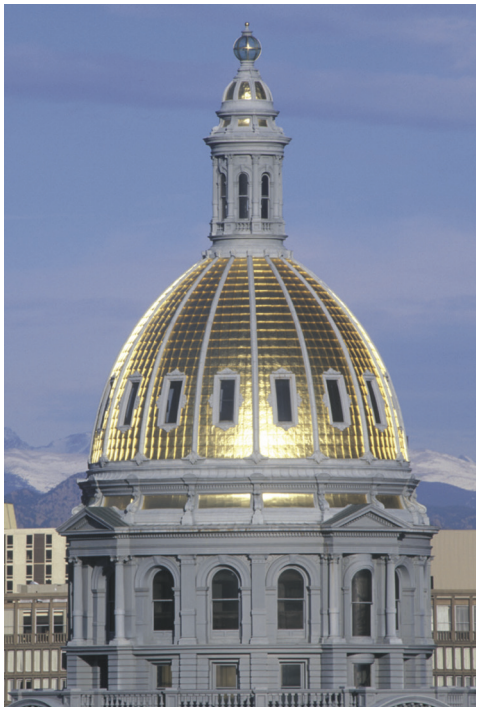
COLORADO OFFICE OF THE STATE AUDITOR

Marijuana Enforcement Division
Colorado Department of Revenue
Colorado State Public Health Laboratory
Colorado Department of Public Health & Environment

Marijuana Consumer Safety

Performance Audit
September 2026
2553P


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September 23, 2026

Members of the Legislative Audit Committee:

This report contains the results of a performance audit of the Department of Revenue's Marijuana Enforcement Division's and the Colorado Department of Public Health & Environment's enforcement activities related to ensuring marijuana consumer safety. The audit was conducted pursuant to Section 2-3-108, C.R.S., which requires the State Auditor to conduct a special audit requested by a member of the General Assembly or the Governor, when approved by a majority vote of the Legislative Audit Committee. The Legislative Audit Committee approved this audit in response to a legislative request, which expressed concerns with marijuana product quality and labelling practices, the Marijuana Enforcement Division's related enforcement activities and responsiveness to stakeholders when concerns are raised, and whether the current regulatory environment is sufficient for ensuring consumer safety. The report presents our findings, conclusions, and recommendations, and the responses of the Marijuana Enforcement Division and the Colorado Department of Public Health & Environment.

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Contents

Report Highlights 1

Chapter 1
Overview of Marijuana Safety Oversight 3

Marijuana Legalization and Consumption Trends 3
Responsible State Agencies 3
Administration 7
Revenues and Expenditures 9
Recent Legislation 11
Information Systems 12
Recent Audits 13
Audit Purpose, Scope, and Methodology 13

Chapter 2
Improvements to Marijuana Enforcement 17

Finding 1 – Marijuana Product Safety Framework 18
Recommendation 1 31

Finding 2 – Timeliness of Health and Safety Advisories 33
Recommendation 2 42

Finding 3 – Health and Safety Advisories, Distribution, Organization, and Content 44
Recommendation 3 53

Finding 4 – Case Management Information and Data Collection Practices 54
Recommendation 4 59

Finding 5 – Marijuana Testing Laboratory Inspection and Certification 61
Recommendation 5 67
Recommendation 6 69

Policy Consideration for an Enhanced Role for the State Reference Lab 70

Chapter 3
Challenges to Marijuana Enforcement 75

Federal Challenges 75
Fragmented State Oversight of Cannabis 76
Funding Impacts of a Market in Decline 78

Appendix A

Marijuana Production and Sale

Marijuana Seed-to-Sale Inventory Tracking Workflow A-1

Appendix B

Marijuana Enforcement Violations

Distribution of Marijuana Enforcement Violations B-1

Appendix C

Data on Safety Investigations

MED's Safety-Related Investigations C-1
CDPHE's Adverse Health Event Investigations C-2

Report Highlights

Marijuana Consumer Safety

Department of Revenue • Department of Public Health & Environment

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Key Concern

Overall, we found that the State has established a framework that helps provide some assurance that regulated marijuana products sold in Colorado are safe. However, we identified deficiencies and gaps in the State's marijuana product safety framework that limit its effectiveness to identify and respond to health and safety risks, which increase the risk that consumers may ultimately use contaminated products.

Key Findings

- Colorado's regulatory framework lacks a fully functional state reference lab to assist with testing marijuana products. The State's inability to provide independent and comprehensive product testing impacts its ability to effectively enforce safety requirements.

- Current rules for marijuana product testing and marijuana facility record retention, combined with the Department of Revenue's Marijuana Enforcement Division's (MED) limited and inconsistent monitoring, limit MED's ability to identify product safety risks and help ensure that licensed marijuana businesses meet product safety requirements.

- MED could take additional steps to issue Health and Safety Advisories more timely when it has identified safety issues with marijuana products and improve the effectiveness of its communications to consumers and other stakeholders to better support public safety.

- The Colorado Department of Public Health & Environment (CDPHE) should improve its oversight of the private labs that conduct routine marijuana product testing to ensure that these labs produce consistent and accurate results.

Background

- In 2012, Colorado voters passed Amendment 64 that added Section 16 to Article XVIII, authorizing personal use of marijuana, also referred to as "retail marijuana." Amendment 64 also required the State to establish a regulatory structure for retail marijuana and expressed the voters' intent that, "…marijuana should be regulated in a manner similar to alcohol…" [Colorado Const., Art. XVIII, Sec. 16(1)(b)].

- In Colorado, multiple state agencies share responsibility for marijuana consumer safety, including the Department of Revenue's MED, CDPHE's State Reference Lab, Colorado's Department of Agriculture, and the Attorney General's Office.

Audit Recommendations Made	Agency Responses		
	Agree	Partially Agree	Disagree
14	14	0	0

Chapter 1

Overview of Marijuana Safety Oversight

Marijuana Legalization and Consumption Trends

Colorado legalized marijuana through the passage of two citizen ballot initiatives that amended the Colorado Constitution. In 2000, voters passed Amendment 20 that added Section 14 to Article XVIII, authorizing the medical use of marijuana for those suffering from certain medical conditions. In 2012, voters passed Amendment 64 that added Section 16 to Article XVIII, authorizing personal use of marijuana, also referred to as "retail marijuana." Amendment 64 also required the State to establish a regulatory structure for retail marijuana and expressed the voters' intent that, "…marijuana should be regulated in a manner similar to alcohol…" [Colorado Const., Art. XVIII, Sec. 16(1)(b)].

According to the Colorado Department of Public Health & Environment's (CDPHE) 2025 health monitoring report, about 20 percent of Colorado adults responding to a 2024 CDPHE survey reported that they had used cannabis within the 30 days prior to the survey, with higher rates among younger adults (ages 18–25), males, and LGBTQ+ populations. Users also reported that smoking remained the dominant method of consumption. Given both the widespread use and potential health risks, ensuring marijuana consumer safety is considered a public health priority.

Responsible State Agencies

In Colorado, multiple state agencies share responsibility for marijuana consumer safety, including the Department of Revenue's (DOR) Marijuana Enforcement Division (MED), the State Lab within CDPHE, Colorado's Department of Agriculture (CDA), and the Attorney General's (AG) Office (Department of Law).

Marijuana Enforcement Division

MED is a division within DOR. The Executive Director of DOR, as the designated State Licensing Authority for regulated marijuana, is required to "Promulgate rules for the proper regulation and control of the cultivation, manufacture, distribution, sale, and testing of regulated marijuana and regulated marijuana products…" [Section 44-10-202(1)(c), C.R.S.]. The Executive Director has delegated day-to-day regulation and enforcement activities to MED, which promulgates rules and employs staff to conduct inspections and investigations to ensure compliance with marijuana rules and laws [1 C.C.R. 212-3, 8-105(A)]. MED has promulgated rules to regulate marijuana from seed to sale to help ensure product safety, including the following requirements that:

- Businesses submit a test batch of marijuana to a certified testing facility to be tested for potency and contaminants, including pesticides and molds, before transferring to another business or before sale [1 C.C.R. 212-3, 4-210 and 215].

- Businesses submit a test batch of marijuana without notice at random or as a result of inspection, which can be tested for potency and contaminates, including pesticides and mold, and whether they are within established thresholds for how much of each contaminant is allowed in products [1 C.C.R. 212-3, 4-205].

- MED-certified marijuana testing facilities test retail marijuana for THC potency—THC, tetrahydrocannabinol, is the principal psychoactive compound in cannabis products—[1 C.C.R. 212-3, 4-210] and for prohibited contaminants [1 C.C.R. 212-3, 4-215].

- Marijuana product be quarantined; destroyed; or in certain cases, decontaminated if it fails contamination testing [1 C.C.R. 212-3, 4-240]. Businesses may use authorized decontamination treatments, such as irradiation, to remove mold from the product, or remediation treatments, such as using chemicals on marijuana that failed testing to isolate the cannabinoids and then use them in vape or edible products.

- Marijuana businesses destroy marijuana; document the destruction; attempt corrective action; or submit new test samples if the marijuana product fails potency testing [1 C.C.R. 212-3, 4-235].

MED has the authority to investigate potential rule violations, and if it finds a violation, it can pursue several different types of enforcement actions against a licensed marijuana business including written warnings, written assurances of future compliance, subpoenas and warrants, disciplinary and administrative hearings, suspensions, and penalties [1 C.C.R. 212-3, 8-100 et. seq.]. Penalties depend on the violation's severity and can range from license suspension to a fine up to $100,000 [1 C.C.R. 212-3, 8-235]. In addition, MED can embargo retail marijuana when there are "objective and reasonable grounds to believe the [retail] Marijuana poses a risk to health, safety, or welfare of the public that imperatively requires emergency action" [1 C.C.R. 212-3, 8-110(B.5)].

Marijuana businesses are required to notify MED of any adverse health events that they become aware of, such as when a consumer experiences an unexpected health condition associated with the use of marijuana, within 48 hours of receiving notice from a consumer [1 C.C.R. 212-3, 3-920(C)]. Consumers may also report adverse health events directly to MED and CDPHE using a Google Reporting Form on MED's website.

When MED identifies a potential safety concern with a marijuana product or receives an adverse health event report, MED has a process to limit consumer exposure to the affected product. MED may ask the licensee responsible for the affected product to publish a voluntary recall of the product. MED may also require the licensee to submit the affected product for additional testing at a certified testing facility. Based on the test results, MED may place an administrative hold on the affected product, such as an embargo or quarantine. An embargo prevents the licensee from transferring or destroying the product, and a quarantine prevents the licensee from transferring it while MED investigates the safety risk. Lastly, if MED determines that the affected product does

pose a safety risk for consumers, MED issues a Health and Safety Advisory (HSA) to inform consumers of the potential health risks. HSAs include information such as the business name and license number, the marijuana batch information that is included on the label, and dates that the product was sold.

MED works with CDPHE to certify and license marijuana testing facilities (labs) for potency, elemental impurity, microbial, mycotoxin, pesticide, solvent, and water activity testing. MED requires different combinations of those 7 test types depending on the type of regulated marijuana product. Marijuana business laboratory testing costs can range from $235 to $525 per sample, depending on the product type tested, the specific tests conducted, and the volume of samples a licensee submits. For example, MED rules for testing of flower products typically includes 5 of the 7 test types, while testing for edibles includes only potency, elemental impurity, and microbial contaminant testing. Additionally, some labs provide discounts based on the overall volume of samples tested.

Since 2017, MED and CDPHE have facilitated a Marijuana Science and Policy Work Group, referred to as the Science and Policy Forum (Forum), that is comprised of MED and CDPHE staff, scientific researchers, and members of Colorado's marijuana industry. The Forum's purpose is to share information and collaborate on marijuana science and policy issues, such as testing requirements and identifying best practices. The Forum provides recommendations for rule changes to improve product and occupational safety in retail marijuana.

In May 2025, MED proposed to the Forum that it should develop and implement a shelf surveillance pilot program to the Forum to perform surveillance testing on consumer-facing retail marijuana products; subsequently, in October 2025 the Division implemented the pilot program. The surveillance-testing program's purpose is to understand the prevalence of contaminants reaching marijuana consumers and the accuracy of potency labels. The shelf-surveillance program collects a limited number of risk-based samples from retailers across the state and tests those samples for a variety of contaminants and potency, which MED hopes will improve product safety by increasing compliance with existing safety requirements and identifying products that do not comply. While MED's leadership has indicated that they would like the program to be permanent, they are starting with a short pilot phase to evaluate if they can financially sustain the program. MED expects initial results from the pilot phase will be published sometime in the third quarter of Calendar Year 2026.

Colorado Department of Public Health & Environment

CDPHE is required by statute to monitor health effects of retail marijuana use in order to protect both marijuana consumers and the general public [Section 25-1.5-110, C.R.S.]. As a part of this statutory requirement, CDPHE established the Retail Marijuana Public Health Advisory Committee (Advisory Committee) to review scientific literature on the health effects of marijuana use and make recommendations for policies [Section 25-1.5-110, C.R.S.]. The Advisory Committee consists of individuals who have expertise in fields that relate to marijuana use, such as health care and cannabis physiology. Any interested and qualified individual may apply for committee membership via an

online application. Current membership includes 11 individuals with professional medical and academic backgrounds representing CDPHE; regional health care organizations like Denver Health and Solvista Health; the University of Colorado's Schools of Medicine, Pharmacy, and Pharmaceutical Sciences; and Colorado's Department of Public Safety. The Advisory Committee presents its policy recommendations every 2 years to the State Board of Health, DOR, and the General Assembly.

In addition, three units within the State Lab support MED functions directly, including the Health Monitoring team, the State Reference Lab team, and the Lab Certification team.

- CDPHE's Health Monitoring team supports MED by investigating adverse health events and providing recommendations on HSAs.
- The State Reference Lab team supports MED investigations, as requested by MED, and its new shelf-surveillance program by testing businesses' product samples.
- CDPHE's Lab Certification team conducts inspections of MED-certified marijuana testing facilities, or labs. When a lab applies for a certification with MED, CDPHE conducts an inspection to ensure the facility is able to test marijuana and the facility meets CDPHE and DOR regulatory requirements. CDPHE also reviews the lab's documentation and processes for compliance. After the inspection is complete and any deficiencies are remediated, CDPHE makes a recommendation to MED to certify the facility. MED has the ultimate authority to issue the lab a certificate or not and is not required to have CDPHE's approval before issuing a certificate to the lab.

Department of Agriculture

The use of pesticides in Colorado is regulated under the Pesticide Act and the Pesticide Applicators' Act [Sections 35-9-101 through 128, C.R.S. and Sections 35-10-101 through 128, C.R.S.]. Any pesticide used in the cultivation of retail marijuana must be registered with CDA and used according to label requirements, CDA regulatory requirements, and pesticide tolerance limits [8 C.C.R. 1203-26, 2.3 and 2.4]. MED can test for pesticides as a part of its retail marijuana testing, and uses CDA's list of allowed pesticides and maximum thresholds for pesticides in marijuana to determine the safety of products.

Colorado Consumer Protection Act

In addition to the regulatory framework set up by MED, CDPHE, and CDA, the Colorado Consumer Protection Act, administered by the Department of Law, protects retail marijuana consumers. The Consumer Protection Act's purpose is to provide prompt, economical, and readily available remedies against consumer fraud. Statute states that a person "engages in a deceptive trade practice" when, in the course of the person's business, vocation, or occupation, the person:

- Falsely represents the ingredients or characteristics of the good or food.
- Represents that goods or foods are a certain quality or grade and the person knows or should know the goods are a different quality.
- Represents that hemp constitutes retail marijuana.
- Violates the Consumer Protection Act as it applies to cannabis products, anything derived from cannabis, or produced from cannabis [Section 6-1-105(1), C.R.S.].

A private citizen, the Attorney General, or a District Attorney can file a suit against a business or person involved with a business under the Consumer Protection Act [Section 6-1-113, C.R.S.]. The Attorney General or a District Attorney may also bring a civil action against a business or a person involved with a business on behalf of the State [Section 6-1-112(1), C.R.S.]. If a person is found guilty of violating the Consumer Protection Act, civil penalties can be up to $20,000 per violation for general violations [Section 6-1-112(1)(a), C.R.S.], or for synthetic cannabinoid specifically, penalties are not less than $10,000 and not more than $500,000 [Section 6-1-112(1)(e), C.R.S.].

Administration

MED

A Senior Director and a Deputy Director administer MED and are responsible for strategic management and oversight of the organization. In addition to the Division's executive team, MED's administrative structure consists of the following, as of August 2026:

- **Licensing**—The Licensing Operations team consists of 33 staff (approximately 31.5 full-time equivalent (FTE) staff). All marijuana businesses, including cultivators, manufacturers, and retail stores, and the employees working at those businesses, must be licensed by MED. MED processes new marijuana license applications and investigates applicants to determine whether to grant them a license. Licenses include three categories: occupational licenses for employees of marijuana businesses, owner licenses, and business licenses.
- **Investigations**—The Investigations team consists of 23 FTE staff spread across the state in four regional offices. It performs site visits to businesses, collects marijuana products to send for testing, and reviews business records, including security footage, METRC data, and My License Office (MyLO) data. (METRC and MyLO are MED's two main IT systems that we discuss later in this chapter.) Investigators identify businesses for investigation through multiple sources, including data analytics reports, direct complaints, and coordination with local law enforcement. If an investigation finds issues that need correcting, investigators open an enforcement case in MyLO and can pursue a variety of non-disciplinary enforcement actions including warnings and assurances of voluntary compliance. For more serious matters, investigators refer the enforcement case to MED's Analysis and Resolution team to pursue disciplinary enforcement actions, such as Orders to Show Cause, which are the initial notices of hearing and requests for

the licensee to provide evidence as to why MED should not discipline them through fines, license suspensions or revocations, or referrals to other law enforcement agencies.

- **Analysis and Resolutions team** (ART)—ART consists of 6 FTE staff. It handles enforcement cases that require formal administrative actions to address violations that cannot be resolved by non-disciplinary tools. ART receives information from MED's investigators related to an alleged violation, reviews it, and creates a report recommending an administrative action—either non-disciplinary or disciplinary—which it provides to MED leadership. MED's Senior Director determines what kind of administrative action MED will pursue. However, any disciplinary actions also require final approval from DOR's executive director as the State's Licensing Authority. Once a course of action is determined, ART supports the Department of Law as the case proceeds to a negotiated settlement or a hearing with final agency action.

- **Data Analytics team** (DAT)—DAT consists of 2 FTE staff who perform routine data aggregation and automation, and statistical analysis to support investigations and process improvements. For example, DAT created proactive notifications to send to licensees when their data is incomplete or reflects a potential compliance issue. DAT staff also provide training to MED staff on data analysis and other technical topics. DAT creates data reports from MED's information systems that identify risk factors in marijuana business records for investigative follow-up. DAT produces these reports at varying frequencies, ranging from monthly to as needed or requested.

- **Physical Sciences team** (PST)—PST consists of 3 FTE staff who are MED's subject matter experts in marijuana testing, product safety, and marijuana biology and chemistry. PST does not conduct any direct testing, but does provide insight on testing requirements and monitors certified testing facility data for anomalies and outliers in testing results. PST also reviews CDPHE lab certification recommendations and conducts separate audits or investigations of the certified testing facilities. According to PST staff, their investigations do not replicate work that CDPHE does in the annual inspection and certification process. Rather, PST's audits review issues and risks in more depth. PST staff may also investigate tips from other marijuana businesses about potentially fraudulent or non-compliant lab procedures.

MED reported that it has 84 staff, who equal 80.5 FTE due to some staff being shared with the Division of Natural Medicine or assigned as less than full time, compared to its appropriated 158.6 FTE. Because of budget reductions related to Colorado's declining marijuana sales, MED officials stated that they have intentionally held some positions vacant to limit costs. As of August 2026, MED had a total of 78.1 vacancies, or about 49 percent of its total appropriated FTE (158.6). This includes 31 vacant field investigator FTEs, or about 57 percent of the 54 allocated investigator FTEs. We discuss this further in Finding 1 and Chapter 3 of this report.

Senate Bill 24-198 created the Division of Natural Medicine within DOR to manage a new program regulating psychedelic substances, including psilocybin. Because this new program involves similar challenges regulating a federally illegal substance, the bill assigned responsibility for the program to

MED. MED shares approximately 7 FTE with the Division of Natural Medicine and received separate funding to initially set up and administer the program.

CDPHE

There are three primary CDPHE teams relevant to marijuana consumer safety: the Cannabis and Natural Medicine Health Monitoring team (Health Monitoring team), the Laboratory Sciences Analytical team (State Reference Lab), and the Testing Facility Certification team (Lab Certification team). A Regulatory Programs Branch Chief oversees the three teams, which consist of the following:

- **Health Monitoring team**—The Health Monitoring team consists of 4 staff who spend about 10 percent of their time, or a total of about 0.4 FTE, related to MED support for adverse health events and recommendations for HSA. The team also staffs and supports the Retail Marijuana Public Health Advisory Committee, discussed previously.

- **Lab Certification team**—The Lab Certification team consists of 7 staff, who spend a portion of their time equaling about 2.5 FTE, focused on certifying marijuana testing labs. They spend their remaining time certifying hemp and natural medicine testing labs. The Lab Certification team performs lab inspections when the labs apply for their initial certification and annually when they apply for recertification. The annual inspection consists of an on-site inspection, lasting from 1 to 2 days; a review of lab procedures; and tracing of documentation for a selection of product samples from receipt to destruction to ensure the lab handled and tested the sample properly. The certification requirement is intended to ensure that testing facilities use scientifically valid methods and provide accurate and consistent results to licensees.

- **State Reference Lab team**—The State Reference Lab team consists of just less than 5 FTE. There are 7 scientists and 2 statistical analysts who devote part of their time to the marijuana state reference lab. The lab has dedicated space for testing marijuana, hemp, and natural medicine products, such as tinctures, tablets, and edibles made from psilocybin. It provides marijuana product testing services to MED in support of investigations and the newly implemented shelf surveillance pilot program, which randomly tests products for sale at marijuana retailers. This lab has special authorization from the federal Drug Enforcement Agency, which allows MED to submit samples to the lab to check the safety of regulated marijuana products.

Revenues and Expenditures

In Calendar Year 2025, total medical marijuana and retail marijuana sales ranged from approximately $102 million to $116 million, per month in Colorado, for an annual total of $1.3 billion. Both medical and retail marijuana sales have been generally decreasing since August 2020. Total marijuana sales peaked at a little more than $226 million per month in July 2020.

Retail marijuana is subject to a 15 percent excise tax when cultivators transfer marijuana to other licensees like manufacturers or retailers, and a 15 percent special sales tax when licensees sell the product to consumers. Medical marijuana is only subject to the State's standard 2.9 percent sales tax. In Calendar Year 2025, the most recent year data was available, Colorado collected $236.5 million across the three different taxes collected on regulated marijuana products. This is a 39 percent decrease from Calendar Year 2020, when the State collected $387.5 million from the marijuana industry. The State distributes tax revenue from the marijuana industry to the Marijuana Tax Cash Fund, the state Public School Fund, the state General Fund, local governments, and the Building Excellent Schools Today Fund.

MED

MED's revenues primarily come from the Marijuana Cash Fund, which consists of licensing fees, operating fees, and fines on licensees. Compared to licensing and operating fees, fines typically make up a smaller portion of the Marijuana Cash Fund. For Calendar Years 2023 through 2025, MED reported that it assessed fines totaling a little less than $770,000 in Calendar Year 2023 to approximately $1.1 million in Calendar Years 2024 and 2025 for each year. Average fines ranged from approximately $24,000 to $32,000 per licensee for the same time period. In Fiscal Year 2025, MED received a total of approximately $14.6 million from the Marijuana Cash Fund. In Fiscal Year 2025, MED also received an appropriation of $3.5 million from the Marijuana Tax Cash Fund. In total, MED received an appropriation of approximately $18.1 million for its marijuana enforcement activities in Fiscal Year 2025.

MED spent approximately $16.2 million in Fiscal Year 2025, including about $11.5 million on personal services, or employee wages and benefits, and about $600,000 for operating expenses. Between Fiscal Years 2023 and 2025, MED's total expenditures on personnel, legal services, and some operational expenditures like vehicles, phones, and equipment decreased from approximately $6.8 million in 2023 to approximately $6.1 million in 2025. MED's Field Investigations team decreased from 34 FTE costing approximately $4.6 million in 2023, to 26 FTE costing approximately $3.6 million in 2025.

Exhibit 1.1 shows MED's appropriations and expenditures since Fiscal Year 2023.

Exhibit 1.1
MED Total Appropriations and Expenditures (in Millions)

	2023	2024	2025	Percent Change 2023 - 2025
Revenues				
MED Revenue	$15.5	$16.1	$16.6	7%
Indirect Cost Assessment	$1.3	$1.3	$1.5	17.6%
Total Revenue	**$16.8**	**$17.4**	**$18.1**	**8%**
Expenditures				
Personal Services	$10.5	$11.2	$11.5	9%
Operating	$0.9	$0.7	$0.6	-31%
Total Expenditures	**$15.7**	**$15.7**	**$16.2**	**3%**

Source: Office of the State Auditor analysis of Long Bill appropriations.

CDPHE

CDPHE receives appropriations from the General Fund; Cash Funds, including the Marijuana Tax Cash Fund; reappropriated funds; and federal funds. In Fiscal Year 2025, the General Assembly appropriated approximately $17.7 million to CDPHE for laboratory services, including testing for communicable diseases, foodborne illnesses, and newborn screening. Of this, approximately $1.16 million was appropriated from the Marijuana Tax Cash Fund for marijuana-related work including the state reference lab and the lab certification functions. The General Assembly separately appropriated approximately $375,000 from the Marijuana Tax Cash Fund to CDPHE for marijuana health monitoring. According to CDPHE's estimates, it spends approximately $1.4 million each year on personal services specifically for marijuana-related duties for the Health Monitoring (just less than $448,000), Lab Certification (just less than $385,000), and State Reference Lab (just less than $600,000) teams. CDPHE could not provide a specific estimate for marijuana-related operating expenses given the teams' other responsibilities.

Recent Legislation

House Bill 25-1209. This bill made numerous changes related to the regulated marijuana industry. Specifically, the bill introduced a new term, "R-and-D Unit" (Research and Development Unit), which refers to regulated marijuana provided to an occupational licensee for product development and quality control purposes. It modified existing rules around record-keeping, requiring businesses to maintain various types of documentation such as child resistance certificates, testing records, and standard operating procedures. The bill also changed background check requirements, shifting from fingerprint-based to name-based judicial record checks for some employees and owners. The bill reduced some administrative burdens for marijuana businesses by eliminating certain reporting requirements, such as maintaining additional records for information tracked in METRC, and residency restrictions for business owners. It also made technical changes to licensing processes,

such as modifying renewal procedures and fee structures. The bill also decreased appropriations for state agencies involved in marijuana regulation. Most provisions of the bill took effect on January 5, 2026, with some sections taking effect immediately upon passage in June 2025.

Senate Bill 24-076. This bill made changes to current marijuana business licensing laws in Colorado to reduce state-level licensing compliance obligations for marijuana businesses. First, the bill extended the initial and renewal license periods from 1 to 2 years for all regulated marijuana business licenses and licenses granted to controlling beneficial owners (i.e., those who meet any of the following three conditions: those with 10 percent or more financial interest, those who have operational control of a business, or those in a position of authority in the business), as well as medical and retail delivery permits. However, localities have the option to choose which local licenses are valid for 1 or 2 years, which means some businesses may still have annual local licensure requirements. Second, for businesses with identical controlling beneficial owners, multiple license types, and separate locations, the bill requires a unified application process that would be subject to a lower initial and renewal license fee for each application than would be paid for applications for the same individual licenses. This means fewer applications and lower licensing fees for business owners with more than one location or license.

In addition, the bill specified that licensees are not obligated to use radio frequency identification (RFID) tags to track marijuana effective January 1, 2027. It also amended the definition of an "immature plant" to include nonflowering plants that are not taller or wider than 15 inches, an increase from the current 8-inch limit. Finally, the bill required MED to amend regulatory requirements for marijuana businesses to annually report modifications to their security systems including the lighting, physical security, video, and alarm requirements. Instead, MED rules now require businesses to report modifications every 2 years.

Information Systems

METRC

METRC is a web-based tracking system that was developed by METRC, LLC. MED contracts with METRC, LLC to host the software that Colorado marijuana businesses use to track inventory. METRC allows businesses to track their marijuana inventory from the plant seeds to a finished product. It also captures granular transaction information, including time of sale, receipt number, and product numbers for every marijuana transaction either through a connection with licensee point of sale systems or by licensee manual entry. Certain MED staff also have access to the data in METRC, which they use to monitor the state of the regulated marijuana industry, identify potential issues, and distinguish the source of those issues. For example, METRC allows MED staff to track how product flows "downstream"—or between businesses—as the product is processed, packaged, and sold to determine which business was the source of an issue. METRC also allows MED staff to send information and notifications to industry members.

My License Office (MyLO)

MyLO is a licensing software used by multiple DOR units that MED modified to include enforcement tracking functionality. MED staff use MyLO to track information about licensed marijuana businesses and employees, complaints MED receives about marijuana businesses including CDPHE-vetted adverse health event reports, and MED investigations. MED staff enter data into MyLO, and there is an automated interface between MyLO and METRC that transmits licensing information from MyLO to METRC daily.

Recent Audits

The OSA conducted a performance audit of MED in 2023 that looked at MED's inspection and enforcement processes. The audit found that MED did not inspect over a third of the newly-licensed retail marijuana stores within 1 year of licensure during Fiscal Years 2019 through 2022, despite MED policy stating it would strive to do so. It also found that MED did not conduct targeted inspections on about one-third of the businesses that met risk factors, such as those that had not had a targeted inspection in the last 2 years or had never been inspected at all, and MED could not identify high-risk businesses on an aggregate level. The OSA recommended that MED improve its inspection process and ensure that it prioritizes stores for inspections based on risk by (1) modifying the targeted inspection reports to include information on newly licensed stores and risk factors, and (2) developing a policy on how to use internal reports to prioritize inspections. MED agreed to these recommendations and reported that it had fully implemented all of them as of June 2025.

During the 2023 audit, the OSA also examined MED's process for addressing complaints, including reports of adverse health events. The audit team reported that MED's process for addressing complaints was functioning effectively and did not have any recommendations for improvement at that time. As a part of the work done in 2023, the audit team did not evaluate HSAs, how MED issues them, or its timeliness in issuing them, which we cover in the current audit.

Audit Purpose, Scope, and Methodology

We conducted this performance audit pursuant to Section 2-3-108, C.R.S., which requires the State Auditor to conduct a special audit requested by a member of the General Assembly or the Governor, when approved by a majority vote of the Legislative Audit Committee. The Legislative Audit Committee approved this audit in response to a legislative request that expressed concerns with product quality and labelling practices, MED's related enforcement activities and responsiveness to stakeholders when concerns are raised, and whether the current regulatory environment is sufficient for ensuring consumer safety. Audit work was performed from August 2025 through September 2026. We appreciate the cooperation and assistance provided by the management and staff of the MED and CDPHE during this audit.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The key objectives of the audit were to evaluate the following:

1. Whether MED has effective processes for ensuring that licensed marijuana businesses comply with consumer protection standards related to regulated marijuana products,

2. Whether MED and CDPHE have effective processes for identifying safety concerns and subsequently providing timely notification to consumers and businesses of any safety concerns with regulated marijuana products,

3. The extent to which MED has notified the Department of Law when it identifies violations at licensed marijuana businesses that fall under the Colorado Consumer Protection Act and how often these businesses are found to be in violation of this Act, and

4. The extent to which factors outside of MED's control related to the federal and state legal landscape for regulated marijuana and market pressures limit its ability to effectively regulate licensed marijuana businesses.

Based on the audit request, the scope of the audit focused on MED's and CDPHE's activities related to ensuring routine compliance of licensed marijuana businesses with consumer protection standards and both agencies' procedures for identifying, investigating, and responding to product safety concerns. The scope of this audit did not include an evaluation of MED's or CDPHE's operations outside of these areas.

To accomplish our audit objectives, we performed the following audit work:

- Researched state laws, regulations, and MED's internal policies and procedures to understand marijuana sampling and testing requirements; MED's and CDPHE's enforcement activities such as inspections, investigations, and administrative actions; drafting and issuing HSAs; and collecting data and other information on cases.

- Consulted with representatives from the Cannabis Regulators Association (CANNRA) to identify trends and emerging best practices for marijuana enforcement in other states. We also conducted additional research using NotebookLM, an artificial intelligence tool, to query websites and state rules on the marijuana regulation practices of 8 states, including Arizona, California, Massachusetts, Michigan, Nevada, New York, Oregon, and Washington.

- Observed MED's and CDPHE's Forum meetings from January 2025 through April 2026 to understand stakeholder concerns and risk perceptions related to marijuana safety oversight activities and to monitor MED's progress on implementing its pilot shelf-surveillance program.

- Surveyed MED's investigators to understand typical inspection practices and observed field investigators during on-site inspections. We administered the survey between February 17 and March 2, 2026, and received a total of 17 investigator responses out of a potential 25 respondents, for a 68 percent response rate. We completed three observations with MED field investigators of on-site inspections completed in January 2026 at two marijuana cultivators and one manufacturer.

- Assessed the reliability of and analyzed datasets from MED's case management system, MyLO and its seed-to-sale inventory tracking system, METRC, to identify the number and type of safety-related investigation cases and testing practices at marijuana businesses. We also assessed and analyzed case tracking spreadsheets for confirmed violations and disciplinary outcomes used by MED's Analysis and Resolutions team. We used NotebookLM, an artificial intelligence tool, to describe and categorize violation citations.

- Completed 20 on-site observations of regulated marijuana stores between December 23, 2025 and January 15, 2026 to identify how marijuana businesses provide consumer safety information to consumers and assess their understanding of how to report marijuana product safety concerns.

- Surveyed all stakeholders who receive MED email notifications when MED issues a new HSA to understand what benefits and drawbacks they experience from MED's HSA practices. We administered the survey between January 27, 2026 and February 11, 2026, receiving a total of 244 responses out of a potential 6,848 respondents, for a 4 percent response rate.

- Evaluated MED's contact lists for individuals who have opted in for marijuana industry notices, including HSAs and industry bulletins, and compared these recipients to CDPHE's estimated number of marijuana users in the state to evaluate the reach of MED's current distribution methods.

- Analyzed the organization and content of each of the 48 HSAs MED issued from January 1, 2023 through December 31, 2025 to determine MED's typical practices for organization and content. We also used NotebookLM, an artificial intelligence tool, to assess the reading or grade levels required to comprehend the documents.

- Reviewed documentation of CDPHE's marijuana testing lab inspection process, as well as documentation of the inspections and lab certification recommendations CDPHE sent to MED for certifications and investigations completed from January 1, 2023 through December 31, 2025.

- Interviewed MED, DOR, and CDPHE officials to understand their current practices, their data collection and reporting methodologies, and to identify any challenges associated with public safety activities.

- We reviewed all 18 of the HSAs MED issued in Calendar Year 2025. We reviewed all of the MyLO documentation and case notes associated with each investigation and enforcement case

resulting in HSAs. This targeted selection is valid for assessing MED's current practices related to how it investigates safety-related issues, identifies the need for HSAs, and drafts and issues them.

We relied on a targeted selection of MED's investigation and enforcement cases to support our work. Specifically, we looked at a random selection of 8 marijuana businesses with multiple enforcement cases opened between January 1, 2023 and December 31, 2025. We reviewed all of the MyLO documentation and case notes associated with each enforcement case. This targeted selection was chosen to include businesses with multiple interactions with MED to determine if MED handled investigations consistently based on the severity of the alleged violation and the history of past violations for the licensee. We also chose it to determine whether MED sufficiently documented its consideration of risk factors and decision making so that it could determine how to handle future investigations. This targeted selection is valid for assessing MED's current practices related to how it assesses risk factors and documents its decision making for investigations and enforcement cases. Along with the other audit work performed, this targeted selection provides sufficient, reliable evidence as the basis for our findings, conclusions, and recommendations.

As required by auditing standards, we planned our audit work to assess the effectiveness of those internal controls that were significant to our audit objectives. Details about the audit work supporting our findings and conclusions, including any deficiencies in internal control that were significant to our audit objectives, are described in the remainder of this report. We have also included a Chapter 3 and Appendices A, B, and C to provide additional relevant information.

A draft of this report was reviewed by MED and CDPHE. Obtaining the views of responsible officials is an important part of the OSA's commitment to ensuring that the report is accurate, complete, and objective. The OSA was solely responsible for determining whether and how to revise the report, if appropriate, based on the departments' comments. The written responses to the recommendations and the related implementation dates were the sole responsibility of the departments.

Chapter 2

Improvements to Marijuana Enforcement

Members of the General Assembly requested this audit in response to stakeholder concerns, citing widespread health and safety risks in regulated marijuana products and the effectiveness of the State's regulatory framework to ensure compliance with health and safety requirements. Overall, we found that the State has established a framework that helps provide some assurance that regulated marijuana products sold in Colorado are safe. Further, we did not identify any evidence to support the claim that there are widespread health and safety issues with marijuana products. However, we did identify deficiencies in the State's marijuana product safety framework that limit its effectiveness to identify and respond to health and safety risks.

First, the Department of Revenue's (DOR) Marijuana Enforcement Division (MED) and its partners have made efforts to address health and safety concerns. Since our last audit of MED in 2023, we found that MED has improved its inspection coverage of businesses, particularly retail stores. MED's Data Analytics team continued to collaborate with field investigators to improve reports on potential noncompliance and inspection priorities. Additionally, MED's Physical Sciences team expanded their work to include field investigations for private labs conducting marijuana testing. MED and the Colorado Department of Public Health & Environment (CDPHE) also meet regularly with stakeholders through the Science and Policy Forum and annual rule-making sessions to discuss health and safety concerns with marijuana products and the State's regulation of the marijuana industry. We observed both agencies incorporating stakeholder feedback in policy proposals and new policies implemented in 2025.

However, deficiencies in the State's current health and safety regulatory framework increase the risk that consumers may ultimately use contaminated products. Most importantly, Colorado's regulatory framework is at a disadvantage because it lacks a fully functional state reference lab to assist with testing marijuana products. The State's inability to provide independent and comprehensive product testing impacts both MED's and CDPHE's ability to effectively enforce safety requirements. We also identified issues with current rules for marijuana product testing and marijuana facility record retention, that, combined with MED's limited and inconsistent monitoring, increase the risk that consumers may access unsafe product. Additionally, we found that MED could take additional steps to issue Health and Safety Advisories (HSA) more timely when it has identified safety issues with marijuana products and improve the effectiveness of its communications to consumers and other stakeholders to better support public safety. We also identified improvements MED should make to its collection of case management information and data to better support its overall performance towards meeting program objectives and identify relevant risks and challenges. Lastly, we found that CDPHE should improve its oversight of the private labs that conduct routine marijuana product testing to ensure that labs produce consistent and accurate results.

The rest of this chapter contains our findings and recommendations to MED and CDPHE as well as a policy consideration for the General Assembly related to marijuana product safety.

Finding 1 — Marijuana Product Safety Framework

Colorado's marijuana product safety framework relies on statutory requirements and MED's authority to establish program rules, monitor compliance, and take enforcement action when needed. At the core of the marijuana product safety framework are program requirements related to testing samples of marijuana products, including natural plant materials (e.g., actual plants) and processed plant materials (e.g., edibles, pre-rolled products), for potency and contaminants. The purpose of the testing is to help ensure that regulated marijuana products sold in Colorado are accurately labeled for potency and are free from prohibited contaminants, such as pesticides and mold. Also central to the product safety framework is MED's authority to conduct both routine inspections and compliance investigations to determine if a licensee is complying with marijuana product safety requirements, and pursue enforcement cases when MED determines that violations have occurred.

The requirements in place related to the marijuana product safety framework come from multiple sources. Stakeholders, including industry representatives, public health officials, regulators, and marijuana researchers help to collectively shape the program rules and how MED enforces them through monthly Science and Policy Forum (Forum) meetings held at the beginning of each calendar year through late summer, depending on the scope of topics identified for the group to work on each year. MED and CDPHE created the Forum to provide an opportunity for stakeholders to discuss and provide input on potential new regulations and discuss concerns and questions. The Forum is intended to foster collaboration between MED, scientists, and stakeholders and better ensure evidence-based regulation of marijuana in the state. Typically, Forum participants make recommendations that guide existing policy or identify new policy proposals. MED considers some proposals from the Forum and collects other public feedback in rule-change sessions conducted later in the year. Members of the General Assembly may also dictate new rules by passing legislation directing MED to implement or change program rules. These processes have resulted in numerous rule and policy changes to Colorado's marijuana product safety framework since voters first legalized retail, or recreational, marijuana in 2012.

To help ensure that marijuana licensees comply with the frequently evolving product safety requirements, MED has implemented a variety of monitoring and enforcement mechanisms, such as:

- Creating and reviewing data reports on marijuana licensees' inventory management, testing practices, and inspection histories to help MED investigators prioritize inspections and support investigations.
- Implementing a pilot end-process, shelf-surveillance program to test products available to consumers in licensed marijuana retailers for contaminants and potency levels.

- Investigating tips or referrals received from the public, local agencies, and other informants related to a marijuana licensee not complying with product safety requirements or a health and safety concern with marijuana products, and pursuing enforcement cases when investigations find tips to have merit.

- Taking enforcement actions, including non-disciplinary and disciplinary actions, against individuals and businesses when MED investigators confirm that rule violations occurred.

What was the purpose of our audit work and what work was performed?

The purpose of our audit work was to assess the effectiveness of the State's marijuana product safety framework, including MED's monitoring and enforcement processes, in helping to ensure that licensed marijuana businesses comply with product safety standards related to regulated marijuana products.

We interviewed MED, DOR, and CDPHE staff to understand their roles and responsibilities related to marijuana product safety regulation, including their current practices, data collection and reporting methodologies and definitions, and any challenges they see associated with marijuana testing and enforcement activities.

We reviewed recordings of MED's and CDPHE's monthly Forum meetings from February 2025 through August 2025, and attended meetings from September 2025 through April 2026 to understand stakeholder concerns and perceptions of risks related to the marijuana testing process, MED's enforcement activities, and MED's progress in implementing its pilot shelf-surveillance program. We surveyed MED's 25 investigators and received responses from 17 investigators (68 percent) to understand their typical practices related to inspections, investigations, and case decisions as well as their perceptions of product safety risk in Colorado's market. In addition, we went on site visits with three different teams of MED field investigators for three inspections, including two marijuana cultivators (i.e., a licensed operator who grows, harvests, and processes cannabis plants for use) and one manufacturer (i.e., a licensed business that processes cannabis plants into consumer products like vapes and edibles).

We reviewed data from My License Office (MyLO), MED's case management system, on active marijuana businesses, investigations conducted, and enforcement cases for January 2023 through December 2025. We also reviewed data from METRC, Colorado's seed-to-sale marijuana inventory tracking system, on testing practices for marijuana cultivators from January 2023 through December 2025. We reviewed MED staffing data for field inspections and investigations for January 2023 through December 2025.

Finally, we researched state laws, regulations, and MED's internal policies and procedures to understand sampling, testing, and enforcement responsibilities and requirements. We also consulted with representatives from the Cannabis Regulators Association (CANNRA), a nonprofit organization of government officials and agencies from 45 states and international bodies that

regulate marijuana, to identify trends in other states and emerging best practices for marijuana enforcement. We conducted our own research on the marijuana regulation practices of 8 states, including Arizona, California, Massachusetts, Michigan, Nevada, New York, Oregon, and Washington.

How were the results of the audit work measured?

The Standards for Internal Control in the Federal Government (Green Book), published by the U.S. Government Accountability Office, provides guidance related to the control system that management implements to provide reasonable assurance that an organization's objectives will be achieved. These standards, which Colorado requires all executive branch agencies to incorporate, represent an accepted best practice for internal control systems in government organizations. Green Book management criteria address the need for a comprehensive system of internal control [OV1.05-1.07]. For example, the Green Book indicates that managers must design and implement control activities throughout their operations to identify and respond to risks and ensure programs meet their objectives [Principles 10 and 12]. Control activities may include establishing program rules; implementing policies, procedures, and job aides, such as checklists; developing and adopting data-driven strategies; monitoring activities such as investigations; and effectively managing human capital. Further, management must periodically assess and correct its control design to ensure programs operate as intended [Principles 16 and 17].

What problems did the audit work identify and why do these problems matter?

Overall, we found that, although the State has established a marijuana product safety framework that helps provide some assurance that regulated marijuana products sold in Colorado are safe, there are deficiencies and gaps in some components of the framework that limit its effectiveness. MED has implemented relevant rules as required by statute and conducts risk-based monitoring activities that are reasonably within the limits of its resources. However, we identified issues with some of MED's current rules related to product testing and record retention for marijuana businesses, as well as concerns with MED's limited and inconsistent monitoring through on-site inspections and the lack of a fully operational shelf-surveillance program. These issues limit MED's ability to meet its core objective to identify product safety risks and to help ensure that licensed marijuana businesses meet product safety requirements. As a result, there is an increased risk that marijuana products sold in Colorado may have contaminants or that the potency listed on the labels is inaccurate. Our concerns are outlined in more detail in the remainder of this report section.

Marijuana Product Testing

Statute requires MED to implement rules related to marijuana product testing and to ensure that testing is not redundant or an undue burden for businesses [Section 44-10-203(2)(d), C.R.S.]. MED rules require licensed businesses to test marijuana products for potency and contaminants, such as

microbials and molds, pesticides, elemental impurities and metals, residual solvents, mycotoxins, and water activity. According to the rules, unless they qualify for an exemption, all licensed marijuana cultivators and manufacturers must submit samples of each batch of their products for testing once all processing steps are complete and it is in its final form, and before transferring or selling the product to another business for sale to consumers. To submit product for testing, MED rules allow businesses to select their own samples and send them to private labs. Marijuana businesses must comply with MED rules for designating who may select test samples, ensuring that the individuals who select the samples undergo required training, selecting the required amount and weight for samples of each product type, and documenting information related to the samples, such as who took the sample, who reviewed the sample, and the sample testing results.

We identified the following concerns with the current marijuana product testing process:

- **Allowing businesses to select their own samples increases the risk that businesses do not pick samples that are representative of the overall quality of their marijuana products.** For example, a business may only pick samples from certain batches of product that it knows to be free from contaminants, while other batches of its product that may have been exposed to contaminants are not selected. As a result, the test results may provide false assurance of the business' product safety. Similarly, a business may add a concentrate to their sample to falsely increase the potency of its product. Some MED investigators responding to our survey expressed concerns with how marijuana product samples are collected and submitted, and indicated that they think the process is a weakness in the State's regulations. One investigator indicated that because sampling is based on the honor system, there is opportunity for licensees who wish to subvert the testing process to do so.

  Most states with legalized marijuana do not allow marijuana businesses to self-select samples. Rather, they rely on private lab staff or an independent third party to collect samples and transport them to the lab for testing. In the states that do allow self-sampling, they have requirements that are similar to those in Colorado, such as requiring training, sample documentation, and video surveillance. According to MED research, 24 other states rely on private lab staff or independent third parties to collect samples, while 15 other states have procedures and rules similar to Colorado's for businesses to select their own samples. In either scenario, CANNRA representatives stressed the importance of state oversight for the sample collection method through random double checks of sample test results, periodic on-site observations of sample collection, and/or reviews of sample collection video footage as part of their enforcement activities.

- **Some businesses do not test a significant portion of marijuana products sold in Colorado due to a lack of mitigating controls over allowable testing exemptions.** In response to statutory requirements to reduce redundant testing requirements, MED rules allow for several exemptions to required product testing to help reduce the testing costs for businesses that demonstrate that their product is free from contaminants. For example, according to METRC data on 183,000 harvest and 310,000 production batches created during January 1, 2023 through December 31, 2025, we found that:

- Marijuana cultivators did not test about 69 percent of harvest batches for elemental impurities, 61 percent for microbials, 38 percent for potency, 68 percent for pesticides, and 69 percent for water activity. A harvest batch consists of plant material of the same strain, cultivated, and harvested under the same conditions that cannot be transferred until it is separated into production batches.

- Marijuana product manufacturers did not test about 68 percent of production batches for elemental impurities, 71 percent for microbials, 94 percent for mycotoxins, 29 percent for potency, 74 percent for pesticides, 81 percent for residual solvents and 93 percent for water activity. A production batch can consist of natural plant materials from the same harvest batch and processed plant materials (e.g., concentrates, edibles, and pre-rolled products).

MED rules establish general testing exemptions that may apply to any business depending on the specific product produced, ownership conditions, and product transfer practices. For example, exemptions for some required tests exist for concentrates, skin and body products, wet whole plants, and pre-rolled marijuana. In some cases, the exemption also requires that certain conditions be met, such as the businesses involved in the transfer of a specific product type must share a common owner or the transfer must be for a specific purpose, such as marijuana allocated for extraction or transferred for decontamination and processing into smaller batches. Businesses self-determine if they qualify for one of these exemptions and there is limited MED oversight of their decision unless an investigation occurs. MED does not track comprehensive data on the number of businesses that qualify for these testing exemptions or the number of transfers affected by them.

Additionally, MED has continued to refine a process validation program created in 2014, referred to as the Reduced Testing Allowance (RTA) program. MED implemented new rules in 2024 for RTA that allow a business to pay a fee and self-attest that they completed a series of initial tests to qualify for reduced testing requirements for specific products and test types. The RTA program requires businesses to submit one batch of product to test for the relevant contaminant exemption once every 30 days, as long as the sampled products continue to pass the tests. As discussed previously, businesses that are not eligible for a general testing exemption or participating in the RTA program must test every product batch before transfer to another business for sale. However, MED has limited information on which businesses are eligible for and are participating in the RTA program. Based on which businesses have paid the fee to participate, MED estimates that a little more than 200 marijuana cultivators currently intend to participate in the RTA program. However, there are an additional 258 cultivators who are testing less than 100 percent but have not paid the fee. Data limitations prevent MED from knowing the exact number of businesses that have met the initial and on-going testing requirements without additional investigation. One MED investigator responding to our survey indicated that they believe that most licensees are confused on the eligibility requirements for the RTA program and many licensees are under the impression that they met the RTA program eligibility requirements, but they did not have a full understanding of the requirements.

Although both of these exemption options are likely meeting their purpose to reduce the testing burden on businesses, as required by statute, they also result in a significant portion of the marijuana product being sold in Colorado not undergoing testing to help ensure it is safe. According to METRC data, the 207 RTA cultivator program participants (e.g., operators who grow and harvest cannabis plants) active at the end of Calendar Year 2025 did not test about 41,000 harvest batches from January 1, 2023 through December 31, 2025, which represented 26 percent of the almost 160,000 harvest batches included in MED's RTA report.

Based on our review of other states' marijuana programs, we found that states seem to be moving towards requiring more product testing rather than less. Testing exemptions and RTA programs are not common. According to CANNRA, RTA programs are generally not advisable for states to implement without additional monitoring or other mitigating controls. We saw a few examples of other states that have an RTA program, but they had paired additional controls with their programs to help mitigate safety risks, including:

- RTA with a more limited scope of allowed reductions than Colorado
- RTA with International Organization for Standardization (ISO) accreditation—ISO provides a widely accepted framework across multiple industries to standardize processes
- RTA with third-party sampling and a shelf-surveillance program

The RTA program's self-attestation form requires businesses to certify that they meet requirements to participate in RTA. In 2024, MED also implemented a requirement for RTA's microbial exemption that required additional accreditation and audit requirements. However, this requirement only applies to one of several testing exemptions allowed under the program. Additionally, MED does not verify that the businesses meet requirements before they can begin exercising their reduced testing privileges.

- **Determining compliance with sampling requirements relies on businesses proactively complying with record retention requirements.** MED rules require businesses to collect samples under video surveillance and maintain the footage so that MED can verify that the samples were selected properly. However, a business intending to commit sample and testing fraud could opt to risk incurring penalties for a lesser violation related to maintaining business records as opposed to penalties for a more serious testing violation. According to MED rules, if a business knowingly adulterates samples for testing, MED must pursue disciplinary action and the violation is categorized with MED's most serious violations. On the other hand, if the business does not maintain the sample selection video footage it would be a lesser violation. A business must demonstrate "substantial failure to maintain required books and records" under the rules before record retention issues would rise to the level of being a serious violation. For some stakeholders, MED's penalties for not maintaining the sample selection video footage may be worth the risk given the financial impact of destroying a whole batch of product if it would not pass testing requirements. As a compliance control, relying on businesses to first comply with other requirements is not an effective approach without ensuring that there are sufficient deterring factors for all related noncompliance.

- **Record retention requirements may be too short to serve as a safeguard.** If businesses comply with record retention requirements, MED rules only require them to maintain the sample selection video footage for 30 days. Unless MED receives a complaint or has reason to question the validity of the sample right after the sample is selected, the video footage would not be available for MED to review due to the short retention timeframe. In addition, MED rules require businesses to maintain non-video records related to sample collections for 2 years so that MED investigators can review the records during on-site inspections. MED's current goal for on-site inspections is to review practices at each business every 2 years. However, we found that the actual timing and frequency of when MED's on-site inspections occur can vary, and often exceeds 2 years in between inspections. For example, in our review of all active marijuana businesses from 2023 through 2025, we found that, despite the businesses being active in all 3 years of our review, MED's actual on-site inspection frequency for some of the businesses was less frequent than its 2-year goal. Specifically, for businesses active for the entire 3-year period, 93 cultivators (38 percent) were inspected only once during the 3-year period or not at all and 97 manufacturers (52 percent) were inspected only once or not at all. We also found additional examples of businesses active during our review period that were not inspected for up to 5 years. MED is not required to inspect businesses every 2 years; however, the actual frequency of inspections, in practice, combined with the specific sample selection record retention timeframes in rule create a risk that an MED investigator will not be able to review sample selection video and other documentation during their on-site inspection because the business will have already disposed of the video footage and other sample documentation. We discuss MED's limited inspection coverage in more detail below.

MED's Monitoring and Inspection Coverage

We identified the following limitations of MED's current monitoring and inspection coverage that impact its ability to identify health and safety concerns with marijuana products.

- **MED does not have sufficient, reliable data to monitor and enforce testing requirements without conducting an in-depth, license-specific analysis for a specific business.** First, marijuana businesses self-report transfer and testing data in METRC with little independent verification by MED of the data's accuracy and reliability. Second, according to MED, there are limitations with METRC data that, combined with how businesses may enter data, can result in testing samples not being linked to the batches they represent.

  MED investigators review business records, such as transfer and testing records as part of an investigation, but MED generally does not have the resources to verify all reported data in METRC. Because of these limitations and the complexity of testing exemptions required by statute and allowed in rule, METRC data cannot be used in isolation to determine a business' compliance. Therefore, to determine compliance with testing exemptions, investigators have to match information in METRC related to testing practices and results and the specific businesses and product types involved in the transfer with corresponding business records, which typically requires an investigation or on-site inspection.

For example, MED cannot rely on METRC data alone to determine which businesses participate in the RTA program. In the report that we discuss above that MED provided on RTA participation for cultivators active at the end of Calendar Year 2025, MED identified 207 cultivators who had paid the RTA fee and were testing less than 100 percent of their harvest batches and 258 cultivators testing less than 100 percent but who had not paid the fee. However, METRC data pulled at this level cannot show whether either group of cultivators had met the testing conditions for eligibility. Additionally, MED does not have a report in METRC that can identify compliance for manufacturers who are participating in RTA due to the complexity of product types subject to that program.

- **MED does not conduct on-site inspections of all marijuana businesses each year.** Investigations and on-site inspections are the most effective control MED currently has for verifying that licensees are complying with program safety requirements. However, according to MED, it does not have the resources to conduct on-site inspections of all marijuana businesses annually; its goal is to conduct on-site inspections every 2 years. Overall, we found that MED has increased its coverage of licensed businesses for on-site inspections since 2023, when we conducted our last audit. The percentage of all marijuana businesses that were active for the entire year and not inspected each calendar year dropped from 51 percent in Calendar Year 2023 to 24 percent in 2025. However, there were still about 30 percent of cultivators and manufacturers that did not undergo an on-site inspection, where the investigator could check for compliance with product safety and testing requirements, in Calendar Year 2025, as shown in Exhibit 2.1.

Exhibit 2.1
Uninspected Marijuana Cultivators and Manufacturers, Active in Each Calendar Year for Calendar Years 2023 through 2025

Business License Type	2023			2024			2025		
	Total	Uninspected	Percent	Total	Uninspected	Percent	Total	Uninspected	Percent
Cultivator	413	217	53%	364	195	54%	335	93	28%
Manufacturer	292	203	70%	263	162	62%	233	72	31%

Source: Office of the State Auditor analysis of MyLO investigation data provided by MED.

For cultivators and manufacturers that were active at any point during our 3-year review period—meaning they were not active for the entire period—and tested less than 100 percent of their batches, we found that MED did not inspect between 7 and 10 percent of those businesses at all during the 3 years and inspected between 29 and 40 percent just once in the 3 years. When MED does not complete periodic on-site inspections of marijuana businesses, it is not able to verify that the businesses have complied with safety and testing requirements.

- **On-site inspections may not always consistently review for compliance with safety and testing requirements.** Our survey of MED investigators indicated that different investigators may take different approaches to monitoring and enforcing businesses' compliance with safety and testing requirements during their on-site inspections. For example, one respondent noted that they only look at a business' testing procedures during an on-site inspection when there has been a specific testing complaint or adverse health event associated with that business' marijuana products. Another respondent noted that MED investigators often addressed sampling and testing discrepancies that they observed on-site with only a verbal warning. A third noted the general inconsistency of MED's inspections as a concern.

  We also attended on-site inspections with three different MED investigation teams. While the inspections we attended during the audit may not be typical of complaint-driven inspections, we observed variations in the assigned investigators' pre-inspection reviews and on-site inspections. Generally, each investigation team confirmed that the businesses' video and security systems functioned, reviewed testing and waste or product destruction procedures, and verified physical inventory. However, the investigation teams did so using different methods and to varying extents. For example, some investigators viewed the video footage, while other investigators just discussed with the business representative whether the systems were operational and observed camera locations, but did not verify that the systems were, in fact, operational. Similarly, some investigators only verbally discussed testing and destruction procedures with the business representative while others physically inspected records or dumpsters. When investigators are not consistent in how they conduct on-site inspections, it reduces the effectiveness of inspections as a tool to verify compliance with safety and testing requirements.

- **Lack of a shelf-surveillance program.** MED planned to implement a pilot shelf-surveillance program that it developed with stakeholder input in the fall of 2025. The program's purpose is to provide an end-process check of marijuana products available to consumers to ensure the products meet safety requirements for contaminants and accurately report their potency. Conducting some level of monitoring of products being sold by retailers helps mitigate the risk of testing exemptions and potential noncompliance with sampling and testing requirements that can occur in earlier stages of product development. As part of the pilot shelf-surveillance program, MED planned to randomly sample all product types available to consumers from stores across the state by the end of 2025. It planned to collect and test product over three phases focusing on edibles in phase one, concentrate and infused pre-rolled marijuana in phase 2, and flower and pre-rolled marijuana in phase 3. However, as of May 15, 2026, the program had not moved past phase one. MED had tested only one product type—edibles—and had not published the results of its tests. According to MED, CDPHE's lack of testing capacity at the state reference lab prevented MED from completing the rest of its planned pilot testing. Additionally, MED has not identified long-term funding to support a permanent shelf-surveillance program. CDPHE allocated approximately $90,000 from its Fiscal Year 2026 operating budget to cover testing costs for all three phases of MED's planned surveillance testing pilot with MED providing the personnel for sample collection.

When we surveyed MED investigators, 6 of the 17 (35 percent) responding to our survey indicated that they believe there are widespread product safety issues in Colorado's regulated marijuana market; 4 investigators (24 percent) indicated there may be widespread issues; and 7 investigators (41 percent) indicated that they did not believe that product safety issues are widespread. However, MED investigator respondents consistently identified concerns with businesses self-selecting samples and MED's testing program, coupled with enforcement gaps throughout their comments as areas of risk for product safety. One investigator commented that they believe that the biggest gap is with the RTA program and MED not checking to ensure all licensees are in compliance with testing standards.

In the absence of increased investigation and monitoring resources, the design of Colorado's current marijuana product safety framework lacks deterring factors for bad actors and allows for compliance gaps. Without effective enforcement to ensure that licensed marijuana businesses comply with safety requirements, MED cannot sufficiently protect consumers from unsafe products and negative health effects or protect other compliant marijuana businesses from financial harm if Colorado's market earns a reputation for allowing unsafe products.

Why did these problems occur?

The concerns that we identified related to Colorado's marijuana product safety framework occurred due to multiple factors, which we discuss below.

Legislative priorities and changes to the marijuana regulatory framework. The General Assembly established Colorado's framework for marijuana regulation with multiple stated purposes: protecting economic and social welfare as well as residents' health, peace, and social morals. Additionally, multiple changes to Colorado's marijuana regulatory program have occurred since recreational marijuana became legal in 2012, typically based on legislative and industry input. Balancing the sometimes competing priorities of the health and safety goals of the program with the economic goals has been challenging, and statute and MED rules often address one area but not both.

As changes have been made over time, legislators and stakeholders may not fully realize their collective impact on the State's marijuana product safety framework and MED has not formally evaluated the resulting overall impact on its ability to help ensure compliance by licensed businesses. Many of the rules associated with this framework—like those allowing businesses to self-select samples and those establishing the RTA program, which limits the number of products tested for safety and potency purposes—predate MED's current administration. According to MED, in the past, MED has proposed regulations only to have those rules walked back by legislative action that in some cases, further reduced MED's authority. For example, according to MED, it recommended and implemented a rule requiring licensed businesses to label marijuana products that had undergone decontamination (i.e., irradiation) in its 2023 rule-making session to increase public awareness of potential health or safety concerns with the products. However, in 2024, the General Assembly passed Senate Bill 24-076, which repealed MED's decontamination rule before it could take effect. The same bill also reduced the frequency with which businesses must report changes to

their security systems to MED, moving from annually to once every 2 years. Additionally, in 2025 through House Bill 25-1209, the General Assembly repealed some records requirements that MED used to identify safety issues. For example, the bill eliminated the requirement for licensees to retain waste logs and other records that investigators used to validate METRC data. Without this information, MED investigators are no longer able to cross-reference reported waste to identify anomalies and other data entry errors and verify that product is being handled properly.

Resource limitations and rule design. Resource limitations affect the number of investigations and on-site inspections that MED can conduct and its ability to implement a shelf-surveillance program to monitor and enforce licensee compliance with health and safety requirements. Because MED rules allow businesses to decide for themselves if they are eligible for general testing exemptions and RTA, and MED has not, instead, implemented a formal approval process for businesses' RTA participation, these inspection and monitoring tools are particularly important for MED to be able to determine products' compliance with safety requirements.

MED Investigations and Inspections

Colorado's marijuana market has been declining since 2021 and because MED's budget is directly tied to licensing fees and taxes on marijuana transfers and sales, when the market declines, MED's available funding also declines. According to MED, it requested additional resources in the past but the General Assembly has not approved these requests, until recently. The General Assembly approved a transfer from the Marijuana Tax Cash Fund administered by DOR in 2025 of $3.5 million to stabilize staffing and for general operations and indirect costs. Additionally, given the state of the market, MED has been cautious about introducing fee increases. MED has also attempted to redistribute limited resources to investigations and inspections when possible. Investigators and other stakeholders such as CANNRA report that marijuana enforcement is generally under-resourced, both in Colorado and other states.

We found that there are no industry standards for marijuana investigator caseload. However, we found that MED's cases per investigator have increased since 2023, both in overall number and for enforcement cases specifically. The total number of cases handled by MED investigators increased between 2023 and 2025 with investigation cases increasing by 1 percent and enforcement cases, which are typically more complex and take longer to close, increasing by 15 percent. At the same time, the number of MED's full-time equivalent (FTE) investigators has decreased by 11 percent due to declining market sales and their impact on MED's budget. According to MED, as its budget decreased with the market, it has sought to reduce operating expenses through intentionally holding positions vacant. We discuss the relationship between Colorado's marijuana market, MED's budget, and its enforcement resources in Chapter 3.

Given these changes, we found that overall, the number of cases assigned to each investigator has increased from 2023 to 2025, with the number of investigations per investigator increasing 14 percent and the number of enforcement cases per investigator increasing 30 percent. Exhibit 2.2

provides the distribution of investigations and enforcement cases for MED field investigators from 2023 through 2025.

Exhibit 2.2
MED Field Investigations Cases per Full-Time Equivalent (FTE) Investigators
Calendar Years 2023 through 2025

	2023			2024			2025		
Case Type	FTE	Cases	Ratio	FTE	Cases	Ratio	FTE	Cases	Ratio
Investigations	35	2,017	58	35	2,069	59	31	2,029	65
Enforcement cases		332	9		376	11		383	12
Vacant FTE	14			20			11		
Total FTE	**49**			**55**			**42**		

Source: Office of State Auditor analysis using MED-provided MyLO investigation and enforcement cases records as of January 21, 2026 and reported FTE as of January 2023, 2024, and 2025.
Note: This analysis does not account for cases that were created in prior years that were still open at the start of the review period. Case counts included cases that were open and closed during the calendar year. Therefore, given how long cases may stay open—up to 3 years—this could undercount open cases in all three years of our scope.

CANNRA representatives noted the lack of resources in most states for marijuana enforcement. Ideally, they recommend both routine, such as quarterly or annually, and risk-based inspections. However, they acknowledged that many states simply do not have the resources for this kind of coverage.

CDPHE State Reference Lab

MED relies on the CDPHE state reference lab to test products for the shelf-surveillance program; however, CDPHE's state reference lab is not fully operational nor able to fully support MED's enforcement needs, including its implementation of the pilot shelf-surveillance program. While the lab received some additional funding in prior years from the Marijuana Cash and Marijuana Tax Cash funds, the increased funding has come with additional responsibilities, such as requirements to now test hemp and develop methods to test natural medicine products. As of May 15, 2026, the state reference lab had not achieved the required method validations to test for all contaminates required to be tested under MED's marijuana shelf-surveillance program. In addition, CDPHE said the lab's capacity has recently been delayed by limited and poorly ventilated physical space in the lab, staff resources, and the complicated process to develop new procedures for emerging areas, like testing for pesticides.

CANNRA representatives highlighted the role a strong state reference lab plays in overall enforcement, from testing support for investigations and shelf-surveillance programs, to helping ensure consistency in sample selections and private lab operations with routine independent verification of private lab results, to furthering marijuana science for better, evidence-based policy development.

Using data to identify risks. According to MED, due to limited resources, it routinely considers risks and makes risk-based decisions on how to best use the resources that it has. For example, MED implemented routine data-driven reports to prioritize businesses for inspection and runs other ad-hoc reports to identify safety indicators. It also provides the RTA program report we refer to above to investigators twice a year for review and creates other reports on safety indicators such as outliers for test results on specific substances that may indicate inversion or suspicious transfers (e.g. intoxicating hemp coming into the market and being sold as marijuana, or transfers between businesses for product that has been significantly discounted compared to market values). However, MED reported that it has started to run some risk-based reports less frequently because the reports identified more leads than investigators could vet and moved away from other reports because they did not turn out to be effective.

There are opportunities for MED to strengthen its current efforts by developing a written, comprehensive risk-based approach that details each strategy, its outcomes, and an assessment of whether it was effective, in line with best practices for a well-documented, risk-based protocol. MED could consider other risk factors to combine with the current risk factors that it considers, as well as some of the risk factors that it no longer uses. For example, the routine reports that MED currently uses to prioritize inspections do not consistently include safety risk indicators, such as a business' testing practices, although some of the reports that MED runs periodically do look at these indicators. Some MED investigators reported to us in our survey that they would like to see other risk factors considered for prioritizing inspection, such as METRC discrepancies or other known safety risks.

Combining testing practices and other factors like relevant violation history with existing factors MED already considers, such as the date of a business' last inspection, may be useful indicators, considering that our file review in Finding 2 identified misunderstandings of testing requirements as a primary driver in HSA investigations. Additionally, MED could consider risk-driven strategies that other states have found effective, such as incorporating observations and reviews of video sample selections periodically or as part of routine inspection activities and follow-up. As discussed previously, MED would likely need to extend its required timeframe for businesses to maintain videos for sample selections, increase inspection frequency, or identify alternatives to remotely access footage if it was to implement this specific strategy. Some states, like Nevada, reported that they have had success with adopting risk-based approaches to inspections with well-documented protocols for how they assess risk.

Gaps in formal inspection expectations and guidance. MED has developed a number of investigation-specific procedures, including a business inspections policy and multiple procedure documents for specific investigation types. However, none of these procedures address a general, on-site inspection checklist of high-risk items to routinely review or specific instructions on the method and extent of review. According to MED, it expects investigators to review certain routine safety practices, such as testing and sampling practices, during inspections. MED reports that it provided email guidance to investigators in December 2025 and gave instructions on testing and sampling practices at cultivators during staff meetings. However, MED has not provided specific, consistent, written guidance on these topics for all of the business types it inspects and across

investigation types. CANNRA recommends standard checklists to guide the inspection along with the flexibility for investigators to follow leads when on-site.

Recommendation 1

The Marijuana Enforcement Division (MED) should strengthen its marijuana product safety framework to mitigate health and safety risks to consumers by:

A. Evaluating its current system of controls for sampling and testing to identify risk areas and implementing mitigating controls for the risks inherent in the program, such as making changes to the Reduced Testing Allowance Program to implement a formal approval process, introducing a more limited scope for testing exemptions, expanding accreditation requirements, or exercising more rigorous oversight for eligibility; incorporating third-party sampling; increasing penalties to ensure that there are sufficient deterring factors for noncompliance; revising record retention requirements to increase the length of time businesses retain video evidence of sampling procedures; implementing MED's planned shelf-surveillance program for all products; and other risk-based inspection and monitoring approaches as appropriate.

   i. If mitigating controls cannot be implemented, MED should consider eliminating aspects of programs that exceed its risk tolerance.

   ii. If new mitigating controls can be implemented, MED should work with the General Assembly, Department of Revenue management, and Colorado's Department of Public Health & Environment to reallocate existing resources or identify new resources for any new strategies as needed.

   iii. If new mitigating controls can be implemented and require statutory change, MED should work with the General Assembly to ensure that it has the appropriate authority to implement new controls and ensure compliance with them.

B. Developing and implementing a written, comprehensive risk-based approach for marijuana safety that details strategies and evaluates the outcomes from the different strategies. This should include incorporating any additional strategies identified in Part A and implementing additional guidance and tools, such as checklists, to increase the prioritization, consistency, documentation, and follow-up for inspections that assess key risk areas; and routinely running reports to look at risk indicators.

Response

Marijuana Enforcement Division

A. Agree
Implementation Date: December 2027

The Marijuana Enforcement Division (MED) recognizes that although the audit did not identify evidence of widespread health and safety issues with marijuana products (as noted in Chapter 2 of the audit report), all aspects of Recommendation 1 offer strategies to meaningfully strengthen the product safety framework for Regulated Marijuana in Colorado.

The product safety framework has evolved significantly over the last decade, including iterations of legislative and rulemaking changes involving product allowances and product safety. Building upon this foundation, MED welcomes an opportunity to perform a comprehensive evaluation of the state's current product safety framework and its system of controls.

To implement Recommendation 1, the MED will assess whether any current initiatives should be deprioritized in order to dedicate attention to this comprehensive evaluation. Additionally, the MED contemplates initiating internal work groups, external work groups, interagency coordination, and a legislative outreach plan. These measures will help the MED (a) identify and prioritize mitigating controls it can implement through its current monitoring, enforcement and rulemaking authority; (b) identify mitigating controls requiring legislative action, which will inform recommendations the MED will make to the legislature; and (c) identify mitigating controls requiring enhanced support from and coordination with partner agencies. The MED anticipates this work will inform the issuance of a 2027 mid-year report reflecting its evaluation findings, progress-to-date, and the timeline for additional actions (e.g. rulemaking, legislative recommendations, etc.).

The implementation date of December 2027 provides the time necessary for the MED to evaluate and finalize legislative recommendations and other work with the General Assembly, and takes into account statutory rulemaking timelines and requirements under the Administrative Procedure Act.

B. Agree
Implementation Date: March 2028

The implementation date of March 2028 accounts for the duration necessary to complete the evaluation described in Recommendation 1.A. and the development of items and resources in response to that evaluation (the guidance and tools, such as checklists, to increase the prioritization, consistency, documentation, and follow-up for inspections). It also considers the time necessary for staff training and developing the process for running reports and identifying risk factors.

Finding 2 — Timeliness of Health and Safety Advisories

MED identifies issues with regulated marijuana products that may pose a risk to consumer health and safety through direct stakeholder reporting, through the course of its general investigations, and by using data analysis to identify potentially non-compliant marijuana licensee behavior. MED has an online reporting form through which stakeholders can report any concerns with marijuana businesses, including safety issues like contaminated product or adverse health events. Additionally, MED investigators may identify safety concerns through routine inspections or investigations of other types of referrals.

If MED determines that contaminated or potentially contaminated product (affected product) is available to the public, product was mislabeled, or there may be a safety issue with a non-cannabis ingredient in the product, MED consults with CDPHE to determine whether to issue a HSA or for lower risk issues, an Informational Notice. An HSA includes the name of the product, batch numbers, the cultivator or manufacturer business name(s), a description of the concern, and what to do with the purchased product. If CDPHE, as the State's agency responsible for public health and environmental protection, agrees with MED that an HSA is warranted, the MED investigator works with MED's physical sciences and data teams to identify the scope of the affected product. At the same time, the investigator also works with the responsible marijuana business to restrict or remove affected product from the market through the use of voluntary recalls, administrative holds, quarantines, or embargos, depending on the circumstances of the case. These tools each restrict product from sale and destruction but require different legal thresholds to use. Voluntary recalls issued by the marijuana business are most typical as these require the least amount of evidence to support.

The investigator then drafts the HSA and submits it for review by their supervisors, the data team, senior management, and communications staff. Once approved, MED issues the HSA by posting it on its website and sending it by email to all of the subscribers to its email list. From January 1, 2023 through December 31, 2025, MED issued a total of 48 safety notices, including 46 HSAs and 2 Informational Notices related to affected marijuana products, with 20 issued in 2023, 10 in 2024, and 18 in 2025. The two Informational Notices that MED issued were for low safety risk issues, like a product with discrepancies on labels for inner and outer packaging, and for safety issues that affected marijuana product that were caused by non-cannabis ingredients. For ease of reference, we refer simply to HSAs but include these two Informational Notices in that term and count.

HSAs most commonly addressed safety concerns with medical and retail marijuana flower, with many involving more than one type of affected product and 24 of the 48 HSAs (50 percent) reporting that the affected products had more than one type of contaminant. Most commonly, HSAs identified issues with the products' microbial content followed by pesticides. Generally, the product issues that caused the 2025 HSAs resulted from cultivators and manufacturers not complying with MED's testing requirements. According to MED case records, these businesses told investigators that they did not understand the applicable testing requirements.

When MED issues an HSA, the HSA itself does not resolve the underlying investigation. MED officially resolves investigations either by taking no action when it does not identify a violation, taking non-disciplinary actions like issuing warnings, or pursuing disciplinary actions like issuing an Order to Show Cause followed by administrative hearings that could result in fines or license suspension. Formal administrative action may also require businesses to destroy the affected product. MED may also negotiate a Stipulation, Agreement, and Order (SAO) if the business wishes to settle the case without a hearing. An SAO may include fines, admissions of certain violations, and license surrender depending on the terms of the agreement. MED publishes all final agency administrative actions on its website. For the 18 HSAs issued in 2025, none of the corresponding investigations had final outcomes as of May 12, 2026. Because of confidentiality requirements in statute, we provide limited details for cases still in progress.

What was the purpose of our audit work and what work was performed?

The purpose of our audit work was to assess MED's timeliness in notifying the public when it became aware of health and safety concerns related to regulated marijuana product. To do this, we reviewed MED's investigation documentation for all 18 HSAs that MED issued in Calendar Year 2025 and analyzed datasets from MyLO, MED's case management system, on investigations created in MyLO from January 1, 2023 through December 31, 2025 to identify the number and type of safety-related and potentially safety-related investigation cases.

We also completed 20 on-site visits at regulated marijuana stores between December 23, 2025 and January 15, 2026 to identify how marijuana businesses provide consumer safety information to consumers and assess store management's and staff's understanding of how to report safety concerns. In addition, we surveyed all stakeholders who are on MED's mailing list and receive email notifications from MED when MED issues a new HSA to understand what benefits and drawbacks they experience from MED's HSA practices. We received a total of 244 responses from HSA users out of a potential 6,848 respondents, for a 4 percent response rate.

Finally, we researched state laws, regulations, and MED's internal policies and procedures to understand MED's marijuana public safety responsibilities and requirements and interviewed MED and other DOR staff, and CDPHE officials to understand their current practices, data collection and reporting methodologies and definitions, and identify any challenges associated with public safety activities.

How were the results of the audit work measured?

Statutory and Regulatory Requirements. The General Assembly established Colorado's framework for marijuana regulation to protect the economic and social welfare and health, peace, and social morals of the public [Section 44-10-102(1), C.R.S.]. Statute does not explicitly address when and how MED should respond to adverse health events or issue HSAs, but it authorizes MED's use of certain tools to restrict and remove affected product through quarantines, holds, and

embargos [Section 44-10-207, C.R.S. and Section 44-10-203(2)(d)(III)(a), C.R.S.]. Marijuana rules also provide limited guidance to MED on how to handle adverse health events. The rules require businesses to report adverse health events to MED [1 C.C.R. 212-3, Rule 3-920(C)] and provide instructions on how MED may use quarantines, holds, and embargos [1 C.C.R. 212-3, Rules 4-205(E)(3)(c), 4-240(A), and 8-110] to recall affected product and address safety issues. Marijuana businesses may also voluntarily recall product at MED's request although MED cannot require them to do so [1 C.C.R. 212-3, Rule 3-336(C)].

Internal Policies and Procedure Requirements. MED has three internal documents in use that primarily dictate how staff should respond to potentially contaminated product and adverse health events:

- A 2023 flowchart describing the process and estimated timelines to complete each step of determining whether to issue an HSA. The flowchart establishes a minimum of 8 to a maximum of 18 days that the whole process should take, depending on how quickly investigators and staff complete each individual step, from the time the MED investigator identifies the need for an HSA to the time MED should issue the HSA publicly.

- A 2024 procedural document that describes when an HSA is necessary, the process investigators should perform to complete an HSA investigation, and what content must be in an HSA. MED's written policies and procedures do not specify timeframes for this process but direct investigators to work "expeditiously" to minimize public health risks.

- A 2025-revised best practices and guidelines document that describes when an HSA is necessary, including a checklist for investigators to follow when investigating contaminated marijuana.

According to MED's various HSA policies:

- An MED investigator must confirm that consumers were able to access and purchase contaminated or potentially contaminated marijuana before initiating the HSA process.

- An MED testing and research analyst, the primary investigator's supervisor, the agent in charge of the primary investigator's office, MED's Data Analytics team, MED's Deputy Director and Chief of Investigations, MED's Senior Director, MED's assigned DOR communications specialist, and CDPHE must review each HSA.

- HSAs can warn consumers of contaminated marijuana, potentially contaminated marijuana, voluntarily recalled marijuana, unsafe product, or mislabeled marijuana.

Management Best Practices. The Standards for Internal Control in the Federal Government (Green Book), published by the U.S. Government Accountability Office, provides guidance related to the control system that management implements to provide reasonable assurance that an organization's objectives will be achieved. These standards, which Colorado requires all executive branch agencies to incorporate into their internal control systems, represent an accepted best practice for internal control systems in government organizations. For example, the Green Book

indicates that managers must design and implement control activities throughout their operations to identify and respond to risks and ensure programs meet their objectives [Principles 10 and 12]. Control activities may include establishing program rules; implementing policies, procedures, and job aides, such as checklists; and effectively managing human capital. Part of management's responsibility also includes developing competent personnel to achieve the entity's objectives, including training and mentoring to guide staff performance and help them adapt to the needs of the job. In addition, management should establish contingency plans to ensure that key responsibilities continue to be addressed regardless of individual staff availability [Principle 4].

What problems did the audit work identify and why do these problems matter?

Overall, we found that MED does not always identify product safety concerns and issue HSAs timely. Although in the past year MED has reduced the amount of time it takes to identify and notify the public of products that create public health concerns, further improvements are needed to help ensure that the risk to consumers is minimized.

The time affected product is available on the market depends on when MED becomes aware of a potential product safety issue, is able to investigate it, and the specific case characteristics of each investigation. It is important to note that unsafe products may be on the market for months, or even years, before MED becomes aware of the safety concerns. While MED does not have full control over some of these factors, it is still responsible for helping to limit the amount of time unsafe product is on the market. As part of our analysis, we looked at (1) how long unsafe products for which MED ultimately issued an HSA were on the market before MED issued the HSA, and (2) how long MED took to issue an HSA after it became aware of the safety concern with the affected products, as discussed below.

Affected Products Available on Market. First, we looked at how long unsafe products were available on the market before MED issued an HSA (Note: this does not mean that MED was aware of the product safety concern for this entire period). From January 1, 2023 through December 31, 2025, we found that potentially harmful marijuana products were available to consumers for between a week to a little more than 3 years before MED issued an HSA; on average, affected product was on the market for 223 days, or just under 7.5 months during the 3-year period.

From January 1, 2025 through December 31, 2025, potentially harmful product was available to consumers an average of 5.7 months, which demonstrates some improvement. MED revised its HSA best practices guidelines in 2025 and we observed improved timeframes and compliance with guidance more frequently in the cases worked later in 2025. Exhibit 2.3 provides the number of days, and the average number of months, potentially contaminated product was on the market before MED issued an HSA for each of the HSA's that MED issued in Calendar Year 2025.

Exhibit 2.3
Average Days and Months Contaminated Marijuana Product was on Market Prior To Health and Safety Advisory Issuance in 2025

HSA	Days From First Day Product Sold to Date HSA Issued
HSA 1	402
HSA 2	382
HSA 3	356
HSA 4	314
HSA 5	313
HSA 6	307
HSA 7	219
HSA 8	145
HSA 9	140
HSA 10	110
HSA 11	77
HSA 12	58
HSA 13	56
HSA 14	54
HSA 15	52
HSA 16	44
HSA 17	37
HSA 18	27
Average Days	**171.8**
Average Months	**5.7**

Source: Office of State Auditor analysis using HSAs MED issued in Calendar Year 2025 and MED-provided MyLO investigation and enforcement case records as of January 21, 2026.

Of the 18 HSAs issued in 2025, five were related to improper pesticide testing at a private lab facility and MED documented them as a single investigation. The audit team excluded those five HSAs from much of the following analysis as the investigation included unique characteristics that were not comparable to a typical investigation; therefore, our analysis looked at the remaining 13 HSAs issued in 2025.

MED Case Milestones. Next, for the 13 HSAs reviewed, we assessed timeframes for the number of days between MED's key case milestones and decisions. These milestones include when MED became aware of a safety issue with a product and started an investigation; when decisions were made during the investigation, such as the dates decisions were made to restrict products and that an HSA should be issued, if the investigator documented these dates in the case records; and when MED issued the HSA. Exhibit 2.4 shows the number of days between these milestones for these 13 HSAs issued in 2025.

Exhibit 2.4
Marijuana Enforcement Division Case Milestones
Health and Safety Advisory Timelines in 2025

HSA Titles	Number of Days From			
	First Day Product Sold to Investigation Start Date	Investigation Start Date to Date HSA Issued	Investigation Start Date to Date of First Product Recall or Hold	Date Investigator Decided HSA was Necessary to Date HSA Issued
HSA 1	295	87	31	38
HSA 2	270	37	16	22
HSA 3	259	97	62	39
HSA 4	169	144	N/A[2]	N/A[2]
HSA 5	120	194	63	131
HSA 6	62	83	14	11
HSA 7	61	49	32	15
HSA 8	35	184	153	2
HSA 9	26	114	13	24
HSA 10	22	45	N/A[2]	45
HSA 11	-7[1]	44	28	15
HSA 12	-79[1]	123	115	2
HSA 13	-136[1]	163	N/A[2]	10
Average Days	**84.4**	**104.9**	**52.7**	**29.5**
Average Months	**2.8**	**3.5**	**1.8**	**1.0**

Source: Office of State Auditor analysis using HSAs MED issued in Calendar Year 2025 and MED-provided MyLO investigation and enforcement case records as of January 21, 2026.
[1]MED investigators sometimes identified product safety issues for products in the middle of the production process. In these cases, the investigation may have started before product was available on the market.
[2]N/A entries represent situations where the audit team was not able to identify one of the necessary dates to perform a calculation. These entries are excluded from the average calculations.

On average, MED issued an HSA approximately 3.5 months after the beginning of the related investigation and issued an HSA approximately 1 month after investigators identified the need for the HSA. Out of the 13 HSA investigations, 7 involved cases that took MED longer than 90 days from the start of the investigation to issue the HSA. For 4 cases, MED took longer than 30 days to draft and issue the HSA once the investigator determined a need for it. MED guidance states that the goal is to issue an HSA within 18 days of the investigator determining that one is needed.

When we surveyed individuals who signed up to receive HSAs from MED by email, 21 of 244 respondents (9 percent) commented specifically on how long it takes MED to investigate, notify consumers, and remove affected product from the market. When safety issues are not addressed timely, consumers may be unnecessarily exposed to unsafe products and their negative health effects.

Why did these problems occur?

The length of time it takes for MED to issue an HSA can be affected by case complexity, investigator workload, and the evolving nature of investigations. In all 7 of the cases that took longer than 90 days for MED to issue an HSA, MED detailed complexities in the cases that investigators worked through before they could identify the need for an HSA and determine the full scope of affected product. According to MED, in some cases, investigators worked multiple safety-related cases at the same time which affected timelines, and in others, the investigation started with a different area of focus and investigators identified the safety issues late in the life of the case.

Although there may be some factors that are not fully within MED's control that affect the length of an investigation and the decision to issue an HSA, we identified the following issues that increase the time it takes for MED to notify consumers of health and safety issues with regulated marijuana product.

Stakeholder Awareness of Reporting Process

First, stakeholders may not be aware of how to report marijuana product safety concerns to MED. MED's outreach related to health and safety information appears to be limited to groups that are already engaged with MED, such as participants in the Science and Policy Forum and rule-making sessions or individuals who have opted in for email notices. Stakeholder reporting appears to be an important source for leads about safety issues. MED received notification of potential product safety concerns from individuals using MED's Google Reporting Form for 7 of the 13 HSA investigations discussed above. However, consumers and other stakeholders, like marijuana business employees, may not understand how they can report safety concerns directly to MED, leading to delays in MED identifying and responding to those safety concerns.

We surveyed all stakeholders who have signed up to receive email notifications when MED issues a new HSA and asked them generally for feedback on how MED could improve the information they share related to product safety. Out of 244 survey respondents, 20 (8 percent) made comments about MED increasing awareness of how to report safety concerns to MED.

During our site visits to marijuana stores, we assessed how easy it would be for a typical consumer to access and report safety concerns when purchasing product and whether store employees knew how to report this information to MED. Of the 20 store representatives that we spoke with, 15 (75 percent) told us that they did not know how to report adverse health events or safety complaints from customers to MED.

Voluntary Recalls

Second, voluntary recalls are not always an effective way to prevent consumers from continuing to access affected products for an extended period after MED identifies safety concerns. As previously discussed, MED may request that a business issue a voluntary recall when it has determined that the

business may have products with a safety concern. MED typically relies on voluntary recalls of affected products because they require less evidence to pursue than an embargo or administrative hold and can typically occur earlier in the investigation process. However, the effectiveness of voluntary recalls depends on the business' record-keeping, communication with downstream businesses, such as other manufacturers and retail stores that purchased the affected product, and overall cooperation with and commitment to public safety.

For 9 of the 13 HSA investigations discussed above, MED requested and the business owners agreed to issue a voluntary recall. However, the investigation records also showed that some of these recalls did not succeed at stopping the businesses from selling potentially unsafe product. In one case, the business that issued the voluntary recall improperly tracked their product in METRC, so that the voluntary recall and MED's subsequent embargo were both ineffective at identifying all affected product and notifying stores that still had it available to consumers. In another case, the business that issued the voluntary recall was not able to contact some of the stores to which they had distributed product. According to MED, these stores did not respond to either the business' or the investigator's attempt to contact them. As a result, an MED investigator personally travelled to each store to ensure they implemented the voluntary recall.

MED rules require businesses to have a voluntary recall plan that must include a process for identifying affected product, notifying other affected businesses and consumers, removing affected product from the market, and measuring the recall's effectiveness by checking that other downstream businesses that purchased the affected product also completed the recall [1 C.C.R. 212-3, Rule 3-336]. However, MED rules do not address what happens if a business does not maintain a voluntary recall plan or if its poor inventory records hamper the effectiveness of a voluntary recall. MED rules also do not require businesses that receive notice of a voluntary recall to be responsive to that voluntary recall.

HSA Draft and Review Process and Guidance

Third, MED's processes around issuing an HSA are complicated and require input from numerous individuals, and its guidance documents laying out those processes are not always consistent and clear about who is involved at what point in the process. MED policies require its investigators to complete a number of steps when drafting an HSA, including consulting internal and external parties, and require extensive review from multiple levels of DOR and MED management. As discussed previously, HSAs must be reviewed by an MED testing and research analyst, the primary investigator's supervisor, the agent in charge of the primary investigator's office, MED's Data Analytics team, MED's Deputy Director and Chief of Investigations, MED's Senior Director, MED's assigned DOR communications specialist, and CDPHE. However, the guidance documents do not provide consistent descriptions of who needs to review the HSA and at what stage of the process. For example, at some stages of review, the documents inconsistently require that CDPHE and a Director of Investigations review it. Once the draft is considered "final," one document requires the Deputy Director to share it with the investigator, supervisor, and agent-in-charge again, along with the Senior Director and the communications team who review and approve it before

issue. However, another document only includes the Senior Director and communications team at this final step.

Further, only one of the guidance documents establishes expected timeframes for each step in the drafting and review process and only one of the documents clarifies that some reviews should be routed concurrently. While one document explains the purpose of CDPHE's review, none of the other documents describe the purpose for each required MED review or describe how staff should proceed when an investigator or required reviewer are not available.

Given the number of required steps and other parties involved, MED should consider consolidating and streamlining its guidance to staff to ensure that it provides clear, cohesive guidance. For 2 of the 7 (29 percent) HSAs issued in 2025 where MED took longer than 90 days to issue the HSA, MED attributed the delayed time to staff who were working their first HSA case and training limitations. According to MED, new investigators learn the HSA process on-the-job which contributes to delays in HSA issuance. In these cases, MED indicated that there were multiple errors in the draft, which required revisions and resulted from staff not following procedures for drafting the HSA and routing it for approval.

In addition, MED should also consider defining the purpose of each reviewer it lists in the process and determining if they are necessary in all cases, and what to do if a reviewer is not available. For the 4 cases that we reviewed that exceeded 30 days from the date the investigator identified a need for the HSA and the date MED issued one, 2 were affected by the extent of the review process and at least 1 by staff absences for holidays during this timeframe.

HSA Authority in Statute and Competing Priorities

Lastly, statute and MED rules do not set specific expectations for how and when MED should issue an HSA. Broadly, the General Assembly intended marijuana regulation to protect Colorado's economic and social welfare, as well as the health, peace, and morals of its residents. However, this dual purpose can lead to potentially competing priorities for regulators to balance and specific rules that pose challenges to MED's ability to act more quickly. There is no clear guidance in statute as to whether or when MED's obligation to protect public safety should take precedence over MED's obligation to protect a business' rights and due process during investigations.

Specifically, statute provides MED the authority to protect public safety by restricting and removing potentially unsafe marijuana products from the market [Section 44-10-207(1) and (2), C.R.S.]. However, statute also includes requirements that may slow MED's ability to issue an HSA quickly to give businesses due process during investigations. For example, if a business' product fails a contaminant test, statute requires MED to provide businesses an opportunity to retest that product up to two times [Section 44-10-203(2)(d)(III), C.R.S.]. Additionally, MED's authority to issue embargos and holds of affected products comes with a requirement that MED establish reasonable cause before doing so, which requires time to gather and assess sufficient evidence. Specifically, an administrative hold prohibits businesses from selling, transporting, or destroying product and MED uses it when it has reasonable grounds to believe a violation occurred. An embargo requires

businesses to recall product, allows businesses to destroy product if they choose, and MED or the business may use it when there are objective and reasonable grounds to believe the product poses a risk to public health and requires emergency action. For example, of the 7 HSAs in 2025 that took more than 90 days from the start of the investigation until MED issued the HSA, 2 (29 percent) involved cases where the businesses retested the product to confirm contaminants and for 5 (71 percent), MED did not issue either an embargo or an administrative hold. Because of litigation risk, MED may be overly cautious about exercising this authority too soon in the life of the case and overly-reliant on the voluntary recall process.

This same tension between public safety and businesses' rights also affects what MED can share with the public about its investigation and when. Statute requires MED to maintain the confidentiality of investigative records related to ongoing investigations until the full administrative process is complete, which can sometimes take a significant amount of time [Section 44-10-204(1-2) C.R.S.].

Marijuana Testing Facilities

CDPHE's state reference lab is not fully operational and is not able to fully support MED's enforcement needs, including all required testing for routine investigations, which means that MED has to often rely on private labs for testing. However, federal restrictions on marijuana limit MED's ability to directly collect and transport samples to private labs. For example, to avoid legal risks based on the provisions of the federal Controlled Substances Act, MED investigators may not take possession of marijuana product to submit to third-party labs for testing. As a result, MED must identify workarounds for collecting, transporting, and testing samples with marijuana businesses and private labs. Additionally, for some of the HSA investigations we reviewed, case notes indicated and MED confirmed that private labs have combative relationships with certain businesses, which can lead to product testing delays or concerns about unfair test results. For example, in one case, MED tried to submit a sample to a private lab who declined to test it due to an on-going billing dispute with the cultivator. We discuss this further in our Policy Consideration.

Recommendation 2

The Marijuana Enforcement Division (MED) should continue to explore opportunities to reduce the time it takes to notify the public and restrict consumer access when it determines that regulated marijuana product may pose a potential health and safety risk by:

A. Increasing its efforts to make consumers and other stakeholders, like staff at marijuana businesses, aware of how to report product safety concerns and their responsibility to monitor inventory for any recalls placed on product they are holding.

B. Implementing additional outreach and education to ensure licensed marijuana businesses have good recall plans and records and that other downstream businesses own some responsibility for

consumer protection response, including considering the need for new rules or penalties to address gaps in the quality or effectiveness of voluntary recall plans and downstream business responsiveness.

C. Evaluating the Health and Safety Advisory (HSA) drafting and review process and providing guidance to streamline and clarify requirements, eliminate barriers to timely issuance of the HSAs, and clarify the process when someone is not available during the drafting and review process.

D. Working with the General Assembly to seek clarity on its priorities when there is a conflict between a marijuana business' rights to retest and privacy and public safety. Once clarity is provided, MED should leverage existing strategies and tools to restrict product as soon as appropriate, such as quarantines, holds, and embargos.

Response

Marijuana Enforcement Division

A. Agree
Implementation Date: April 2027

The MED is committed to further enhancing consumer awareness for reporting product safety concerns associated with Regulated Marijuana and agrees that there are opportunities for the agency and industry licensees to more effectively monitor and quarantine inventory when presented with evidence of potential product safety risks. While Finding 2 acknowledges improvements the MED has made in reducing the time it takes to issue HSAs after identifying evidence of a potential product safety issue, the MED understands the importance of building on this progress. The comprehensive evaluation the MED will conduct to implement Recommendation 1 will support the actions necessary to implement this Recommendation 2.A. The MED anticipates its efforts to implement this recommendation will include communication and outreach initiatives, collaboration with its Inventory Tracking System vendor, interagency coordination, and potential recommendations for rulemaking considerations.

B. Agree
Implementation Date: November 2027

The comprehensive evaluation the MED will conduct to implement Recommendation 1 will support the actions necessary to implement this Recommendation 2.B. The MED anticipates its efforts to implement this recommendation will include communication and outreach plans it will initiate between the end of 2026 and mid-2027. The implementation timeline of November 2027 also takes into account statutory rulemaking timelines and requirements under the Administrative Procedure Act (for filing, public notice, public input, cost-benefit analysis requests, etc.), where any new permanent rules from annual rulemaking can take effect by November of that year.

C. Agree
Implementation Date: January 2027

The MED agrees with the recommendation and recognizes the value of further streamlining and clarifying its processes for drafting, review, approval, and issuance of HSAs. As noted in Finding 2 of the audit report, the MED revised its HSA best practices guidelines in 2025, with improved timeframes and compliance with guidance in cases worked later in 2025, and the MED is prepared to build on these efforts to implement this recommendation.

D. Agree
Implementation Date: December 2027

The MED looks forward to working with the General Assembly to report its progress and pursue broader strategies that advance mutual goals of enhancing product safety and consumer awareness within a robust regulatory structure. Under current statutory provisions, licensees are allowed to retest and sell products following initial tests showing contaminants or substances harmful to health (see C.R.S. § 44-10-203(2)(d)(III)). Although the MED views this provision as constraining its authority to limit consumer access to affected products, the Division recognizes the benefit of proactive legislative engagement to ensure clear alignment regarding permitted business practices and the MED's enforcement authority. Accordingly, the MED stands ready to assist in legislative efforts aimed at clarifying statutory authority to protect consumers, support market participants, and strengthen the overall regulatory framework.

Finding 3 — Health and Safety Advisories Distribution, Organization, and Content

When MED determines that a regulated marijuana product has safety concerns, it issues an HSA to notify the public of the safety concerns identified. MED's HSAs contain information such as the name of the business that produced the contaminated product, the type of product affected, the type of contaminants identified, and the dates and location the product was available for sale. Once an HSA has been finalized and approved, the DOR communication staff assigned to support MED post the HSA on MED's website and initiate an email notice to individuals who have opted in for MED communications and its media contact list. These are MED's primary methods for notifying the public of HSA information. MED has also requested that marijuana stores post a flyer at their points of sale that directs users to MED's website where the HSAs are posted, but does not specifically require the stores to post the HSAs. In addition to issuing HSAs, MED also typically issues Informational Notices for low safety risk issues, like a product with discrepancies on labels for inner and outer packaging, or for safety issues with affected marijuana product that were caused by non-cannabis ingredients.

From January 1, 2023 through December 31, 2025, MED issued a total of 46 HSAs and 2 Informational Notices related to contaminated and potentially contaminated marijuana products.

For ease of reference, we refer to a total of 48 HSAs but include the 2 Informational Notices in this term and count.

What was the purpose of the audit work and what work was performed?

The purpose of our audit work was to assess the effectiveness of MED's communications to consumers and other stakeholders, such as marijuana businesses, healthcare providers, researchers, marijuana advocacy and educational organizations, and members of the media related to health and safety concerns identified with regulated marijuana products.

We evaluated MED's contact lists for individuals who have opted in to receive marijuana industry notices, including HSAs, Informational Notices, and other industry bulletins, which address a variety of topics such as impending policy changes and tips and resources for rule implementation. We compared these recipients to CDPHE's estimated number of marijuana users in the State to evaluate the reach of MED's current distribution methods. We also surveyed the individuals who had opted in to receive MED notices to understand their experience with HSAs and their overall satisfaction with how easy it is to use MED's health and safety information. We received a total of 244 responses out of a potential 6,848 respondents, a 4 percent response rate.

In addition, we conducted on-site visits at 20 randomly selected retail marijuana businesses in 9 cities across central and eastern Colorado to determine how easy it would be for a typical consumer to access or report safety concerns when purchasing marijuana. We also reviewed the 46 HSAs and 2 Informational Notices that MED issued from January 1, 2023 through December 31, 2025 to assess MED's typical practices for safety notice organization and content. We used NotebookLM, an artificial intelligence tool, to assess the reading or grade levels required to comprehend the documents.

We researched state laws, regulations, and MED's internal policies and procedures to understand what expectations Colorado has established for HSA distribution, organization, and content. We also researched other states' practices for notifying the public of health and safety concerns identified with regulated marijuana products and researched federal communications practices to identify relevant standards for government communication to the public. Finally, we interviewed MED staff, DOR communications staff, and CDPHE officials to understand their current practices and identify any challenges associated with HSA distribution, organization, and content.

How were the results of the audit work measured?

Statute and MED rules do not address HSAs, including when they should be issued or what information they should contain. In 2025, MED implemented new guidelines on drafting and issuing HSAs, including what information to include, templates and best practice examples for HSA formats, and required review steps. Specifically, the guidelines state that HSAs should list the products affected; the category of contaminant, such as pesticide or yeast and mold; and provide

information to consumers on how to identify and dispose of the affected product. The guidance gives examples but does not require specific details to be included in these sections. Rather, MED's guidance notes that HSAs are intended to prevent individuals from consuming contaminated marijuana and instructs investigators to include any pertinent details available to help identify the contaminated marijuana.

Additionally, MED's assigned DOR communications manager developed an HSA Communication Plan in 2024. The plan identifies key audiences for HSAs, establishes a goal of "getting the HSAs in front of the people who need it most and in the simplest terms possible," and outlines strategies and tactics for communications. Notably, it includes strategies like working with CDPHE to contact individuals who qualify for medical marijuana use and are on the medical marijuana registry list, leveraging media connections and providing more detailed media releases, building stakeholder contact lists, and increasing communication with licensees and social media posts.

DOR also issues general communication guidance to its divisions, including MED. DOR recommends that divisions refer to Colorado's plain language guidelines to write public-facing communications between a fifth and ninth grade level. State plain language guidelines also call for agencies to identify and seek feedback on the needs of users; use short, simple sentences and words; rely on active voice; and leverage organization and design to enhance reader comprehension.

What problems did the audit work identify and why do they matter?

Overall, we found that MED could improve the effectiveness of its communications to consumers and other stakeholders related to health and safety concerns identified with regulated marijuana products to better support public safety. Specifically, we identified gaps in MED's processes for notifying consumers and other stakeholders when it issues an HSA. We also found that HSA organization and content lacked consumer-friendly features and did not include sufficient details to help users understand product safety risks. As a result of these issues, marijuana consumers and other stakeholders may not be receiving the information they need to make informed decisions about the safety of marijuana products. Further, because of the lack of clarity and usability of HSAs' organization and content, stakeholders who are aware of how to access the information may not be able to use it effectively.

Consumer Awareness

We identified the following gaps in MED's processes for notifying consumers and other stakeholders when it issues an HSA.

- **Limited direct notification to consumers and other stakeholders.** As of December 31, 2025, MED data indicates that there were about 7,300 individuals signed up to receive MED's HSA notices through one of MED's opt-in email lists. However, according to CDPHE's most recent report available, there were likely over 900,000 marijuana users in Colorado as of 2024.

This means that less than 1 percent of marijuana users in Colorado received direct notification from MED when it issued an HSA.

- **Some retail stores may not post HSAs and do not consistently post information on how to access HSAs.** We visited 20 retail marijuana stores to determine how easy it would be for a typical consumer to access or report safety concerns when purchasing product. We found that none of the stores posted HSAs in the stores and 11 of the 20 stores (55 percent) did not have MED's HSA QR code flyer posted at all or in a manner easily accessible to customers, as requested by MED. Specifically, we observed that 9 stores did not have the HSA QR code flyer posted at all, while 2 stores had posted the flyer where it could not easily be seen by customers. Generally, the store representatives that we spoke with during our visits appeared to lack awareness of how to access health and safety information related to marijuana; 4 of the store representatives that we spoke with stated that they did not know how to access HSAs issued by MED. Additionally, one store manager did not appear to be aware that a recent HSA had named their store in a product recall.

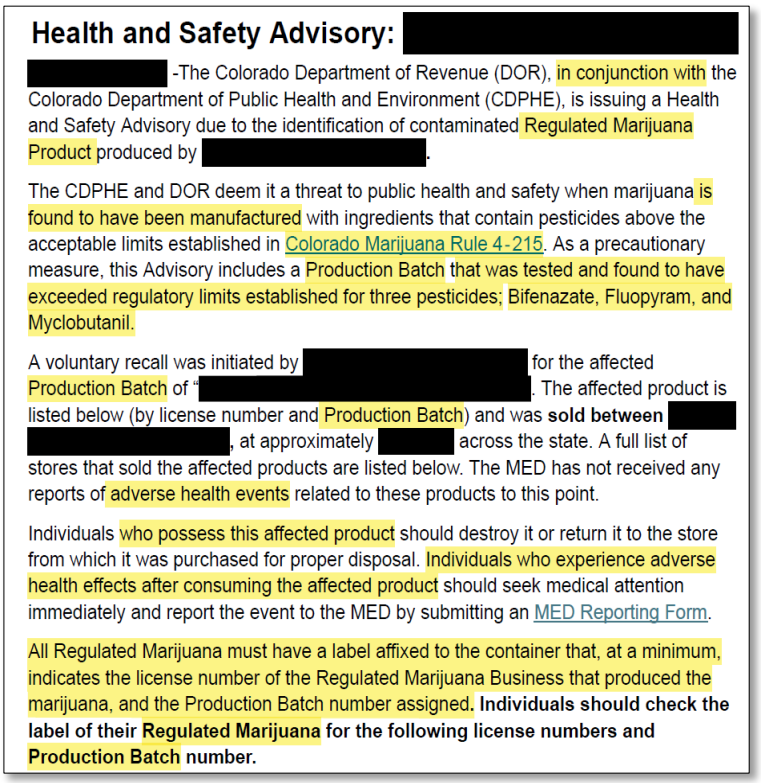
Consumer-friendly Organization and Content

Generally, we found that the 48 HSAs that MED issued from January 1, 2023 through December 31, 2025 followed a standard template with consistent types of information provided about the affected product, production company, type of contaminant, and product IDs. However, we also found that the HSAs did not consistently provide consumer-friendly organization or content to assist consumers with identifying their personal risk. Specifically, we found:

- **Organization.** Of the 48 HSAs reviewed, more than half (27, or 56 percent) were relatively short, straightforward, and easy to understand. For example, one HSA issued in 2025 included only two contaminated products sold in two locations and was just one page long. However, we found that 21 of the 48 HSAs (44 percent) presented a large amount of complex data that was difficult to navigate, and, based on the NotebookLM analysis we conducted, required a college or professional level understanding. These HSAs used complex sentence structure, regulatory or industry jargon, scientific and medical terms, and dense data blocks that made processing the information more difficult. For example, these HSAs used industry jargon to refer to the affected products that may not resonate with consumers, such as "harvest batch," "production batch," "infused pre-rolled marijuana," "regulated marijuana flower (bud/shake/trim)," and "regulated marijuana product." The HSAs also referred to contaminants such as total yeast and mold, water activity, elemental impurities, and technical and brand names for pesticides such as Bifenazate, Fluopyyram, and Myclobutanil.

  Exhibit 2.5 provides a snapshot from one HSA that shows an example of standard language MED includes in HSAs. We have redacted specific recall details and highlighted industry jargon, technical and medical terms, as well as examples of clauses that could be rewritten to comply with plain language guidance.

Exhibit 2.5
Excerpt of HSA Using Jargon and Complicated Text



Health and Safety Advisory: [redacted]

[redacted] -The Colorado Department of Revenue (DOR), in conjunction with the Colorado Department of Public Health and Environment (CDPHE), is issuing a Health and Safety Advisory due to the identification of contaminated Regulated Marijuana Product produced by [redacted].

The CDPHE and DOR deem it a threat to public health and safety when marijuana is found to have been manufactured with ingredients that contain pesticides above the acceptable limits established in Colorado Marijuana Rule 4-215. As a precautionary measure, this Advisory includes a Production Batch that was tested and found to have exceeded regulatory limits established for three pesticides; Bifenazate, Fluopyram, and Myclobutanil.

A voluntary recall was initiated by [redacted] for the affected Production Batch of "[redacted]. The affected product is listed below (by license number and Production Batch) and was **sold between** [redacted], at approximately [redacted] across the state. A full list of stores that sold the affected products are listed below. The MED has not received any reports of adverse health events related to these products to this point.

Individuals who possess this affected product should destroy it or return it to the store from which it was purchased for proper disposal. Individuals who experience adverse health effects after consuming the affected product should seek medical attention immediately and report the event to the MED by submitting an MED Reporting Form.

All Regulated Marijuana must have a label affixed to the container that, at a minimum, indicates the license number of the Regulated Marijuana Business that produced the marijuana, and the Production Batch number assigned. **Individuals should check the label of their Regulated Marijuana for the following license numbers and Production Batch number.**

Source: Office of the State Auditor analysis of MED's posted HSAs from January 1, 2023 through December 31, 2025.

We recognize that in some cases, MED has little control over the complexity of information it must include in an HSA. For example, MED has no control over how a business identifies its products, which often include product IDs with long combinations of letters and numbers. Additionally, recalls may involve complicated contaminants and affect hundreds of products and store locations, which MED should include in the HSA. However, we found that 16 of these 21 complex HSAs (76 percent) also lacked consumer-friendly organization that would help consumers navigate the complexity. For example, we saw HSAs that:

- Listed affected products by product IDs that were in no particular order, making it difficult to search.
- Listed affected products by number in alphanumeric order but not by page. In other words, the HSA listed products in columns with page breaks that required scrolling back and forth across more than one page to follow the list's order.
- Listed the stores that sold the affected products in alphanumeric order but by store legal name rather than its DBA ("doing business as") name, which the consumer would be more likely to recognize.

- Included lists with duplicate entries. For example, one HSA included a product list with 103 entries but there were only 47 unique products listed. We also found unnecessary duplication in how HSAs listed stores that sold affected product. It is common for a marijuana store to sell both medical and recreational marijuana products from a single store location and they are required to have a license for each product type. In the HSAs, MED routinely listed each license separately as an affected store despite the locations being the same. From a consumer perspective, this detail does not offer meaningful information, adding to the amount of text in the lists that they had to search through to determine if they shopped at an affected location. For example, one of the store lists was 22 pages long with almost 300 licenses listed, but many of the entries indicated duplicate store names and locations.

HSA user survey respondents also identified concerns with how MED organized HSA information. Of the 244 HSA users responding to our survey, 44 (18 percent) reported that they would like to see improvements to HSAs' organization and format, such as making them easier to read and search for affected product. For example, some respondents called out the use of "legalese" and the lack of plain language in the HSAs. Others noted difficulties searching pdfs, and recommended a searchable database or format that would allow them to search for their purchased product IDs rather than using individual pdf lists to compare detailed product information. Additionally, other users noted that the number of links MED includes in the email is a barrier to access information efficiently.

Exhibit 2.6 provides a snapshot from one HSA that shows a list of product numbers that is not organized in any particular order and includes duplication among the product numbers.

Exhibit 2.6

Excerpt HSA Listing Duplicate Product

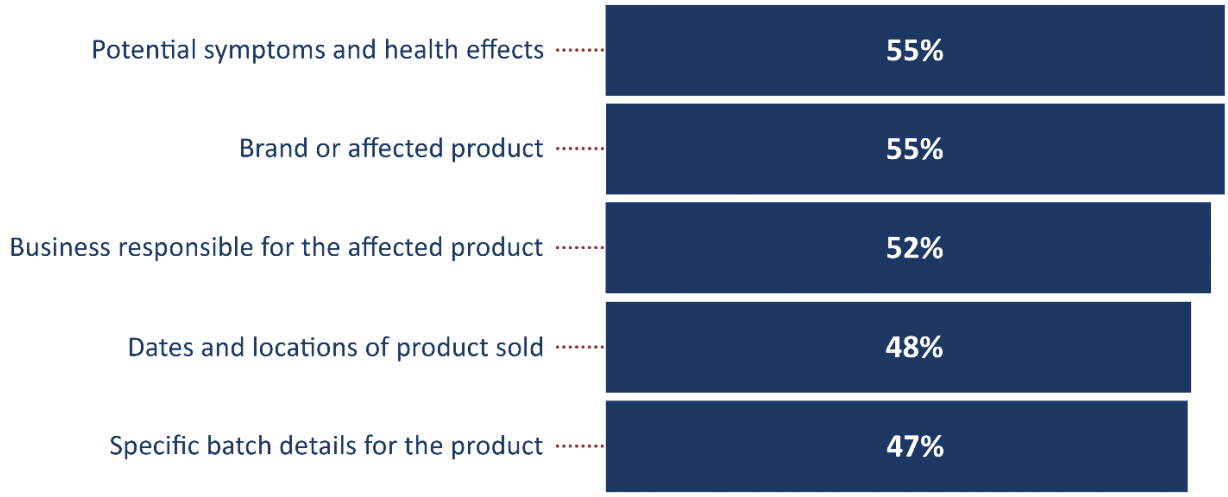
VFOG04123R	DINF08093R	DINF08093R
GPGS07193R	GBAL07123R	WGCK08023R
WGCK08023R	GOCK07123R	GOCK07123R
GOCK07123R	GPGS07193R	GOCK07123R
RPKI07193R	OIPS05243R	AFTR07053R
WTMN07123R	VFOG07053R	RNRY05313R
OREO04053R	GYPN03083R	DINF08093R
CPNH02223R	CPNH08023R	SBCK07263R
RNRY05313R	WTMN05173R	GPGS07193R
TBAN03153R	DINF02153R	SRBF04053R
PHBH03223R	GOCK07123R	GOCK07123R
RNRY05313R	GPGS07193R	OIPS05243R
TRFL03083R	GOCK07123R	OIPS05243R
RPKI07193R	SBCK07263R	OIPS05243R
SBCK06283R	WDGP07053R	WGCK08023R
RPKI08023R	SRBF07193R	GBAL06073R
DINF04053R	WDGP07053R	GRCN02223R
DVPT05033R	PHBH03223R	SRBF04053R
GYPN05173R	GRCN06143R	GOCK05313R
RNRY03083R	WTMN06073R	CPNH02223R
CPNH08023R	WTMN06073R	SRBF06143R
SBCK06283R	SBCK07263R	RNRY05313R
RNRY03083R	SBCK06283R	OIPS05243R
GPGS04123R	SBCK06283R	VFOG07053R

Source: Office of the State Auditor analysis of MED's posted HSAs from January 1, 2023 through December 31, 2025.

- **Content.** Of the 48 HSAs we reviewed, 10 (21 percent) lacked details that may have helped a consumer better understand the health and safety risk associated with the affected product, such as a clear description of the scope of affected product, the dates the product was sold, the store locations it was sold at, and the specific substance, like arsenic or lead, identified as the contaminant in the product.

  HSA user survey respondents also identified concerns with the details MED included in HSAs and indicated it would be helpful if the HSAs included information such as the specific contaminants involved, potential symptoms to watch for related to the contaminants, DBA business names, locations and dates product was sold, images of the packaging, and brand names. Exhibit 2.7 shows the areas that survey respondents indicated that they wanted more detail about.

Exhibit 2.7
Requested Details from HSA Users



Source: Office of the State Auditor analysis of HSA user survey responses.

Why did these problems occur?

MED's current HSA process relies on limited communication methods and does not require consumer-friendly organization or content. In addition, MED has not undertaken any formal evaluation of its HSA process that considers consumer needs and behaviors to help determine the best way to increase consumer awareness for HSAs and to ensure the HSAs present useful information to consumers in a user-friendly format.

MED uses limited communication methods to disseminate information about HSAs. Currently, MED posts HSAs on its website, emails individuals who have signed up to receive notifications, emails its media contacts, and asks marijuana retailers to post flyers with links to MED's website to notify the public of health and safety risks related to marijuana products. However, in our survey of HSA users, respondents identified additional outreach strategies, including some that DOR identified in its 2024 HSA Communication Plan, that could help MED reach more people. For example, respondents recommended that MED distribute HSAs to health care providers, marijuana retail locations, and the media; and post them on social media. A few respondents also noted that text messages and emails from the stores that sold the product would be welcome, with one noting that most stores keep contact lists for customers who have opted into marketing notifications. Another respondent who works at a marijuana retail store thought it would be helpful if MED had direct communication with the stores that had sold the affected product. We saw some of these additional practices in other states, such as Michigan, which requires retail stores that sold contaminated product to post the recall notice in the store for 30 days.

In addition, according to DOR's communications team, relying on the email distribution lists presents a challenge, considering email filters for spam and the potential for undelivered email due

to inbox limits and mis-typed email addresses. Currently, DOR's communications team lets stakeholders know about the health and safety information MED publishes to its website via announcements during rulemaking meetings and at other stakeholder meetings, such as the Science and Policy Forum meetings; by asking regulated marijuana stores to display the HSA flyer at their point of sale; and by informing their CDPHE partners. However, these approaches are directed at audiences that are already likely to be engaged with MED, not typical consumers.

As previously mentioned, DOR drafted a 2024 HSA Communications Plan that laid out strategies to increase broader consumer awareness and access to HSAs but has not fully implemented it. These strategies included working with CDPHE to contact individuals on the medical marijuana registry list, leveraging media connections and providing more detailed media releases, building stakeholder contact lists and increasing communication with licensees, and increasing social media posts. Although MED has implemented some of the strategies identified in the Plan, such as reducing the number of links in notice emails, encouraging the use of simpler language, and sending HSAs to its media contacts, MED has not sufficiently increased its coverage to potential marijuana users as some HSA users still report the need for increased public notice and media coverage. Additionally, the communications team reports that resource constraints have prevented the communications team from seeking end-user feedback from marijuana consumers, given the wide breadth of stakeholders and their individual needs.

MED's policies and procedures do not require investigators to include consumer-friendly organization and details. Related to organization and content, MED's policies and procedures for HSAs are generally new and applied primarily to HSAs that MED issued in 2025. However, these policies and procedures do not focus on end-user needs or incorporating plain language concepts. Specific gaps from a consumer perspective include not providing information on the specific types of contaminants identified, like what pesticides and elemental impurities were identified; presenting product IDs and store locations where sold in a user-friendly, searchable format; and leveraging plain language standards for communication like visual cues, tables, and simple terms and sentence structures.

MED revised the HSA template in January 2026 during our audit and the new template includes some improvements like example labels, simplified language, and more white space. However, it is still missing key details like the dates the affected product was available for sale and DBA names for affected stores, as well as directions to ensure formats used are searchable for images, products, and locations sold.

According to CANNRA representatives, there are no established best practices for the content, organization, or distribution of HSAs. However, we identified other states' HSAs that provide examples of requirements to post in stores affected by the recall and how to incorporate consumer-friendly details, product images, and searchable lists. These examples include:

- California—California's Department of Cannabis Control hosts an online recall portal that allows users to search for recalled product. Each recall is searchable by recall name, recall type, product, or keyword. The notice itself includes images of the product packaging.

- Michigan—The list of HSAs resembles Colorado's; however, the notices themselves include less jargon and an image of the product recalled. Michigan also requires stores that carried the product to post the notice in a visible location on the sales floor for 30 days.

- Oregon—Oregon hosts a searchable table of product recalls that features brand names and product types. The table links to a similar pdf notice as Colorado's HSAs but includes images of the product.

When we surveyed HSA users about their experience with HSAs and their overall satisfaction with how easy it is to use MED's safety information, some respondents noted that MED should increase general consumer awareness of HSAs (20, or 8 percent of respondents). One respondent noted, that they believe customers have no idea how the recall system works and that MED needs to make it easy for them to understand. Other respondents also noted that MED should post HSA information more prominently in health care settings, retail locations, the media, and social media (14, or 6 percent of respondents). One respondent indicated that HSAs' distribution should be expanded—especially for HSAs about significant dangers. In their opinion, HSAs should go to ERs, first responders, and media and they should be posted at dispensaries where a product might have been purchased.

Additionally, according to MED and DOR, MED's HSA and other email notifications are secondary communications, meaning that MED advises stakeholders and consumers to get the HSAs primarily from MED's website for complete and accurate safety information. However, we found that 75 survey respondents (31 percent) stated they do not actively monitor MED's HSA website to identify missed notices and 82 (32 percent) stated they did not know who to contact about problems receiving MED's HSAs and other email notices.

Recommendation 3

The Marijuana Enforcement Division should improve the effectiveness of its communications to consumers and other stakeholders related to health and safety concerns with regulated marijuana products by:

A. Increasing its efforts to ensure consumers are aware of how to access Health and Safety Advisories (HSA) and other safety information by implementing the strategies laid out in the Department of Revenue's 2024 HSA Communication Plan, including but not limited to requiring retail locations to post HSA flyers and requiring specific retail locations that sold affected product to post notices and notify customers who have opted in for communications from the store.

B. Developing and implementing a consumer-friendly approach to the organization and content of HSAs, including periodically collecting user feedback to evaluate whether HSAs meet their needs, providing all relevant details for a consumer to assess their personal risk, and consistently organizing information in standard, easy-to-search formats to help consumers navigate the often

dense and complex data presented. This may include using "doing business as" names, images of product labels, and standard list formats for products and stores in each HSA.

Response

Marijuana Enforcement Division

A. Agree
Implementation Date: November 2027

As noted above, the MED is committed to enhancing consumer awareness for reporting product safety concerns associated with Regulated Marijuana. The implementation timeline of November 2027 takes into account statutory rulemaking requirements and timelines, as requiring retail locations to post content and notify customers will require rulemaking. The MED's implementation efforts will also include communication and outreach strategies it expects to initiate between the end of 2026 and mid-2027.

B. Agree
Implementation Date: June 2027

The MED agrees that the organization and content of Health and Safety Advisories can be refined to enhance consumer readability. Building upon the MED's initial efforts noted in the Finding, the MED will leverage this recommendation to guide ongoing enhancements. To improve the accessibility of the information for consumers, the MED plans to systematically gather user feedback to inform HSA content updates and evaluate the impact of these revisions.

Finding 4 — Case Management Information and Data Collection Practices

MED documents information related to any referrals, or complaints, that it receives related to marijuana businesses in its case management system, MyLO. When MED receives a referral, staff will review it to determine if it has merit, and, if so, assign it to an investigator for further investigation. If an investigator confirms there is a potential violation or problem to pursue, the investigator opens an associated enforcement case in MyLO and documents information such as notes on any communications with the business, pictures and other supporting evidence, and formal reports of investigation. If the investigator and their supervisor determine that the case warrants disciplinary action, MED's Analysis and Resolution team uses the same MyLO record to document notices to the business, hearing procedures, and final outcomes such as settlement agreements, fines, and license suspensions. We refer to this investigation and disciplinary process, as applicable, as a "case" throughout this finding.

The extent to which MED documents decision making and other information it collects about cases varies on the risk level it believes exists based on MED's investigation process. For example, an investigation or its resulting enforcement case may be closed with no documentation other than the

MyLO record if subsequent work finds no support for the alleged violations or the violations are minor enough to warrant only a verbal warning. If an investigator confirms violations, additional MyLO documentation requirements apply including uploading warning letters, reports of investigation, and documentation of disciplinary action.

MED currently has several ways that it tracks information related to investigations. The MyLO record is the primary, official record of MED's interaction with the licensee. However, field offices collect additional information in their team-specific case tracking spreadsheets used to manage each case during the course of the investigation. Each team and office uses its own template and there are no formal expectations or instructions for the individual teams' spreadsheets use, beyond the fields captured in MyLO. MED's Analysis and Resolution Team also uses its own spreadsheet to track its cases and report on violations. These case tracking spreadsheets are not a part of the official case record that is accessible to all MED staff.

MED reports that it will be replacing MyLO with a new licensing and case management system in Spring 2027.

What was the purpose of the audit work and what work was performed?

The purpose of our audit work was to evaluate MED's process for investigating alleged violations, including its consideration of compliance and specific health and safety risks, its maintenance of sufficient records to assess its own performance, and its identification of the risks and challenges to its ability to meet program objectives.

We reviewed MED's investigation and enforcement case datasets and the case tracking spreadsheet for enforcement case violations maintained by the Analysis and Resolution team for January 1, 2023 through December 31, 2025 to assess their completeness and the consistency of what was included in the reviews; to identify the corrective actions taken and compare those across the population; and to review the rationale noted in MyLO for those actions. We conducted a file review of licensees with a history of enforcement cases. We randomly selected 8 licensees out of a total of 263 licensees with multiple enforcement cases from 2023 through 2025, or about 3 percent of the licensees; these 8 licenses had a total of 27 enforcement cases during the 3-year period. We reviewed all of the MyLO documentation and case notes associated with each of the 8 sampled licensees to determine if MED handled investigations consistently based on the severity of the alleged violations and the history of past violations for the licensee. We also reviewed how MED documented its decision making so that it could determine how to assess the risk of a business' prior interactions with MED in future investigations. In addition, we reviewed all of the related investigation and enforcement case records in MyLO and MED's case tracking spreadsheets for the 18 HSAs MED issued in 2025 to determine specific timelines and challenges associated with safety investigations.

Finally, we reviewed MED's policies and procedures for managing and documenting information related to investigations and enforcement cases and we conducted interviews with MED staff to

understand the investigation and enforcement processes, documentation practices, and any associated challenges.

How were the results of the audit work measured?

The Standards for Internal Control in the Federal Government (Green Book), published by the U.S. Government Accountability Office, provides guidance related to the control system that management implements to provide reasonable assurance that an organization's objectives will be achieved. These standards represent an accepted best practice for internal control systems in government organizations and Colorado requires all executive branch agencies to incorporate them. Green Book management criteria require managers to develop processes to identify, analyze and respond to program risks that pose threats to achieving their objectives [Principle 7]. To do this, management must identify and collect relevant, quality information [Principle 13].

MED provides some limited guidance to investigators on the information it expects them to document. For example, MED's Business Inspections Policy requires a written Report of Investigation when investigators confirm certain types of violations. Additionally, the case tracking spreadsheet used by the Analysis and Resolution team includes a tab with data definitions for expected entries in some fields, such as case status, assigned analyst, and case outcomes.

What problems did the audit work identify and why do these problems matter?

Overall, we found that MED did not sufficiently document key case management details to support its overall performance towards meeting program objectives and identifying relevant risks and challenges, such as inefficient processes, inaccurate reporting, and resource needs. These key details include relevant data elements on the timing and resources needed to manage cases, case outcomes, and whether cases involve health and safety risks for consumers; its consideration of businesses' compliance risks; and its decision making related to why it took specific enforcement actions. Without effective documentation and data collection practices, MED is not able to fully understand health and safety risks, how its actions affect overall licensee compliance, and its challenges to effectively manage them. Further, MED may not consistently generate the information that it needs or be able to easily access and analyze it to effectively advocate for resources and to make changes to the program or its practices to address these risks. Specifically,

- We found data reliability issues that limited our ability to assess how MED manages cases and identifies trends in case outcomes and violations including:
    - **Some investigation and enforcement case records in MyLO had missing or duplicate entries for certain fields, including the fields for assigned investigators and field offices as well as date fields for caseload, workload, and resources.** For example, 2,045 of 5,000 enforcement case records (41percent) and 1,164 of 38,233 investigation records (3 percent) for Calendar Years 2023 through 2025 were either missing an assigned investigator,

or when it was included, the investigator's name was repeated multiple times. For example, one case included the same investigator's name, repeated 15 times in the field that noted the assigned investigator. According to MED, investigators typically record the names of lead investigators but they may not record all investigators who supported a case. These gaps in MED's data collection about cases prevent MED from fully understanding the length of time investigators work on each case and how many investigators participated, which are critical elements in understanding and advocating for its resource needs. Additionally, it is not possible for MED to calculate and report on trends for actual caseload per investigator without relying on anecdotal information.

- **Some investigation and enforcement case records in MyLO were missing information on the results of the investigations and associated recommendations, and the enforcement actions taken.** Of the 16,325 investigation participant records associated with Calendar Years 2023 through 2025 cases, 1,850 (11 percent) had no recorded reason from the investigator as to why they closed the case. Of the 1,397 enforcement case records, 353 (25 percent) had no recorded disposition to show what actions were taken. Without an accurate count of closure reasons and case dispositions, MED has a limited ability to report on its overall investigation and enforcement of potential compliance issues and substantiated versus unsubstantiated reports of noncompliance.

- **Some enforcement case records in the Analysis and Resolution team's tracking spreadsheet contained inconsistent data entries for violations.** For example, the spreadsheet included multiple violation citations in the same field for a case, but the team did not use consistent punctuation (e.g., commas, semicolons, and spaces) to separate violation entries, which made it difficult to isolate and count correct citations. We also found that MED does not maintain a key, or description, of violation citations listed in the spreadsheet, some of which are older citations that are no longer listed in program rules. In addition, many of the codes the team used are repetitive of the same requirement. For example, statute and program rules reference the same prohibited activity in multiple places, leading to multiple potential citations such as those used for underage sales, label violations, and license requirements for business owners. It is not clear what value is added by citing multiple references for the same prohibited activity. This practice increases the risk that staff may make errors when entering multiple codes and presents challenges in accurately reporting on the true number and distribution of violations.

- We found that MED did not consistently document some case management information for investigation and enforcement cases related to HSAs.

  - **MED did not consistently track the number of investigations that it conducted with health and safety-related concerns.** Specifically, MyLO allows investigators to select only one investigation type per case. MED instructs investigators to select the investigation type based on the primary issue reviewed, but it also allows investigators to select broad categories like "Regulatory Violation" that do not provide sufficient detail to indicate if the investigation was safety related. This practice limits MED's ability to report on its overall

investigation and enforcement of potential health and safety issues and the prevalence of these risks in Colorado's marijuana market.

- **MED does not consistently document when cases have non-disciplinary outcomes, such as verbal warnings; our file reviews found that investigators did not typically document the scope of on-site inspections unless it was directly relevant to potential violations.** Moreover, some investigators told us they only review health and safety-related risk areas like sampling and testing practices when there is a relevant allegation. Without this type of information, future investigators will not be aware that the licensee has a history of similar problems and may not escalate a current issue accordingly.

- **MED did not consistently document how investigators considered business compliance risks in enforcement cases when determining the appropriate follow-up for non-disciplinary outcomes like verbal and written warnings.** MED instructs investigators to consider aggravating and mitigating factors when assessing a business' risk for noncompliance. However, for 8 of the 27 cases we reviewed (30 percent), MED did not document its decision making related to the specific factors they considered when determining follow-up actions. For example, in our review of case records, we noted some cases included aggravating factors such as businesses with a history of similar problems, untimely responses from the businesses during the investigations, and businesses with apparent willful noncompliance. At times, cases also included mitigating factors, such as changes in ownership, the newness of a business, or the business' proactive actions to address issues once identified. However, investigators did not clearly document how they considered these factors when determining how to resolve the cases. As a result, it was not clear whether MED's consideration of noncompliance risks for these businesses was in line with its expectations.

- **MED did not consistently document case details and events to inform factors contributing to case timelines, the rationale for issuing HSAs, and resolution of cases.**

  - 5 of the 18 HSAs (28 percent) issued in Calendar Year 2025 resulted from a single case involving a certified testing facility that improperly tested pesticide samples. However, the MyLO case record did not have detailed information for each HSA issued, including when and how investigators determined the need for each HSA.

  - Of the other 13 HSAs issued in Calendar Year 2025 that involved a more typical business investigation, for 8 (62 percent), MED investigators did not document a request or relevant dates in MyLO for CDPHE's recommendation to issue the HSA. Additionally, for 3 of these 13 HSAs (23 percent), licensees self-reported that they destroyed product; however, the investigators only documented work in MyLO to confirm product destruction for 1 (8 percent).

Why did these problems occur?

These problems occurred because MED does not have a comprehensive information and data collection strategy and plan that outlines key case management details to collect, provides guidance on where and how staff should collect them, and outlines how MED management should use that data to inform program operations.

For example, MED lacks comprehensive policies, procedures, and guidance to staff on what specific information staff must document in official case records and how to document it. Current policies and procedures include partial guidance on required documentation. However, the guidance does not comprehensively identify all key elements, including what information investigators should document for non-disciplinary outcomes or for safety investigations. MED was able to provide additional details for some cases indicating that it retained some records outside of MyLO; however, it is not clear how MED retains these other sources of information, for how long, and whether staff are able to easily access them to review a licensee's full history.

MED's policies and procedures also do not provide comprehensive instruction on how to collect information such as how to consistently enter data in a single cell to allow for analysis in the example of the Analysis and Resolution team's case tracker. A more intentional approach to collecting violations data—including providing guidance to staff on how to enter data in the tracker or other data systems, maintaining a key that groups related citations into reporting categories to ensure that older citations are easily identifiable, and reconsidering the level of specificity in the rules to which these are cited—would allow MED to more easily access data and report meaningful results.

According to MED, MyLO had a number of limitations that led it to adopt its manual tracking for some information, such as the case tracking spreadsheets and requests to CDPHE for HSA recommendations. MED is in the final stages of replacing that case management system with a new one. However, it is not clear whether the new case management system will address these areas. Regardless of the specific system or tracking tool used, MED should identify key case management information and provide guidance to staff on how to collect it to ensure it is able to use case information to assess program performance, risks, and challenges; and use quality information to effectively report on the program and advocate for resources and changes.

Recommendation 4

The Marijuana Enforcement Division (MED) should ensure that it sufficiently and consistently documents its investigations of and any resulting outcomes related to marijuana businesses' general compliance and violations to better inform its overall performance towards meeting program objectives and identifying relevant risks and challenges by developing and implementing a comprehensive information and data collection plan. This plan should include:

A. Establishing key case management details that must be collected, documented, and tracked during an investigation and enforcement case, including but not limited to key case milestone dates, the number of investigators working a case, the nature of any violations, whether a case involved health and safety risks, and the consideration of risk and other factors in case decision making.

B. Developing comprehensive policies and procedures that specify how and where the information should be documented and providing relevant training to staff on these procedures to ensure consistent and complete data collection.

C. Documenting and expanding its process for compiling case management data and using the data to:

   i. Identify relevant risks and challenges to MED's ability to meet program objectives, such as inefficient processes, inaccurate reporting, and resource needs;

   ii. Assess MED's performance and potential resource needs and areas where the division might advocate for additional resources and legislative changes;

   iii. Expand MED's ability to report on its overall investigation and enforcement of potential health and safety issues and the prevalence of these risks in Colorado's marijuana market.

Response

Marijuana Enforcement Division

A. Agree
Implementation Date: December 2027

The MED is committed to developing and implementing a comprehensive information and data collection plan. A new case management system is currently being implemented that will allow the MED to more strategically capture and report on key information without duplicating efforts across various trackers and teams. The MED agrees that the identification, documentation, and retrieval of key case management details in an efficient manner will support overall performance to meet regulatory objectives and allow for more consistent evaluation of performance goals and outcomes.

B. Agree
Implementation Date: December 2027

The MED agrees with the recommendation. The suggested timeline allows for full implementation of the new case management system, along with adequate time to evaluate any gaps and find solutions for how the new system ultimately supports or complements the agency's ability to fully implement its information and data collection plan.

C. Agree
Implementation Date: December 2027

The MED is committed to being a data-driven organization. Ensuring data informs operational decisions and policy discussions, as well as making the data available to stakeholders as permitted by law and available resources. For example, the Division has developed a data dashboard publicly available, publishes final agency actions on its website, and makes a variety of other resources available that include critical data points. The Division acknowledges the benefits of this recommendation to focus a data collection strategy to better inform the discussion around relevant risks and challenges as well as document performance and resource needs related to investigation and enforcement efforts.

Finding 5 — Marijuana Testing Laboratory Inspection and Certification

Statute requires that marijuana products sold in Colorado be free from various contaminants and that the potency listed on product labels is accurate. To ensure that marijuana products comply with state standards, marijuana cultivators and manufacturers are required to send samples of their products to marijuana testing facilities, or laboratories (labs), that are certified by MED for testing to ensure that the products comply with state regulations [Section 44-10-203(2)(d), C.R.S.]. MED serves as the primary licensing and certification authority for marijuana testing facilities in the state. Under Colorado law, CDPHE has general authority to oversee laboratory standards and operations but has not established its own standards for marijuana testing labs [Section 25-1.5-101(1)(f), C.R.S.]. Rather, MED and CDPHE share oversight of marijuana testing labs through a December 2015 Memorandum of Understanding (MOU) and confidentiality agreement that established each agency's role for oversight of marijuana testing labs. Under this agreement, CDPHE serves as MED's agent for providing technical assistance related to marijuana testing standards, protocols, methodologies, and quality control. According to statute, CDPHE is responsible for establishing technical laboratory standards and providing scientific expertise, including evaluating practices at marijuana testing labs in Colorado and making recommendations to MED as to whether a lab should be certified to conduct marijuana product testing.

The certification requirement is intended to ensure that marijuana testing labs use scientifically valid methods and provide consistent and accurate results to the marijuana businesses. The Lab Certification team at CDPHE inspects marijuana testing labs when they apply for their initial certification with MED and annually when they apply for recertification. The annual inspection is typically on-site and consists of a review of lab procedures, and tracing of documentation for a selection of product samples submitted by marijuana businesses from receipt at the lab to destruction to ensure the lab handled and tested the sample properly. CDPHE may also rely on a desk audit, a review based solely on documents, to assess lab procedures. If CDPHE identifies any deficiencies in a lab's facilities or testing procedures, the lab is required to develop a plan of correction to address the deficiencies. The extent to which CDPHE verifies corrective action varies based on the severity of issues identified and what the lab reports it plans to do. Once CDPHE is

satisfied that a lab has corrected any deficiencies, it makes a recommendation to MED, as the primary licensing authority, to certify the lab. In some cases, CDPHE may recommend that MED certify the lab with contingencies. According to CDPHE, it may recommend certification with contingencies if CDPHE staff identify what they consider to be low risk issues, such as a broken hood vent used for ventilation during testing, that the lab plans to address. CDPHE may also recommend that MED should not certify or recertify a lab for testing, which can lead to an investigation, license suspensions, and other disciplinary actions depending on the deficiencies involved. From January 1, 2023 through December 31, 2025, there were seven private marijuana testing labs in the state that had been certified by MED.

What was the purpose of the audit work and what work was performed?

The purpose of our audit work was to determine if MED and CDPHE have established effective processes to ensure that the marijuana testing labs that MED certifies have demonstrated proficiency to conduct marijuana testing, so that each lab tests marijuana in accordance with established requirements and that licensees and consumers can be assured that marijuana sold in Colorado is free of prohibited contaminants and labeled with the accurate potency.

We interviewed CDPHE staff to gain an understanding of its processes for conducting lab inspections, making certification recommendations to MED, and maintaining records related to the inspection process. We interviewed MED staff to gain an understanding of how it interacts with CDPHE on the lab certification process and its expectations for CDPHE in the process. We reviewed available documentation related to CDPHE's inspection and certification process for the seven marijuana testing labs that MED certified or recertified in Calendar Years 2023 through 2025. Specifically, we reviewed available documentation related to the inspections, the marijuana testing labs' plans of correction (how the labs reported they would address noted deficiencies), supervisory reviews of the inspection and certification processes, and CDPHE lab certification recommendations that it sent to MED and to the marijuana testing labs.

How were the results of the audit work measured?

We identified the following criteria related to MED's and CDPHE's authority with respect to marijuana testing labs:

- MED has the statutory authority to grant or refuse state licenses for the cultivation, manufacture, distribution, sale, hospitality, and testing of regulated marijuana products [Section 44-10-202(1)(b), C.R.S.].

- CDPHE has the statutory authority to establish and maintain labs, conduct lab investigations as deemed necessary for the protection of public health, and establish standards for diagnostic tests by labs [Section 25-1.5-101(1)(e) and (f), C.R.S.]; this provision is not limited to, or specific to

marijuana. MED and CDPHE developed and entered into an MOU that governs CDPHE's support of marijuana testing labs under this general provision.

- CDPHE must validate and verify material changes to lab operations [1 C.C.R. 212-3, Rules 5-415, 5-420, 6-415, and 6-420]. In addition to the annual certification process, if a lab makes changes in its leadership, location, testing methods, instrumentation, or workflows, MED rules require CDPHE to review the changes to ensure continued compliance and effectiveness of lab operations. MED rules dictate the extent of CDPHE's review based on the specific change the lab reports.

- CDPHE has the responsibility to maintain adequate internal controls to govern its operations and ensure that it meets its objectives. The Standards for Internal Control in the Federal Government (Green Book), published by the U.S. Government Accountability Office, provides guidance related to the control system that management employs to provide reasonable assurance that an organization's objectives will be achieved. These standards represent an accepted best practice for internal control systems in governmental organizations and are required for all of Colorado's executive branch agencies. According to the Green Book:

    - **CDPHE should design and implement control activities.** Management should design control activities to mitigate risks to achieving the entity's objectives to acceptable levels. Control activities may include creating documents that outline processes and expectations such as standard operating procedures, maintenance of appropriate documentation of activities and supervisory reviews, and approval of day-to-day activities [Principles 10, 10.01 and 12, 12.01].

    - **CDPHE should use quality information.** Management should obtain or generate relevant, quality information and use it to support the functioning of the internal control system. Management should establish information requirements through policies and procedures, with clear responsibility and accountability for the quality of information. These information requirements should be communicated both internally and externally [Principle 13, 13.01 and 13.03].

    - **CDPHE should perform monitoring activities.** Management should establish and operate monitoring activities to monitor its internal control system and evaluate the results [Principle 16, 16.01].

What problems did the audit work identify?

Overall, we identified concerns with the completeness and consistency of CDPHE's processes for conducting inspections of marijuana testing labs and making recommendations to MED on whether a lab should be certified. The problems we identified include:

Incomplete and inconsistent documentation to support lab certification recommendations. We requested documentation from CDPHE to support its inspection process and certification

recommendations for all seven of the marijuana testing labs that it inspected in Calendar Years 2023 through 2025. We found that CDPHE did not routinely retain key documents to support its marijuana testing lab inspections or certification recommendations. Specifically, CDPHE did not retain its on-site inspection checklists and staff notes to support the extent and consistency of staff review for each inspection and the specific marijuana product samples for which staff traced supporting documentation. CDPHE also did not retain documentation to support lab-reported changes that required CDPHE confirmation and follow-up or communications that it made to the lab when these requirements were satisfied. In addition, for 3 of the 7 labs (43 percent), CDPHE did not provide full documentation supporting its certification recommendations to MED. Missing documents included the labs' plans of correction to address deficiencies identified during the inspection process, CDPHE's letters to the labs accepting their plans of correction, and follow-up communications between CDPHE and the labs when CDPHE found that some of their plans of correction needed to be changed.

Additionally, we found that for 6 of the 29 plans of correction (21 percent) that we reviewed for these 7 labs, their plans of correction did not clearly align with and address the deficiencies CDPHE noted during its inspections. In addition, CDPHE did not have documentation to show that it followed-up with all labs to confirm that the labs made the changes necessary to support CDPHE's recommendation for certification.

Recurring deficiencies for same standards and groups of standards. CDPHE defines a recurring deficiency as the same issue in a specific process observed year-to-year. Based on the lab inspection reports we reviewed, we found that CDPHE identified similar recurring deficiencies for specific standards and across general categories of standards from one inspection to the next for each of the 7 labs. The general categories included issues with documentation practices, adherence to standard operating procedures, clarity of standard operating procedures, guidance to staff, and implementation of quality assurance and quality control procedures. According to CDPHE officials, they consider many of these recurring deficiencies to be minor. However, recurring minor issues may be indicative of larger management problems.

Corrective actions may over-rely on standard operating procedure updates and future action without sufficient follow-up. We found that for all 7 testing labs, many of the corrective actions the labs proposed to address deficiencies that CDPHE identified consisted of the labs making updates to their standard operating procedures. However, simply revising their procedures may not address the root cause of staff not adhering to them. For example, staff may continue to have issues following the procedures without a sufficient training plan in place or management's regular review and update of procedures to ensure their relevance. Further, we found that CDPHE recommended certification with contingencies on six different occasions for four testing labs. CDPHE provided evidence that appeared to clear the contingency for only one of these six instances. For the other five instances, CDPHE did not retain documentation to show that it verified that the labs addressed the identified deficiencies. Even though CDPHE did not have documentation to show that it had verified that the labs had corrected their deficiencies, CDPHE recommended to MED that the labs be re-certified and MED re-certified all six of the labs based on CDPHE's recommendation.

CDPHE reported to us that it had sent email confirmation to MED that it had cleared the contingencies but neither CDPHE nor MED had documentation of that communication.

Inconsistent communication to MED on lab findings and CDPHE certification recommendations. In two instances, we identified inconsistencies in the communications CDPHE provided to MED regarding certification recommendations. For one lab, CDPHE recommended certification with a contingency that it did not report to MED. Specifically, CDPHE included a contingency that the lab fix a broken ventilation hood in its letter to the lab but did not reference the contingency in its corresponding recommendation letter to MED. In the other instance, CDPHE identified significant concerns with a lab during a recertification inspection that led it to recommend that the lab stop all pesticide testing in June 2025. CDPHE notified MED via email of its recommendation that the lab stop pesticide testing, however, CDPHE did not formally notify MED that it recommended suspension of the lab's certification until September 2025. The lab continued pesticide testing during this timeframe of June to September 2025.

Why did these problems occur?

MED and CDPHE have not clearly defined expectations for the lab inspection and certification process. While MED and CDPHE share inspection oversight and certification of the marijuana testing lab process—with MED having final decision-making authority—MED reports that it has had little input in CDPHE's lab inspection and certification processes. Similarly, CDPHE reports that MED has not been as involved as CDPHE would like with the lab certification process. The 2015 MOU between MED and CDPHE governs this arrangement but it does not specify expectations for what the scope of CDPHE's inspection and certification process should include and the outcomes that MED expects from this process beyond detailing confidentiality requirements CDPHE must comply with related to licensee information in line with MED rules. Although the MOU notes that CDPHE's technical assistance, development, and implementation of MED's marijuana testing proficiency program are essential to MED's proper regulation and control of licensing of the cultivation, manufacture, distribution, and sale of marijuana in Colorado, it does not provide sufficient direction on what these processes should look like.

MED and CDPHE have not reevaluated their agreement for the lab inspection and certification process since the original 2015 MOU was established. In our discussions with MED staff about the issues we identified in CDPHE's lab inspection and certification processes, they expressed an interest in making changes to the processes, but they had not directly expressed any concerns to CDPHE. For example, according to MED, it would be helpful if CDPHE shared more information about the scope of CDPHE's inspections when it makes recommendations on whether MED should certify a marijuana testing lab, such as the samples CDPHE reviewed, how CDPHE used desk audit procedures versus on-site inspection to support its recommendations to certify, any issues CDPHE identified and how the lab resolved them, and any communication CDPHE provided to the lab. CDPHE does not currently provide that information to MED when it makes a recommendation regarding a lab's certification. MED also expressed concerns with the extent of CDPHE's follow-up and verification of corrective actions to address lab deficiencies. For example,

MED believes CDPHE should reconsider issuing a recommendation to certify with contingencies and instead take additional steps to verify that a lab has implemented all needed corrective actions before making a recommendation to MED. According to MED, it is not clear under CDPHE's current inspection process whether it is CDPHE's or MED's responsibility to verify that a lab has taken the necessary corrective actions to address any named contingency issues. Further, MED expressed concerns with how and when CDPHE uses desk audits during the inspection process and it would like for CDPHE to outline specific circumstances in which that approach may or may not be used. However, according to CDPHE officials, MED declined their previous offers to share additional information about their recommendations to certify.

Given that the current MOU is more than 10 years old, MED has since expanded its Physical Sciences team, and the marijuana industry has continued to evolve; MED and CDPHE would benefit from re-visiting their agreement and expectations for the lab inspection and certification process to ensure that CDPHE's work provides the information that MED needs to make informed certification decisions.

CDPHE's newly implemented standard operating procedures do not fully address the issues we identified or reflect MED's expectations. Up until April 2026, CDPHE lacked documented policies and procedures for its marijuana testing lab inspection and certification recommendation process. CDPHE did not have any guidance or procedures for lab inspection documentation retention to support the scope of on-site reviews and supervisory review of recommendations for lab certification to ensure consistency in documentation, and staff decisions and resolution of any contingencies. For example, in our review of the marijuana testing lab documentation, we found that for 6 of the 29 plans of correction (21 percent) that we reviewed, the format of each of the lab's plans of correction made it difficult to trace the corrective action proposed to the specific deficiency noted in the inspection report. As a result, it was unclear if the plans would actually address the problems that CDPHE identified. Although CDPHE retained some informal notes on staff and supervisory reviews, it did not have criteria for how staff and supervisors should review and document support for the decision to recommend a marijuana testing lab for certification. According to CDPHE, its email retention policy led to much of the supporting evidence related to marijuana testing lab certification recommendations being deleted after 90 days because CDPHE did not maintain the information outside of emails.

At the end of April 2026, during our audit, CDPHE implemented written standard operating procedures around its inspections and process for making recommendations to MED related to marijuana testing lab certifications. These new procedures address some of the issues we identified, such as establishing expectations for documenting and retaining support for some key steps and final decisions in the inspection and investigation process. However, we found that CDPHE's new standard operating procedures still lack some guidance and requirements that are important to ensure that CDPHE's processes are consistent and documented, especially since CDPHE's processes rely heavily on staff judgment and because CDPHE shares the lab certification process with MED. Specifically, the new standard operating procedures do not clearly address how staff and supervisors should document support for key decisions or steps required to clear contingencies when its working documents and final certification decisions indicate that there are still corrective

actions the lab should take. Additionally, when CDPHE developed its new standard operating procedures, it did not obtain MED's input on its expectations and needs for the certification recommendation process and communication. For example, although MED expressed interest in CDPHE addressing these areas, CDPHE's new standard operating procedures do not explain when it is appropriate to use desk audits during the inspection process or address communications with MED, especially when CDPHE recommends certification that is contingent on the lab taking specific actions to remedy deficiencies identified by CDPHE during the inspection process. Further, the procedures do not specify how CDPHE defines a recurring deficiency or escalating approaches for how staff should deal with these when identified. While MED does not formally define its expectation, it provided us with a broader definition for recurring deficiencies that encompasses similar issues or issues that have the same impact. CDPHE's current practice involves a narrower definition that allows labs to have similar deficiencies year-over-year without addressing that some deficiencies may be caused by the same root cause, such as management not enforcing compliance.

Why do these problems matter?

When CDPHE does not have a complete, well-defined process for its lab inspections and recommendations to MED for certification, it can fail to follow an inspection process that ensures its staff review labs consistently and comprehensively and that CDPHE has full insight into the lab's performance. Further, CDPHE's lab certification process may not fully meet MED's expectations or effectively oversee the marijuana testing laboratories. MED relies on CDPHE's technical expertise and thorough vetting of the marijuana testing labs to help ensure that competent labs properly, accurately, and consistently test marijuana products that are offered for sale to the public; report whether those products are safe for consumption; and verify the potency of the products. If CDPHE does not document a consistent marijuana lab inspection and certification recommendation, it may recommend labs for certification that should not be certified.

Recommendation 5

The Marijuana Enforcement Division (MED) and the Colorado Department of Public Health & Environment (CDPHE) should improve the marijuana testing laboratory inspection and certification recommendation process by working together to:

A. Establish well-defined expectations for the process including what documentation CDPHE should retain to support its recommendations to certify marijuana laboratories, including those with contingencies; what steps CDPHE staff should take to verify that labs have addressed any identified deficiencies prior to making a certification recommendation; agreed-upon procedures for defining key terms such as recurring deficiency and the use of desk audits during inspections; the timing of CDPHE's certification recommendation to MED when the recommendation is contingent on laboratories curing deficiencies at a later date and verification of corrective action; and standard communication protocols and what information CDPHE will provide to MED with each recommendation. MED and CDPHE should also establish a periodic evaluation of

the laboratory inspection and certification process and these expectations to be conducted jointly by both parties to ensure it continues to meet MED's needs.

B. Revise their Memorandum of Understanding to ensure that expectations for both parties in the shared task of laboratory inspection and certification are updated, clear, and reflective of MED's requirements.

Response

Marijuana Enforcement Division

A. Agree
Implementation Date: March 2027

The MED has a longstanding history of interagency coordination with the CDPHE and believes there is valuable opportunity to revisit its laboratory inspection and testing certification processes. The MED is prepared to collaborate with the CDPHE to clarify expectations based on statutory and regulatory authority, as well as update or establish new policies and interagency agreements that can support alignment in understanding and shared accountability between the departments.

B. Agree
Implementation Date: March 2027

As noted above, the MED is prepared to collaborate with the CDPHE on updates to its MOU to ensure alignment in understanding and shared accountability between the departments based on statutory and regulatory authority.

Response

Colorado Department of Public Health & Environment

A. Agree
Implementation Date: March 2027

CDPHE and MED will jointly revise the formal Memorandum of Understanding (MOU) provisions to create clear expectations for the laboratory inspection and certification process, and CDPHE will revise its Cannabis and Natural Medicine Certification and Auditing Standard Operating Procedure (SOP).

The SOP, titled CERT 1238: Cannabis and Natural Medicine Certification: Compliance Audits and Certification of Testing Facilities. (version 1.0), was implemented and fully authorized April 28th, 2026. This SOP will be updated to include additional details for the following procedures:

- Documentation retention guidelines to ensure full retention of audit notes and files supporting all recommendations submitted to MED, specifically highlighting justification for contingent status.
- Steps CDPHE staff should take to verify and document that labs have addressed any identified deficiencies prior to making a certification recommendation.
- Definitions of key terms such as recurring deficiency.
- Protocols for the use of desk audits during inspections.
- Timing of CDPHE's certification recommendation to MED, when the recommendation is contingent on laboratories remediating deficiencies at a later date and verification of corrective action; and standard communication protocols and what information CDPHE will provide to MED with each recommendation.

CDPHE and MED leadership will establish a periodic review cadence to jointly evaluate inspection metrics, reassess inter-agency protocols, and adapt certification workflows to evolving industry and regulatory standards.

B. Agree
Implementation Date: March 2027

CDPHE agrees with the recommendation to update the 2015 interagency Memorandum of Understanding (MOU) with the MED to reflect the expectations of each agency and optimize joint oversight.

To address all aspects of the recommendation, CDPHE leadership will collaborate with MED leadership to execute a modernized MOU that refines operational expectations while leveraging each agency's distinct strengths.

Recommendation 6

The Colorado Department of Public Health & Environment (CDPHE) should improve its marijuana testing laboratory inspection and certification recommendation process by revising written policies and procedures to reflect any changes made to the Memorandum of Understanding and expectations established in Recommendation 5.

Response

Colorado Department of Public Health & Environment

Agree
Implementation Date: June 2027

CDPHE agrees with the recommendation to update and align its internal written policies and standard operating procedures (SOPs) with the revised Memorandum of Understanding (MOU) and operational expectations established under Recommendation 5. To address all aspects of the recommendation, CDPHE will implement the following actions:

SOP Review and Revision: Following the execution of the updated MOU, CDPHE will update all internal laboratory inspection and certification SOPs to fully incorporate agreed-upon interagency processes, definitions, and communication protocols.

Embed Detailed Operational Guidance: Updated policies will formally incorporate standardized record retention workflows, explicit criteria for desk audits versus on-site inspections, updated definitions of recurring deficiencies, and formalized procedures for verifying lab corrective actions prior to certification recommendations.

Incorporate Elevation Protocols: Integrate clear, finalized procedures into internal SOPs for escalating severe safety, testing, or regulatory violations to MED to ensure timely action.

Staff Training & Quality Control: Revised SOPs and checklists will be controlled and provided to inspection and supervisory staff to ensure consistent policy application.

Policy Consideration for an Enhanced Role for the State Reference Lab

Members of the General Assembly requested this audit in 2025 in response to stakeholder concerns with regulated marijuana product quality and labeling practices and whether the current regulatory environment is sufficient for ensuring consumer safety. Inconsistent private lab testing practices, insufficient product sampling and testing requirements, and gaps in oversight and enforcement of product safety standards were central to these concerns.

In Colorado, DOR and MED have the primary responsibility for marijuana enforcement. However, MED relies on CDPHE to provide expert advice and technical support, including support from CDPHE's state reference lab for product testing. CDPHE established the Cannabis and Natural Sciences Program Laboratory Unit (state reference lab) in 2017 for marijuana testing and has since expanded its scope to include hemp and natural medicines, as directed by statute, which has added to its workload and required new resources. The lab generally absorbs marijuana testing costs within its regularly appropriated budget rather than billing MED. In 2025, the broader Laboratory Services Division, which includes the state reference lab received about $17.7 million in revenue from cash funds, federal funds, and state general funds. Of that, the Laboratory Services Division received

almost $1.16 million from the Marijuana Tax Cash Fund administered by DOR, which consists of tax revenue generated by medical and retail marijuana sales, with just under $1.09 million of it supporting the lab's testing of cannabis products.

What policy consideration did the audit work identify?

Our research into other states' current practices and emerging best practices for marijuana enforcement identified a strong state reference lab program as a key component of an effective marijuana product safety regulatory framework. We consulted with CANNRA representatives to learn more about what practices have proven effective for regulating marijuana and ensuring consumer safety in other states and why. CANNRA representatives highlighted the importance of a dedicated cannabis state reference lab program regardless of a state's specific approach to sampling and testing requirements. For example, whether a state allows marijuana businesses to collect samples or requires a third party to do so, most states have found that the same issues exist with technical errors in collecting representative samples, the risk for conflicts of interest, and sample fraud. State oversight over the process by a dedicated cannabis state reference lab is the critical control, including the capacity to observe sample selection and independently verify sample testing results.

Additionally, strong state reference labs increase states' overall enforcement capacity, including: providing independent testing support for investigations and shelf-surveillance programs, helping to ensure consistency in private lab operations by establishing standards for testing methods and through routine, independent verification of private lab results, and furthering marijuana science for better, evidence-based policy development.

Lack of Testing Capacity

We found that Colorado's state reference lab is not currently able to fulfill the role of a dedicated cannabis state reference lab. As of May 15, 2026, CDPHE's state reference lab did not have the capacity to test for pesticides, residual solvents, and mycotoxins, all of which are required tests for marijuana product sold in Colorado. CDPHE cited issues with:

- The condition of its lab building and HVAC system. Officials described the space as too small with inadequate ventilation for the required equipment to function properly.

- Resource challenges related to staff. The lab operated with five full-time equivalent staff (FTE) until it received four additional FTE in 2024 and 2025 for taking on new work in hemp and natural medicine. As a result of taking on the additional work in hemp and developing testing methods for natural medicine, the lab currently has just under five FTE supporting marijuana testing. The lab also has only one chemist assigned to develop new testing methods and support MED's marijuana shelf-surveillance program.

- Emerging areas of science, such as the expanded panel of pesticide testing. Because this is a new area of science, it required additional time for staff to develop new technical expertise without the assistance of references and other resources.

- Funding limitations to meet MED's needs for testing support and shelf-surveillance programs. For example, MED officials estimated that MED sends an average of about 5 samples for testing a month to the state reference lab for investigations when it is not possible to use a private lab for testing. However, the testing needed each month to support the shelf-surveillance program would involve 30 to 50 tests and around 200 additional tests to fully support investigations. According to MED, it currently can take the state reference lab anywhere from 3 weeks to 6 months to provide test results for a sample.

While CDPHE reports that it has made some progress during our audit in addressing its ventilation issues, and is close to having some of its marijuana testing methods validated, lab officials estimated the lab would not be fully functional until sometime in the third quarter of 2026, or later depending on when the lab receives its statutorily-required International Organization for Standardization (ISO) accreditation for the newly validated testing methods. ISO provides a widely accepted framework across multiple industries to standardize processes. According to MED, statute requires both CDPHE's lab certification process and ISO accreditation for MED to rely on the state lab's results [Section 44-10-203 (2)(d)(VII), C.R.S.]. CDPHE lab officials estimate that they would need to almost double their current resources with an approximate cost of just more than $13 million to take on a more enhanced role in Colorado's marijuana enforcement activities. This estimate includes about $7.2 million for new lab facilities with the remaining funds supporting additional staff and operational costs to provide expanded testing support for MED and additional verification of private lab test results. However, this estimate does not include estimates for sample collection observation.

The state reference lab's lack of capacity, with respect to its staffing and facility resources, creates challenges to MED's ability to effectively and timely oversee marijuana enforcement. For example, as we discuss in Finding 1, MED's shelf-surveillance program is not fully operational because CDPHE's lab cannot support the required testing. Additionally, a state reference lab could also play a role in improving consistency for sample collection and identifying noncompliance and fraud for sample collection. In Finding 2, we describe how MED investigators must rely on workarounds with marijuana businesses and private labs to test product for HSA-related investigations because the state reference lab cannot test for pesticides. When a test is required that the state reference lab is not able to complete, MED investigators request that the business under investigation collect and submit a sample of the potentially contaminated marijuana to a private lab for testing. In these cases, the MED investigator typically observes sample collection onsite and seals the sample container in such a way that it is obvious if anyone attempts to tamper with it. The business or a licensed courier then transports the sample to the lab. However, in one case, the private lab refused to test the sample because of a billing dispute with the business under investigation but did not notify MED of this issue for almost a full month, resulting in a delay for MED to arrange for another lab to test the sample. In another case, the lab reported to MED that someone had tampered with the sample, which required an additional week for MED to determine what happened and whether the sample

should be tested or replaced with a new sample. This reliance on workarounds can lead to extended case timeframes and delays in identifying contaminated marijuana and notifying consumers that could be avoided if MED investigators were able to collect the sample themselves and transport it to the state reference lab for testing.

Related to Finding 5, CDPHE and MED have limited ability to independently verify the accuracy and consistency of private labs' methods and results by directly testing their output because the state reference lab cannot complete the same tests and has limited staff resources and space. Finally, CDPHE is not able to further marijuana science in Colorado as comprehensively as it could if it had additional resources, resulting in potentially less effective regulations for product safety that are not based on scientific evidence. For example, a state lab with the appropriate capacity and resources could address recent research questions about the safety and risks associated with currently allowed decontamination and remediation techniques that businesses use before and after testing to control for certain contaminants. As discussed previously, businesses may use authorized decontamination treatments such as irradiation to remove mold from the product, or remediation treatments such as using chemicals on marijuana that failed testing to isolate the cannabinoids and then use them in vape or edible products.

Ambiguous Statutory Responsibility

Statute provides ambiguous guidance to CDPHE's state reference lab on its role in supporting MED's operations, whereas CDPHE's responsibilities related to other MED operations, such as health monitoring and private lab oversight, are written more explicitly in statute. For example, statute only directly links CDPHE's Health Monitoring team to marijuana regulation in Section 25-1.5-110(1), C.R.S., which requires CDPHE to "...monitor changes in drug use patterns, broken down by county or region, as determined by the department, and race and ethnicity, and the emerging science and medical information relevant to the health effects associated with marijuana use." Section 25-1.5-101(1)(f), C.R.S., provides CDPHE the power and duty "To make, approve, and establish standards for diagnostic tests by chemical, bacteriological, and biological laboratories, and to require such laboratories to conform thereto; and to prepare, distribute, and require the completion of forms or certificates with respect thereto." While CDPHE considers this statutory authority to be secondary to MED's statutory responsibility for marijuana enforcement, in practice, MED and CDPHE have interpreted statute to mean that CDPHE has a role to play with the oversight of private marijuana testing labs. A 2015 Memorandum of Understanding between CDPHE and MED supplements this provision for CDPHE's role in MED's oversight of private labs.

Conversely, the state reference lab relies solely on Section 25-1.5-101(1)(e)(I), C.R.S., which grants CDPHE the power and duty, "To establish, maintain, and approve chemical, bacteriological, and biological laboratories, and to conduct such laboratory investigations and examinations as it may deem necessary or proper for the protection of the public health." After Colorado legalized adult use, or recreational, marijuana in 2012, CDPHE began efforts to build capacity at the state reference lab as early as 2015 under its broader mission to support public health. Statute also requires CDPHE

to maintain a library of approved marijuana testing methodologies [Section 25-1.5-106 (3.5), C.R.S.]. However, the lack of a fully functioning state reference lab hinders CDPHE's ability to fulfill this requirement.

Policy Consideration

If the General Assembly intends for Colorado's marijuana product safety regulatory framework to have the capacity for strong, independent marijuana testing support and its associated benefits, such as supporting the Marijuana Enforcement Division's (MED) enforcement and monitoring needs; providing technical oversight of private labs; and furthering marijuana research in the state to benefit policy making, then legislators should work with MED and the Colorado Department of Public Health & Environment to consider statutory changes to clarify the state reference lab's role and responsibilities. Any additional responsibilities resulting from this clarification may require a fiscal note to determine the specific resources required and their feasibility.

Chapter 3

Challenges to Marijuana Enforcement

During the audit, we identified additional information that we thought would be helpful for readers to understand about the marijuana industry in the United States and in Colorado, as follows. We do not have any additional recommendations in these areas.

Federal Challenges

In April 2026, the federal government rescheduled medical marijuana from a Schedule I to a less restrictive Schedule III narcotic drug. Historically, and ongoing for retail, or recreational marijuana, the federal classification of marijuana as a Schedule I drug has limited state regulators' ability to implement and enforce consistent standards, movement of product for testing, the maturity of marijuana science, and research opportunities. Individual states and local jurisdictions that have legalized marijuana use have significantly different structures, goals, and markets, with some prioritizing consumer health and safety, some prioritizing equity, and others prioritizing economic stability. According to representatives at the Cannabis Regulators Association (CANNRA), without minimum federal standards, it is difficult for states to compare policies and identify best practices for enforcement. In Colorado, marijuana is designated as medical or recreational from the very beginning of its lifecycle; every seed, clone (i.e. a cutting taken from a mature marijuana plant and grown as a separate plant), and immature plant is explicitly assigned a license type and tagged and tracked accordingly.

To avoid legal risks based on the provisions of the federal Controlled Substances Act, Marijuana Enforcement Division (MED) investigators may not take possession of marijuana product to submit to third-party labs for testing. According to MED officials, it received legal advice that as a law enforcement agency, MED may only transfer marijuana to another government entity, such as the state reference lab or other law enforcement agencies. As a result, MED relies on marijuana businesses to select samples for its investigations and couriers and labs licensed by MED to transport and test product when CDPHE's state reference lab is unable to complete the required testing. Additionally, custody of the product and any testing of the product must be tracked through METRC, a web-based tracking system, which limits MED's ability to conduct blind testing, (i.e. testing in which the tester is not aware of which business the product came from), and shelf-surveillance, since the information is visible to the business in METRC.

Further, marijuana product may not be transferred across state lines, limiting research opportunities. In the past, federal funding has been very limited and much of what is known about cannabis is based on studies of commercially produced hemp due to marijuana's status as a Schedule I drug. As a result, marijuana science is fairly young and there are many unknowns about the long-term effects

of substances that are allowed to be added to marijuana, byproducts from remediation techniques, and marijuana use more broadly.

The April 28, 2026, federal government reclassification of medical cannabis from a Schedule I narcotic to a less restrictive Schedule III narcotic allows marijuana producers and labs already registered and licensed under state medical marijuana programs to register with the federal government and seek a federal license. However, it is unclear how this change will impact the requirements for licensed medical marijuana cultivators, manufacturers, and distributors, and issues related to the transfer of medical marijuana across states. After the federal government's classification change, MED issued an industry bulletin, stating that this is an evolving matter and it will provide updates to licensees once there is additional guidance from federal agencies. Additionally, recreational cannabis remains a Schedule I drug. As a result, MED and CDPHE are still limited in their ability to transfer recreational marijuana product for testing and research purposes. Currently, there are no federal standards for either medical or recreational marijuana regulation, including consumer safety standards.

Fragmented State Oversight of Cannabis

State Entities Responsible for Cannabis Oversight

MED, CDPHE, the Colorado Department of Agriculture (CDA), and the Attorney General's Office or Department of Law (DOL), as the State's enforcement body, all have some responsibility related to Colorado's cannabis regulation. The amount of tetrahydrocannabinol (THC) in a product—THC is the principal psychoactive compound in cannabis products—generally determines which entity is responsible. Federally, the cannabis plant is considered hemp if it has below 0.3 percent THC concentration, and marijuana if it has above the 0.3 percent THC concentration threshold. MED is primarily responsible for regulated marijuana products throughout the supply chain, or from seed-to-sale. CDA and CDPHE share oversight for regulating hemp. CDA oversees growers and agricultural production, while CDPHE's Hemp program regulates the manufacture of hemp products during and after growers have harvested the agricultural commodity. CDA is also responsible for regulating pesticides and pesticide application, for both hemp and marijuana cultivation. CDPHE's Hemp program also oversees the Safe Harbor Hemp program, which allows hemp manufacturers to produce intoxicating hemp products but prohibits their sale in Colorado. Different teams within CDPHE are also responsible for certifying both hemp and marijuana testing laboratories and for monitoring the health effects of marijuana use.

Finally, the DOL's Consumer Protection Division, distinct from the team that provides legal support to MED within the Department of Revenue (DOR), has a Consumer Protection Fraud Unit that can pursue civil enforcement actions under the Colorado Consumer Protection Act (CCPA), including violations related to hemp and marijuana. However, CCPA cases require the unit to demonstrate that a business or individual met a "knowing or reckless standard". As a result, enforcement actions under the CCPA require different evidence and findings to prove those claims. Most often, DOL's Consumer Fraud Unit uses civil litigation to stop companies that are violating

the CCPA. Typical marijuana- and hemp-related violations include businesses claiming that a hemp product is marijuana, claiming that a marijuana product is hemp, or failing to verify customer ages to prevent selling products to minors.

Consequences of Fragmented Authority

Colorado has a fragmented regulatory framework that can cause confusion as to which state entity is responsible for cannabis products, unlicensed hemp, and marijuana businesses. This confusion can also complicate the enforcement of hemp and marijuana law in the state. First, intoxicating hemp products can be easily confused with, or illegally represented as, marijuana. As a result, state entities face significant challenges in determining which organization has jurisdiction when it is unclear whether a product was created with intoxicating hemp or with marijuana. Officials from all four entities–MED, CDPHE, CDA, and DOL–told us in interviews that when jurisdiction is unclear, they work together to determine who should manage the case.

In addition, DOL officials told us that sometimes MED, CDPHE, and CDA opt not to handle cases involving unlicensed businesses, saying that they do not have the authority to do so, although statute appears to provide this authority to all four entities. A CDA official that we spoke to reported that CDA does not have the authority to do anything with unlicensed hemp businesses and that it refers them to law enforcement. An official from CDPHE told us that CDPHE devotes a substantial amount of program effort to pursuing unlicensed businesses but estimated that there is still a significant number of unlicensed businesses, so that effort is not quickly addressing the issue. DOL's Consumer Protection Fraud Unit does not have the authority to embargo product from licensed marijuana businesses or pursue legal action against unlicensed marijuana operators like MED does. Additionally, it does not have the authority to arrest unlicensed operators, but theoretically has the authority to sue them in civil court [Sections 6-1-105(1)(z) and (sss), and 112 C.R.S.]. However, DOL officials told us that the statute limits their capacity to pursue the vast majority of those cases unless the business specifically represents to consumers that it is licensed in the course of a transaction. Therefore, the responsibility to stop unlicensed businesses falls to other state law enforcement agencies such as the Colorado Bureau of Investigation or the DOL's Criminal Justice Unit and local law enforcement agencies.

Overlap between MED and the Colorado Consumer Protection Act

There is some overlap between MED's authority to regulate marijuana in the state and the CCPA. When MED has jurisdiction over a business or alleged rule or statutory violation, it typically takes action independently of the DOL's Consumer Protection Fraud Unit. Between 2023 and 2025, MED took enforcement actions against MED licensees for violations that align with the CCPA for false advertising, mislabeling, and underage sales without referring those cases to the DOL's Consumer Protection Fraud Unit.

From 2023 to 2025, the DOL's Consumer Protection Fraud Unit pursued 42 cannabis-related cases under the CCPA and resolved 16 of the 42 cases (38 percent) with "cease and desist" letters. It also

referred 8 of the 42 cases (19 percent) to other state and law enforcement agencies as these were outside of the CCPA's scope. MED referred just 2 of these 42 cannabis-related cases to the DOL's Consumer Protection Fraud Unit, while the majority came from other cannabis (marijuana and hemp) industry members. In these two cases, MED determined it did not have regulatory authority.

Funding Impacts of a Market in Decline

Declining market sales in Colorado limit MED's resources for regulation. From 2020 to 2025, the regulated marijuana market has decreased by approximately 41 percent, from $2.2 billion in sales in 2020 to $1.3 billion in 2025. This decrease limits MED's resources as its funding is directly tied to the number of licensees, and by extension, the size of the market. MED's budget decreased with the market because of its reliance on taxes and fees on marijuana consumers and businesses. MED cut operating expenses by 63 percent and the number of its staff by nearly 14 percent between Fiscal Years 2022 and 2024. While there are fewer active licensees to regulate than there were in prior years, MED staff told us that MED does not have sufficient resources to investigate all of the potential issues it identifies using METRC data. For example, if MED identifies additional instances of potential noncompliance through its data collection, understaffing limits its ability to follow up on these issues because it does not have enough investigators. According to MED, it has sought to reduce operating expenses by intentionally holding positions vacant. As of August 2026, MED had a total of 78.1 vacancies, or about 49 percent of its total 158.6 allocated full-time equivalent staff (FTE). This includes 31 vacant field investigator FTEs, or about 57 percent of the 54 allocated investigator FTEs.

According to MED officials, the marijuana industry currently competes with the unregulated and illegal intoxicating cannabis market, which undercuts the price and profitability of regulated marijuana. Additionally, legalization of recreational marijuana in many other states (currently 23 other states have legal recreational marijuana) contributed to the downturn in Colorado's market by drawing marijuana tourism away from Colorado as legalization has become more commonplace.

As more states have joined Colorado in legalizing recreational marijuana, there are additional regulation and funding models to serve as a basis of comparison. According to a recent CANNRA survey, approximately half of its member states fund their regulation efforts through licensing fees alone. However, most states rely on taxes and noncompliance fees in addition to licensing fees, as is the case in Colorado. Some states' marijuana regulators also receive funding from their states' general funds to reduce their reliance on sales. According to CANNRA representatives, states that rely solely on marijuana sales through taxes and fees to fund regulation risk creating less effective oversight of the market. For example, in the worst case, this model may incentivize regulators to prioritize businesses' ability to remain profitable over protecting consumer safety. In the best case, regulators may not have the stable resources they need to plan for and implement effective oversight for businesses when there are sudden or extreme shifts in sales.

Appendix A

Appendix A

Marijuana Production and Sale

Marijuana Seed-to-Sale Inventory Tracking Workflow

The following exhibit demonstrates the marijuana seed-to-sale workflow, which includes information about what data points are recorded in METRC, the Marijuana Enforcement Division's (MED) marijuana inventory tracking system, at each key phase and transition points in the growth and production of marijuana from its beginning as a seed to its eventual sale to the consumer.

Growth Phase Cycle

Immature Plant → Vegetative → Flowering → Harvest → Testing → Packaging & Transfer → Purchase

Growth Phase/Transition Point **Immature Plant**	**Description**	**Key Data Points Recorded in METRC**
	Cultivators grow marijuana plants from seeds or clones. Clones and seeds are planted into an immature plant batch. Only one strain of marijuana is allowed per immature batch. The immature batch is placed in an area (e.g., grow room) where lighting, temperature, and other environmental conditions are controlled. Not all immature plants develop properly; any plants that are not selected for continued growth should be destroyed.	• Group name (strain and date of planting) • Date of planting • Number of plants • Type of plant (seed or clone) • Plant strain • Destroyed plants

Photo courtesy of OSA staff

Growth Phase/Transition Point **Vegetative**	Description	Key Data Points Recorded in METRC
	Once a plant reaches the vegetative state (i.e., 15 inches in height and/or width), cultivators must place a radio frequency identification (RFID) tag with a unique tracking number on the plant. The cultivators must also track the location where each plant is physically located. Cultivators establish "rooms" by assigning names and numbers in METRC that represent the various physical locations on the licensee's premises where plants are stored during the vegetative, flowering, and harvest phases. Cultivators have the flexibility to define a room how they choose. If the plant is physically moved to a new location, cultivators must document the new room information. Any plants that are not selected for continued growth should be destroyed.	• Date of transition from immature plant to the vegetative phase • Date RFID tag is affixed to plant • Plant tracking number • Assigned room • Date plant is moved to an assigned room • Destroyed plants

Photo courtesy of OSA staff

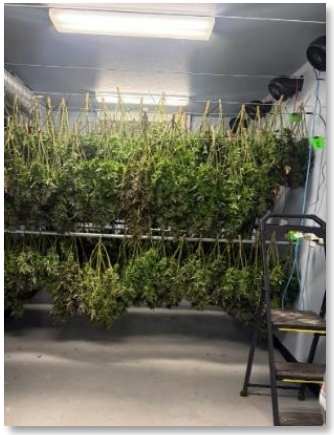
Growth Phase/Transition Point **Flowering**	Description	Key Data Points Recorded in METRC
	Flowering is the reproductive state of the plant in which there are physical signs of flower, or budding out of the nodes in the stem. At the start of the flowering phase, cultivators document the new phase and may transfer the plant to a new room, in which case they document the date of the move and the plant's new location. A plant is considered to be in the flowering stage once the growing light cycle changes to 12 hours of light and 12 hours of darkness. Plants are ready for harvest once they reach the end of the flowering phase. Any plants that are not harvested should be destroyed.	• Date of transition from vegetative phase to flowering phase • Assigned room • Date plant is moved to the assigned room • Destroyed plants

Photo courtesy of OSA staff

Growth Phase/Transition Point **Harvest**	Description	Key Data Points Recorded in METRC
	Once plants are ready for harvest, cultivators create a harvest batch in METRC, assign a harvest batch identification number, and record the harvest date to document that the plants are no longer active and viable. A harvest batch can be made up of many individual plants. The plant tags are removed; however, the harvest batch identification number is used to maintain inventory control and connect the harvested plant's number to the resulting packaged product, which is assigned a new tracking tag and number. At harvest, the marijuana plants are considered wet whole plants because they have not yet been dried out. Cultivators must calculate and record the overall wet weight of each harvested plant, which is the undried weight of the entire plant above the growing medium (e.g., soil or water). As the marijuana is cured, or dried, it loses a significant amount of its weight. Cultivators and MED use industry averages to ensure that harvest batches lose wet weight at an expected rate and identify anomalies. During the harvest and cure process, unusable excess plant material, such as leaves and stems, are removed and destroyed. All such waste must also be weighed and tracked.	• Harvest batch identification number • Plant tracking numbers included in harvest • Harvest date • Plant wet weight • Waste • Destroyed plants

Photo courtesy of OSA staff

Growth Phase/Transition Point **Testing**	**Description**	**Key Data Points Recorded in METRC**
	Licensees create production batches based on the category of marijuana (e.g. flower, shake/trim, etc.)[1]. Prior to transfer to another licensee, for sale or production, cultivators must create a test batch in METRC from the production batch and submit the test batch to a testing facility for the required potency and contaminant tests. A production batch that has been submitted for testing is restricted from being transferred to another licensee until a testing facility enters passing test results into METRC.	• Sample package identification number • Weight • Transfer vehicle's make, model, license plate number, and planned route • Transfer driver's name, phone number, and occupational license number • Date and time of acceptance by recipient • Recipient's name and license number • Test results

Photo Credit: Shutterstock

[1] "Flower" is literally the flower of the marijuana plant and the part that has more THC than the other parts of the plant. "Shake" is the small pieces of flower that naturally break off. "Trim" is the leftover leaves, stem, and plant material cut away during the harvesting process.

Growth Phase/Transition Point **Packaging & Transfer**	**Description**	**Key Data Points Recorded in METRC**
	At the completion of successful testing, the marijuana is ready for transfer to a retail marijuana store, a medical marijuana store, or a product manufacturer for creating marijuana-infused products (e.g., edible products, ointments, tinctures). Multiple packages can be created from a single production batch. Cultivators affix a tracking tag with a unique number on each individual package. Packages may contain a number of individual items and can be subsequently repackaged by the cultivator, store, or the product manufacturer. For example, a retail store may repackage the marijuana it receives from a cultivator into smaller units for individual sale. Any time marijuana or marijuana product is repackaged, a new package tag must be created and details about the package entered into METRC and tracked. As packaged marijuana and marijuana products are transferred between cultivators, product manufacturers, and stores/centers, the complete details of the transfer must be recorded and tracked. For example, a cultivator assigns a package and prepares a travel manifest with details on who the transfer is between, the date, what is being transferred, and how much is being transferred. The transporter delivers the package to the recipient (e.g., retail marijuana store) who is responsible for verifying the accuracy of the package contents before it is accepted. If the recipient identifies any major discrepancies with a package (e.g., missing contents), it can be rejected. Once accepted, custody and responsibility for the package passes to the recipient.	• Package identification number • Package weight • Package contents • Package history (harvest batch, testing results, transfers, repackaging) • Travel manifest (what, how much, and to whom the package is being transferred) • Transfer driver's name, phone number, and occupational license number • Transfer vehicle's make, model, license plate number, and planned route • Date and time of acceptance by recipient • Recipient's name and license number

Photo courtesy of OSA staff

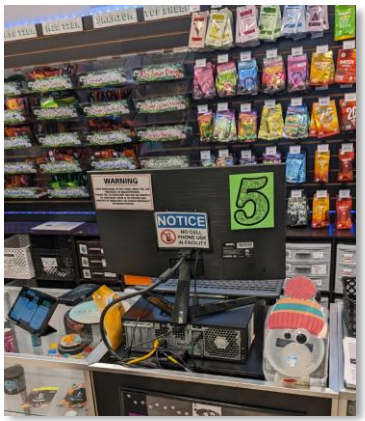
Growth Phase/Transition Point **Purchase**	**Description**	**Key Data Points Recorded in METRC**
	The sale of the marijuana or marijuana products to the end consumer is the final step in the seed-to-sale process. METRC is not a sales transaction system; however, all sales information is entered into METRC and tied to the specific package tracking tag so that inventory records are kept current. Specifically, each retailer and medical marijuana business must reconcile the weight and/or count of all on-premises marijuana at the close of business each day. The retailer must prepare a summary of sales transactions, which includes total quantity, unit of measure, and total dollars for the day, daily for all packages sold. When the contents of a package are gone, either through sales or repackaging, the retailer must archive that package and package tracking tag in METRC. Retail and medical marijuana stores have the ability to enter sales information manually or through an automatic interface between the store's point-of-sale system and METRC.	• Package identification number • Total quantity sold • Unit of measure • Date and time of sale • Dollar amount of sale

Photo courtesy of OSA staff

Source: Compiled by the Office of the State Auditor and updated by Marijuana Enforcement Division officials.

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Appendix B

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Appendix B

Marijuana Enforcement Violations

Distribution of Marijuana Enforcement Violations

The Marijuana Enforcement Division's (MED) Analysis and Resolution team closed 136 enforcement cases with a total of 1,209 violations between Calendar Years 2023 and 2025. The total number of violations per year increased by 35 percent during this 3-year period, from 311 in 2023 to 420 in 2025.

We identified 23 categories of violations using the statutory and rule citations in MED's case records. The most common categories of violations included: inventory tracking, licensing, testing, business records, and sampling. The following exhibit provides the full distribution of violations for enforcement cases closed between January 1, 2023 and December 31, 2025.

Marijuana Enforcement Violations, Calendar Years 2023 through 2025

Type of Violation	Total	2023	2024	2025	Percentage of Violation Type	Percent Change 2023 to 2025
Inventory Tracking	272	71	99	102	22%	44%
Licensing	173	30	84	59	14%	97%
Testing	137	58	51	28	11%	-52%
Business Records	97	27	42	28	8%	4%
Sampling	94	19	57	18	8%	-5%
Video Surveillance	63	9	25	29	5%	222%
Health and Safety	60	14	40	6	5%	-57%
Underage Sales	60	11	11	38	5%	245%
Transfer and Storage	60	14	14	32	5%	129%
Facility Conditions	47	12	15	20	4%	67%
Packaging & Labeling	37	19	3	15	3%	-21%
Waste Disposal	20	6	4	10	2%	67%
Identification	18	3	5	10	1%	233%
Administratively Closed	16	2	6	8	1.3%	300%
Failure to Cooperate with Investigation	14	4	4	6	1.2%	50%
Sales Limit	11	5	4	2	0.9%	-60%
Other[1]	18	6	10	2	1%	-67%
Hemp Product	4	1	0	3	0.3%	200%
Cultivation Limits	4	0	2	2	0.3%	-
Advertising	3	0	1	2	0.2%	-
Pregnancy Warning	1	0	1	0	0.1%	-
Grand Total	**1,209**	**311**	**478**	**420**	**100%**	**35%**

Source: Office of the State Auditor analysis of MED's violations data for cases closed between Calendar Years 2023 and 2025.

[1] "Other" includes violations with revised or repealed citations that we could not clearly identify, violations included in settlement agreements for which the business did not admit guilt, and violations that were not related to safety and had a total count of 2 or fewer occurrences in the data.

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Appendix C

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Appendix C

Data on Safety Investigations

MED's Safety-Related Investigations

Marijuana Enforcement Division (MED) investigators may initiate investigations based on complaints or referrals from members of the public, businesses, or other stakeholders. Investigators may also initiate investigations as a result of risk assessments based on data analysis. Some of these complaints, referrals, or risk assessments may identify safety-related concerns. For example, MED has an online Google Form called the Information Referral Form, where individuals can report concerns with the regulated marijuana industry. If the reporter is reporting an adverse health event, that information is sent to the Colorado Department of Public Health & Environment's (CDPHE) Health Monitoring team for further investigation. Once CDPHE has completed an investigation, it informs MED of the outcome and MED may open its own investigation to determine whether any violation of MED rules occurred.

MED labels its investigations based on the primary issue being investigated. The audit team grouped MED's investigation data into "safety-related" and "potentially safety-related" categories based on the investigation type. MED investigators may select only one investigation type in its case management system, MLO, even when an investigation involves multiple problems. Because MED investigators may select only one investigation type, the audit team created a "potentially safety-related" investigations category to capture investigation types that may be safety-related, but are not necessarily always safety-related. This category includes investigation types like "Information Referral Form," which could include any investigation initiated by a stakeholder filling out MED's Information Referral Form.

The following exhibit shows the total number of investigations MED performed in Calendar Years 2023 through 2025, and how many of those investigations were safety-related and potentially safety-related.

MED Safety-related and Potentially Safety-related Investigations
Calendar Years 2023 through 2025

Investigation Type	2023	2024	2025	Total	Percent of Total
All Business Investigations	**1,989**	**2,045**	**1,995**	**6,029**	**100%**
• Safety-Related Investigations	**159**	**183**	**96**	**438**	**7%**
◦ Adverse Health Event Report	49	54	31	134	2.2%
◦ Surveillance or Security Requirements Investigations	46	65	10	121	2.0%
◦ Testing Related Violation	34	38	32	104	1.7%
◦ Pesticide Investigation	8	12	7	27	0.4%
◦ Packaging or Labeling Violation	13	4	4	21	0.3%
◦ Health and Safety Violation	5	6	5	16	0.3%
◦ Contamination of Marijuana	4	4	6	14	0.2%
◦ Illegal Cultivation Operation	0	0	1	1	0.02%
• Potentially Safety-Related Investigations[1]	**697**	**812**	**922**	**2,431**	**40%**

Source: Office of the State Auditor analysis using MED-provided MLO investigation and enforcement case records as of January 21. 2026.
[1]"Potentially safety-related" investigations include: Advertising Violation, Compliance Field Inspection, Consumption Onsite, Diversion by Licensee, Information Referral Form/Line, Inventory Management, Inspection, Metrc Violation, Operator Investigation, Operator Related Violation, Plant Related Violation, Plant/Product Overage, Production Management, Targeted Inspection, Transporter Related Violation, and Waste Disposal.

CDPHE's Adverse Health Event Investigations

CDPHE's Health Monitoring team investigates reports of adverse health events associated with cannabis consumption. Staff determine if the report describes a legitimate adverse health event and the severity of the adverse health event. The Health Monitoring team interviews the initial reporter and may review hospital records if there are any relevant to the report. The following exhibits describe the outcomes of the CDPHE Health Monitoring team's investigations between Calendar Years 2023 through 2025.

CDPHE's Adverse Health Event Reports by Complaint Type
Calendar Years 2023 through 2025

Complaint Type	2023	2024	2025	Total	Percent of Total
Adverse Health Event due to exposure or use	64	23	16	103	49.8%
No response[1]	30	22	7	59	28.5%
General complaint	6	10	12	28	13.5%
Occupational health and safety	2	4	2	8	3.9%
Contaminated product	2	2	2	6	2.9%
Blank[1]	0	0	3	3	1.4%
Total	**104**	**61**	**42**	**207**	**100%**

Source: Office of the State Auditor analysis using CDPHE-provided investigation records as of January 6, 2026.
[1]When CDPHE staff are unable to contact the initial reporter, they record "No Response" under the Complaint Type and "Blank" means the complaint did not list a type.

Number of Adverse Health Events Investigated by CDPHE by Adverse Health Event Type
Calendar Years 2023 through 2025

AHE Type	2023	2024	2025	Total	Percent of Total
Mild	34	16	15	**65**	**63.1%**
Moderate	30	7	0	**37**	**35.9%**
Not related	0	0	1	**1**	**1.0%**
Total	**64**	**23**	**16**	**103**	**100%**

Source: Office of the State Auditor analysis using CDPHE-provided investigation records as of January 6, 2026.

Number of Adverse Health Event Reports Investigated by CDPHE by Source of Reporting
Calendar Years 2023 through 2025

Source of Report	2023	2024	2025	Total	Percent of Total
Self-report	68	33	22	**123**	**59.4%**
Cannabis industry member reporting a complaint	24	18	15	**57**	**27.5%**
On behalf of another government agency	6	2	0	**8**	**3.9%**
On behalf of a friend or family member	5	0	1	**6**	**2.9%**
Not listed	1	8	4	**13**	**6.3%**
Total	**104**	**61**	**42**	**207**	**100%**

Source: Office of the State Auditor analysis using CDPHE-provided investigation records as of January 6, 2026.

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