



**HOUSE HEALTH SUBCOMMITTEE ON HEALTHCARE
INFORMATIONAL MEETING ON ADULT USE CANNABIS**

AGENDA

Monday, February 5th, 2024

10:00 am

Room 140 Main Capitol

Harrisburg, PA

1. Call to Order

2. Attendance

Panel 1 Grower-Processors

Shelly Edgeton, Government & Regulatory Affairs, PharmaCann and Former Licensing & Regulatory Affairs for the State of Michigan

Steve Reilly, Partner/General Counsel INSA

John Sullivan, Executive Vice President, Cresco Labs.

Panel 2 Dispensaries

Bill Bookwalter, Co-CEO, Delta 9 Delta 9/ Keystone Integrated Care

Angela Zaydon, Government Relations Manager, Trulieve

Panel 3 Labs

Elisabeth Berry, Board Member, S3 Collective; founding member of the National Cannabis Laboratory Council; Acting Executive Director of the Coalition for Cannabis Scheduling Reform.

Bob Miller, Chief Science Officer, ACT Labs

Dr. Daniel Neisen, Laboratory Director, Steep Hill Pennsylvania/ Green Analytics

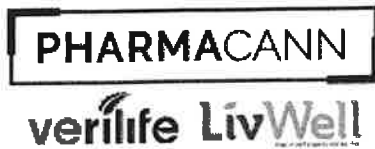
Shannon Hoffman, Regional Director of Operations and Certifying Chemist, Steep Hill Pennsylvania/ Green Analytics

Panel 4 Clinical Registrants

Chris Ferguson, Vice President Government Affairs and Policy, Verano

Eric Hauser, President, Organic Remedies

3. Adjournment



Shelly Edgerton
Government/Regulatory Affairs Associate Counsel
PharmaCann, Inc

Shelly Edgerton serves as Government & Regulatory Affairs Counsel for PharmaCann, Inc that operates in seven states in the cannabis industry. She is the former Director for the Department of Licensing & Regulatory Affairs in Michigan which had regulatory oversight for nearly two-thirds of the professional licensing for the state of Michigan. Shelly led the creation of the regulatory cannabis licensing and IT programs. She was instrumental in the rules and selection of personnel to operate the program. Prior to her service with the Department, Shelly served in the legislature as a Chief of Staff and then Deputy Majority Counsel serving under five different Senate majority leaders. Before joining PharmaCann, Shelly served as Senior Counsel for the Dykema law firm Government Policy and Practice group specializing in state and local regulatory issues.

She earned her Bachelor's degree and Master of Public Administration degrees from Western Michigan University. She went on to receive her Juris Doctor at Thomas M. Cooley Law School.



Introductory Testimony of Shelly Edgerton PharmaCann, Inc

Pennsylvania House Health Committee

February 5, 2024

To the Honorable Chairman and Committee Members:

Thank you Mr. Chairman and Committee Members. It is a pleasure to be here today to discuss Pennsylvania potentially moving forward with an adult use market. My name is Shelly Edgerton, and I am a Government and Regulatory Affairs Associate Counsel with PharmaCann. I am also the former Michigan Director of the Department of Licensing and Regulatory Affairs that was charged with establishing the Michigan program. PharmaCann currently operates a medical marijuana Grower/Processor in the greater Scranton area, and we have three medical dispensary permits with sites located throughout Southeast and Central Pennsylvania in Bucks, Delaware, Lancaster, Montgomery, North Umland, and Philadelphia Counties. We also operate in seven states outside of Pennsylvania as far west as Colorado and then across the Midwest and Northeast.

Our company has transitioned into adult-use sales in the various states we operate and most recently Maryland with an expectation of Ohio later this year. Border states like Maryland smoothly transitioned to adult use within 90 days. Ohio is expected by September if not sooner.

With 24 states now legal for adult-use consumption, no state has been perfect in its transition from medical to adult-use regulation. There are, however, critical lessons learned in each state transition, with innovative and successful legislative and policy outcomes, along with pitfalls that have stalled the transition to adult-use regulation. Most recently, Maryland has provided a good model for transitioning to adult use. Unlike New York, Maryland made a smooth and timely transition to adult use with minimal disruption to patients, customers and licensees.

There are many policy considerations inherent in transitioning Pennsylvania to a highly regulated and safe adult-use marketplace, with the primary goal of moving those aged 21 and over currently consuming cannabis from the illicit cannabis trade, into the regulated marketplace as quickly and effectively as possible. Today I'd like to discuss a few primary considerations that can bolster Pennsylvania's transition if the legislature elects to move forward on adult-use legislation.

CENTRALIZED REGULATORY OVERSIGHT

On regulatory and administrative oversight – from our experience, it is beneficial when state law builds in a centralized independent regulator to oversee the entirety of the adult-use and medical cannabis programs together. This allows the state regulator to make policy decisions that review



the two programs together holistically, rather than forcing two or more separate agencies to communicate across functions related to the administration and enforcement of the programs in separate silos.

In the last few years, states transitioning to adult use have seen the benefits of an independent regulatory body. A centralized regulator can also write and update regulations for both programs that can eliminate unnecessary redundancies, create efficiency and synergy between the two and smoothly administer a transition into adult use. A statute must move the oversight of this commercial industry to an independent regulatory body with goals, resources and standards more aligned to develop a safe, secure and functional commercial market.

Michigan, Maryland, Massachusetts, Ohio, and New York maintain independent regulatory bodies. The new independent regulatory body should also be authorized to develop a regulatory program that oversees all intoxicating THC products and novel cannabinoids to assure that safe manufacturing, age verification and marketing standards are in place for protection of consumers. Michigan and New York independent regulatory bodies are examples of states that have taken function for the protection of kids and adult consumers.

90 DAY ENACTMENT

Establish a “go live” date within the statute. Maryland was able to roll out its program within six months and by doing so avoided a regulatory vacuum by minimizing the time frame for a regulated marketplace. Transitioning current medical licensees into the adult use market allows for continued products for patients and customers. The framework developed for licensees is already built. It will also allow the regulatory body to quickly focus on underserved areas and potential social equity applicants entering the marketplace. Grandfathering also assists with reducing the illicit market by allowing dispensaries to operate and provide safe, tested products for those adults 21 or older as well as capturing tax revenues.

LIMIT LOCAL TIME, PLACE, MANNER ZONING

Create a process that allows existing operators to serve adult consumers on Day One and allow municipalities to use a referendum process to opt out thereafter. Allowing municipalities to opt out immediately creates huge opportunities for the illicit market to grow. Most recently, Ohio’s initiated statute outlined this process that allows the municipality to hold a referendum on the issue, but doesn’t preclude a transition to adult use. Early on, Michigan suffered greatly from the lack of municipal participation with an opt out provision and the state saw increases in the illicit market. Over saturation occurred in those communities that “opted-in.” There should be no distinctions in medical and adult use of cannabis but only at the point of sale whereby a



medical patient is exempt from taxes. All cannabis is cultivated, processed, tested and distributed the same way throughout the supply chain.

IMPROVE SEED TO SALE TRACKING

The current seed to sale tracking system is chronically non-operational causing the medical cannabis supply chain to come to abrupt and sometimes unannounced standstill which prevents patients access to their medicine. With adult use, an effective and efficient system should be in place not only for the state as a customer, but also the operators who are required by statute to track the supply chain for cannabis from a seed to the point of sale for a customer and/or patient. Enable the regulatory agency the ability to act quickly in obtaining a system that will address shortcomings now evident in the Pennsylvania program. Policy considerations should be given to allow for offline access when any system is not performing.

TAXES AND REVENUES

Pennsylvania has an opportunity to generate new, meaningful, and sustained revenue towards spending priorities within the Commonwealth. A primary consideration in order to ensure the success of the cannabis program – and maximize tax revenue – tax rates should be sufficient to generate meaningful revenue aligned with the collective reinvestment goals of the legislature, while avoiding high pricing that is not competitive with an illicit market. Pennsylvania’s adult-use program should incentivize the transition of consumers from the illicit market to a regulated market to realize both optimal tax revenues and consumer protection, where cannabis users 21 and over can begin accessing safe, lab-tested products at a price competitive with the unregulated cannabis that is being produced or sourced illegally in Pennsylvania.

Pennsylvania can learn important lessons from developing adult-use cannabis markets and set a cumulative tax rate on adult-use marijuana that strikes the appropriate balance, ensuring that prices remain competitive enough for adult-use consumers to move into the regulated market and meet the Commonwealth’s revenue priorities.

- To provide some examples of competitive tax rates
 - Michigan’s combined effective tax rate is 16%, with a 10% cannabis excise tax and 6% regular state sales tax.
 - In 2023, Michigan achieved over \$3 billion in total sales, and generated ~266 million in tax revenue for its respective spending priorities
 - State tax revenues for cannabis are not exceeding alcohol sales.

PHARMACANN

- Maryland with a population about half the size of Pennsylvania recognized \$12m in the first quarter alone in 2023 transition to adult use. Given the size of the Pennsylvania market, the potential to reach nearly \$100 is possible within a year.
- Massachusetts has a combined tax rate of 20%, a 10.75% cannabis excise tax, 3% municipal cannabis tax, and 6.25% regular state sales tax.
 - Massachusetts realize approximately \$159 million in state revenues in FY 2022-23, with a population of only 6.8 million
 - State total recorded sales for 2023 were nearly \$1.8 billion.
 - Since 2022, the state is generating more revenue from cannabis than alcohol.

To provide some examples of non-competitive tax rates: California and Illinois

- In contrast, California opened its adult-use market with much higher effective tax rates hovering between 40-50%, depending on the local taxes added by municipal jurisdictions. The state combines cultivation, excise, retail and sales taxes at the state level, layered with local and county taxes. This tax structure simply priced out many adult-use consumers, and kept them in the state's entrenched illicit market.
 - California's marijuana sales and associated state tax revenues fell short of initial projections as a result of its cumulative tax rates on marijuana.
 - In fact, it was the only state on record to experience a reduction in overall market sales in its first year following the legalization of adult-use cannabis:
 - Regulators and policymakers alike now recognize the need to make taxes more competitive, and rollback of taxes is underway in California.
 - For additional comparison, Illinois has an effective tax rate of around 30% for whole flower products, and as high as 45% on oil and vape products. Like California, although not as extreme, Illinois layers multiple cultivation, excise, and sales taxes, as well as local municipal and county taxes. Tax revenues are strong, but Illinois has some of the most expensive regulated



adult-use cannabis products in the country, and is losing market share to illicit, untested cannabis sales.¹

- Illinois achieved over \$1.6 billion in 2023 adult-use sales, with strong revenues posted at \$417 million for the year

CANNABIS RETAIL TAX

As a final note on taxes – the most seamless taxing structure for both operators and regulators alike is to assign a cannabis tax at the point of retail sale. If Pennsylvania plans to maintain its existing medical patient market, this will assure that the appropriate tax is assigned and differentiated between medical patients and adult-use consumers. In other words, the only place to determine whether an adult-use tax should be applied, is at the point of sale when the consumer either does or does not produce a patient registration card.

Placing cannabis excise taxes as the product moves through the wholesale market along the supply chain has the effect of compounding the tax as it makes its way through the supply chain, and ultimately inflating prices for patients and consumers alike. It also causes headaches for operators and revenue collectors to differentiate between medical and adult-use products, because at the time of production it is simply unknown whether the product will be sold to a medical patient or adult-use consumer. Applying the cannabis tax at the point of retail sale helps alleviate these issues.

WORKFORCE DEVELOPMENT AND ACADEMIC PARTNERSHIPS

In its medical market, Pennsylvania has been a national leader in supporting academic and operator partnerships under its Clinical Registrant program, opening the potential for more clinical research into the state's medical cannabis industry. In the adult-use context, similar partnerships can garner not only improved study and knowledge of the medical impacts of cannabis, but serve as a formalized area of study for the business, trade, and agricultural aspects of the industry.

An adult-use transition in Pennsylvania will potentially generate tens of thousands of good-paying, living-wage direct industry jobs to meet demand. Creating a formalized field of study to create a pipeline into the industry will ensure that these new positions are filled by trained professionals ready to meet the needs of the industry. Many other states that have transitioned

¹ "Illinois Has Some of the Highest Tax Rates in the Country, Could Keep Black Market Thriving." Illinois Policy Institute, January 9, 2020; available at <https://www.illinoispolicy.org/illinois-cannabis-taxes-among-nations-highest-could-keep-black-market-thriving/>



to adult use have seen major universities expand curriculum offerings, certificates and degrees in the fields of cannabis study.

In Illinois, the state utilized a cannabis certificate program generated at Community Colleges to fill this need. Our company had already been working in an advisory capacity to build institutional knowledge in programs such as business operations, supply chain management, and legal and regulatory compliance. Recognizing that community colleges primarily serve economically, demographically, and geographically diverse students who demonstrate financial need – in its adult-use law, the state provided the opportunity for Community Colleges to open a plant-touching field of study into the agricultural aspects of the plant, facilitated by industry operators like PharmaCann to aid in the security and design of the grow facility.

These are just a few of many important considerations that Pennsylvania can learn from and consider as it continues policy discussions on an adult-use statutory framework.

Thank you again for the opportunity to participate in today's hearing.

Written Testimony of: Stephen M. Reilly, Partner/General Counsel
Insa
178 East 11th Ave.
Shamokin Dam, PA

To: Pennsylvania House Health Committee
Representative Dan Frankel- Chair

Date: February 5, 2024

Re: Informational Meeting on Adult Use Cannabis

Introduction

Members of the Committee, thank you for the opportunity to provide testimony as you consider expansion of the cannabis industry in Pennsylvania to include adult use sales.

My name is Stephen M. Reilly, I am an attorney admitted to practice in Massachusetts and Connecticut. I am a partner and general counsel for Insa, a multi-state cannabis operator in Pennsylvania, Massachusetts, Connecticut, Ohio, and Florida. I am also responsible for business development and government relations at Insa. Prior to my time at Insa I had a private law practice focused on licensing matters, worked for the Speaker Pro Tempore in the Massachusetts House, and served as municipal counsel for cities and towns.

Insa is a grower/processor only in Pennsylvania. We operate a facility that is approximately 40,000 s.f. in Shamokin Dam, PA and employes 35 individuals who cultivate, process, and package cannabis for distribution throughout Pennsylvania's medical cannabis market. In other states Insa also operates production and dispensing facilities for both medical and adult use cannabis.

Testimony

The legalization process will play out in discussions over the coming months. It will require lawmakers to consider a number of factors that cannot be covered in one morning of testimony. My goal today is to identify the larger issues lawmakers should consider at the beginning of the process. The recommendations set forth below are based upon Insa's experience in multiple states in both adult use and medical markets.

Regulatory Oversight

The first step in developing an adult use law is to consider what entity should be tasked with industry development and oversight. This entity will be the point of contact for the industry and the public. It is critical that the state can operate effectively in both roles to develop a successful program for the industry and the residents of Pennsylvania. The creation of a new entity tasked

with the industry's development and being considerate of public concerns is the most effective means of implementing a new adult use cannabis law. This is preferable to imposing the obligation of industry oversight on an existing state department or agency with other responsibilities.

Although the cost of a new government entity can be seen as burdensome there are two realities undercutting that position. First, the adult use cannabis industry in Pennsylvania will be large. The state will quickly receive license applications for an industry that will rapidly generate hundreds of millions of dollars in tax revenue through hundreds of millions of sales transactions while employing thousands of people. Second, to support this volume and recognize the financial benefits created by the industry the state must make an investment in industry regulation. The options are to create a new entity tasked with this new responsibility or to impose the obligation on an existing entity that may or may not be eager to take-on the job.

Similar to gaming revenue the adult use cannabis industry has the potential to generate significant revenue for the Commonwealth. The Pennsylvania medical program only taxes wholesale transactions. Adult use legalization would surely include retail taxes. Adult use sales tax in Massachusetts now exceeds alcohol tax revenue. To realize that financial benefit the state must make an investment, as it has with casinos. In short the creation of an adult use industry represents a financial opportunity for Pennsylvania but will be a significant undertaking demanding state investment.

Prior to the implementation of adult use cannabis sales in Massachusetts the medical cannabis program was overseen by the state's department of public health. This is effectively the equivalent of the medical cannabis program in Pennsylvania today. The adult use cannabis laws in Massachusetts created the Cannabis Control Commission, a new entity tasked with the development and oversight of the adult use cannabis industry in Massachusetts and absorbing the medical program from the Department of Health.

Massachusetts made a sound decision to create a new government entity for industry oversight rather than placing that responsibility with an existing agency or department. The Massachusetts Cannabis Control Commission shares in the same goals as the industry it regulates, namely the effective implementation of the adult use and medical cannabis laws. This new department recognizes the concerns related to the industry but at the same time understands the benefits in bringing such a large industry into legal existence. Insa has found the department works collaboratively with operators to identify and solve problems to public benefit. This approach speeds up the development of the industry as all stakeholders work together to improve operations. A heavy-handed regulatory approach will only impede development of the legal market to the benefit of illegal market operators that control the market today.

Leveraging the Existing Medical Program

The existing medical program represents an opportunity to quickly recognize the financial benefits of adult use cannabis sales while ensuring a responsible roll out and preventing the illicit

market from filling the vacuum. As seen in states like New York, legalization without a quick path to a legal market for sale is a recipe for the illicit market to flourish.

Massachusetts recognized its existing medical cannabis operators represented the best opportunity to quickly and responsibly implement its adult use cannabis program. A process was developed to take advantage of existing operations while allowing for the entry of new entities into the market. Massachusetts created a priority based application process whereby existing operators are required to submit an application in relatively the same form as new operators but are provided priority status for speedy application review. This allows existing companies capable of opening quickly to do so upon evidencing compliance with the new adult use cannabis laws. The result is a quick and relatively seamless implementation of the program and speedy generation of revenue for the state. New operators are reviewed as their applications are complete and numerous such operators have also been approved in Massachusetts evidencing that the process works for new and existing companies. This priority status also gave consideration to the investments of existing medical businesses and their employees by providing an expedited path to adult use sales.

Pennsylvania's medical cannabis companies represent the same opportunity as those in Massachusetts. They provide a responsible means to ensure speedy implementation of the program and quick generation of revenue that will represent a public victory. Pennsylvania's medical cannabis operators currently dispense medical cannabis to patients throughout the commonwealth and have been vetted by the Department of Health. These entities are imminently capable of commencing adult use sales without incident and have adequate security operations already in place- this will eliminate opportunities for an illicit market that has been seen in other states. This model has been shown to success in Massachusetts. An expedited process to identify that existing operators are in compliance with adult use laws is the best means of implementing an adult use cannabis program.

Hemp Derived THC

There are hemp-derived Delta-8 and Delta-9 THC products being sold all over Pennsylvania through online retailers, gas stations, convenience stores and "smoke shops". These products are intoxicating, and contain as much or more THC than licensed cannabis operators are allowed to produce. In addition, they are unregulated, untested, untaxed (compared to adult use cannabis), and unsafe. These products have packaging and flavors that appeal to minors, are known to contain high levels of heavy metals, pesticides and other contaminants. Despite these negative consequences the products produce little tax benefit for Pennsylvania. Though less concerning than potential health risks, these products will also undercut taxes as a competitor to any properly authorized state adult use cannabis program.

Unregulated competitors represent a threat to the legal industry. While licensed operators pay annual license fees and have invested millions of dollars into manufacturing infrastructure, including seed to sale tracking systems, lab testing, competitive wages and benefits for employees, DEI programs and initiatives, these unregulated interlopers have no such obligations. Left unchecked this unregulated market will erode the regulated market and put responsible

operators out of business- New York is a prime example of a market that has fallen into such a state.

Because these products are derived from “hemp”, retailers claim they are legal under the federal 2018 Farm Bill. However, the Commonwealth has the legal authority to prohibit this increasingly dangerous and out-of-control marketplace. These products are not authorized for human consumption by the FDA, and are not authorized for sale by Pennsylvania law, regulation or guidance. The legislature must make clear in any adult use law that intoxicating hemp derived products are prohibited for sale in Pennsylvania.

Conclusion

The development of responsible and effective adult use cannabis legislation will require nuanced discussion of numerous factors beyond the scope of this testimony. Identifying a regulatory body tasked with industry oversight, leveraging the existing medical industry to lock out the illicit market, and preventing unregulated unlicensed competitors selling intoxicating hemp should be at the forefront of the adult use discussion.

Thank you for the opportunity to provide these comments on the possibility of adult use cannabis in Pennsylvania. I am hopeful to provide further detailed testimony in the future regarding additional items of concern for the development of adult us cannabis in the Commonwealth.

Thank you for holding this important hearing and allowing me to testify today.

My name is John Sullivan, and I am the Executive Vice President for Public Affairs at Cresco Labs.

Cresco was one of the original five medical vertical license holders in the Commonwealth of Pennsylvania. Cresco grows, manufactures, and dispenses medical cannabis. In fact, we manufactured and sold the first medical product in the Commonwealth on February 15, 2018. Additionally, we partnered with Temple University to conduct cutting-edge research on cannabis therapies.

Since we were awarded our license six years ago, we have invested over 100 million dollars in the Commonwealth, built out a 135,000 square foot cultivation facility in Brookville and opened dispensaries throughout Pennsylvania. We currently employ 455 people in Pennsylvania. And, all of them have health insurance, paid vacation, paid community volunteer hours, paid sick leave, good-paying jobs, and ownership in the company.

To date, Cresco's Brookville facility has manufactured 22,324,992 medical cannabis products for Pennsylvania's patients.

Every one of those products was tested by independently licensed 3rd parties to ensure accuracy of potency and make sure it was free from heavy metals, pesticides and mold.

Every product was sold in child-resistant and tamper-evident packaging that was reviewed and approved by the Department of Health. None of the products, packaging or advertising are designed in a way that would appeal to children.

We have had zero product recalls and zero documented instances of children being hospitalized after consuming our products.

There have been zero instances of diversion or selling products across state lines.

This track record did not happen by accident. It happened because the state set up a comprehensive regulatory framework and partnered with a limited number of operators that were carefully vetted through a robust merit-based application process. The results speak for themselves.

The team at Cresco has spent the last ten years helping to build a responsible, respectable cannabis industry. A cannabis industry where all cannabis is tested, tracked from seed to sale, and labeled so that patients know exactly what they are consuming.

However, that responsible, respectable cannabis industry is in jeopardy in Pennsylvania.

Pennsylvania today also has an illicit cannabis market and, as a result of the 2018 Federal Farm Bill, it has what I call "gas station cannabis".

Otherwise known as intoxicating hemp, synthesized cannabis, Delta 8,

Delta 9, THCO and “THCA” Flower. Walk into virtually any gas station, convenience store or smoke shop and you can find these products.

The gas station cannabis industry and the illicit market are nothing like the licensed cannabis industry. The vast majority of these products undergo no safety testing, endure no regulatory compliance obligations, have no age restrictions, are intentionally child appealing, and are chemically engineered to be more potent than anything in the regulated cannabis industry. In Pennsylvania and throughout the country, we are seeing a frightening number of children mistakenly taking these products and ending up in the hospital. In fact, the Center for Disease Control is now tracking the number of incidents with gas station cannabis that send our children to hospitals.

Furthermore, to our knowledge, all of these products come from outside the Commonwealth, creating no jobs, building no lasting infrastructure and paying little to no taxes.

The worst part is, with no regulation it is virtually impossible to stop the intoxicating hemp, “gas station cannabis” industry. Before I was in cannabis, I was a gang crimes prosecutor in Chicago, Illinois, and I worked closely with law enforcement. I still speak with members of law enforcement regularly. Right now, this “gas station cannabis” industry is impossible for law enforcement to stop. While the FDA and DEA have both issued clarifications on the illegality of the majority of these products, there is so much confusion around what products are legal under the 2018 farm

bill, there is no way for law enforcement to discern what is legal hemp product and what is illegal. As a result, this industry operates unchecked.

Each day that goes by, this unregulated industry grows, takes hold, and makes it tougher for a responsible, regulated industry to take its place – it puts everything that we have advocated for and operated compliantly pursuant to over the last 10 years, for Cresco Labs and for Pennsylvania.

So today, I am imploring this PA legislature and this committee to act quickly to implement an adult-use cannabis program that has a robust regulatory system that emphasizes the protection of adult consumers and keeps cannabis out of the hands of children.

How do we do this:

First, use the current medical cannabis regulatory structure and footprint already that currently exists to launch an adult use cannabis program as quickly as possible. This will provide tens of thousands of good-paying jobs, spur economic development, and provide significant tax revenue.

Second, create an environment where the entire cannabis ecosystem works together to create the best results for all businesses, whether small or large, new businesses and current operators. Infighting and delay will only embolden the illicit and the hemp-synthesized “gas station cannabis” industry.

Third, implement a system that maximizes the creation of good jobs for Pennsylvanians, opportunity for people from all walks of life, and the tax revenue that Pennsylvania can collect.

All of these things are possible if we act together and act quickly.

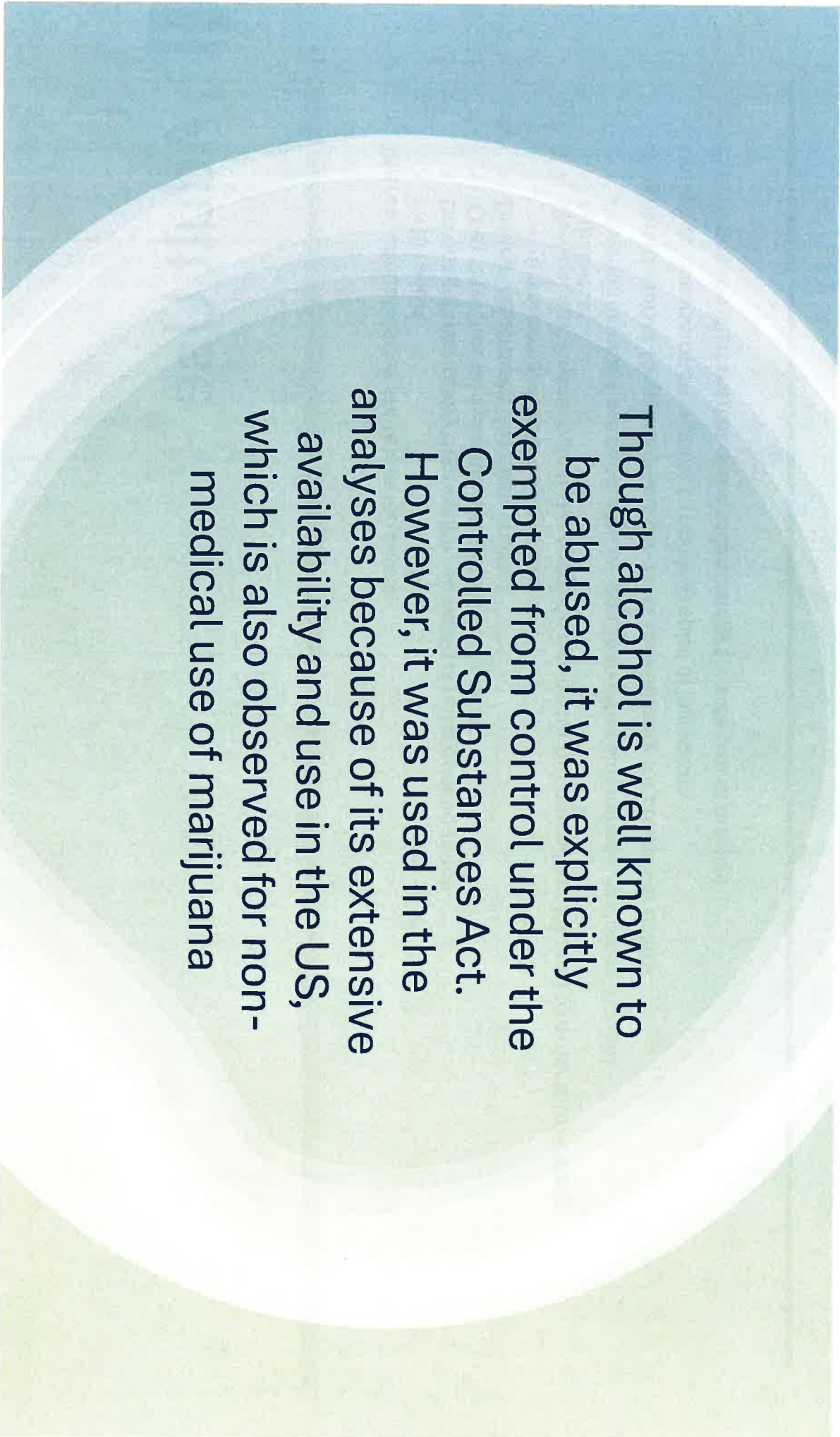
Thank you.



Adult Use

- The real critical issues are related to safety
 - HHS report
 - Do not get respiratory depression, so death is not a consequence
 - Over time (hours) symptoms spontaneously remit
 - Driving impairment has been studied
 - Enforcement must be legislated
 - Physical and Psychological dependence can occur but are mild compared to other intoxicating substances
 - Adverse reactions are substantially less than other substances, including alcohol
- A regulated market for all cannabis products is necessary for consumer safety
- Underage consumption is going to occur in spite of legislation
- Eliminating the illicit market is the only strategy for safe use at any age





Though alcohol is well known to be abused, it was explicitly exempted from control under the Controlled Substances Act. However, it was used in the analyses because of its extensive availability and use in the US, which is also observed for non-medical use of marijuana

Marijuana Sources for Nonmedical and Medical Use

Products containing marijuana or derived from marijuana are generally obtained by the public from four main sources:

- State-authorized adult-use (nonmedical) programs
- State-authorized medical-use programs
- Illicit marketplace – includes unregulated smoke/vape shops, gas stations, convenience stores, marijuana clubs/lounges, person-to-person sales, and illicit cultivation
- Home cultivation for personal use (either legal or illegal under state programs)

Marijuana Economic Impact on Regulated Market from Unregulated Cannabinoid Sources for Nonmedical and Medical Use

- The proliferation of CBD based products, primarily Delta-8 has adversely affected the regulated market.
- Glass shops and “CBD Boutiques” are providing misleading advertising representing they are selling the same product as Medical Marijuana without having to get a card.
- Currently, research on Delta-8 is lacking, as well as other THC products produced from CBD.
- Lack of process supervision, laboratory control, and testing prevents accurate awareness of dosing.

Problems Without Regulation

Actual quantity of melatonin ranged from 74% to 478% of the declared quantity (1.3-mg to 13.1mg)

As little as 0.1-mg to 0.3-mg of melatonin can increase plasma concentrations into the normal nighttime range.

88% were inaccurately labeled

In products containing CBD, the actual CBD content was 104%-118% of labeled

- Delta 8
- Some manufacturers may use potentially unsafe household chemicals
- From January 1, 2021, Poison Control to February 28, 2022:
 - 2362 exposure cases
 - 41% pediatric
 - 82% unintentional
 - 45% requiring healthcare facility evaluation were pediatric
 - One pediatric fatality

Underage use: Youth Risk Behavior Surveillance System

20% of students in 9th-12th grade reported using marijuana at least once in the past month during each year evaluated.

past-month alcohol use by high school students (29%) in 2019 was greater than that of marijuana use past month prescription opioid misuse (including codeine, hydrocodone, or oxycodone) (7%) in 2019

Does the passage of medical and recreation MJ laws lead to an increase in teen MJ use?

- NO
- Youth Risk Behavior Survey 1993-2019
 - There was little evidence that the legalization of medical and recreational marijuana encourages youth marijuana use
 - The overall association between recreational marijuana legalization and marijuana use among adolescents was statistically indistinguishable from zero.
- They are already using drugs and marijuana from the illicit market
- Legalization allows access to safe, unadulterated products the illicit market cannot provide, just as the control of alcohol does not decrease underage use, but simply provides products of known provenance.

Anderson DM, Rees DJ, Sabia JJ, Safford S. Association of Marijuana Legalization With Marijuana Use Among US High School Students, 1993-2019. *JAMA Netw Open*. 2021;4(9):e2124638. doi:10.1001/jamanetworkopen.2021.24638. <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2793850>

Psychotic Episode from Marijuana

- Daily use of cannabis and use of high-potency cannabis increase the risk of a psychotic disorder.
 - Self-reported
- Starting use by age 15
- Data not validated by blood, urine, or hair samples
- No direct measure of THC %
- Does not differentiate licit versus illicit market
- No data on CBD content, which may modify Delta-9 effects
- London 45.7 cases/100,000; Amsterdam 37.9/100,000

Benefit of Controlled Adult Use Market

Provide for safety
of products
available in the
market

Undermine the
illicit market with
products of known
provenance

Driving and Cannabis

CONCLUSIONS AND RELEVANCE

Smoking cannabis ad libitum by regular users resulted in simulated driving decrements.

However, when experienced users control their own intake, driving impairment cannot be inferred based on THC content of the cigarette, behavioral tolerance, or THC blood concentrations.

Participants' increasing willingness to drive at 1 hour 30 minutes may indicate a false sense of driving safety. Worse driving performance is evident for several hours post-smoking in many users but appears to resolve by 4 hours 30 minutes in most individuals.

Further research is needed on the impact of individual biologic differences, cannabis use history, and administration methods on driving performance.

JAMA Psychiatry. doi:10.1001/jamapsychiatry.2021.4037

CONCLUSIONS AND RELEVANCE

- In a crossover clinical trial that assessed driving performance during on-road driving tests, the SDLP (standard deviation of lateral position/lane weaving) following vaporized THC-dominant and THC/CBD-equivalent cannabis compared with placebo was significantly greater at 40 to 100 minutes but not 240 to 300 minutes after vaporization;
- there were no significant differences between CBD-dominant cannabis and placebo.
- however, the effect size for CBD-dominant cannabis may not have excluded clinically important impairment, and the doses tested may not represent common usage.

JAMA. 2020;324(21):2177-2186. doi:10.1001/jama.2020.21218

National Survey on Drug Use and Health (NSDUH)

The prevalence of past-year use of alcohol was 5-6 times greater than nonmedical use of marijuana

Nonmedical marijuana use an average of less than 5 days/month while another 30% reported nonmedical marijuana use for an average of more than 20 days/month benzodiazepines (4%), hydrocodone, oxycodone, tramadol (2% each), cocaine or crack (less than 2%), and illicit fentanyl, heroin, and ketamine (less than 1% each).

WHAT, IF ANY, RISK THERE IS TO THE PUBLIC HEALTH

The risks to public health posed by marijuana are low compared to other drugs of abuse (e.g., heroin, cocaine, benzodiazepines), based on an evaluation of various epidemiological databases for ED visits, hospitalizations, unintentional exposures, and most importantly overdose deaths.

For overdose deaths, marijuana is always in the lowest rankings among comparator drugs

although abuse of marijuana produces clear evidence of a risk to public health, that risk is relatively lower than that posed by most other comparator drugs

Psychic or Physiological Dependence

experimental data and clinical reports demonstrate that chronic, but not acute, use of marijuana can produce both psychic and physical dependence in humans

symptoms associated with both kinds of dependence are relatively mild for most individuals, although the severity may be greater with increased exposure to marijuana

Considerations for Scheduling of Marijuana

Actual of relative potential for abuse

Scientific evidence of its pharmacological effect

State of current scientific knowledge regarding the drug

History and current pattern of abuse

Scope, duration, and significance of abuse

Risk to the public health

Psychic or physiological dependence liability

Immediate precursor or a substance already controlled

THE SCOPE , DURATION , AND SIGNIFICANCE OF ABUSE

Medical outcomes from abuse of selected drugs is that for all measures that were evaluated from 2015 to 2020, the rank order of the comparators in terms of greatest adverse consequence typically places alcohol, heroin, and/or cocaine in the first or immediately subsequent positions, with marijuana in a lower place in the ranking



How does marijuana work?

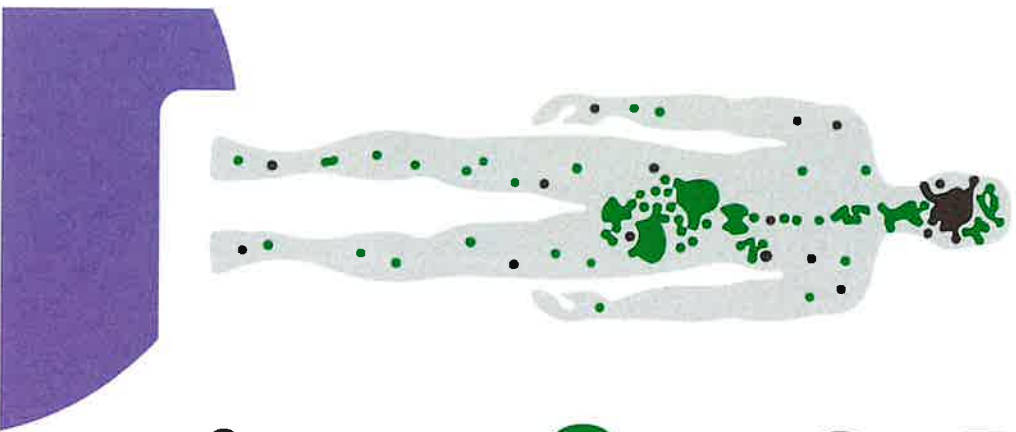
Delta-9 THC is an agonist (stimulates) CB1 receptors, to produce its effects.

Conclusions

Marijuana has a potential for abuse less than the drugs or other substances in Schedules I and II.

Marijuana has a currently accepted medical use in treatment in the United States

Abuse of marijuana may lead to moderate or low physical dependence or high psychological dependence



HUMAN ENDOCANNABINOID SYSTEM

CB1

CB1 Receptors Target

- x Motor Activity
- x Thinking
- x Motor Co-ordination
- x Appetite
- x Short Term Memory
- x Pain Perception
- x Immune Cells

CB2

CB2 Receptors Are
Much Broader Than
CB1 And Influence
Most Of The Body

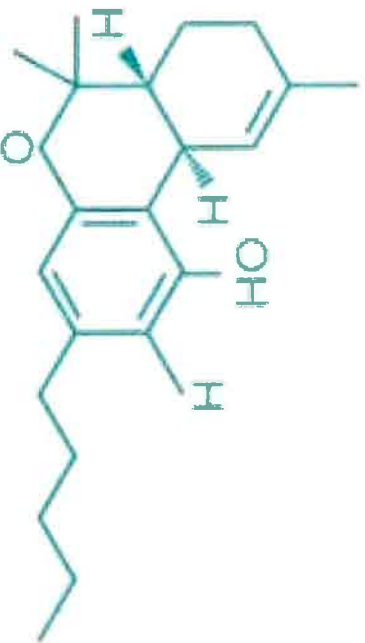
- x Gut
- x Kidneys
- x Pancreas
- x Adipose Tissue
- x Skeletal Muscle
- x Bone health
- x Eyes
- x Tumours
- x Reproductive System
- x Immune System
- x Respiratory Tract
- x Skin health
- x CNS
- x Cardiovascular System
- x Liver

AMSTERDAM
GENETICS

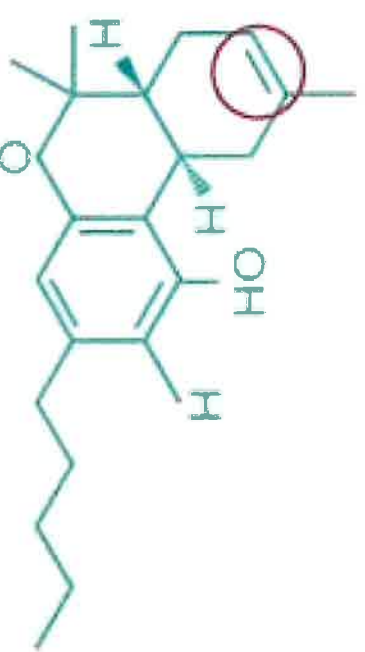
Receptors

- Cb1: Less prevalent
- THC only binds to Cb1
- Cb2: More prevalent
- Accepts broader range of cannabinoids
- Discovering others

Delta 9 THC



Delta 8 THC



Delta 8

Delta 9 has a double bond at the ninth carbon atom and Delta 8 at the eighth

Seven indications were selected for evaluation under Part 2 of the CAMU test based on conclusions from Part 1 of the CAMU test as well as the FDA's analysis of the landscape of medical use of marijuana. The indications evaluated are anorexia related to a medical condition, anxiety, epilepsy, inflammatory bowel disease, nausea and vomiting (e.g., chemotherapy-induced), pain, and post-traumatic stress disorder

The available data do provide some level of support for the way marijuana is being used in clinical practice

Angela Zaydon Bio

Angela Zaydon is a government affairs professional and lobbyist. She is experienced in health care issues, pharmaceuticals, property and casualty insurance, manufacturing, and business issues. She has a proven track record for passing legislation and has built and maintained relationships with legislators across the country.

Angela has worked in the cannabis industry for several years in the government affairs arena. She fosters and maintains relationships with governors, elected officials, and key regulators in several states and the federal government. She joined Trulieve, a vertically integrated multi-state operator in 2022 as the Government Relations Manager. She provides analysis and insight as to industry initiatives and trends, provides internal strategic guidance related to external affairs, and implements policies and procedures that align with the passage of new legislation and regulations.

Angela has held several positions within Pennsylvania government, beginning with the House of Representatives, Majority Chief Counsel's office, the Office of General Counsel, State Police Headquarters, and the Office of General Counsel, Department of Corrections under Governor Tom Ridge, and the Office of Attorney General in the Legislative Affairs Office under Attorney General Mike Fisher.

Angela holds a Bachelor of Arts degree in Political Science with a minor in Business Administration from Canisius College, Buffalo, NY. She obtained her Juris Doctor from Widener University School of Law, Harrisburg, PA.

TESTIMONY
HOUSE HEALTH SUBCOMMITTEE ON HEALTH CARE
FEBRUARY 5, 2024
INFORMATIONAL MEETING ON ADULT USE CANNABIS
SUBMITTED BY ANGELA ZAYDON
GOVERNMENT RELATIONS MANAGER
TRULIEVE

Good morning. My name is Angela Zaydon, and I am the Government Relations Manager for Trulieve. Trulieve is an industry leading, vertically integrated cannabis company and multi-state operator in the U.S. We currently operate 192 retail dispensaries in 9 states, and multiple dispensaries, cultivation and processing facilities in Pennsylvania. By providing innovative, high-quality products across our brand portfolio, Trulieve delivers optimal patient and customer experiences. In addition, our experience in other states enables us to offer suggestions and comments to state legislators and regulators so that they are aware of best practices in other states. Based on our experience in other adult use markets, we believe that Pennsylvania has the opportunity to create a robust adult use market that is business friendly, retains the medical market, provides adult use customers with premium options and generates tax revenue for the Commonwealth. We look forward to working with you throughout this transition into the adult use arena.

I would like to thank Chairman Frankel and Chairwoman Rapp, as well as the members of the House Health Committee and their staff, for the opportunity to discuss adult use cannabis in Pennsylvania.

Infrastructure

Pennsylvania currently has 177 dispensaries across 59 counties and more to come online with the most recent changes in the law. Adult use implementation also has the opportunity to address underserved areas. Cannabis should only be sold in dispensaries that are licensed and regulated by the Commonwealth. The current dispensary infrastructure is the best way to add an adult use

Business Practices

No artificial distinctions should be made between medical and adult use cannabis products. In all cases, these products are made and tested to the same standards. The only distinction between medical and adult use cannabis should exist at the point of retail sale, where the purchaser is either verified as a registered patient by showing a valid medical card or an adult use consumer, by showing a valid government issued identification. No other distinction should be made to the consumer at the point of sale. In addition, there should not be any different entrances, obstacles, checkout lines, or hours of operation that would differentiate or single out a patient from an adult use consumer. Historically medical patients have not been negatively affected by adult use sales, and we have seen medical programs continue to successfully operate after adult use implementation. Of course, medical patients should continue to enjoy a zero-sales tax policy, which would only be recognized at the point of sale back end. All cannabis products should be cultivated, manufactured, and distributed in the same way throughout the same supply chain.

Cannabis businesses should be treated the same as other businesses in Pennsylvania. Normal business practices should be allowed for cannabis, such as advertising, tax code allowances, and consumer marketing such as sales, loyalty rewards, and company merchandise. Obviously, a tax structure that is not too high or too low is important to the industry and the consumer in order to slow the illicit market, retain sales and generate revenue for the Commonwealth while allowing the industry to grow.

Local Government

Municipalities should not be able to opt out of currently licensed facilities. Many local municipalities have ordinances to protect against over saturation, but they should not be allowed to prohibit or restrict adult use sales. To reduce the illicit market, municipalities should not be allowed to refuse or delay currently licensed medical dispensaries the ability to convert to adult use. Research in other states supports the model of automatic conversion of medical dispensaries to adult use dispensaries.

**Pennsylvania Adult-Use Hearing
Laboratory Panel (1pm-2pm EST)**

Purpose: Gathering industry perspectives on what standing up an adult-use program should entail.

Opening Statement / Remarks

Topics for consideration in standing up an adult-use program.

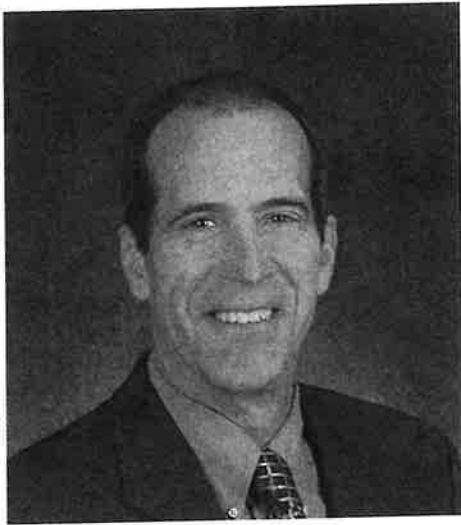
1. **Laboratories are key to your market's success - but not an arm of enforcement.** Robust quality systems require laboratories and licensed producers/cultivators to work together closely.
 - a. Consider how rules and regulations will impact this critical relationship.
 - b. Utilizing laboratories in enforcement, creates conflict and opens the door for operators willing to work outside of the rules.
 - c. While laboratories are not an arm of enforcement - they are most definitely a resource. Engage this community prior to the introduction of new rules to explore intended and unintended consequences.

2. **Focused laboratory oversight is foundational.** As a critical partner in the success of your state marketplace, you should ensure that your laboratory oversight is in place first and foremost (the longer this is absent, the harder it will be to correct). This means a great deal more than ISO 17025 accreditation. It means regular collaboration and conversation, proficiency testing, random audits and transparent interlaboratory comparisons or exercises to this effect. Doing this well early on will help prevent market manipulation from taking root.
 - a. **ISO 17025 is a [necessary] foundation.** But it does not ensure compliance or accuracy. Just as getting a contractor's license doesn't mean someone will build a quality home, there is a great deal more that goes into ensuring quality in your laboratory operations - you still need inspectors/inspections.
 - b. **Conduct random audits.** Random audits of in process and final products will assist in identifying issues. One method of conducting random audits should involve selecting retail products for retesting (by multiple laboratories). Spot audits (after removing identifying labels/tags) can help discourage intentional manipulation. In the event that there is a dispute or conflict related to audit testing results, there must be a defined pathway for dispute resolution - the laboratories cannot be expected to regulate one another.
 - c. **Invest in your regulatory team.** Hire experts in analyzing and monitoring large data sets - look for trends and investigate. Hire scientists who have worked in laboratories and know what to look for. Regardless of your approach to testing and monitoring, the data produced through your seed to sale system is your window into what's happening in your market - don't under-utilize this asset.
 - d. **Share data.** Transparency is a tool in rooting out issues. As a State, if you are opaque with your data, your operators will follow suit.
 - i. Share results with those participating in interlaboratory comparisons or other similar audits (remove names and identifiers to protect licensees and know what is visible in your seed-to-sale system).

- ii. Allow for anonymous, aggregated sharing of State data. Let this fuel research, innovation and further conversations concerning trends..
3. **Encourage collaboration.** Create a scientific / laboratory round table and ask for input.
 - a. You cannot possibly anticipate every product form or process that will be developed (and where they should fit into your testing regulations). These groups will help you build and maintain frameworks intended to evaluate and incorporate the unknowns.
 - b. Create a safe pathway for all licensees (including laboratories) to consult your regulators when a non-standard situation comes up. Be a partner in issue resolution.
4. **Reward investment in quality systems.** When rules are based on regular risk assessment, operators are encouraged to invest in quality systems that identify risks and inform testing to ensure the safety of their products.
 - a. Avoid rules / regulations that discourage R&D testing, input testing, product development and testing to control the supply chain. These are healthy elements of quality control.
 - b. Every operation will identify risks in their facility and processes - this is a good thing. One of the greatest risks to the end consumer is creating a system that incentivizes operators to avoid these issues or not look for them at all.
 - c. Where possible, focus on the elements of production and the intended method of consumption of the end product. These are critical factors in understanding the contaminants for which you need to test.
5. **Be aware of your pressure points.** Growth from medical to adult use is exponential not linear. Your state regulators know where your systems are strongest and where it is weakest and most prone to manipulation. These cracks will become chasms in an expanded AU market. Be on the lookout for rules that rely on people not to challenge audits and resulting enforcement - they stand to undermine your entire structure.

Resources for consideration and continued support:

- [S3 Collective](#). A nonprofit facilitating multi-stakeholder conversations and providing input and feedback on regulatory guidance and system in development (a great partner for any state looking to engage experts in the drafting process).
- [Standardizing Cannabis Lab Testing Nationally](#). Published by the National Cannabis Laboratory Council (NCLC), addressing broad testing requirements that will serve the eventuality of federal legalization and interstate commerce.
- FDA presentation. [A New Way Forward for CBD and Other Hemp Products](#).
- [ASTM Cannabis Resources](#). ASTM International's Committee on Cannabis Standards (D37) formed in 2017, welcomes participation, and has published a growing number of standards related to cannabis and laboratory testing.
- AOAC International's Cannabis Analytical Science Program (CASP) - published Standard Method Performance Requirements (SMPRs) specific to cannabis testing.



Dr. Robert Miller
Chief Scientific Officer
ACT Lab

As Chief Scientific Officer, Dr. Bob Miller is focused on the rigorous pursuit of excellence in applying the most advanced and trusted scientific methods. He joined ACT as COO in 2019. He took on the role of Chief Scientific Officer in 2023. Dr. Miller has over 35 years in Pharmaceuticals, which included oversight of diverse product portfolios for global Pharma and Generic companies such as Bayer Pharmaceutical, Pfizer/Warner-Lambert, and Johnson & Johnson.

Prior to joining ACT, Dr. Miller was SVP of Quality at Gilead Sciences Inc. He has a wealth of experience in the design and implementation of quality systems and guiding companies through compliance enhancements in response to FDA and other global regulatory agencies. Prior to his role at Gilead, Dr. Miller was the head of Quality at Johnson & Johnson and Pfizer.

Dr. Miller holds a B.S. in Pharmacy and a Ph.D. in Pharmaceutical Chemistry from Rutgers University College of Pharmacy.



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To: Representative Dan Frankel
Chairman House Health Committee

Representative Rick Trajewski
Subcommittee Chair on Health Care

From: Bob Miller, Ph.D
Chief Science Officer
ACT Laboratories

Date: February 5, 2024

RE: Testimony for Hearing on Adult-Use Cannabis

Dear Chairman Frankel:

I want to thank you for the opportunity to be part of the Laboratory Panel focused on how we can all work together to ensure a successful launch of an Adult Use program in Pennsylvania. As you may know, ACT Laboratories perform Cannabis testing in western PA and has been in operation for 5 years. More importantly, as the Chief Science Officer (CSO) of ACT, which is located in 6 states, I have been actively and personally involved in working with state agencies, most notably in NY and Ohio, who have recently implemented an Adult Use program or are considering such a launch. In addition, I have worked with state agencies in Michigan and Illinois as they continue to make changes to their existing programs.

Based on my experiences, there are three keys to a successful AU program;

- Ensuring the creation of appropriate lab regulations driven by science,
- Development of the necessary controls to enable the marketing of infused products
- Greater focus on data integrity coupled with empowered regulators.

When looking at successful regulatory bodies in the states that ACT operates in, there is a need to have laboratory expertise to both develop and regulate the program. In addition, the regulatory body needs to have real enforcement power and the tools necessary to investigate the irregularities found. We have seen this as an issue in a number of states that we operate in. In addition, the underlying statute for labs should allow for flexibility to change through regulation and not be prescribed in statute limiting flexibility.

This flexibility will enable the regulatory agency to react to the science and best standards constantly being developed and innovated. This has been a significant challenge in Illinois, where the state acknowledges that some of the tests required can not be implemented as written. However, they are unable to make the necessary changes.

In AU markets, infused products are the fastest-growing products. As you may know, infused products are all over Pennsylvania right now. They are being sold by unregulated hemp producers that are selling gummies, candies, etc., everywhere. It has been seen that some patients have mistakenly turned to this market because of the rigidity of the current medical program not meeting patients' needs for chewable products. It is clear that infused products must be allowed in the regulated program. Otherwise, a gray market will continue with PA patients buying these unregulated hemp products in gas stations or going across state lines to get approved infused products resulting in a loss of PA revenue.

With the introduction of the AU market in Pa., it is expected that there will be an increase in product production. Making it even more critical that there is a greater focus on data integrity by an empowered regulatory body. Data is currently available at the state level with the seed-to-sale system to identify atypical results being generated, yet it is not being utilized.

In summary, ACT is committed to working with state regulators in the launch of an AU program in PA. We are very grateful for the opportunity to offer this testimony and look forward to continuing the conversation on lab integrity with you soon.

Additionally, I offer additional examples of some challenges that other states have seen below.

Sincerely,



Bob Miller, Ph.D.
Chief Science Officer
ACT Laboratories

Examples of Laboratory Testing Issues in other States

Current issues with cannabis testing laboratories that have made headlines:

Cannabis shoppers use THC percentages like nutritional labels, purchasing products based on THC content, yet the lab system entrusted with measuring the compound is vulnerable to corruption. Some unscrupulous laboratories have been caught inflating THC potency levels, passing moldy cannabis as safe, and even making up results entirely. In several other states with medical/adult use programs, testing issues have come to surface which has disrupted those markets and potentially caused patient safety risks. In some of the worst cases in other states, laboratories have falsified results or incentives have been created for companies to “laboratory shop” for results that yield desired results.

Lab tests have other impacts too. If a sample fails its quality assurance test, a grower might need to destroy an entire crop of cannabis. And, corrupt labs are cheating customers out of the potency they think they’re buying.

Experts say that lab corruption is widespread because the incentives to cheat are too high and enforcement is mostly ineffective.

What is the solution or potential solutions?

To ensure consistency, we should clarify what types of testing methods are allowed and which ones are not as well as what laboratories should be testing for. It is believed that in PA, not all laboratories are using the same testing methods and that many are not using uniform nomenclature to report results which could be confusing for patients. The granularities of testing and its concomitant practices should be standardized or formalized in an effort to strengthen laboratory integrity.

To ensure consistency we should also endeavor to clarify what types of testing methods are permitted in an effort to strengthen laboratory integrity. Stakeholders have expressed the need for the permissibility of formal proficiency testing among labs and accountability to meet program standards. This could include blind “round-robin” style testing, where labs test products which have been tested previously on a peer-to-peer level, or the utilization of trend analysis to ensure accurate and reliable testing data is being generated. This could be a meaningful next step as it relates to the development of formal laboratory oversight from the PA DoH and as well in an eventual adult-use program.

How have other states tried to tackle this issue and what has worked in addressing the problem?

The strictest lab regulations in the country are likely in Oklahoma, where a booming pot economy worth \$800 million a year has sprung up on the edge of the American South. Pot labs face regular proficiency tests and the state requires labs to collect two samples for every test and then hold a reserve sample, which is used to investigate complaints. The second sample is also used as a calibration tool, with the state randomly retesting reserve samples. The lab must answer for any deviations between the first and second tests.

A blistering 2019 audit of Oregon's testing system found that the state's testing program "cannot ensure that test results are reliable and products are safe" and said the state regulatory program had "limited authority, inadequate staffing and inefficient processes."

Allegations of lab fraud have dogged the legal cannabis industry from the beginning of commercial pot sales, especially in Washington state, where recreational pot has been legally sold since 2014. Observers have known about the problem in part because lab data is public in Washington, allowing data scientists to analyze the test results of individual labs.

In late 2015, MacRae published data showing that, in a three-month period, four of Washington state's 14 certified labs had tested tens of thousands of samples without ever failing a sample for microbial contamination, while other labs failed as many as 45 percent of samples. Four months later, the state suspended one of those four labs for six months, finding the lab had given the highest THC averages in the state and "put the public health and safety at risk by exposing the public to ... marijuana products that have not been properly or accurately tested for microbial contamination and other risks."

Other states have similar issues. In 2019, MacRae analyzed the cannabis market in Nevada, which has publicly struggled to regulate their industry. (In one five-month period, the state suspended the licenses of nearly half of all of its certified labs.) MacRae's analysis found that the average THC potency in the state had steadily increased from 19 percent to almost 22 percent between 2018 and 2019, and multiple labs were appearing to release fraudulently inflated THC potencies and rarely failing samples for safety standards. Within days of MacRae presenting his findings to the state, Nevada's government warned the lab industry that they were actively investigating THC inflation, and within weeks the state had fined a lab for "unsound testing practices."

Additional References

America's Pot Labs Have A THC Problem | FiveThirtyEight

Lack of standards, dubious business practices threaten to upend cannabis testing industry

False test results, lab shopping put cannabis consumers at risk

Lab Shopping: Highlighting the Need for Checks and Balances in Cannabis

Ethics or Profits: Lab Shopping in the Cannabis Industry





ADULT USE PRINCIPLES FOR THE COMMONWEALTH

The Pennsylvania Cannabis Coalition is a 501(c)(6) trade organization established to protect and preserve Pennsylvania's emerging cannabis market. We represent the current medical cannabis industry here in Pennsylvania and advocate for a robust yet economically sensible regulatory framework. We continue to educate elected officials, regulators, and stakeholders about the need for, and benefits of, cannabis-derived therapies.

STANDING UP AN ADULT USE MARKET

- **Within 90 days of enactment, the state must establish a legal access point for adult consumers 21 and over to purchase cannabis by grandfathering all current grow/process and dispensary operators into the adult use regulatory framework.** Allowing current operators the ability to operate within 90 days as a matter of law will allow the Commonwealth to curb illegal activity and generate tax revenue by quickly capturing illicit market sales, and avoids the proliferation of illegal operators entering the market, as was experienced in neighboring jurisdictions like New York and Washington D.C.
- **To reduce the illicit market, municipalities should not be allowed to refuse or delay currently licensed medical dispensaries from the ability to convert to adult use.** Research supports the model of automatic conversion of medical dispensaries to adult use dispensaries. Economists at the Federal Reserve Bank of Philadelphia found that each additional dispensary in a neighborhood leads to a 19% decline in the neighborhood's crime rate. A study conducted by Whitney Economics demonstrated that local bans on legal stores created an automatic economic protection zone for illegal street dealers. In communities that have not allowed this automatic process, adults with no regulated dispensaries in their communities buy cannabis from the illegal market, increasing crime in those communities.

TRANSITIONING THE CURRENT MEDICAL INFRASTRUCTURE

- **The Commonwealth should establish a new and independent regulatory body to bring focused oversight to the regulated adult use and medical cannabis program, as well as cannabinoid hemp-derived consumer products (excluding industrial hemp).** The regulatory body should be independent from any current administrative agency and should include one or more industry representatives with experience operating a cannabis business in a strictly regulated cannabis program.
- **No artificial distinctions should be made between medical and adult use cannabis products.** In all cases, these products are made and tested to the same standards. The only distinction between medical and adult use cannabis should exist at the point of retail sale, where the purchaser is verified as a registered patient or adult use consumer, and where medical patients should continue to enjoy a zero-sales tax policy. All cannabis products should be cultivated, manufactured, and distributed in the same way throughout the same supply chain.

HEALTH AND PUBLIC SAFETY

- **The legislation should ban all synthetic cannabinoids and isomers manufactured outside the regulated marketplace, including those intoxicating THC compounds marketed as federally legal hemp.** These untested and unregulated THC products are currently being sold without age verification in retail markets, gas stations, and online. The new regulatory body should be required to develop a regulatory framework to bring all intoxicating THC products and novel cannabinoids into the safeguards of the regulated market. The regulatory body should have the discretion to ban certain synthetic cannabinoid derivatives outright. This result will ensure oversight of safe manufacturing practices, age or patient verification, advertising and marketing standards, third-party lab testing for contaminants and dangerous chemicals, and applicable licensing fees and taxation through regulated channels. Further to these points, methods of



ADULT USE PRINCIPLES FOR THE COMMONWEALTH

skirting the regulated market that have become widespread in jurisdictions like New York and Washington D.C., such as gifting, membership fees, or selling unregulated cannabis and “hemp-derived” THC products online should be made explicitly unlawful in the Commonwealth.

FAIRNESS AND EQUITY IN THE CANNABIS INDUSTRY

- **Cannabis should only be sold in dispensaries that are licensed and regulated by the new regulatory body, and not be sold in state liquor stores or any other retail outlet.** The preemptive nature of Federal Law supports the expediency of the sale of cannabis via private entities. The Commonwealth acting as the primary market participant could have disastrous effects on the current market and will severely undercut the significant investment the industry has and will continue to make in the state. By acting as the seller, the Commonwealth would expose itself to significant legal and financial liabilities in the areas of banking, real estate and infrastructure, security, and training. By establishing itself as the largest cannabis seller the Commonwealth would limit job growth, consumer choice and social equity opportunities.
- **The legislation should embrace and enhance the cannabis research model established by Chapter 20 of Act 16 while allowing Clinical Registrants to participate in the adult use market.** Pennsylvania’s Clinical Registrants have produced valuable research in partnership with the states Academic Clinical Research Centers. Without current Federal funding for the research of cannabis-based therapeutics the Commonwealth’s program is at the forefront of cannabis science and is well positioned to make Pennsylvania a leader in the field.
- **New licenses that immediately result from the passage of an adult use bill should reflect social equity principles that are important to Pennsylvanians.** Reduced fees, targeted incentives, and training for new licenses owned by women, minorities, veterans, small farmers, or those with prior cannabis-related arrests due to state prohibition are important features of an adult use program.



www.emerald penn.com

Official Testimony: Emerald Penn

John Bowser, Co-Founder
Dan Lauria, Co-Founder
Chad Harlacker, Co-Founder

House Health Committee – Subcommittee on Health Care
Informational Meeting: Adult-Use Cannabis

Date: February 5, 2024

Chairman Frankel, Chairwoman Rapp, and Members of the House Health Committee:

Thank you for taking the time to assess the many policy matters that must come with the state's potential consideration of adult-use marijuana. While many states in the nation have already taken steps to move down this path of adult-use, Pennsylvania must be certain not to replicate mistakes by others.

For background, we are the founders of [Emerald Penn](http://www.emerald penn.com) – a Central Pennsylvania small business focused on responsible marijuana use and patient care. *Emerald Penn* was founded with the goal of entering the state's medical marijuana market with a focus on exceptional customer service, high-quality products, and above all, creating a positive impact on our local community.

While our primary goal remains to compete for a medical marijuana permit and create new opportunities for small, diverse, and disadvantaged businesses within the industry, *Emerald Penn* also strongly supports options to expand into the adult-use market. But doing so must be done cautiously and with a long-term focus.

Currently, there are [24 states](#) in the United States that have taken steps to approve some form of adult-use marijuana legislation. Each of Pennsylvania's bordering states-except West Virginia-are among those on this list. Ohio was the most recent to do so via voter referendum in November 2023.

With almost half the country moving down the path of adult-use legalization, there is an array of policy options to consider here in Pennsylvania as lawmakers assess similar plans. From tax rates to permitting requirements, there are many ways to create an adult-use market.

Emerald Penn believes several vital points must be considered. First and foremost – and we cannot stress this point enough – Pennsylvania must diversify its marijuana market. While the large multi-state operators (MSO) have dominated the market since the legalization of medical marijuana in 2017, more needs to be done to open the space to small, diverse, and disadvantaged businesses.

[Act 16 of 2016](#), which created the medical market in Pennsylvania, included specific provisions under [Section 615](#) that required efforts to meet diversity goals. Unfortunately, most believe the current market is not meeting the goals set forth in this section. And while the MSOs should be applauded for their efforts to build the current system, more needs to be done to allow others the opportunity to compete.

Creating new opportunities for small, diverse, and disadvantaged businesses in the marijuana market – both under the current medical system and any expansion to adult-use – will bring a locally centered care and perspective to an industry that is currently led by larger corporations. Specifically, we are urging lawmakers to create new opportunities for locally owned and operated businesses.

The majority of Pennsylvania's existing medical marijuana dispensaries are run by large, multistate operators. Many of these operators have spent the last several years acquiring smaller entities. This, along with the provisions included in [Act 63 of 2023](#), has essentially vertically integrated the entire system. While this was not the intent of Act 16, the fact remains that opportunities for smaller, locally owned entities are few and far between.

As it relates to the state's medical marijuana market, *Emerald Penn* is advocating for the enactment of [House Bill 1942](#) and [House Bill 1881](#). These proposals would create new opportunities for small, diverse, and disadvantaged businesses in the state's existing medical market. Additionally, we ardently believe the principles of these bills should be applied to any discussions related to adult-use policies.

While the adult-use and medical markets align with different public policy goals, there are some overlapping points that should be applied equally. Access to opportunities for locally owned businesses is among them.

There are no doubts the existing multi-state operators that support the state's medical system will advocate for initial access to an adult-use market. To be fair, those operators have already been vetted by the state and many of them support both medical and adult-use markets in other states. Thus, transitioning markets here in Pennsylvania would make sense. But they cannot be the only entities afforded opportunities.

Like any product-driven market in any industry, variety matters, and it drives competition. *Emerald Penn* believes this perspective needs to be applied to any expansion of Pennsylvania's marijuana industry – adult-use and medical. Customers and patients are served differently by small, community-based businesses versus larger, corporate-like operators. One is not necessarily better than the other, but the services and support will differ.

Lawmakers and state policy officials have long promoted their support for small businesses in Pennsylvania. These efforts must carry forward into the state's marijuana market. In the early onset

of the Shapiro Administration, the governor signed an [Executive Order](#) designed to increase state contract partnership opportunities with small and diverse businesses.

When announcing the order, Governor Shapiro released the following statement: *“By supporting our small diverse businesses, we’ll not only grow our economy and strengthen our communities – we’ll also create more competition for Commonwealth business and secure higher quality products and better results for all Pennsylvanians.”*

If these are the principles by which the Commonwealth intends to honor its partnerships with Pennsylvania-based businesses, then they should also be applicable to instances in which businesses are looking to secure state permits within the marijuana industry. Small, diverse, and disadvantaged businesses must be prioritized.

In looking at other states that have ventured down the path of adult-use policies, social equity measures have often been a part of the discussion. These are important considerations to assess, and they should be included in Pennsylvania’s discussions. However, if implemented, the policies need to work best for operators and customers or patients.

States like [Missouri](#) and [Arizona](#) have seen problems with initiatives focused on social equity related to their respective marijuana industries. Additionally, states like [Massachusetts](#), which enacted a similar social equity provision, have seen significant challenges in fully realizing the objectives of its program due to lack of access to necessary capital.

These problems – coupled with successes in other states – should be viewed as a map of what to do, and what not to do, should Pennsylvania move toward adult-use considerations. To obtain a successful adult-use market, we must utilize the benefits and best practices of large MSO organizations coupled with the locally centered benefits of small, diverse, and disadvantaged businesses. Pennsylvania does not need a one-size-fits all approach, but a comprehensive strategy to address both adult-use and medical cannabis.

Small, diverse, and disadvantaged businesses were effectively shut out of the state’s medical marijuana market. And while likely an unintentional consequence of statutory moves that led to a vertically integrated system, it’s a reality lawmakers must consider moving forward.

Pennsylvania should move toward an adult-use model before neighboring states dominate the regional market and our communities are forced to play catch-up. But to do so in the right way, it is imperative that small, diverse, and disadvantaged businesses are given priority and initial opportunities in the new system.

####



Chris Ferguson
Vice President, Government Affairs and Policy, Verano

Chris Ferguson serves as Vice President of Government Affairs and Policy for Verano Holdings (Cboe CA: VRNO) (OTCQX: VRNOF), a leading, vertically integrated, U.S. multi-state cannabis company. As one of the largest cannabis companies in the nation, Verano has active operations across 13 states that include 14 cultivation and production facilities and more than 130 dispensaries that operate under the company's flagship Zen Leaf™ and MÜV™ banners.

Mr. Ferguson started his professional career in 2002 in the private sector, where he gained experience working in the insurance industry related to fraud investigations. Subsequently, in 2010, Mr. Ferguson began his career with the Florida Department of Health, where he held several roles within the state's Medical Quality Assurance department and ultimately, served as Chief of General Operations. In 2019, Mr. Ferguson began serving as the Director of Health and Medical Services, where he specifically directed all aspects of the Office of Medical Marijuana Use. Following his extensive service in the public sector, Mr. Ferguson decided to rejoin the private sector in December of 2022, where he now leverages his valuable experience and expertise in regulation and policy development in his current role at Verano.

A native of Florida, Mr. Ferguson is based in his home state, and works collaboratively with colleagues across the country to support Verano's Government Affairs activities nationwide.

Chris Ferguson
Vice President of Government Affairs and Policy,
Verano/Agronomed Biologics, LLC
Clinical Registrant Testimony
House Health Subcommittee on Healthcare
Informational Meeting on Adult Use Cannabis
Monday, February 5th, 2024

Chairman Frankel, Chairwoman Rapp, Health Care Subcommittee Chairs Krajewski and Schemel, and members of the committee,

My name is Chris Ferguson, and I am honored to appear before you today as the Vice President of Government Affairs and Policy at Verano. I am here to provide testimony on behalf of our affiliate clinical registrant, Agronomed Biologics, LLC, and its partnership with Drexel University. Our focus is on discussing the outlook of adult-use legalization in Pennsylvania while emphasizing the importance of maintaining a robust medical program and supporting cannabis research. Let me be very clear and say that again; it is very important for the Commonwealth and its operators to maintain a robust medical program and support continued research.

Having previously served as the Director of the Office of Medical Marijuana Use in Florida and as a public servant with the Florida Department of Health for twelve years, I possess a wealth of experience in regulatory frameworks and the implementation of effective cannabis policies. Throughout my tenure, I have witnessed firsthand the transformative impact that a well-regulated medical marijuana program can have on patients in need.

In my opinion as a former regulator, the well-regulated legalization of adult use leads to the regulation of an otherwise underground market and ensures product safety and quality. Currently, without regulation, individuals have no guarantee of what they are purchasing from the illicit market. Legalization would allow for strict quality control measures, including testing for contaminants, thus safeguarding consumers.

Moreover, legalizing adult-use cannabis would generate significant revenue for the state. By imposing reasonable taxes and fees on adult use cannabis sales, Pennsylvania stands to benefit financially. It's important to make sure taxes are not set too high, driving consumers back to the illicit market. These funds could be allocated to crucial areas such as education, infrastructure, and healthcare, ultimately improving the lives of all Pennsylvanians.

It's crucial to acknowledge the existing medical marijuana program as a foundational framework. One significant aspect to consider is regulatory oversight. Pennsylvania has stringent regulations governing its medical marijuana program, and extending these to adult-use would maintain consistency and uphold public safety standards. Additionally, transitioning existing medical dispensaries to serve both medical and adult-use customers could streamline distribution channels and reduce logistical challenges.

One of the cornerstone principles that must guide our approach to adult-use legalization is the preservation and enhancement of the existing medical marijuana program. This means

safeguarding patient access, maintaining product quality standards, and upholding the integrity of the physician-patient relationship. By prioritizing the needs of medical marijuana patients, we can establish a framework that serves as a model for responsible adult-use regulation.

Furthermore, as we contemplate the transition to adult-use legalization, we must remain steadfast in our commitment to advancing scientific research. Research plays a pivotal role in unlocking the full potential of cannabis as a therapeutic agent, providing valuable insights into its efficacy, safety profile, and potential interactions with other medications. By fostering a supportive environment for research initiatives, we can continue to expand our understanding of cannabis and its medical applications, ultimately benefiting patients and consumers alike.

I commend this committee for taking time to hear from medical marijuana licensees operating within Pennsylvania to better understand the current challenges, and what the future of adult use legalization could look like. Pennsylvania has the opportunity to learn from other states' experiences and implement a regulatory framework that prioritizes public health and safety.

Overall, the establishment of an adult-use cannabis market in Pennsylvania holds immense potential for economic growth, job creation, and social progress. By building upon the foundation laid by the medical marijuana program and prioritizing regulatory integrity and social equity, we can cultivate a thriving industry that benefits both businesses and communities alike.

Monday, February 5, 2024

Testimony of Green Analytics North, LLC (dba Steep Hill Pennsylvania)
Before the Pennsylvania House Health Subcommittee
Informational Meeting on Adult Use Cannabis – Laboratory Panel

Participants on behalf of Green Analytics North, LLC (dba Steep Hill Pennsylvania):

Shannon Hoffman
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Laboratory Director
Green Analytics North, LLC (dba Steep Hill Pennsylvania)
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Good Afternoon Chairman Frankel, Chairman Rapp, and members of the House Health Committee.

My name is Shannon Hoffman. I am the National Director of Operations for Green Analytics Laboratories, a network of seven accredited and state-licensed cannabis laboratories operating in the northeastern states of Pennsylvania, Maryland, Massachusetts, New Jersey, New York, Virginia and West Virginia. Across our 7 markets, we have over 20 years of combined experience.

I'm here today with Dr. Daniel Niesen, the Director of our Pennsylvania laboratory, which operates under the name Steep Hill Pennsylvania. We appreciate the opportunity to participate in this discussion, answer your questions, and to offer our experience in support of an adult use program for Pennsylvania.

Now that Pennsylvania has become an island surrounded by neighboring states with successful adult use programs, we have a duty to our citizens to stop the economic vacuum which draws new revenues, tax dollars, and sustainable jobs away from our state.

We should build on the safety, success and robustness of our state's medical marijuana program by adding an adult use program with broader product access for consumers and appropriate regulatory oversight for the laboratory testing program.

Continued thorough and comprehensive testing of cannabis products is imperative to gain consumer confidence and differentiate the adult use market from the illicit use market. Throughout the country in adult use markets, thorough product safety testing remains the most important factor in building consumer confidence and reducing the liability to cannabis stakeholders and the state of Pennsylvania.

Industry data demonstrates that a successful adult use program is defined by having the testing protocols and protections in place for the recreational user that are already structured to protect vulnerable populations including the immunocompromised and elderly. The recreational user unequivocally deserves the same protections and comprehensive testing platform that protects our medical users. Pennsylvania has a great opportunity to perpetuate the same comprehensive testing program for adult use which will provide standards, reduce liability and create the credibility necessary to make Pennsylvania's adult use program the envy of all surrounding states while eliminating the black market.



Eric Hauser, RPh., President Organic Remedies

Eric Hauser currently serves as President of Organic Remedies. Eric co-founded the company with Jaime and Mark Toigo in 2016. Under Hauser's leadership, Organic Remedies has become one of Pennsylvania's premier medical marijuana growers, processors, and dispensary operators.

Organic Remedies was among the first dispensaries to open in the state of Pennsylvania in February 2018. Hauser accurately anticipated the knowledge gap surrounding medical marijuana in Pennsylvania with respect to both traditional healthcare workers and patients. To address this, he coordinated an extensive community outreach effort that today is credited for educating thousands of Pennsylvania-based healthcare workers, healthcare students, law enforcement officers, patients, caregivers, and the general public.

Under Hauser's guidance, Organic Remedies adopted a high-touch clinical approach to treatment with medical marijuana that is outcomes-based. Patients are regularly referred to Organic Remedies by certifying physicians because they are familiar and comfortable with the high level of patient care provided by pharmacists and other patient-facing staff within Organic Remedies dispensaries.

Hauser has become the "go to" subject matter expert for many Pennsylvania based physicians, human resource professionals, law enforcement officers, universities, health care systems, patients and caregivers. As an example, Hauser and his team have hosted hundreds of educational events at various venues, including but not limited to universities, health care systems, physician groups and continuing educational seminars for pharmacists, attorneys, and human resource professionals.

Under Hauser's leadership, the Organic Remedies team, has helped more than 75,000 Pennsylvania-based patients and caregivers. The Organic Remedies team has established themselves as a leader in medical marijuana education, products, services and advice over the past 5 years.

Prior to serving as President of Organic Remedies, Eric served in many leadership roles within the pharmacy industry. He worked for Rite Aid Corporation for over 27 years holding roles of increasing responsibility, including student intern, pharmacist, pharmacy manager, district manager, manager of special projects, and manager of pharmacy operations. Hauser's last two roles within Rite Aid were leadership positions where he had responsibilities companywide involving over 3,000 stores nationwide.



Hauser is a lifelong resident of Pennsylvania and has spent his entire career in the pharmacy industry. In 1994, he graduated at the top of his class from Duquesne University School of Pharmacy and within a few months become a licensed pharmacist in Pennsylvania. Due to his early leadership roles within pharmacy, Hauser is also licensed as a pharmacist in West Virginia and Maryland.



ADULT USE FOR THE COMMONWEALTH- CLINICAL REGISTRANT PERSPECTIVE

Eric Hauser, RPh., President, Organic Remedies

Based in Carlisle, PA., Organic Remedies cultivates, manufactures, and dispenses safe, effective medical marijuana products for certified PA patients. OR is advancing medical marijuana therapies through genetics, collaborative research, and superior patient care. Specially trained pharmacists and patient care consultants deliver a clinical approach for the utilization of medical marijuana that is patient-focused, collaborative and outcomes based. Dispensaries are located in Chambersburg, Enola, Paoli, N. Pittsburgh, S. Pittsburgh, and York.

INTRODUCTION

Hello, I'm Eric Hauser, President of Organic Remedies. It is an honor to speak with you today on an important topic for all Pennsylvania residents, especially existing medical marijuana patients and future marijuana consumers, should an adult use program be implemented in the Commonwealth.

- A little about Organic Remedies. OR is one of 9 clinical registrants in the state. As a state-approved clinical registrant, Organic Remedies is licensed to grow and process medical marijuana and operate medical marijuana dispensaries.
- Since 2020, OR and its academic partner, Pennsylvania College of Osteopathic Medicine has been conducting valuable research dedicated to increasing understanding of health outcomes involving cannabinoids and medical marijuana.
- We recognize that the cannabis research model established by Chapter 20 of Act 16 is at the forefront of cannabis science and is enabling Pennsylvania to become a leader in the field. We take this responsibility seriously and are proud of our research to date.
- I'd like to share with you some of the findings we have published thus far.

RESEARCH STUDIES

- Over the past four years, researchers at the Philadelphia College of Osteopathic Medicine have studied changes in quality of life and symptom severity in new Pennsylvania medical marijuana patients. This is one of the largest longitudinal studies of medical marijuana to date.
- Researchers followed more than 450 patients over the first year of their medical marijuana use for any of the 20+ approved medical conditions in PA.
 - The most common reasons people began medical marijuana in PA were for chronic pain and anxiety.
 - Across medical conditions, medical marijuana users reported rapid (first three months) and substantial improvements in their medical symptoms, but also in their quality of life (better physical and emotional functioning, less pain and fatigue, improved social lives).
 - For example, medical marijuana users with anxiety disorders reported a greater than 30% decrease in the severity of their anxiety after three months.
 - Their anxiety severity went from the "moderate" to the "mild" range.
 - In patients taking prescription medications for anxiety, including benzodiazepines that can have notable safety concerns, 32% reported that they were able to reduce or eliminate their prescription medication use for anxiety over three months of medical marijuana use.
 - Researchers have presented data at several international scientific conferences (American Public Health Association 2021; American Psychological Association 2023; Association for Behavioral and Cognitive Therapies 2022), and published data in peer-reviewed journals (*Journal of Affective Disorders Reports* 2023; *Journal of Cannabis Research* 2022; *Medical Cannabis and Cannabinoids* 2022).
 - Researchers are also collecting data on the potential negative social, occupational, physical, and personal consequences associated with medical marijuana use, as well concurrent use of other substances and legal involvement over the first year of use. While data collection is not yet complete, the overall rates of reported problems or adverse consequences are very low.

ORGANIC REMEDIES

ADULT USE FOR THE COMMONWEALTH- CLINICAL REGISTRANT PERSPECTIVE

Eric Hauser, RPh., President, Organic Remedies

- It is plausible that one of the reasons that these data indicate such positive outcomes in regards to symptom severity and quality of life, and very few adverse consequences, is because of the manner in which medical marijuana is dispensed in PA.
 - The medical marijuana product landscape is vast and complex, with different strains, dosing and routes of administration. Currently, medical marijuana users in PA work closely with dispensary pharmacists and trained dispensary retail staff to determine the best approach to address their medical needs while providing instructions for safe use and storage.
 - If a adult use is made legal in PA, marijuana is likely to be sought for conditions currently approved by the medical marijuana program, as well as for sleep and relaxation. Dispensaries with trained pharmacists and staff are well-positioned to continue to address the needs of users (recreationally or medically), promote safe use and assist with research studies that monitor and report beneficial and adverse effects of marijuana.
- Additionally, research is expensive. We are currently funding 9 research studies with PCOM. Staffing and resources are costly. As we move to adult-use, the additional revenue will allow us to fund additional research studies. We can expand research into more areas, including specific disease state outcomes.

HEALTH AND PUBLIC SAFETY

- OR dispensaries are highly focused on patient health and public safety.
 - We have highly trained pharmacists in every dispensary as required by the PA Medical Marijuana program. Our pharmacists provide expert counseling to every patient the first time they visit, and many patients continue working with our pharmacists long-term as they work to improve their health conditions.
 - Not only are our pharmacists trained experts, but also our patient care consultants or sales staff (we call PCC's) have extensive training in proper consumption of our products. Most patients have limited experience and knowledge of the various forms of medical marijuana, dosing, onset, duration - our pharmacists and care consultants are there to answer their questions; provide expert advice so that patients get the best product for their individual healthcare concerns and understand how much to consume for the desired effects.
 - It is important to understand cannabis is a complex plant, with hundreds of various strains and plant components that react in individual patients differently. Finding the "sweet spot" for health improvement is critical. Our pharmacists and care consultants are passionate about helping patients live their best life with medical marijuana.
- It is important to maintain this dispensary model in an adult-use scenario. Many new consumers who visit will have questions about forms and dosing.
 - A prime example is edibles, for instance, gummies. Gummies do not deliver an immediate effect. Many consumers try a gummy and expect an immediate effect. When that effect does not happen immediately, they consume more. This can lead to strong effects that are unwanted. It is important for experts to advise consumers about the onset of effects and the proper amount to ingest, so that adverse effects do not occur. Consumers need to understand how to consume medical or adult use marijuana safely.
- Our medical marijuana program ensures the safety of our patients and will continue to provide a "safety net" in an adult use market, specifically in terms of regulating consumption by minors or pregnant women, which has not yet been established as safe.
 - Our pharmacists and care consultants remind existing patients and will remind adult use consumers of the potential risks to children, adolescents, and pregnant women.
 - Current medical marijuana regulations specify child-proof containers for medical marijuana products, and we maintain a strict adherence to those regulations. This will continue to be important in an adult use market.
- Our dispensary staff is the front line for safety in an adult use market.

TRANSITIONING TO ADULT USE

ORGANIC REMEDIES

ADULT USE FOR THE COMMONWEALTH- CLINICAL REGISTRANT PERSPECTIVE

Eric Hauser, RPh., President, Organic Remedies

- In an adult use market, many people will be visiting dispensaries, looking for answers to questions about the products, about health improvements. Who better to provide accurate advice than pharmacists and care consultants? We have the knowledge and the experience to provide the answers they need.
- We also have the infrastructure in place to make the transition to adult use quickly, within 90 days. Most of our neighboring states have implemented adult-use using the existing infrastructure. Some have done better than others, but in most states, using the existing infrastructure where medical marijuana dispensaries transition to sell both medical and adult use products has worked well. The result has been a seamless transition for the state, the consumers, and the cannabis industry.
- Here in PA, we have a strong medical marijuana program, recognized across the nation as one of the best state medical marijuana programs.
 - It stands to reason that using the current infrastructure to transition to adult use would expedite the transition:
 - Protecting consumer safety of those who today purchase marijuana from the illicit market, an untested marijuana with no quality controls thus an unsafe source of marijuana;
 - Benefiting our state by expediting tax revenue by reducing the runway for implementation;
 - Leveraging existing medical marijuana businesses, which have a vested business interest in the state industry.
- We can learn a lot from what has been done in other states. Some have done well, some not so well. I'll leave you with a document that gives a quick at-a-glance look at how other states have implemented adult use, and some of the learnings to date.
 - In general, those states which have done well— implemented their adult use program in 90 days and did not mandate specific products to be either medical or adult use. The difference being an increase in taxes on adult use products.
 - This allows the current infrastructure to roll out the transition in a timely manner and results in an immediate tax revenue stream without jeopardizing medical patients.
- History tells us that medical marijuana programs that transition to adult use almost immediately results in an increase of 3 to 5 times the number of consumers.
 - Here in PA, with more than 400,000 current medical card holders, that number could increase to 1.2 million to 2 million almost overnight.
 - The medical marijuana industry in PA is in a good position to meet that increase in demand. We have no shortages on product, and in fact, we have a glut in the market now, with plenty of product in the supply chain to meet the expected increase in consumer demand—if we use the current infrastructure.

UNDER-SERVED COMMUNITIES

- As you may know, the PA Dept. of Health has identified 13 rural counties as being underserved by the state's medical marijuana industry. Act 63, which goes into effect in mid-April may translate into less disparity for these counties, but I would strongly recommend this body to consider encouraging new dispensary permit holders that result from the passage of an adult use bill to locate in these underserved areas versus allowing liquor stores to serve these areas in light of many of the points I have already shared with you today, consumer safety being the top priority.

CLOSING

- In closing, I thank you for giving me and my fellow colleagues the opportunity to share our expertise and knowledge in this industry. As a clinical registrant, Organic Remedies is closely connected to our patients. We've cultivated strong relationships with many of our patients. They trust us to help them live a better quality of life. And we are looking forward to expansion of the industry in the Commonwealth so that many more individuals can easily access the safe products that we offer.
- Thank you. I'll now open the floor to your questions.



AT-A-GLANCE NEIGHBORING STATE ADULT USE IMPLEMENTATION

CONNECTICUT

- Connecticut began 2023 with the opening of the state's first adult-use marijuana stores in January.
- State regulators granted hybrid licenses to a number of existing medical marijuana providers to supply both markets.
- Ahead of the launch, officials issued an advisory to medical cannabis patients encouraging them to stock up in order to "avoid long lines and traffic that may develop around hybrid retailers."
- By November, however, regulators said the market had mostly stabilized, and the state doubled the adult-use purchase limit

NEW JERSEY

- Jan. 1, 2021- Amendment to the state constitution legalized cannabis; enabling legislation and related bills signed into law by the governor on February 22, 2021
- New Jersey law makes a legal distinction between cannabis and marijuana. In short, cannabis refers to the regulated form of the plant (what is grown, bought, and sold by New Jersey state-licensed cannabis businesses) and marijuana refers to the unregulated form of the plant (what is grown, bought, and sold in the illicit market).
 - Residents 21 years and older.
 - 28.35 grams (1 ounce) of dried flower, or
 - 4 grams of solid cannabis concentrates or resin, or the equivalent of 4 grams of concentrate in liquid form (solution in milliliters), or
 - 4 grams of vaporized formulations (oil), or
 - 1000 mg of multiple ingestible cannabis-infused products (10 100 mg packages) like gummies
- April 2022- recreational cannabis market officially opened, with just 22 dispensaries largely owned by multi-state operators.
- 2023- First full year of legal cannabis sales
 - 57 dispensaries that opened in the Garden State this year, the first full year recreational cannabis has been legal in New Jersey.
 - Dec. 2023- 79 dispensaries opened in 18 counties, 40 of those are open to both medical and recreational. 9 are only open to medical users.
- Cannabis is some of the most expensive in the country, because of lack of competition.
- Cannabis officials confirmed there was an issue with the application process in 2022, which categorized some applications incorrectly and delayed processing.
- Two-thirds of municipalities across the state have banned cannabis dispensaries within their borders.
- Commission officials have said local officials limiting where dispensaries can open has prevented the industry from thriving statewide.

NEW YORK

- 2016- Medical Marijuana legalized
- March, 2021- Recreational marijuana legalized
 - Created Office of Cannabis Management (OCM) governed by a Cannabis Control Board to oversee and implement the law
 - Adults 21 years and older
 - Possess 3 ounces of cannabis or 24 grams of concentrated cannabis
 - Possess up to 5 pounds of cannabis at their personal residence or grounds
- New York's cannabis law specifies that the licensing process should "award (50) percent of adult-use cannabis licenses to social and economic equity applicants," including prioritizing "individuals from communities disproportionately impacted by the enforcement of cannabis prohibition," minority-owned businesses, women-owned businesses, distressed farmers and service-disabled veterans.
 - Launched sales by promising first retail licenses to people with past drug convictions, hoping to give people harmed by war on drugs a chance to succeed before competitors came into state.
- Delays in setting up a \$200 million social equity fund to jump-start entrepreneurs has hampered its rollout.
- Dec. 2022- First legal cannabis shop opens.

ORGANIC REMEDIES

AT-A-GLANCE NEIGHBORING STATE ADULT USE IMPLEMENTATION

- Nine months after sales started, only 24 dispensaries were open.
- Legal challenges over the state's permitting process left more than 400 licenses in limbo. Too few stores to sell.
- Illegal black-market sellers opened dispensaries without a license.
 - March 2023, officials calculated 1,400 unlicensed shops in the five boroughs.
 - Illegal shops undercut the legal stores, selling marijuana at much cheaper costs; but presents much larger safety issue, because the marijuana is not lab tested.
- Sept. 2023- NY State Cannabis Control Board voted to expand access to license applications; In October, the general public could apply.
- 2023- Generated \$150M in Sales; \$16.3M Tax revenue- far behind \$1.25B
- Jan. 2024- Nearly two years after the state legalized recreational marijuana, an estimated 1,500 illegal dispensaries have opened in New York City, while roughly 36,000 have opened statewide. Yet only nearly a dozen legal locations exist in the city, and fewer than 50 across the state have been approved for a license.

MARYLAND

- Maryland lawmakers worked swiftly in 2023 to pass a sales regulation bill just a few months before legalization in that state took effect, in July.
- By the start of July, nearly 100 existing medical marijuana dispensaries had been approved to start serving adults 21 and over.
- Within the first weekend of legal recreational sales, storefronts had sold more than \$10 million worth of products.
- In terms of state revenue, the Maryland Cannabis Administration said in December that the state collected more than \$12 million in marijuana tax revenue during the first three months of legal sales.

MISSOURI

- Missouri's first legal sale of marijuana for nonmedical use happened in February 2023, following voters' approval of a legalization initiative the November before.
- Less than two months after the market launch, the change had created thousands of new jobs.
- One CEO said the state came to be seen as the "darling" of the cannabis industry after hitting \$102.9 million in sales—\$72 million for recreational marijuana—during the market's first month of operation. By the next month, the combined sales figure had grown by nearly a quarter, to \$126 million overall.