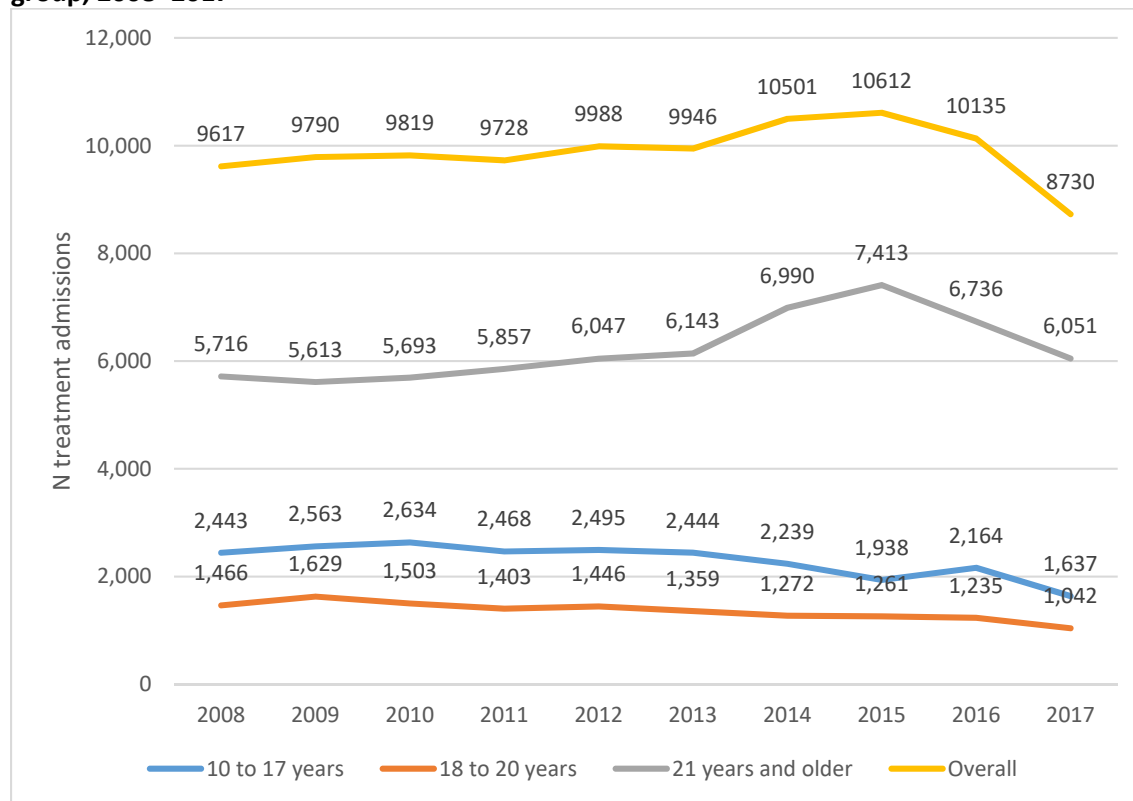


Sources: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System; Colorado Department of Local Affairs, State Office of Demography. Analyzed by the Division of Criminal Justice.

⁵⁵ The version of this report released in 2016 calculated treatment rates based on whether the patient reported marijuana as *any* of their top three drugs of abuse. After consultation with the Office of Behavioral Health, we changed our focus to only those patients reporting marijuana as their *primary* drug of abuse. Consequently, the rates presented in this report are lower than in the prior report.

⁵⁶ For the purposes of this report all types of treatment types in the ADDSCODS database are being used. This includes in-patient treatment, out-patient treatment, STIRT, withdrawal management, DUI education/services, and differential assessment. Consequently, the numbers in this report may be somewhat higher than other reports from OBH that focus solely on in-patient and out-patient treatment.

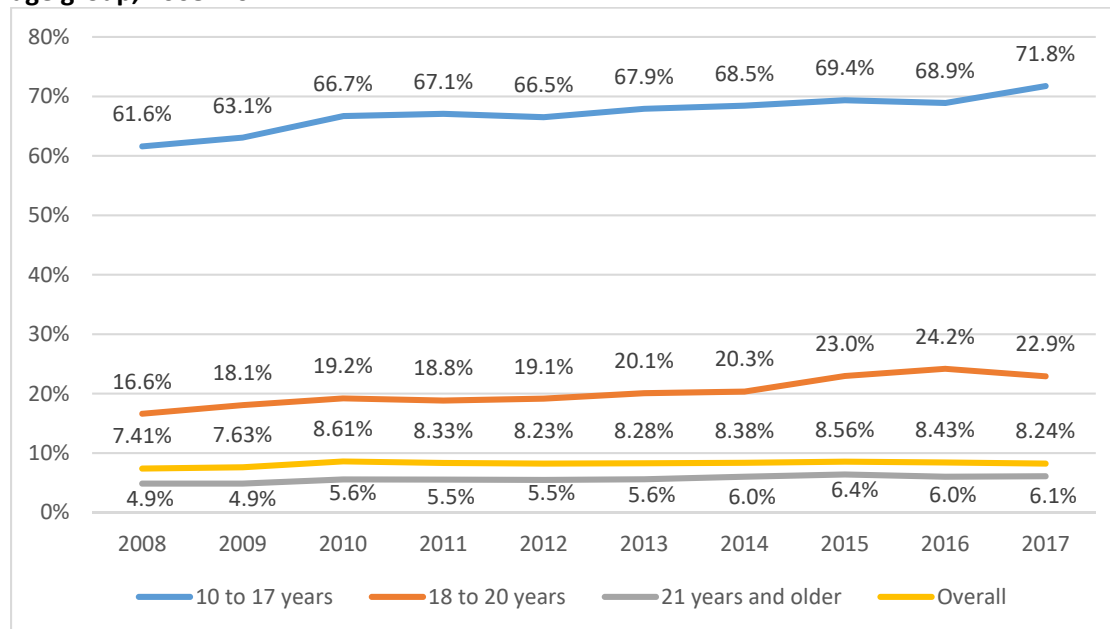
Figure 48. Number of treatment admissions reporting marijuana as primary drug of abuse, by age group, 2008–2017



Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

Marijuana was reported as the primary drug of abuse by 71.8% of youth under the age of 18 who were admitted for treatment in 2017 (Figure 49). This contrasts with 22.9% of 18- to 20-year-olds and 6.1% of adults 21 years or older.

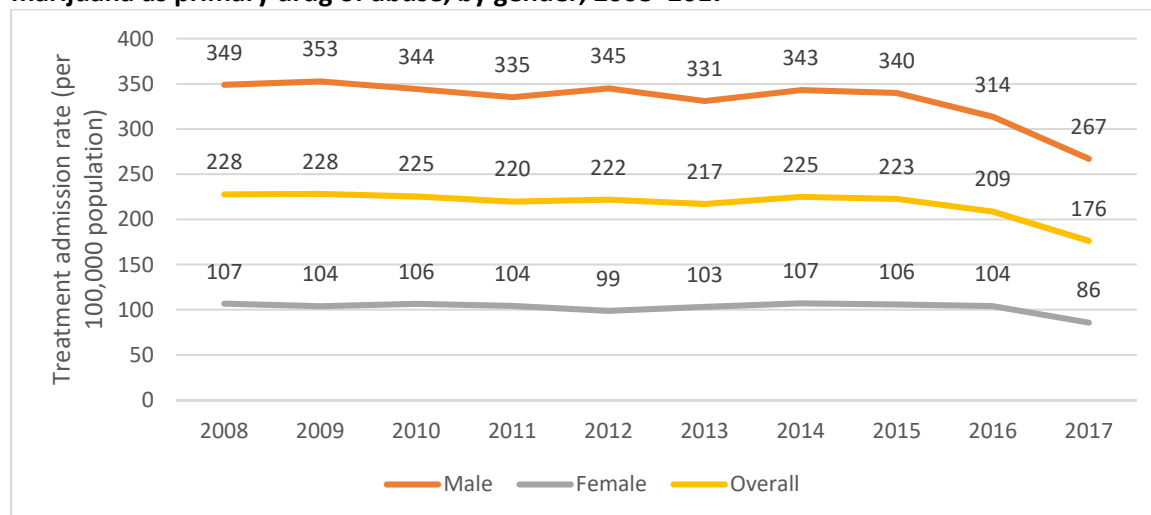
Figure 49. Percent of treatment admissions with marijuana reported as the primary drug of abuse, by age group, 2008–2017



Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

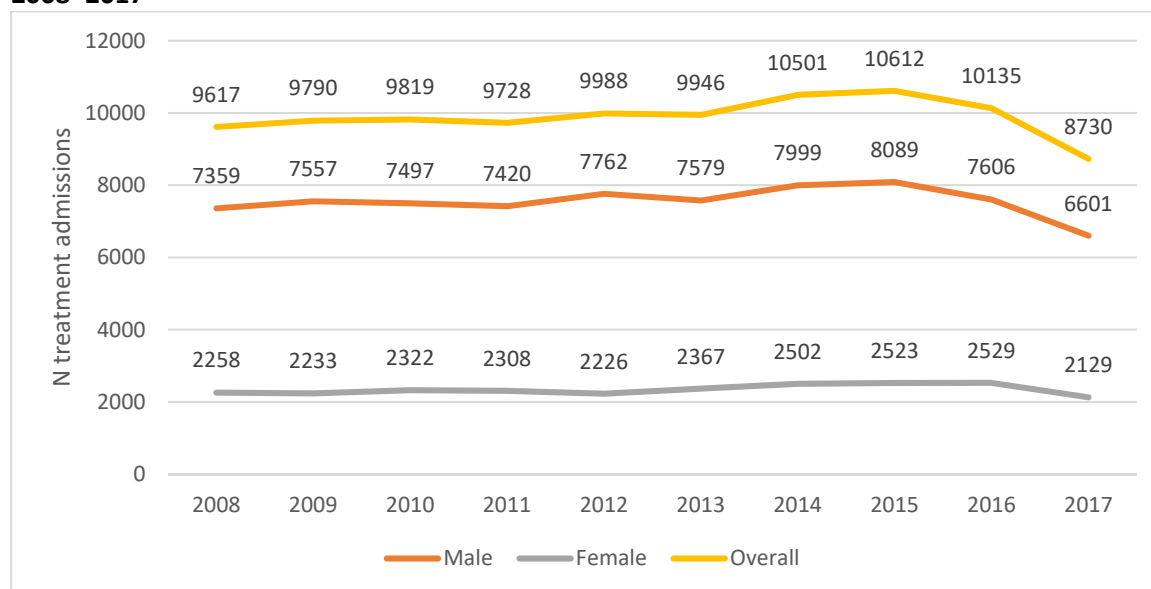
Treatment admission rates (per 100,000 population) and number of admissions with marijuana as the primary drug of abuse, broken out by gender, are detailed in Figures 50 and 51. (For purposes of comparability across gender, rates are presented.) The overall treatment admission rate for marijuana decreased between 2012 to 2017, from 222 to 176, respectively. The treatment admission rate decreased for males, from 345 in 2012 to 267 admissions per 100,000 population in 2017 (Figure 50). The admission rate also decreased for females, from 99 admissions per 100,000 in 2012 to 86 in 2017.

Figure 50. Treatment admission rate (per 100,000 population in each age group) for those reporting marijuana as primary drug of abuse, by gender, 2008–2017



Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

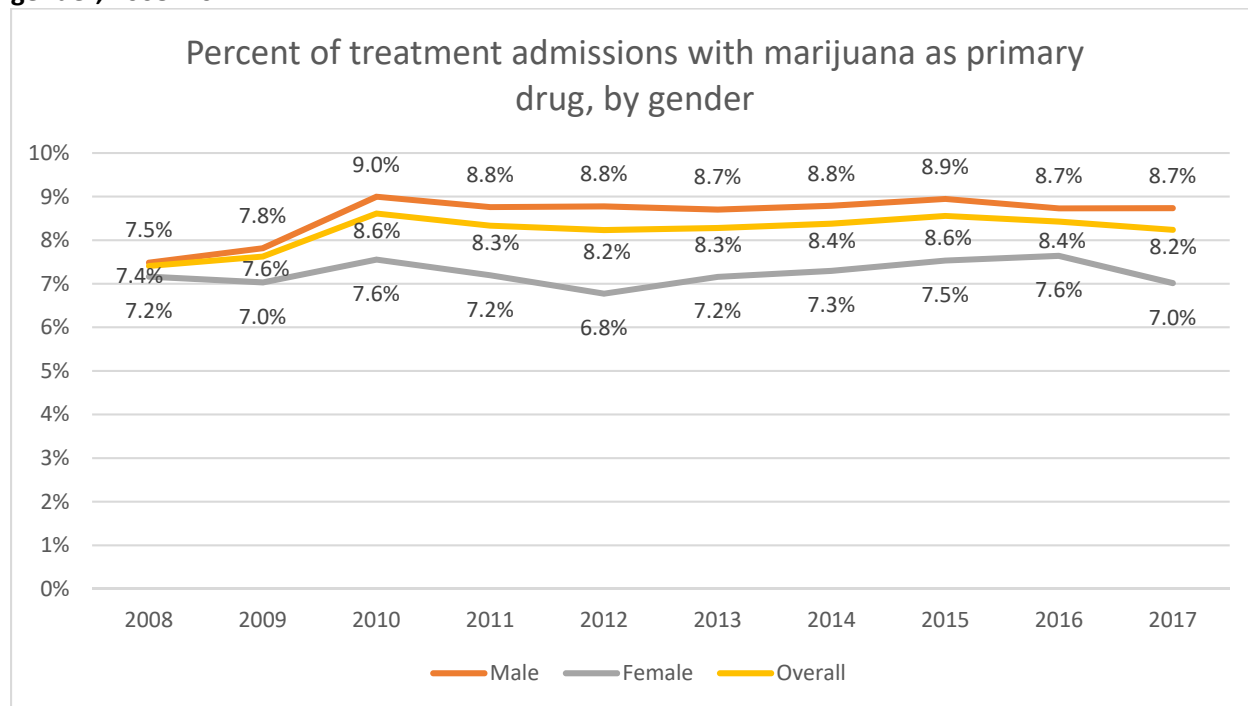
Figure 51. Number of treatment admissions reporting marijuana as primary drug of abuse, by gender, 2008–2017



Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

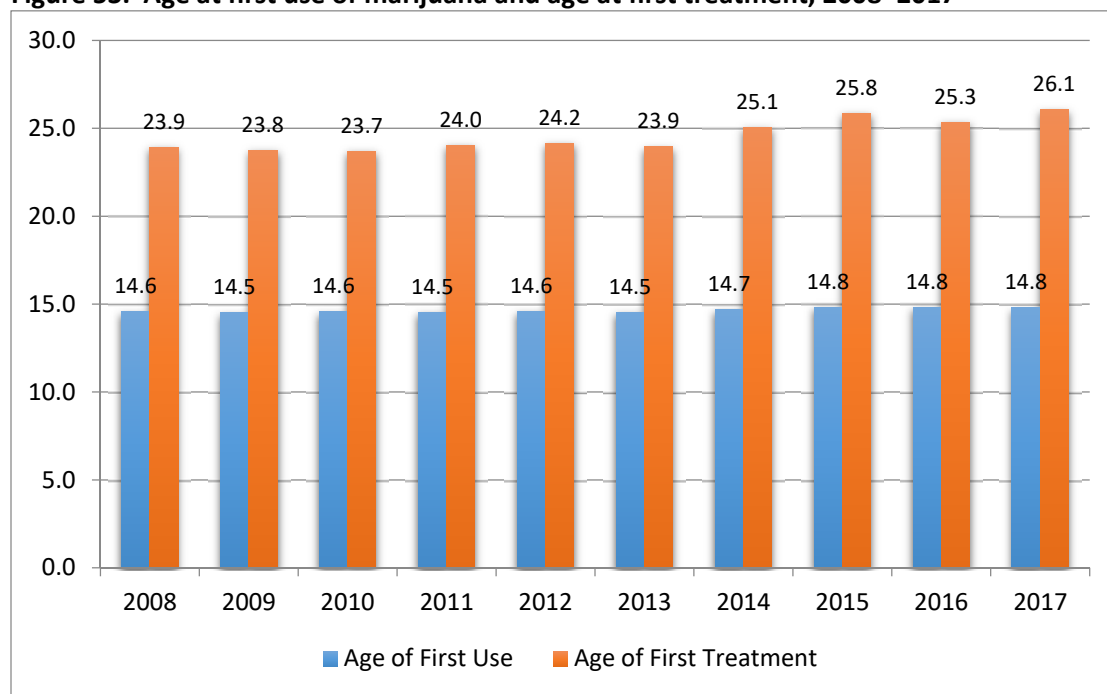
Marijuana was reported as the primary drug of abuse by 8.0% of all treatment admissions and 8.7% of males admitted for treatment in 2017 (Figure 52). This contrasts with 7.0% of females in 2017.

Figure 52. Percent of treatment admissions with marijuana reported as the primary drug of abuse, by gender, 2008–2017



Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

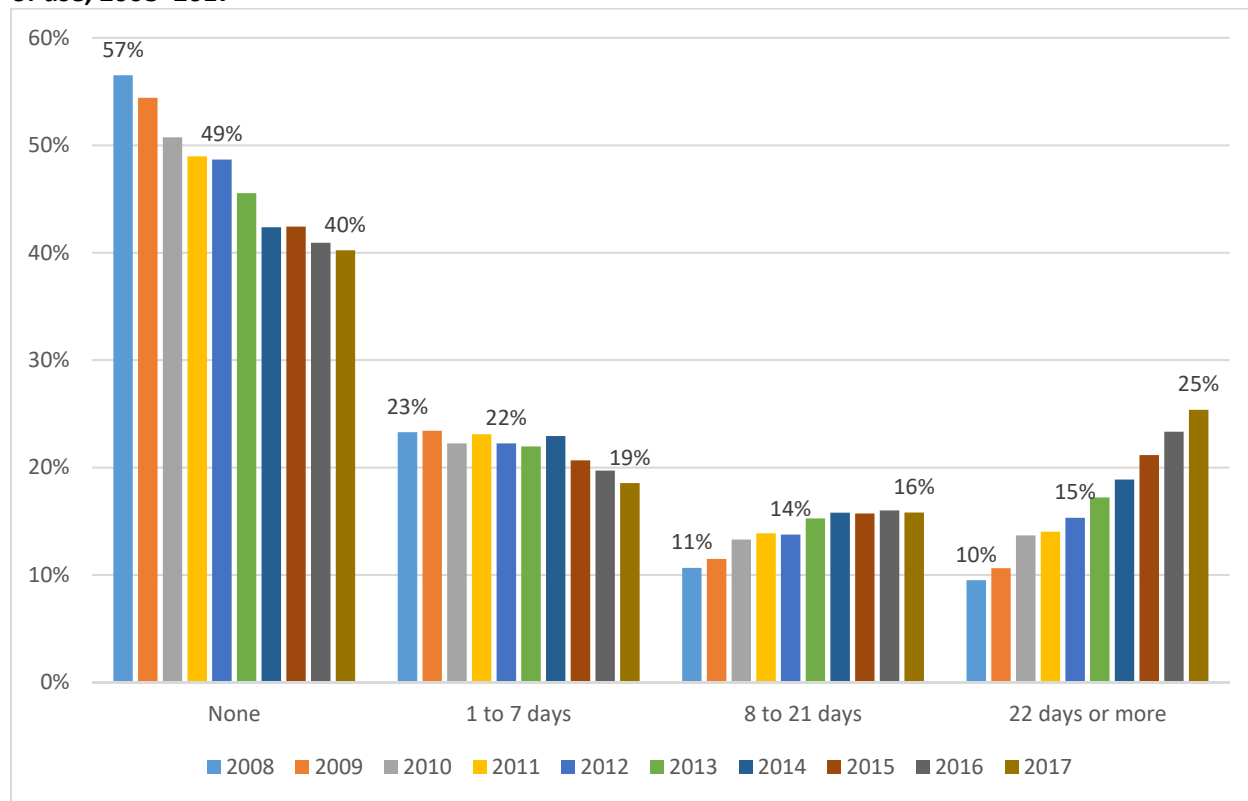
The average age at first use for those seeking treatment for marijuana abuse remained stable at 14.5–15.0 years (Figure 53) during the period 2008–2017. The average age at first treatment increased after 2008, from 23.9 years in 2008 to 26.1 years in 2017. The time from first usage to first treatment increased, from around 9.3 years in 2008 to 11.3 years in 2017. The reasons behind this change are unknown at this time, but OBH is tracking this development.

Figure 53. Age at first use of marijuana and age at first treatment, 2008–2017

Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

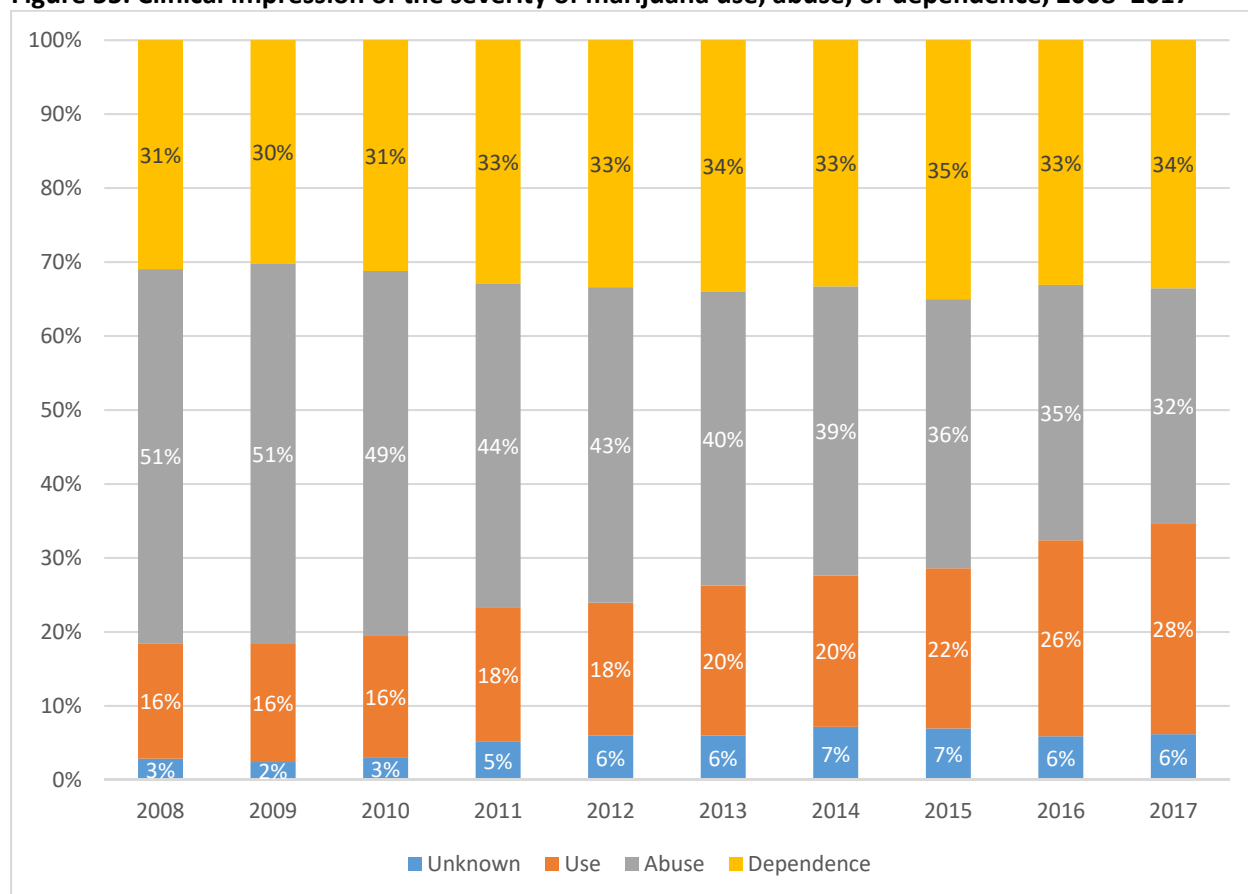
The DACODS collects information on frequency of drug use in the 30 days prior to treatment (Figure 54). In 2008, 23% of clients seeking treatment were occasional users (1–7 days of use in the past 30 days) and 10% were heavy users (22 days or more). By 2017, this distribution changed and occasional users (19%) were outnumbered by heavy users (25%), suggesting that those seeking treatment were more likely to be heavy users prior to admission. Reported methods of marijuana use have not changed over time, with the most common method of marijuana use being smoking (91.8%), followed by eatables (4.0%), and inhalation (3.6%) (data not presented).

Figure 54. Percent of clients who reported marijuana use in past 30-days, by number of reported days of use, 2008–2017



Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

The trend in the clinical impression of the severity of marijuana use is presented in Figure 55. The proportion of patients classified as dependent on marijuana remained stable, at approximately one-third being assessed at that level. The percentage classified as exhibiting abuse decreased, from 51% in 2008 to 32% in 2017, while those classified as exhibiting use increased, from 16% in 2008 to 28% in 2017.

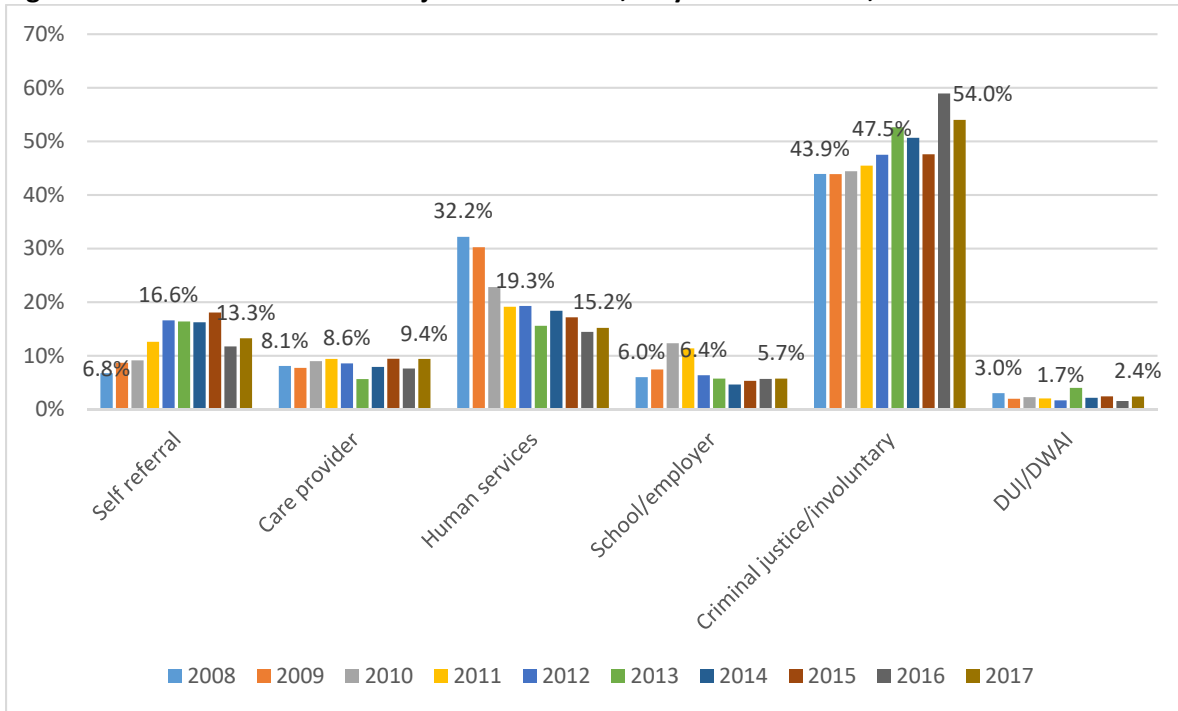
Figure 55. Clinical impression of the severity of marijuana use, abuse, or dependence, 2008–2017

Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

Information on the referral source and admission category by age group is presented in Figures 56–61. Referrals from the criminal justice system were the most common across all age categories for the period 2008–2017 (Figures 56, 58, and 60), ranging from 54.0% of youth 17 years and under to 42.3% of young adults 18–20 years old. The second most common referral category for youth 17 years and under was human services (15.2%), while DUI/DWAI referrals was the second most common category for those 18–20 years (26.5%) and those 21 years and older (28.6%).

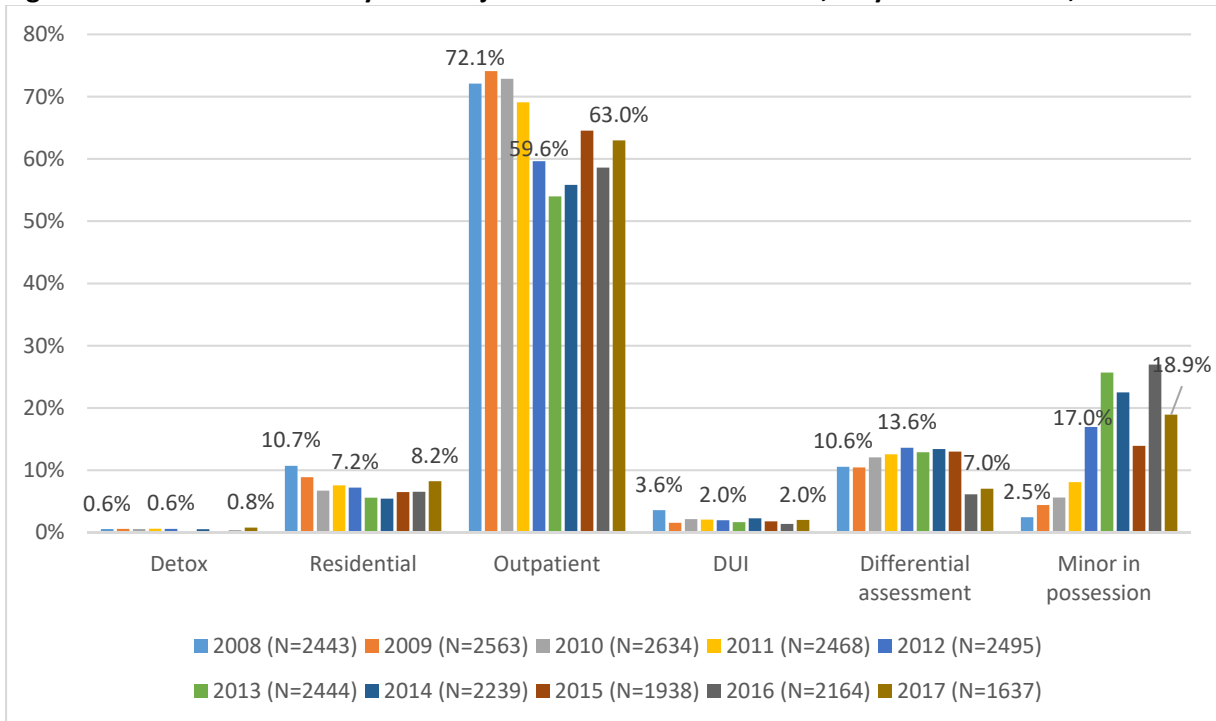
The most common admission category across all age groups was outpatient treatment (Figures 57, 59, and 61). The age group with the highest proportion of individuals seeking outpatient treatment were those ages 17 years and younger (63.0% in 2017), followed by adults 21 years and older (53.2% in 2017), and young adults 18–20 years old (44.5% in 2017).

Figure 56. Referral source for marijuana treatment, 17 years and under, 2008–2017



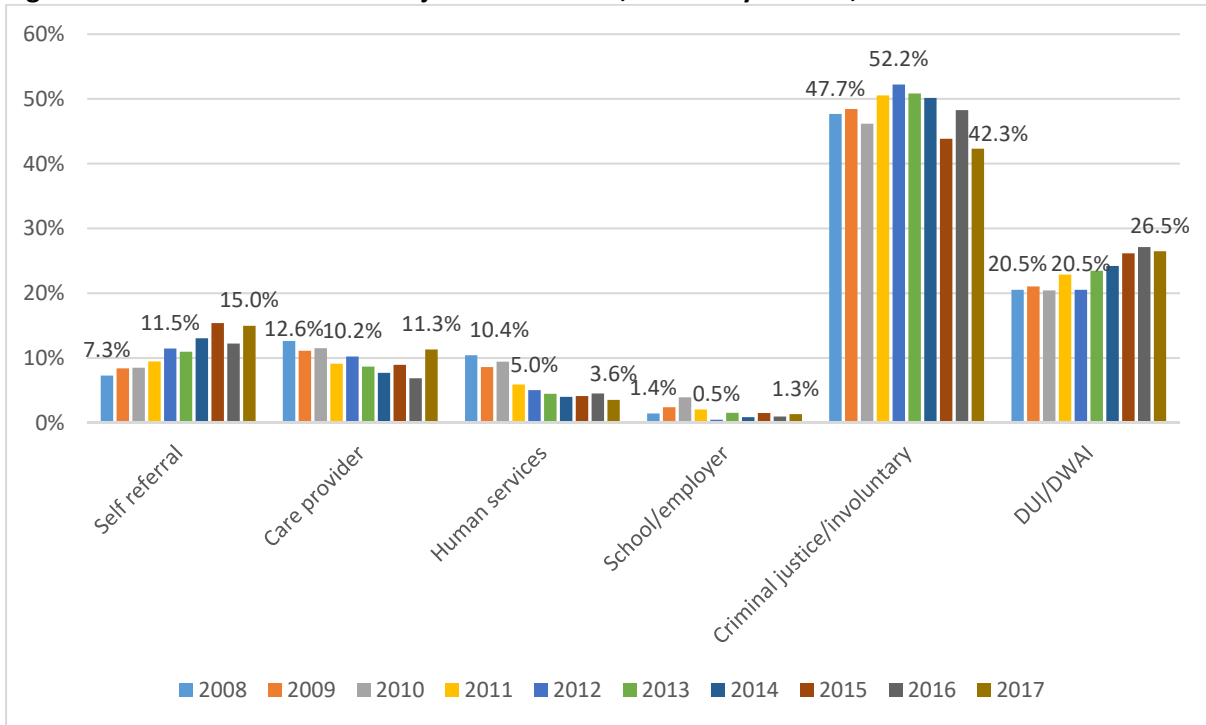
Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

Figure 57. Treatment modality for marijuana treatment admissions, 17 years and under, 2008–2017



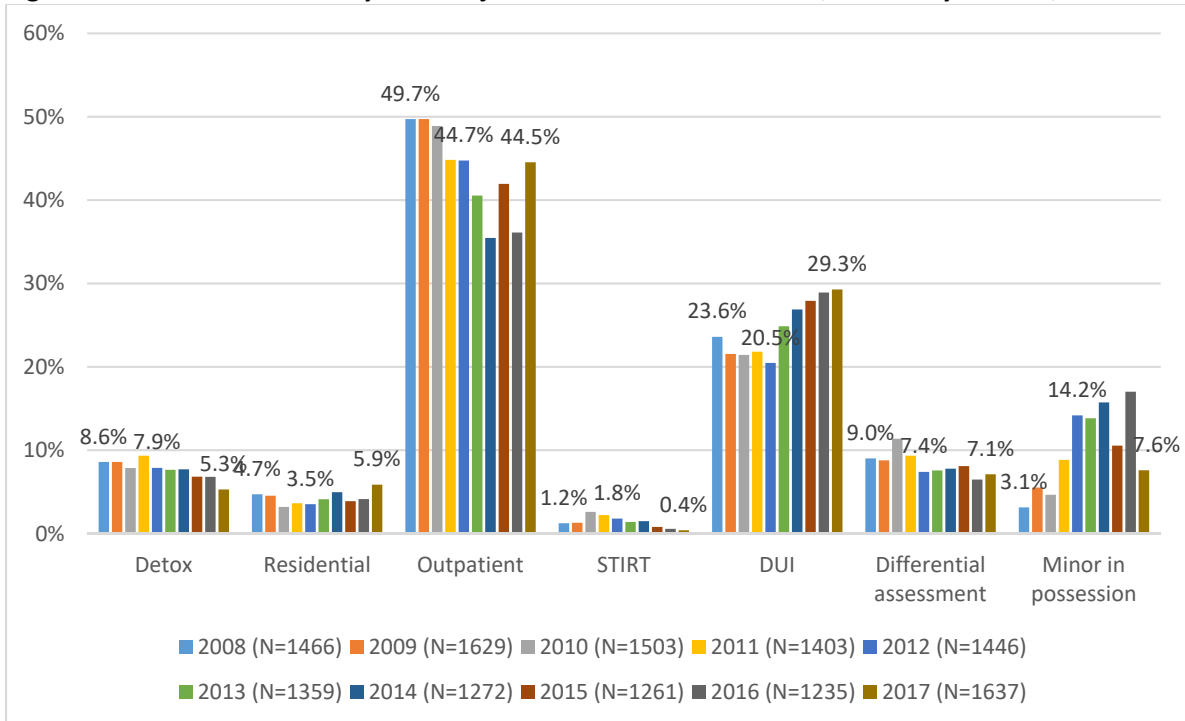
Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

Figure 58. Referral source for marijuana treatment, 18 to 20 years old, 2008–2017



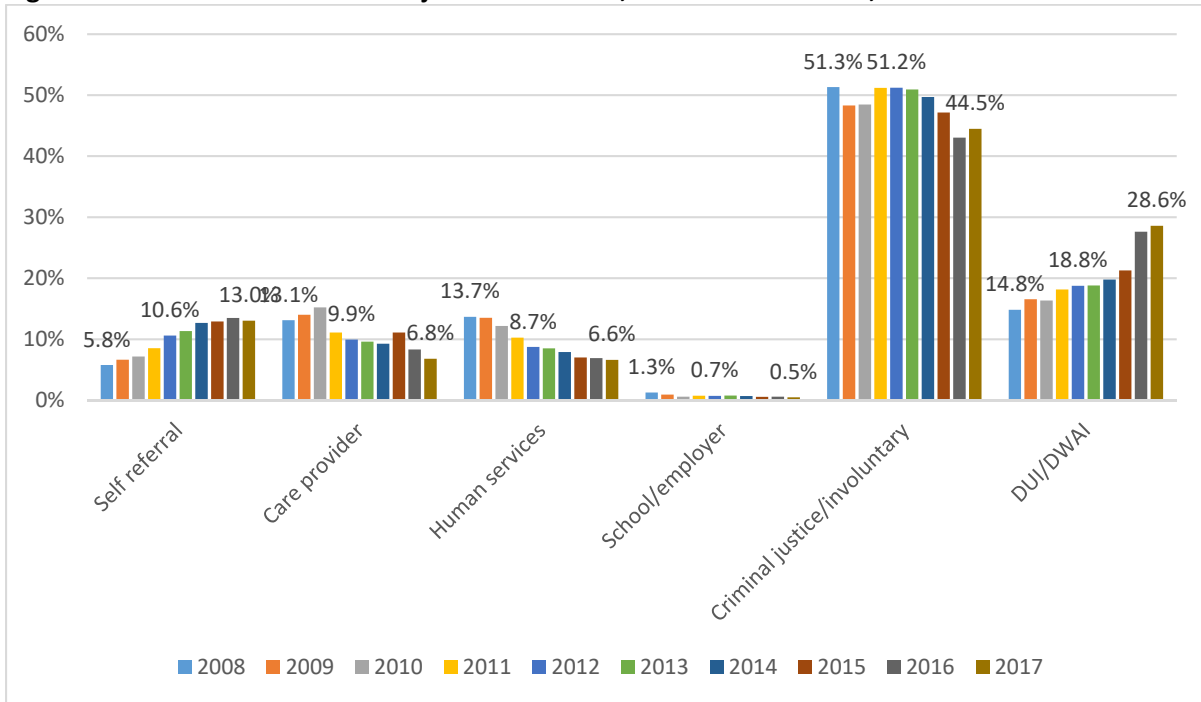
Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

Figure 59. Treatment modality for marijuana treatment admissions, 18 to 20 years old, 2008–2017



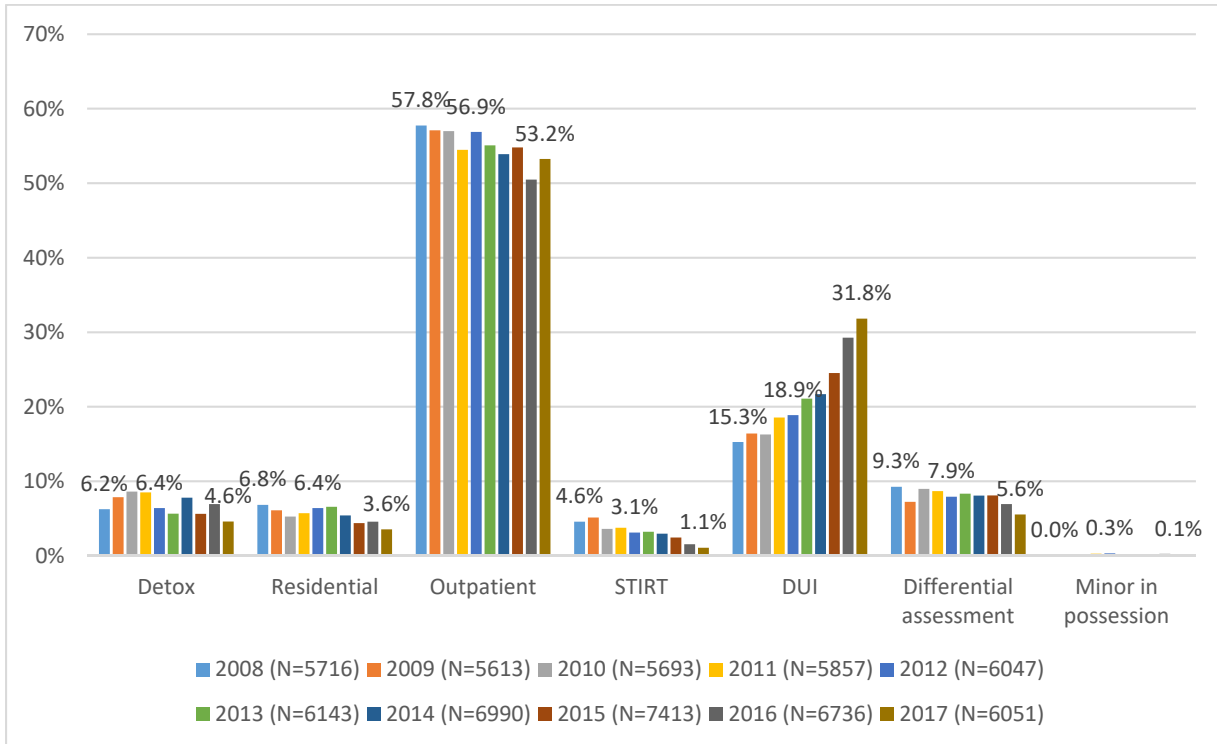
Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Note: STIRT stands for Strategic Intensive Remediation Treatment. Analyzed by the Division of Criminal Justice.

Figure 60. Referral source for marijuana treatment, adults 21 and older, 2008–2017



Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

Figure 61. Treatment modality for marijuana treatment admissions, adults 21 years and older, 2008–2017

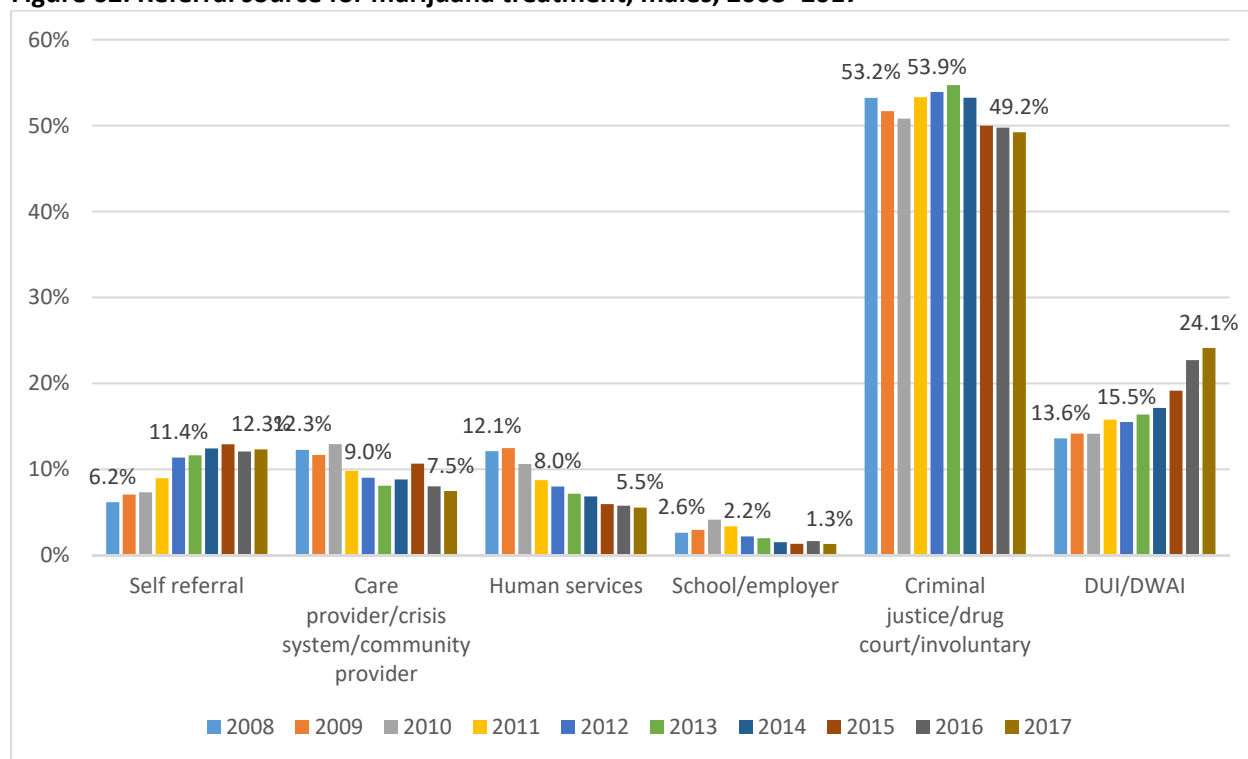


Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Note: STIRT stands for Strategic Intensive Remediation Treatment. Analyzed by the Division of Criminal Justice.

Information on the referral source and admission category by gender is presented in Figures 62-65. Referrals from the criminal justice system were the most common referral source across both genders for the period 2008–2017 (Figures 62 and 64), ranging from 49.0% of males to 36.1% of females. DUI/DWAI referrals were the second most common referral category for both males (24.1%) and females (21.3%).

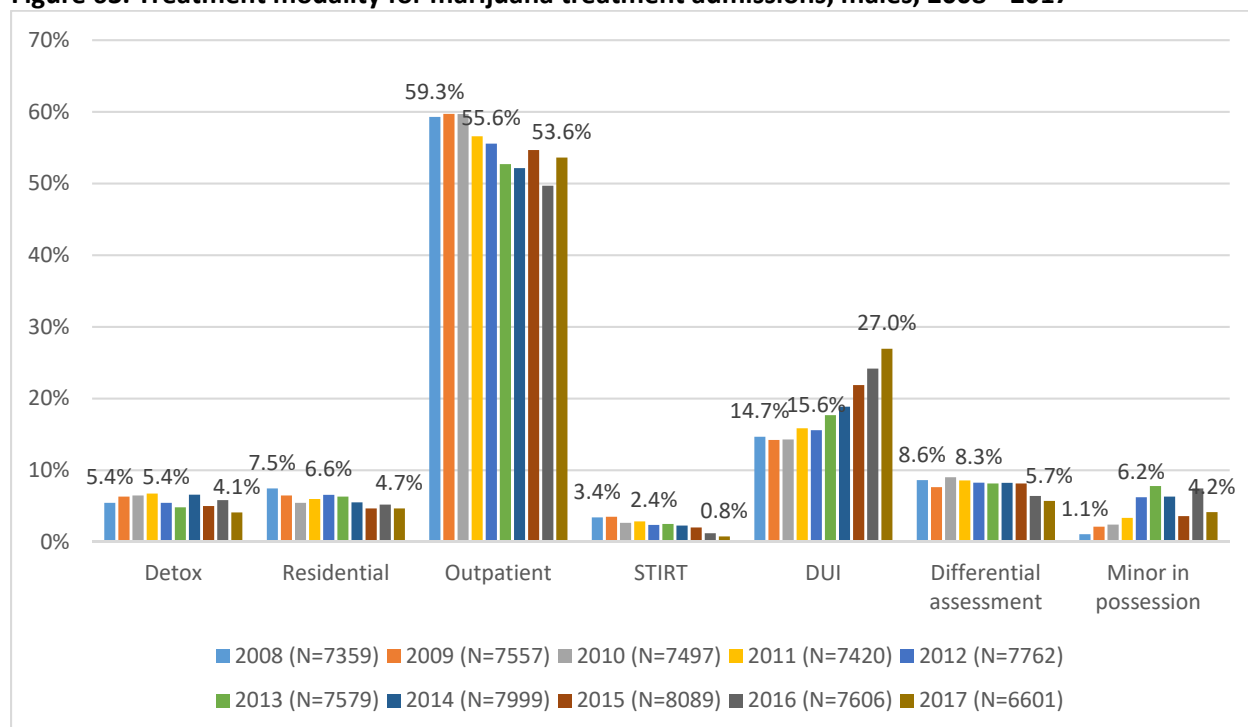
The most common admission modality across both genders was outpatient treatment (Figures 63 and 65), with 53.6% of males and 55.3% of females admitted to outpatient treatment. DUI/DWAI was the second most common admission modality for both genders, with 27.0% of males and 22.8% of females admitted for DUI/DWAI.

Figure 62. Referral source for marijuana treatment, males, 2008–2017



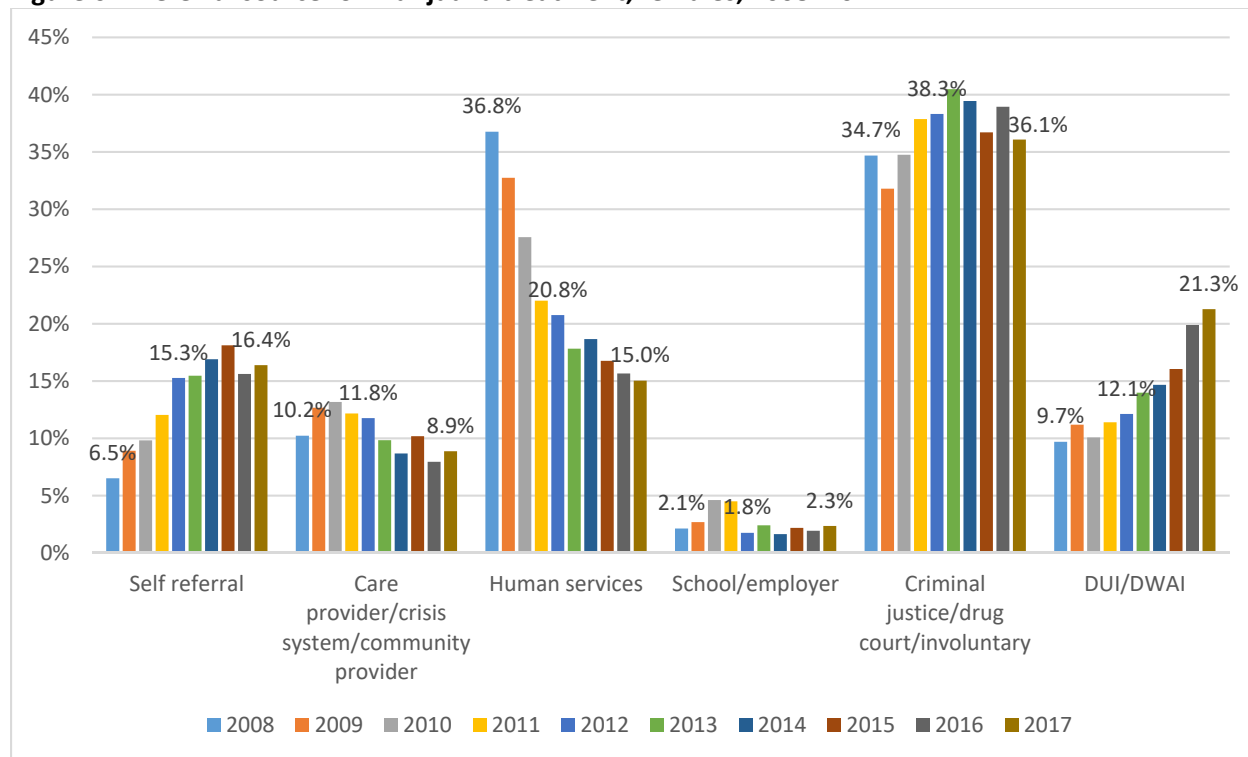
Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

Figure 63. Treatment modality for marijuana treatment admissions, males, 2008–2017



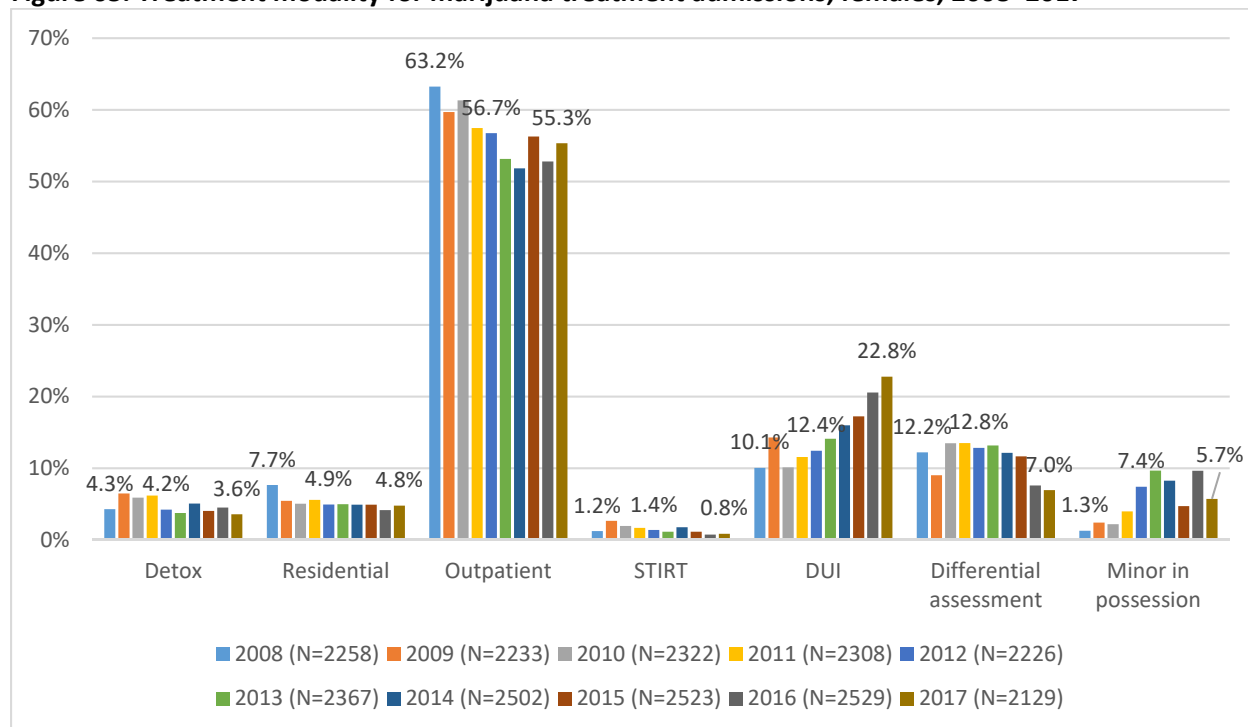
Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice. Note: STIRT is Strategic Intensive Remediation Treatment.

Figure 64. Referral source for marijuana treatment, females, 2008–2017



Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

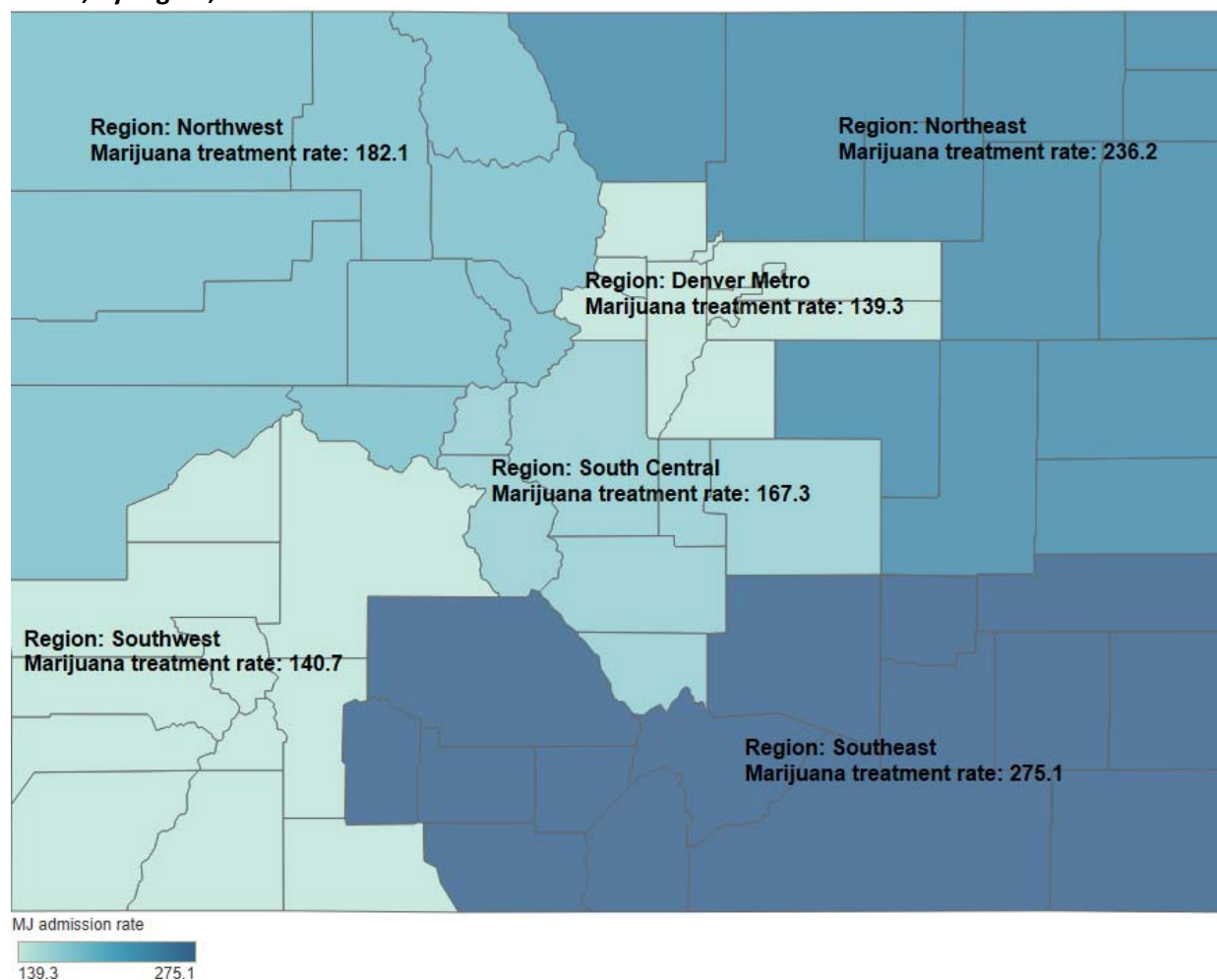
Figure 65. Treatment modality for marijuana treatment admissions, females, 2008–2017



Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice. Note: STIRT is Strategic Intensive Remediation Treatment.

A geographic breakdown of treatment admissions in 2017 per 100,000 population of those ages 10 and over is presented in Figures 66 and 67. The county rates presented in Figure 66 must be interpreted with caution due to the requirement that a county must have at least 30 treatment admissions before data can be released. Figure 67 presents data by region and shows how different the treatment rates were throughout the state. In 2017, the Southeast region had the highest rate (275.1), while the Denver Metro area had the lowest rate (139.3).

Figure 67. Treatment rates (per 100,000 population ages 10 and over) for marijuana as primary drug of abuse, by region, 2017



Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System; Colorado Department of Local Affairs, State Office of Demography. Analyzed by the Division of Criminal Justice.

Suicide Rate Trends

The trend in overall crude suicide rate⁵⁷ and information on toxicology results from coroners is presented in Table 31. The overall crude rate has remained relatively stable since 2012. The prevalence of positive marijuana tests increased from 11.8% in 2012 to 22.3% in 2016. There was no change the percent of deaths by suicide testing positive for alcohol. The 22.3% testing positive for marijuana in 2016 was nearly identical to the national prevalence (22.4%) detailed in a recent CDC report.⁵⁸

The variable "Marijuana Present" could indicate toxicology tests were positive for Delta-9 THC, 11-OH-THC, or THC-COOH (carboxy), so this factor alone is not indicative of intoxication or impairment at time

⁵⁷ The crude suicide rate is per 100,000 total population and is not adjusted for age.

⁵⁸ Stone, D. et al. (2018). *Vital signs: Trends in state suicide rates – United States, 1999-2016 and circumstances contributing to suicide – 27 States, 2015*. Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report. Available at https://www.cdc.gov/mmwr/volumes/67/wr/mm6722a1.htm?s_cid=mm6722a1_w

of death, nor can it be interpreted as causal. It is possible that other substances (including alcohol) were present in addition to marijuana, which makes it difficult to conclusively state marijuana played a role in the death.

Table 31. Suicides in Colorado, by overall crude rate and select toxicology results, 2006-2016

Year	N suicides	Overall crude rate	N with toxicology available	N marijuana present	% marijuana present	N alcohol present	% alcohol present
2006	711	15.0	585	44	7.5%	206	35.2%
2007	807	16.7	767	70	9.1%	273	35.6%
2008	799	16.2	776	58	7.5%	275	35.4%
2009	919	18.3	707	50	7.1%	247	34.9%
2010	850	16.9	821	70	8.5%	268	32.6%
2011	884	17.3	821	62	7.6%	281	34.2%
2012	1,021	19.7	729	86	11.8%	242	33.2%
2013	996	18.9	764	105	13.7%	260	34.0%
2014	1,063	19.9	817	122	14.9%	328	40.1%
2015	1,066	19.6	808	156	19.3%	298	36.9%
2016	1,140	20.5	860	189	22.0%	312	36.3%

Source: Colorado Department of Public Health and Environment, Colorado Violent Death Reporting System, at

<https://www.colorado.gov/pacific/cdphe/colorado-violent-death-reporting-system>

Note: Data obtained from Colorado suicide data dashboard. For additional information on data definitions please visit *Colorado Suicide Data Dashboard: Data Definitions and Functionality*, at

<https://drive.google.com/file/d/1tzPZoZH3UFJ6nafbx3pak7bEA8CL1KkR/view>.

The crude suicide rate is per 100,000 total population and is not adjusted for age.

In sum, the impacts of marijuana legalization on public health in Colorado are still being assessed. Surveys of marijuana use show that among young adults' (18–25), past 30-day use increased from 21% in 2005/2006⁵⁹ to 32% in 2015/2016. Past 30-day use among adults ages 26 and older increased from 5% in 2005/2006 to 14% in 2015/2016. Since 2000, rates of hospitalizations and emergency department visits possibly related to marijuana increased, as have the number of calls to poison control. Drug treatment admission rates for marijuana increased somewhat between 2007 and 2014 for those over the age of 21, but have since declined. The next section provides information on the impact of marijuana legalization on youth.

⁵⁹ Note that the 2006 NSDUH survey for Colorado showed the lowest past 30-day use since 1999.

SECTION FOUR: IMPACT ON YOUTH

Overview

This section focuses on the impact of marijuana legalization on youth under the age of 18. The topics include youth use, diversion of marijuana to youth, youth arrests, comprehensive school information, drug-endangered children,⁶⁰ and other potential impacts.

Information regarding youth marijuana use was obtained from surveys that ask students about drug use and other risky behavior. The Healthy Kids Colorado Survey (HKCS) is a biennial survey administered to high school and middle school youth by the Colorado Department of Public Health and Environment (CDPHE). The 2017 HKCS surveyed more than 53,800 high and middle school students. The National Survey on Drug Use and Health (NSDUH) is administered annually to those ages 12 and older by the federal Substance Abuse and Mental Health Services Administration. SAMHSA produces state-level estimates from a two-year rolling sample. The two-year prevalence rates for Colorado residents 12 to 17 years old were based on weighted estimates from between 500 to 650 survey respondents.

The public safety impacts are examined by using official offense and arrest data from the Colorado Bureau of Investigation, court filings data, and drug testing information from the State Division of Probation Services in the Judicial Branch.

Information about schools was gathered from discipline data made available by the Colorado Department of Education. These data include trends on suspensions, expulsions, and law enforcement referrals for drugs. The data system in place from 2004–2016 did not capture whether marijuana was the specific drug that led to the discipline, as it was grouped with all other drugs. In the 2016–2017 school year, marijuana was reported separately as a reason for school discipline.⁶¹ However, since the most commonly used illicit drug in the youth population is marijuana, changes in drug discipline trends can logically be linked to changes in marijuana use. Discussions with school administrators and the 2016–2017 analysis results support this assumption.

The impact of retail marijuana on drug-endangered children is difficult to answer. The term “drug-endangered children” has not been defined by the legislature, and identifying relevant data is problematic. The Department of Human Services, Division of Child Welfare does not collect specific information on whether drug use or abuse is a contributing factor for at-risk families. Nevertheless, a few data elements may be informative. The CDPHE’s Colorado Behavioral Risk Factor Surveillance System (BRFSS) is a group of health-related telephone surveys that collect data from residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. The Child Health Survey is a component of the BRFSS that asks parents, with children ages 1-14, about various behaviors, including parental marijuana usage and marijuana storage in the home. Questions about

⁶⁰ Senate Bill 2013-283, which mandated this report, included drug-endangered children in the list of topics to study.

⁶¹The 2015–2016 school year was the first in which marijuana was recorded as a discipline reason, but it was not reported for the full year.

marijuana were first added in 2014. The CDPHE's Pregnancy Risk Assessment Monitoring System (PRAMS) is a surveillance system designed to identify and monitor behaviors and experiences of women before, during, and after pregnancy. Information about marijuana use before, during, and after pregnancy is collected by surveying a sample of women who have recently given birth.

A second proxy for drug-endangered children are reports from pregnant women entering substance abuse treatment, by type of drug they report and frequency of marijuana use prior to entering treatment.

Youth Use

Survey Data

Healthy Kids Colorado Survey

The CDPHE's Healthy Kids Colorado Survey (HKCS) collects health information biennially (every odd year) from thousands of Colorado public school high school and middle school students.⁶² Surveys are completed by students from a random sample of selected schools and randomly selected classrooms within those schools. Results are weighted to represent student enrollment in all Colorado public high schools (2005, 2009, 2011, 2013, 2015, 2017) and public middle schools (2013, 2015, 2017). The HKCS and other sample-based surveys employ statistical weights to account for the fact that information is obtained from a sample and used to represent the larger population. The weights account for sampling design, school and student nonparticipation and nonresponse, and overall adjustments in grade, sex, and ethnicity that match the sample and the population.

A total of 53,850 randomly selected students from 190 randomly selected schools participated in the 2017 HKCS. The sample includes 47,146 students in 157 public high schools and 6,704 students in 33 public middle schools (Table 32).

⁶² More detailed information about the Healthy Kids Colorado Survey can be accessed at <https://www.colorado.gov/cdphe/hkcs>. HKCS is Colorado's version of the national Youth Risk Behavioral Survey (YRBS), a biennial survey overseen by the Centers for Disease Control and Prevention. More information about the YRBS can be found here <https://www.cdc.gov/healthyyouth/data/yrbs/results.htm>

Table 32. Sample information for Healthy Kids Colorado Survey (HKCS)

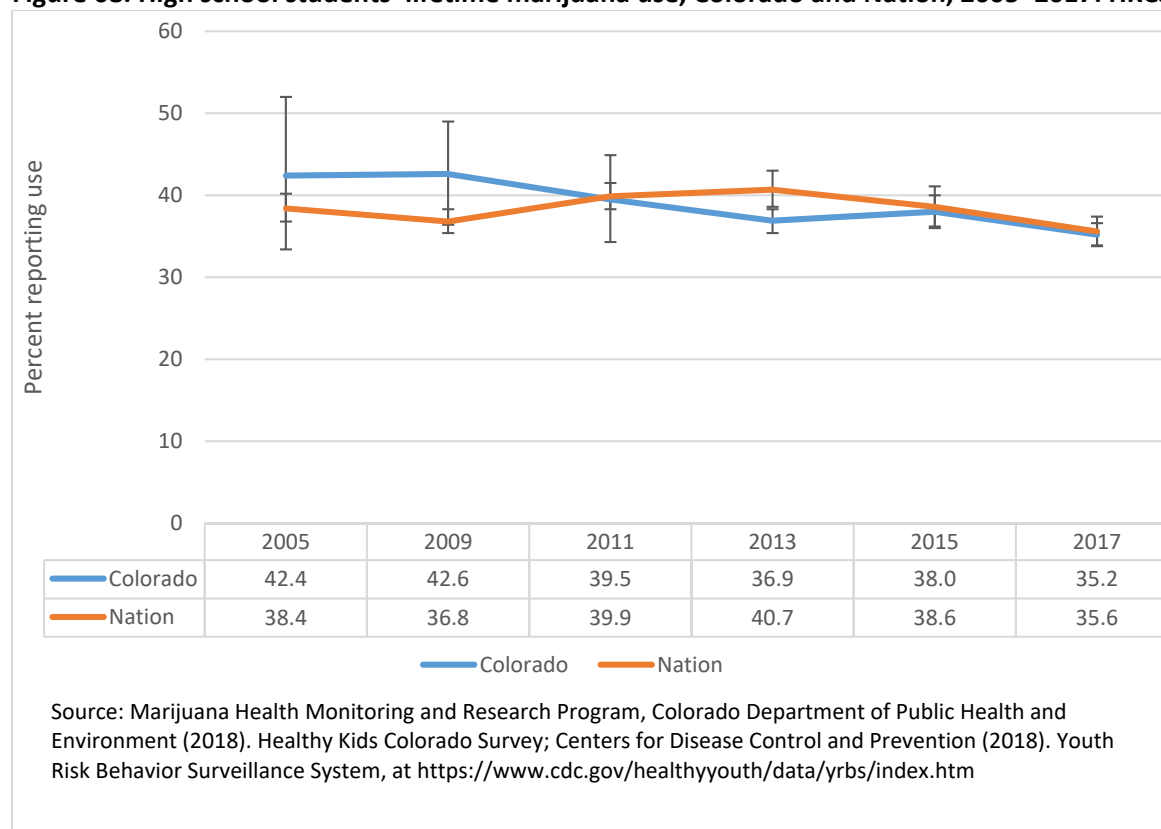
Year	High school	Middle school ^a
	N Responses	N Responses
2005	1,498	--
2009	1,511	--
2011	1,523	--
2013	25,197	14,187
2015	15,970	997
2017	47,146	6,704

Source: Colorado Department of Public Health and Environment, Healthy Kids Colorado Survey Technical Documentation.

^aThe middle school survey was not conducted prior to 2013.

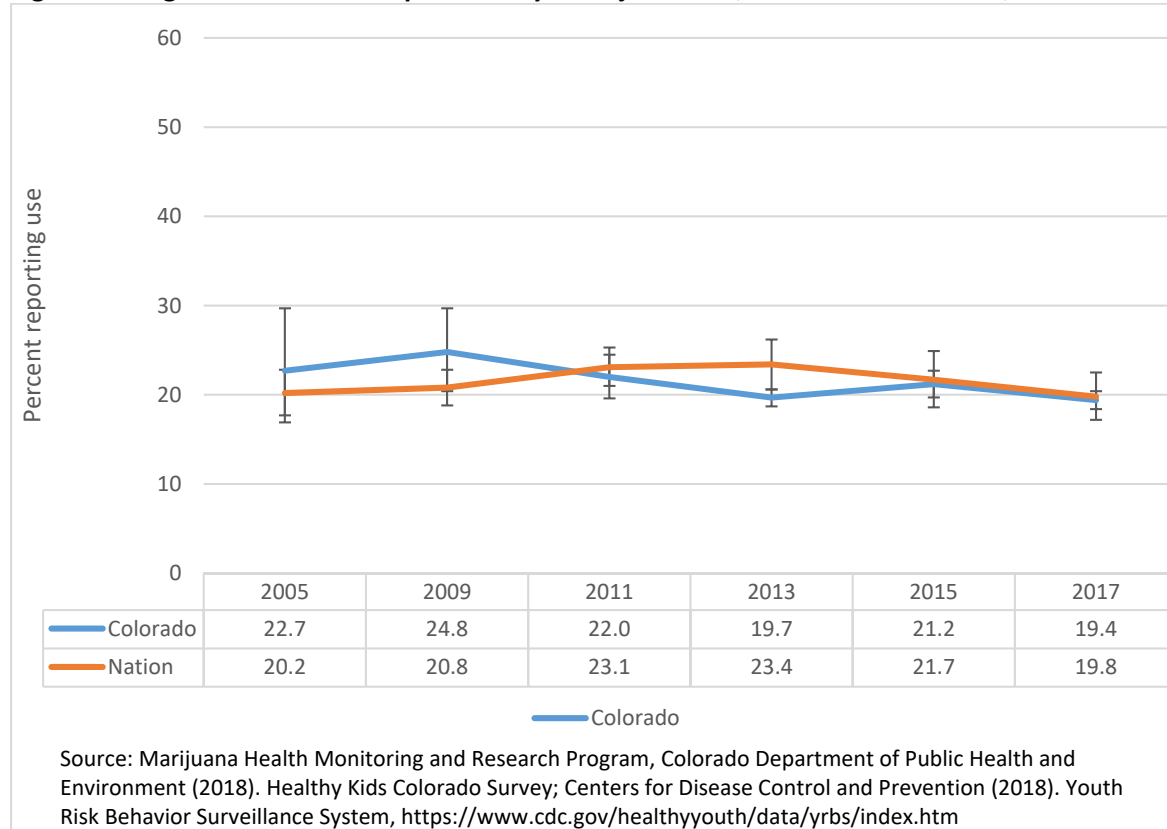
Note: The response rate from the 2007 survey was too low to allow for accurate weighting of the results and these data are not presented.

The proportion of Colorado high school students reporting using marijuana ever in their lifetime remained statistically unchanged between 2005 and 2017 (Figure 68). Further, Figure 1 shows there was no statistically significant difference between Colorado student responses compared to national data.

Figure 68. High school students' lifetime marijuana use, Colorado and Nation, 2005–2017: HKCS

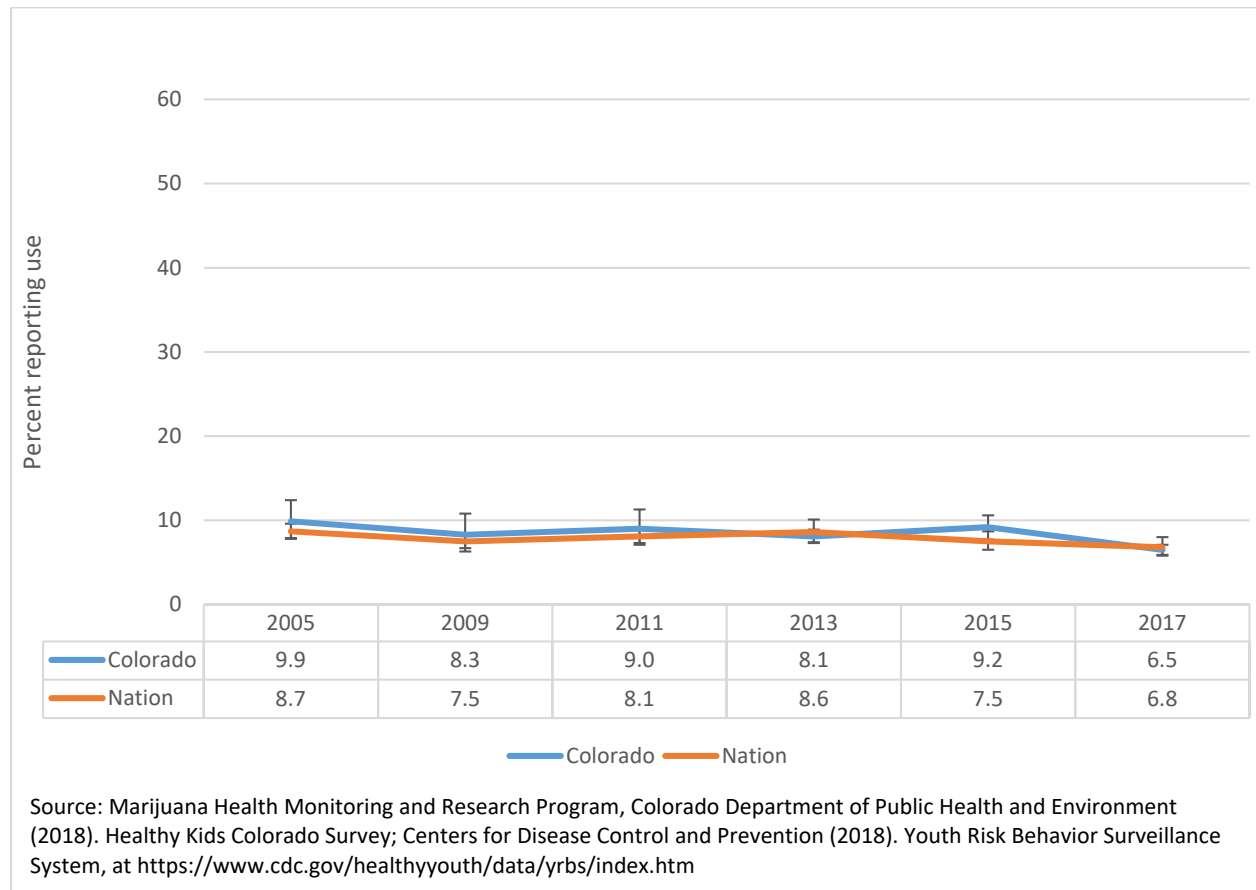
The percentage of high school students reporting past 30-day use also remained stable, with no significant changes between 2005 and 2017 (Figure 69).

Figure 69. High school students' past 30-days marijuana use, Colorado and Nation, 2005–2017: HKCS



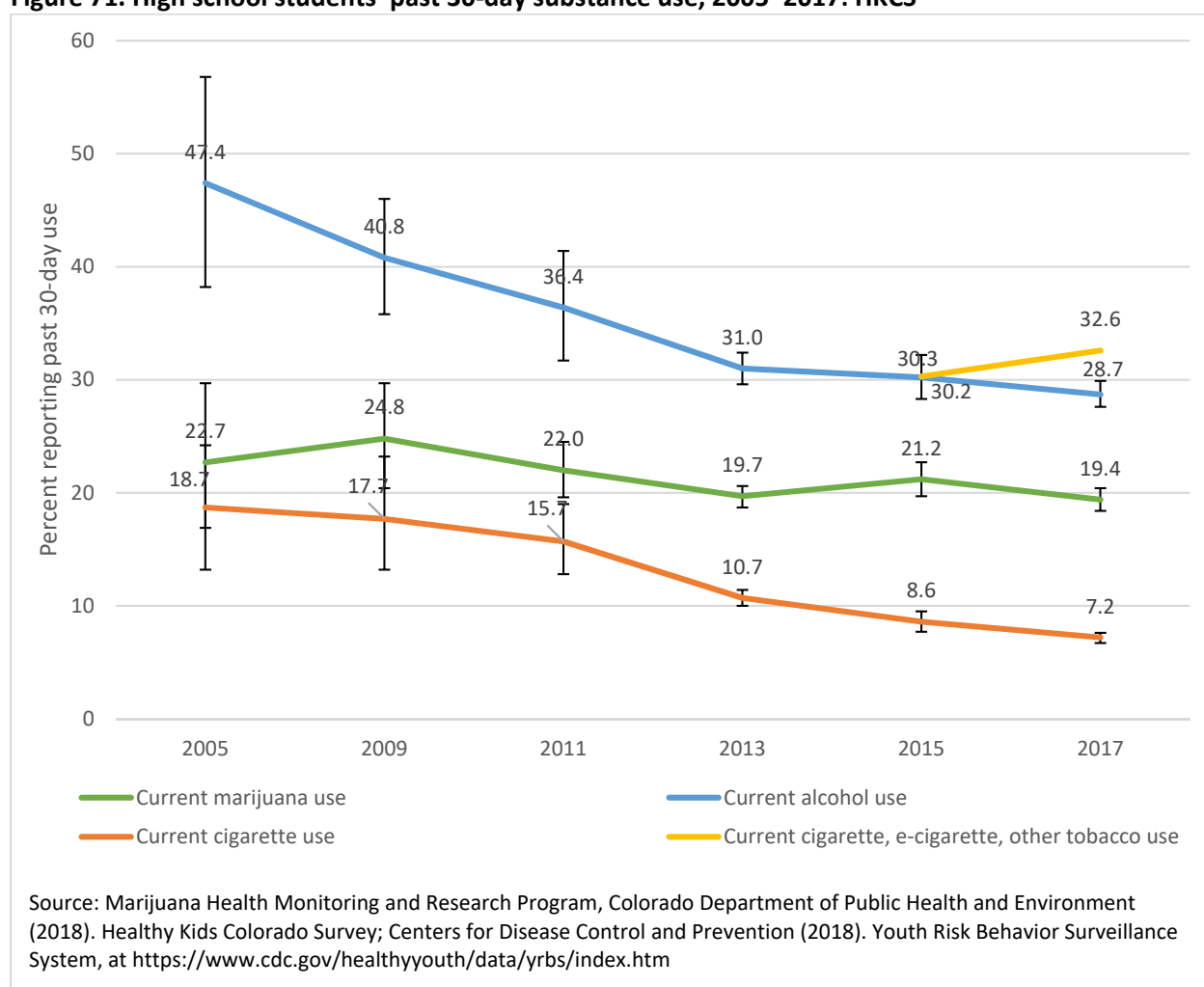
The proportion of students trying marijuana before the age of 13 went down significantly in Colorado, from 9.2% in 2015 to 6.5% in 2017 (Figure 70). These findings were not statistically different from the national data.

Figure 70. High school students' marijuana use before 13 years old, Colorado and Nation, 2005–2017: HKCS



Prevalence trends for the three most commonly used substances by high school students are presented in Figure 71. The prevalence of marijuana use has not changed significantly in the past six survey administrations (2005, 2009, 2011, 2013, 2015, and 2017). Alcohol and cigarette use trended downward, with the largest reduction linked to current alcohol use, down from 47.4% in 2005 to 28.7% in 2017. Although youth's cigarette smoking was at an all-time low, 27% of youth report using nicotine through vapor products including e-cigarettes. Data on e-cigarettes was added to the 2015 administration of HKCS.

Figure 71. High school students' past 30-day substance use, 2005–2017: HKCS



The demographic characteristics of students reporting past 30-day marijuana use in 2017 are presented in Table 33. The percentage of males (18.9%) and females (19.7%) that report past 30-day use does not show any difference. The age of the student was associated with marijuana use, with 13.5% of those 15 or younger reporting use in the past 30-days, compared to 23.7% of 16- to 17-year olds, and 27.0% of those 18 or older. There were no significant differences in reported use between American Indian/Alaska Native (20.5%), Black/African-American (19.1%), White (18.3%), or Hispanic/Hispanic-White students (21.9%). Asian high school students reported using less frequently (9.3%) than other racial categories while multiple race/Hispanic-Other race reported the highest rates (27.1%). Those reporting their sexual orientation as gay/lesbian/bisexual were likely to report past 30-day marijuana use (30.9%) than heterosexual (18.2%) or unsure (16.5%) youth.

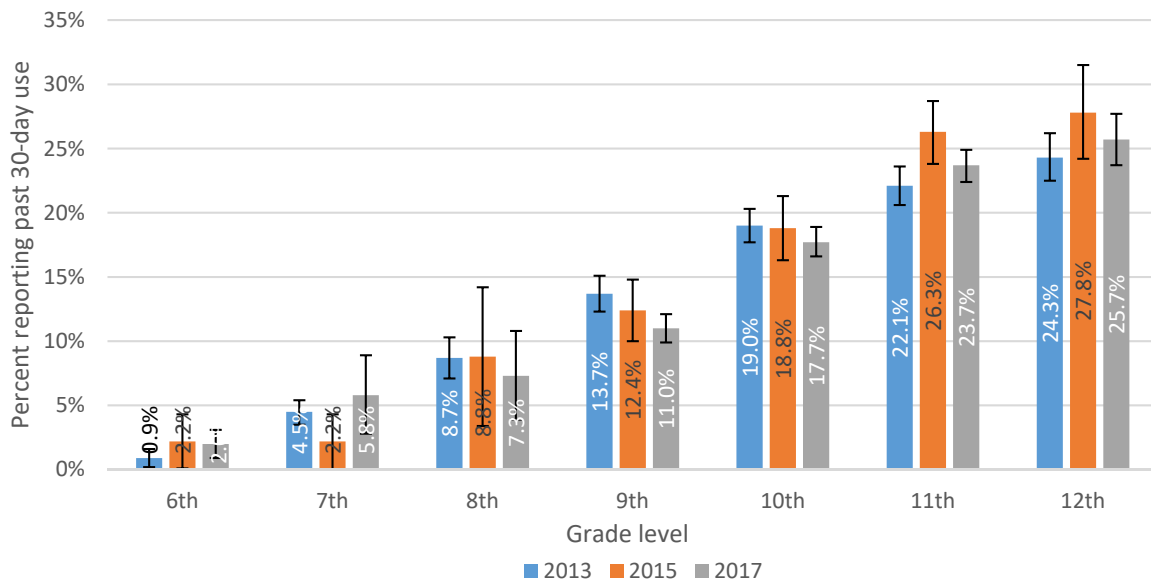
Table 33. High school students' past 30-day marijuana use, by demographic characteristics, 2017

Demographic category	Percent	95% CI
Total	19.4	(18.4-20.4)
Gender		
Male	18.9	(17.8-19.9)
Female	19.7	(18.5-21.0)
Age		
15 or younger	13.5	(12.6-14.5)
16 or 17	23.7	(22.5-25.0)
18 or older	27.0	(24.0-30.0)
Grade		
9th	11.0	(9.9-12.1)
10th	17.7	(16.6-18.9)
11th	23.7	(22.4-24.9)
12th	25.7	(23.7-27.7)
Race/ethnicity		
American Indian/Alaska Native	20.5	(16.6-24.4)
Asian	9.3	(7.2-11.5)
Black/African-American	19.1	(15.4-22.8)
Native Hawaiian/Pacific Islander	23.1	(11.5-34.6)
White	18.3	(17.0-19.7)
Hispanic only or Hispanic White	21.9	(20.6-23.1)
Multiple race or Hispanic Other Race	27.1	(23.6-30.6)
Sexual orientation		
Heterosexual	18.2	(17.3-19.2)
Gay, Lesbian, or Bisexual	30.9	(28.4-33.5)
Unsure	16.5	(13.7-19.4)

Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment (2018). Healthy Kids Colorado Survey, at <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-data-tables-and-reports>

Past 30-day marijuana use by grade level is presented in Figure 72. No significant changes occurred within any grade between 2013 to 2017. Past 30-day marijuana use increased by grade, with the biggest jumps in 2017 occurring from 9th grade to 10th grade (+6.7% points) and 10th grade to 11th grade (+6.0% points).

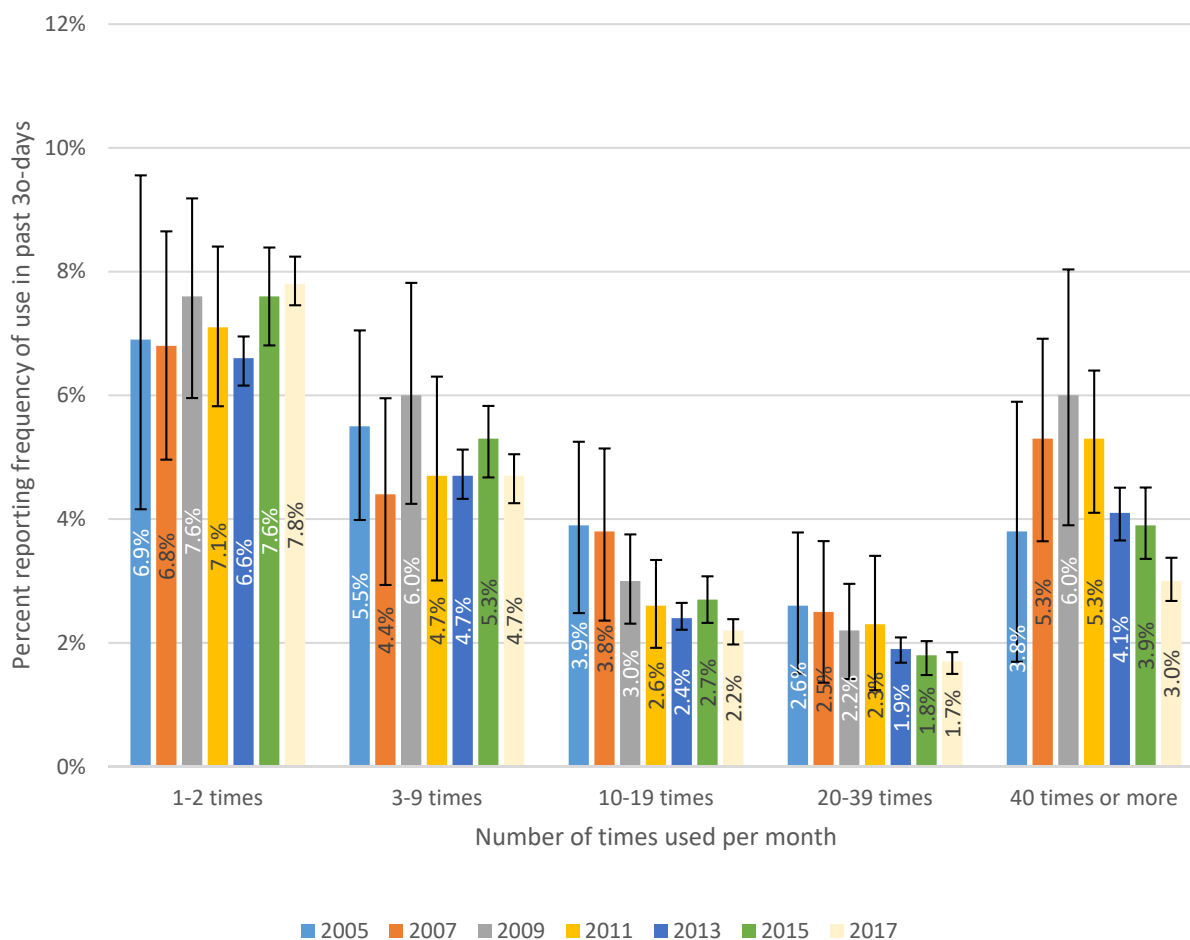
Figure 72. High school and middle school students' past 30-day marijuana use, by grade level, 2013-2017: HKCS



Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment (2018). Healthy Kids Colorado Survey, at <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-data-tables-and-reports>

The number of times high school students reported using marijuana in the past 30-days is presented in Figure 73. In 2017, among those who used marijuana, 7.8% reported using one to two times, 4.7% reported using three to nine times, and 3.0% reported using 40 or more times. Using 40 or more times appears to have decreased, but there were no statistically significant differences in any use category between 2015 to 2017.

Figure 73. High school students' marijuana use frequency in past 30 days, 2005–2017: HKCS

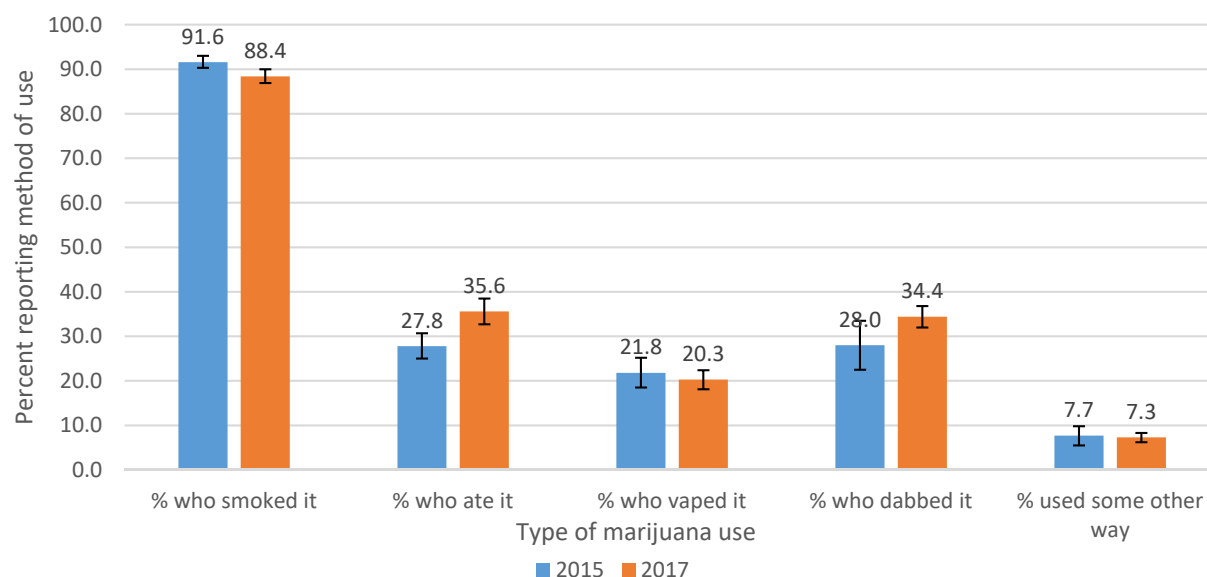


Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment (2018). Healthy Kids Colorado Survey, at <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-hkcs-monitoring-trends-youth-marijuana-use>

The most common method of marijuana use, reported by the 19.4% of high school students who used marijuana in the past 30-days, was smoking (88.4%), followed by eating (35.6%), and dabbing⁶³ (34.4%). The percent of high school students reporting eating and dabbing marijuana in the past 30-days both increased significantly from 2015 to 2017 (Figure 74).

⁶³ Dabbing is a method of use in which a high THC concentrate (25%-90% THC) is placed on a small metal “nail,” heated up to a very high temperature, and then inhaled through a glass device known as a “dab rig.” For a more complete description of concentrates and dabbing, see <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5679763/>; <https://ajp.psychiatryonline.org/doi/full/10.1176/appi.ajp-rj.2016.110604>; <https://www.theatlantic.com/national/archive/2013/05/amateurs-guide-dabs/315221/>.

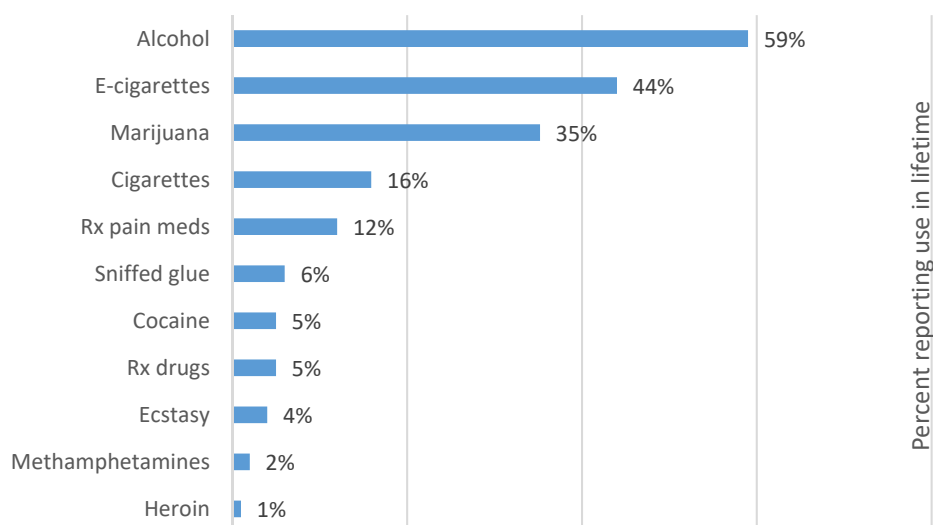
Figure 74. High school students' reported methods of marijuana use, by type of use, 2015–2017: HKCS



Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment (2018). Healthy Kids Colorado Survey, at <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-hkcs-monitoring-trends-youth-marijuana-use>. Note: Student can report more than one method of use.

Alcohol was the most common substance high school students reported using at any point in their lives at 59%, followed by e-cigarettes at 44%, and marijuana at 35% (Figure 75).

Figure 75. High school students' reported use in lifetime of various substances, by substance type, 2017: HKCS



Source: Colorado Department of Public Health and Environment (2018), *Data Brief: Colorado Youth Marijuana Use 2017*. Note: E-cigarette use does not include marijuana products.

Colorado has 21 Health Statistics Regions (HSRs). Large counties constitute a single HSR, while smaller counties are grouped together. This grouping allows estimates to be produced for areas with small student populations. See Figure 76 for a statewide map of the HSRs.

Health Statistics Region 7 (Pueblo County) reported the highest rate of high school students using marijuana in the past 30 days for the last three survey administrations, with 26.8% reporting use in 2017, 30.1% in 2015, and 32.1% in 2013 (Table 34, Figures 77–79). Note, however, that the proportion reporting 30-day use declined between 2013 and 2017. Also reporting high rates of use were students in Region 10 (Delta, Gunnison, Hinsdale, Montrose, Ouray, and San Miguel Counties) at 25.3% in 2017, and Region 9 (Archuleta, La Plata, and Montezuma Counties) at 24.9%. The areas with the lowest usage in 2017 included Region 3 (Douglas County) at 13.5%, Region 5 (Cheyenne, Elbert, Kit Carson, and Lincoln Counties) at 16.2% and Region 1 (Logan, Morgan, Philips, Sedgwick, Washington, and Yuma Counties) at 16.3%.

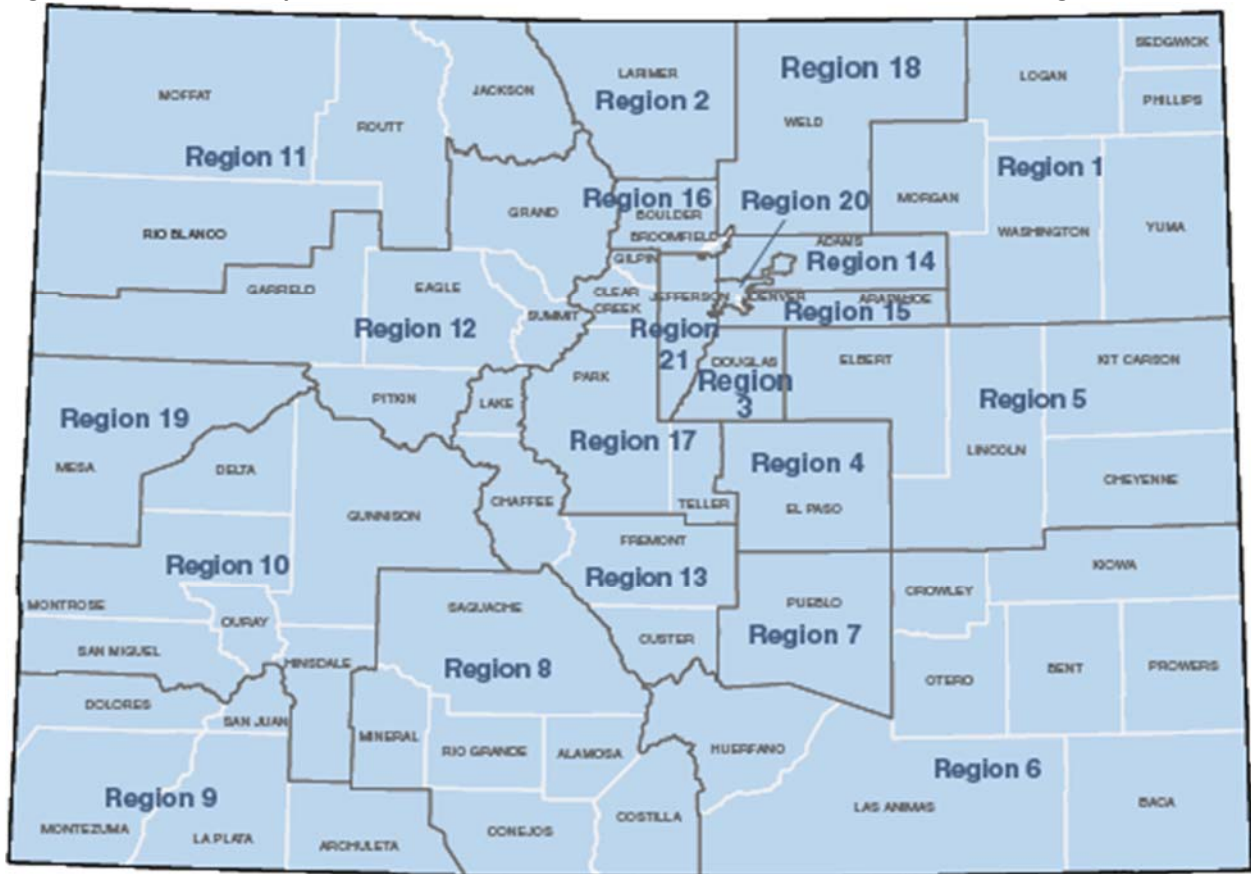
Table 34. High school students reporting marijuana use in the past 30-days, by health statistics region, 2013-2017

Health Statistics Region	2013		2015		2017	
	30-day use	95% CI	30-day use	95% CI	30-day use	95% CI
Colorado	19.7	(18.7-20.6)	21.2	(19.7-22.7)	19.4	(18.4-20.4)
HSR 1	--	--	11.8	(4.8-18.8)	16.3	(12.9-19.6)
HSR 2	16.9	(14.0-19.8)	17.6	(12.6-22.5)	19.6	(18.3-20.9)
HSR 3	13.2	(11.7-14.7)	--	--	13.5	(12.1-14.8)
HSR 4	14.8	(10.4-19.2)	--	--	22.2	(19.5-24.8)
HSR 5	9.4	(6.0-12.9)	9.7	(1.9-17.4)	16.2	(11.6-20.8)
HSR 6	17.6	(13.4-21.8)	20.1	(16.9-23.3)	20.6	(12.6-28.5)
HSR 7	32.1	(25.7-38.4)	30.1	(27.1-33.2)	26.8	(24.1-29.5)
HSR 8	23.1	(18.1-28.0)	19.7	(17.0-22.4)	19.6	(17.5-21.7)
HSR 9	24.6	(20.9-28.3)	26.2	(24.7-27.7)	24.9	(23.0-26.8)
HSR 10	26.7	(22.3-31.0)	17.5	(12.7-22.2)	25.3	(22.0-28.6)
HSR 11	14.3	(7.3-21.2)	19.7	(18.0-21.4)	19.5	(18.9-20.2)
HSR 12	19.7	(15.5-23.9)	24.5	(20.1-28.9)	20.8	(19.4-22.3)
HSR 13	22.9	(21.2-24.7)	23.5	(21.9-25.1)	22.1	(18.9-25.2)
HSR 14	22.8	(19.7-25.9)	20.6	(14.3-27.0)	--	--
HSR 15	20.6	(18.7-22.4)	20.2	(17.9-22.6)	18.3	(15.5-21.1)
HSR 16	20.3	(18.3-22.3)	24.1	(20.2-28.0)	22.2	(18.9-25.4)
HSR 17	25.1	(21.9-28.3)	20.8	(19.3-22.3)	22.1	(17.9-26.3)
HSR 18	18.6	(15.4-21.9)	--	--	18.0	(16.1-19.9)
HSR 19	17.2	(13.0-21.3)	21.2	(19.0-23.3)	19.7	(17.2-22.2)
HSR 20	26.6	(22.5-30.8)	26.1	(20.5-31.8)	20.9	(16.9-24.8)
HSR 21	--	--	--	--	--	--

Source: : Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment, Healthy Kids Colorado Survey, at <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-hkcs-monitoring-trends-youth-marijuana-use>

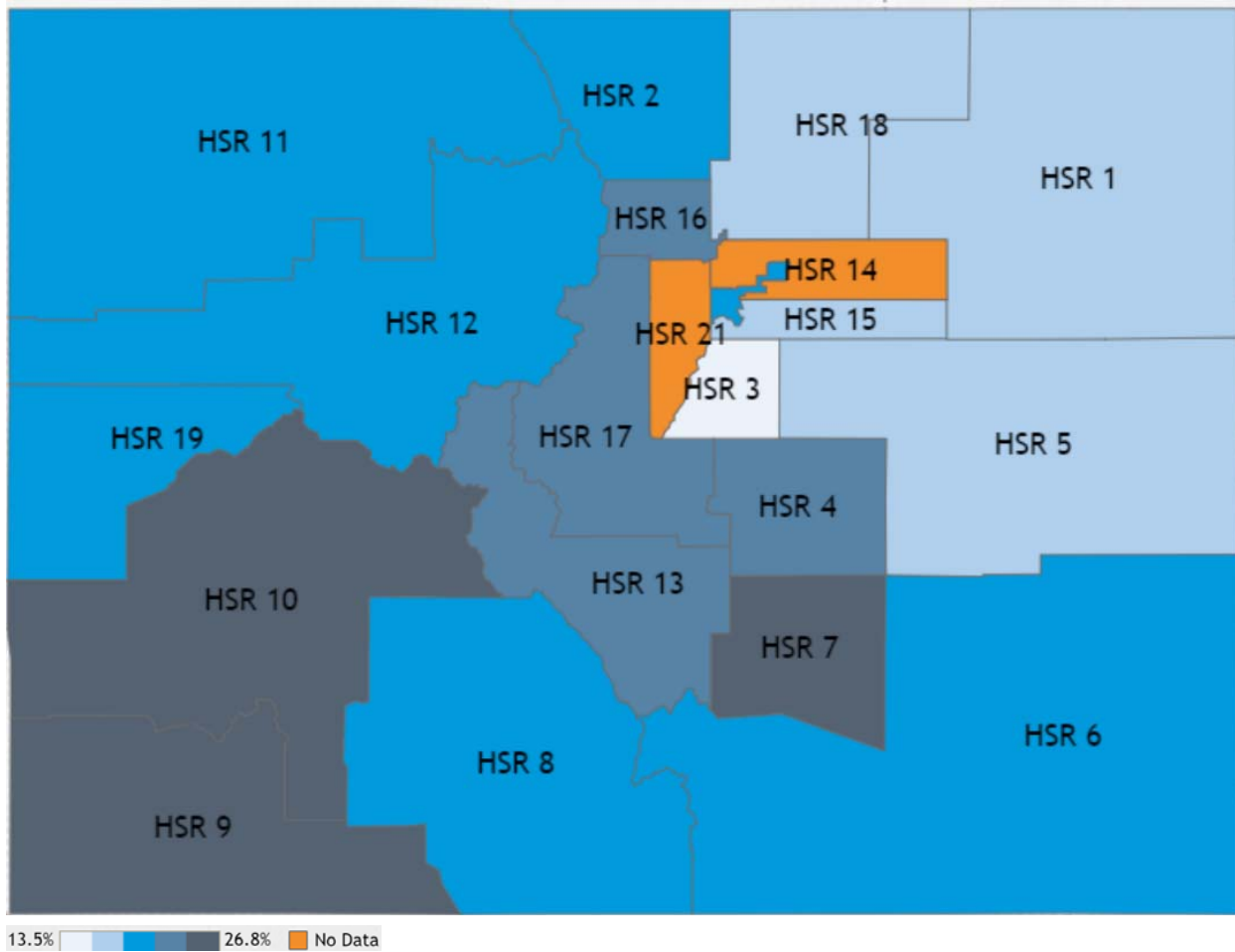
Note: HSR results indicated with a -- either did not participate in the survey or had too few responses to produce reliable estimates.

Figure 76. Colorado Department of Public Health and Environment Health Statistics Regions



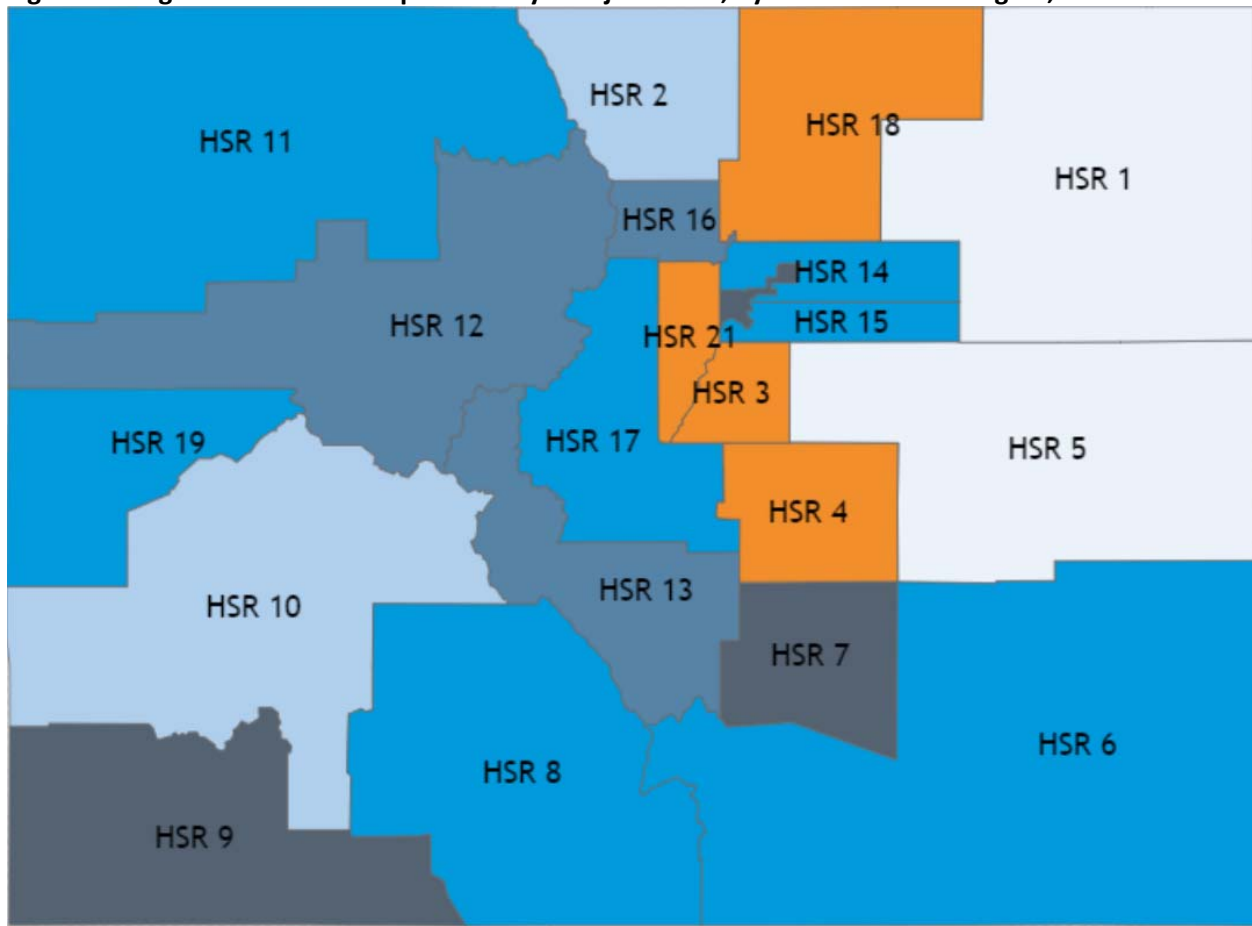
Source: Colorado Department of Public Health and Environment.

Figure 77. High school students' past 30-day marijuana use, by health statistics region, 2017: HKCS



Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment, Healthy Kids Colorado Survey, at <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-hkcs-monitoring-trends-youth-marijuana-use>
 Note: Adams County (Region 14) and Jefferson County (Region 21) did not have enough responses to create reliable estimates in the 2017 Healthy Kids Colorado Survey.

Figure 78. High school students' past 30-day marijuana use, by health statistics region, 2015: HKCS



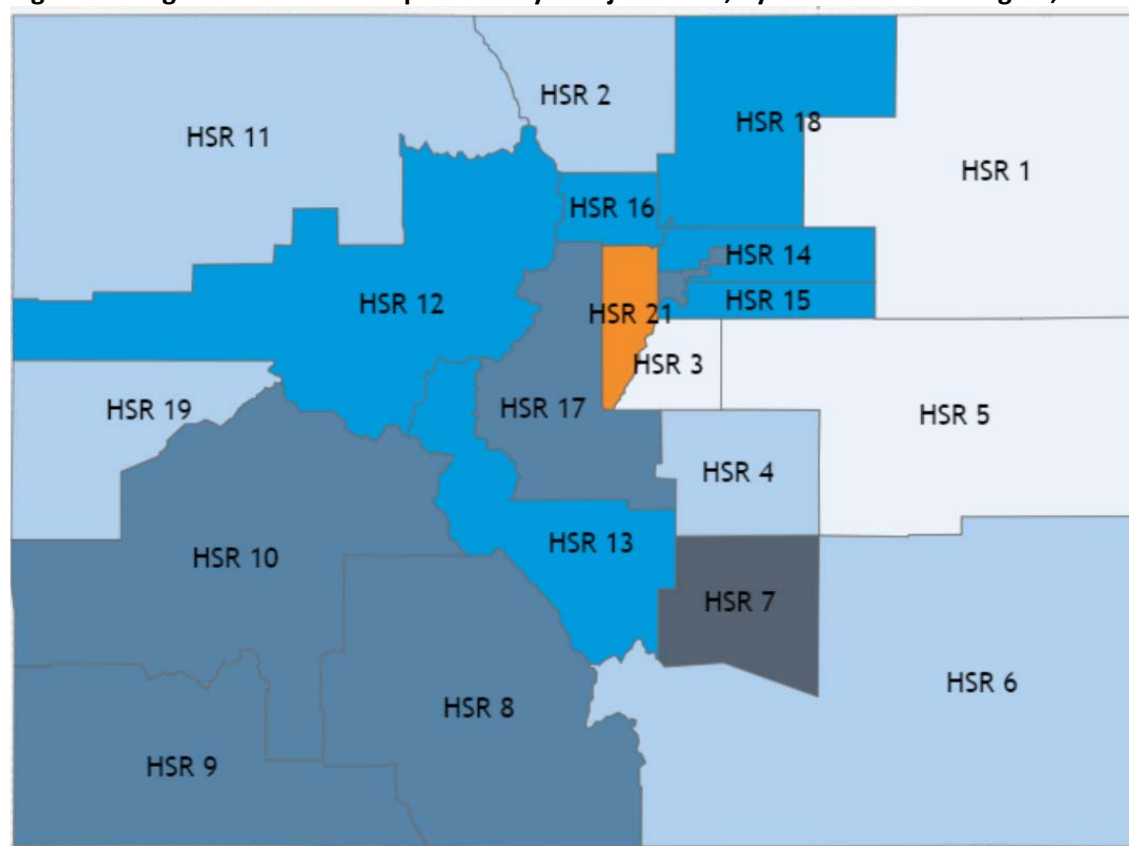
9.7% 30.1% No Data

Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment, Healthy Kids Colorado Survey, at

<https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-hkcs-monitoring-trends-youth-marijuana-use>

Note: Douglas County (Region 3), El Paso County (Region 4), Jefferson County (Region 21), and Weld County (Region 18) either did not participate or did not have enough responses to create reliable estimates in the 2015 Healthy Kids Colorado Survey.

Figure 79. High school students' past 30-day marijuana use, by health statistics region, 2013: HKCS



9.4% 32.1% No Data

Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment, Healthy Kids Colorado Survey, at

<https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-hkcs-monitoring-trends-youth-marijuana-use>

Note: Jefferson County (Region 21) did not participate in the 2013 Healthy Kids Colorado Survey.

The HKCS asks about various student opinions and behaviors concerning marijuana (Tables 35 and 36). The perception of moderate/great risk of using marijuana regularly⁶⁴ was reported by 71.2% of middle school students and a little over half (51.8%) of high school students in 2017.

High school students believe that 78.9% of “typical students” have used marijuana in the past 30-days, with 40.5% of middle school students expressing this belief in 2017. This compares to 25.7% of 12th graders and 7.3% of 8th graders who reported use in the past 30 days (Figure 72).

The perception of how easy it would be to obtain marijuana changes as students age, with 18.3% of middle school students reporting that it would be sort of/very easy to get marijuana, and 53.5% of high

⁶⁴ The frequency implied by the term “use marijuana regularly” is not explicitly defined in the survey. This is also a different measure of risk perception from that used in the NSDUH, which asks about perceived risk for using once a month.

school students expressing this belief in 2017 (Tables 35 and 36). Student perceptions about the wrongness of marijuana use also vary by age, with 88.3% of middle school students believing use is wrong/very wrong, and 57.4% of high school students expressing this opinion in 2017. Grade-level trends regarding the opinion questions are available in Figures 80–83.

Two questions about driving were asked of high school students: whether they rode in a car with someone who had been using marijuana and if they drove while using marijuana (Table 35). In 2017, nearly one in five (18.6%) reported riding with someone who had been using marijuana and about one in 10 (9.0%) of students who drove reported driving while using marijuana in the past 30 days. Grade-level trends for the driving questions are presented in Figures 84 and 85.

Table 35. High school students' opinions regarding marijuana, by school level, 2013–2017: HKCS

Question	2013		2015		2017	
	Percentage	95% CI	Percentage	95% CI	Percentage	95% CI
Percentage of students who think people who use marijuana regularly have moderate/great risk of harming themselves	54.0%	(52.7-56.2)	47.7%	(45.5-49.9)	51.8%	(50.3-53.4)
Percentage of students who think a typical student used marijuana during the past 30-days	NA		NA		78.9	(77.5-80.3)
Percentage of students who feel it would be sort of easy or very easy to get marijuana if they wanted	54.9	(53.4-56.5)	55.7	(53.6-57.8)	53.5	(51.8-55.3)
Percentage of students who think it is wrong/very wrong for someone their age to use marijuana	60.2	(58.7-61.7)	60.6	(58.5-62.7)	57.4	(55.9-58.9)
Percentage of students who think their parents would feel it is wrong/very wrong if they used marijuana	86.4	(85.7-87.2)	85.4	(84.0-86.8)	86.6	(85.7-87.5)
Percentage of students who rode one or more times during the past 30-days in a car or other vehicle driven by someone who had been using marijuana	19.7	(18.6-20.8)	20.4	(18.4-22.5)	18.6	(17.4-18.7)
Among students who drove a car or other vehicle during the past 30-days, the percentage who drove one or more times when they had been using marijuana	10.9	(10.0-11.8)	10.4	(9.0-11.8)	9.0	(8.2-9.7)

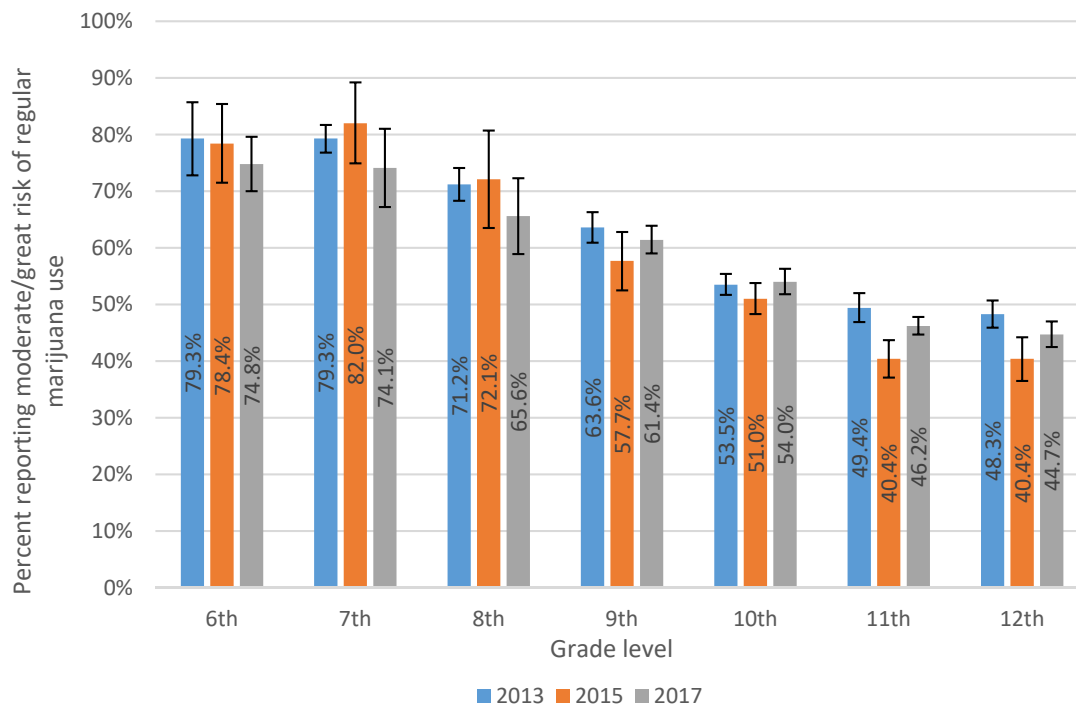
Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment, Healthy Kids Colorado Survey, at <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-data-tables-and-reports>

Table 36. Middle school students' opinions regarding marijuana, by school level, 2013–2017: HKCS

Question	2013		2015		2017	
	Percentage	95% CI	Percentage	95% CI	Percentage	95% CI
Percentage of students who think people who use marijuana regularly have moderate/great risk of harming themselves	76.4%	(73.8-79.0)	77.5%	(72.1-82.8)	71.2%	(66.2-76.2)
Percentage of students who think a typical student used marijuana during the past 30-days	NA		NA		40.5	(36.5-44.5)
Percentage of students who feel it would be sort of easy or very easy to get marijuana if they wanted	16.2	(14.4-18.0)	15.5	(10.5-20.5)	18.3	(14.5-22.2)
Percentage of students who think it is wrong/very wrong for someone their age to use marijuana	89.3	(87.6-91.0)	91.6	(87.8-95.4)	88.3	(85.3-91.3)
Percentage of students who think their parents would feel it is wrong/very wrong if they used marijuana	96.3	(95.6-97.1)	97.5	(96.2-98.7)	96.0	(94.4-97.6)

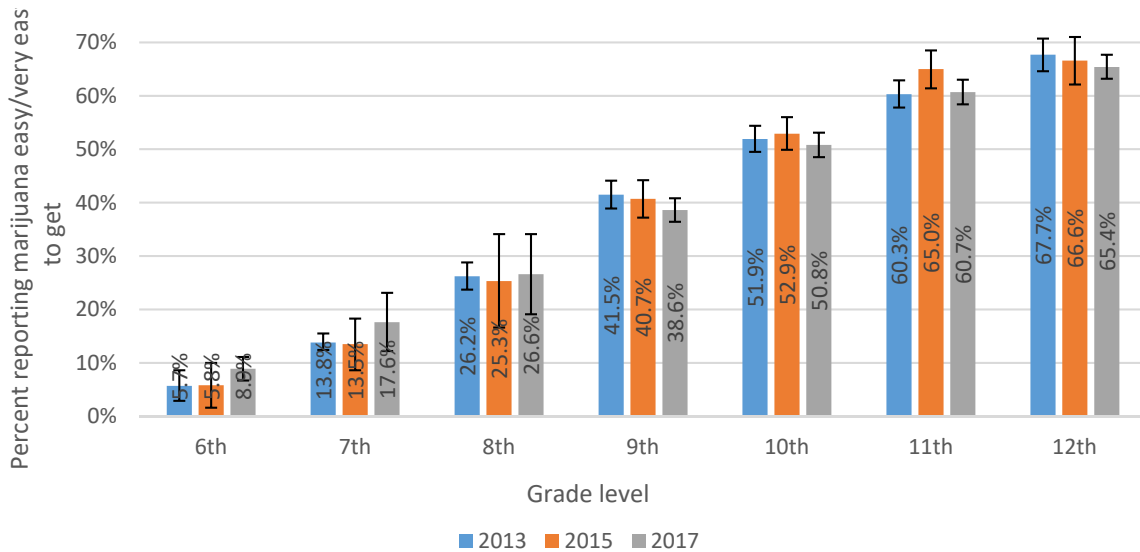
Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment, Healthy Kids Colorado Survey

Figure 80. Students' opinion regarding moderate/great risk of regular marijuana use, by grade level, 2013–2017: HKCS



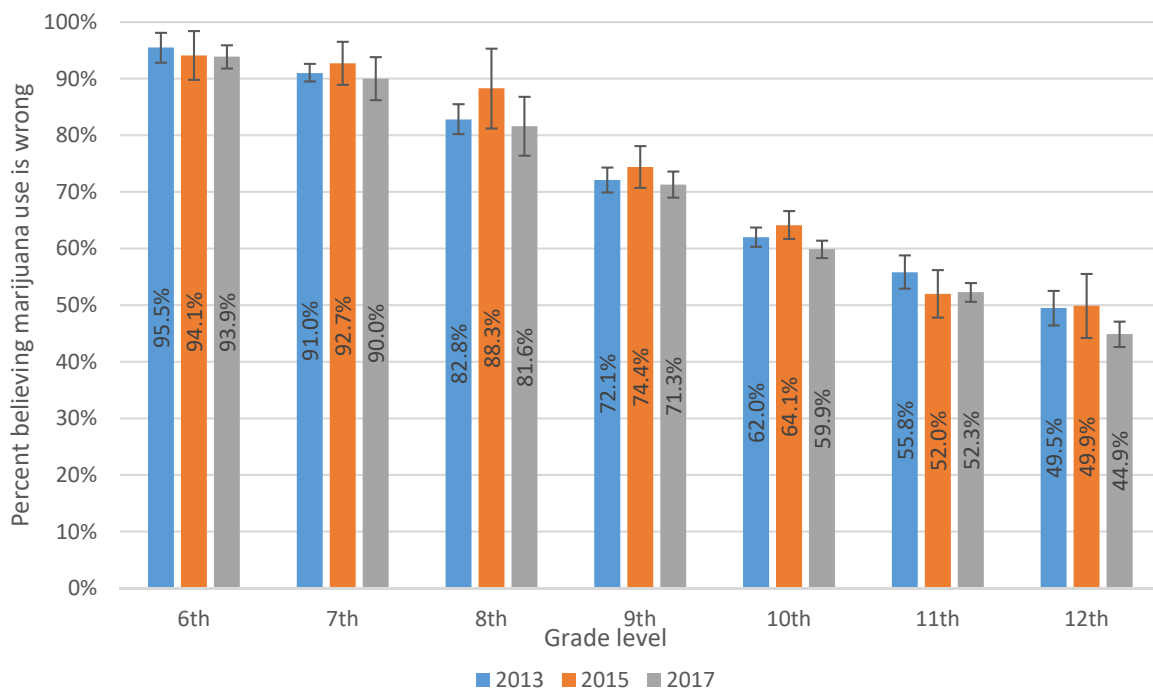
Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment, Healthy Kids Colorado Survey, at <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-data-tables-and-reports>, at <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-data-tables-and-reports>

Figure 81. Students’ opinion regarding marijuana being easy/very easy to get, by grade level, 2013–2017: HKCS



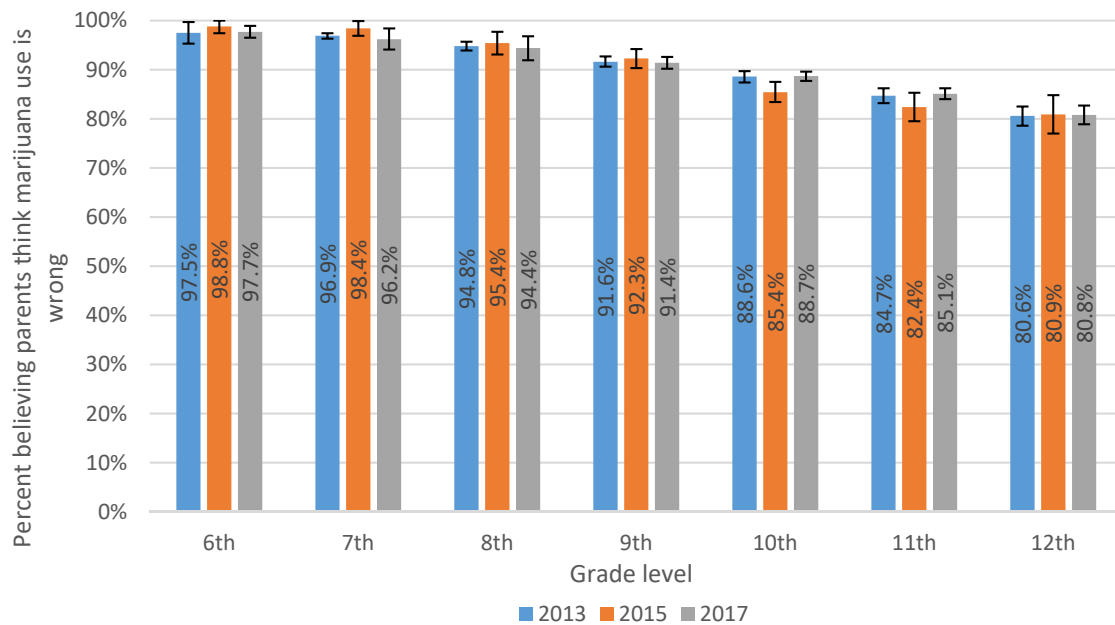
Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment, Healthy Kids Colorado Survey, at <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-data-tables-and-reports>

Figure 82. Students’ opinion regarding whether marijuana use is wrong, by grade level, 2013–2017: HKCS



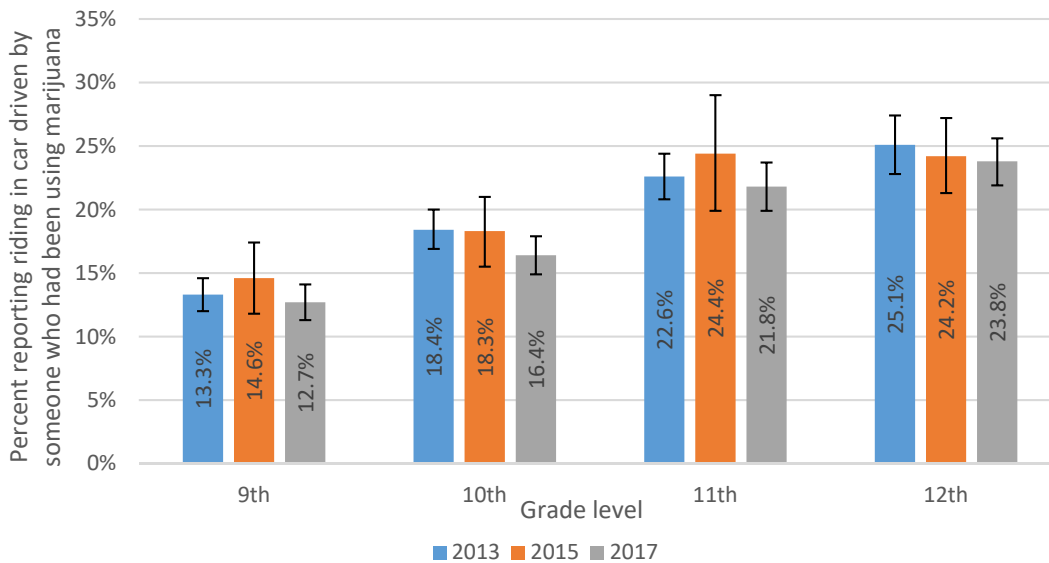
Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment, Healthy Kids Colorado Survey, at <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-data-tables-and-reports>

Figure 83. Students’ opinion regarding whether parents believe marijuana use is wrong, by grade level, 2013–2017: HKCS



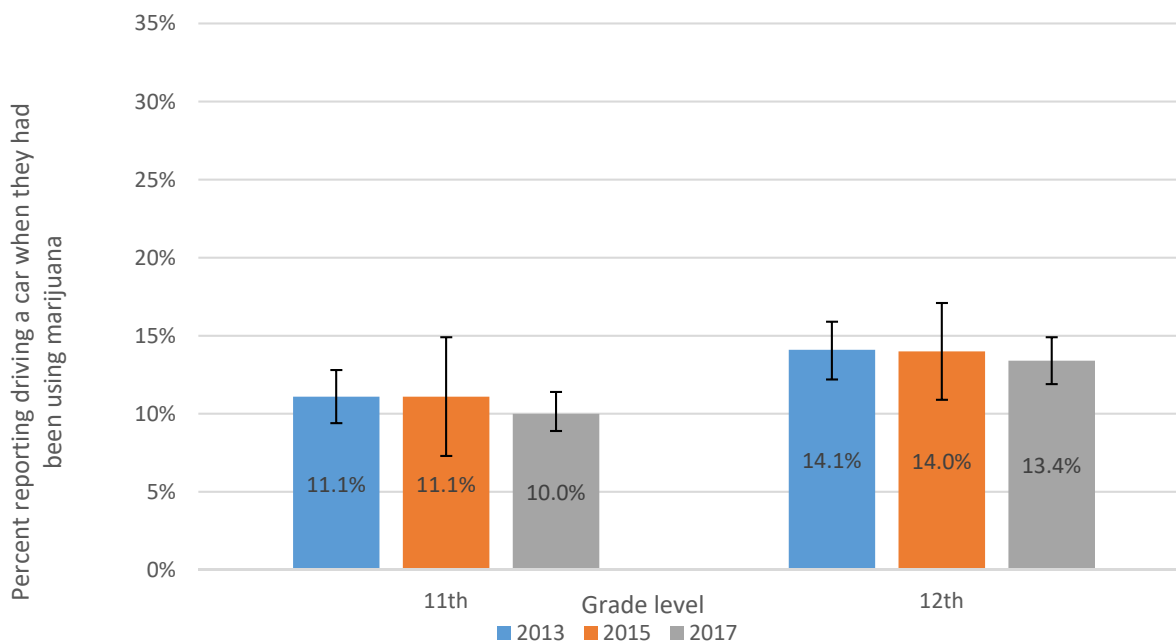
Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment, Healthy Kids Colorado Survey, at <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-data-tables-and-reports>

Figure 84. Students reporting riding in a car driven by someone who had been using marijuana, by grade level, 2013–2017: HKCS



Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment, Healthy Kids Colorado Survey, at <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-data-tables-and-reports>

Figure 85. Students reporting driving car when they had been using marijuana, by grade level, 2013–2017: HKCS



Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment, Healthy Kids Colorado Survey, at <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-data-tables-and-reports>

National Survey on Drug Use and Health

The federal Substance Abuse and Mental Health Services Administration (SAMHSA) conducts the annual National Survey on Drug Use and Health (NSDUH).⁶⁵ The NSDUH is the primary source of information on the prevalence, patterns, and consequences of alcohol, tobacco, and illegal drug use and abuse, and mental disorders in the U.S. civilian, noninstitutionalized population, age 12 and older. The survey generates estimates at the national, state, and sub-state levels. The NSDUH is state-based, with an independent, multistage area probability sample within each state and the District of Columbia.

SAMHSA produces state-level estimates from a two-year rolling sample. This means that each year presented in this report actually represents two years of data. The two-year usage prevalence rates for Colorado residents 12 to 17 years old are based on weighted estimates from between 500 to 650 survey respondents.

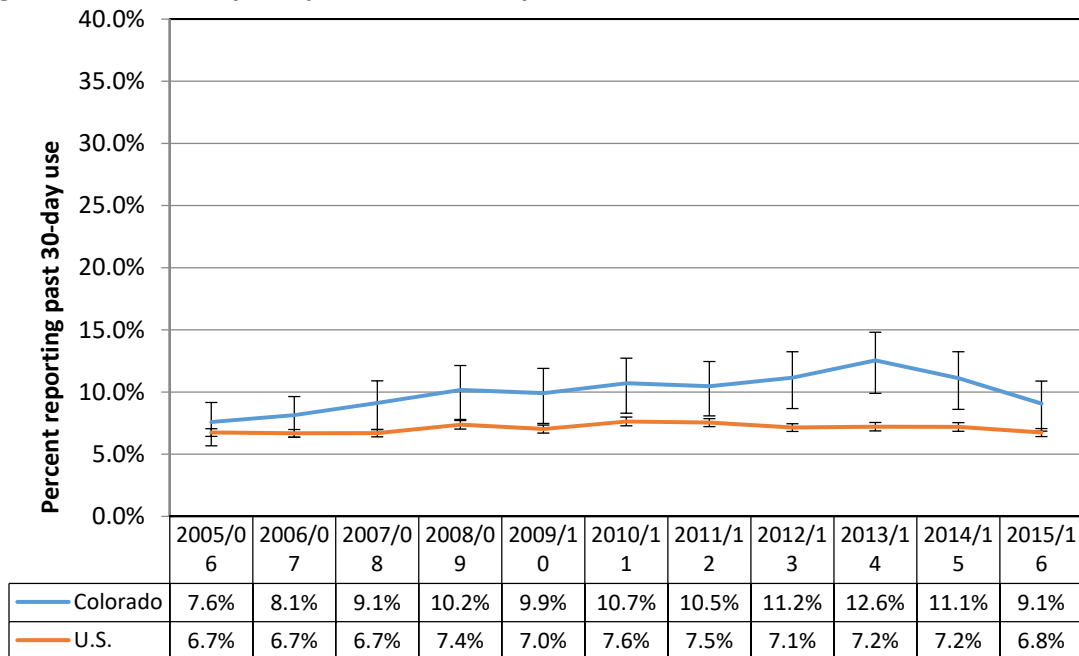
The proportion of Colorado youth reporting marijuana use in the past 30 days was significantly higher than the national average for the entire period from 2008/2009 through 2015/2016 (Figure 86).⁶⁶ The 2015/2016 30-day marijuana use percentage in Colorado (9.1%) was significantly lower than the 2014/2015 estimate (11.1%) and was equal to the 2007/2008 estimate. A map with state-level estimates

⁶⁵ Descriptions of the NSDUH are derived from information available at <http://www.samhsa.gov/data/population-data-nsduh/reports>.

⁶⁶ SAMHSA produces *p*-value tables that compare different geographic areas. *P*-values below .05 are considered statistically significant.

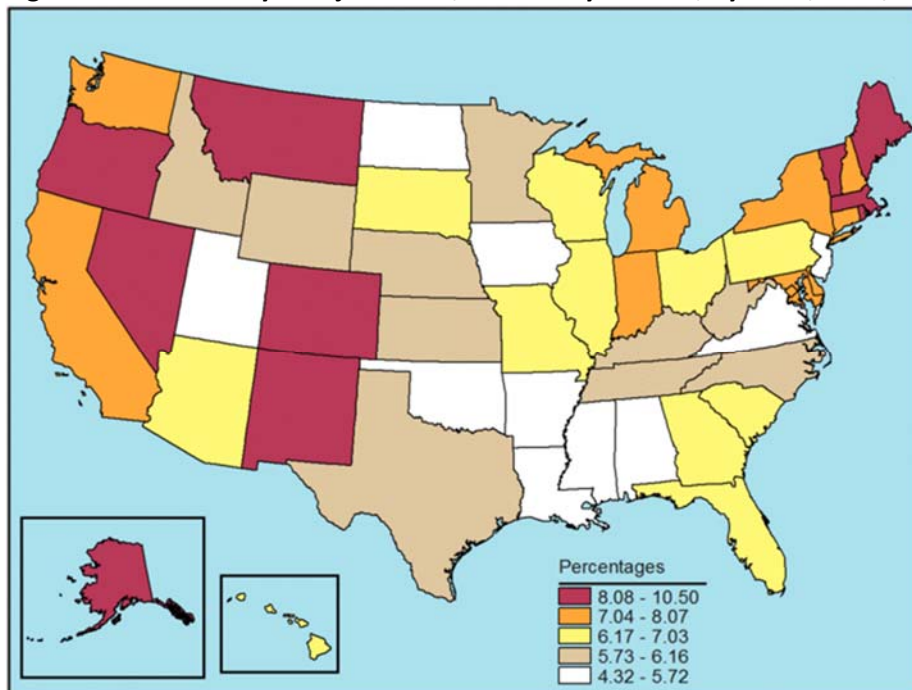
of 30-day usage is presented in Figure 87 and indicates that Colorado was in the top 20% of states for youth marijuana usage.

Figure 86. Past 30-day marijuana use, 12–17 years old, 2005/2006–2015/2016: NSDUH



Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, at <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>

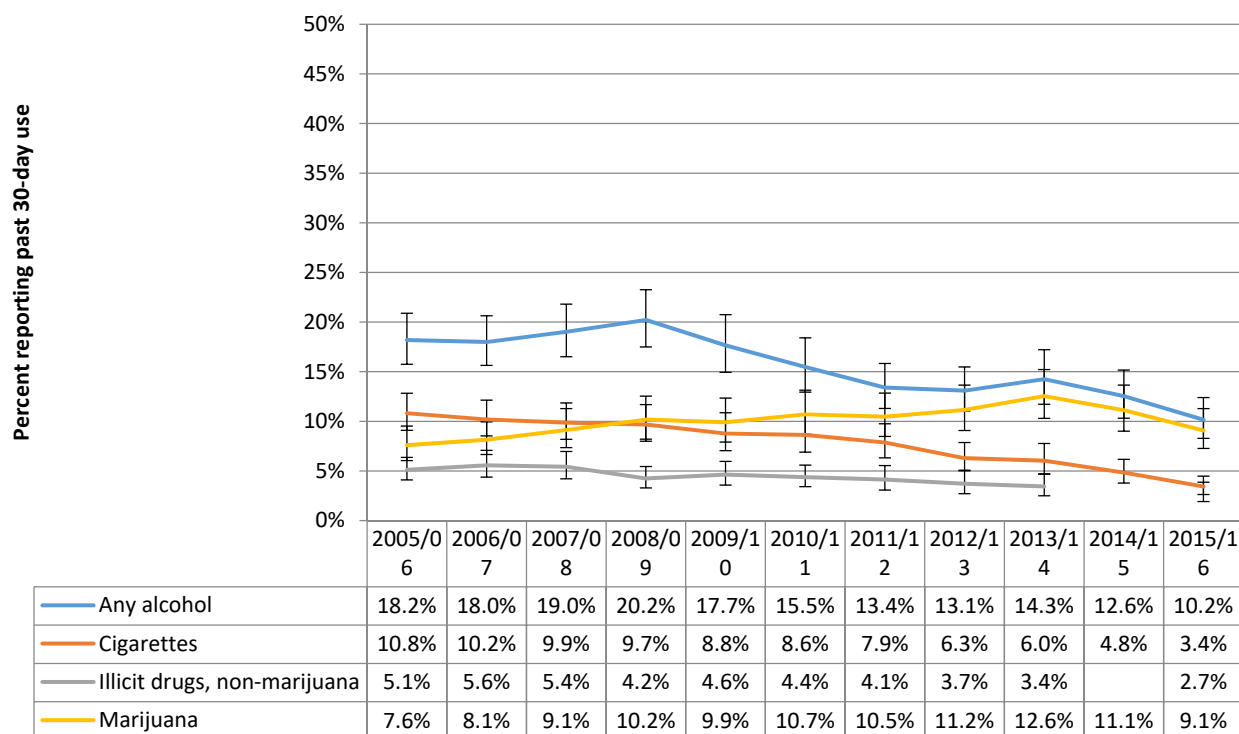
Figure 87. Past 30-day marijuana use, 12- to 17-year-olds, by state, 2015/2016



Source: Substance Abuse and Mental Health Services Administration (2018), National Survey on Drug Use and Health, 2015-16 National Survey on Drug Use and Health National Maps of Prevalence Estimates, by State. Available at <https://www.samhsa.gov/data/sites/default/files/NSDUHsaeMaps2016/NSDUHsaeMaps2016.pdf>

Overall substance use among teens was decreasing, with reductions in alcohol, cigarette, marijuana, and illicit drug use other than marijuana over the past eight years (Figure 88).

Figure 88. Past 30-day substance use in Colorado, 12–17 years old, 2005/2006–2015/2016: NSDUH

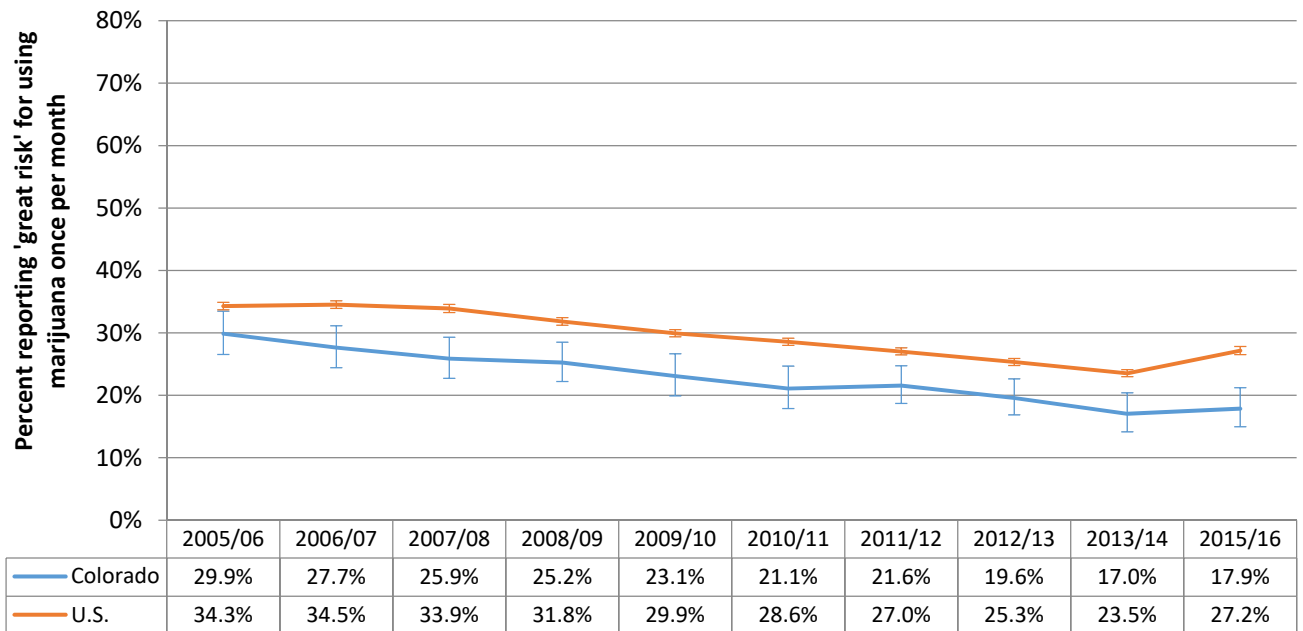


Note: There were no state-level estimates for use of illicit drugs other than marijuana in 2014/2015.

Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, at <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>

Colorado youths' perceptions of great risk for using marijuana once per month have been consistently lower than the national average (Figure 89). Both the Colorado and national trends have shown declines in perception of risk. The perception of great risk from using marijuana once a month among Colorado youth declined from 29.9% in 2005/2006 to 17.9% in 2015/2016. The perception of great risk in Colorado for 2015/2016 was significantly lower than the national figure, but the gap between the two remained relatively consistent, at five to six percentage points.

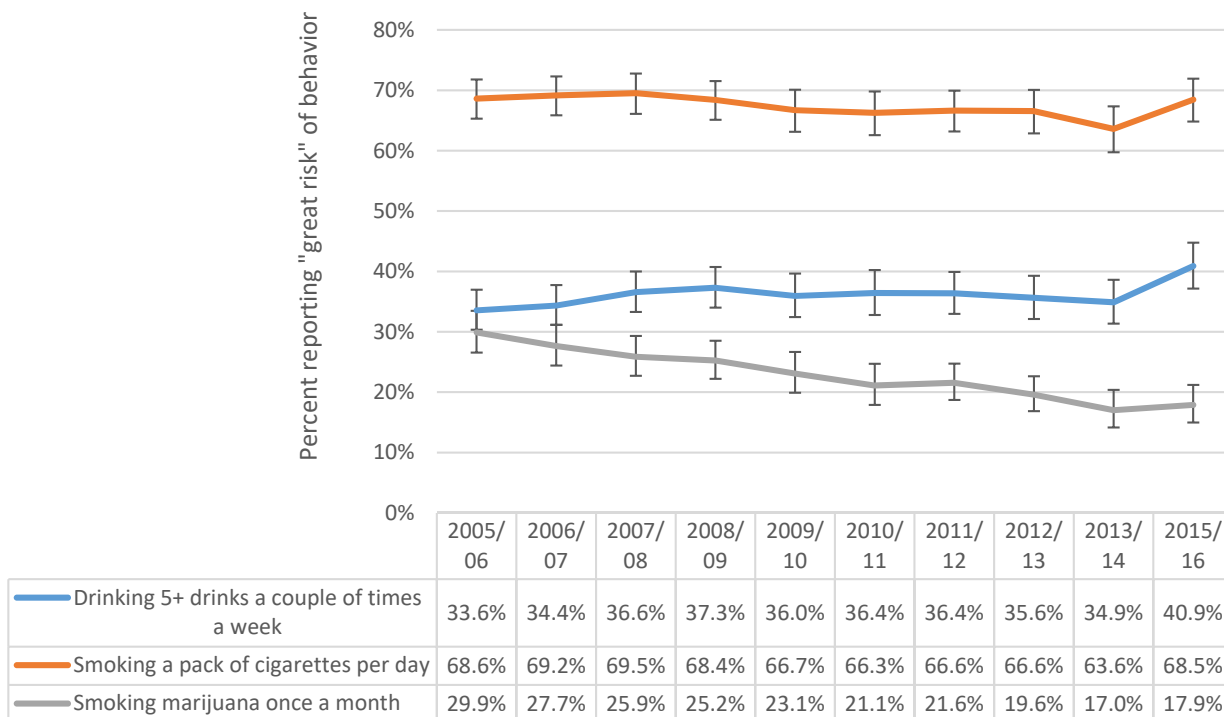
Figure 89. Perception of great risk for using marijuana once a month, 12– to 17-year old, 2005/2006–2015/2016: NSDUH



Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, at <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>

As shown in Figure 90, the reduced perception of risk for marijuana use once-per-month contrasts with very little change in the perception of great risk for regular cigarette smoking (one pack per day) or binge drinking (five or more drinks a couple times a week). However, the difference in the frequency of the behavior in question should be noted and taken into consideration when interpreting this disparity.

Figure 90. Perception of great risk for using various substances, 12- to 17-year olds, 2005/2006–2015/2016: NSDUH



Note: There were no state-level estimates in 2014/2015.

Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, at <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>

Summary of Survey Data

In sum, data on youth use was available from two sources, the Healthy Kids Colorado Survey, with over 53,000 students responding in 2017 and the National Survey on Drug Use and Health, with about 550 respondents. The 2017 HKCS results indicated no change in high school students' past 30-day use of marijuana from 2015. The 2017 HKCS found that, among current marijuana users, using marijuana edibles or dabbing marijuana concentrate increased between 2015 and 2017.

Criminal Justice Involvement

Arrest Trends

The total number of juvenile marijuana arrests decreased from 3,168 in 2012 to 2,655 in 2017 (-16%) (Table 37). The juvenile marijuana arrest rate decreased 22%, from 583 per 100,000 population 10–17 years old in 2012 to 453 in 2017 (Table 38). The demographic characteristics behind this change show some differences in trends based on gender and race/ethnicity. The number of females arrested in 2017 (751) was up 9% from the 2012 total (690) but when controlling for the increase in the population, the rate was effectively unchanged (Tables 37 and 38). This contrasts with the decrease in the number (-23%) and rate (-29%) of male juvenile arrests between 2012 and 2017 (Tables 37 and 38).

The rate (-30%) and number (-30%) of White juveniles arrested decreased during this period. The rate and number of arrests for the largest minority populations also decreased: the rate (-31%) and number (-16%) of Hispanic juvenile arrests decreased, and the rate (-23%) and number (-19%) of Black juvenile arrests also decreased (Tables 37 and 38). The arrest rate for Black juveniles (642 per 100,000) was 24% above that of Whites (517 per 100,000) and 74% higher than the Hispanic rate (369 per 100,000)

Finally, the most common type of juvenile marijuana arrest was possession, which made up 90% of these arrests in 2017.

Table 37. Juvenile marijuana arrests, by demographics and crime type, 2012–2017

	Number of marijuana arrests					
	2012	2013	2014	2015	2016	2017
10 to 17 years old						
Total	3,168	3,030	3,325	2,956	2,615	2,655
Race						
White non-Hispanic	2,146	1,961	1,984	1,803	1,613	1,703
Hispanic	767	773	972	858	741	733
Black non-Hispanic	202	258	318	263	221	172
Other	53	38	51	32	40	47
Gender						
Male	2,478	2,318	2,451	2,185	1,882	1,904
Female	690	712	874	771	733	751
Drug crime type						
Sales	41	44	52	23	35	40
Smuggling	2	1				
Possession	2,859	2,731	3,127	2,335	2,321	2,171
Production	5	4	3		5	3
Unspecified	328	345	218	123	140	190

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System.

Table 38. Juvenile marijuana arrest rates (per 100,000 population), by demographics and crime type, 2012–2017

	Marijuana arrest rate (per 100,000 population)					
	2012	2013	2014	2015	2016	2017
10 to 17 years old						
Total	583	550	595	519	453	453
Race						
White non-Hispanic	654	598	604	548	489	517
Hispanic	469	455	550	464	388	369
Black non-Hispanic	787	998	1,226	999	832	642
Other	203	141	183	110	134	152
Gender						
Male	891	824	859	752	639	636
Female	260	264	319	277	259	262
Drug crime type						

	Marijuana arrest rate (per 100,000 population)					
	2012	2013	2014	2015	2016	2017
Sales	8	8	9	4	6	7
Smuggling	0	0	0	0	0	0
Possession	526	496	559	410	402	371
Production	1	1	1	0	1	1
Unspecified	60	63	39	22	24	32

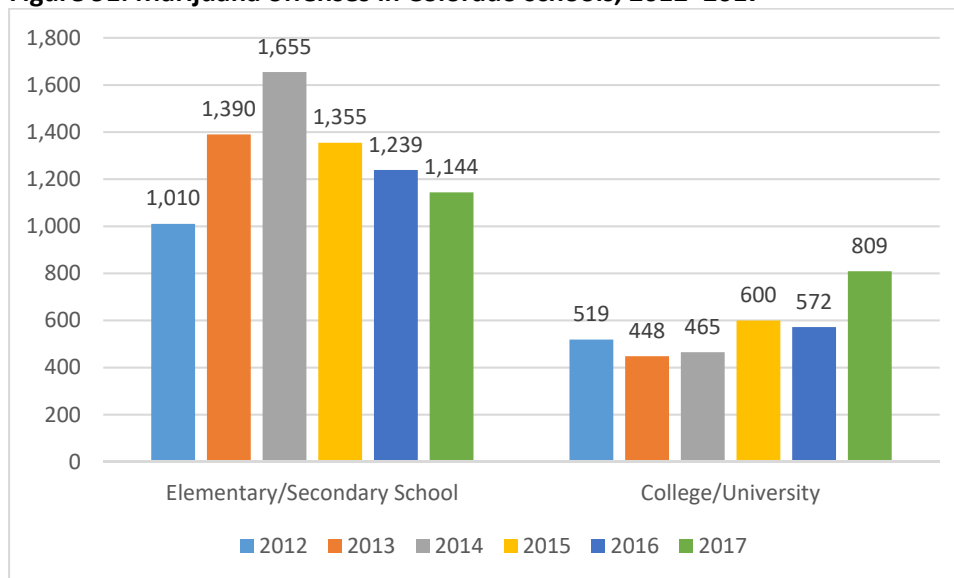
Source: Colorado Bureau of Investigation, National Incident-Based Reporting System; Colorado State Office of Demography.
 Note: The rates for total arrests and rates by drug crime type were calculated based on the population 10-17 years old. The rates for race/ethnicity and gender were calculated on the population of 10-17 year olds in those respective groups.

School Data

Offense Trends

The National Incident-Based Reporting System (NIBRS) captures information on the place where an offense was reported to have occurred. There are 57 categories, which include locations such as public transportation, bars, convenience stores, homes, parks, parking lots, primary/secondary schools, colleges, etc. The number of offenses in elementary/secondary schools increased 64% from 2012 to 2014, but has since decreased; the 2017 total (1,144) was 13% above 2012 (Figure 91). The number of offenses reported on college and university campuses was relatively stable from 2012 through 2016, but the 2017 number (809) was 56% above the number reported in 2012 incident figures (519).

Figure 91. Marijuana offenses in Colorado schools, 2012–2017



Source: Colorado Bureau of Investigation, National Incident-Based Reporting System.

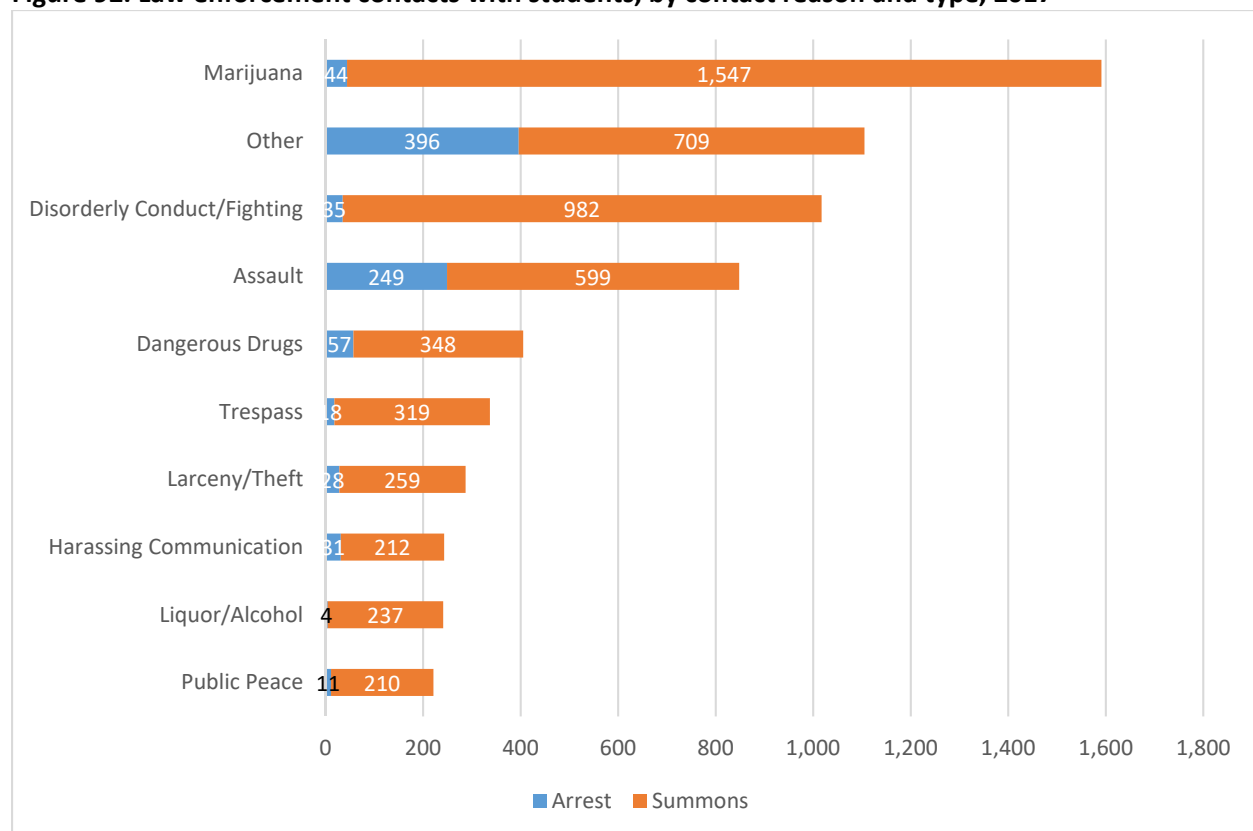
Note: Prior to 2012 school/university was a single location code. There were 258 offenses in 2012 using this more generic location code; these are not included in the totals because it is not possible to determine the specific location.

Law Enforcement Contacts with Students

Colorado Revised Statute 22-32-146(5) mandates that local law enforcement agencies annually report specific information to the Division of Criminal Justice (DCJ) concerning every incident that resulted in a student's arrest, summons or ticket during the previous academic year for an offense that occurred at a public elementary school, middle or junior high school, or high school; in a school vehicle; or at a school activity or sanctioned event. In the 2016-2017 school year, approximately 60% of law enforcement agencies reported no events to DCJ. It is unknown if this occurred because there were no incidents at schools in these jurisdictions, or if these agencies were unaware of the reporting mandated by House Bill 2015-1273.⁶⁷

Figure 92 presents the most common reasons for law enforcement contact among those agencies that reported to DCJ, with marijuana at the top of the list. The 1,591 contacts for marijuana account for 25% of all contacts reported in 2016-2017 (6,295). The vast majority of these contacts resulted in a summons (97%) rather than an arrest (3%).

Figure 92. Law enforcement contacts with students, by contact reason and type, 2017

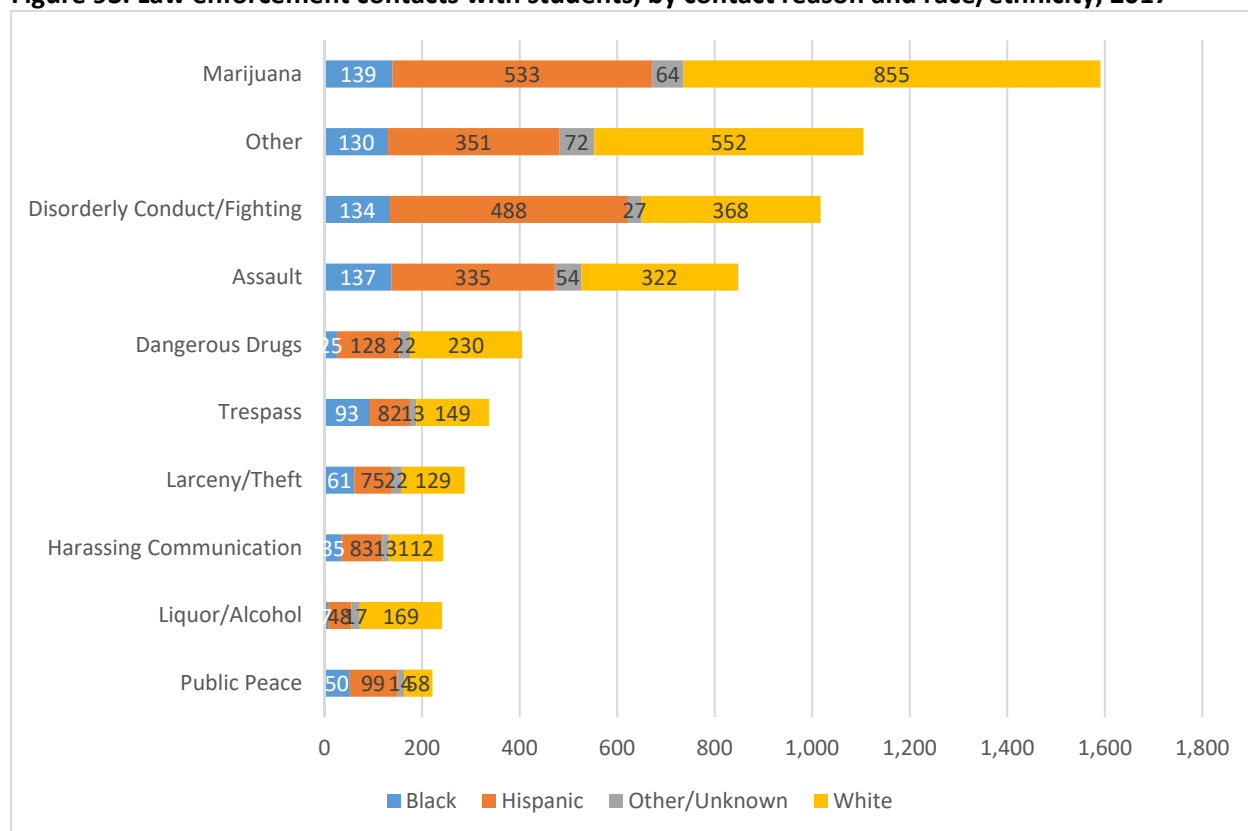


Source. Colorado Division of Criminal Justice (2018). Law Enforcement Contacts with Students, Academic Year 2016-17. See https://www.colorado.gov/pacific/dcj-ors/StudentContact_SD

⁶⁷ For additional information please visit https://www.colorado.gov/pacific/dcj-ors/StudentContact_SD.

Figure 93 shows the type of law enforcement contact by race/ethnicity, where Whites comprise 54% of contacted students, Hispanics 34%, and Blacks 9%.

Figure 93. Law enforcement contacts with students, by contact reason and race/ethnicity, 2017



Source. Colorado Division of Criminal Justice (2018). Law Enforcement Contacts with Students, Academic Year 2016-17. See https://www.colorado.gov/pacific/dcj-ors/StudentContact_SD.

School Discipline Data Trends

Many educators, law enforcement officials, school counselors, and others who work with juveniles are concerned that marijuana legalization could lead to an increase in school discipline for drug-related activity. School discipline, including suspension or expulsion, can disrupt academic achievement, increase the probability of future involvement in the justice system, and normalize punitive social control early in a student's life.⁶⁸

The Colorado Department of Education reports disciplinary data on suspensions, expulsions, and law enforcement referrals for each school year.⁶⁹ A number of reasons for discipline are reported, including

⁶⁸ Ramey, D. (2016). The influence of early school punishment and therapy/medication on social control experiences during young adulthood, *Criminology*, *Online Early publication*, available at <http://onlinelibrary.wiley.com/doi/10.1111/1745-9125.12095/abstract>.

⁶⁹ Colorado Department of Education, Suspension and expulsion statistics, available at <http://www.cde.state.co.us/cdereval/suspend-expelcurrent>.

drugs, alcohol, tobacco, serious assault, minor assault, robbery, other felonies, disobedience, detrimental behavior, destruction of property, and other violations. The drug category covers all drugs and does not break out marijuana separately. However, since marijuana is currently the most commonly used illicit drug in elementary and secondary schools (tobacco and alcohol are tracked in separate categories), changes in trends are likely to be related to changes in use and possession of marijuana on school grounds or changes to school response or reporting of illicit drug use. In 2015, legislation was passed instructing the Department of Education to begin collecting discipline data about marijuana separately from other drugs. The first full year of marijuana-specific data became available for the 2016–2017 school year.

Prior to the 2012 school year, legislation (Senate Bill 12-046 and House Bill 12-1345) modified some zero-tolerance policies that had resulted in what some considered “unnecessary expulsions, suspensions, and law enforcement referrals.”⁷⁰ *This change in the law should be taken into account when examining disciplinary trends.*

Data regarding suspensions, expulsions, and law enforcement referrals are publicly available at the Colorado Department of Education’s website. These raw numbers were transformed into rates per 100,000 students to take the increased number of students into account.⁷¹ Specifically, in the 2008–2009 school year, 818,443 students were enrolled in Colorado schools and, by 2017-2018, that number increased to 910,280.⁷² A student may be involved in more than one disciplinary incident, so these rates do not equate to the percentage of students receiving disciplinary action in a given year.

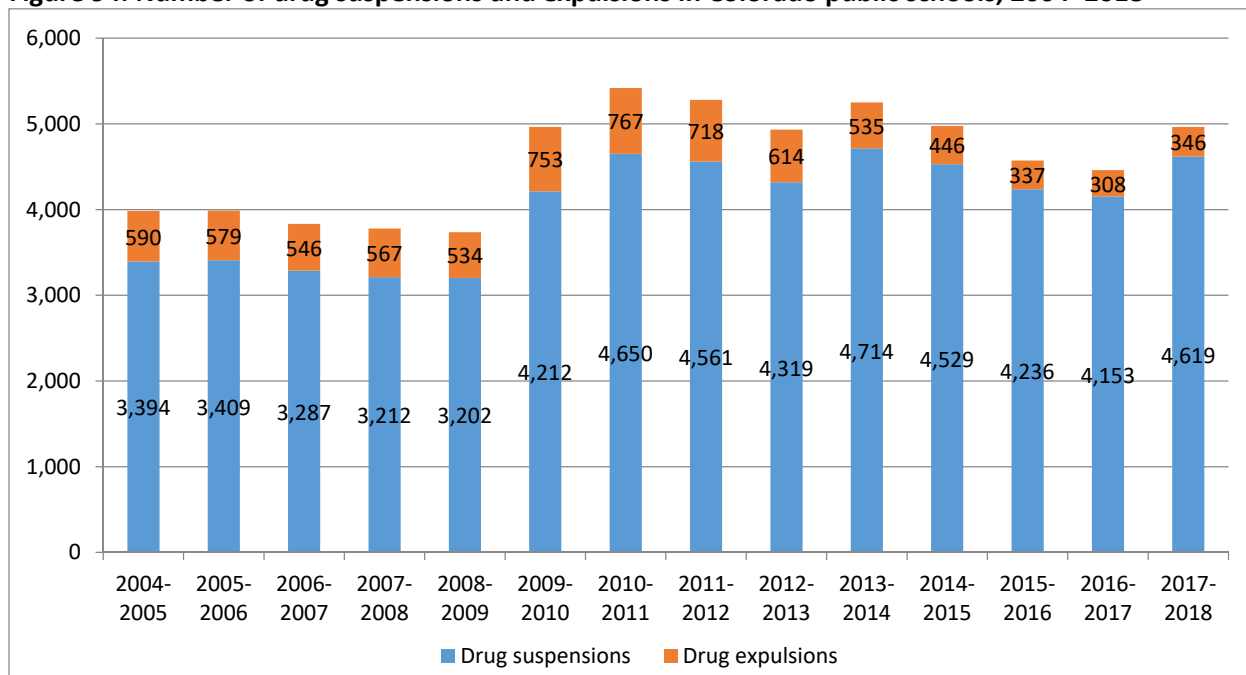
The number of suspensions and expulsions for drugs increased between 2008–2009 and 2009–2010 at 5,417 and 5279, respectively, but has remained relatively stable at between 4,500 and 5,000 (Figure 94) through 2017-2018.

⁷⁰ Colorado School Safety Resource Center, Discipline in Schools, available at <https://www.colorado.gov/pacific/cssrc/discipline-schools>.

⁷¹ The raw numbers are included in Appendix F, Table 12.

⁷² Colorado Department of Education, pupil membership, available at <http://www.cde.state.co.us/cdereval/pupilcurrent>.

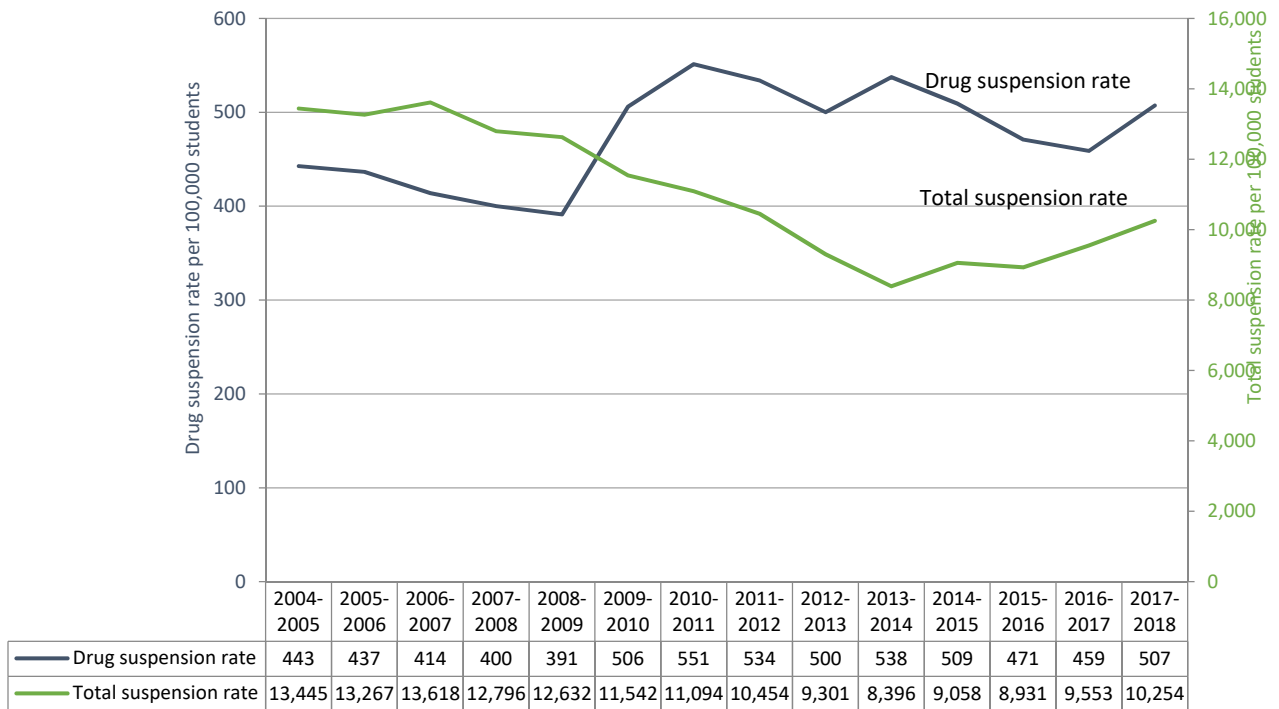
Figure 94. Number of drug suspensions and expulsions in Colorado public schools, 2004–2018



Source: Colorado Department of Education, at <http://www.cde.state.co.us/cdereval/suspend-expelcurrent>.

The drug suspension rate began to increase in 2009–2010, up 29% from 2008–2009. Since that increase, the drug suspension rate has remained relatively stable, with a slight decrease in the last two years (Figure 95). This contrasts with the overall suspension rate for any school code of conduct violation, which has increased in the past four years.

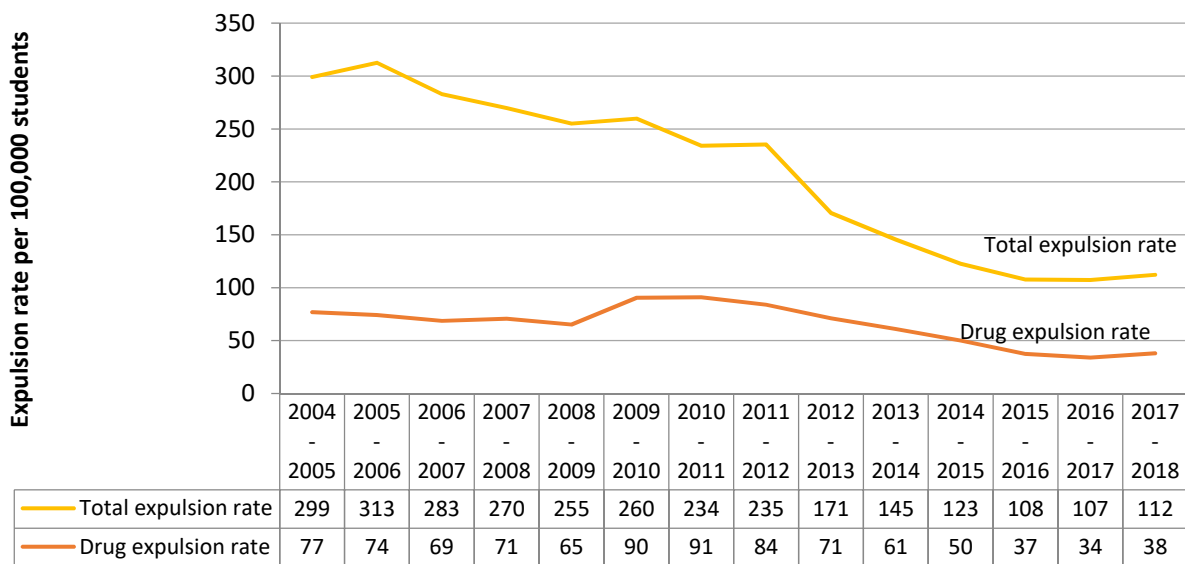
Figure 95. Total and drug suspension rates (per 100,000 students), 2004–2018



Source: Colorado Department of Education, at <http://www.cde.state.co.us/cdereval/suspend-expelcurrent>.

The drug expulsion rate decreased 16% between 2004–2005 and 2008–2009 (Figure 96). The drug expulsion rate increased 39% in 2009–2010, plateaued in 2010–2011, and then began to gradually decrease. This decrease occurred in conjunction with a decline in the total expulsion rate.

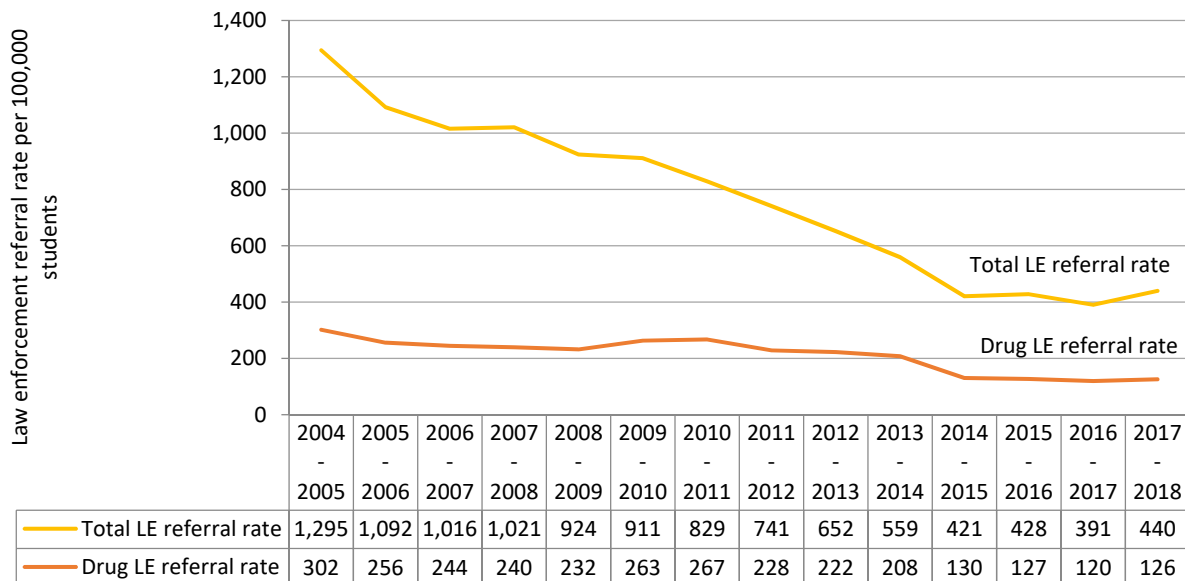
Figure 96. Total and drug expulsion rates (per 100,000 students), 2004–2018



Source: Colorado Department of Education, at <http://www.cde.state.co.us/cdereval/suspend-expelcurrent>.

The law enforcement referral rate for drug-related behaviors was relatively stable from 2005–2006 through 2012–2013, but declined 43% between 2012–2013 and 2016–2017 (Figure 97). The reasons for this decline are not entirely clear. Discussions with school administrators point to changes in policies regarding referrals to law enforcement rather than a reduction in student possession or use.

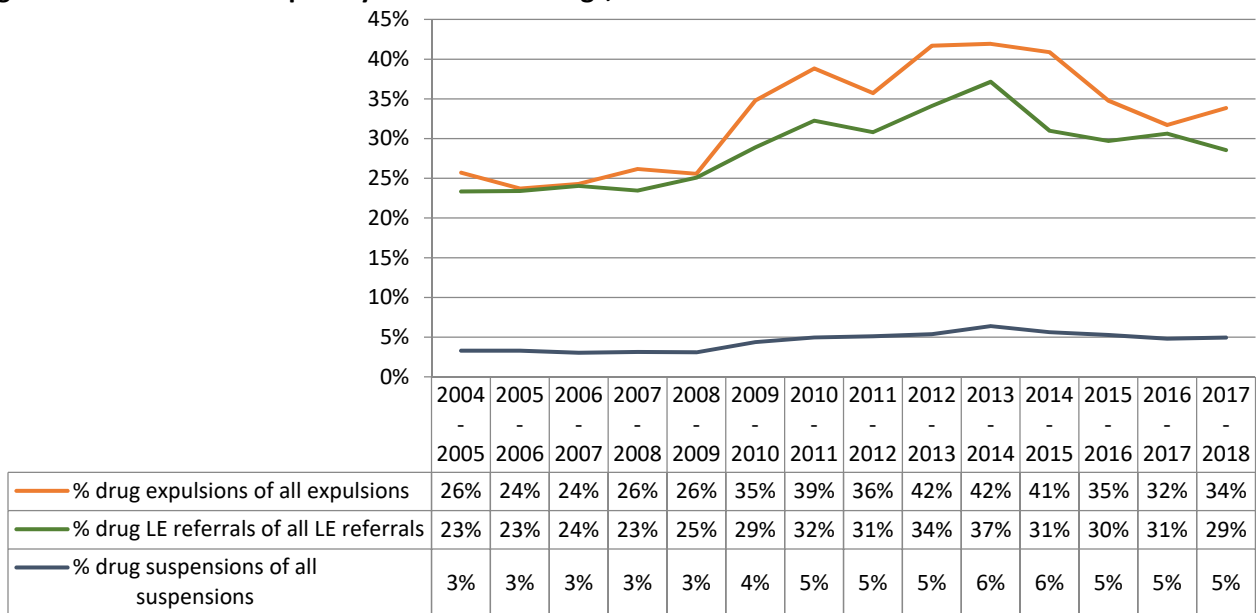
Figure 97. Total and drug law enforcement referral rates per 100,000 students, 2004–2018



Source: Colorado Department of Education, at <http://www.cde.state.co.us/cdereval/suspend-expelcurrent>.

The percentage of drug expulsions among all expulsions was stable from 2004–2005 to 2008–2009, at around 25% (Figure 98). It increased by 16 percentage points, from 26% to 42%, in 2012–2013. Since that high point, it has come down eight percentage points, standing at 34% in 2017–2018. The percentage of drug-related behavior referrals among all law enforcement referrals follows a similar pattern. It was stable from 2004–2005 to 2008–2009 at around 23%, began to increase in 2009–2010, peaked in 2013–2014 at 37% of all law enforcement referrals, and dropped to 29% in 2017–2018. The percentage of drug suspensions among all suspensions has remained at around 5%–6% of all suspensions.

Figure 98. Percent of disciplinary incidents for drugs, 2004–2018



Source: Colorado Department of Education, at <http://www.cde.state.co.us/cdereval/suspend-expelcurrent>.

The 2016-2017 school year was the first full year of reporting marijuana separately from other drugs as a disciplinary reason. Figures 99 and 100 present information on disciplinary incidents for both marijuana and other drugs. Since only two years of data were available, it is not possible to determine a trend (Figure 99). However, in 2017-2018, marijuana accounted for about 70% of suspensions or expulsions for drugs and almost 80% of law enforcement referrals for drugs (Figure 100).

In the context of all disciplinary incidents, marijuana accounted for 3% of all suspensions, was related to 24% of all expulsions and 22% of all law enforcement referrals in the 2017-18 school year (Figure 101).

Figure 99. Disciplinary incidents for drugs in Colorado schools, 2016–2018

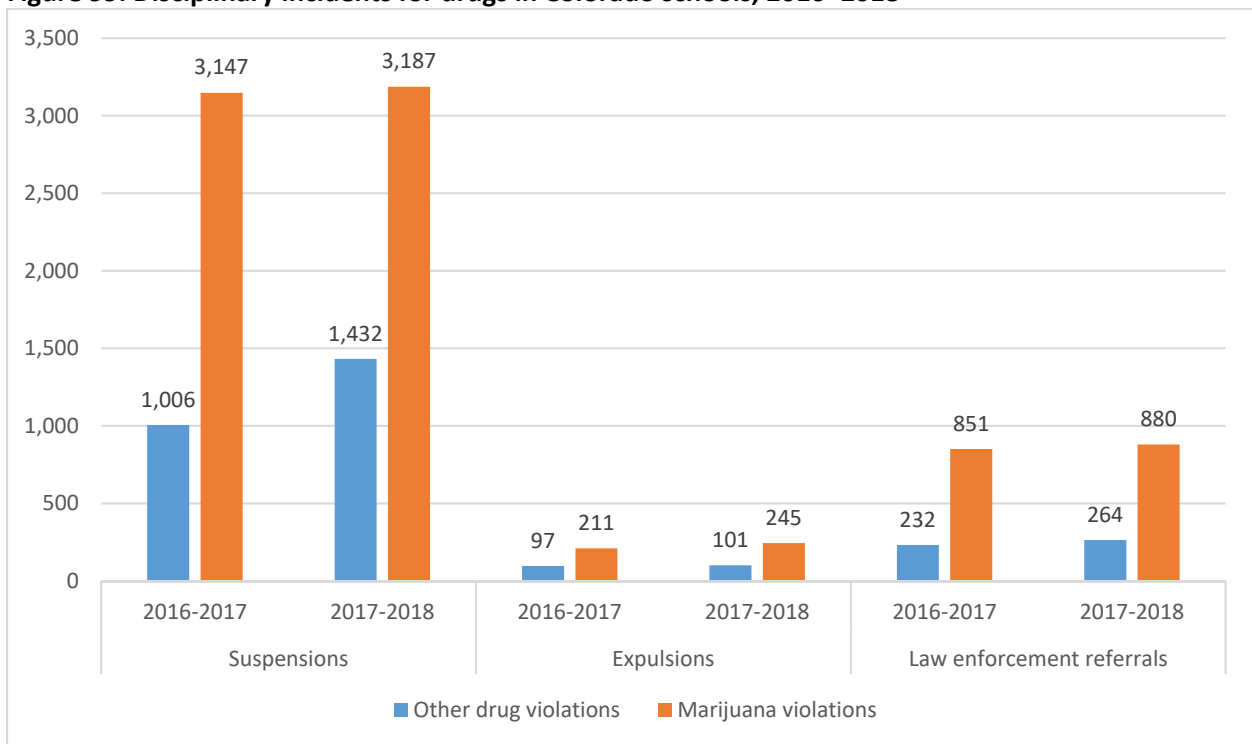


Figure 100. Distribution of disciplinary incidents for drugs in Colorado schools, 2016–2018

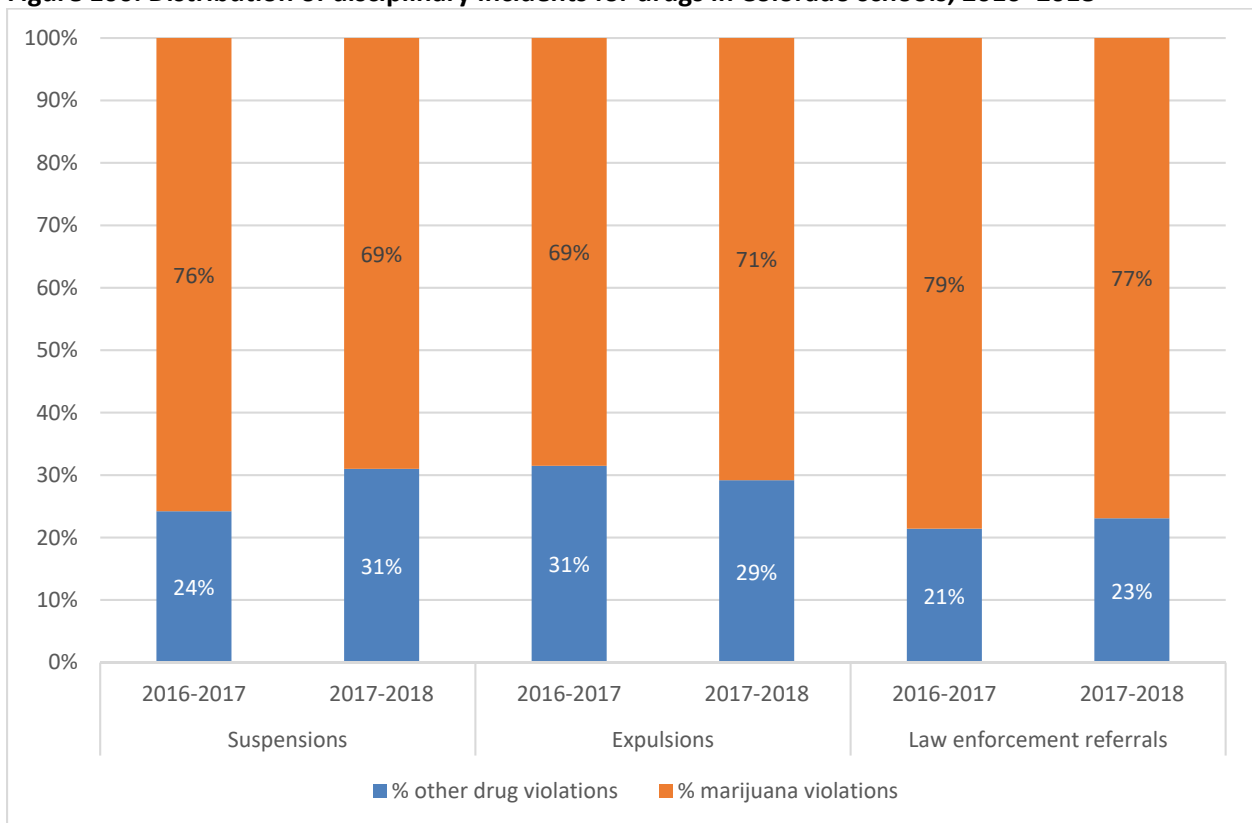
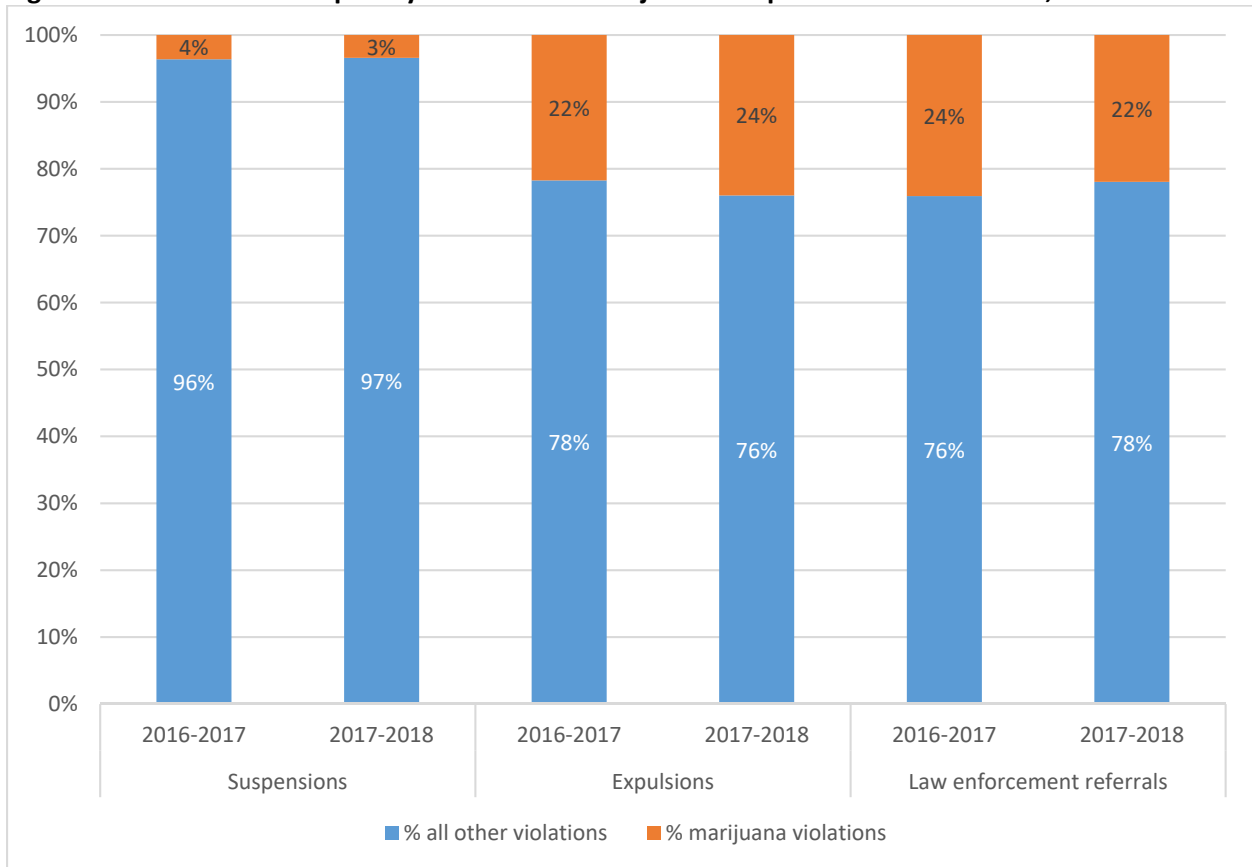


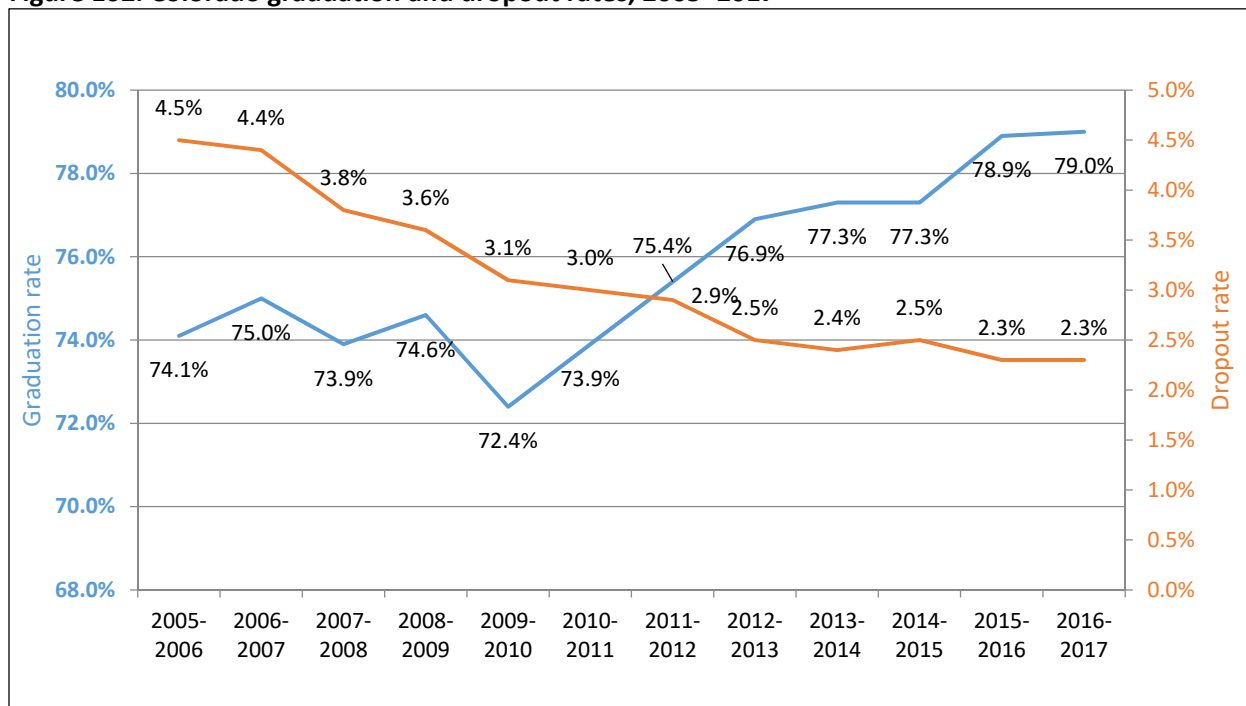
Figure 101. Percent of disciplinary incidents for marijuana compared to other reasons, 2016–2018



Source: Colorado Department of Education, at <http://www.cde.state.co.us/cdereval/suspend-expelcurrent>.

There was concern among legalization stakeholders that school dropouts would increase and graduation rates would decrease after legalization. This is not reflected in the data presented in Figure 102.

Figure 102. Colorado graduation and dropout rates, 2005–2017



Source: Colorado Department of Education, <http://www.cde.state.co.us/cdereval>.

In sum, since legalization, reported discipline incidents due to drugs have not increased. It should be noted that recent declines in rates of suspension and expulsion, and fewer referrals to law enforcement, are likely associated with school reform efforts mandated in Senate Bill 12-046 and House Bill 12-1345.

Probation Testing Data

Colorado’s Probation Departments conduct drug tests on juvenile probationers. The frequency of testing is determined by assessment, court orders, and other case-related information. Table 39 presents information on the percentage of juvenile probationers who tested positive for THC. The percentage of the 10- to 14-year-old group testing positive for THC one or two times has remained relatively stable, at about 20%, while the percentage testing positive three or more times rose from 16% to 23%. The percentage of 15- to 17-year-olds testing positive one or two times was also stable, at around 26%, while those testing positive three or more times increased from 23% to 30%. There is currently no link between probationer drug testing results and probation status, so it remains unknown if changes in drug use patterns affect probation violations.

Table 39. Juvenile probationer test results for THC, 2012–2017

Age Group	Times tested positive	Percent of probationers testing positive for THC					
		2012	2013	2014	2015	2016	2017
10 to 14 years old	N probationers with test results	652	492	520	493	453	388
	0 times	66%	60%	54%	58%	51%	56%
	1-2 times	19%	20%	25%	22%	29%	20%
	3 or more times	16%	20%	20%	20%	20%	23%
15 to 17 years old	N probationers with test results	3,377	2,599	2,776	2,643	2,523	2,324
	0 times	50%	51%	48%	47%	46%	44%
	1-2 times	27%	24%	25%	25%	26%	26%
	3 or more times	23%	25%	27%	28%	28%	30%

Note: The number of active juvenile clients decreased from 5,156 in fiscal year 2012 to 3,549 in fiscal year 2017.

Source: Colorado Division of Probation Services.

The percentage of total tests with positive results for THC is presented in Table 40. For 10 to 14 year olds, the percentage of tests that were positive for THC increased from 31% in 2012 to 39% in 2014, where it remained in 2017. The 15- to 17-year-old group showed similar results, with 28% of tests coming back positive in 2012, increasing to 39% in 2017.

Table 40. Percent of juvenile probationer drug test results for THC that are positive, 2012–2017

Age Group	Times tested	2012	2013	2014	2015	2016	2017
10 to 14 years old	N tests	2,542	2,002	2,223	2,340	2,207	1,893
	% positive	31%	35%	39%	37%	38%	39%
15 to 17 years old	N tests	23,094	17,241	20,183	18,737	18,707	16,394
	% positive	28%	31%	33%	34%	35%	39%

Note: The number of active juvenile clients decreased from 5,156 in fiscal year 2012 to 3,549 in fiscal year 2017.

Source: Colorado Division of Probation Services.

Drug-Endangered Children

Senate Bill 13-283 requires that information be collected on the impact of marijuana legalization on drug-endangered children. There is no agreement on the definition of that term and so no formal definition exists. The Colorado Department of Human Services does not have a method to track whether a child welfare case was prompted by any specific drug. Likewise, it is not possible to identify whether an arrest or court filing for child abuse/child endangerment has marijuana as a causal or contributing factor. This creates a significant gap in the information available on the topic.

In an attempt to address the General Assembly's concern about drug-endangered children, we use two sources of information to examine the issue. First, a statewide survey of parents about their marijuana use and product storage at home (CDPHE's Child Health Survey) is examined below. This is followed by

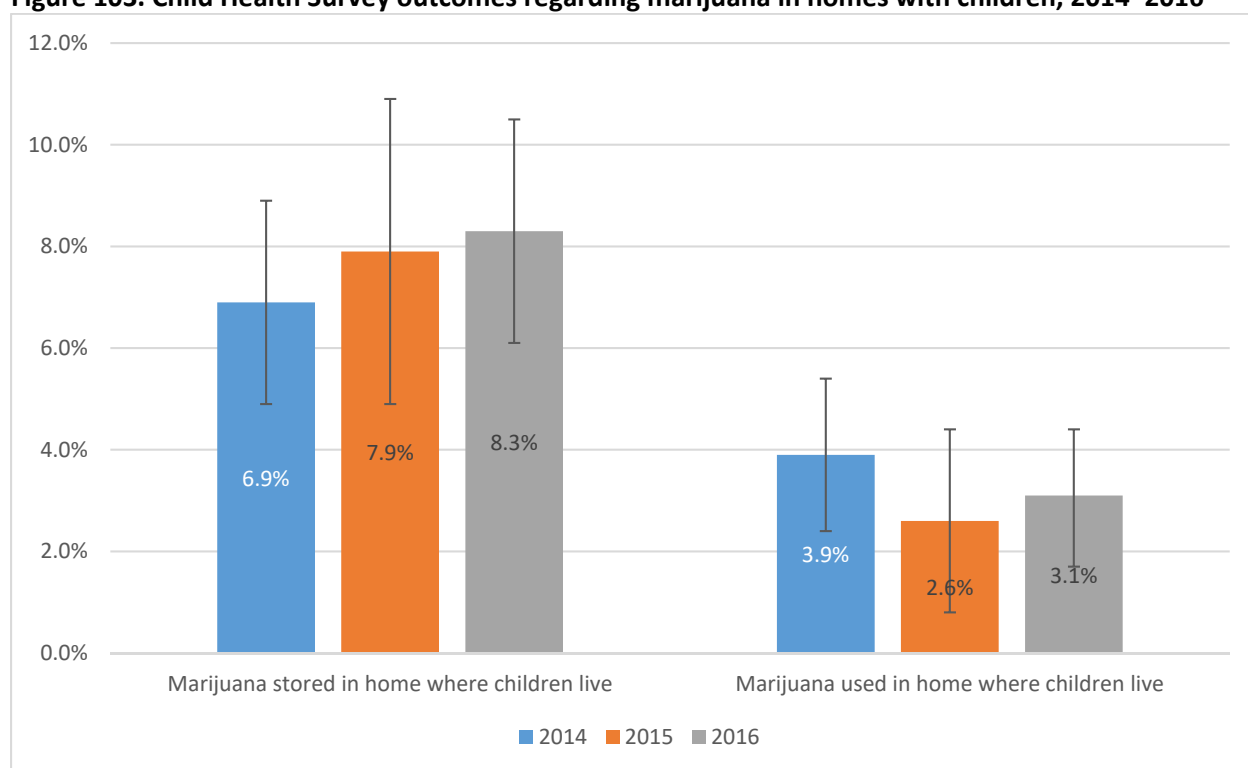
data from the Office of Behavioral Health's Drug/Alcohol Combined Data System (DACODS), examining marijuana treatment trends for people reporting dependent children under 18.

Child Health Survey

The Child Health Survey⁷³ (CHS) is done as an adjunct to the annual Behavioral Risk Factor Surveillance Survey (BRFSS) conducted by CDPHE. Once respondents complete the BRFSS, the interviewer asks if they have a child between the ages of one and 14, and asks about their willingness to complete the Child Health Survey. The CHS asks questions on a variety of topics, including the child's physical activity, nutrition, access to health and dental care, behavioral health, school health, sun safety, injury, among others. Questions regarding parental marijuana use, storage, and consumption methods were added to the CHS in 2014.

Of homes with children ages 1–14 who participated in the 2016 BRFSS and the Child Health Survey, 8.3% reported storing marijuana in homes where children live, and 3.1% report using it in the home where children live (Figure 103).⁷⁴

Figure 103. Child Health Survey outcomes regarding marijuana in homes with children, 2014–2016



Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment, Child Health Survey: Monitoring trends in marijuana use, at <https://www.colorado.gov/pacific/cdphe/marijuana-colorado-homes-children>

⁷³ Additional information about the Child Health Survey is available at <https://www.colorado.gov/pacific/cdphe/marijuana-colorado-homes-children>.

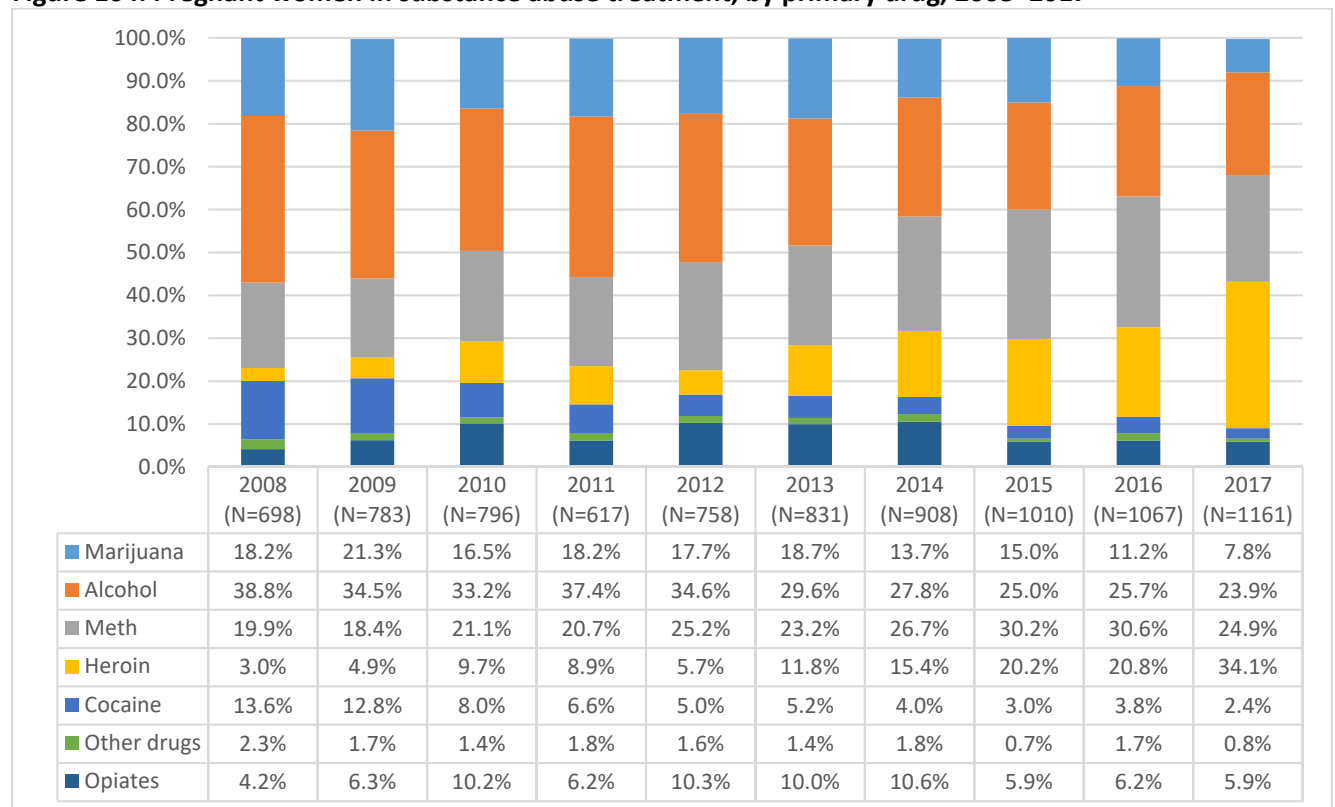
⁷⁴ Data for the 2017 Child Health Survey was not available at the time of this publication.

Parental Treatment and Use Trends

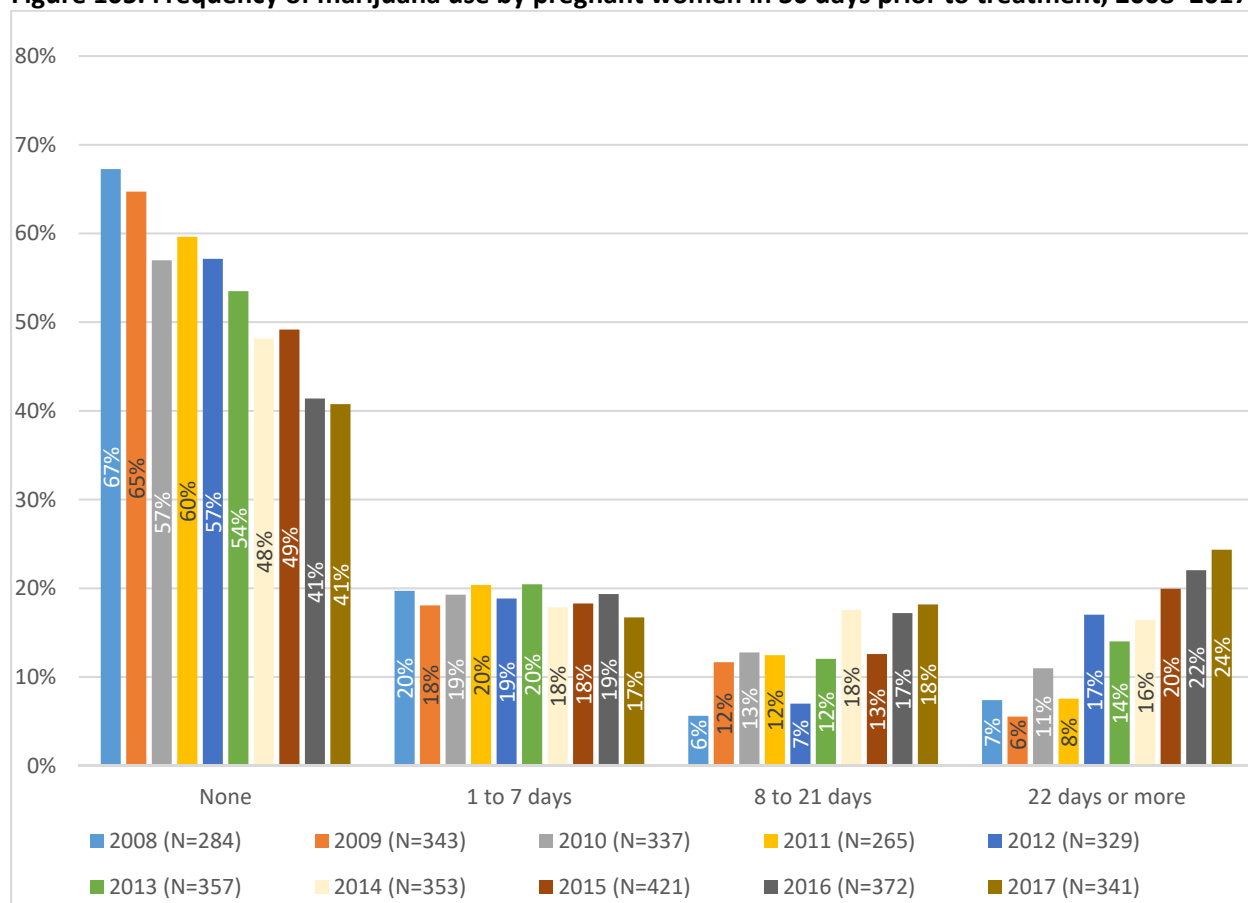
In Figure 104, the percent of pregnant women in substance abuse treatment is shown by primary drug of abuse. In 2017, heroin (34.1%), methamphetamine (24.9%), and alcohol (23.9%) were the most common drugs of abuse for which pregnant women sought treatment, with marijuana coming in fourth at 7.8%, down from 17.7% in 2012. The number of women in treatment increased from 698 in 2008 to 1161 in 2017; much of the increase was associated with heroin.

Figure 105 presents the frequency of marijuana use in the 30 days prior to treatment, over time, for pregnant women. In 2012, prior to legalization, 54% of pregnant women reported no use in the month before treatment, 7% reported using 8–21 days, while 17% reported using 22 days or more. By 2017, 41% reported no use, 18% reported using 8–21 days, and 24% reported using for 22 days or more.

Figure 104. Pregnant women in substance abuse treatment, by primary drug, 2008–2017



Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System. Analyzed by the Division of Criminal Justice.

Figure 105. Frequency of marijuana use by pregnant women in 30 days prior to treatment, 2008–2017

Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System.

Note: This includes frequency of use where marijuana was either primary, secondary, or tertiary drug of abuse.

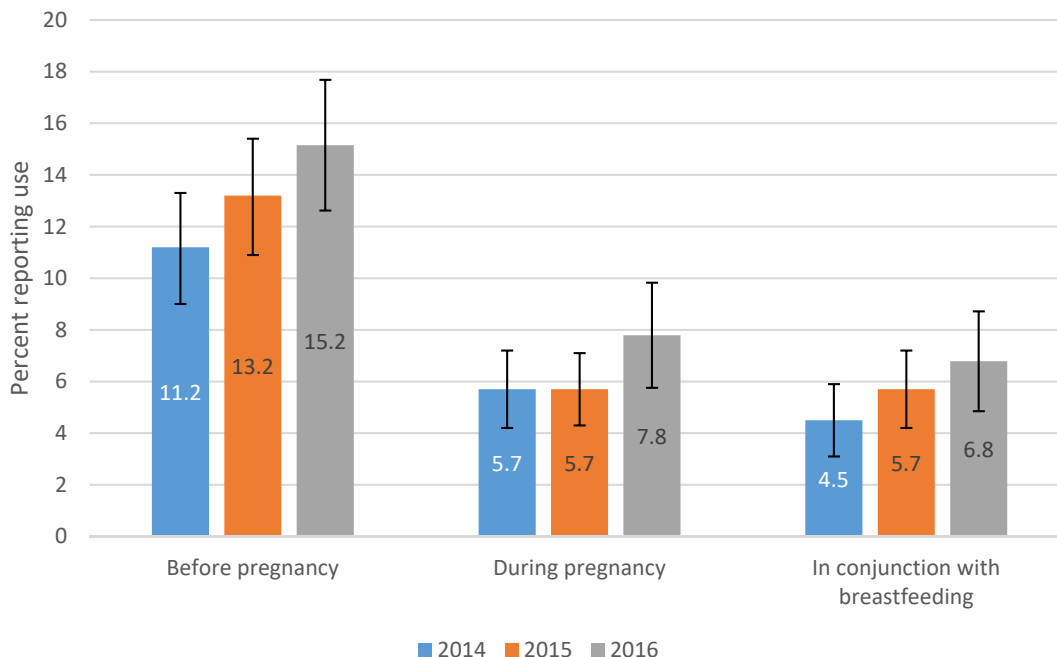
Pregnancy Risk Assessment Monitoring System

The Pregnancy Risk Assessment Monitoring System (PRAMS) is a surveillance system designed to identify and monitor behaviors and experiences of women before, during and after pregnancy. Information is collected by CDPHE by surveying a sample of women who have recently given birth. PRAMS uses a combination of two data collection approaches: statewide mailings of the surveys, and a telephone follow-up with women who do not return the survey by mail. Beginning in 2014, CDPHE added specific marijuana questions to PRAMS, including use prior to pregnancy, use during pregnancy, and use while breastfeeding.

In 2016, most women were not using marijuana before, during, or in conjunction with breastfeeding. Alcohol use remained the most common substance used before pregnancy at 65.9%, followed by marijuana at 15.2% of women, up significantly from 11.2% in 2014 (Figure 106). The proportion of women reporting use during pregnancy in 2016 (7.8%) was not significantly different from prior years. Additionally, the percentage reporting use in conjunction with breastfeeding (6.8%) was not significantly

different from prior years. Alcohol continued to be used at higher rates than marijuana before, during and after pregnancy.

Figure 106. Marijuana use before and during pregnancy and in conjunction with breastfeeding, 2014–2016



Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment, Marijuana use during pregnancy and breastfeeding in Colorado, at <https://www.colorado.gov/pacific/cdphe/pregnancy-risk-assessment-monitoring-system-prams-monitoring-trends-marijuana-use>.

In sum, this section focused on the impact of marijuana legalization on youth. Survey data reflect that the proportion of students using marijuana in their lifetime remained stable between 2005 and 2017, and lifetime use rates (at 35.3% in Colorado in 2017, according to HKCS) was not different from the national cohort. The proportion of Colorado students reporting past 30-day use remained statistically unchanged between 2005 and 2017 (at 19.4% in 2017, according to HKCS) and again was not different from the national cohort. (Note that the NSDUH survey, with a small sample of Colorado students, showed 30-day use declining.) Additionally, marijuana was the most common reason for law enforcement contact with students in 2017, but it is noteworthy that graduation rates continued to increase through the 2016-2017 academic year and dropout rates remained stable since 2012-2013. The proportion of juveniles on probation who tested positive for THC increased between 2012 and 2017 but it is unknown how this affected revocation rates. Finally, a relatively small percentage of households reported storing (8.3%) or using (3.1%) marijuana in a home where children live. The number of pregnant women entering substance abuse treatment decreased but those who do enter treatment had more severe recent use histories. The use of marijuana before pregnancy (15.2%) increased significantly from 2014 but use during pregnancy (7.8%), or in conjunction with breastfeeding did not change significantly. The use of alcohol before pregnancy (65.9% in 2017) or during pregnancy (17.3% in 2017) was considerably more common, however.

SECTION FIVE: ADDITIONAL INFORMATION

Licensing and Revenue

Marijuana Enforcement Division

The Marijuana Enforcement Division⁷⁵ (MED) is tasked with licensing and regulating the medical and retail marijuana industries in Colorado. The Division implements legislation, develops rules, conducts background investigations, issues business licenses, and enforces compliance mandates in order to maintain a robust regulatory structure. MED promotes transparency and clarity for all stakeholders by utilizing a highly collaborative process through which it develops industry regulations and furthers its primary mission of ensuring public safety.

Licensees Statewide

As reflected in Table 41, the total number of marijuana business licenses issued increased sharply for the first two years after legalization, up 30% from 2014 (2,249) to 2016 (2,934). Recent growth, between 2016 and 2018, was more moderate, up 6% (from 2,934 to 3,101). The number of medical licenses dropped slightly (-5%) during this period while the total number of retail licenses increased 18% between 2016 and 2018.⁷⁶

Licenses for marijuana businesses were concentrated in Denver (1,226), El Paso (370), and Pueblo (303) Counties (Figure 107). The largest number of retail store licenses were in Denver (182), Boulder (54), and Pueblo (32) Counties (Figure 108). Denver County also had the largest number of medical center licenses (199) followed by El Paso (134) and Boulder (26) (Figure 109). There were 232 retail cultivations in Denver, 167 in Pueblo, and 60 in Boulder (Figure 110). There were 369 medical cultivations in Denver County, 179 in El Paso County, and 35 in Pueblo County (Figure 111). Additional information on the location of different license types can be found in Figures 112-115 and the data supporting the maps is located in Appendix H, Tables 20 and 21.

⁷⁵ Additional information on the MED can be obtained at <https://www.colorado.gov/enforcement/marijuanaenforcement>.

⁷⁶ Labs test for potency of products, homogeneity of THC throughout a product, solvents, and microbial contamination.

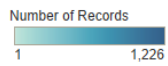
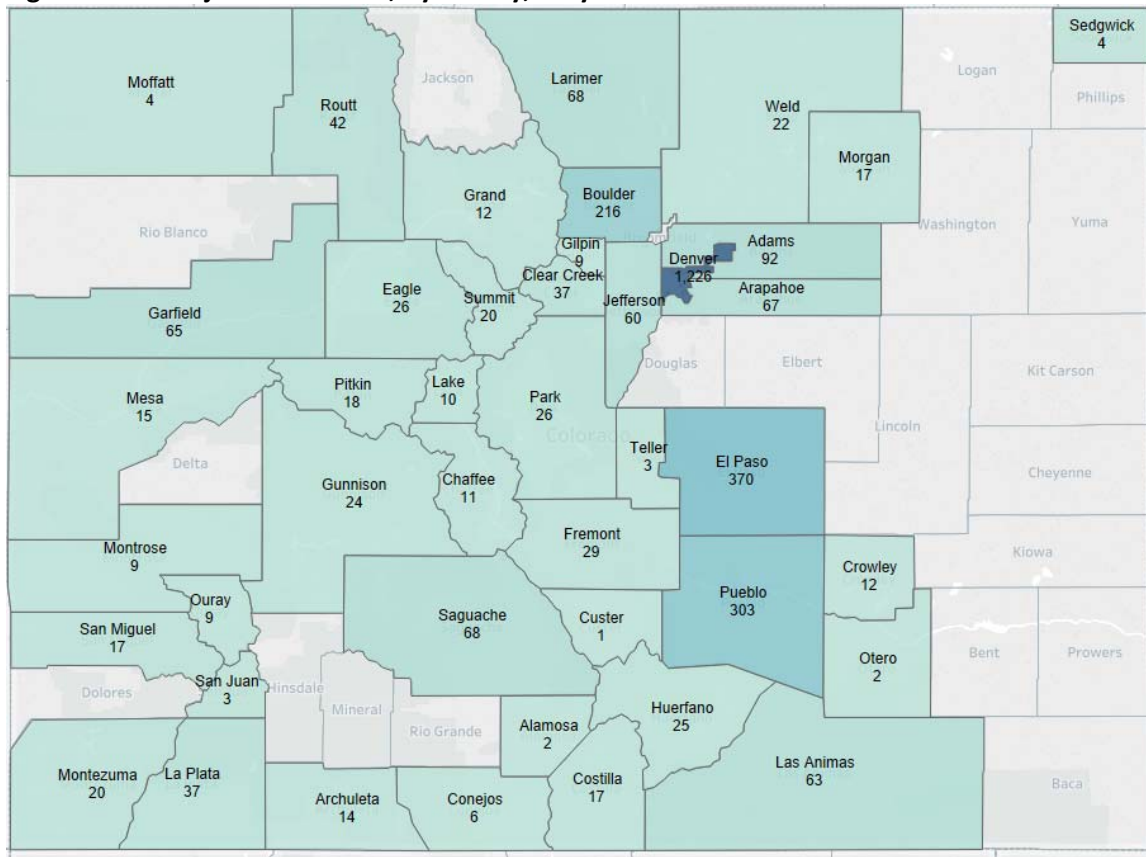
Table 41. Licensed marijuana premises, by license type, 2014-18

	2014	2015	2016	2017	2018
Total licensed premises	2,249	2,592	2,934	3,051	3,101
Medical	1,416	1,469	1,584	1,531	1,511
Centers	505	516	528	506	498
Cultivations	748	751	788	759	735
Product manufacturers	163	202	524	254	254
Testing facilities	0	0	14	12	10
Operator	0	0	0	5	6
Transporter	0	0	0	8	8
Retail	833	1,123	1,350	1,520	1,590
Stores	322	424	459	509	529
Cultivations	397	514	633	720	742
Product manufacturers	98	168	244	279	287
Testing facilities	16	17	14	12	13
Operator	0	0	0	6	9
Transporter	0	0	0	10	10

Source: Colorado Department of Revenue, Marijuana Enforcement Division, *2014 Annual Update; 2015 Annual Update; 2016 MED Annual Update; 2017 MED Annual Update*. At <https://www.colorado.gov/pacific/enforcement/med-updates>.

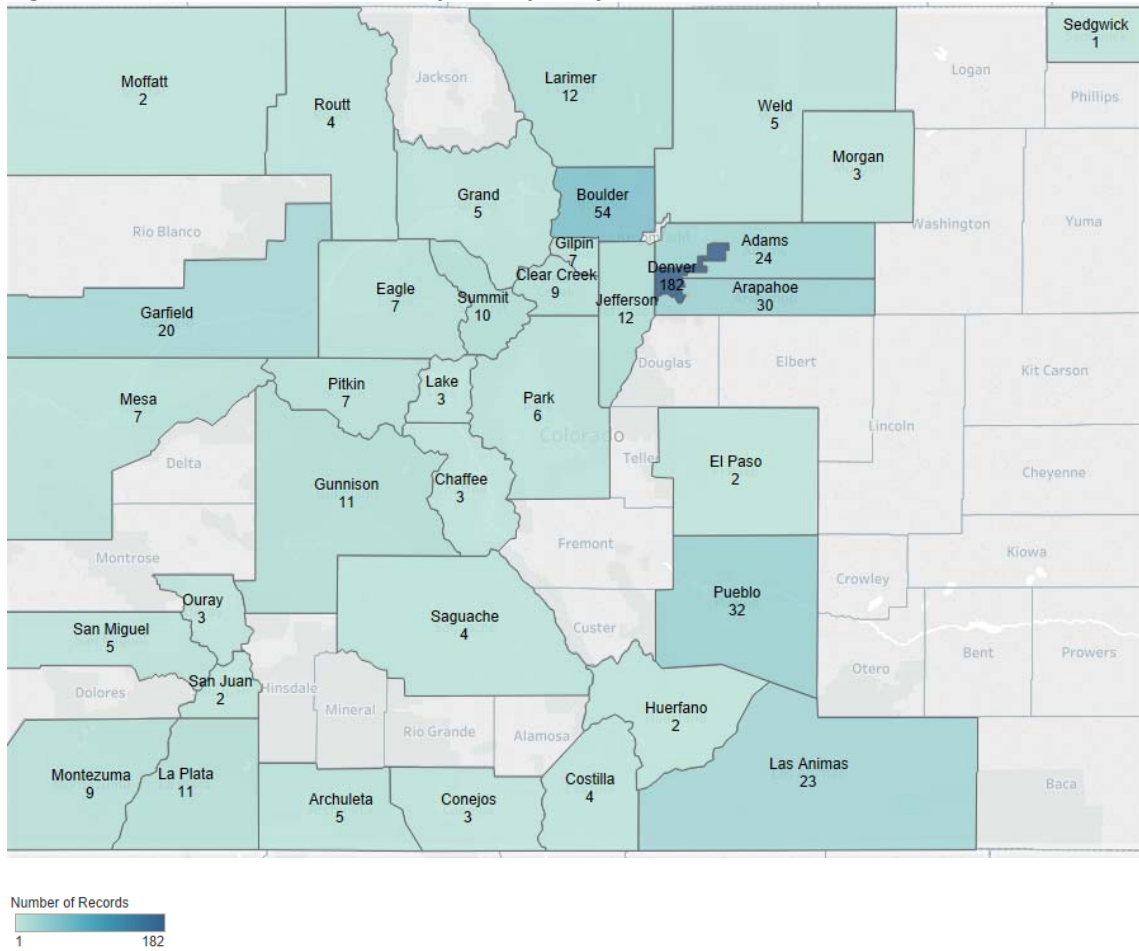
Note: For additional information on the different marijuana business license types and archived lists please visit: <https://www.colorado.gov/pacific/enforcement/med-licensed-facilities>

Figure 107. Marijuana licensees, by county, May 2018



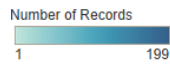
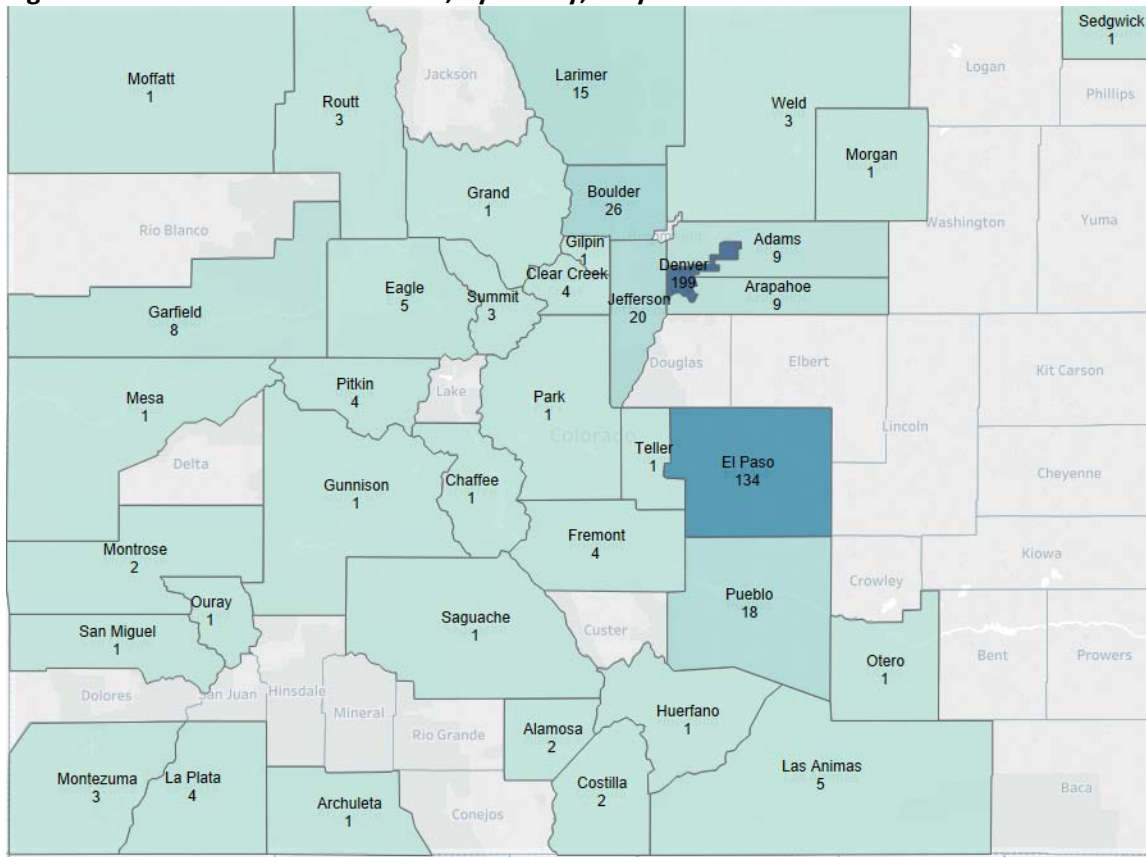
Source: Colorado Department of Revenue, Marijuana Enforcement Division, MED Licensed Facilities, at <https://www.colorado.gov/pacific/enforcement/med-licensed-facilities>.

Figure 108. Retail store licensees, by county, May 2018



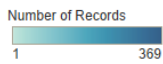
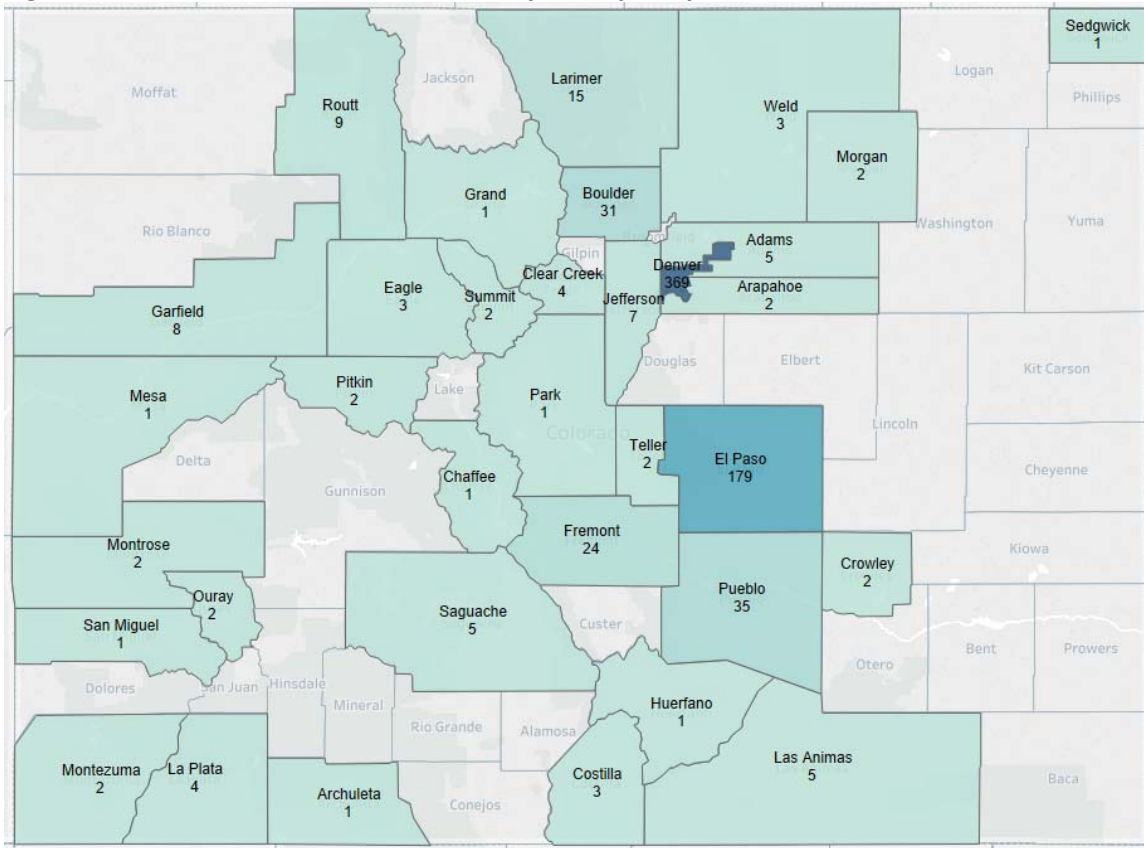
Source: Colorado Department of Revenue, Marijuana Enforcement Division, MED Licensed Facilities, at <https://www.colorado.gov/pacific/enforcement/med-licensed-facilities>.

Figure 109. Medical center licensees, by county, May 2018



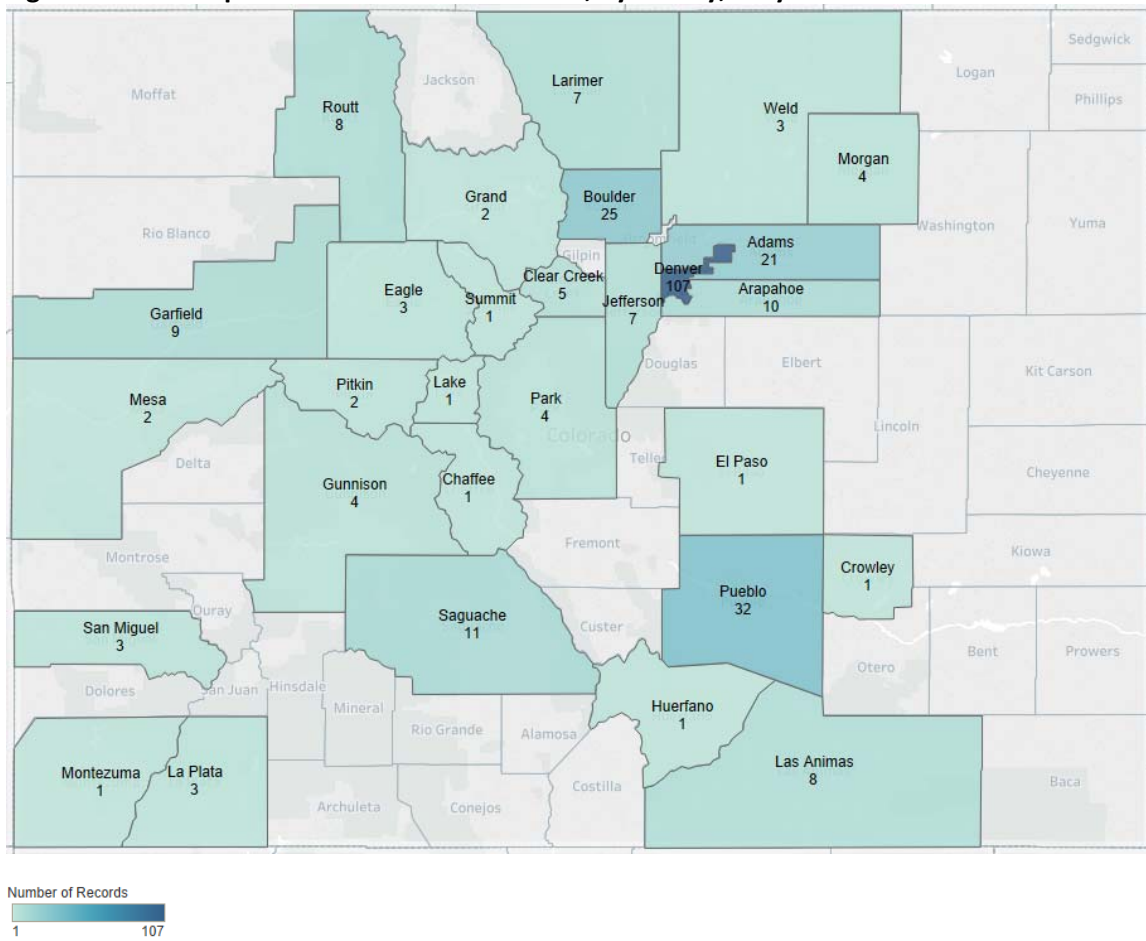
Source: Colorado Department of Revenue, Marijuana Enforcement Division, MED Licensed Facilities, at <https://www.colorado.gov/pacific/enforcement/med-licensed-facilities>.

Figure 111. Medical cultivation licenses, by county, May 2018



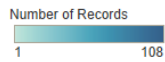
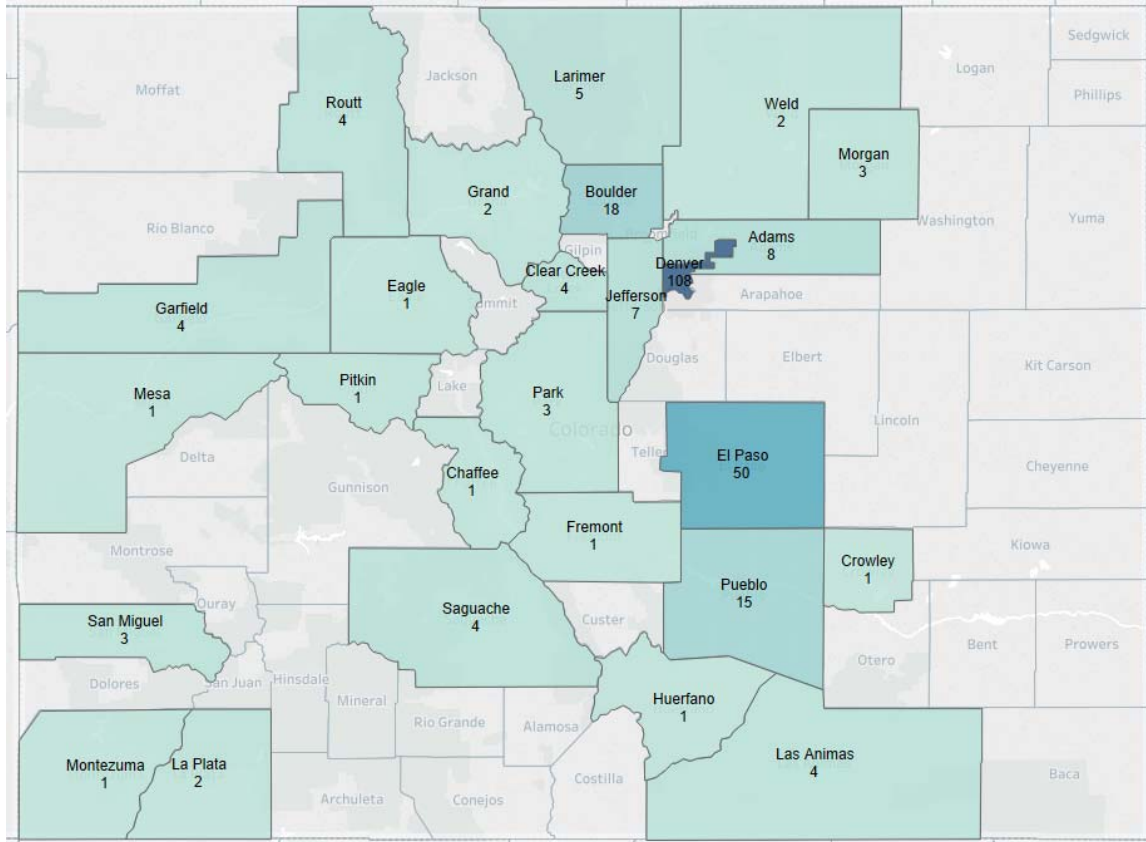
Source: Colorado Department of Revenue, Marijuana Enforcement Division, MED Licensed Facilities, at <https://www.colorado.gov/pacific/enforcement/med-licensed-facilities>.

Figure 112. Retail product manufacture licenses, by county, May 2018



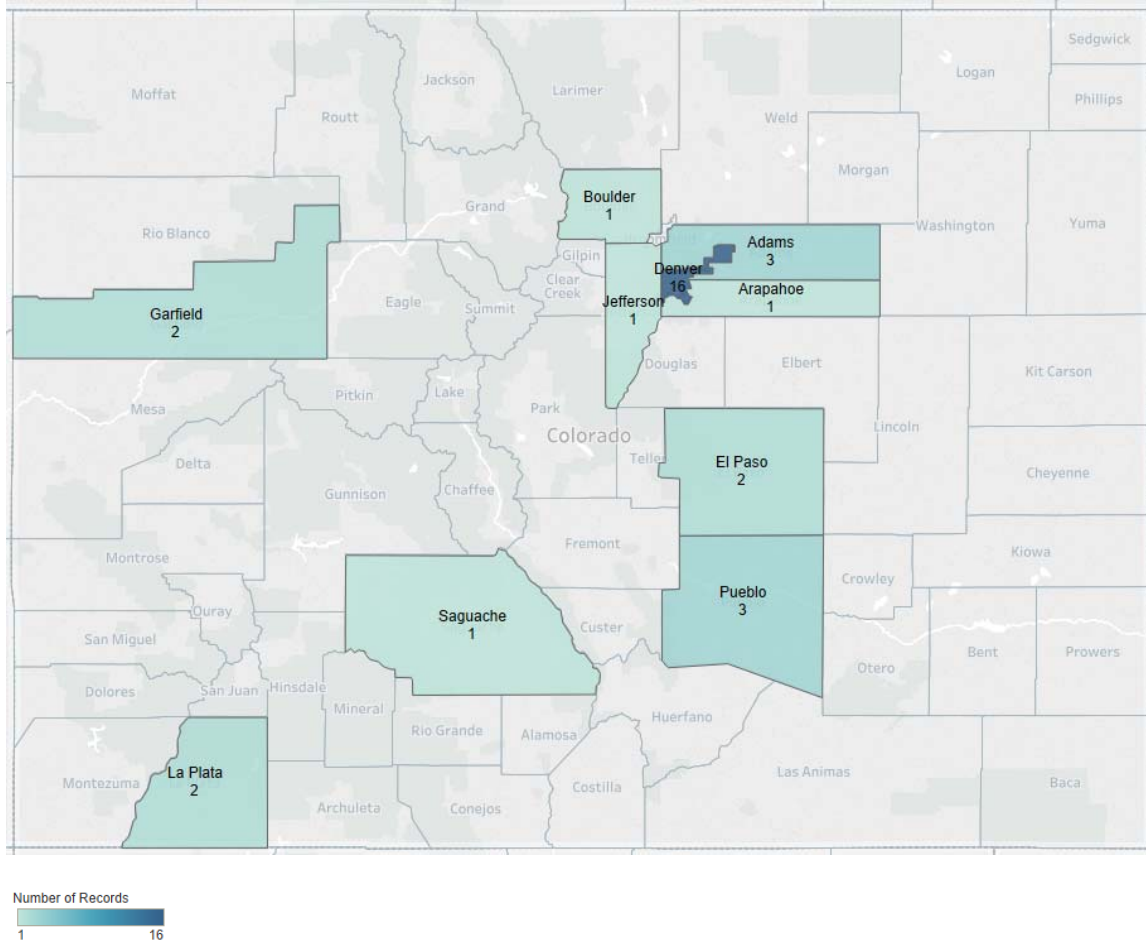
Source: Colorado Department of Revenue, Marijuana Enforcement Division, MED Licensed Facilities, at <https://www.colorado.gov/pacific/enforcement/med-licensed-facilities>.

Figure 113. Medical product manufacture licenses, by county, May 2018



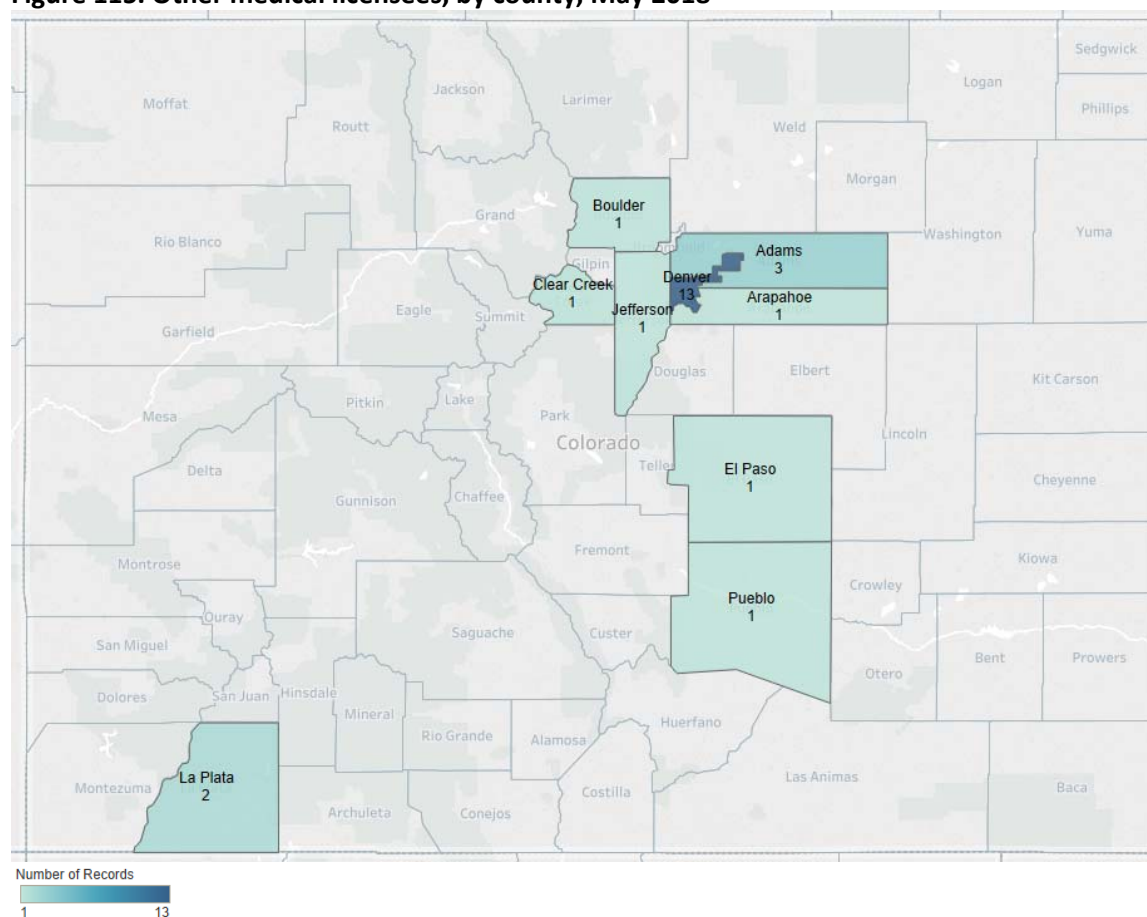
Source: Colorado Department of Revenue, Marijuana Enforcement Division, MED Licensed Facilities, at <https://www.colorado.gov/pacific/enforcement/med-licensed-facilities>.

Figure 114. Other retail licensees, by county, May 2018



Source: Colorado Department of Revenue, Marijuana Enforcement Division, MED Licensed Facilities, at <https://www.colorado.gov/pacific/enforcement/med-licensed-facilities>.

Figure 115. Other medical licensees, by county, May 2018



Source: Colorado Department of Revenue, Marijuana Enforcement Division, MED Licensed Facilities, at <https://www.colorado.gov/pacific/enforcement/med-licensed-facilities>.

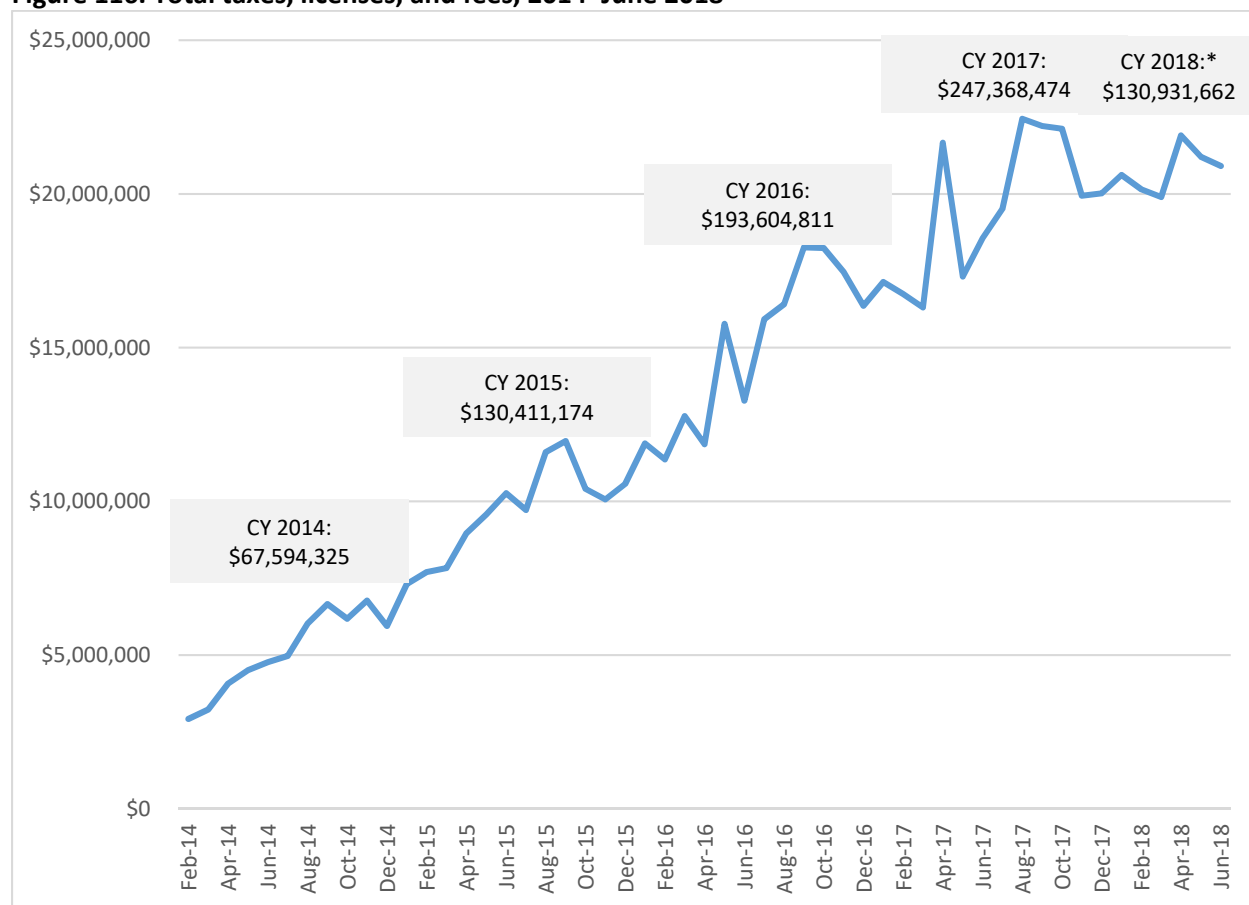
Tax Revenue and Sales

The total revenue from taxes, licenses, and fees increased 266% from calendar year 2014 to 2017, going from \$67,594,325 up to \$247,368,474 (Figure 116 and Table 42). The revenue increase was driven by the sales taxes, excise taxes, licenses, and fees for retail marijuana. In calendar year 2017, total sales taxes, excise, taxes, licenses and fees from retail marijuana accounted for \$226,812,442, or 92% of all marijuana revenue. On average, Colorado collects approximately \$20 million per month in taxes, licenses, and fees from all marijuana sources (Table 42).

The excise tax revenue collected to fund the Public School Capital Construction Assistance Fund reached \$40,256,542 in calendar year 2017, with an additional \$31,558,383 sent to the Public School Fund. Between 2016 and 2018 marijuana excise taxes have contributed between \$5-6 million dollars per month directly to school construction or other public school needs (Figure 118). The taxes distributed to local governments increased 305%, from \$4,005,458 in 2014 to \$16,204,671 in 2017.

The tax revenue from marijuana should be put in context of all tax revenue collected in Colorado. In fiscal year 2017, gross collections for all tax revenue totaled \$13.8 billion dollars.⁷⁷ Marijuana taxes make up about 1.52% of all tax revenue collected in the state. For a graphic depiction of marijuana revenue see Appendix I.

Figure 116. Total taxes, licenses, and fees, 2014–June 2018

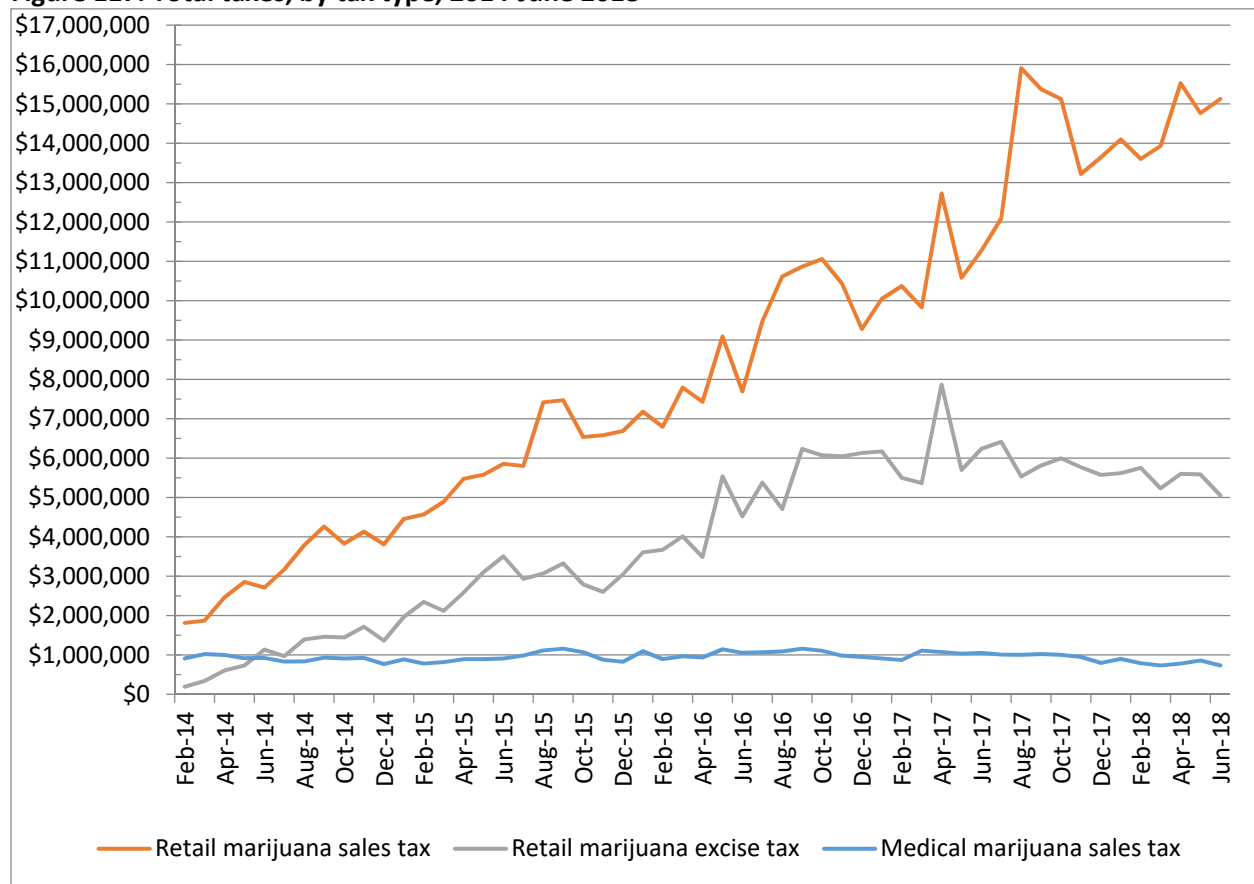


Source: Marijuana Enforcement Division (2018). Marijuana Tax Data, at <https://www.colorado.gov/pacific/revenue/colorado-marijuana-tax-data>

Note: Calendar year 2018 taxes reported through June 2018.

⁷⁷ Colorado Department of Revenue (2017). *Annual Report 2017*, at https://www.colorado.gov/pacific/sites/default/files/2017_Annual_Report.pdf.

Figure 117. Total taxes, by tax type, 2014-June 2018



Source: Marijuana Enforcement Division (2018). Marijuana Tax Data, at <https://www.colorado.gov/pacific/revenue/colorado-marijuana-tax-data>

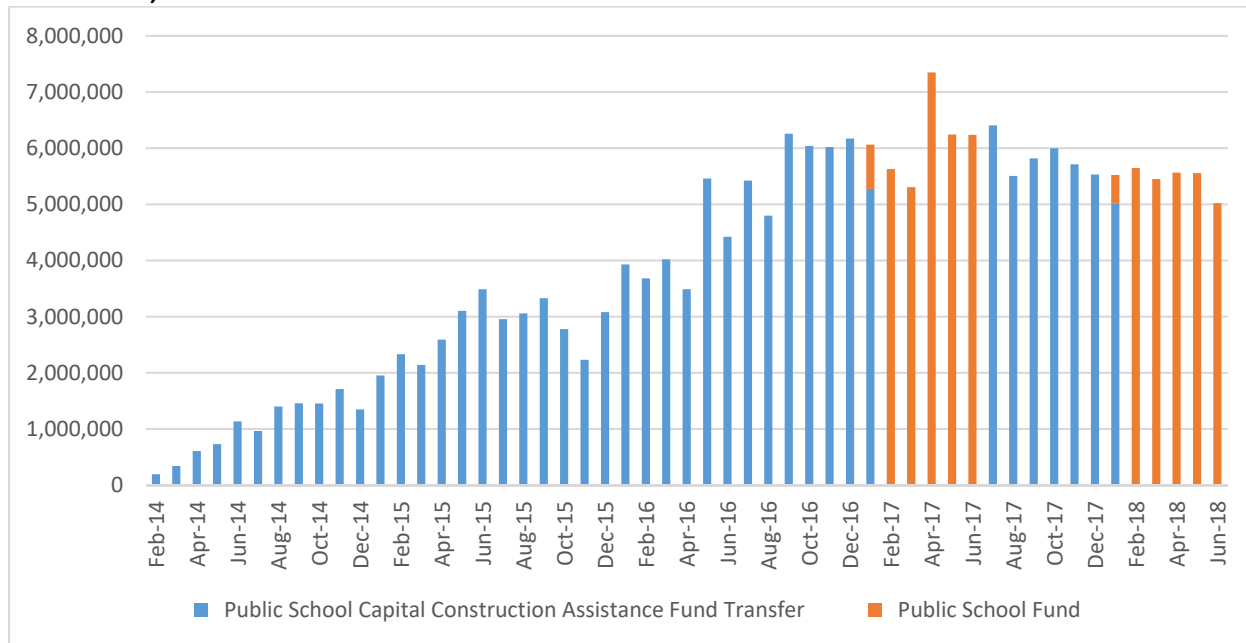
Note: Calendar year 2018 taxes reported through June 2018.

Table 42. Annual and average monthly taxes, licenses, and fees, 2014-June 2018

Calendar Year	Annual total collections			Average monthly collections		
	Taxes	License & Fees	Taxes & Fees	Taxes	License & Fees	Taxes & Fees
2014	\$56,102,639	\$11,491,688	\$67,594,325	\$5,100,240	\$1,044,699	\$6,144,939
2015	\$116,003,360	\$14,407,811	\$130,411,174	\$9,666,947	\$1,200,651	\$10,867,598
2016	\$179,619,617	\$13,985,195	\$193,604,811	\$14,968,301	\$1,165,433	\$16,133,734
2017	\$234,014,747	\$13,353,727	\$247,368,474	\$19,501,229	\$1,112,811	\$20,614,040
2018	\$124,696,564	\$6,235,099	\$130,931,662	\$20,782,761	\$1,039,183	\$21,821,944

Source: Colorado Department of Revenue, Marijuana Enforcement Division (2018). Marijuana Tax Data, at <https://www.colorado.gov/pacific/revenue/colorado-marijuana-tax-data>

Figure 118. Monthly transfer of marijuana excise taxes to school construction fund and general public school fund, 2014-June 2018



Source: Colorado Department of Revenue, Marijuana Enforcement Division (2018). Marijuana Tax Data, at <https://www.colorado.gov/pacific/revenue/colorado-marijuana-tax-data>

Note: Amendment 64 calls for the transfer of the first \$40 million in retail marijuana excise taxes to the Public School Capital Construction Assistance Fund (BEST) every year. Once this \$40 million is reached the taxes are transferred to the general public school fund for the rest of the fiscal year.

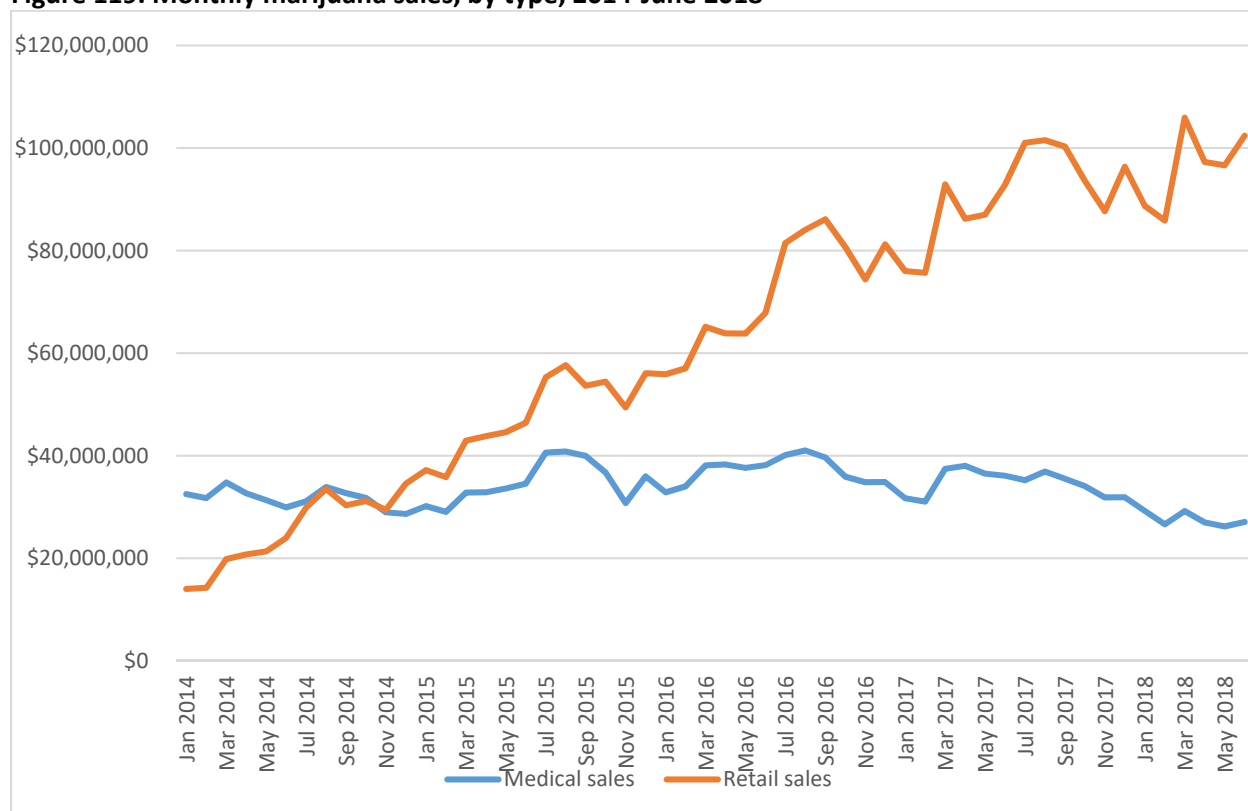
The sales of retail marijuana products have more than tripled over the past four years, from \$303 million in 2014 to \$1.09 billion in 2017 (Table 2). In 2017, an average of \$90 million in retail marijuana products were sold, up from \$25 million in 2014 (Table 43 & Figure 119). The sales of medical marijuana products increased initially but have been decreasing gradually over the past year, from \$445 million in 2016 to \$416 million in 2017 (Table 43). The average monthly sales of medical marijuana products also declined, from \$37 million in 2016 to \$34 million in 2017 (Table 43 and Figure 119).

Table 43. Annual and average monthly sales of marijuana products, 2014-June 2018

Calendar Year	Annual total sales			Average monthly sales		
	Medical	Retail	Total	Medical	Retail	Total
2014	\$380,284,040	\$303,239,699	\$683,523,739	\$31,690,337	\$25,269,975	\$56,960,312
2015	\$418,054,912	\$577,536,343	\$995,591,255	\$34,837,909	\$48,128,029	\$82,965,938
2016	\$445,616,062	\$861,587,411	\$1,307,203,473	\$37,134,672	\$71,798,951	\$108,933,623
2017	\$416,516,782	\$1,091,185,437	\$1,507,702,219	\$34,709,732	\$90,932,120	\$125,641,852
2018	\$138,387,136	\$474,477,654	\$612,864,790	\$27,677,427	\$94,895,531	\$122,572,958

Source: Colorado Department of Revenue, Marijuana Enforcement Division (2018). Marijuana Sales Reports, at <https://www.colorado.gov/pacific/revenue/colorado-marijuana-sales-reports>

Notes: Medical marijuana sales (gross sales minus wholesale) and sales of accessories/other products that do not contain medical marijuana. Retail marijuana sales (gross sales minus wholesale) and does not include sales of accessories/other products that do not contain retail marijuana.

Figure 119. Monthly marijuana sales, by type, 2014-June 2018

Source: Colorado Department of Revenue, Marijuana Enforcement Division (2018). Marijuana Sales Reports at <https://www.colorado.gov/pacific/revenue/colorado-marijuana-sales-reports>

Note: Medical marijuana sales (gross sales minus wholesale) and sales of accessories/other products that do not contain medical marijuana. Retail marijuana sales (gross sales minus wholesale) and does not include sales of accessories/other products that do not contain retail marijuana.

The number of cultivated medical marijuana plants fluctuated between 2014 and 2017, and in December 2017 a little over 300,000 plants were under cultivation (Table 44). The number of plants in the retail market increased each year, up from 216,802 in 2014 to 669,044 in 2017 (+208%). Interestingly, the pounds of medical flower sold increased between 2015 and 2017 while, during this same period, units of infused edibles and non-edibles sold declined. The sales totals for all types of marijuana products increased across the retail market between 2014 and 2017. Since 2014 sales of retail flower have gone up 516%, infused edibles up 226%, and infused non-edibles up 135%. The sales of concentrates have only been tracked since 2016, but both medical and retail sales showed increases.

Table 44. Plants cultivated and annual sales totals, by type of marijuana product, 2014-2017

	2014	2015	2016	2017
Plants cultivated (monthly average in December)				
Medical	302,793	327,960	350,206	305,063
Retail	216,802	346,921	525,225	669,044
Annual Sales				
Medical bud/flower (lbs)	109,578	144,537	159,998	172,994
Retail bud/flower (lbs)	38,660	106,932	175,642	238,149
Medical infused edibles (units)	1,964,917	2,261,875	2,117,838	1,851,098
Retail infused edibles (units)	2,850,733	5,280,297	7,250,936	9,295,329
Medical infused non-edibles (units)	411,099	485,362	292,401	210,823
Retail infused non-edibles (units)	359,412	801,215	761,764	843,646
Medical concentrate (lbs)	--	--	10,037	14,092
Retail concentrate (lbs)	--	--	7,611	13,798

Source: Colorado Department of Revenue, Marijuana Enforcement Division. *2014 Annual Update; 2015 Annual Update; 2016 MED Annual Update; 2017 MED Annual Update*, at <https://www.colorado.gov/pacific/enforcement/med-updates>.

Note: Sales amounts for concentrates was not reported prior to 2016.

Medical Marijuana Cardholders

Colorado Department of Public Health and Environment Process

The Medical Marijuana Registry is administered by the Colorado Department of Public Health and Environment (CDPHE) pursuant to CRS 25-1.5-106. To apply for a medical marijuana registry card, a person must be a Colorado resident with a valid Social Security number, be receiving treatment for a qualifying debilitating medical condition, and be examined by a doctor with whom the person has a bona fide physician-patient relationship. The doctor must recommend the use of marijuana for the patient's condition and specify the number of plants required to alleviate the symptoms of the condition. If the applicant is a minor, additional requirements apply, including a signed parental consent form, two separate physician recommendations, and a copy of the minor's state-issued birth certificate.

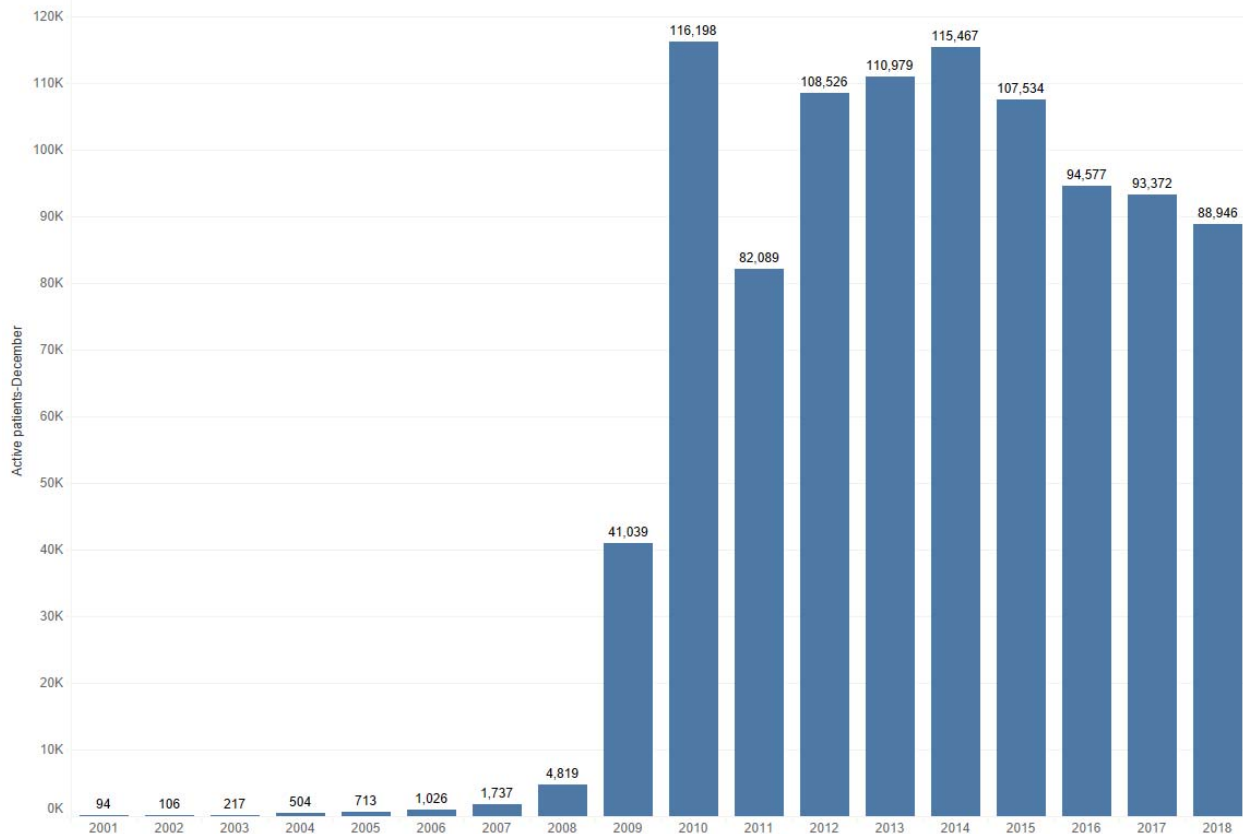
Cardholders can choose to grow their own marijuana plants or designate a caregiver to grow the plants for them. The commercial dispensary market can act as the caregiver and can service the number of patients allowed by the Marijuana Enforcement Division.⁷⁸ Cardholders also have the choice of designating a private person as caregiver.

⁷⁸ The Marijuana Enforcement Division licenses each dispensary to grow a certain number of plants based on the number of patients registered and their recommended plant count.

Trend Data

The number of medical marijuana cardholders began to increase in 2009, after the commercialization of the caregiver market was allowed (Figure 120). From 2008 to 2010, 111,379 cardholders were added to the registry. The number of cardholders peaked in 2010 at 116,198. The number of cardholders decreased 23% between 2014 (115,467) and April 2018 (88,946).

Figure 120. Number of medical marijuana cardholders, 2001-2018



Source: Medical Marijuana Registry, Colorado Department of Public Health and Environment (2018). Medical marijuana statistics and data, at <https://www.colorado.gov/pacific/cdphe/medical-marijuana-statistics-and-data>

Table 45 shows characteristics of registered cardholders in April 2018. The average age of a cardholder was 44 years old. The majority were male (62.1%) and with an average age of 43, while the average age of female cardholders (37.9%) was 46. The majority of cardholders were over 40 (52.9%). The three most common conditions reported were severe pain (92.5%), muscle spasms (30.5%), and severe nausea (13.5%). A cardholder can report more than one debilitating condition.

El Paso County had the most cardholders (19,790), followed by Denver (11,986), Jefferson (8,914), and Arapahoe (7,113) Counties (Figure 121).

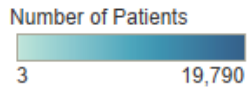
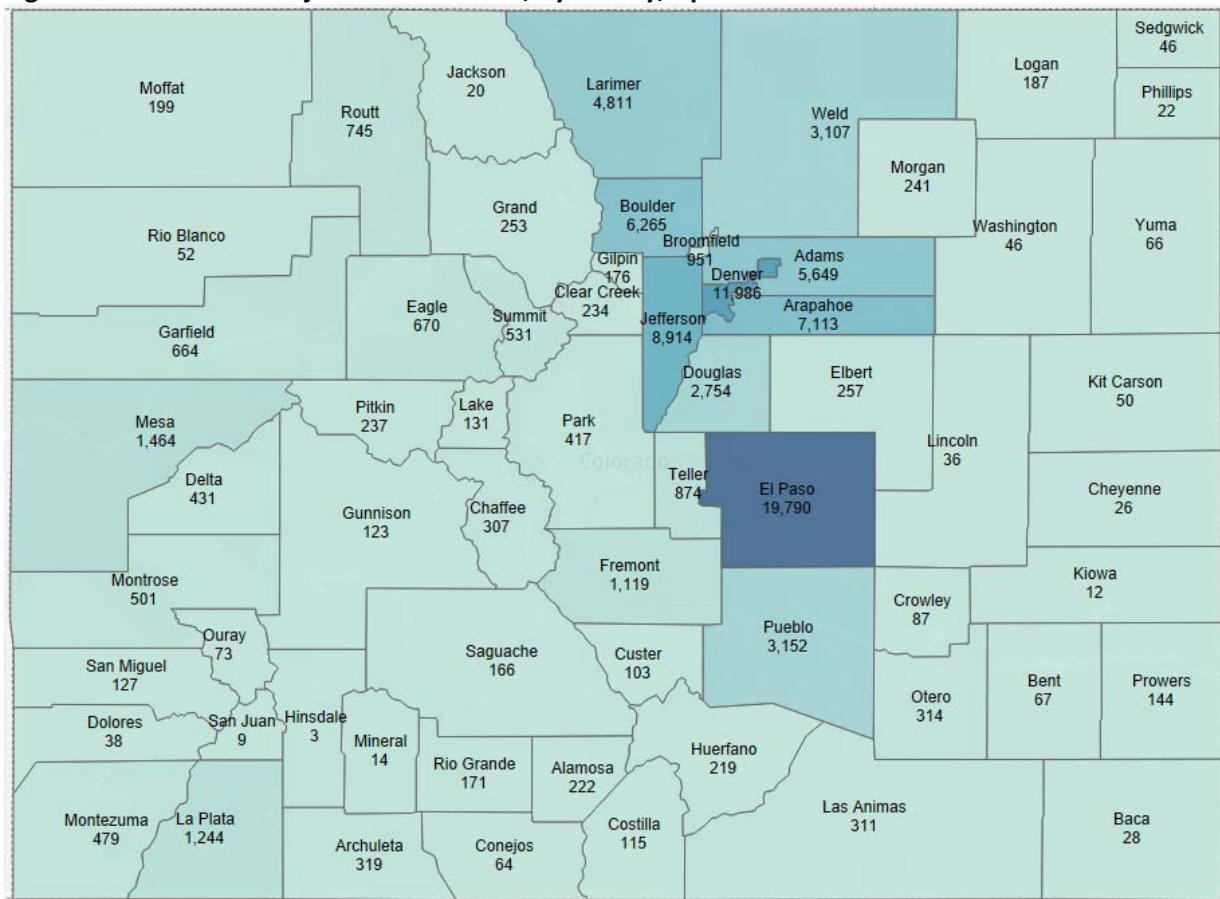
Table 45. Medical marijuana cardholder characteristics, April 2018

Patient characteristics	N	%
Total	88,946	100.0%
Gender		
Male	55,200	62.1%
Female	33,746	37.9%
Age group		
0-10	164	0.2%
11-17	127	0.1%
18-20	3,411	3.8%
21-30	19,141	21.5%
31-40	19,014	21.4%
41-50	14,322	16.1%
51-60	14,710	16.5%
61-70	14,268	16.0%
71 and older	3,789	4.3%
Reported condition^a		
Cachexia	951	1.0%
Cancer	4,082	4.6%
Glaucoma	1,031	1.2%
HIV/AIDS	0	0.0%
Muscle spasms	27,116	30.5%
Seizures	2,670	3.0%
Severe nausea	12,044	13.5%
Severe pain	82,308	92.5%
Post-Traumatic Stress Disorder (PTSD)	4,917	5.5%

Source: Medical Marijuana Registry, Colorado Department of Public Health and Environment, Medical marijuana statistics and data, at <https://www.colorado.gov/pacific/cdphe/medical-marijuana-statistics-and-data>.

^aDoes not sum to 100% because patients may report more than one debilitating medical condition.

Figure 121. Medical marijuana cardholders, by county, April 2018



Source: Colorado Department of Public Health and Environment (2018). Medical marijuana statistics and data, at <https://www.colorado.gov/pacific/cdphe/medical-marijuana-statistics-and-data>

Overall Crime in Colorado

Offense rates for property remained relatively stable from 2012 to 2017, but violent crime increased 20% from 2012 to 2017 (Table 46).

Table 46. Offenses and offense rates in Colorado, by offense type, 2008–2017

Year	Number of total offenses		Offense rate, per 100,000 population	
	Property	Violent	Property	Violent
2008	132,212	16,062	2,639	321
2009	131,141	16,608	2,580	327
2010	132,623	16,676	2,570	323
2011	131,800	16,278	2,575	318
2012	136,483	15,719	2,630	303
2013	138,275	16,056	2,622	305
2014	133,927	16,355	2,503	306
2015	141,634	17,450	2,602	321
2016	149,713	18,787	2,695	338
2017	150,775	20,254	2,688	361

Note: Violent crime includes murder/non-negligent manslaughter, rape, robbery, and aggravated assault. Property crime includes burglary, larceny/theft, motor vehicle theft, and arson. Two additional offenses were added into the category of rape in 2013.

Source: Colorado Bureau of Investigation, as analyzed by Colorado Division of Criminal Justice. See: Crime Statistics, at <https://www.colorado.gov/pacific/dcj-ors/ors-crimestats>.

Arrest rates for violent crime, property crime, and weapons increased between 2012 and 2017 (Table 47). An increase in the number aggravated assault was primarily responsible for the increase in the violent crime rate while larceny arrests was primarily responsible for the increase in property crime rates (data not presented). Drug arrest rates decreased slightly between 2012 and 2017.

Table 47. Arrests and arrest rates in Colorado, by crime type, 2006–2017

Year	Number of total arrests				Arrest rate, per 100,000 population			
	Violent	Property	Drug	Weapons	Violent	Property	Drug	Weapons
2006	7,047	24,194	19,513	2,388	147.2	693.7	458.7	54.8
2007	5,741	23,984	18,290	2,325	163.7	562.1	453.4	55.5
2008	6,208	25,453	17,851	2,054	133.4	557.2	425.0	54.0
2009	6,470	25,826	16,658	1,836	144.2	591.4	414.8	47.7
2010	5,939	23,172	15,294	1,690	150.3	600.0	387.0	42.7
2011	5,701	23,445	15,109	1,701	138.0	538.4	355.3	39.3
2012	5,375	23,128	15,953	1,743	132.5	544.7	351.0	39.5
2013	5,691	28,833	12,370	1,841	124.9	537.4	370.7	40.5
2014	5,936	32,318	13,381	2,164	132.2	669.9	287.4	42.8
2015	6,242	31,067	14,430	2,219	137.9	750.9	310.9	50.3
2016	6,691	29,879	14,790	2,363	145.0	721.8	335.3	51.6
2017	7,721	27,157	16,626	2,309	155.5	694.2	343.6	54.9

Note: Violent crime includes murder/non-negligent manslaughter, rape, robbery, and aggravated assault. Property crime includes burglary, larceny/theft, motor vehicle theft, and arson. Drug and weapon crimes include crimes classified in those categories. Two additional offenses were added into the category of rape in 2013.

Source: Federal Bureau of Investigation, *Crime in the United States*, <https://ucr.fbi.gov/ucr-publications>.

In sum, the information presented in this section showed that licenses for retail and medical marijuana stores were concentrated in Denver, El Paso and Boulder Counties. Overall, 40% of all licensed businesses were located in Denver County. Revenue from taxes, licenses and fees totaled \$247,368,474 in 2015; retail establishments accounted for 72% of all marijuana revenue. Marijuana taxes contributed about 1% of all tax revenue collected in the state. In addition, in April 2018, there were 88,946 medical marijuana card holders, down 23% from 2010; 93% of card holders reported severe pain as the debilitating condition. Finally, across the state, crime decreased from 2012 to 2014 but increased in subsequent years.

**APPENDIX A:
OGDEN MEMORANDUM**



U.S. Department of Justice

Office of the Deputy Attorney General

The Deputy Attorney General

Washington, D.C. 20530

October 19, 2009

MEMORANDUM FOR SELECTED UNITED STATES ATTORNEYS

FROM: 
David W. Ogden
Deputy Attorney General

SUBJECT: Investigations and Prosecutions in States
Authorizing the Medical Use of Marijuana

This memorandum provides clarification and guidance to federal prosecutors in States that have enacted laws authorizing the medical use of marijuana. These laws vary in their substantive provisions and in the extent of state regulatory oversight, both among the enacting States and among local jurisdictions within those States. Rather than developing different guidelines for every possible variant of state and local law, this memorandum provides uniform guidance to focus federal investigations and prosecutions in these States on core federal enforcement priorities.

The Department of Justice is committed to the enforcement of the Controlled Substances Act in all States. Congress has determined that marijuana is a dangerous drug, and the illegal distribution and sale of marijuana is a serious crime and provides a significant source of revenue to large-scale criminal enterprises, gangs, and cartels. One timely example underscores the importance of our efforts to prosecute significant marijuana traffickers: marijuana distribution in the United States remains the single largest source of revenue for the Mexican cartels.

The Department is also committed to making efficient and rational use of its limited investigative and prosecutorial resources. In general, United States Attorneys are vested with "plenary authority with regard to federal criminal matters" within their districts. USAM 9-2.001. In exercising this authority, United States Attorneys are "invested by statute and delegation from the Attorney General with the broadest discretion in the exercise of such authority." *Id.* This authority should, of course, be exercised consistent with Department priorities and guidance.

The prosecution of significant traffickers of illegal drugs, including marijuana, and the disruption of illegal drug manufacturing and trafficking networks continues to be a core priority in the Department's efforts against narcotics and dangerous drugs, and the Department's investigative and prosecutorial resources should be directed towards these objectives. As a general matter, pursuit of these priorities should not focus federal resources in your States on



Memorandum for Selected United States Attorneys

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Subject: Investigations and Prosecutions in States Authorizing the Medical Use of Marijuana

individuals whose actions are in clear and unambiguous compliance with existing state laws providing for the medical use of marijuana. For example, prosecution of individuals with cancer or other serious illnesses who use marijuana as part of a recommended treatment regimen consistent with applicable state law, or those caregivers in clear and unambiguous compliance with existing state law who provide such individuals with marijuana, is unlikely to be an efficient use of limited federal resources. On the other hand, prosecution of commercial enterprises that unlawfully market and sell marijuana for profit continues to be an enforcement priority of the Department. To be sure, claims of compliance with state or local law may mask operations inconsistent with the terms, conditions, or purposes of those laws, and federal law enforcement should not be deterred by such assertions when otherwise pursuing the Department's core enforcement priorities.

Typically, when any of the following characteristics is present, the conduct will not be in clear and unambiguous compliance with applicable state law and may indicate illegal drug trafficking activity of potential federal interest:

- unlawful possession or unlawful use of firearms;
- violence;
- sales to minors;
- financial and marketing activities inconsistent with the terms, conditions, or purposes of state law, including evidence of money laundering activity and/or financial gains or excessive amounts of cash inconsistent with purported compliance with state or local law;
- amounts of marijuana inconsistent with purported compliance with state or local law;
- illegal possession or sale of other controlled substances; or
- ties to other criminal enterprises.

Of course, no State can authorize violations of federal law, and the list of factors above is not intended to describe exhaustively when a federal prosecution may be warranted. Accordingly, in prosecutions under the Controlled Substances Act, federal prosecutors are not expected to charge, prove, or otherwise establish any state law violations. Indeed, this memorandum does not alter in any way the Department's authority to enforce federal law, including laws prohibiting the manufacture, production, distribution, possession, or use of marijuana on federal property. This guidance regarding resource allocation does not "legalize" marijuana or provide a legal defense to a violation of federal law, nor is it intended to create any privileges, benefits, or rights, substantive or procedural, enforceable by any individual, party or witness in any administrative, civil, or criminal matter. Nor does clear and unambiguous compliance with state law or the absence of one or all of the above factors create a legal defense to a violation of the Controlled Substances Act. Rather, this memorandum is intended solely as a guide to the exercise of investigative and prosecutorial discretion.



Memorandum for Selected United States Attorneys

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Subject: Investigations and Prosecutions in States Authorizing the Medical Use of Marijuana

Finally, nothing herein precludes investigation or prosecution where there is a reasonable basis to believe that compliance with state law is being invoked as a pretext for the production or distribution of marijuana for purposes not authorized by state law. Nor does this guidance preclude investigation or prosecution, even when there is clear and unambiguous compliance with existing state law, in particular circumstances where investigation or prosecution otherwise serves important federal interests.

Your offices should continue to review marijuana cases for prosecution on a case-by-case basis, consistent with the guidance on resource allocation and federal priorities set forth herein, the consideration of requests for federal assistance from state and local law enforcement authorities, and the Principles of Federal Prosecution.

cc: All United States Attorneys

Lanny A. Breuer
Assistant Attorney General
Criminal Division

B. Todd Jones
United States Attorney
District of Minnesota
Chair, Attorney General's Advisory Committee

Michele M. Leonhart
Acting Administrator
Drug Enforcement Administration

H. Marshall Jarrett
Director
Executive Office for United States Attorneys

Kevin L. Perkins
Assistant Director
Criminal Investigative Division
Federal Bureau of Investigation



**APPENDIX B:
COLE MEMORANDUM**

**U.S. Department of Justice**


Office of the Deputy Attorney General

The Deputy Attorney General

Washington, D.C. 20530

August 29, 2013

MEMORANDUM FOR ALL UNITED STATES ATTORNEYS

FROM: James M. Cole 
Deputy Attorney General

SUBJECT: Guidance Regarding Marijuana Enforcement

In October 2009 and June 2011, the Department issued guidance to federal prosecutors concerning marijuana enforcement under the Controlled Substances Act (CSA). This memorandum updates that guidance in light of state ballot initiatives that legalize under state law the possession of small amounts of marijuana and provide for the regulation of marijuana production, processing, and sale. The guidance set forth herein applies to all federal enforcement activity, including civil enforcement and criminal investigations and prosecutions, concerning marijuana in all states.

As the Department noted in its previous guidance, Congress has determined that marijuana is a dangerous drug and that the illegal distribution and sale of marijuana is a serious crime that provides a significant source of revenue to large-scale criminal enterprises, gangs, and cartels. The Department of Justice is committed to enforcement of the CSA consistent with those determinations. The Department is also committed to using its limited investigative and prosecutorial resources to address the most significant threats in the most effective, consistent, and rational way. In furtherance of those objectives, as several states enacted laws relating to the use of marijuana for medical purposes, the Department in recent years has focused its efforts on certain enforcement priorities that are particularly important to the federal government:

- Preventing the distribution of marijuana to minors;
- Preventing revenue from the sale of marijuana from going to criminal enterprises, gangs, and cartels;
- Preventing the diversion of marijuana from states where it is legal under state law in some form to other states;
- Preventing state-authorized marijuana activity from being used as a cover or pretext for the trafficking of other illegal drugs or other illegal activity;



Memorandum for All United States Attorneys
Subject: Guidance Regarding Marijuana Enforcement

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- Preventing violence and the use of firearms in the cultivation and distribution of marijuana;
- Preventing drugged driving and the exacerbation of other adverse public health consequences associated with marijuana use;
- Preventing the growing of marijuana on public lands and the attendant public safety and environmental dangers posed by marijuana production on public lands; and
- Preventing marijuana possession or use on federal property.

These priorities will continue to guide the Department's enforcement of the CSA against marijuana-related conduct. Thus, this memorandum serves as guidance to Department attorneys and law enforcement to focus their enforcement resources and efforts, including prosecution, on persons or organizations whose conduct interferes with any one or more of these priorities, regardless of state law.¹

Outside of these enforcement priorities, the federal government has traditionally relied on states and local law enforcement agencies to address marijuana activity through enforcement of their own narcotics laws. For example, the Department of Justice has not historically devoted resources to prosecuting individuals whose conduct is limited to possession of small amounts of marijuana for personal use on private property. Instead, the Department has left such lower-level or localized activity to state and local authorities and has stepped in to enforce the CSA only when the use, possession, cultivation, or distribution of marijuana has threatened to cause one of the harms identified above.

The enactment of state laws that endeavor to authorize marijuana production, distribution, and possession by establishing a regulatory scheme for these purposes affects this traditional joint federal-state approach to narcotics enforcement. The Department's guidance in this memorandum rests on its expectation that states and local governments that have enacted laws authorizing marijuana-related conduct will implement strong and effective regulatory and enforcement systems that will address the threat those state laws could pose to public safety, public health, and other law enforcement interests. A system adequate to that task must not only contain robust controls and procedures on paper; it must also be effective in practice. Jurisdictions that have implemented systems that provide for regulation of marijuana activity

¹ These enforcement priorities are listed in general terms; each encompasses a variety of conduct that may merit civil or criminal enforcement of the CSA. By way of example only, the Department's interest in preventing the distribution of marijuana to minors would call for enforcement not just when an individual or entity sells or transfers marijuana to a minor, but also when marijuana trafficking takes place near an area associated with minors; when marijuana or marijuana-infused products are marketed in a manner to appeal to minors; or when marijuana is being diverted, directly or indirectly, and purposefully or otherwise, to minors.

Memorandum for All United States Attorneys
Subject: Guidance Regarding Marijuana Enforcement

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must provide the necessary resources and demonstrate the willingness to enforce their laws and regulations in a manner that ensures they do not undermine federal enforcement priorities.

In jurisdictions that have enacted laws legalizing marijuana in some form and that have also implemented strong and effective regulatory and enforcement systems to control the cultivation, distribution, sale, and possession of marijuana, conduct in compliance with those laws and regulations is less likely to threaten the federal priorities set forth above. Indeed, a robust system may affirmatively address those priorities by, for example, implementing effective measures to prevent diversion of marijuana outside of the regulated system and to other states, prohibiting access to marijuana by minors, and replacing an illicit marijuana trade that funds criminal enterprises with a tightly regulated market in which revenues are tracked and accounted for. In those circumstances, consistent with the traditional allocation of federal-state efforts in this area, enforcement of state law by state and local law enforcement and regulatory bodies should remain the primary means of addressing marijuana-related activity. If state enforcement efforts are not sufficiently robust to protect against the harms set forth above, the federal government may seek to challenge the regulatory structure itself in addition to continuing to bring individual enforcement actions, including criminal prosecutions, focused on those harms.

The Department's previous memoranda specifically addressed the exercise of prosecutorial discretion in states with laws authorizing marijuana cultivation and distribution for medical use. In those contexts, the Department advised that it likely was not an efficient use of federal resources to focus enforcement efforts on seriously ill individuals, or on their individual caregivers. In doing so, the previous guidance drew a distinction between the seriously ill and their caregivers, on the one hand, and large-scale, for-profit commercial enterprises, on the other, and advised that the latter continued to be appropriate targets for federal enforcement and prosecution. In drawing this distinction, the Department relied on the common-sense judgment that the size of a marijuana operation was a reasonable proxy for assessing whether marijuana trafficking implicates the federal enforcement priorities set forth above.

As explained above, however, both the existence of a strong and effective state regulatory system, and an operation's compliance with such a system, may allay the threat that an operation's size poses to federal enforcement interests. Accordingly, in exercising prosecutorial discretion, prosecutors should not consider the size or commercial nature of a marijuana operation alone as a proxy for assessing whether marijuana trafficking implicates the Department's enforcement priorities listed above. Rather, prosecutors should continue to review marijuana cases on a case-by-case basis and weigh all available information and evidence, including, but not limited to, whether the operation is demonstrably in compliance with a strong and effective state regulatory system. A marijuana operation's large scale or for-profit nature may be a relevant consideration for assessing the extent to which it undermines a particular federal enforcement priority. The primary question in all cases – and in all jurisdictions – should be whether the conduct at issue implicates one or more of the enforcement priorities listed above.

Memorandum for All United States Attorneys
Subject: Guidance Regarding Marijuana Enforcement

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As with the Department's previous statements on this subject, this memorandum is intended solely as a guide to the exercise of investigative and prosecutorial discretion. This memorandum does not alter in any way the Department's authority to enforce federal law, including federal laws relating to marijuana, regardless of state law. Neither the guidance herein nor any state or local law provides a legal defense to a violation of federal law, including any civil or criminal violation of the CSA. Even in jurisdictions with strong and effective regulatory systems, evidence that particular conduct threatens federal priorities will subject that person or entity to federal enforcement action, based on the circumstances. This memorandum is not intended to, does not, and may not be relied upon to create any rights, substantive or procedural, enforceable at law by any party in any matter civil or criminal. It applies prospectively to the exercise of prosecutorial discretion in future cases and does not provide defendants or subjects of enforcement action with a basis for reconsideration of any pending civil action or criminal prosecution. Finally, nothing herein precludes investigation or prosecution, even in the absence of any one of the factors listed above, in particular circumstances where investigation and prosecution otherwise serves an important federal interest.

cc: Mythili Raman
Acting Assistant Attorney General, Criminal Division

Loretta E. Lynch
United States Attorney
Eastern District of New York
Chair, Attorney General's Advisory Committee

Michele M. Leonhart
Administrator
Drug Enforcement Administration

H. Marshall Jarrett
Director
Executive Office for United States Attorneys

Ronald T. Hosko
Assistant Director
Criminal Investigative Division
Federal Bureau of Investigation



APPENDIX C: MARIJUANA ARRESTS

Appendix C, Table 1. Marijuana arrests, by county, 2012-2017

County	Number of marijuana arrests					
	2012	2013	2014	2015	2016	2017
Unknown	1265	275	333	337	273	278
Adams	2222	938	813	729	683	736
Alamosa	2	6	12	21	15	23
Arapahoe	1466	700	813	703	687	581
Archuleta	17	3	6	19	11	4
Baca	17	7	1	1	2	0
Bent	0	1	0	1	0	0
Boulder	712	433	352	391	445	656
Broomfield	294	127	132	76	113	108
Chaffee	47	14	17	13	19	10
Cheyenne	2	1	0	0	0	0
Clear Creek	44	7	6	9	2	1
Conejos	2	0	0	0	0	0
Costilla	0	0	1	0	0	0
Crowley	0	0	0	1	0	3
Custer	1	1	3	4	2	2
Delta	15	15	8	2	24	21
Denver	168	451	836	1127	613	267
Dolores	0	1	1	0	0	4
Douglas	533	331	213	258	265	388
Eagle	259	124	93	114	90	89
El Paso	848	517	592	479	538	447
Elbert	17	19	17	7	4	12
Fremont	38	11	5	12	6	24
Garfield	164	50	44	87	84	123
Gilpin	96	7	4	6	3	6
Grand	14	2	4	0	2	0
Gunnison	37	29	31	49	33	44
Hinsdale	0	0	0	0	2	0
Huerfano	13	0	4	6	9	1
Jackson	0	0	0	0	0	0
Jefferson	1443	746	920	840	841	849
Kiowa	1	3	0	0	0	0
Kit Carson	18	11	4	17	10	15
La Plata	54	53	81	65	69	80
Lake	24	3	3	0	2	1
Larimer	896	464	459	419	514	470
Las Animas	7	5	1	1	0	4
Lincoln	1	0	0	1	1	7
Logan	41	3	28	34	17	11

Appendix C, Table 1. Marijuana arrests, by county, 2012-2017

County	Number of marijuana arrests					
	2012	2013	2014	2015	2016	2017
Mesa	622	408	419	380	326	424
Mineral	0	0	0	0	0	0
Moffat	99	22	20	29	47	30
Montezuma	74	6	14	6	10	8
Montrose	133	50	46	39	33	28
Morgan	51	19	34	10	18	23
Otero	22	3	6	14	5	8
Ouray	0	0	4	0	0	0
Park	10	1	4	2	3	0
Phillips	2	1	0	1	2	1
Pitkin	7	0	10	7	4	3
Prowers	90	32	38	3	7	2
Pueblo	23	20	23	21	43	37
Rio Blanco	26	4	18	11	3	2
Rio Grande	28	4	2	11	6	8
Routt	90	36	60	45	47	45
Saguache	11	0	2	2	0	10
San Juan	0	1	0	0	0	0
San Miguel	0	0	0	0	0	0
Sedgwick	1	3	1	0	0	0
Summit	63	5	5	22	19	6
Teller	55	45	29	25	27	25
Washington	20	2	1	1	2	0
Weld	502	336	329	270	269	228
Yuma	2	3	0	0	0	0

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System, analyzed by the Division of Criminal Justice.

Note: Since county is determined based on the law enforcement agency's location there are some statewide agencies, such as the Colorado State Patrol, that cannot be assigned to a specific county.

Appendix C, Table 2. Marijuana arrest rate (per 100,000 county population), by county, 2012-2017

County	Arrest rate (per 100,000 population)					
	2012	2013	2014	2015	2016	2017
Adams	576	237	200	175	161	169
Alamosa	15	45	89	154	109	165
Arapahoe	286	134	152	129	124	103
Archuleta	156	27	54	170	95	34
Baca	512	216	31	32	64	0
Bent	0	19	0	19	0	0
Boulder	263	157	126	137	154	223
Broomfield	581	244	246	134	194	179
Chaffee	284	84	101	77	109	57
Cheyenne	124	62	0	0	0	0
Clear Creek	533	85	72	106	23	12
Conejos	29	0	0	0	0	0
Costilla	0	0	31	0	0	0
Crowley	0	0	0	19	0	62
Custer	25	25	74	96	46	46
Delta	56	56	30	7	88	76
Denver	30	80	144	189	101	43
Dolores	0	56	58	0	0	219
Douglas	210	126	78	92	92	131
Eagle	580	273	202	244	190	184
El Paso	153	92	103	82	90	73
Elbert	81	89	78	31	18	50
Fremont	89	26	12	28	14	55
Garfield	340	103	90	175	165	236
Gilpin	1,956	140	77	114	56	111
Grand	111	16	31	0	15	0
Gunnison	269	208	219	339	224	295
Hinsdale	0	0	0	0	288	0
Huerfano	217	0	68	102	148	16
Jackson	0	0	0	0	0	0
Jefferson	298	152	185	167	165	164
Kiowa	78	238	0	0	0	0
Kit Carson	253	152	57	237	150	224
La Plata	116	112	168	133	139	156
Lake	383	48	47	0	30	15
Larimer	327	166	160	142	171	154
Las Animas	53	39	8	8	0	32
Lincoln	21	0	0	20	20	141

Appendix C, Table 2. Marijuana arrest rate (per 100,000 county population), by county, 2012-2017

County	Arrest rate (per 100,000 population)					
	2012	2013	2014	2015	2016	2017
Logan	208	15	141	171	86	55
Mesa	483	317	324	292	247	318
Mineral	0	0	0	0	0	0
Moffat	885	197	182	263	419	267
Montezuma	333	27	62	26	43	33
Montrose	374	140	128	109	90	75
Morgan	213	79	142	42	75	95
Otero	137	19	38	88	31	50
Ouray	0	0	95	0	0	0
Park	69	7	27	13	19	0
Phillips	53	26	0	27	54	27
Pitkin	45	0	62	43	24	18
Prowers	858	307	371	29	69	20
Pueblo	16	14	16	15	30	25
Rio Blanco	446	69	315	195	53	35
Rio Grande	273	39	20	111	60	80
Routt	435	172	280	207	213	201
Saguache	201	0	37	37	0	177
San Juan	0	158	0	0	0	0
San Miguel	0	0	0	0	0	0
Sedgwick	47	144	48	0	0	0
Summit	247	19	19	80	68	21
Teller	261	214	137	118	123	112
Washington	477	47	23	23	46	0
Weld	225	147	140	111	107	87
Yuma	23	35	0	0	0	0

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System; Colorado State Demography Office. Analyzed by the Division of Criminal Justice.

Note: There is no rate for 'unknown county' because it is not possible to assign a population value.

Appendix C, Table 3. Marijuana arrests, by county and race/ethnicity, 2012-2017

County	Race/ethnicity	2012	2013	2014	2015	2016	2017
Unknown	White	1,072	209	266	248	199	178
	Hispanic	124	51	46	70	58	66
	African-American	54	12	16	14	12	30
	Asian	12	2	5	4	2	3
	Native American	3	1	0	1	2	1
	Total	1,265	275	333	337	273	278
Adams	White	1,259	486	439	362	327	328
	Hispanic	835	395	339	319	308	356
	African-American	94	39	29	33	33	35
	Asian	17	8	2	11	7	9
	Native American	6	3	0	1	4	1
	Unknown	11	7	4	3	4	7
	Total	2,222	938	813	729	683	736
Alamosa	White	1	2	8	17	6	11
	Hispanic	1	2	4	2	4	8
	African-American	0	2	0	2	4	2
	Asian	0	0	0	0	1	0
	Native Hawaiian/Pacific Islander	0	0	0	0	0	2
	Total	2	6	12	21	15	23
Arapahoe	White	779	345	386	370	314	276
	Hispanic	253	153	179	157	186	138
	African-American	405	180	225	151	143	123
	Asian	15	17	14	23	38	41
	Native American	5	2	5	0	5	0
	Native Hawaiian/Pacific Islander	0	0	0	0	1	0
	Unknown	9	3	4	2	0	3
	Total	1,466	700	813	703	687	581
Archuleta	White	14	2	4	14	7	4
	Hispanic	3	1	2	5	2	0
	Native American	0	0	0	0	2	0
	Total	17	3	6	19	11	4
Baca	White	13	6	1	1	2	0
	Hispanic	3	1	0	0	0	0
	African-American	1	0	0	0	0	0
	Total	17	7	1	1	2	0



Appendix C, Table 3. Marijuana arrests, by county and race/ethnicity, 2012-2017

County	Race/ethnicity	2012	2013	2014	2015	2016	2017
Bent	White	0	0	0	1	0	0
	Unknown	0	1	0	0	0	0
	Total	0	1	0	1	0	0
Boulder	White	591	373	284	291	332	508
	Hispanic	83	39	47	82	79	104
	African-American	28	16	11	8	17	16
	Asian	8	5	7	10	10	24
	Native American	1	0	0	0	3	1
	Native Hawaiian/Pacific Islander	0	0	0	0	2	0
	Unknown	1	0	3	0	2	3
	Total	712	433	352	391	445	656
Broomfield	White	251	106	111	59	83	69
	Hispanic	34	16	9	13	23	37
	African-American	6	5	4	2	2	0
	Asian	2	0	2	1	2	0
	Native American	1	0	1	0	0	1
	Unknown	0	0	5	1	3	1
	Total	294	127	132	76	113	108
Chaffee	White	45	13	15	11	18	9
	Hispanic	1	1	0	0	1	0
	African-American	1	0	2	2	0	1
	Total	47	14	17	13	19	10
Cheyenne	White	2	0	0	0	0	0
	African-American	0	1	0	0	0	0
	Total	2	1	0	0	0	0
Clear Creek	White	37	7	5	9	1	1
	Hispanic	5	0	1	0	1	0
	Asian	2	0	0	0	0	0
	Total	44	7	6	9	2	1
Conejos	White	1	0	0	0	0	0
	Hispanic	1	0	0	0	0	0
	Total	2	0	0	0	0	0
Costilla	Hispanic	0	0	1	0	0	0
	Total	0	0	1	0	0	0

Appendix C, Table 3. Marijuana arrests, by county and race/ethnicity, 2012-2017

County	Race/ethnicity	2012	2013	2014	2015	2016	2017
Crowley	White	0	0	0	1	0	1
	Hispanic	0	0	0	0	0	2
	Total	0	0	0	1	0	3
Custer	White	1	1	3	4	1	2
	Hispanic	0	0	0	0	1	0
	Total	1	1	3	4	2	2
Delta	White	13	15	7	2	19	15
	Hispanic	2	0	1	0	4	6
	Native American	0	0	0	0	1	0
	Total	15	15	8	2	24	21
Denver	White	63	167	321	511	265	131
	Hispanic	49	165	280	312	192	65
	African-American	55	110	213	258	135	55
	Asian	0	5	7	16	8	14
	Native American	1	1	8	12	4	0
	Unknown	0	3	7	18	9	2
	Total	168	451	836	1,127	613	267
Dolores	White	0	1	1	0	0	4
	Total	0	1	1	0	0	4
Douglas	White	469	288	181	225	213	315
	Hispanic	31	24	20	24	27	40
	African-American	26	16	9	6	16	23
	Asian	6	3	2	1	7	5
	Native American	1	0	0	1	1	1
	Native Hawaiian/Pacific Islander	0	0	1	0	0	0
	Unknown	0	0	0	1	1	4
	Total	533	331	213	258	265	388
Eagle	White	205	94	54	81	62	60
	Hispanic	48	30	36	30	24	24
	African-American	3	0	3	2	1	1
	Asian	3	0	0	1	0	2
	Native American	0	0	0	0	1	0
	Unknown	0	0	0	0	2	2
	Total	259	124	93	114	90	89

Appendix C, Table 3. Marijuana arrests, by county and race/ethnicity, 2012-2017

County	Race/ethnicity	2012	2013	2014	2015	2016	2017
El Paso	White	617	369	404	339	375	260
	Hispanic	83	49	73	58	73	93
	African-American	134	91	109	75	84	80
	Asian	12	5	4	2	3	11
	Native American	2	3	1	3	0	2
	Unknown	0	0	1	2	3	1
	Total	848	517	592	479	538	447
Elbert	White	15	16	15	7	2	11
	Hispanic	2	3	1	0	2	1
	Native Hawaiian/Pacific Islander	0	0	1	0	0	0
	Total	17	19	17	7	4	12
Fremont	White	37	10	5	11	6	19
	Hispanic	1	1	0	0	0	0
	African-American	0	0	0	1	0	2
	Native American	0	0	0	0	0	1
	Unknown	0	0	0	0	0	2
	Total	38	11	5	12	6	24
Garfield	White	122	31	27	67	52	70
	Hispanic	38	18	15	19	28	49
	African-American	4	1	2	1	3	3
	Asian	0	0	0	0	0	1
	Native Hawaiian/Pacific Islander	0	0	0	0	1	0
	Total	164	50	44	87	84	123
Gilpin	White	83	7	2	5	3	5
	Hispanic	5	0	1	1	0	1
	African-American	6	0	1	0	0	0
	Asian	2	0	0	0	0	0
	Total	96	7	4	6	3	6
Grand	White	11	2	3	0	2	0
	Hispanic	3	0	1	0	0	0
	Total	14	2	4	0	2	0



Appendix C, Table 3. Marijuana arrests, by county and race/ethnicity, 2012-2017

County	Race/ethnicity	2012	2013	2014	2015	2016	2017
Gunnison	White	35	29	30	44	27	38
	Hispanic	0	0	1	2	5	3
	African-American	1	0	0	2	1	3
	Native American	1	0	0	0	0	0
	Native Hawaiian/Pacific Islander	0	0	0	1	0	0
	Total	37	29	31	49	33	44
Hinsdale	White	0	0	0	0	2	0
	Total	0	0	0	0	2	0
Huerfano	White	2	0	2	5	4	0
	Hispanic	11	0	2	1	5	1
	Total	13	0	4	6	9	1
Jefferson	White	1,152	589	688	628	649	641
	Hispanic	218	114	196	178	162	151
	African-American	49	31	28	27	22	43
	Asian	15	10	6	3	7	7
	Native American	8	2	1	4	0	4
	Native Hawaiian/Pacific Islander	0	0	0	0	0	1
	Unknown	1	0	1	0	1	2
	Total	1,443	746	920	840	841	849
Kiowa	White	1	3	0	0	0	0
	Total	1	3	0	0	0	0
Kit Carson	White	10	8	4	11	6	13
	Hispanic	7	2	0	4	3	1
	African-American	1	1	0	2	1	1
	Total	18	11	4	17	10	15
La Plata	White	45	42	42	38	43	59
	Hispanic	2	3	5	11	6	10
	African-American	1	1	0	1	3	1
	Asian	0	1	0	0	0	0
	Native American	5	6	34	15	17	10
	Unknown	1	0	0	0	0	0
	Total	54	53	81	65	69	80
Lake	White	17	3	1	0	1	1
	Hispanic	7	0	2	0	1	0
	Total	24	3	3	0	2	1



Appendix C, Table 3. Marijuana arrests, by county and race/ethnicity, 2012-2017

County	Race/ethnicity	2012	2013	2014	2015	2016	2017
Larimer	White	710	348	347	316	397	359
	Hispanic	138	88	84	77	88	84
	African-American	39	19	24	22	22	18
	Asian	4	3	1	3	4	1
	Native American	3	2	1	0	2	0
	Native Hawaiian/Pacific Islander	0	1	0	1	0	1
	Unknown	2	3	2	0	1	7
	Total	896	464	459	419	514	470
Las Animas	White	2	1	0	0	0	1
	Hispanic	5	4	0	1	0	3
	African-American	0	0	1	0	0	0
	Total	7	5	1	1	0	4
Lincoln	White	1	0	0	0	0	1
	Hispanic	0	0	0	0	0	6
	African-American	0	0	0	1	1	0
	Total	1	0	0	1	1	7
Logan	White	33	3	26	19	13	8
	Hispanic	6	0	2	6	4	1
	African-American	2	0	0	9	0	2
	Total	41	3	28	34	17	11
Mesa	White	525	329	324	280	252	321
	Hispanic	70	65	79	73	50	79
	African-American	22	12	16	19	23	16
	Asian	4	0	0	5	0	4
	Native American	1	0	0	2	0	0
	Native Hawaiian/Pacific Islander	0	2	0	1	1	4
	Unknown						
	Total	622	408	419	380	326	424
Moffat	White	85	16	16	22	39	27
	Hispanic	10	6	4	7	8	3
	Native American	4	0	0	0	0	0
	Total	99	22	20	29	47	30
Montezuma	White	43	3	12	5	7	5
	Hispanic	1	0	1	0	2	0
	Native American	30	3	1	1	1	3
	Total	74	6	14	6	10	8



Appendix C, Table 3. Marijuana arrests, by county and race/ethnicity, 2012-2017

County	Race/ethnicity	2012	2013	2014	2015	2016	2017
Montrose	White	93	30	24	35	28	20
	Hispanic	39	19	17	4	4	8
	African-American	1	0	1	0	0	0
	Unknown	0	1	4	0	1	0
	Total	133	50	46	39	33	28
Morgan	White	24	4	11	4	11	9
	Hispanic	24	15	23	5	7	13
	African-American	3	0	0	1	0	1
	Total	51	19	34	10	18	23
Otero	White	14	2	1	3	4	2
	Hispanic	8	1	1	9	1	3
	African-American	0	0	4	2	0	3
	Total	22	3	6	14	5	8
Ouray	White	0	0	3	0	0	0
	Hispanic	0	0	1	0	0	0
	Total	0	0	4	0	0	0
Park	White	9	1	4	2	3	0
	Hispanic	1	0	0	0	0	0
	Total	10	1	4	2	3	0
Phillips	White	2	1	0	0	1	0
	Hispanic	0	0	0	1	0	1
	African-American	0	0	0	0	1	0
	Total	2	1	0	1	2	1
Pitkin	White	7	0	10	7	3	3
	Hispanic	0	0	0	0	1	0
	Total	7	0	10	7	4	3
Prowers	White	51	28	26	1	5	0
	Hispanic	33	3	11	1	2	2
	African-American	4	0	1	1	0	0
	Asian	2	0	0	0	0	0
	Native Hawaiian/Pacific Islander	0	1	0	0	0	0
	Total	90	32	38	3	7	2



Appendix C, Table 3. Marijuana arrests, by county and race/ethnicity, 2012-2017

County	Race/ethnicity	2012	2013	2014	2015	2016	2017
Pueblo	White	7	14	10	11	25	20
	Hispanic	14	5	13	9	16	16
	African-American	2	1	0	0	1	1
	Asian	0	0	0	1	0	0
	Unknown	0	0	0	0	1	0
	Total	23	20	23	21	43	37
Rio Blanco	White	23	4	11	7	3	2
	Hispanic	2	0	5	2	0	0
	African-American	1	0	1	1	0	0
	Asian	0	0	0	1	0	0
	Native American	0	0	1	0	0	0
	Total	26	4	18	11	3	2
Rio Grande	White	26	2	2	9	6	3
	Hispanic	2	2	0	2	0	5
	Total	28	4	2	11	6	8
Routt	White	88	33	58	42	42	39
	Hispanic	2	1	2	3	4	5
	African-American	0	1	0	0	1	1
	Unknown	0	1	0	0	0	0
	Total	90	36	60	45	47	45
Saguache	White	10	0	1	0	0	1
	Hispanic	1	0	1	2	0	9
	Total	11	0	2	2	0	10
San Juan	White	0	1	0	0	0	0
	Total	0	1	0	0	0	0
Sedgwick	White	0	3	1	0	0	0
	Hispanic	1	0	0	0	0	0
	Total	1	3	1	0	0	0
Summit	White	50	5	5	18	12	3
	Hispanic	13	0	0	2	4	1
	African-American	0	0	0	0	2	1
	Asian	0	0	0	2	0	0
	Unknown	0	0	0	0	1	1
	Total	63	5	5	22	19	6

Appendix C, Table 3. Marijuana arrests, by county and race/ethnicity, 2012-2017

County	Race/ethnicity	2012	2013	2014	2015	2016	2017
Teller	White	51	45	27	21	23	20
	Hispanic	1	0	0	2	2	3
	African-American	3	0	2	2	2	1
	Asian	0	0	0	0	0	1
	Total	55	45	29	25	27	25
Washington	White	19	2	1	1	2	0
	African-American	1	0	0	0	0	0
	Total	20	2	1	1	2	0
Weld	White	369	278	270	210	232	196
	Hispanic	119	48	46	47	26	25
	African-American	10	8	10	10	9	4
	Asian	1	0	2	1	2	1
	Native American	1	0	0	0	0	0
	Unknown	2	2	1	2	0	2
	Total	502	336	329	270	269	228
Yuma	White	2	0	0	0	0	0
	Hispanic	0	3	0	0	0	0
	Total	2	3	0	0	0	0
Total	White	9,207	4,377	4,499	4,375	4,129	4,069
	Hispanic	2,340	1,328	1,552	1,541	1,414	1,423
	African-American	957	547	712	655	539	467
	Asian	105	59	52	85	91	124
	Native American	73	23	53	40	43	25
	Native Hawaiian/Pacific Islander	0	4	2	3	5	8
	Unknown	27	21	32	29	29	37
	Total	12,709	6,359	6,902	6,728	6,250	6,153

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System, analyzed by the Division of Criminal Justice.

Note: Since county is determined based on the law enforcement agency's location there are some statewide agencies, such as the Colorado State Patrol, that cannot be assigned to a specific county.

Appendix C, Table 4. Marijuana arrests, by county and age group, 2012-2017

County	Age group	2012	2013	2014	2015	2016	2017
Unknown	Under 18	55	28	45	54	51	40
	18 to 20	272	177	192	158	132	126
	21 or older	938	70	96	125	90	112
	Total	1,265	275	333	337	273	278
Adams	Under 18	586	489	492	475	420	437
	18 to 20	517	270	249	198	188	201
	21 or older	1,119	179	72	56	75	98
	Total	2,222	938	813	729	683	736
Alamosa	Under 18	0	0	0	2	1	4
	18 to 20	0	5	10	17	13	17
	21 or older	2	1	2	2	1	2
	Total	2	6	12	21	15	23
Arapahoe	Under 18	393	335	390	291	299	238
	18 to 20	325	222	195	177	134	110
	21 or older	748	143	228	235	254	233
	Total	1,466	700	813	703	687	581
Archuleta	Under 18	7	3	3	11	7	2
	18 to 20	7	0	3	7	1	0
	21 or older	3	0	0	1	3	2
	Total	17	3	6	19	11	4
Baca	Under 18	0	0	0	0	0	0
	18 to 20	1	2	0	1	0	0
	21 or older	16	5	1	0	2	0
	Total	17	7	1	1	2	0
Bent	Under 18	0	0	0	1	0	0
	18 to 20	0	1	0	0	0	0
	21 or older	0	0	0	0	0	0
	Total	0	1	0	1	0	0
Boulder	Under 18	121	87	116	120	119	106
	18 to 20	365	281	191	240	282	517
	21 or older	226	65	45	31	44	33
	Total	712	433	352	391	445	656

Appendix C, Table 4. Marijuana arrests, by county and age group, 2012-2017

County	Age group	2012	2013	2014	2015	2016	2017
Broomfield	Under 18	112	70	81	46	72	89
	18 to 20	77	49	47	26	32	18
	21 or older	105	8	4	4	9	1
	Total	294	127	132	76	113	108
Chaffee	Under 18	20	7	9	8	10	4
	18 to 20	7	7	7	4	8	4
	21 or older	20	0	1	1	1	2
	Total	47	14	17	13	19	10
Cheyenne	Under 18	0	0	0	0	0	0
	18 to 20	0	0	0	0	0	0
	21 or older	2	1	0	0	0	0
	Total	2	1	0	0	0	0
Clear Creek	Under 18	9	3	1	4	2	1
	18 to 20	1	2	5	3	0	0
	21 or older	34	2	0	2	0	0
	Total	44	7	6	9	2	1
Conejos	Under 18	1	0	0	0	0	0
	18 to 20	1	0	0	0	0	0
	21 or older	0	0	0	0	0	0
	Total	2	0	0	0	0	0
Costilla	Under 18	0	0	0	0	0	0
	18 to 20	0	0	0	0	0	0
	21 or older	0	0	1	0	0	0
	Total	0	0	1	0	0	0
Crowley	Under 18	0	0	0	0	0	0
	18 to 20	0	0	0	1	0	1
	21 or older	0	0	0	0	0	2
	Total	0	0	0	1	0	3
Custer	Under 18	0	0	0	2	0	1
	18 to 20	0	1	1	0	0	0
	21 or older	1	0	2	2	2	1
	Total	1	1	3	4	2	2

Appendix C, Table 4. Marijuana arrests, by county and age group, 2012-2017

County	Age group	2012	2013	2014	2015	2016	2017
Delta	Under 18	4	7	6	1	19	15
	18 to 20	3	7	2	1	3	3
	21 or older	8	1	0	0	2	3
	Total	15	15	8	2	24	21
Denver	Under 18	30	198	363	316	182	61
	18 to 20	27	51	94	140	70	27
	21 or older	111	202	379	671	361	179
	Total	168	451	836	1,127	613	267
Dolores	Under 18	0	1	0	0	0	0
	18 to 20	0	0	1	0	0	0
	21 or older	0	0	0	0	0	4
	Total	0	1	1	0	0	4
Douglas	Under 18	200	181	114	141	110	193
	18 to 20	153	130	89	109	139	165
	21 or older	180	20	10	8	16	30
	Total	533	331	213	258	265	388
Eagle	Under 18	38	32	22	24	11	30
	18 to 20	48	36	33	35	27	22
	21 or older	173	56	38	55	52	37
	Total	259	124	93	114	90	89
El Paso	Under 18	267	286	263	214	201	204
	18 to 20	252	149	172	115	119	110
	21 or older	329	82	157	150	218	133
	Total	848	517	592	479	538	447
Elbert	Under 18	7	16	15	1	0	0
	18 to 20	3	2	2	2	0	2
	21 or older	7	1	0	4	4	10
	Total	17	19	17	7	4	12
Fremont	Under 18	6	6	1	0	0	14
	18 to 20	12	4	3	4	1	8
	21 or older	20	1	1	8	5	2
	Total	38	11	5	12	6	24

Appendix C, Table 4. Marijuana arrests, by county and age group, 2012-2017

County	Age group	2012	2013	2014	2015	2016	2017
Garfield	Under 18	42	26	13	29	35	48
	18 to 20	32	20	27	35	28	44
	21 or older	90	4	4	23	21	31
	Total	164	50	44	87	84	123
Gilpin	Under 18	5	0	0	0	1	0
	18 to 20	4	2	3	4	0	3
	21 or older	87	5	1	2	2	3
	Total	96	7	4	6	3	6
Grand	Under 18	3	2	4	0	1	0
	18 to 20	5	0	0	0	1	0
	21 or older	6	0	0	0	0	0
	Total	14	2	4	0	2	0
Gunnison	Under 18	0	3	5	9	8	8
	18 to 20	24	17	12	32	19	26
	21 or older	13	9	14	8	6	10
	Total	37	29	31	49	33	44
Hinsdale	Under 18	0	0	0	0	0	0
	18 to 20	0	0	0	0	1	0
	21 or older	0	0	0	0	1	0
	Total	0	0	0	0	2	0
Huerfano	Under 18	0	0	0	2	3	0
	18 to 20	1	0	2	0	0	0
	21 or older	12	0	2	4	6	1
	Total	13	0	4	6	9	1
Jefferson	Under 18	570	518	596	533	498	575
	18 to 20	335	160	225	212	238	197
	21 or older	538	68	99	95	105	77
	Total	1,443	746	920	840	841	849
Kiowa	Under 18	0	0	0	0	0	0
	18 to 20	1	2	0	0	0	0
	21 or older	0	1	0	0	0	0
	Total	1	3	0	0	0	0

Appendix C, Table 4. Marijuana arrests, by county and age group, 2012-2017

County	Age group	2012	2013	2014	2015	2016	2017
Kit Carson	Under 18	4	1	3	8	4	0
	18 to 20	7	7	0	5	3	7
	21 or older	7	3	1	4	3	8
	Total	18	11	4	17	10	15
La Plata	Under 18	12	4	8	9	12	20
	18 to 20	34	44	67	40	45	34
	21 or older	8	5	6	16	12	26
	Total	54	53	81	65	69	80
Lake	Under 18	2	0	1	0	1	0
	18 to 20	3	0	1	0	1	0
	21 or older	19	3	1	0	0	1
	Total	24	3	3	0	2	1
Larimer	Under 18	182	222	208	208	177	214
	18 to 20	281	190	169	141	201	143
	21 or older	433	52	82	70	136	113
	Total	896	464	459	419	514	470
Las Animas	Under 18	5	1	0	1	0	4
	18 to 20	2	0	1	0	0	0
	21 or older	0	4	0	0	0	0
	Total	7	5	1	1	0	4
Lincoln	Under 18	0	0	0	0	0	0
	18 to 20	0	0	0	0	0	1
	21 or older	1	0	0	1	1	6
	Total	1	0	0	1	1	7
Logan	Under 18	4	2	15	11	4	0
	18 to 20	13	0	12	20	12	4
	21 or older	24	1	1	3	1	7
	Total	41	3	28	34	17	11
Mesa	Under 18	152	204	206	162	108	136
	18 to 20	174	160	164	160	159	136
	21 or older	296	44	49	58	59	152
	Total	622	408	419	380	326	424



Appendix C, Table 4. Marijuana arrests, by county and age group, 2012-2017

County	Age group	2012	2013	2014	2015	2016	2017
Moffat	Under 18	21	13	4	20	16	15
	18 to 20	22	6	9	6	21	9
	21 or older	56	3	7	3	10	6
	Total	99	22	20	29	47	30
Montezuma	Under 18	18	1	8	2	1	3
	18 to 20	10	4	3	2	4	1
	21 or older	46	1	3	2	5	4
	Total	74	6	14	6	10	8
Montrose	Under 18	45	27	23	22	21	15
	18 to 20	26	23	21	12	6	9
	21 or older	62	0	2	5	6	4
	Total	133	50	46	39	33	28
Morgan	Under 18	23	13	27	7	14	16
	18 to 20	13	5	7	2	3	7
	21 or older	15	1	0	1	1	0
	Total	51	19	34	10	18	23
Otero	Under 18	3	1	0	7	0	0
	18 to 20	14	2	6	7	1	4
	21 or older	5	0	0	0	4	4
	Total	22	3	6	14	5	8
Ouray	Under 18	0	0	2	0	0	0
	18 to 20	0	0	1	0	0	0
	21 or older	0	0	1	0	0	0
	Total	0	0	4	0	0	0
Park	Under 18	0	0	2	0	1	0
	18 to 20	7	1	2	0	0	0
	21 or older	3	0	0	2	2	0
	Total	10	1	4	2	3	0
Phillips	Under 18	0	0	0	0	0	0
	18 to 20	1	1	0	1	2	1
	21 or older	1	0	0	0	0	0
	Total	2	1	0	1	2	1

Appendix C, Table 4. Marijuana arrests, by county and age group, 2012-2017

County	Age group	2012	2013	2014	2015	2016	2017
Pitkin	Under 18	2	0	4	6	3	3
	18 to 20	0	0	5	1	1	0
	21 or older	5	0	1	0	0	0
	Total	7	0	10	7	4	3
Prowers	Under 18	18	11	18	1	1	2
	18 to 20	20	12	16	2	1	0
	21 or older	52	9	4	0	5	0
	Total	90	32	38	3	7	2
Pueblo	Under 18	1	1	4	3	4	11
	18 to 20	2	17	14	10	4	18
	21 or older	20	2	5	8	35	8
	Total	23	20	23	21	43	37
Rio Blanco	Under 18	2	0	4	3	0	0
	18 to 20	7	4	13	7	3	2
	21 or older	17	0	1	1	0	0
	Total	26	4	18	11	3	2
Rio Grande	Under 18	11	0	1	9	4	7
	18 to 20	6	0	1	1	1	1
	21 or older	11	4	0	1	1	0
	Total	28	4	2	11	6	8
Routt	Under 18	18	9	19	11	27	9
	18 to 20	34	23	34	25	12	34
	21 or older	38	4	7	9	8	2
	Total	90	36	60	45	47	45
Saguache	Under 18	4	0	1	1	0	3
	18 to 20	6	0	1	1	0	0
	21 or older	1	0	0	0	0	7
	Total	11	0	2	2	0	10
San Juan	Under 18	0	0	0	0	0	0
	18 to 20	0	0	0	0	0	0
	21 or older	0	1	0	0	0	0
	Total	0	1	0	0	0	0

Appendix C, Table 4. Marijuana arrests, by county and age group, 2012-2017

County	Age group	2012	2013	2014	2015	2016	2017
Sedgwick	Under 18	0	3	0	0	0	0
	18 to 20	0	0	1	0	0	0
	21 or older	1	0	0	0	0	0
	Total	1	3	1	0	0	0
Summit	Under 18	9	2	1	5	2	1
	18 to 20	13	1	1	9	5	3
	21 or older	41	2	3	8	12	2
	Total	63	5	5	22	19	6
Teller	Under 18	12	27	12	11	9	11
	18 to 20	13	13	10	8	12	9
	21 or older	30	5	7	6	6	5
	Total	55	45	29	25	27	25
Washington	Under 18	0	1	1	0	2	0
	18 to 20	4	1	0	1	0	0
	21 or older	16	0	0	0	0	0
	Total	20	2	1	1	2	0
Weld	Under 18	144	186	214	165	154	115
	18 to 20	122	130	97	82	93	75
	21 or older	236	20	18	23	22	38
	Total	502	336	329	270	269	228
Yuma	Under 18	0	3	0	0	0	0
	18 to 20	0	0	0	0	0	0
	21 or older	2	0	0	0	0	0
	Total	2	3	0	0	0	0
Total	Under 18	3,168	3,030	3,325	2,956	2,615	2,655
	18 to 20	3,307	2,241	2,221	2,064	2,026	2,099
	21 or older	6,234	1,088	1,356	1,708	1,609	1,399
	Total	12,709	6,359	6,902	6,728	6,250	6,153

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System, analyzed by the Division of Criminal Justice.

Note: Since county is determined based on the law enforcement agency's location there are some statewide agencies, such as the Colorado State Patrol, that cannot be assigned to a specific county.

Appendix C, Table 5. Marijuana arrests, by county and gender, 2012-2017

County	Gender	2012	2013	2014	2015	2016	2017
Unknown	Male	1,065	233	284	273	230	235
	Female	200	42	49	64	43	43
	Total	1,265	275	333	337	273	278
Adams	Male	1,810	743	627	572	508	545
	Female	412	195	186	157	175	191
	Total	2,222	938	813	729	683	736
Alamosa	Male	0	4	10	20	12	17
	Female	2	2	2	1	3	6
	Total	2	6	12	21	15	23
Arapahoe	Male	1,201	576	667	557	549	451
	Female	265	124	146	146	138	130
	Total	1,466	700	813	703	687	581
Archuleta	Male	13	2	4	16	7	3
	Female	4	1	2	3	4	1
	Total	17	3	6	19	11	4
Baca	Male	11	7	1	1	1	0
	Female	6	0	0	0	1	0
	Total	17	7	1	1	2	0
Bent	Male	0	1	0	1	0	0
	Female	0	0	0	0	0	0
	Total	0	1	0	1	0	0
Boulder	Male	606	375	273	300	353	529
	Female	106	58	79	91	92	127
	Total	712	433	352	391	445	656
Broomfield	Male	240	109	89	64	90	68
	Female	54	18	43	12	23	40
	Total	294	127	132	76	113	108
Chaffee	Male	39	10	15	10	15	9
	Female	8	4	2	3	4	1
	Total	47	14	17	13	19	10
Cheyenne	Male	2	1	0	0	0	0
	Female	0	0	0	0	0	0
	Total	2	1	0	0	0	0
Clear Creek	Male	39	4	5	8	2	1
	Female	5	3	1	1	0	0
	Total	44	7	6	9	2	1
Conejos	Male	1	0	0	0	0	0
	Female	1	0	0	0	0	0
	Total	2	0	0	0	0	0



Appendix C, Table 5. Marijuana arrests, by county and gender, 2012-2017

County	Gender	2012	2013	2014	2015	2016	2017
Costilla	Male	0	0	1	0	0	0
	Female	0	0	0	0	0	0
	Total	0	0	1	0	0	0
Crowley	Male	0	0	0	1	0	3
	Female	0	0	0	0	0	0
	Total	0	0	0	1	0	3
Custer	Male	1	1	3	3	2	2
	Female	0	0	0	1	0	0
	Total	1	1	3	4	2	2
Delta	Male	13	12	6	1	18	16
	Female	2	3	2	1	6	5
	Total	15	15	8	2	24	21
Denver	Male	145	373	704	945	510	215
	Female	23	78	132	182	103	52
	Total	168	451	836	1,127	613	267
Dolores	Male	0	1	1	0	0	3
	Female	0	0	0	0	0	1
	Total	0	1	1	0	0	4
Douglas	Male	431	270	177	208	208	292
	Female	102	61	36	50	57	96
	Total	533	331	213	258	265	388
Eagle	Male	231	104	72	102	66	70
	Female	28	20	21	12	24	19
	Total	259	124	93	114	90	89
El Paso	Male	684	412	482	375	414	357
	Female	164	105	110	104	124	90
	Total	848	517	592	479	538	447
Elbert	Male	17	13	12	7	4	8
	Female	0	6	5	0	0	4
	Total	17	19	17	7	4	12
Fremont	Male	31	10	4	8	5	16
	Female	7	1	1	4	1	8
	Total	38	11	5	12	6	24
Garfield	Male	133	36	36	75	61	102
	Female	31	14	8	12	23	21
	Total	164	50	44	87	84	123
Gilpin	Male	75	5	2	6	3	5
	Female	21	2	2	0	0	1
	Total	96	7	4	6	3	6

Appendix C, Table 5. Marijuana arrests, by county and gender, 2012-2017

County	Gender	2012	2013	2014	2015	2016	2017
Grand	Male	12	2	4	0	1	0
	Female	2	0	0	0	1	0
	Total	14	2	4	0	2	0
Gunnison	Male	32	22	23	41	24	35
	Female	5	7	8	8	9	9
	Total	37	29	31	49	33	44
Hinsdale	Male	0	0	0	0	1	0
	Female	0	0	0	0	1	0
	Total	0	0	0	0	2	0
Huerfano	Male	11	0	4	6	8	1
	Female	2	0	0	0	1	0
	Total	13	0	4	6	9	1
Jefferson	Male	1,106	590	678	657	624	611
	Female	337	156	242	183	217	238
	Total	1,443	746	920	840	841	849
Kiowa	Male	1	2	0	0	0	0
	Female	0	1	0	0	0	0
	Total	1	3	0	0	0	0
Kit Carson	Male	17	9	4	13	8	13
	Female	1	2	0	4	2	2
	Total	18	11	4	17	10	15
La Plata	Male	48	50	64	53	48	61
	Female	6	3	17	12	21	19
	Total	54	53	81	65	69	80
Lake	Male	23	2	2	0	2	1
	Female	1	1	1	0	0	0
	Total	24	3	3	0	2	1
Larimer	Male	719	385	347	312	409	334
	Female	177	79	112	107	105	136
	Total	896	464	459	419	514	470
Las Animas	Male	7	5	1	1	0	1
	Female	0	0	0	0	0	3
	Total	7	5	1	1	0	4
Lincoln	Male	1	0	0	1	1	5
	Female	0	0	0	0	0	2
	Total	1	0	0	1	1	7
Logan	Male	34	1	26	26	11	7
	Female	7	2	2	8	6	4
	Total	41	3	28	34	17	11



Appendix C, Table 5. Marijuana arrests, by county and gender, 2012-2017

County	Gender	2012	2013	2014	2015	2016	2017
Mesa	Male	469	309	318	288	245	312
	Female	153	99	101	92	81	112
	Total	622	408	419	380	326	424
Moffat	Male	64	18	16	23	33	25
	Female	35	4	4	6	14	5
	Total	99	22	20	29	47	30
Montezuma	Male	54	6	11	5	7	8
	Female	20	0	3	1	3	0
	Total	74	6	14	6	10	8
Montrose	Male	109	38	40	29	26	21
	Female	24	12	6	10	7	7
	Total	133	50	46	39	33	28
Morgan	Male	39	11	25	7	14	15
	Female	12	8	9	3	4	8
	Total	51	19	34	10	18	23
Otero	Male	18	3	4	11	5	7
	Female	4	0	2	3	0	1
	Total	22	3	6	14	5	8
Ouray	Male	0	0	2	0	0	0
	Female	0	0	2	0	0	0
	Total	0	0	4	0	0	0
Park	Male	9	1	4	2	2	0
	Female	1	0	0	0	1	0
	Total	10	1	4	2	3	0
Phillips	Male	2	1	0	1	2	1
	Female	0	0	0	0	0	0
	Total	2	1	0	1	2	1
Pitkin	Male	7	0	7	5	2	2
	Female	0	0	3	2	2	1
	Total	7	0	10	7	4	3
Prowers	Male	76	29	29	2	5	2
	Female	14	3	9	1	2	0
	Total	90	32	38	3	7	2
Pueblo	Male	21	17	19	15	38	30
	Female	2	3	4	6	5	7
	Total	23	20	23	21	43	37
Rio Blanco	Male	23	3	15	10	3	1
	Female	3	1	3	1	0	1
	Total	26	4	18	11	3	2

Appendix C, Table 5. Marijuana arrests, by county and gender, 2012-2017

County	Gender	2012	2013	2014	2015	2016	2017
Rio Grande	Male	20	4	2	6	3	6
	Female	8	0	0	5	3	2
	Total	28	4	2	11	6	8
Routt	Male	76	30	51	39	42	40
	Female	14	6	9	6	5	5
	Total	90	36	60	45	47	45
Saguache	Male	9	0	2	2	0	9
	Female	2	0	0	0	0	1
	Total	11	0	2	2	0	10
San Juan	Male	0	0	0	0	0	0
	Female	0	1	0	0	0	0
	Total	0	1	0	0	0	0
Sedgwick	Male	1	2	1	0	0	0
	Female	0	1	0	0	0	0
	Total	1	3	1	0	0	0
Summit	Male	56	4	4	19	15	6
	Female	7	1	1	3	4	0
	Total	63	5	5	22	19	6
Teller	Male	45	38	25	21	20	19
	Female	10	7	4	4	7	6
	Total	55	45	29	25	27	25
Washington	Male	16	2	1	0	2	0
	Female	4	0	0	1	0	0
	Total	20	2	1	1	2	0
Weld	Male	416	266	241	176	200	161
	Female	86	70	88	94	69	67
	Total	502	336	329	270	269	228
Yuma	Male	2	3	0	0	0	0
	Female	0	0	0	0	0	0
	Total	2	3	0	0	0	0
Total	Male	10,331	5,155	5,445	5,324	4,859	4,681
	Female	2,378	1,204	1,457	1,404	1,391	1,472
	Total	12,709	6,359	6,902	6,728	6,250	6,153

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System, analyzed by the Division of Criminal Justice.

Note: Since county is determined based on the law enforcement agency's location there are some statewide agencies, such as the Colorado State Patrol, that cannot be assigned to a specific county.

Appendix C, Table 6. Marijuana arrests, by county and arrest type, 2012-2017

County	Arrest type	2012	2013	2014	2015	2016	2017
Unknown	On-View Arrest	724	194	165	197	129	181
	Taken Into Custody	31	14	27	21	36	20
	Summoned/Cited	510	67	141	119	108	77
	Total	1,265	275	333	337	273	278
Adams	On-View Arrest	688	202	152	155	135	117
	Taken Into Custody	146	60	70	52	59	82
	Summoned/Cited	1,388	676	591	522	489	537
	Total	2,222	938	813	729	683	736
Alamosa	On-View Arrest	0	0	0	0	0	4
	Taken Into Custody	0	0	0	0	1	0
	Summoned/Cited	2	6	12	21	14	19
	Total	2	6	12	21	15	23
Arapahoe	On-View Arrest	321	128	114	116	403	366
	Taken Into Custody	77	37	43	39	53	22
	Summoned/Cited	1,068	535	656	548	231	193
	Total	1,466	700	813	703	687	581
Archuleta	On-View Arrest	1	0	0	0	0	0
	Taken Into Custody	0	0	0	0	4	2
	Summoned/Cited	16	3	6	19	7	2
	Total	17	3	6	19	11	4
Baca	On-View Arrest	3	0	0	1	0	0
	Taken Into Custody	1	7	1	0	2	0
	Summoned/Cited	13	0	0	0	0	0
	Total	17	7	1	1	2	0
Bent	Summoned/Cited	0	1	0	1	0	0
	Total	0	1	0	1	0	0
Boulder	On-View Arrest	101	41	40	28	46	31
	Taken Into Custody	22	7	20	11	12	21
	Summoned/Cited	589	385	292	352	387	604
	Total	712	433	352	391	445	656
Broomfield	On-View Arrest	65	15	6	8	14	3
	Taken Into Custody	3	2	2	1	1	0
	Summoned/Cited	226	110	124	67	98	105
	Total	294	127	132	76	113	108
Chaffee	On-View Arrest	10	2	2	0	2	0
	Taken Into Custody	11	2	0	1	4	0
	Summoned/Cited	26	10	15	12	13	10
	Total	47	14	17	13	19	10



Appendix C, Table 6. Marijuana arrests, by county and arrest type, 2012-2017

County	Arrest type	2012	2013	2014	2015	2016	2017
Cheyenne	On-View Arrest	1	0	0	0	0	0
	Taken Into Custody	1	1	0	0	0	0
	Total	2	1	0	0	0	0
Clear Creek	On-View Arrest	8	2	3	0	0	0
	Taken Into Custody	4	0	0	0	0	0
	Summoned/Cited	32	5	3	9	2	1
	Total	44	7	6	9	2	1
Conejos	On-View Arrest	1	0	0	0	0	0
	Taken Into Custody	1	0	0	0	0	0
	Total	2	0	0	0	0	0
Costilla	Taken Into Custody	0	0	1	0	0	0
	Total	0	0	1	0	0	0
Crowley	Taken Into Custody	0	0	0	1	0	3
	Total	0	0	0	1	0	3
Custer	On-View Arrest	0	0	2	1	1	1
	Taken Into Custody	1	0	0	1	0	0
	Summoned/Cited	0	1	1	2	1	1
	Total	1	1	3	4	2	2
Delta	On-View Arrest	2	2	0	0	1	0
	Taken Into Custody	1	1	0	0	2	0
	Summoned/Cited	12	12	8	2	21	21
	Total	15	15	8	2	24	21
Denver	On-View Arrest	145	121	153	116	154	146
	Taken Into Custody	6	9	14	7	10	12
	Summoned/Cited	17	321	669	1,004	449	109
	Total	168	451	836	1,127	613	267
Dolores	Taken Into Custody	0	0	0	0	0	1
	Summoned/Cited	0	1	1	0	0	3
	Total	0	1	1	0	0	4
Douglas	On-View Arrest	59	73	81	78	60	107
	Taken Into Custody	11	10	5	6	14	17
	Summoned/Cited	463	248	127	174	191	264
	Total	533	331	213	258	265	388
Eagle	On-View Arrest	72	31	13	13	10	6
	Taken Into Custody	25	2	5	2	1	0
	Summoned/Cited	162	91	75	99	79	83
	Total	259	124	93	114	90	89

Appendix C, Table 6. Marijuana arrests, by county and arrest type, 2012-2017

County	Arrest type	2012	2013	2014	2015	2016	2017
El Paso	On-View Arrest	59	43	47	58	66	51
	Taken Into Custody	63	16	10	4	15	32
	Summoned/Cited	726	458	535	417	457	364
	Total	848	517	592	479	538	447
Elbert	On-View Arrest	6	0	1	3	4	9
	Taken Into Custody	1	1	0	1	0	1
	Summoned/Cited	10	18	16	3	0	2
	Total	17	19	17	7	4	12
Fremont	On-View Arrest	0	0	0	0	0	1
	Taken Into Custody	18	3	2	7	5	4
	Summoned/Cited	20	8	3	5	1	19
	Total	38	11	5	12	6	24
Garfield	On-View Arrest	85	22	20	27	26	46
	Taken Into Custody	9	0	0	1	5	7
	Summoned/Cited	70	28	24	59	53	70
	Total	164	50	44	87	84	123
Gilpin	On-View Arrest	24	1	0	1	1	3
	Taken Into Custody	2	1	0	1	0	0
	Summoned/Cited	70	5	4	4	2	3
	Total	96	7	4	6	3	6
Grand	On-View Arrest	1	0	0	0	0	0
	Summoned/Cited	13	2	4	0	2	0
	Total	14	2	4	0	2	0
Gunnison	On-View Arrest	4	2	5	2	3	3
	Taken Into Custody	0	3	1	0	0	1
	Summoned/Cited	33	24	25	47	30	40
	Total	37	29	31	49	33	44
Hinsdale	Summoned/Cited	0	0	0	0	2	0
	Total	0	0	0	0	2	0
Huerfano	On-View Arrest	5	0	2	0	6	1
	Taken Into Custody	1	0	0	1	0	0
	Summoned/Cited	7	0	2	5	3	0
	Total	13	0	4	6	9	1
Jefferson	On-View Arrest	106	56	80	72	67	54
	Taken Into Custody	190	78	64	69	68	66
	Summoned/Cited	1,147	612	776	699	706	729
	Total	1,443	746	920	840	841	849
Kiowa	Taken Into Custody	0	3	0	0	0	0
	Summoned/Cited	1	0	0	0	0	0
	Total	1	3	0	0	0	0

Appendix C, Table 6. Marijuana arrests, by county and arrest type, 2012-2017

County	Arrest type	2012	2013	2014	2015	2016	2017
Kit Carson	On-View Arrest	1	6	1	2	4	9
	Taken Into Custody	3	3	0	3	4	4
	Summoned/Cited	14	2	3	12	2	2
	Total	18	11	4	17	10	15
La Plata	On-View Arrest	2	0	0	1	5	2
	Taken Into Custody	2	4	4	2	1	1
	Summoned/Cited	50	49	77	62	63	77
	Total	54	53	81	65	69	80
Lake	On-View Arrest	1	0	0	0	0	1
	Taken Into Custody	9	1	0	0	0	0
	Summoned/Cited	14	2	3	0	2	0
	Total	24	3	3	0	2	1
Larimer	On-View Arrest	145	48	62	40	43	40
	Taken Into Custody	16	3	4	11	13	2
	Summoned/Cited	735	413	393	368	458	428
	Total	896	464	459	419	514	470
Las Animas	On-View Arrest	0	1	0	0	0	0
	Taken Into Custody	2	4	1	0	0	3
	Summoned/Cited	5	0	0	1	0	1
	Total	7	5	1	1	0	4
Lincoln	On-View Arrest	1	0	0	1	0	6
	Taken Into Custody	0	0	0	0	1	0
	Summoned/Cited	0	0	0	0	0	1
	Total	1	0	0	1	1	7
Logan	On-View Arrest	25	1	5	3	3	4
	Taken Into Custody	5	1	0	4	1	3
	Summoned/Cited	11	1	23	27	13	4
	Total	41	3	28	34	17	11
Mesa	On-View Arrest	100	70	71	74	40	79
	Taken Into Custody	60	11	14	17	26	19
	Summoned/Cited	462	327	334	289	260	326
	Total	622	408	419	380	326	424
Moffat	On-View Arrest	47	7	8	7	14	12
	Taken Into Custody	1	0	0	0	0	0
	Summoned/Cited	51	15	12	22	33	18
	Total	99	22	20	29	47	30
Montezuma	On-View Arrest	18	3	7	3	5	4
	Taken Into Custody	1	0	0	0	0	0
	Summoned/Cited	55	3	7	3	5	4
	Total	74	6	14	6	10	8

Appendix C, Table 6. Marijuana arrests, by county and arrest type, 2012-2017

County	Arrest type	2012	2013	2014	2015	2016	2017
Montrose	On-View Arrest	13	6	2	2	2	2
	Taken Into Custody	6	1	4	0	2	2
	Summoned/Cited	114	43	40	37	29	24
	Total	133	50	46	39	33	28
Morgan	On-View Arrest	7	1	1	0	0	0
	Taken Into Custody	2	0	0	2	1	0
	Summoned/Cited	42	18	33	8	17	23
	Total	51	19	34	10	18	23
Otero	On-View Arrest	0	0	0	1	0	1
	Taken Into Custody	3	0	1	0	2	1
	Summoned/Cited	19	3	5	13	3	6
	Total	22	3	6	14	5	8
Ouray	Summoned/Cited	0	0	4	0	0	0
	Total	0	0	4	0	0	0
Park	On-View Arrest	6	0	0	2	3	0
	Summoned/Cited	4	1	4	0	0	0
	Total	10	1	4	2	3	0
Phillips	On-View Arrest	0	1	0	0	2	1
	Taken Into Custody	1	0	0	0	0	0
	Summoned/Cited	1	0	0	1	0	0
	Total	2	1	0	1	2	1
Pitkin	On-View Arrest	5	0	2	1	0	0
	Summoned/Cited	2	0	8	6	4	3
	Total	7	0	10	7	4	3
Prowers	On-View Arrest	13	7	0	1	0	0
	Taken Into Custody	8	4	6	0	6	0
	Summoned/Cited	69	21	32	2	1	2
	Total	90	32	38	3	7	2
Pueblo	On-View Arrest	21	3	2	1	2	1
	Taken Into Custody	2	4	9	7	37	20
	Summoned/Cited	0	13	12	13	4	16
	Total	23	20	23	21	43	37
Rio Blanco	On-View Arrest	8	1	0	1	0	1
	Taken Into Custody	2	1	1	1	3	1
	Summoned/Cited	16	2	17	9	0	0
	Total	26	4	18	11	3	2
Rio Grande	On-View Arrest	0	0	0	0	0	2
	Taken Into Custody	0	3	0	1	0	0
	Summoned/Cited	28	1	2	10	6	6
	Total	28	4	2	11	6	8



Appendix C, Table 6. Marijuana arrests, by county and arrest type, 2012-2017

County	Arrest type	2012	2013	2014	2015	2016	2017
Routt	On-View Arrest	18	7	5	6	1	4
	Taken Into Custody	8	2	0	0	2	2
	Summoned/Cited	64	27	55	39	44	39
	Total	90	36	60	45	47	45
Saguache	On-View Arrest	2	0	0	1	0	0
	Taken Into Custody	0	0	0	0	0	1
	Summoned/Cited	9	0	2	1	0	9
	Total	11	0	2	2	0	10
San Juan	Taken Into Custody	0	1	0	0	0	0
	Total	0	1	0	0	0	0
Sedgwick	Taken Into Custody	1	0	1	0	0	0
	Summoned/Cited	0	3	0	0	0	0
	Total	1	3	1	0	0	0
Summit	On-View Arrest	17	3	0	5	3	1
	Summoned/Cited	46	2	5	17	16	5
	Total	63	5	5	22	19	6
Teller	On-View Arrest	35	26	19	3	8	12
	Taken Into Custody	5	4	3	2	2	1
	Summoned/Cited	15	15	7	20	17	12
	Total	55	45	29	25	27	25
Washington	On-View Arrest	5	0	0	0	0	0
	Summoned/Cited	15	2	1	1	2	0
	Total	20	2	1	1	2	0
Weld	On-View Arrest	78	83	49	43	50	41
	Taken Into Custody	42	22	17	6	18	16
	Summoned/Cited	382	231	263	221	201	171
	Total	502	336	329	270	269	228
Yuma	Taken Into Custody	0	3	0	0	0	0
	Summoned/Cited	2	0	0	0	0	0
	Total	2	3	0	0	0	0
Total	On-View Arrest	3,059	1,209	1,120	1,074	1,313	1,353
	Taken Into Custody	804	329	330	282	411	367
	Summoned/Cited	8,846	4,821	5,452	5,372	4,526	4,433
	Total	12,709	6,359	6,902	6,728	6,250	6,153

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System, analyzed by the Division of Criminal Justice.

Note: Since county is determined based on the law enforcement agency's location there are some statewide agencies, such as the Colorado State Patrol, that cannot be assigned to a specific county.

Appendix C, Table 7. Marijuana possession arrests, by county and drug crime type, 2012-2017

Marijuana-Possession						
County	2012	2013	2014	2015	2016	2017
Unknown	1,140	237	288	298	245	238
Adams	2,071	862	717	643	604	614
Alamosa	2	6	9	21	4	12
Arapahoe	1,373	608	669	570	535	442
Archuleta	17	3	6	18	8	2
Baca	15	7		1		
Bent		1		1		
Boulder	664	378	301	341	403	608
Broomfield	290	121	130	73	107	108
Chaffee	45	14	17	9	18	8
Cheyenne	2	1				
Clear Creek	40	7	6	9	2	1
Conejos	2					
Crowley				1		2
Custer	1	1				1
Delta	15	12	8	2	22	15
Denver	58	371	750	1,051	496	115
Dolores		1	1			
Douglas	524	274	210	256	255	371
Eagle	237	72	61	102	77	83
El Paso	673	426	486	445	493	403
Elbert	17	19	16	6	4	10
Fremont	31	11	4	3	1	
Garfield	153	42	31	81	73	94
Gilpin	94	5	4	5	2	5
Grand	13	2	4		2	
Gunnison	37	24	26	47	29	31
Hinsdale					2	
Huerfano	13		2	5	3	
Jefferson	1,310	650	832	772	799	803
Kiowa	1	3				
Kit Carson	18	11	4	16	10	11
La Plata	54	53	81	40	54	41
Lake	23	2	1		1	1
Larimer	521	283	283	308	393	378
Las Animas	7	2	1			4
Lincoln	1					
Logan	39	2	28	34	17	9
Mesa	573	324	347	286	246	256
Moffat	95	22	19	29	45	29
Montezuma	60	6	11	6	10	7
Montrose	131	49	45	37	31	28
Morgan	50	18	32	9	17	22
Otero	15	3	5	14	4	6
Ouray			4			
Park	7	1	4			
Phillips	2	1		1	2	1
Pitkin	7		9	5	4	3
Prowers	90	30	35	2	3	2
Pueblo	11	9	13	18	40	34
Rio Blanco	26	4	18	11	3	2



Appendix C, Table 7. Marijuana possession arrests, by county and drug crime type, 2012-2017

Marijuana-Possession						
County	2012	2013	2014	2015	2016	2017
Rio Grande	27	3	2	10	6	8
Routt	87	26	46	35	46	43
Saguache	11		2	2		4
Sedgwick	1	3				
Summit	63	5	2	14	12	5
Teller	52	45	24	19	26	20
Washington	20	2		1	2	
Weld	485	313	316	257	244	201
Yuma	2	3				
Total	11,316	5,378	5,910	5,914	5,400	5,081

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System, analyzed by the Division of Criminal Justice.

Note: Since county is determined based on the law enforcement agency's location there are some statewide agencies, such as the Colorado State Patrol, that cannot be assigned to a specific county.

Appendix C, Table 8. Marijuana sales arrests, by county, 2012-2017

Marijuana-Sales						
County	2012	2013	2014	2015	2016	2017
Unknown	22	10	6	11	5	9
Adams	39	18	16	8	8	9
Arapahoe	24	17	19	22	13	8
Archuleta					2	
Baca	2		1		2	
Boulder	8	1	17	5	11	4
Broomfield	7	7		2	1	
Chaffee	2			1		2
Clear Creek	1					
Costilla			1			
Crowley						1
Denver	93	71	71	58	74	98
Dolores						1
Douglas	4	1	2	1	6	1
Eagle	6	3		1	1	1
El Paso	32	21	28	23	32	28
Elbert			1			2
Fremont	1			2		
Garfield	1	2	3		1	
Grand	1					
Gunnison			2			4
Jefferson	9	7	10	7	8	8
Kit Carson	1	3			2	1
Lake	1	1				
Larimer	10	11	15	10	17	8
Las Animas		3				
Logan	1	1				
Mesa	14	20	15	11	19	40
Moffat	3		1		2	1
Montezuma			1			1
Montrose	1	1			1	
Morgan	1	1				1

Appendix C, Table 8. Marijuana sales arrests, by county, 2012-2017

Marijuana-Sales						
County	2012	2013	2014	2015	2016	2017
Otero			1			
Park	1				1	
Pitkin				2		
Prowers		2	2	1	1	
Pueblo		1			1	
Rio Grande		1		1		
Routt	1			1		
San Juan		1				
Teller			2	3	5	4
Weld	11	16	11	4	7	16
Total	297	220	225	174	220	248

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System, analyzed by the Division of Criminal Justice.

Note: Since county is determined based on the law enforcement agency's location there are some statewide agencies, such as the Colorado State Patrol, that cannot be assigned to a specific county.

Appendix C, Table 9. Marijuana production arrests, by county, 2012-2017

Marijuana-Production						
County	2012	2013	2014	2015	2016	2017
Unknown	2		2	2	4	1
Adams	39	15	6	8	14	19
Arapahoe	65	67	122	103	127	120
Boulder	1	1		7	2	2
Broomfield			2		1	
Clear Creek	1					
Custer			2	1	1	
Denver	15	6	14	16	42	54
Douglas					2	9
Eagle	2	1		1		
El Paso	20	4	2	3	3	7
Elbert				1		1
Fremont			1	1	2	1
Gilpin	2	2		1		
Gunnison		2	1	2		1
Huerfano			2	1	6	1
Jefferson	6	4	9	13	10	8
Kit Carson						3
Lake	3		1			
Larimer	5	1	5	7	13	13
Lincoln						7
Logan						1
Mesa	3	4	3	9	11	9
Moffat	4					
Montrose	1			1		
Morgan					1	
Otero	1				1	1
Park	1			2	2	
Prowers					2	
Routt				3		

Appendix C, Table 9. Marijuana production arrests, by county, 2012–2017

Marijuana-Production						
County	2012	2013	2014	2015	2016	2017
Sedgwick			1			
Teller	1				1	
Weld	7	4	2	6	3	9
Total	179	111	175	188	248	267

Appendix C, Table 10. Marijuana arrests for unknown reason, by county, 2012–2017

Marijuana-Unknown						
County	2012	2013	2014	2015	2016	2017
Unknown	111	32	38	24	18	31
Adams	134	85	99	98	72	110
Alamosa			3	1	11	11
Arapahoe	6	9	5	9	9	12
Archuleta				1	1	2
Boulder	39	53	34	38	30	43
Broomfield	2	1		2	4	
Chaffee				3	1	
Clear Creek	2		1			
Custer			1	3	1	1
Delta		3			2	6
Denver	2	3	1	2	1	
Dolores						3
Douglas	5	56	2	1	6	10
Eagle	27	55	34	17	15	6
El Paso	132	68	81	11	17	20
Fremont	8			6	3	23
Garfield	11	6	10	6	11	33
Gilpin					1	1
Gunnison		3	2		4	8
Jefferson	172	120	76	59	34	33
Kit Carson				1		
La Plata	1			25	15	39
Lake			1		1	
Larimer	360	169	156	94	90	71
Las Animas				1		
Logan	1					1
Mesa	43	68	65	82	57	136
Moffat	2					
Montezuma	14		2			
Montrose			1	1	1	
Morgan			2	1		
Otero	6					
Park	1					
Pitkin			1			
Prowers		1	1			
Pueblo	12	10	10	3	2	3
Rio Grande	1					
Routt	3	10	14	6	1	2
Saguache						7

Appendix C, Table 10. Marijuana arrests for unknown reason, by county, 2012–2017

Marijuana-Unknown						
County	2012	2013	2014	2015	2016	2017
Summit			3	8	8	1
Teller	3		3	3		1
Washington			1			
Weld	1	4	1	3	14	1
Total	1,099	756	648	509	430	615

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System, analyzed by the Division of Criminal Justice.

Note: Since county is determined based on the law enforcement agency's location there are some statewide agencies, such as the Colorado State Patrol, that cannot be assigned to a specific county.

Appendix C, Table 11. Marijuana smuggling arrests, by county, 2012–2017

Marijuana-Smuggling						
County	2012	2013	2014	2015	2016	2017
Unknown	1	2		2	1	
Arapahoe					3	
Boulder						1
El Paso	4	1		1		
Gilpin	1					
Larimer					1	
Lincoln				1	1	
Mesa		1				
Otero						1
Prowers					1	
Rio Grande		1				
Weld					1	1
Total	6	5		4	8	3

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System, analyzed by the Division of Criminal Justice.

Note: Since county is determined based on the law enforcement agency's location there are some statewide agencies, such as the Colorado State Patrol, that cannot be assigned to a specific county.

Appendix C, Table 12. Marijuana arrests, by agency, 2012–2017

Agency	2012	2013	2014	2015	2016	2017
Acet (All Crimes Enforcement Team)	0	0	0	0	0	1
Adams County SO	678	262	154	150	112	98
Adams State College	0	6	12	16	14	9
Aims Community College PD	2	0	0	0	0	0
Alamosa County SO	2	0	0	0	0	0
Alamosa PD	0	0	0	5	1	14
Arapahoe Community College	1	1	1	1	1	0
Arapahoe County SO	77	39	50	22	39	58
Archuleta County SO	1	0	0	1	4	2
Arvada PD	432	205	246	263	194	190
Aspen PD	7	0	10	3	0	2
Ault PD	2	0	3	3	3	0
Auraria Department of Public Safety	5	0	0	7	6	7
Aurora PD	727	397	509	429	447	356
Avon PD	58	7	23	18	7	20
Baca County SO	4	3	0	1	0	0
Basalt PD	7	4	1	3	0	0
Bayfield PD	0	0	0	3	3	3
Bent County SO	0	1	0	1	0	0
Berthoud PD	5	5	0	0	0	0
Black Hawk PD	66	0	1	2	0	2
Boulder County SO	0	0	0	48	52	71
Boulder PD	137	76	71	42	30	15
Bow Mar PD	0	0	0	0	0	1
Breckenridge PD	1	0	4	16	12	4
Brighton PD	193	107	146	153	118	151
Broomfield PD	294	127	132	76	113	108
Brush PD	10	2	0	2	7	3
Buena Vista PD	1	2	2	11	6	6
Burlington PD	8	3	1	3	4	5
Campo PD	13	4	0	0	0	0
Canon City PD	21	7	4	6	0	20
Carbondale PD	0	1	0	0	4	6
Castle Rock PD	112	63	37	67	61	102
Centennial PD	78	32	34	14	30	20
Center PD	4	0	1	2	0	10
Central City PD	0	4	2	0	0	0
Chaffee County SO	19	3	3	2	7	2
Cherry Hills Village PD	0	4	0	3	0	0
Cheyenne County SO	2	1	0	0	0	0
Clear Creek County SO	31	4	5	6	2	1

Appendix C, Table 12. Marijuana arrests, by agency, 2012–2017

Agency	2012	2013	2014	2015	2016	2017
Colorado Mental Health Institute-Pueblo	0	0	1	0	0	1
Colorado School of Mines-Golden	7	6	7	2	8	18
Colorado Springs PD	420	243	313	343	450	307
Colorado State Patrol	1,265	274	333	335	269	277
Colorado State University-Fort Collins	83	56	42	40	67	41
Commerce City PD	188	143	94	75	60	53
Conejos County SO	2	0	0	0	0	0
Cortez PD	8	1	3	1	1	4
Costilla County SO	0	0	1	0	0	0
Craig PD	82	21	18	21	35	24
Crested Butte PD	2	4	5	4	6	10
Cripple Creek PD	14	7	5	4	3	2
Crowley County SO	0	0	0	1	0	3
Custer County SO	1	1	3	4	2	2
Dacono PD	4	0	1	0	1	4
De Beque PD	0	5	0	0	0	0
Del Norte PD	9	0	0	5	1	1
Delta County SO	0	2	0	0	4	0
Delta PD	14	10	4	1	18	18
Denver PD	155	451	836	1,118	607	260
Dillion PD	0	0	0	1	1	1
Division of Gaming-Criminal Investigation	0	1	0	0	0	0
Dolores County SO	0	1	1	0	0	4
Douglas County SO	233	163	117	119	143	193
Durango PD	22	9	7	36	31	57
Eagle County SO	74	49	29	15	21	7
Eagle PD	17	3	7	4	8	21
Eaton PD	2	4	0	1	2	4
Edgewater PD	6	4	0	10	8	30
El Paso County SO	154	115	109	12	23	25
Elbert County SO	8	2	1	7	4	12
Elizabeth PD	9	17	16	0	0	0
Empire PD	2	2	0	0	0	0
Englewood PD	247	92	91	99	85	82
Erie PD	26	22	43	23	37	22
Estes Park PD	18	2	4	2	3	2
Evans PD	58	33	28	18	8	16
Federal Heights PD	78	14	4	18	21	25
Firestone PD	7	15	8	13	19	13
Florence PD	11	3	0	0	1	0
Fort Collins PD	285	180	201	181	256	226

Appendix C, Table 12. Marijuana arrests, by agency, 2012–2017

Agency	2012	2013	2014	2015	2016	2017
Fort Lewis College PD	32	42	67	26	34	20
Fort Lupton PD	46	3	10	11	3	5
Fort Morgan PD	34	17	27	8	10	20
Fountain PD	151	89	70	58	31	92
Fowler PD	1	0	0	0	4	1
Frederick PD	17	8	16	16	10	13
Fremont County SO	6	1	1	6	5	4
Frisco PD	15	0	0	0	0	0
Fruita PD	26	41	37	26	12	8
Garden City PD	1	1	3	1	2	0
Garfield County SO	14	9	4	13	15	26
Georgetown PD	0	1	0	2	0	0
Gilpin County SO	30	3	1	4	3	4
Glendale PD	3	2	0	3	2	0
Glenwood Springs PD	136	29	28	38	40	36
Golden PD	78	41	50	43	38	43
Granby PD	14	2	4	0	2	0
Grand Junction PD	492	296	299	279	274	328
Greeley PD	250	176	141	107	94	81
Greenwood Village PD	131	49	31	50	30	22
Gunison PD	32	24	16	42	25	28
Gunnison County SO	0	1	2	1	0	5
Gypsum PD	0	0	3	14	3	3
Haxtun PD	0	0	4	0	0	2
Hinsdale County SO	0	0	0	0	2	0
Holyoke PD	2	1	0	1	2	0
Hotchkiss PD	1	1	4	1	2	3
Hudson PD	2	0	4	0	0	0
Huerfano County SO	1	0	1	1	6	1
Hugo Marshals Office	0	0	0	1	1	0
Idaho Springs PD	11	0	1	1	0	0
Jefferson County SO	414	210	202	209	197	216
Johnstown PD	9	1	0	0	8	15
Keensburg PD	0	1	0	2	0	0
Kersey PD	0	6	2	4	0	1
Kiowa County SO	1	3	0	0	0	0
Kit Carson County SO	10	8	3	14	6	10
La Junta PD	20	3	6	14	1	6
La Plata County SO	0	2	7	0	1	0
Lafayette PD	125	26	36	15	30	25
Lake County SO	10	0	1	0	0	1

Appendix C, Table 12. Marijuana arrests, by agency, 2012–2017

Agency	2012	2013	2014	2015	2016	2017
Lakeside PD	13	0	1	3	1	0
Lakewood PD	371	217	319	237	336	291
Lamar PD	71	28	28	2	0	2
Larimer County SO	224	66	65	38	37	42
LaSalle PD	3	0	0	0	0	0
Leadville PD	14	3	2	0	2	0
Lincoln County SO	1	0	0	0	0	7
Littleton PD	167	62	65	51	40	32
Lochbuie PD	0	2	1	8	0	1
Logan County SO	37	2	12	5	6	5
Lone Tree PD	92	13	5	17	12	23
Longmont PD	72	48	73	74	72	43
Louisville PD	0	1	10	11	27	36
Loveland PD	281	155	146	158	145	159
Mancos PD	0	0	0	1	0	1
Manitou Springs PD	66	43	67	53	24	4
Mead PD	3	8	12	13	16	4
Meeker PD	4	0	1	0	0	0
Mesa County SO	104	66	71	66	35	69
Milliken PD	0	3	10	5	7	8
Minturn PD	1	0	0	0	0	0
Moffat County SO	17	1	2	8	12	6
Monte Vista PD	19	2	2	6	5	7
Montezuma County SO	66	5	11	4	9	3
Montrose County SO	25	12	11	6	11	3
Montrose PD	108	38	35	33	22	25
Monument PD	17	5	1	2	5	11
Morgan County SO	7	0	7	0	1	0
Morrison PD	2	0	0	0	0	0
Mountain View PD	1	0	1	0	1	2
Mt Crested Butte PD	3	0	8	2	2	1
Nederland PD	0	0	0	0	1	0
Northglenn PD	212	100	106	88	65	61
Oak Creek PD	0	0	0	0	0	1
Otero County SO	1	0	0	0	0	1
Ouray PD	0	0	4	0	0	0
Pagosa Springs PD	16	3	6	18	7	2
Palisade PD	0	0	12	9	5	19
Palmer Lake Marshal	1	0	0	0	0	0
Paonia PD	0	2	0	0	0	0
Parachute PD	13	2	10	25	14	8

Appendix C, Table 12. Marijuana arrests, by agency, 2012–2017

Agency	2012	2013	2014	2015	2016	2017
Park County SO	10	1	4	2	3	0
Parker PD	96	92	54	55	49	70
Phillips County SO	0	0	0	0	0	1
Pikes Peak Community College PD	4	0	1	0	1	0
Pitkin County SO	0	0	0	4	4	1
Platteville PD	0	0	0	0	1	0
Prowers County SO	19	4	10	1	7	0
Pueblo County SO	1	16	17	20	40	36
Pueblo PD	22	4	5	1	3	0
Rangely PD	4	3	17	8	3	1
Red Rocks PD	11	0	3	3	2	1
Rifle PD	0	9	2	10	10	42
Rio Blanco County SO	18	1	0	3	0	1
Rio Grande County SO	0	2	0	0	0	0
Routt County SO	10	0	1	5	1	2
Saguache County SO	7	0	1	0	0	0
Salida PD	27	9	12	0	6	2
San Juan County SO	0	1	0	0	0	0
San Miguel County SO	0	0	0	0	4	0
Sedgwick County SO	1	3	1	0	0	0
Severance PD	2	0	1	0	3	2
Sheridan PD	35	22	32	31	13	10
Silt PD	1	0	0	1	1	5
Silverthorne PD	5	0	1	3	5	1
Southwest Drug Task Force	0	0	0	2	0	0
Springfield PD	0	0	1	0	2	0
Steamboat Springs PD	80	36	55	40	46	40
Sterling PD	4	1	16	29	11	6
Summit County SO	42	5	0	2	1	0
Teller County SO	17	1	6	5	1	2
Thornton PD	426	169	155	129	189	237
Tinmath PD	0	0	1	0	6	0
Trinidad PD	7	5	1	1	0	4
University of Colorado PD - Denver/Anschutz Medical Campus	8	0	0	2	0	0
University of Colorado PD- Boulder	378	282	162	201	233	466
University of Colorado PD-Colorado Springs	35	22	31	11	4	8
University of Northern Colorado-Greeley	0	13	16	16	22	9
Vail PD	102	61	30	60	51	38
Walsenburg PD	12	0	3	5	3	0
Washington County SO	20	2	1	1	2	0

Appendix C, Table 12. Marijuana arrests, by agency, 2012–2017

Agency	2012	2013	2014	2015	2016	2017
Weld County SO	39	21	26	26	32	26
Westminster PD	447	143	154	116	118	111
Wheat Ridge PD	108	63	91	70	56	58
Windsor PD	29	19	4	3	1	4
Woodland Park PD	24	37	18	16	23	21
Yuma County SO	2	0	0	0	0	0
Yuma PD	0	3	0	0	0	0
Total	12,709	6,359	6,902	6,728	6,250	6,153

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System, analyzed by the Division of Criminal Justice.

Appendix C, Table 13. Marijuana arrests in Denver, 2012–2017

Arrests	2012	2013	2014	2015	2016	2017
Total (Individual)*	1,605	903	474	526	499	302
Gender						
Male	1,319	743	390	434	400	239
Female	286	160	84	91	98	62
Unknown/Not Listed	0	0	0	1	1	1
Age						
Under 18	378	396	312	302	302	119
18-20	287	93	56	82	56	30
21 and older	939	414	106	142	140	152
Unknown/Not Listed	1	0	0	0	1	1
Race/ethnicity						
White (non-Hispanic)	835	385	129	160	104	137
African-American	469	219	130	133	118	47
Hispanic	272	277	195	201	237	99
Asian / Pacific Islander	14	6	4	15	16	17
Native American	13	11	5	3	2	0
Other/Unknown/Not Listed	2	5	11	14	22	2
Type of crime **						
Possession	1,587	667	397	431	389	336
Production/cultivation	1	6	9	55	61	107
Sales	10	46	71	97	99	108
Smuggling	0	0	0	0	0	0
Unspecified/Other	8	184	0	0	0	0

Source: Denver Police Department Data Analysis Unit.

* Does not include warrant arrests for marijuana charges or Civil or Administrative Citations for certain marijuana violations after 2014

** Count of Charge Types, not individual arrests. Type of Crimes may not sum to total arrests as one individual may be charged with multiple crimes.

**APPENDIX D:
OFFENSES REPORTED, BY LOCATION**

Appendix D, Table 14. Marijuana offenses, by location, 2012–2017

Location	2012	2013	2014	2015	2016	2017
Total	12,798	5,989	6,531	6,535	6,244	6,182
Abandoned/Condemned Structure	3	1	2	3	0	2
Air/Bus/Train Terminal	31	53	67	51	40	37
Amusement Park	4	3	1	2	2	1
Arena/Stadium/Fairgrounds/Coliseum	17	11	8	10	11	9
Auto Dealership New/Used	1	0	0	1	1	0
Bank/Savings and Loan	5	1	1	0	2	1
Bar/Nightclub	75	22	13	17	11	11
Camp/Campground	4	0	1	4	2	3
Church/Synagogue/Temple/Mosque	4	8	6	12	8	6
Commercial/Office Building	43	34	33	39	43	54
Community Center	0	4	5	3	6	6
Construction Site	5	0	1	1	1	1
Convenience Store	48	27	23	29	25	24
Daycare Facility	0	0	1	0	0	0
Department/Discount Store	112	66	60	63	60	86
Dock/Wharf/Freight/Modal Terminal	5	4	11	11	13	10
Drug Store/Doctors Office/Hospital	24	8	7	7	12	18
Farm Facility	0	3	0	0	0	1
Field/Woods	151	122	72	72	49	46
Gambling Facility/Casino/Race Track	14	2	1	1	0	3
Government/Public Building	84	44	38	46	35	54
Grocery/Supermarket	48	21	24	23	17	11
Highway/Road/Alley/Street/Sidewalk	6,799	2,227	2,196	2,221	2,057	1,937
Hotel/Motel/Etc.	151	38	29	31	42	35
Industrial Site	1	0	3	3	3	2
Jail/Prison/Penitentiary/Corrections Facility	49	27	30	29	30	31
Lake/Waterway/Beach	10	4	4	5	3	4
Liquor Store	8	1	0	1	2	2
Military Installation	2	0	0	0	0	0
Other/Unknown	513	191	236	226	250	209
Park/Playground	227	198	369	473	346	323
Parking/Drop Lot/Garage	955	388	427	415	453	384
Rental Storage Facility	9	6	1	2	9	6
Residence/Home	1,476	564	668	681	798	821
Rest Area	2	1	1	1	1	2
Restaurant	46	18	21	28	26	27
School – College/University	519	448	465	600	572	809

Appendix D, Table 14. Marijuana offenses, by location, 2012–2017

Location	2012	2013	2014	2015	2016	2017
School – Elementary/Secondary	1,010	1,390	1,655	1,355	1,239	1,144
School/College(Historical Only)	258	0	0	0	0	0
Service/Gas Station	15	8	7	9	4	8
Shelter – Mission/Homeless	1	1	0	4	2	3
Shopping Mall	19	15	9	11	10	7
Specialty Store	50	30	35	44	58	43
Tribal Lands	0	0	0	1	1	1

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System, analyzed by the Division of Criminal Justice.

**APPENDIX E:
MARIJUANA DRUG SEIZURES, BY COUNTY**

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Unknown	2012	Amount	15873.27	0.07	5.00	106.00		
		N reports	1293	2	3	4		
	2013	Amount	5071.24					
		N reports	280					
	2014	Amount	4387.68			81.00		
		N reports	319			2		
	2015	Amount	7645.67	0.03	97.00			
		N reports	293	1	4			
	2016	Amount	1467.51		9.00	256.00		
		N reports	200		2	2		
	2017	Amount	7788.50		19.00			
		N reports	245		4			
	Adams	2012	Amount	3412.29	99.75	1234.71	9470.60	NA
			N reports	1988	1	21	32	1
2013		Amount	3813.18		4.90	770.00		
		N reports	804		3	6		
2014		Amount	1169.35		7.00	70.00		
		N reports	658		2	4		
2015		Amount	2467.12	3200.16	188.90	232.00	NA	
		N reports	603	1	12	5	1	
2016		Amount	13288.43	1.03	352.91	2971.00	NA	
		N reports	608	2	15	13	2	
2017		Amount	6525.85		468.41	16603.00	NA	
		N reports	648		27	22	1	
Alamosa		2012	Amount	4.00				
			N reports	2				
	2013	Amount	1.04					
		N reports	2					
	2014	Amount	5.87					
		N reports	6					
	2015	Amount	57.65					
		N reports	16					
	2016	Amount	2.82					
		N reports	6					
	2017	Amount	58.07					
		N reports	26					

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Arapahoe	2012	Amount	68188.77	65.28	23.00	1071.00	NA	
		N reports	1842	1	13	5	6	
	2013	Amount	26728.15			1.00		
		N reports	842			1		
	2014	Amount	7232.76		31010.00	7.00		
		N reports	875		7	1		
	2015	Amount	14843.43		25.00	24.00		
		N reports	763		2	2		
	2016	Amount	26576.07		7199.20	2.00		
		N reports	693		5	2		
	2017	Amount	27122.76	0.00	962.20	0.00	NA	
		N reports	618	1	7	2	3	
	Archuleta	2012	Amount	6.20				
			N reports	10				
2013		Amount	3.01					
		N reports	5					
2014		Amount	10.64					
		N reports	9					
2015		Amount	6.74					
		N reports	15					
2016		Amount	2.51			16.00		
		N reports	6			1		
2017		Amount	1423.10					
		N reports	3					
Baca		2012	Amount	46.00				
			N reports	16				
	2013	Amount	54.86					
		N reports	4					
	2014	Amount	608.00					
		N reports	1					
	2015	Amount	0.25					
		N reports	1					
	2016	Amount	64.00					
		N reports	1					



Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Bent	2012	Amount	1.00					
		N reports	1					
	2013	Amount	1.00					
		N reports	2					
	2015	Amount	0.04					
		N reports	1					
	2016	Amount				12.00		
		N reports					1	
	2017	Amount	0.26					
		N reports	1					
Boulder	2012	Amount	555.69		10.00	3.00		
		N reports	711		10	1		
	2013	Amount	921.01		120.00	1.00		
		N reports	409		8	1		
	2014	Amount	1941.09		8.00	17.00		
		N reports	299		4	1		
	2015	Amount	1806.48		9.00			
		N reports	297		7			
	2016	Amount	894.88	2.85	28.01	2.00		
		N reports	369	3	23	1		
	2017	Amount	1203.42		2668.54	386.00		
		N reports	488		27	3		
	Broomfield	2012	Amount	1992.96		8.00		
			N reports	209		10		
2013		Amount	3467.95		1.00	0.00		
		N reports	93		1	1		
2014		Amount	38.00		4.00			
		N reports	82		5			
2015		Amount	12.18		3.01			
		N reports	51		5			
2016		Amount	809.41					
		N reports	73					
2017		Amount	40.66		2.00			
		N reports	62		1			

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Chaffee	2012	Amount	44.34		2.00	10.00		
		N reports	42		1	1		
	2013	Amount	3.19			8.00		
		N reports	13			1		
	2014	Amount	3.09		1.00			
		N reports	14		1			
	2015	Amount	5.13					
		N reports	12					
	2016	Amount	19.97		1.00			
		N reports	19		1			
	2017	Amount	11.00					
		N reports	11					
	Cheyenne	2012	Amount	11.30			3.00	
			N reports	3			1	
2013		Amount	12.00					
		N reports	1					
2014		Amount	0.39					
		N reports	1					
Clear Creek	2012	Amount	80.87		4.00	323.00		
		N reports	44		4	2		
	2013	Amount	16.65		12.00			
		N reports	7		3			
	2014	Amount	2.38					
		N reports	7					
	2015	Amount	5.47					
		N reports	7					
	2016	Amount			3.00	0.00		
		N reports			1	1		
	2017	Amount	0.04		1.00			
		N reports	1		1			
	Conejos	2012	Amount			2.00		
			N reports			1		
Costilla	2014	Amount	0.07					
		N reports	1					
Crowley	2015	Amount	0.00					
		N reports	1					
	2017	Amount	3246.94					
		N reports	2					

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Custer	2012	Amount	41.85			43.10		
		N reports	2			2		
	2013	Amount	0.11					
		N reports	2					
	2014	Amount	0.00			5.00		
		N reports	1			1		
	2015	Amount	0.01			60.00		
		N reports	1			1		
	2017	Amount	3.26					
		N reports	2					
	Delta	2012	Amount	9.75				
			N reports	4				
2013		Amount	406.48					
		N reports	12					
2014		Amount	0.15					
		N reports	3					
2015		Amount	690.80		1.00	2232.00	NA	
		N reports	4		1	1	1	
2016		Amount	7.53		1.00	19.00		
		N reports	10		1	1		
2017		Amount	112.83		2.00			
		N reports	13		2			
Denver	2012	Amount	150.50		11.00		NA	
		N reports	20		4		374	
	2013	Amount	3.83				NA	
		N reports	7				554	
	2014	Amount	101.34		1.00		NA	
		N reports	7		1		771	
	2015	Amount	12.49		22.00		NA	
		N reports	6		2		894	
	2016	Amount	534.06				NA	
		N reports	7				575	
	2017	Amount	6.31		3.00	31.00	NA	
		N reports	16		1	2	370	

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report
Dolores	2013	Amount	0.25				
		N reports	1				
	2014	Amount	0.00				
		N reports	1				
	2016	Amount	208.00				
		N reports	1				
2017	Amount					25.10	
	N reports					1	
Douglas	2012	Amount	195.44		6.00	4.00	
		N reports	355		3	1	
	2013	Amount	217.62			101.00	
		N reports	261			2	
	2014	Amount	41.68			600.00	
		N reports	203			1	
	2015	Amount	1059.70	3038.72	3.50		
		N reports	237	2	4		
	2016	Amount	6382.72		48.50	150.00	
		N reports	291		6	1	
	2017	Amount	553.13	883.20	1.00	1746.00	
		N reports	346	2	1	3	
Eagle	2012	Amount	544.31		6.01	2.00	
		N reports	217		3	1	
	2013	Amount	188.17		21.00		
		N reports	51		3		
	2014	Amount	71.67		6.00	1300.00	
		N reports	47		3	1	
	2015	Amount	310.89		11.00		
		N reports	36		6		
	2016	Amount	48.51	1.00	1.00		
		N reports	16	1	1		
	2017	Amount	6.38		8.00		
		N reports	23		5		

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
El Paso	2012	Amount	2792.80	0.00	12.00	2217.24		
		N reports	810	1	7	40		
	2013	Amount	963.33	113.92	22.00	110.00		
		N reports	449	2	3	4		
	2014	Amount	934.65	102.40	5.00	9.00		
		N reports	523	1	5	3		
	2015	Amount	1250.27	771.84	9.00	1.00		
		N reports	453	2	9	1		
	2016	Amount	5855.36	14.80	19.00	328.00		
		N reports	458	3	11	4		
	2017	Amount	20903.04	1241.60	461.00	3061.00		
		N reports	500	2	24	25		
	Elbert	2012	Amount	52.26			0.60	
			N reports	12			1	
2013		Amount	309.64					
		N reports	11					
2014		Amount	5.03		6.25			
		N reports	11		3			
2015		Amount	29.88		1.00			
		N reports	4		1			
2016		Amount	268.39			13.00		
		N reports	5			1		
2017		Amount	93.10			180.00		
		N reports	13			3		
Fremont		2012	Amount	65.94		26.20	1.00	
			N reports	60		9	1	
	2013	Amount	11.28		202.00			
		N reports	25		4			
	2014	Amount	26569.06		2.00			
		N reports	35		2			
	2015	Amount	0.57		5.00			
		N reports	7		2			
	2016	Amount	48.62		7.00			
		N reports	7		4			
	2017	Amount	2091.43		24.50		NA	
		N reports	26		7		1	

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Garfield	2012	Amount	72.12	204.80	2.00			
		N reports	143	2	3			
	2013	Amount	168.66		1.00			
		N reports	49		1			
	2014	Amount	226.36					
		N reports	43					
	2015	Amount	498.47	659.20	2.00			
		N reports	62	2	2			
	2016	Amount	36.53	746.24	23.00			
		N reports	71	1	11			
	2017	Amount	239.01	76.00	37.00	1.00		
		N reports	75	2	16	1		
	Gilpin	2012	Amount	60.20				
			N reports	88				
2013		Amount	5.62					
		N reports	8					
2014		Amount	0.82		1.00			
		N reports	4		1			
2015		Amount	2.61					
		N reports	4					
2016		Amount	4.48					
		N reports	3					
2017		Amount	2.89					
		N reports	8					
Grand		2012	Amount	2.08				
			N reports	10				
	2013	Amount	0.11					
		N reports	3					
	2014	Amount	0.07					
		N reports	2					
	2016	Amount	57.56					
		N reports	3					

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Gunnison	2012	Amount	115.66			17.00		
		N reports	36				2	
	2013	Amount	44.75			18.00		
		N reports	24				1	
	2014	Amount	40.21					
		N reports	23					
	2015	Amount	30.51	0.03		66.00		
		N reports	32		1		1	
	2016	Amount	3.92			124.00		
		N reports	22			1		
	2017	Amount	9.44			5.30	30.00	
		N reports	36			4	1	
	Hinsdale	2012	Amount	0.50				
			N reports	1				
2016		Amount	0.05					
		N reports	1					
Huerfano	2012	Amount	1.95			154.00		
		N reports	12				2	
	2013	Amount				6.00		
		N reports					1	
	2014	Amount	7.35			54.00		
		N reports	3				1	
	2015	Amount	6.03			513.00		
		N reports	4				1	
	2016	Amount	0.00			634.00		
		N reports	1				2	
	2017	Amount	22.50			493.00		
		N reports	1				1	
	Jackson	2012	Amount	8.00				
			N reports	1				

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Jefferson	2012	Amount	1896.24		30.10	6.00	NA	
		N reports	1195		17	1	1	
	2013	Amount	1443.00		9.10			
		N reports	568		8			
	2014	Amount	871.08		21.10	679.70		
		N reports	641		10	2		
	2015	Amount	668.68		4.00	389.00		
		N reports	546		3	4		
	2016	Amount	1752.25		590.00	124.00		
		N reports	558		16	2		
	2017	Amount	1661.80	128.00	95.04	122.35	NA	
		N reports	588	1	23	8	23	
	Kiowa	2012	Amount	0.50				
			N reports	1				
2013		Amount	16.28					
		N reports	3					
Kit Carson	2012	Amount	8.68					
		N reports	17					
	2013	Amount	62.71					
		N reports	8					
	2014	Amount	0.85					
		N reports	6					
	2015	Amount	440.34					
		N reports	13					
	2016	Amount	28.94					
		N reports	10					
	2017	Amount	159.66					
		N reports	8					
	La Plata	2012	Amount	8.96		3.00		
			N reports	36		2		
2013		Amount	4.53					
		N reports	42					
2014		Amount	6.67		10.00		NA	
		N reports	57		1		1	
2015		Amount	6.59		0.00			
		N reports	33		4			
2016		Amount	39.57					
		N reports	36					
2017		Amount	49.13		1.00			
		N reports	42		1			

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Lake	2012	Amount	48.25			300.00		
		N reports	18			1		
	2013	Amount	8.00					
		N reports	3					
	2014	Amount	32.07					
		N reports	2					
	2017	Amount	17.38					
		N reports	2					
	Larimer	2012	Amount	11064.00	4.34	48.50		NA
			N reports	709	2	26		6
2013		Amount	263.55			31.00	3.00	NA
		N reports	301			10	1	1
2014		Amount	337.57			30.00	2.00	
		N reports	293			3	1	
2015		Amount	36882.04			10.00	99.00	NA
		N reports	288			5	1	2
2016		Amount	5699.23	0.13	40.00		1.00	
		N reports	334	1	6		1	
2017		Amount	9472.63			187.00	6.00	
		N reports	320			6	1	
Las Animas		2012	Amount	3.32				
			N reports	6				
	2013	Amount	8.13					
		N reports	7					
	2015	Amount	0.11					
		N reports	1					
	2016	Amount	0.01					
		N reports	1					
	2017	Amount	0.28					
		N reports	4					
Lincoln	2015	Amount	17.00					
		N reports	1					
	2016	Amount	86.24					
		N reports	1					
	2017	Amount	1752.00				84.00	
		N reports	1				2	

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Logan	2012	Amount	21.90		1.00			
		N reports	39		1			
	2013	Amount	1.34					
		N reports	6					
	2014	Amount	4.11		1.00			
		N reports	13		1			
	2015	Amount	36.93		2.00			
		N reports	39		1			
	2016	Amount	15.59		3.00			
		N reports	23		1			
	2017	Amount	61.92		40.00	66.00		
		N reports	16		8	2		
	Mesa	2012	Amount	5761.42	0.50	1.00	10.00	
			N reports	490	1	1	2	
2013		Amount	8220.22			2.00		
		N reports	285			1		
2014		Amount	1037.09		2.00	1.00		
		N reports	284		2	1		
2015		Amount	11013.46			3.00		
		N reports	277			1		
2016		Amount	11135.32			139.00		
		N reports	242			1		
2017		Amount	70862.86			85.00		
		N reports	255			2		
Mineral		2014	Amount	1.00				
			N reports	1				
Moffat	2012	Amount	29.24		79.00	6.00		
		N reports	85		1	1		
	2013	Amount	24.51					
		N reports	19					
	2014	Amount	23.32		1.01			
		N reports	22		1			
	2015	Amount	3.61					
		N reports	25					
	2016	Amount	4.62					
		N reports	43					
	2017	Amount	21.94					
		N reports	35					

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Montezuma	2012	Amount	67.18					
		N reports	70					
	2013	Amount	49.00					
		N reports	7					
	2014	Amount	110.49					
		N reports	12					
	2015	Amount	51.00					
		N reports	7					
	2016	Amount	63.77	0.07				
		N reports	8	1				
	2017	Amount	1717.47		1.00			
		N reports	14		1			
	Montrose	2012	Amount	163.22			8.00	
			N reports	133			2	
2013		Amount	16.79					
		N reports	52					
2014		Amount	7.02					
		N reports	39					
2015		Amount	650.93					
		N reports	41					
2016		Amount	71.55					
		N reports	41					
2017		Amount	88.58					
		N reports	40					
Morgan		2012	Amount	93.81		8.00		NA
			N reports	47		8		3
	2013	Amount	216.62					
		N reports	19					
	2014	Amount	3.80		1.00			
		N reports	25		1			
	2015	Amount	133.37					
		N reports	15					
	2016	Amount	2.11		1.00	40.00	NA	
		N reports	6		1	2	4	
	2017	Amount	67.85		3.00			
		N reports	22		2			



Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Otero	2012	Amount	7482.84			18.00		
		N reports	13				1	
	2013	Amount	2.12					
		N reports	1					
	2014	Amount	2.03					
		N reports	4					
	2015	Amount	3.82					
		N reports	5					
	2016	Amount	10.07					
		N reports	2					
	2017	Amount	643.62			3.00		
		N reports	8			3		
	Ouray	2012	Amount	1.94				
			N reports	1				
2014		Amount	0.50					
		N reports	3					
2015		Amount	0.00					
		N reports	1					
Park	2012	Amount	7.51			30.01		
		N reports	12				1	
	2013	Amount	2.00					
		N reports	2					
	2014	Amount	5.01					
		N reports	5					
	2015	Amount	2.00				170.00	
		N reports	2				2	
	2016	Amount	3.00				897.00	
		N reports	2				2	
	2017	Amount				9.00	212.00	
		N reports				1	1	
	Phillips	2012	Amount	2.00				
			N reports	3				
2015		Amount	0.04					
		N reports	1					
2016		Amount	0.11					
		N reports	2					

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Pitkin	2012	Amount	23.77				NA	
		N reports	23				1	
	2013	Amount	2.27					
		N reports	4					
	2014	Amount	3.52			6.00		
		N reports	12			2		
	2015	Amount	7.49			8.00		
		N reports	8			1		
	2016	Amount	3.00			4.00		
		N reports	2			2		
	2017	Amount	15.42			7.00		
		N reports	4			3		
	Prowers	2012	Amount	234.52				
			N reports	77				
2013		Amount	102.69					
		N reports	29					
2014		Amount	480.99	0.03				
		N reports	24	1				
2015		Amount	1.18					
		N reports	3					
2016		Amount	225.16	0.10				
		N reports	2	1				
2017		Amount	0.04					
		N reports	1					
Pueblo		2012	Amount	571.51		2.00	14150.00	NA
			N reports	63		2	2	2
	2013	Amount	78.97			59.00		
		N reports	53			2		
	2014	Amount	543.50			0.04		
		N reports	56			1		
	2015	Amount	313.70			177.00	NA	
		N reports	73			8	2	
	2016	Amount	2383.76	1.00	261.00	2889.00	NA	
		N reports	80	1	5	19	1	
	2017	Amount	843.51	2969.60	121.00	582.27	NA	
		N reports	64	1	8	5	1	

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Rio Blanco	2012	Amount	18.54					
		N reports	18					
	2013	Amount	0.15					
		N reports	3					
	2014	Amount	4.77					
		N reports	13					
	2015	Amount	1.62					
		N reports	9					
	2016	Amount	0.07					
		N reports	1					
	2017	Amount	2.09					
		N reports	2					
	Rio Grande	2012	Amount	201.31		4.00		
			N reports	28		1		
2013		Amount	2.17					
		N reports	3					
2014		Amount	0.28					
		N reports	1					
2015		Amount	7.75					
		N reports	6					
2016		Amount	0.22		10.00			
		N reports	4		1			
2017		Amount	6.13		11.00			
		N reports	4		4			
Routt		2012	Amount	10.42			1.00	NA
			N reports	60			1	1
	2013	Amount	20.51					
		N reports	28					
	2014	Amount	12.41		1.00			
		N reports	29		1			
	2015	Amount	112.84					
		N reports	30					
	2016	Amount	28.67					
		N reports	30					
	2017	Amount	17.85					
		N reports	39					



Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report
Saguache	2012	Amount	14.61				
		N reports	6				
	2014	Amount	0.62				
		N reports	2				
	2015	Amount	4.10				
		N reports	3				
	2016	Amount	1.00				
		N reports	1				
	2017	Amount	3.10				36.00
		N reports	3				4
San Juan	2012	Amount	0.25				
		N reports	1				
San Miguel	2012	Amount	2.32				
		N reports	10				
	2015	Amount	0.12				
		N reports	2				
Sedgwick	2012	Amount	1.00				
		N reports	1				
	2013	Amount	2.00				
		N reports	2				
	2014	Amount	0.20				
		N reports	1				
Summit	2012	Amount	40.56	1536.00	93.30		
		N reports	70	1	13		
	2013	Amount	8.70		5.00		
		N reports	14		5		
	2014	Amount	0.56		1.00		
		N reports	3		1		
	2015	Amount	0.54		13.00		
		N reports	3		10		
	2016	Amount	3.14		22.00		
		N reports	7		10		
	2017	Amount	0.60		10.00		
		N reports	6		6		

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report	
Teller	2012	Amount	40.85		1.00			
		N reports	49		1			
	2013	Amount	9.76					
		N reports	42					
	2014	Amount	1087.08					
		N reports	31					
	2015	Amount	129.24	5.89				
		N reports	19	1				
	2016	Amount	145.11					
		N reports	15					
	2017	Amount	596.90			41.00		
		N reports	22			1		
	Washington	2012	Amount	20.58				
			N reports	18				
2013		Amount	0.30					
		N reports	2					
2015		Amount	0.00					
		N reports	1					
2016		Amount	32.07					
		N reports	4					
2017		Amount	368.00					
		N reports	1					
Weld		2012	Amount	973.01	1.00	9.00	315.00	NA
			N reports	529	1	4	6	3
	2013	Amount	843.99		2.00	149.00		
		N reports	315		1	4		
	2014	Amount	188.27		7.00	14.00		
		N reports	320		4	2		
	2015	Amount	424.07		1.00	211.00		
		N reports	261		1	1		
	2016	Amount	4009.36		31.20	1583.00		
		N reports	288		6	7		
	2017	Amount	5835.83	0.10	92.00	1464.00		
		N reports	224	1	6	5		
	Yuma	2012	Amount	0.00			14.00	
			N reports	2			1	

Appendix E, Table 15. Marijuana seized by law enforcement, by measurement type and county, 2012–2017

County			Weight- Ounces	Volume- Fluid Ounces	Dosage units	Plants	No report
Total	2012	Amount	123144.33	1911.73	1631.82	28283.55	NA
		N reports	11762	12	169	115	398
	2013	Amount	53823.42	113.92	431.00	1228.00	NA
		N reports	5183	2	50	26	555
	2014	Amount	48162.52	103.45	31131.35	2839.74	NA
		N reports	5077	3	60	22	772
	2015	Amount	81654.96	7675.87	592.42	4000.00	NA
		N reports	4623	10	90	21	900
	2016	Amount	82325.29	767.21	8778.82	10076.00	NA
		N reports	4614	14	130	64	582
	2017	Amount	165707.19	89847.62	5242.99	25254.73	NA
		N reports	4888	11	199	95	399

Source: Colorado Bureau of Investigation, National Incident-Based Reporting System, analyzed by the Division of Criminal Justice.

APPENDIX F: COURT FILINGS

Appendix F, Table 16. Marijuana court filings, by age group, 2008-2017

Age group	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
10-17 years old										
Total cases	1,754	1,616	1,640	1,544	1,624	1,492	1,532	1,766	1,496	1,607
Total charges	2,463	1,942	1,757	1,631	1,720	1,588	1,767	2,213	1,969	2,048
<i>Charge law class</i>										
Felony	204	216	170	127	123	104	30	24	31	20
Misdemeanor	113	98	94	73	64	102	201	143	100	149
Petty offense	2,146	1,628	1,493	1,431	1,533	1,380	1,499	2,013	1,815	1,862
Traffic	0	0	0	0	0	2	36	33	23	17
Unknown	0	0	0	0	0	0	1	0	0	0
<i>Charge category</i>										
Conspiracy	9	12	14	14	12	4	7	3	6	6
Manufacture	10	7	10	8	2	6	0	5	2	1
Distribution	56	80	59	64	58	67	77	40	27	51
Possession with intent	99	93	73	43	40	47	40	43	54	49
Possession	1,542	1,455	1,512	1,455	1,537	1,389	1,076	430	201	186
Public consumption	61	85	88	49	71	73	71	31	8	16
Possession under 21	0	0	0	0	0	0	460	1,628	1,648	1,719
Other	686	212	1	0	0	0	0	0	0	0
Possession- consumption in vehicle	0	0	0	0	0	2	36	33	23	20
18-20 years old										
Total cases	3,093	2,785	2,451	2,456	2,381	1,491	1,579	1,610	1,621	1,710
Total charges	4,769	3,659	2,685	2,622	2,548	1,627	1,847	2,048	2,112	2,280
<i>Charge law class</i>										
Felony	412	452	329	197	179	132	56	77	60	89
Misdemeanor	286	249	224	201	183	148	168	99	96	112
Petty offense	4,071	2,957	2,132	2,223	2,186	1,330	1,419	1,687	1,807	1,922
Traffic	0	0	0	0	0	17	203	185	149	157
Unknown	0	1	0	1	0	0	1	0	0	0
<i>Charge category</i>										
Conspiracy	14	36	38	19	11	6	5	9	11	13
Manufacture	43	39	22	26	26	10	8	5	4	15
Distribution	90	109	83	63	67	47	52	47	33	35
Possession with intent	181	189	126	73	65	60	31	46	40	53
Possession	2,619	2,623	2,380	2,373	2,322	1,412	1,193	443	256	238
Public consumption	21	28	32	66	53	71	88	43	23	21
Possession under 21	0	0	0	0	0	3	266	1,269	1,595	1,744
Other	1,801	636	4	1	3	1	1	1	1	2
Possession- consumption in vehicle	0	0	0	1	1	17	203	185	149	159

Appendix F, Table 16. Marijuana court filings, by age group, 2008-2017

Age group	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
21 years or older										
Total cases	6,880	6,484	6,002	5,777	5,901	1,049	1,502	1,548	1,786	1,949
Total charges	10,910	8,594	7,059	6,850	6,952	1,601	1,894	2,250	2,790	3,074
<i>Charge law class</i>										
Felony	1,620	1,576	1,602	1,459	1,396	843	609	1,061	1,546	1,833
Misdemeanor	805	815	736	670	680	341	319	331	401	322
Petty offense	8,484	6,201	4,720	4,721	4,873	342	193	203	187	244
Traffic	0	0	0	0	0	75	772	653	655	675
Unknown	1	2	1	0	3	0	1	2	1	0
<i>Charge category</i>										
Conspiracy	72	94	126	175	145	109	59	94	160	212
Manufacture	266	284	432	426	439	143	133	311	554	619
Distribution	293	251	313	301	311	280	176	230	289	298
Possession with intent	543	541	443	426	359	221	213	375	513	628
Possession	6,467	6,322	5,673	5,439	5,600	671	387	421	426	413
Public consumption	26	39	55	79	82	97	151	137	134	193
Possession under 21	0	0	0	0	0	0	2	25	55	32
Other	3,243	1,064	18	4	7	4	0	1	2	2
Possession- consumption in vehicle	0	0	0	0	9	76	773	656	657	677

Source: Colorado State Judicial Branch, analyzed by the Division of Criminal Justice.

Note: The Denver County Court, which handles misdemeanors and petty offenses in the City and County of Denver, does not report filings to the State Judicial Branch.

Appendix F, Table 17. Marijuana court filings, by gender, 2008-2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Female										
Total cases	1965	1792	1726	1719	1787	706	859	1013	960	1129
Total charges	3020	2294	1896	1873	1936	803	989	1303	1285	1519
<i>Charge law class</i>										
Felony	269	285	247	199	192	126	60	174	210	293
Misdemeanor	199	191	180	155	135	88	96	82	116	108
Petty offense	2552	1816	1469	1519	1609	560	635	875	793	947
Traffic	0	0	0	0	0	29	198	172	166	171
<i>Charge category</i>										
Conspiracy	10	29	20	17	16	22	8	16	31	35
Manufacture	53	60	59	61	62	30	16	59	65	89
Distribution	48	59	50	54	44	43	39	54	65	72
Possession with intent	88	82	76	54	55	27	26	57	76	106
Possession	1786	1715	1662	1640	1708	614	484	241	154	161
Public consumption	28	33	26	46	49	37	58	40	27	50

Appendix F, Table 17. Marijuana court filings, by gender, 2008–2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Possession under 21	0	0	0	0	0	0	160	664	700	835
Other	1007	316	3	1	1	1	0	0	0	0
Possession- consumption in vehicle	0	0	0	0	1	29	198	172	167	171
Male										
Total cases	9748	9085	8348	8048	8114	3315	3724	3888	3933	4125
Total charges	15099	11898	9580	9216	9276	4001	4482	5181	5576	5868
<i>Charge law class</i>										
Felony	1957	1957	1845	1580	1502	953	630	986	1423	1645
Misdemeanor	999	968	873	785	790	502	591	490	479	474
Petty offense	12142	8968	6860	6848	6981	2481	2468	3010	3018	3072
Traffic	0	0	0	0	0	65	790	693	655	677
Unknown	1	3	1	1	3	0	3	2	1	0
<i>Charge category</i>										
Conspiracy	85	113	156	191	152	97	63	90	146	195
Manufacture	264	270	404	395	403	129	125	260	495	545
Distribution	389	381	400	374	391	351	261	263	281	311
Possession with intent	731	740	566	488	408	301	258	407	529	623
Possession	8829	8679	7885	7615	7748	2847	2165	1047	728	674
Public consumption	80	119	149	148	156	203	253	172	138	180
Possession under 21	0	0	0	0	0	3	565	2244	2600	2652
Other	4721	1596	20	4	9	4	1	2	3	4
Possession- consumption in vehicle	0	0	0	1	9	66	791	696	656	684

Source: Colorado State Judicial Branch, analyzed by the Division of Criminal Justice.

Note: The Denver County Court, which handles misdemeanors and petty offenses in the City and County of Denver, does not report filings to the State Judicial Branch. Felony filings from Denver District Court are included in these data.

Appendix F, Table 18. Marijuana court filings, by judicial district and charge category, 2008–2017

Judicial District	Charge category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	Total cases	1,355	1,194	1,238	1,255	1,094	434	598	478	491	543
	Total charges	603	502	410	267	319	304	241	488	423	668
	Conspiracy	7	14	53	114	46	30	18	1	9	14
	Manufacture	39	41	80	50	34	58	7	13	32	29
	Distribution	39	34	80	98	57	77	47	34	23	22
	Possession with intent	90	91	106	127	45	26	25	40	46	43
	Possession	1,303	1,158	1,173	1,162	1,065	378	317	136	86	70
	Public consumption	4	12	14	18	15	5	11	5	10	10
	Possession under 21	0	0	0	0	0	0	127	308	411	499
	Other	680	238	6	0	0	1	1	0	0	0
	Possession-consumption in vehicle	0	0	0	0	0	3	179	76	56	64
	2	Total cases	333	261	219	143	163	117	113	139	167
Total charges		2,162	1,588	1,512	1,569	1,262	578	732	613	673	751
Conspiracy		23	18	17	6	11	43	23	70	33	90
Manufacture		36	22	20	33	31	16	34	149	117	200
Distribution		99	86	81	56	77	74	26	77	59	118
Possession with intent		184	162	147	87	89	93	71	137	146	182
Possession		259	213	145	85	110	77	87	50	67	70
Public consumption		1	0	0	0	1	1	0	0	0	2
Possession under 21		0	0	0	0	0	0	0	5	1	6
Other		1	1	0	0	0	0	0	0	0	0
3	Total cases	86	108	117	122	114	49	43	42	51	78
	Total charges	120	123	117	123	133	62	48	55	69	124
	Conspiracy	0	0	0	0	0	0	0	2	0	0
	Manufacture	3	0	6	2	15	1	2	4	10	27
	Distribution	0	0	0	0	1	10	0	10	4	0
	Possession with intent	2	3	0	1	8	1	3	3	9	26
	Possession	72	106	111	118	96	37	13	9	8	13
	Public consumption	0	0	0	1	6	7	0	2	2	0
	Possession under 21	0	0	0	0	0	0	5	17	22	44
	Other	43	14	0	1	7	1	0	0	0	0
Possession-consumption in vehicle	0	0	0	0	0	5	25	8	14	14	
4	Total cases	1651	1346	1288	1045	962	424	646	625	534	616
	Total charges	2,372	1,657	1,414	1,145	1,091	477	736	751	657	813
	Conspiracy	8	8	26	6	17	11	6	1	12	14
	Manufacture	34	35	62	84	89	6	12	15	27	56
	Distribution	63	62	44	29	42	42	25	12	19	45
	Possession with intent	64	63	51	58	56	19	15	17	45	84

Appendix F, Table 18. Marijuana court filings, by judicial district and charge category, 2008–2017

Judicial District	Charge category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Possession	1,498	1,260	1,213	948	864	349	276	122	103	80
	Public consumption	3	6	16	19	18	17	104	37	34	25
	Possession under 21	0	0	0	0	0	0	133	399	267	352
	Other	702	223	2	1	1	0	0	0	1	0
	Possession-consumption in vehicle	0	0	0	0	4	33	165	148	149	157
5	Total cases	589	466	405	371	551	167	224	241	221	209
	Total charges	979	644	454	408	593	190	258	315	289	261
	Conspiracy	2	3	4	2	2	3	1	1	1	1
	Manufacture	6	4	9	5	20	1	17	12	5	4
	Distribution	9	23	7	12	9	11	5	12	11	11
	Possession with intent	7	16	9	9	2	15	2	8	12	3
	Possession	549	471	422	371	549	143	112	60	28	17
	Public consumption	1	2	3	9	11	15	25	16	6	2
	Possession under 21	0	0	0	0	0	0	21	119	142	134
	Other	405	125	0	0	0	0	0	0	0	0
	Possession-consumption in vehicle	0	0	0	0	0	2	75	87	84	89
6	Total cases	132	114	114	149	98	16	32	37	42	37
	Total charges	201	150	122	152	105	16	34	47	51	45
	Conspiracy	2	0	1	0	0	0	0	0	0	0
	Manufacture	2	1	3	0	1	0	0	0	0	0
	Distribution	2	4	4	0	8	0	1	4	2	1
	Possession with intent	8	4	3	2	5	0	0	3	0	4
	Possession	121	109	108	150	89	16	11	8	2	1
	Public consumption	0	2	2	0	2	0	0	4	1	2
	Possession under 21	0	0	0	0	0	0	7	9	21	27
	Other	66	30	1	0	0	0	0	0	0	0
	Possession-consumption in vehicle	0	0	0	0	0	0	15	19	25	10
7	Total cases	327	283	299	282	245	104	135	139	215	190
	Total charges	477	351	313	293	264	108	164	167	250	226
	Conspiracy	1	5	1	0	0	1	0	0	0	0
	Manufacture	6	10	9	6	5	4	4	7	14	3
	Distribution	2	6	4	0	4	3	4	2	6	2
	Possession with intent	7	5	8	3	4	0	3	3	8	3
	Possession	295	280	283	283	249	89	60	19	19	36
	Public consumption	4	3	8	1	1	10	12	5	7	6
	Possession under 21	0	0	0	0	0	0	22	78	131	134
	Other	162	42	0	0	0	0	0	0	0	0
	Possession-consumption in vehicle	0	0	0	0	1	1	59	53	65	42

Appendix F, Table 18. Marijuana court filings, by judicial district and charge category, 2008–2017

Judicial District	Charge category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
8	Total cases	950	740	786	832	903	436	399	425	400	365
	Total charges	1,442	925	862	905	956	479	420	510	492	433
	Conspiracy	2	1	6	7	7	10	0	2	5	2
	Manufacture	40	16	36	30	20	14	2	14	19	8
	Distribution	23	31	14	22	7	26	14	10	17	7
	Possession with intent	40	34	37	27	28	10	8	26	21	17
	Possession	735	652	748	802	856	355	268	97	72	51
	Public consumption	26	27	19	17	37	55	45	36	29	25
	Possession under 21	0	0	0	0	0	0	56	293	304	295
	Other	576	164	2	0	1	0	0	0	0	0
	Possession-consumption in vehicle	0	0	0	0	0	9	27	32	25	28
	9	Total cases	277	302	248	236	280	97	131	159	157
Total charges		484	387	281	269	312	107	156	201	192	175
Conspiracy		1	0	5	4	0	0	0	2	0	0
Manufacture		8	4	3	9	3	0	0	2	4	0
Distribution		7	11	21	21	20	10	11	12	3	7
Possession with intent		18	13	9	10	10	9	2	3	4	9
Possession		261	295	242	221	272	85	76	25	10	9
Public consumption		3	2	0	4	7	1	12	5	3	2
Possession under 21		0	0	0	0	0	0	20	93	115	100
Other		186	62	1	0	0	0	0	0	0	1
Possession-consumption in vehicle		0	0	0	0	0	2	35	59	53	47
10		Total cases	235	283	247	201	191	75	110	114	143
	Total charges	334	349	283	214	214	92	119	147	215	180
	Conspiracy	5	1	0	1	1	0	0	1	13	13
	Manufacture	7	5	8	8	7	9	1	3	63	32
	Distribution	2	2	15	4	15	4	3	15	8	8
	Possession with intent	22	26	7	4	5	4	7	25	40	28
	Possession	233	277	252	196	182	62	47	55	30	23
	Public consumption	1	1	1	1	3	2	2	5	0	3
	Possession under 21	0	0	0	0	0	0	2	25	35	61
	Other	64	37	0	0	0	2	0	0	0	0
	Possession-consumption in vehicle	0	0	0	0	1	9	57	18	26	12
	11	Total cases	340	303	177	183	208	62	116	115	107
Total charges		531	380	194	209	222	67	133	138	127	121
Conspiracy		8	0	0	0	1	0	1	2	0	0
Manufacture		9	7	3	9	5	1	3	12	14	7
Distribution		1	8	10	8	4	2	5	7	2	7

Appendix F, Table 18. Marijuana court filings, by judicial district and charge category, 2008–2017

Judicial District	Charge category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Possession with intent	5	11	5	9	3	0	4	1	3	5
	Possession	324	295	175	178	201	57	57	20	12	5
	Public consumption	2	4	1	5	8	6	8	1	15	1
	Possession under 21	0	0	0	0	0	0	18	78	56	66
	Other	182	55	0	0	0	0	0	0	0	0
	Possession-consumption in vehicle	0	0	0	0	0	1	37	17	25	30
12	Total cases	226	300	177	131	108	27	54	76	67	65
	Total charges	353	373	180	142	112	29	61	103	89	97
	Conspiracy	1	3	0	2	1	0	0	4	4	6
	Manufacture	1	2	0	2	1	2	0	3	3	22
	Distribution	16	7	0	4	1	0	3	8	2	2
	Possession with intent	1	5	2	1	2	1	6	1	9	8
	Possession	212	293	177	132	107	23	26	37	18	10
	Public consumption	3	1	1	1	0	0	1	2	1	0
	Possession under 21	0	0	0	0	0	0	3	31	44	36
	Other	119	62	0	0	0	0	0	0	0	0
	Possession-consumption in vehicle	0	0	0	0	0	3	22	17	8	13
13	Total cases	254	280	232	206	206	78	105	133	128	131
	Total charges	400	358	268	255	229	95	124	165	173	168
	Conspiracy	1	5	2	4	0	2	1	0	0	3
	Manufacture	3	0	1	2	5	0	0	3	3	9
	Distribution	4	3	3	5	1	3	5	7	5	8
	Possession with intent	6	18	19	23	10	12	4	12	8	8
	Possession	242	284	241	213	208	78	59	59	45	52
	Public consumption	2	2	2	8	2	0	2	1	0	1
	Possession under 21	0	0	0	0	0	0	18	41	76	56
	Other	142	46	0	0	1	0	0	0	0	0
	Possession-consumption in vehicle	0	0	0	0	2	0	35	42	36	31
14	Total cases	282	324	293	298	299	94	104	141	133	130
	Total charges	461	434	306	315	315	104	129	188	195	175
	Conspiracy	2	11	0	0	0	0	1	0	0	2
	Manufacture	4	12	3	4	6	3	0	1	1	0
	Distribution	13	10	4	4	2	2	4	6	12	11
	Possession with intent	10	15	5	7	3	7	3	2	5	4
	Possession	255	329	292	298	298	84	32	12	7	3
	Public consumption	5	0	2	2	6	3	1	5	4	0
	Possession under 21	0	0	0	0	0	0	70	145	154	131
	Other	172	57	0	0	0	0	0	0	0	0

Appendix F, Table 18. Marijuana court filings, by judicial district and charge category, 2008–2017

Judicial District	Charge category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Possession-consumption in vehicle	0	0	0	0	0	5	18	17	12	24
15	Total cases	90	103	79	61	86	33	33	52	37	27
	Total charges	150	135	86	68	88	43	42	63	43	31
	Conspiracy	0	0	0	0	0	2	0	0	0	0
	Manufacture	0	2	2	4	0	0	2	3	0	2
	Distribution	6	1	3	0	0	4	5	7	6	3
	Possession with intent	6	4	5	8	3	8	1	7	4	2
	Possession	87	99	75	56	85	29	19	6	5	4
	Possession under 21	0	0	0	0	0	0	3	32	16	13
	Other	51	29	1	0	0	0	0	0	0	0
	Possession-consumption in vehicle	0	0	0	0	0	0	12	8	12	7
16	Total cases	63	73	40	52	57	12	30	53	26	50
	Total charges	97	95	40	56	57	12	33	62	38	60
	Conspiracy	0	0	0	0	0	0	1	0	8	0
	Manufacture	3	2	0	2	1	0	0	0	0	4
	Distribution	15	0	0	1	1	0	1	1	9	0
	Possession with intent	5	5	2	2	0	0	0	0	1	8
	Possession	51	68	38	51	55	10	10	7	3	5
	Public consumption	0	2	0	0	0	2	0	0	0	0
	Possession under 21	0	0	0	0	0	0	13	46	12	32
	Other	23	18	0	0	0	0	0	0	0	0
	Possession-consumption in vehicle	0	0	0	0	0	0	8	8	5	11
17	Total cases	975	985	1106	1175	1263	391	346	314	296	289
	Total charges	1,500	1,272	1,285	1,367	1,569	454	401	369	389	359
	Conspiracy	7	22	33	14	34	0	6	2	6	1
	Manufacture	28	49	105	124	170	16	17	6	30	30
	Distribution	27	37	32	52	70	38	30	14	17	25
	Possession with intent	71	74	77	58	74	33	22	28	44	45
	Possession	936	958	1,036	1,112	1,215	353	232	143	97	99
	Public consumption	7	3	1	6	6	9	15	18	10	10
	Possession under 21	0	0	0	0	0	0	15	106	139	101
	Other	424	129	1	1	0	0	0	0	0	0
	Possession-consumption in vehicle	0	0	0	0	0	5	64	52	46	48
18	Total cases	1243	1233	1105	1095	1142	574	549	731	787	850
	Total charges	1,839	1,554	1,252	1,199	1,270	650	675	978	1,280	1,308
	Conspiracy	10	36	15	20	38	10	10	16	68	67
	Manufacture	28	69	82	47	23	15	28	45	152	128
	Distribution	24	48	55	41	57	43	26	44	82	62

Appendix F, Table 18. Marijuana court filings, by judicial district and charge category, 2008–2017

Judicial District	Charge category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Possession with intent	143	118	68	35	59	34	45	65	121	119
	Possession	1,130	1,128	991	1,003	1,054	523	402	188	124	132
	Public consumption	14	23	34	50	39	19	32	16	10	5
	Possession under 21	0	0	0	0	0	2	70	509	657	687
	Other	490	132	7	2	0	0	0	0	0	1
	Possession-consumption in vehicle	0	0	0	1	0	4	62	95	66	107
19	Total cases	552	597	570	500	517	346	385	352	330	352
	Total charges	778	725	616	526	562	377	436	462	471	493
	Conspiracy	7	4	4	3	3	0	1	0	0	11
	Manufacture	6	6	12	3	11	8	1	5	25	28
	Distribution	25	24	19	12	14	9	21	8	9	15
	Possession with intent	16	32	29	14	14	19	22	37	30	39
	Possession	509	565	535	487	512	326	269	112	69	49
	Public consumption	10	17	17	7	6	8	9	8	3	4
	Possession under 21	0	0	0	0	0	1	66	256	306	318
	Other	205	77	0	0	0	0	0	0	1	0
	Possession-consumption in vehicle	0	0	0	0	2	6	47	36	28	29
20	Total cases	941	839	711	812	807	280	165	264	289	303
	Total charges	1,533	1,222	815	923	871	323	215	326	384	398
	Conspiracy	8	11	7	14	4	4	2	2	3	2
	Manufacture	50	30	11	13	9	2	0	11	10	24
	Distribution	47	30	40	29	20	24	54	15	21	17
	Possession with intent	76	78	23	28	14	10	11	13	11	26
	Possession	784	838	721	804	792	212	94	56	39	39
	Public consumption	4	13	12	35	32	67	13	17	12	18
	Possession under 21	0	0	0	0	0	0	18	174	222	199
	Other	564	222	1	0	0	1	0	2	0	1
	Possession-consumption in vehicle	0	0	0	0	0	3	23	36	66	72
21	Total cases	768	715	592	554	519	201	255	272	219	391
	Total charges	1,240	930	642	629	583	254	306	356	308	509
	Conspiracy	1	0	4	11	3	10	0	6	16	12
	Manufacture	5	13	8	23	11	11	11	21	35	34
	Distribution	9	6	18	29	28	19	14	14	28	20
	Possession with intent	34	41	30	34	30	27	27	36	35	76
	Possession	718	689	539	522	505	170	170	68	30	62
	Public consumption	18	31	42	10	6	13	19	28	17	115
	Possession under 21	0	0	0	0	0	0	28	145	123	173
	Other	455	150	1	0	0	0	0	0	1	1

Appendix F, Table 18. Marijuana court filings, by judicial district and charge category, 2008–2017

Judicial District	Charge category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Possession-consumption in vehicle	0	0	0	0	0	4	37	38	23	16
22	Total cases	84	53	65	88	110	24	46	32	73	67
	Total charges	127	68	66	89	111	24	52	40	83	82
	Conspiracy	0	0	0	0	0	0	0	0	1	5
	Manufacture	2	1	1	0	0	2	0	0	0	14
	Distribution	7	7	1	1	0	0	1	4	6	7
	Possession with intent	8	5	1	0	0	0	3	3	7	6
	Possession	77	50	63	87	111	21	22	6	9	7
	Public consumption	0	1	0	1	0	1	0	1	2	0
	Possession under 21	0	0	0	0	0	0	16	18	52	38
	Other	33	4	0	0	0	0	0	0	0	0
	Possession-consumption in vehicle	0	0	0	0	0	0	10	8	6	5

Source: Colorado State Judicial Branch, analyzed by the Division of Criminal Justice.

Note: The Denver County Court, which handles misdemeanors and petty offenses in the City and County of Denver, does not report filings to the State Judicial Branch. Felony filings from Denver District Court are included in these data.

**APPENDIX G:
CERTIFIED DRUG RECOGNITION EXPERTS, BY AGENCY**

Appendix G, Table 19. Certified drug recognition experts, by agency, June 2018

Agency	N certified
Adams County Sheriff's Office	1
Alamosa Police Department	1
Arapahoe County Sheriff's Office	3
Arvada Police Department	2
Auraria Police Department	1
Aurora Police Department	7
Avon Police Department	1
Basalt Police Department	1
Black Hawk Police Department	1
Boulder County Sheriff's Office	1
Boulder Police Department	1
Breckenridge Police Department	1
Brighton Police Department	1
Broomfield Police Department	1
Buena Vista Police Department	1
Canon City Police Department	1
Carbondale Police Department	1
Castle Rock Police Department	1
Clear Creek County Sheriff's Office	1
Colorado Mental Health Institute	1
Colorado Springs Police Department	6
Colorado State Patrol	61
Colorado State University Police	1
Commerce City Police Department	2
Denver Police Department	27
Douglas County Sheriff's Office	2
Eagle County Sheriff's Office	2
El Paso County Sheriff's Office	1
Elbert County Sherriff's Office	1
Englewood Police Department	2
Fort Collins Police Services	2
Fort Lupton Police Department	1
Fountain Police Department	4
Fraser Winter Park Police Department	1
Frederick Police Department	1
Fremont County Sheriff's Office	1
Garfield County Sheriff's Office	2
Gilpin County Sheriff's Office	1
Glenwood Springs Police Department	2
Grand Junction Police Department	2

Appendix G, Table 19. Certified drug recognition experts, by agency, June 2018

Agency	N certified
Greeley Police Department	2
Greenwood Village Police Department	1
Gunnison County Sherriff's Office	1
Gunnison Police Department	1
Jefferson County Sheriff's Office	1
Lafayette Police Department	3
Lakewood Police Department	2
Larimer County Sheriff's Office	1
Logan County Sheriff's Office	1
Longmont Police Department	5
Loveland Police Department	5
Montezuma County Sheriff's Office	1
Montrose Police Department	1
Northglenn Police Department	2
Oak Creek Police Department	1
Pagosa Springs Police Department	1
Parachute Police Department	1
Park County Sheriff's Office	1
Parker Police Department	4
Pitkin County Sheriff's Office	1
Pueblo County Sheriff's Office	3
Pueblo Police Department	2
Rangely Police Department	1
Rifle Police Department	1
Salida Police Department	1
San Miguel County Sheriff's Office	1
Steamboat Springs Police Department	2
Sterling Police Department	1
Telluride Marshal's Office	1
Thornton Police Department	6
U.S. Air Force Academy 10 Security Forces Squadron	1
Vail Police Department	2
Weld County Sheriff's Office	1
Westminster Police Department	2
Wheat Ridge Police Department	1
Woodland Park Police Department	1
Grand Total	214

Source: Colorado Department of Transportation, Drug Recognition Experts Program.

**APPENDIX H:
MARIJUANA BUSINESS LICENSEES, BY COUNTY**

Appendix H, Table 20. Licensed retail marijuana businesses, by license type and county, May 2018

County	Retail grow	Retail MIP	Retail operator	Retail store	Retail testing facility	Retail transporter	Total retail
Adams	19	21	2	24	1		67
Alamosa							0
Arapahoe	14	10	1	30			55
Archuleta	7			5			12
Boulder	60	25		54	1		140
Chaffee	4	1		3			8
Clear Creek	10	5		9			24
Conejos	3			3			6
Costilla	8			4			12
Crowley	8	1					9
Custer	1						1
Denver	232	107	3	182	6	7	537
Eagle	7	3		7			17
El Paso	1	1	1	2		1	6
Fremont							0
Garfield	14	9		20	2		45
Gilpin	1			7			8
Grand	1	2		5			8
Gunnison	8	4		11			23
Huerfano	19	1		2			22
Jefferson	5	7		12	1		25
La Plata	9	3		11	2		25
Lake	6	1		3			10
Larimer	14	7		12			33
Las Animas	18	8		23			49
Mesa	3	2		7			12
Moffatt	1			2			3
Montezuma	4	1		9			14
Montrose	5						5
Morgan	4	4		3			11
Otero	1						1
Ouray	3			3			6
Park	11	4		6			21
Pitkin	2	2		7			11
Pueblo	167	32	1	32		2	234
Routt	14	8		4			26
Saguache	42	11	1	4			58
San Juan	1			2			3
San Miguel	4	3		5			12
Sedgwick	1			1			2
Summit	4	1		10			15
Teller							0
Weld	6	3		5			14
Total	742	287	9	529	13	10	1590

Source: Colorado Department of Revenue, Marijuana Enforcement Division. MED Licensee Information, at <https://www.colorado.gov/pacific/enforcement/med-licensee-information>

Appendix H, Table 21. Licensed medical marijuana businesses, by license type and county, May 2018

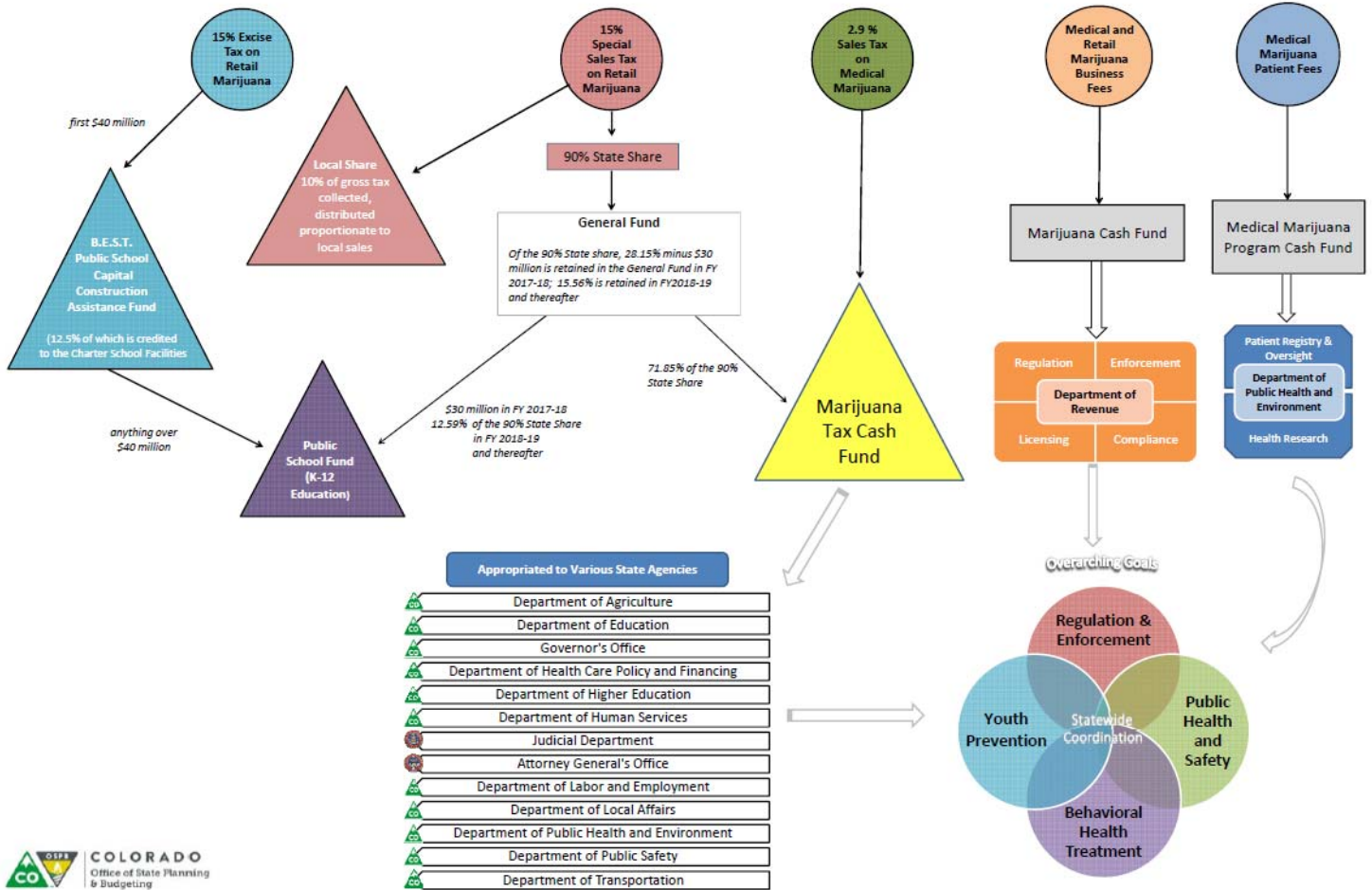
County	Medical Center	Medical Grow	Medical MIP	Medical Operator	Medical Testing Facility	Medical Transporter	Total medical
Adams	9	5	8	2	1		25
Alamosa	2						2
Arapahoe	9	2		1			12
Archuleta	1	1					2
Boulder	26	31	18		1		76
Chaffee	1	1	1				3
Clear Creek	4	4	4	1			13
Conejos							0
Costilla	2	3					5
Crowley		2	1				3
Custer							0
Denver	199	369	108	2	5	6	689
Eagle	5	3	1				9
El Paso	134	179	50			1	364
Fremont	4	24	1				29
Garfield	8	8	4				20
Gilpin	1						1
Grand	1	1	2				4
Gunnison	1						1
Huerfano	1	1	1				3
Jefferson	20	7	7		1		35
La Plata	4	4	2		2		12
Lake							0
Larimer	15	15	5				35
Las Animas	5	5	4				14
Mesa	1	1	1				3
Moffatt	1						1
Montezuma	3	2	1				6
Montrose	2	2					4
Morgan	1	2	3				6
Otero	1						1
Ouray	1	2					3
Park	1	1	3				5
Pitkin	4	2	1				7
Pueblo	18	35	15			1	69
Routt	3	9	4				16
Saguache	1	5	4				10
San Juan							0
San Miguel	1	1	3				5
Sedgwick	1	1					2
Summit	3	2					5
Teller	1	2					3
Weld	3	3	2				8
Total	498	735	254	6	10	8	1511

Source: Colorado Department of Revenue, Marijuana Enforcement Division. MED Licensee Information, at <https://www.colorado.gov/pacific/enforcement/med-licensee-information>

**APPENDIX I:
DISTRIBUTION OF MARIJUANA TAX AND FEE REVENUE, FY 2017-18 FLOWCHART**

Appendix I, Figure 1. Distribution of marijuana tax and fee revenue beginning in FY 2017–18

Distribution of Marijuana Tax and Fee Revenue Beginning in FY 2017-18 (Beginning July 1, 2017)



Source: Governor's Office of State Planning and Budget.



COLORADO
Division of Criminal Justice
Department of Public Safety



COLORADO
Division of Criminal Justice
Department of Public Safety

Office of Research and Statistics
Division of Criminal Justice
Colorado Department of Public Safety
700 Kipling Street, Suite 1000
Lakewood, CO 80215
<https://www.colorado.gov/pacific/dcj-ors>

