

2024 Cannabis Travel Guide



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Feature Story
Cannabis Connections
Travel Guide

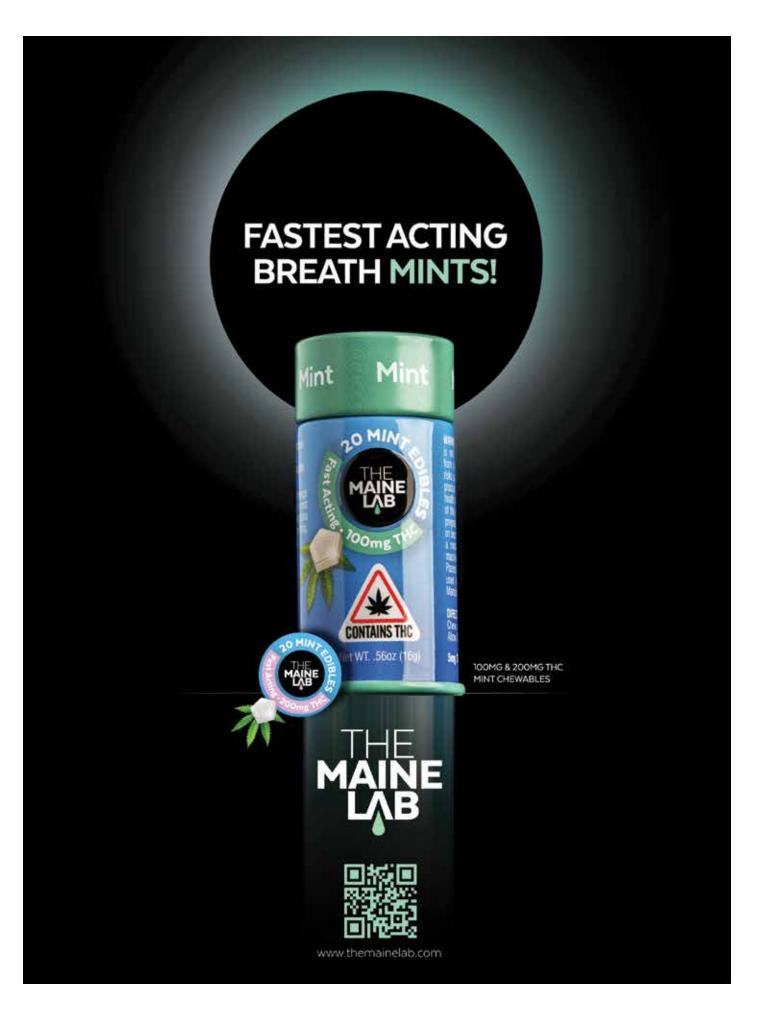
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## Cannabis Connections Travel Guide

By Aidan Leavitt

his new year might be just the time to broaden your horizons, spoil yourself with a change of scenery, and really take in all that we have to offer weed-wise in this great wide world. There are so many options, and we're certainly not suggesting you kick your local dispensary, far from it. Those kinds of establishments are the lifeblood of weed culture here in Maine, but what about getting out and experiencing how other smokers enjoy their bud, whether it be here in the United States or halfway across the globe? A new perspective never hurts anyone, and if you're a cultivator or have some skin in the weed-game business, what better way to see how you can improve your process then to offer it some juxtaposition? We here at Cannabis Connections have crafted an albeit short but notable, collection of locations where you can spark and try something new, or find a familiar favorite in a far-off land.

California, find me a state with a name more synonymous with weed than the Golden State. The sun-spoiled paradise birthed weed culture as we know it today and popularized so many of the practices related to the consumption and proliferation of the hobby. Where would marijuana

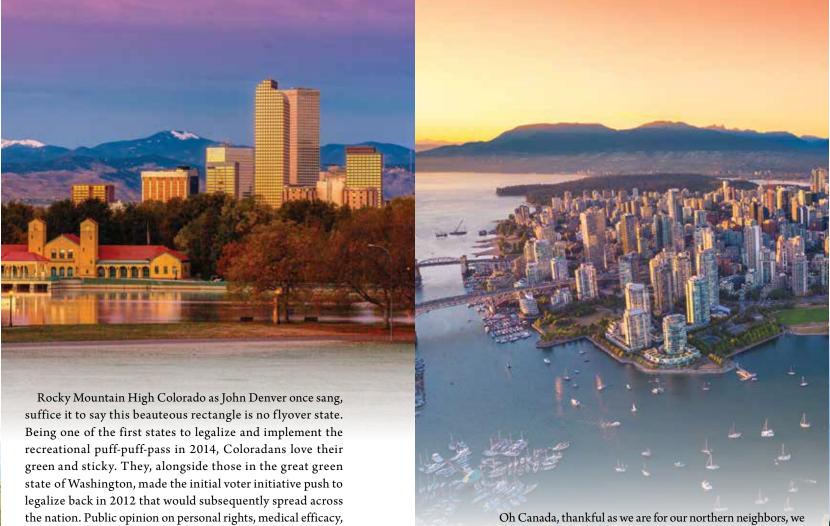
be if Hollywood didn't bring it into the spotlight? What if those writers never puffed a few? Hard to imagine, but we certainly wouldn't have been graced by masterpieces such as Cheech & Chong, The Big Lebowski, Pineapple Express... the list is unending. The stoner archetype has been done to death in cinema, yet we keep coming back for more. The hilarity and depth have created its own genre of movie which is a testament indeed. Some of weed's most iconic figures stem from humble beginnings within the state, a case in point being the ever-iconic Snoop Dogg hailing from Long Beach. Music, art and culture owe a great deal to and continue to uplift the practice of puffing. Moving on to more tangible topics, California legalized weed in 2016 with the law taking effect in 2018 making it one of the first few states to do so. It leads the nation in the number of dispensaries with a total of over 1,200. Given the state's populous nature this checks out, but still, what a number! Some of the nation's finest bud can be found here thanks to the incredible community, competition, and high demand. There are plenty of activities to be experienced in Los Angeles as well, including cannabis cafes, lounges, restaurants and even processing facility tours.



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You know it, you've probably got it on your bucket list, and we would be remiss not to mention the one and only great green beacon of hope; the charming capital city of the Netherlands, Amsterdam. Whether or not they really do call them a royale with cheese, we can't confirm, but we can say with some confidence Amsterdam is a smoker's city, a veritable paradise awash in the green stuff. The Coffee House scene, different entirely from Vienna's very real coffee house scene, is actually centered around peddling good ole bud in all its shapes and forms. To smoke you've got to be over 18 and keep an eye on the signage as some coffeehouses are allowed to deny tourists due to a 2012 ruling aimed to curb some of the unsavory incidents relating to crime and over-consumption by large tourist crowds. The original goal of Amsterdam's ambitious push was to move drugs into two categories, hard and soft drugs, marijuana being the latter, so as to promote safe usage and decriminalize what is known to be safe for use. This policy of tolerance dates way back to the 1970s and is one of the most innovative across the globe. The harm reduction angle this policy has taken has in turn inspired other countries to take a hard look at their own drug laws and what is best for their citizens. Not to mention the tourism benefits the Netherlands sees are in the billions of dollars annually. Amsterdam itself is a quaint and walkable (or bikeable if you really want to get the authentic experience) city, known for its historic narrow houses, dense canal system, nightlife and a smorgasbord of excellent culinary options making it an enviable destination for any traveler, smoker or not.





prison reform, economic incentives and many more had the

effect of propelling this revolutionary ballot through the leg-

islative process. Colorado has seen many benefits as a result of

this including increased tourism and economic expansion.

The tax results are eye-watering, since 2014 The State has

recorded \$15 billion in sales and collected nearly \$2 billion in

tax revenue. Numbers aside, there are lots of reasons to spend

your time in the dramatic shadows of the Rockies. High adven-

ture awaits, and while you could do it high I suppose it's more

likely you'll want to save sparking the juntil after you've done

the laborious hike, white water rafting adventure, trail run or

climbing session. Colorado also boasts some of the nation's

most exciting and outdoorsy cities such as the mile-high city of

Denver, the justly named Boulder, to be found at the foot of the

Rockies, and the picturesque Colorado Springs placed near the

precarious Pikes Peak of automotive acclaim. You better have

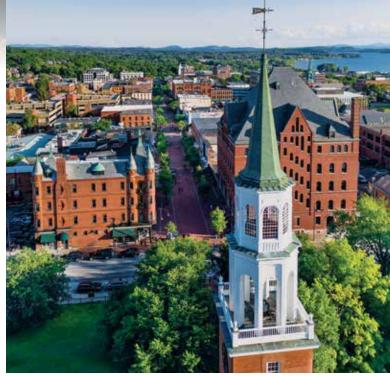
strong lungs if you want to enjoy your bud at high altitudes,

but many a wandering dude does as weed and exercise and

intertwined in this outdoorsy-oriented state.

often forget to credit them for their innovative and intriguing cultural adaptations when it comes to the wide world of weed. British Columbia specifically has had a longstanding relationship with the bud. Canada legalized recreational weed more recently in the fall of 2018 with the passing of the Cannabis Act. This allowed all citizens aged 19 or older (18 in some provinces) to possess, consume and cultivate. In British Columbia specifically, weed has been worked into the culture more than in other provinces, similar to American West Coast attitudes towards blowing clouds. Not only does the province have a vibrant music scene but holds many a festival in the warmer months. The pace of life here can be both rapid and relaxed as places like Vancouver do indeed cater to the weed crowd despite being bustling hubs of industry and culture. Venture outside of the sprawl and you'll find vast areas of gorgeous undeveloped wilderness where you can enjoy the peace and quiet like nowhere else. Fishing and traipsing across the temperate rainforests of the Pacific Coast is strongly advised, and stunning parks like Gwaii Haanas and Pacific Rim await.

Vermont, land of maple syrup and rolling green hills is also home to plenty who know how to roll em', light em' and smoke em'. This picturesque parcel of charming mountain villages and outdoorsy folk is home to an estimated ~65 dispensaries. That's quite the number when you consider dispos have only been allowed to operate since October of 2023. Despite the nascency of its dispensaries, the Green Mountain State has legalized recreational usage since 2018. While not as well known as its sister state of New Hampshire (talk about a stick in the mud, NH is the only New England state wherein recreational usage is illegal) for hiking, Vermont features a crosscut of the infamous Appalachian trail as well as a particularly beautiful and lengthy footpath aptly named the Long Trail. A 273-mile route, The Long Trail stretches from the state's southern border with Massachusetts to Canada featuring some of the most stunning scenes, pristine ponds, and many a moss-covered tree or boulder. Who's to say such a woodland adventure wouldn't benefit from a few trees (carefully handled of course)? The atmosphere in most small villages is laid back and most Vermonters are incredibly welcoming and warm people.



Ah, lastly, and far from least, our great Pine Tree State. Not only are we covered in little green trees but we love rolling them up too. Having legalized medical use in 1999 and recreational usage in 2016, Maine has situated itself at the forefront of the Green Rush despite our rural status. Maine's label as Vacationland, a moniker our residents might decry as catering a tad too much to the out-ofstate tourism sector of our economy is perhaps somewhat fitting. Nowhere else on the East Coast can you enjoy the natural splendor of the Appalachians, and shortly thereafter find yourself at either a rocky or sandy beach unspoiled by the ever-creeping ooze of suburban and luxury-condo development. From skiing to sailing, hiking to biking, dining to diving, ice-skating to ice-climbing, we certainly have no shortage of ways to experience that true hardy New England culture and the natural world that surrounds it. Mainers have adapted to Mary Jane and her many applications as well. In almost any town you can find a local dispensary willing and able to assist you. That said, not only can you find bud nearly everywhere nowadays but also a plethora of terps, dabs, carts, edibles, and pretty much anything you can dream up.

This is to say Maine's weed market is well-developed and the quality of bud the dispensaries are able to source is quite high as a lot of Mainers have paired their green thumb to make it with their ability to grow up to 12 immature plants per person. Highly recommended is spending some time in the greater Portland area where you can pair your passion for puffing with the well-established, ever-innovating, restaurant scene.

While we've certainly left some real contenders off of this list (see: Washington, Oregon, Oklahoma...) the real goal is simply to provide some inspiration and perspective. Weed has become a global phenomenon and will likely continue to grow its influence abroad as other nations start to appreciate the benefits related to decriminalization taxation and healing that weed possesses. Sharing bud with others can be a real communal experience and something that certainly deserves its place in the realm of social convention. Sharing our experiences with others is a decidedly good act and learning about how others view the things we take for granted can really help widen our horizons, weed is no exception to this rule, and as we enter the new year, don't forget to take the opportunity!







## Winter Cannabis and Creativity: A New England Perspective

#### By Beverly Ann Soucy

Soucy is a writer, herbalist, and artist with a background in photography living in the mountains of western Maine living the dream surrounded by her wine collection, guitars, paints and books.

Hardcore. Survivors. Fierce. Independent. Those are just some of the words that speak to who we are as born and bred Mainers.

Living in New England during the winter months can be challenging with its time change, long nights, and the length of cold days limiting outdoor activities and things to do. Let's face it. There are a lot of us who prefer cozying up, eating good food, and catching up on sleep in favor of getting outdoors to play.

New England's snowy cold winters can be long and challenging leaving many to seek alternative ways to pass the time.

The relationship between smoking pot and creativity is an intricate dance that Mainers have two-stepped to since the beginning of time. No better way to pass the long months of dark and cold. There is nothing like a big pot of something stewing, your favorite slippers, a great movie, or a good book, and a fatty.

I have to laugh as I type the word, "fatty" into this article. Growing up in a time when marijuana was illegal and mostly bad by definition, fatty was one of the "secret" words. Most of us know what it means to "roll a fatty". It's an act that crosses all adult generations. Trust me, your grandparents know this one. Just think about it for a moment. Today's grandparents are the generation that were at Woodstock, who were still protesting the war, and who followed The Grateful Dead around.

They know. Only now, instead of smoking to get high, most if not all of that same generation are using it as it was intended. As plant medicine for a better quality of life. Simply that.

However, it is worth noting for the rest of the hippies who still prefer the smoke, that it can be a very comfortable wintertime with an occasional puff in front of the fireplace, to enhance the downtime and the dark days of winter.

Winter in New England is long.

The days of garbage weed are long gone.

Depending on the individual strains, the role of cannabis plays an interesting part in interacting with your brain's receptors and can change your perception, your mood, and your creativity in a snap. It is not news that it has been used for hundreds of years and has been reported to enhance one's imagination and as a way of stimulating creativity.

It is also known to promote and improve focus and concentration for some people. Add to it all a heightened sense of perception and it is cannabis for the win when looking to enhance



the long winter season. Experimenting with different strains and consumption is worth noting.

If this is something you have never tried or even if you are a long-time participant, just be mindful of your dosage by taking a couple of puffs, or "hits" and give it a minute to see how you feel. And much like learning the art of drinking wine, it doesn't hurt one bit to keep a journal for making notes on the individual strains and what you do and don't like about each. Pay attention to your mood or your increased energy that the sativa strains help with, or perhaps you prefer something to wind down your day, while you are watching the snow coming down. Look for a good indicator for those moments, and again, keep your notes. For any newbie, those will be valuable for recreating similar moments.

The art of cannabis is so much different than the Mexican brick of the seventies. The potency is much higher and the choices are endless. This is when it matters where you shop and who you make friends with within the cannabis business that you shop at.

Perhaps you just want a good night's sleep or something to help with anxiety, or maybe you want to dig out your paints or woodworking tools and get creative. No matter what it is that you seek, there is a strain for you. Those shopkeepers that offer cannabis are very knowledgeable about exactly what you are looking for. They are the ones who understand the strength, the strain, and what works for your individual needs and are the path to success for it all.

It might also be noted that throughout history, artists and writers have been known to use a variety of methods to enhance their creativity from caffeine to alcohol, from opium to cannabis. In fact, many of the great Master of Art Literature have been rumored to have used marijuana as a way to boost their inspiration, their imaginations, and their creativity.

One of the most famous examples of this is the painter Henry Matisse, who was known to smoke marijuana while working on his paintings. Matisse was part of a group of artists, known as the Fauves, who were known for their bold use of color and innovative techniques.

It's possible that the altered state of consciousness induced by marijuana helped to tap into his inner creativity and his artistic genius. Another artist rumored to have used marijuana for creative purposes was Vincent van Gogh. While there's no concrete evidence to support this claim the style in many of his paintings is recognizable for their swirling dream-like quality and vivid colors, which could suggest that he was experiencing altered states of consciousness during his creative process.

Writers too have been known to use marijuana to enhance their creativity. One notable example is the American author Karrack who wrote the iconic novel ON THE ROAD while smoking marijuana and drinking coffee. It is possible that marijuana helped him to get into a state of flow and tap into his inner muse, allowing him to write with greater spontaneity and freedom.

Another famous writer who is rumored to have used marijuana for creative purposes was the Greek poet and novelist Nikos Kasantzakis. He was known for his vivid poetic writing style and the use of marijuana may have helped him tap into his innermost thoughts and emotions, allowing him to create more freely and honestly.

Of course, the use of marijuana for creative purposes is still to this day a very controversial topic, sadly. There are many factors to consider when exploring this idea. While some artists and writers have used the drug to great effect others have struggled with side effects or even became addicted to their own drugs of choice that had much bigger effects and implications.

It's also worth noting that marijuana can affect each person differently and what works for one artist might not work for another. But I promise this, if you find yourself smoking more than you are used to you are not going to die from the effects. Just give it a little time and have a bite to eat. You will be just fine. And remember to make your notes for next if you are new to this.

As the chilly winter months arrive in New England many people find themselves longing for ways to stay entertained and to beat the winter blues and while some turn to hot cocoa, cozy fires and a favorite aperitif, those same people might find that a little creative



stimulation in the form of a joint is just the ticket. What better way to tap into your inner artist, than with a little help from Mother Nature?

Marijuana has been used for centuries both as a medicine and a recreational drug. Its effects on the human brain can be profound and quite wonderful. From being relaxed to euphoric, or as a way to stimulate creativity. There is a lot of research to suggest that the drug can stimulate certain parts of the brain that are associated with creativity and imagination many artists and writers have reported using marijuana to boost their creativity and inspiration, from the beat poets to the countercultural icons of the 60s and 70s. Many of the greatest songs of that time were born from those moments of sharing a good smoke, being surrounded by friends, and writing music.

Marijuana has been a staple of the bohemian lifestyle for generations and has always been such a big part of everyday culture similar to offering up a cup of coffee and conversation as an offering to your guests.

In the dead of winter, it is the perfect time to experiment with

With a warm comfy blanket, a steaming cup of tea, and a little bit of a great bud-strain, you can settle in for a cozy winter afternoon and perhaps tap into your inner artist. Try your hand at painting, playing music, writing or just looking out the window and daydreaming. Used in moderation marijuana can be fun, creative and a pretty great way to pass the time during those long winter months.

Whether you're exploring your innermost thoughts and feelings through writing or getting lost in the swirls and colors of a painting there's no better time to tap into your inner artist than right now. So, fire up that joint or take a few hits from your trustee vaporizer, and let the creativity flow. Who knows, you just might create a masterpiece that will be remembered for generations to come. At the very least you will have created something to mark those long winter nights in New England.





**Feature Story** 

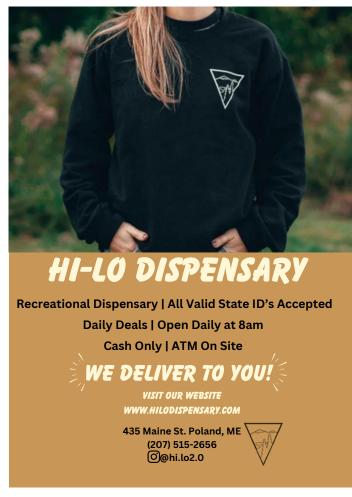
#### **Artists and Writers Who've used Cannabis**

**Henry Matisse** (painter) - Part of the group of artist, known as the Fauves, who were known for their bold use of color and innovative techniques.

**Vincent Van Gogh (painter)** - His style in many of his paintings is recognizable for their swirling dream-like quality and vivid colors.

**Jack Kerouac** (Writer) - It is possible that marijuana helped him to get into a state of flow and tap into his inner muse, allowing him to write with greater spontaneity and freedom.

**Nikos Kasantzakis (Writer)** - Had a vivid poetic writing style and the use of marijuana may have helped him tap into his innermost thoughts and emotions.







## Mark Your Calendars! UPGOMING EVENTS

Due to the coronavirus (COVID-19), event information may be out of date. Confirm details with event organizers.

#### Hynes Convention Center | 900 Boylston St., Boston, MA

#### March 22 & 23, 2024: New England Cannabis Convention

Trade Show Hours: Friday 10 a.m. - 5 p.m. & Sunday 10 a.m. - 4 p.m.

Friday: Green Market Report Financial Summit (add-on purchase) Saturday 2 p.m.: NECANN Cup Awards Show (free with admission)

Since its first 70 booth convention in 2015, NECANN Boston has grown into the 2nd largest B2B cannabis industry event in the world, and will feature over 350 exhibitors, five full programming tracks, multiple workshops, and a day-long financial/investor summit in 2024!

If you want to get your brand in front of the largest gathering of cannabis industry professionals in the northeast, contact us at: info@necann.com

#### Champlain Valley Expo | 105 Pearl St., Essex Junction, VT

#### June 14 & 15, 2024: The Vermont Cannabis & Hemp Convention

Exhibit Hall Hours: Friday & Sunday 10 a.m. - 3 p.m.

**Exhibit at NECANN** 

Our exhibitors are the lifeblood of what makes NECANN successful, and helping them achieve high ROI is our primary goal. We work tirelessly to attract the largest, most comprehensive group of cannabis industry professionals of any event on the east coast, bringing new relationships and customers to them. For more information: 207-756-5948 | john@necann.com

Interested in being an exhibitor, reach out directly to either 774-254-5073 | MARC@NECANN.COM for more information.

#### XL Center | 1 Civic Center Plaza, Hartford, CT

#### October 4 & 5 2024: Connecticut Cannabis Convention

**Trade Show Hours: TBD** 

NECANN's Cannabis Convention: A Cannabis Event You Can't Afford To Miss

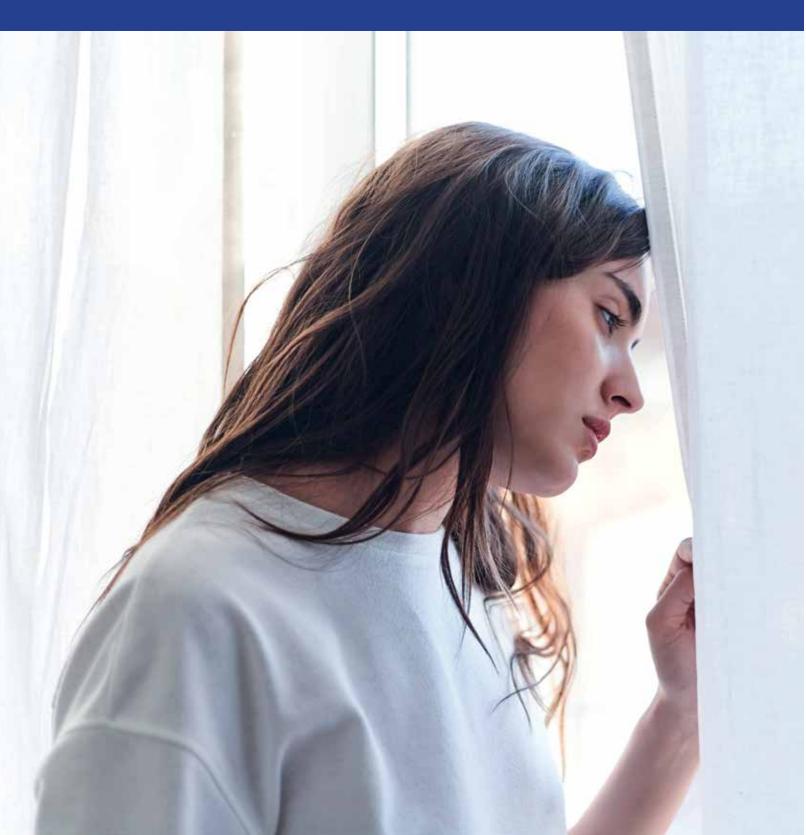
As Connecticut begins the transition to a legal recreational cannabis state, NECANN will serve as the state's "must attend" B2B event for the emerging industry. With an unparalleled track record of success in helping local companies, entrepreneurs, investors, job seekers, and advocates in the Massachusetts, Maine, and Vermont markets, NECANN brings eight years of New England cannabis industry convention experience to our Connecticut event. This will be THE event for anyone who wants to be involved in the local industry on any level.

Interested in being an exhibitor, reach out directly to either 774-254-5073 | MARC@NECANN.COM for more information.

If you're interested in the event, go to the NECANN website at necann.com/vermont to buy a ticket or become an exhibitor today. These are 21+ events (under 21 need parent/guardian or MMJ Card)

If you would like to advertise, a calendar event cost \$150; and could be subject to edits in order to fit a given space. For more information call 207-225-2076 or email come@turnerpublishing.net.

## Healing Section W

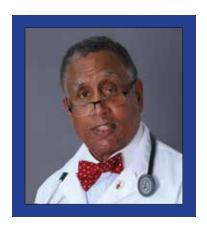


## Ask an Expert



## The Endocannabinoid System Fighting Cabin Fever, Aging and Depression

Nrf2 and Its Role in Attacking Inflammation and Depression



Written by Eric I. Mitchell
Eric I. Mitchell, MD MA FACPE CPE
is president and medical director of
Hemp Commodity Industries, LLC.

1 years of scientific suppression and now the truth be told. No, I am not talking about global warming, but there are some intersecting historical points where politics and ideology were selected for the few over the masses. Let's look back at what happened to the electric car from 1890 which could go 14 mph and hold 6 people. Today, the electric car is in its renaissance and is being promoted to address the global warming caused by the gasoline car first introduced in 1893. Funny, history repeats itself. The subject of this article has a similar story that needs to be told. This is a story about the rise, fall and renaissance of hemp. I will review where we are today with hemp as we head toward the shortest day of the year and Cabin Fever!

Hemp was a major agricultural crop at the turn of the 20th century in the United States. The photo on the top of the next page speaks for itself (Photo 1). This is the back of the \$10 bill in 1920 which shows that hemp was King. By 1937, the hemp kingdom was politically made a bad actor by legal statute. The 1937 Marijuana Tax Act was designed to keep this crop suppressed for the few and it did. Now we have 7 billion aging people on a warming planet, now both of these Black Swans have our attention. This article will be talking about hemp's renaissance with the Endocannabinoid System (ECS), why we



need to learn about this biological system as we await the shortest day of the year and how hemp can play a major role in fighting the druthers of winter.

I am talking about our mammal biological system, the ECS that has been the victim of willful blindness which was predictably irrational and created a Black Swan for Hemp in 1937 which continued to 1970 when this botanical became a Schedule 1 drug and criminalized for the masses. Hemp was released from statutory prison in 2018 with the passage of the 2018 Farm Bill. Hemp was made legal again after 81 years of political incarceration.

With the sky dark by 4:30 pm in the afternoon, snow on the roof and the dooryard yet to be plowed, trouble is brewing. There is nowhere to go because everything is closed, which interrupts our socialization and helps to create Cabin Fever. These climate conditions have similar effects around the world when the "sun don't shine". These environmental conditions increase the number of people who may take one of 95 different medications for depression. Yes, I said there are at least 95 pharmacological medications that are allocated and directed for the treatment of depression. Why?

Depression is a mood condition characterized by persistent and overwhelming feelings of sadness that can affect your day-to-day activities and how you think, feel, and behave. Sometimes it can affect your outlook on life and make you feel that life isn't worth living. Depression may also be called major depressive disorder or clinical depression.

Experts aren't exactly sure what causes depression but believe it is due to a combination of different factors, such as genetic vulnerability, faulty mood regulation by the brain, stress, chemicals in the brain, medications, or medical problems, that all interact together to bring on depression.

The risk of developing depression is higher in women and older people:

• Aged 45 to 64 years of age or the elderly

- With chronic or acute health conditions
- Who is undergoing a major life event, such as a job loss, divorce, workplace stress, or physical or mental abuse, and yes Cabin Fever!

The ECS is an important molecular system responsible for controlling our body's homeostasis and is becoming an increasingly popular target of pharmacotherapy in the treatment of depression. Endocannabinoids that our bodies make are Ester, ether, and amide derivatives of long-chain polyunsaturated fatty acids (PUFAs), such as arachidonic acid, and they act mainly as cannabinoid receptor ligands, like the CB1 and CB2 receptors.

Endocannabinoids belong to a large group of compounds with a similar structure and biological activity called cannabinoids. In fact, Cannabinoids now number about 140 known to be found in the Cannabis sativa L plant. THC, CBD, CBC and CBG are our top four cannabinoids and are now all the rage. This quartet of cannabinoids will not be the end all to what ails us. However, you and I need to know what they do and can do from depression to cancer!

#### First Things First

The first thing, the government must do, is take THC the number one most studied cannabinoid off the Controlled Substances Act (CSA) Schedule as a Schedule 1 drug. Pharmaceutical companies have spent millions of dollars over many years of time to replicate the botanical into a pharmaceutical analog. Many of these efforts have failed because Mother Nature continues to be the dominant force for mankind. The phenomenon known as the "Entourage Effect" is achieved when THC and other cannabinoids can give a more potent and targeted effect against diseases. This means moving from an adjunctive addition to therapy to a main therapeutic index to help suppress the disease and work toward a cure for a disease state.

Cannabidiol (CBD) is the second most common Cannabinoid studied and is one of the main pharmacologically active phytocannabinoids of Cannabis sativa L, and no it does not cure everything! CBD is a non-psychoactive Cannabinoid unlike THC, the deemed bad boy, but exerts a number of beneficial pharmacological effects, including anti-inflammatory and antioxidant properties working through the ECS.

The chemistry and pharmacology of CBD, as well as various molecular targets, including CB1 and CB2 cannabinoid receptors, serve as a target opportunity for treatment in our homeostatic ECS system. In addition, preclinical and clinical studies have contributed to our understanding of the therapeutic potential that CBD has for many diseases, including diseases associated with oxidative stress, free radicals, and chronic inflammation, all of which are related to aging.

#### Flip the Switch

Inflammation is a stereotypical response to tissue damage. Our most powerful detoxification from chronic inflammation lies deep within, a master antioxidant switch that is inside every cell of our body. It is called Nrf2 (pronounced Nurf-2, and short for nuclear factor [erythroid-2]—related factor 2) and it is so important that it is found in all mammalian species. Nrf2 is an exquisitely sensitive cellular switch that when turned on regulates the activity of over 200 genes, almost all of them involved in either antioxidant defense or detoxification of our cellular makeup!

Because Nrf2 participates in inflammation ablation, we hypothesize that Nrf2 could play a role in mitigating depressive disorders. Side note, a causative relationship between inflammation and depression is gradually gaining consistency. Nrf2 is capable of activating powerful protective genes and signaling molecules that are critical for our processing of drugs and toxins, for dampening inflammation, removing damaged proteins, and helping repair our DNA.

#### Measure It to Understand It

Monitoring inflammation is now possible with techniques such as microdialysis and has been extensively documented in experimental and clinical traumatic brain injury (TBI). Altering of the acute inflammatory response may be neuroprotective. Nrf2 is an essential transcription factor that regulates an array of detoxifying and antioxidant defense gene expressions in the liver. It is activated in response to oxidative stress and induces the expression of its target genes by binding to the Antioxidant Response Element (ARE).

When you are sitting in the cabin stressing, inflammation occurs, and a number of biochemical mediators, including prostaglandins, cytokines, chemokines, neuropeptides, and nerve growth factor (NGF), are released. In conditions related to chronic musculoskeletal pain, such as osteoarthritis (OA), rheumatoid arthritis (RA),

tendinitis, and chronic low back pain (CLBP), these mediators have been identified as key drivers for chronic pain. In conclusion, our results indicate that chronic inflammation due to a deletion of Nrf2 can lead to a depressive-like phenotype while induction of Nrf2 could become a new and interesting target to develop novel anti-depressive drugs.

Chronic diseases in the elderly are most likely characterized by the loss of homeostasis during aging or as a result of environmental factors, all of them leading to low-grade stress by pathologic formation of reactive oxygen species (ROS), chronic inflammation, and metabolic imbalance. A review of the recent science shows evidence indicating that Nrf2, as the master regulator of multiple cytoprotective responses and a key molecular node within a particular cluster of diseases, provides a new strategy for drug development and repurposing, the antioxidant activity of CBD through Nrf2 activation.

#### Reactive Oxygen Species (ROS)

Oxidative stress resulting from the overproduction of ROS is a key element of the immune system's response to combat pathogens and initiate tissue repair. However, metabolic modifications resulting from the overproduction of ROS also have many negative aspects and lead to the development and/or exacerbation of many diseases. It is believed that the ECS, which includes G-protein coupled receptors and their endogenous lipid ligands, may be responsible for the therapeutic modulation of oxidative stress in various diseases. In this context, the phytocannabinoid cannabidiol (CBD), which was identified

several decades ago and may interact with the cannabinoid system, is a promising molecule for pharmacotherapy.

During post-traumatic inflammation, metabolic products of arachidonic acid, known as prostanoids (prostaglandins and thromboxanes) are released and aggravate the injury process. Neural injury leads to inflammation and activation of microglia that in turn may participate in the progression of neurodegeneration diseases like dementia, Alzheimer's, Parkinson's, and traumatic brain injury (TBI).

Prostanoid synthesis is regulated by the enzyme cyclooxygenase (COX), which is present in at least two isoforms, COX-1 (the constitutive form) and COX-2 (the inducible form). These two isoforms have been shown to have an adverse effect on brain tissue from several days to several weeks after TBI. Animal studies have been done to show by blocking the COX reactions recovery to the TBI brain is faster and with better motor outcomes. The acid form of CBD known as CBD-A works to block the COX-1 and COX-2 inhibitors. Because TBI is a leading killer of both men and women, I plan to make this an expert article in the near future. But right now, let's get back to depression.

The therapeutic potential of CBD has been evaluated in cardiovascular, neurodegenerative, cancer, and metabolic diseases, which

#### How Does CBD Work in the Body?

#### Potential benefits of Activating the CB1 Receptors

Lower Anxiety
Lower Blood Pressure
Lower Intestinal Inflammation
Relieve Depression
Reduce Fear and Paranoia











#### Potential benefits of Activating the CB2 Receptors

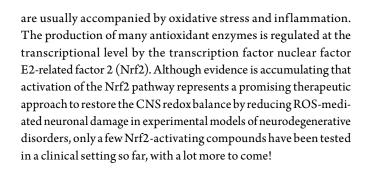
Help with Alcohol and Nicotine Addiction
Increase appetite Neurodegernerative Diseases
Reduce Chronic Pain
Reduce Inflammation
Stress Response











#### Vitamins by Funk 1919

Originally, Vitamins were called "accessory substances" which later changed to the term "vitamine" on scientific papers, which then again changed to the word we all know today, the vitamin. Casimir Funk, credited for discovering vitamins, proposed the idea that various diseases could be cured if these nutrients were present in foods.

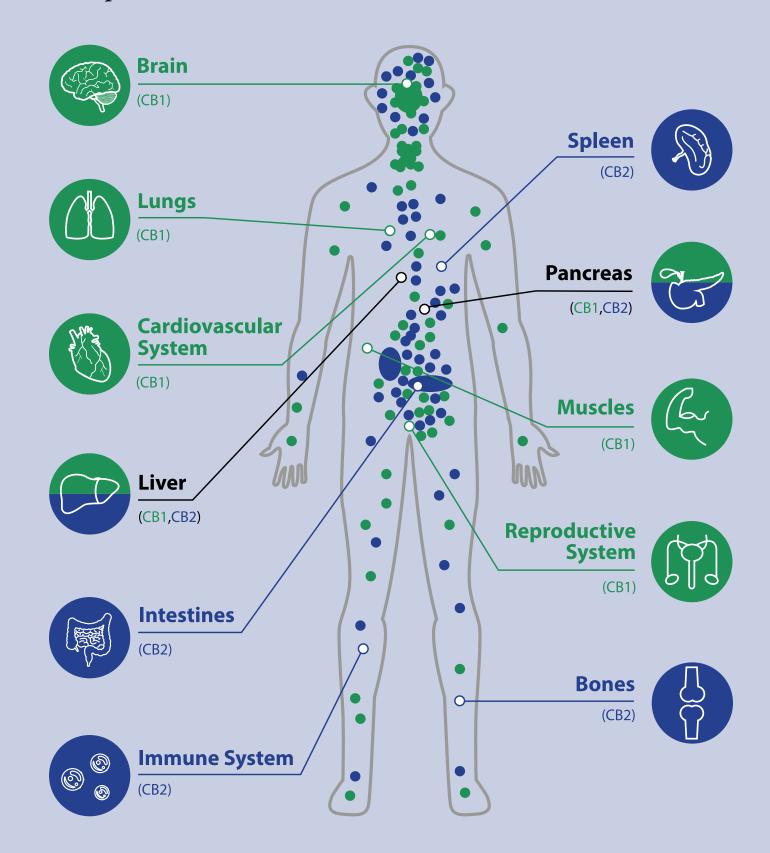
This initial vitamin discovery spawned various products to enter the market. Names such as Vitamine, Double Strength Yeast and Super Vitamins arrived on shelves and generally contained vitamin B from yeast and included various other ingredients. Mastin's Yeast Vitamin Tablets, created in 1916, was a leading product of the day and likely most like today's multivitamins,

with vitamins A, B, and C, iron, calcium, and Nux-vomica, a homeopathic remedy for heartburn. Its label claimed: "This preparation contains vitamines together with other ingredients which should prove of value in helping to improve the appetite, aid digestion, correct constipation, clear the skin, increase energy, and, as a tonic, to assist in putting on weight in weakened, run-down conditions due to malnutrition." It sounds like snake oil, doesn't it?

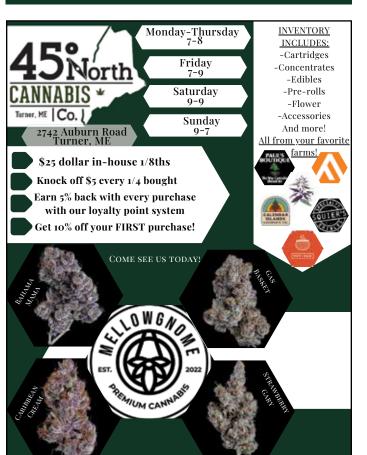
By the way, the immune system plays an integral part in executing and creating these factors so that we can stay in balance through the ECS. When we get out of balance, we're gonna have a rough ride on the road to good health. So, I believe that a "Daily Dose of Wellness" is important to incorporate in your daily taking of CBD. CBD was not included in your daily vitamin regimen when the One-A-Day Vitamin was introduced in 1943 during WWII.

I the author, like Funk in 1919, consider that this cannabinoid, CBD, is another fundamental dietary supplement to keep the ECS in balance. In 2018, I named and filed a Trademark application for VitaminCBD™ as the very first vitamin of the ECS. VitaminCBD has all the criteria that each and every other vitamin falls under. The DEA and FDA have yet to address my Trademark request. Keep your fingers crossed and get your www.DailyVitaminCBD.com and think about ice fishing, snowshoeing and skiing. By the time you read this article, the days will be getting longer. ▶

Introducing CBD to the body can help reduce the symptoms of a wide range of illnesses including epilepsy, multiple sclerosis, chronic inflammation, depression, diabetes, rheumatoid arthritis, anxiety and opioid withdrawal.













#### Does Cannabis Cause Heart Failure and Stroke?

#### Written by Dr. Dustin Sulak

Dustin Sulak, D.O., is globally recognized as a leading cannabis clinician and pioneer of clinical applications. He is a board member of The Society of Cannabis Clinicians.

Last month, an article published by CNN's health website reported on two new studies that found "marijuana use raises the risk of heart attack, heart failure and stroke." In this article, I'll review what we know and don't know about the new findings (including some juicy details that didn't make it to the media reports), compare with some of the previous publications on this topic, and boil it down to what matters for people with cardiovascular disease or cardiovascular risks who want to safely use cannabis. Let's start by taking a look at the new data and what it means.

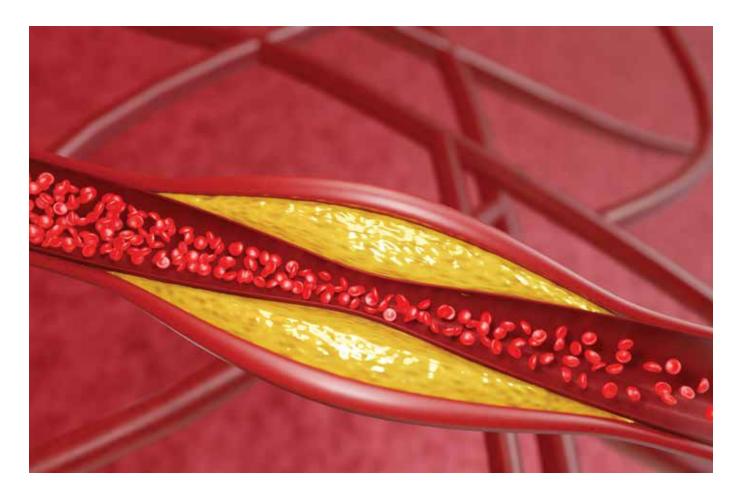
First, it's important to point out that I usually wait until new data makes its way through the scientific peer-review process and is published in a journal before giving it much time and energy.

Neither of these studies fit those criteria – they were preliminary reports presented at a recent American Heart Association conference. At this point, we don't have access to anything more than the abstracts, which allow no opportunity for understanding the authors' detailed consideration of the data, scrutinizing their methods, or understanding how this data relates to what's already known about this topic.

Here's what I do know about the first presentation, titled Daily Marijuana Use is Associated With Incident Heart Failure: "All of Us" Research Program:

• 156,999 people without heart failure were followed for a median of 45 months.





- During that time, 2,958 (1.9%) developed heart failure.
- Researchers compared those who had never used cannabis with those who had, adjusting the data to account for differences in age, sex, race, ethnicity, alcohol and tobacco use, educational attainment, employment status, income, health insurance coverage, and the presence of diabetes, hypertension, hyperlipidemia, and body mass index.
- After making all of those adjustments, daily cannabis use (but not weekly or monthly) was associated with a 34% increase in heart failure, which was marginally statistically significant.
- After adding a diagnosis of coronary artery disease (CAD)

- to the list of conditions for which the data was controlled, there was no longer a statistically significant association between daily cannabis use and heart failure.
- This led the authors to suspect that daily cannabis use was increasing the risk of heart failure by increasing the risk of CAD.

It's also important to point out that while a 34% increase in heart failure sounds like a lot when you consider the 1.9% incidence of heart failure in the entire group, that's an absolute difference of around 0.6%. In other words, the daily cannabis user had an incidence of heart failure of approximately 2.5%.

#### 156,999 people

1.9% developed heart failure



The second presentation titled *Increased Risk of Major Adverse* Cardiac and Cerebrovascular Events in Elderly Non-Smokers with Cannabis Use Disorder: A Population-Based Analysis, was even less compelling:

- It compared 28,535 people who have been labeled with "cannabis use disorder" (CUD) who don't smoke tobacco with >10 million people who also don't smoke tobacco and don't have CUD. All of the subjects were admitted to the hospital and were over the age of 65.
- There were major differences between the two groups:
- a. Those with CUD were more likely to be male, black, have AIDS, alcohol abuse, depression, uncomplicated hypertension, and drug abuse.
- **b.** Those with CUD were less likely to have complicated hypertension, diabetes, hyperlipidemia, obesity, thyroid issues, previous strokes, blood clots, and cancer.
- Without controlling for any of the factors mentioned above, the researchers showed that those with CUD had 20% more major adverse cardiac and cerebrovascular events.
- Importantly, the authors failed to mention that among those with CUD, the rate of all-cause mortality was ~50% lower (1.7% vs. 3.3%).

I admit that there are compounds in cannabis smoke, like other types of smoke, that are harmful to the cardiovascular system. The presence of other risk factors, amount and frequency of smoking, and individual differences all modify just how much risk this poses.

Unfortunately, neither of these reports tells us anything about how these subjects were using cannabis, except the first one which stratified daily vs less than daily use. Were they smoking vape pens, joints, bongs or were they using flower vaporizers and oral products? Were they heavy users who built tolerance? Were they using cannabis to treat another medical condition? Did these differences in behavior change the risk of an adverse outcome? We'll likely never know.

What I do know is that both of these questions have been answered by other studies that have made it through peer review and rely on more robust data sets. If you'd like to read a careful analysis of the large body of evidence on this topic that is overly critical of cannabis but still looks at nuances, a review article from the journal Circulation published in 2020 is a good place to start. This review includes evidence from the CARDIA study that followed subjects for 25+ years and found no association between cumulative lifetime and recent cannabis use with cardiovascular disease, stroke, coronary heart disease, or cardiac mortality.

Cross-sectional data, like the second presentation described above, essentially compares a snapshot of the cannabis users vs non-users and is less compelling than longitudinal data that follows people over time and compares their outcomes in the context of other factors, like the first presentation. Longitudinal data with a median of 45 months duration typically provides a lot less information than one that has followed subjects for decades.

It's also important to point out that the second presentation described above was not the first to find that cannabis users hospitalized for cardiovascular events are less likely to die than non-users, though the difference was the biggest one yet; at least two other studies have shown 21% and 26% lower mortality rates in cannabis users who have a heart attack.

In the latter, the best the authors could say was, "the odds of mortality was not significantly increased" in the cannabis users. If you want to find evidence of 26% lower mortality, you'll have

to read the fine print. It's a good reminder that scientific bias against cannabis is still alive and well. Similar findings have been published showing lower rates of mortality in cannabis users who have traumatic brain injury and brain hemorrhage.

Finally, it's important to point out that compounds in cannabis, including CBD and ultra-low-dose THC, have been shown in several animal studies to have a protective effect on the heart and brain in models of heart attack and stroke, which explains why cannabis users who suffer these outcomes may have better outcomes.

#### Varables not Accounted in Studies!

#### Different types of consumption

Examples: smoking, vaping, vaporizing, edibles, tinctures, topicals, etc.

#### Heavy vs light cannabis consumption

- How many times a day?
- How much are they consuming at once?
- Do they take any tolerance breaks?

#### Reasons for using cannabis product

- Treatment
- Recreational

#### Study #2 doesn't account for other factors

- Physical Health Depression Race
- Alcohol Abuse
- Drug Abuse
   Disease
- Hypertension
- Gender
- etc.

#### 1. Use cannabis in a way that promotes restorative sleep, decreases anxiety and stress, improves mood, and increases

cannabis without increasing their cardiovascular risk?

*Healer.com* that will help you do this.

So, what's the take-home message for those who want to use

2. Limit or avoid smoking cannabis and using vape pens. Instead, use a flower vaporizer, drops, capsules, gummies, tea, and topical products.

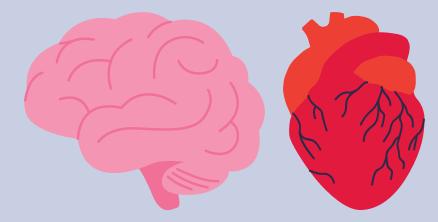
beneficial social interactions. We have many free resources on

- 3. Choose "clean" cannabis products that are free from contaminants and accurately labeled based on third-party lab testing.
- 4. Use the lowest effective dose of cannabis to relieve symptoms and avoid building tolerance. If you have built tolerance, reverse it using Healer's Sensitization program (healer.com/ programs/sensitization-protocol).
- 5. If you're wary about using THC, many highly effective hemp-based products can relieve symptoms with no risk of impairment, including at healerchd.com.
- 6. Work with a cannabis expert. If you have a medical condition that you'd like to treat with cannabis, find a local cannabis expert at the Society of Cannabis Clinicians (www.cannabisclinicians.org/find-a-cannabis-doctor)
- 7. Pay less attention to news headlines (in general), especially those that exaggerate non-peer-reviewed findings about the harms of cannabis!

Cannabis is one of the most versatile, safe, and effective medicinal plants on the planet. With its immense power to heal, it certainly also has the power to harm, though the risk is much less than most of the drugs it can replace. We have a lot more to learn about the healing properties and risks of cannabis, but until then, I plan to continue treating my patients with cardiovascular disease or risk factors with cannabis when appropriate.

#### Researchers Conclusion from Study #2

20% more major adverse cardiac and cerebrovascular events for those with CUB (cannabis use disorder).



#### **Failed to Mention**

~48% greater all-cause mortality rate for people who don't have CUD.



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January 18th, February 15th & March 21st 6-8 p.m.

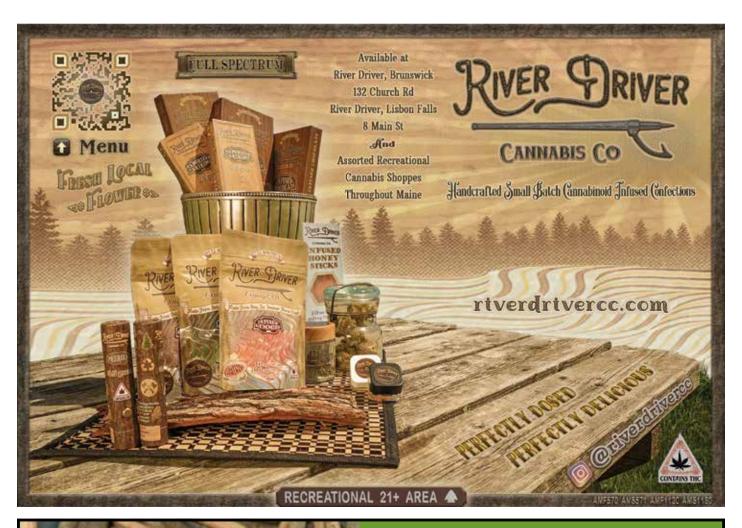
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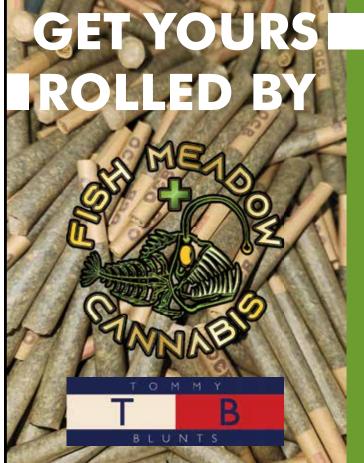
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## Study Finds Cannabis Users had better Covid-19 Outcomes

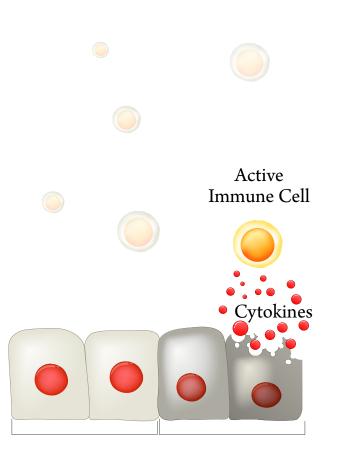
By A.J. Herrington

Cannabis users who contracted COVID-19 had better outcomes and reduced mortality compared to people who do not use marijuana, according to new research presented at a conference in Hawaii this week. A presentation on the study, which was conducted through a review of the medical records of more than 320,000 individuals, was delivered on Wednesday at the annual meeting of the American College of Chest Physicians (CHEST) in Honolulu.

"Marijuana smokers had better outcomes and mortality compared to non-users," the authors of the study wrote in their conclusion.

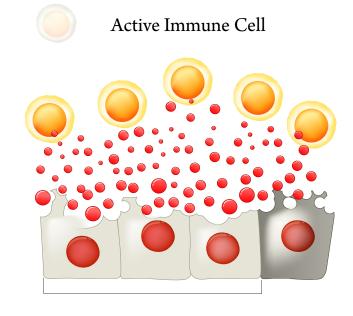
"The beneficial effect of marijuana use may be attributed to its potential to inhibit viral entry into cells and prevent the release of proinflammatory cytokines, thus mitigating cytokine release syndrome." To conduct the study, a team of researchers analyzed data on 322,214 patients from the National Inpatient Sample, a U.S. government database that tracks hospital use and outcomes. Patients who were under the age of 18 or who had information missing from the database were excluded from the study. Among the patients in the sample, 2,603 (less than 1%), said that they were cannabis users.

#### **Normal**



Healthy Cells Infected Cells

#### **Cytokine Storm**



Healthy Cells



The patients in the sample were divided into two groups based on marijuana use. Data from the sample was then used "to match marijuana users to non-users 1:1 on age, race, gender, and 17 other comorbidities including chronic lung disease."

When comparing cannabis users to non-users, the researchers determined that cannabis users "were younger and had higher prevalence of tobacco use." Among the patients who did not use cannabis, "other comorbidities including obstructive sleep apnea, obesity, hypertension, and diabetes mellitus were more prevalent."

#### Pot Users Had Significantly Lower Covid-19 Mortality

The analysis determined that cannabis users had significantly lower mortality compared to non-users (2.9% compared to 13.5%). Cannabis users also had significantly lower rates of complications associated with COVID-19, such as intubation, acute respiratory failure and multiorgan failure.

"On univariate analysis, marijuana users had significantly lower rates of intubation (6.8% vs 12%), acute respiratory distress syndrome (ARDS) (2.1% vs 6%), acute respiratory failure (25% vs 52.9%) and severe sepsis with multiorgan failure (5.8% vs 12%). They also had lower in-hospital cardiac arrest (1.2% vs 2.7%) and mortality (2.9% vs 13.5%)."

After 1:1 matching, marijuana users had lower mortality and

lower rates of intubation, ARDS, acute respiratory failure and severe sepsis with multiorgan failure.

The authors noted that the study's findings have clinical implications and called for further research into the potential link between cannabis use and Covid-19 outcomes.

"The significant decrease in mortality and complications warrants further investigation of the association between marijuana use and COVID-19," the researchers wrote. "Our study highlights a topic of future research for larger trials especially considering the widespread use of marijuana."

So far, research into possible associations between cannabis and COVID-19 has been limited, online cannabis news source Marijuana Moment noted in a report on the new study. A 2022 study found that among hospitalized patients, cannabis users had "lower COVID-19 severity" and "significantly better health outcomes." Another study conducted last year found that cannabis use was associated with a lower chance of contracting COVID-19, but cannabis use was also linked to more serious infections. A separate 2022 lab study by researchers at the University of Oregon determined that cannabis compounds prevented infection by the COVID-19 virus in human cells. The researchers are also exploring cannabis as a treatment for Covid-19.

The new study "Exploring the Relationship Between Marijuana Smoking and Covid-19," was published this month in a supplement to the peer-reviewed CHEST Journal.

## **Cannabis Users Non-Users** 6.8% **Intubation** 12% 2.1% Acute Respiratory Distress Syndrome 6% 25% Acute Respiratory Failure 52.9% 5.8% Severe Sepsis with Multiorgan Failure In-Hospital Cardiac Arrest 2.7% 2.9% Mortality 13.5%



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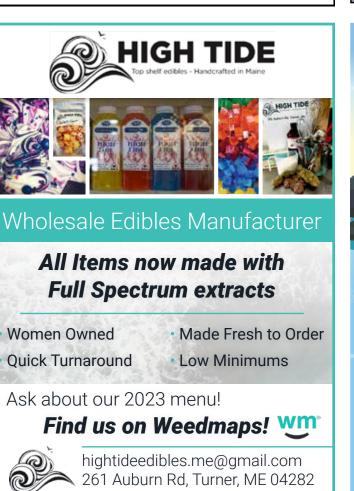
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Sun Closed

M-Th 12-8pm







#### A Zip of Prevention is worth a Pack of Cure

#### By Liz Lane

Liz is a writer, podcaster, and weed enthusiast located in Southern Maine. Follow them on Instagram @potluckypodcast.

If Benjamin Franklin had been alive in 2023, he probably would have modified one of his most famous idioms for modern mouths;" A zip of prevention is worth a pack of cure."

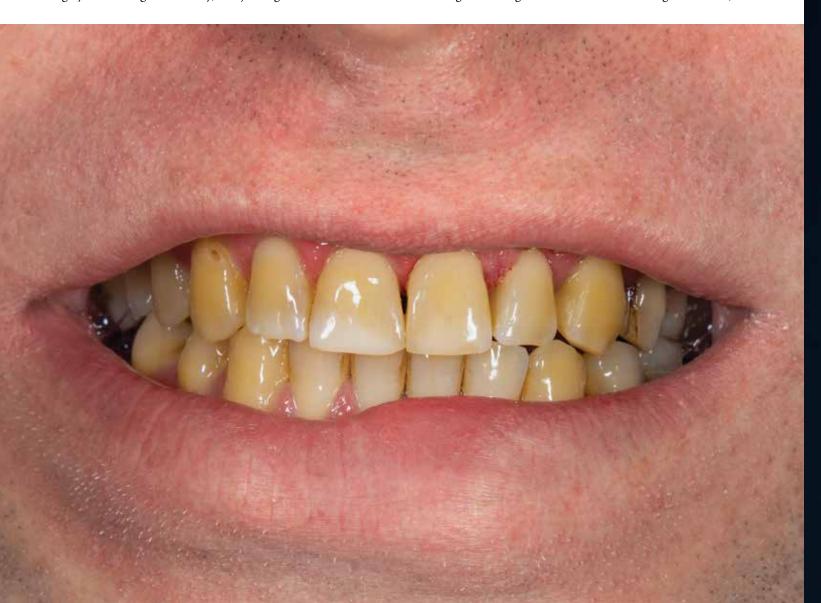
In reflection on this year, one can't help but call to mind the clouds of bong smoke and hazy memories among friends passing around a joint or maybe a vape pen. While these cozy memories may bring warmth to your heart, you may have welcomed in more than you bargained for when joining a smoke circle. During the season of giving, it's no use looking a gift horse in the mouth, but you'd do well to check your chompers thoroughly.

Smoking is by far the most popular method of cannabis consumption. It's as easy as digging a hole in an apple or pulling apart a two-liter soda bottle for an improvised bong. Stoners are a hugely welcoming community, and joining a smoke sesh is as

simple as stepping into the circle. This convenience now leads to more issues later, especially in the case of oral health.

Most are aware of the damages smoking cigarettes can cause, and while cannabis may seem friendlier, there are still risks associated with inhaling combustibles, be it a house fire or a smoking doobie. Cannabis also has four times as much tar as tobacco, which is evident when frowning at the collection of resin in your bong. But what about your lungs and mouth? While others have grown smell blind to the scent of cigarettes or weed odors that linger, the rest of the population has noticed, and some more than others.

"Most of the time, I can tell the difference between smokers and nonsmokers by looking at their teeth," said Dr. Mohamed Elsalhy, a dental public health specialist and faculty member at the University of New England College of Dental Medicine. "The gums darken,





and while they may get used to it, the smell sticks around for a while. Most of the impact of smoking is not reversible. Lost bone doesn't come back. Cavities can't be reversed, but they can be stopped from progressing and save whatever remains in the mouth."

Fear of the dentist is unfortunately not uncommon. This can be attributed to waiting until the pain or issue has progressed to absolute agony or the point of no return, resulting in pulled teeth or other grim diagnoses. While the consequences of smoking seem frightening, risk prevention is Dr. Elsalhy's expertise, and you already know most of the steps, even if they aren't executed correctly daily, which is another issue.

"Preventing dental diseases is very simple; it just needs effort," said Dr. Elsalhy. "Treating dental diseases is very costly. When dental diseases progress, it becomes very painful. A significant problem is that damage is irreversible, so we must protect them from the beginning. We have oral hygiene practices that can prevent oral diseases in smoking and nonsmoking patients."

Cannabis purveyors are especially at risk for this cottony stoner nemesis: dry mouth. While mostly viewed as an annoyance, parchment significantly affects the natural biome of one's mouth. If forest fires send woodland creatures running for their lives, what do you suppose the effect of chemical inhalants and bong rips are passing through your natural flora?

Fungal infections in the mouth are common because people share tools between them, like bongs, water pipes, and even utensils," explained Dr. Elsalhy. "There's a hypothesis that fungi feed on hydrocarbons as an energy source; that's why they would be more present than other infectious organisms."

Our mouth is covered by bacteria that are healthy in general, and they take care of us. When we disrupt these bacteria with high heat and foreign chemicals, fungi will be able to accumulate. Once they start growing, they will continue to become more prominent. This is seen commonly in immunocompromised patients, and it's also common in smokers.

"It's known that [cannabis] users are more likely to have tooth decay compared to people who don't smoke at all, and a dry mouth increases the risk of cavities," informed Dr. Elsalhy. "Another reason for higher tooth decay is that [cannabis] can increase appetite, resulting in more snacking, with most of these being high in sugar; we call them cariogenic snacks, meaning they cause cavities. This increases the risk of decay, usually on the front face of the front teeth, which is a smooth, very cleanable surface."

Something else can hitch a ride with the smoke from your bong that will make you rethink sharing with others: bacteria and fungal spores. Cannabis use, be that eating, vaping, or smoking, is associated with immune suppression and may increase oral Candida and other fungal infections.

"When I reviewed the literature published by the American Dental Association, I also found that they are more prone to HPV infections in the mouth because of this immune suppression. When they get HIV and HPV human papillomavirus, it will be

more aggressive compared to nonsmokers," commented the doctor. "Gingivitis, periodontitis, and gingival overgrowth have been associated with any kind of smoking. Gingivitis is inflammation of the outer surface of the gum, but if the bones are involved, it becomes periodontitis. Gingival hyperplasia is an increase in the overgrowth of the gums."

Fear not; this article isn't here to judge you but to remind you that you only get one set of adult teeth for free—the rest you'll have to pay for yourself. While thorough oral hygiene habits are best learned when you still need a stool to get to the sink, the second-best time to plant that seed is now.

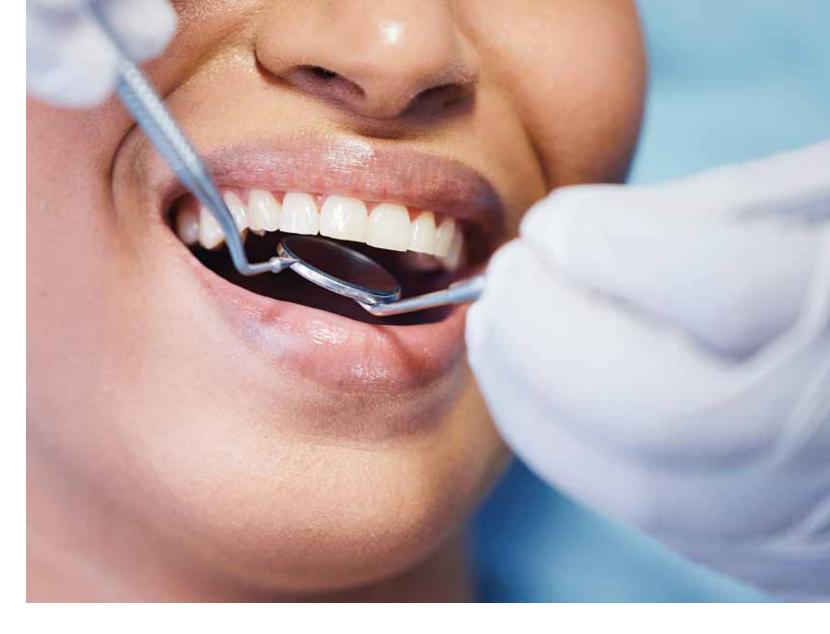
"The first tool is brushing the teeth very well, at least twice a day, with fluoridated toothpaste, as most oral diseases are related to plaque. This buildup causes inflammation, carries [cavities], and periodontal diseases," Elaborated Dr Elsalhy. "If you smoke, this will be more exaggerated, but with plaque control, it becomes less aggressive. Fluoride strengthens teeth, and with plaque removal, we save the whole tooth."

If brushing your teeth is a superhero, flossing, scraping your tongue, and using mouthwash are the necessary sidekicks that keep those things that do damage at bay by reducing the bacterial load. Many of them had fluoride, which gives more preventative effects and reduces the impact of dry mouth on teeth. However, home dental care has limitations compared to a professional setting.

"It is vital to visit the dentist to get your teeth cleaned more professionally with a higher concentration of fluoride, which is more efficient than over-the-counter ones. If there are early disease signs, they will be detected by either the hygienist or the dentist so that they can intervene early, rather than the disease progressing to more advanced stages, which we cannot reverse," Dr. ElSalhy said. "It's also vital that heavy smokers receive oral cancer screenings. For example, the cheeks, under the tongue, the mouth floor, and the mouth's back. If there are any cancer lesions, they will detect them early so that they can intervene early to prevent more advanced stages of oral pharyngeal cancers."

Dentists recommend 30 seconds of multi-surface brushing for each quadrant of the mouth, but without a timepiece, most people call it quits at just 30 seconds. A remedy for this is a sand timer, which some dental offices may provide. However, keeping an eye on the timestamp for a video you're watching has proven effective for combining a somewhat mindless activity with a source of entertainment, resulting in more prolonged tooth-to-brush contact. Podcasts designed to help you brush your teeth and keep your mind occupied exist, and they aren't just for children.

Don't wait until 2:30 to go to a dentist if you've ignored pain, aggravation, and odd discoloration for the extent of 2023. The University of New England Oral Health Center exists to provide Maine residents with low-cost dental care while training the next generation of gentle dental professionals. When reflecting on Auld Lang Syne, don't forget to check your reflection for food in your teeth.





BRUSH TEETH REGULARLY



DO NOT SMOKE



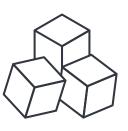
USE A FLUORIDE TOOTHPASTE



CONSIDER A MOUTHWASH



FLOSS ONCE A DAY



LIMIT SUGARY FOODS, STARCHES



SEE A DENTIST REGULARLY



DRINK MORE WATER

## Legal Section 4



#### Think Tank Offers National Cannabis Legalization Plan Focused on Interstate Commerce

 $By A.J. \, Herrington$ 

n influential cannabis policy think tank recently released a report calling for national cannabis legalization that focuses on interstate commerce as a way to protect small businesses in the cannabis industry. In its report, the Parabola Center for Law and Policy outlines concerns that full cannabis legalization at the federal level would decimate current state markets, to be replaced with a nationwide monopoly. The report also offers a blueprint for Congress to protect the almost 10,000 small businesses that make up the current state-legal market and the hundreds of thousands of jobs the businesses provide.

"Excitement for federal legalization is mounting because state programs have led to good jobs and a lot of progress toward our goals of equity and justice," said Shaleen Title, founder and director of Parabola Center," said in a statement. "But flipping a switch to federally legalize marijuana would end all of that progress. Gradual implementation that protects small businesses and workers is the fairest option for everyone."

In its report, the Parabola Center notes that national cannabis legalization is all but inevitable. While such action would better align federal and state policy, legalization at the federal level could also threaten to "disrupt and force the transformation of existing intrastate cannabis markets."

"How the nation will shift from dozens of individual state cannabis markets to one national market, and the implications of that shift, is unknown but likely to be dramatic," the report says. "It is also safe to assume that many advocates for federal descheduling are not aware of the consequences such a policy change portends for existing and entrenched state cannabis policies."

#### Three Keys to Federal Legalization

The Parabola Center's blueprint for Congress includes three main points to guide federal cannabis legalization including policy solutions and model language that would protect state efforts to foster equity and justice in their respective cannabis industries. The first recommendation for a national legalization plan from the group is to explicitly allow state cannabis markets to operate as designed and without disruption. Congress should "specifically state that it does not intend to preempt, prohibit, or otherwise limit any state law, regulation, or requirement regardless of whether the state law affects interstate commerce or favors in state interests," according to the report.

The second proposal would prioritize small businesses, social equity licensees, and worker-owned enterprises for interstate



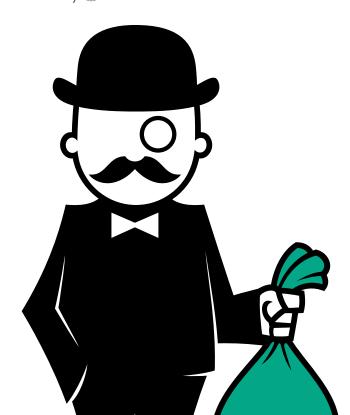
commerce, which would be regulated by requiring companies to register with the federal government. Registration would be reserved for state-licensed businesses that promote industry diversity, offer support and services to "disadvantaged individuals, veterans, or individuals and communities most affected by cannabis prohibition and enforcement," or protect the rights of workers to organize and co-own businesses.

With its third recommendation, the Parabola Center suggests that a national cannabis legalization plan should include provisions to prevent corporate consolidation and monopolization of the cannabis industry. Earlier this year, the group launched an educational campaign highlighting the risk consolidation poses to small businesses in state-legal markets.

"If federal legalization is not coupled with explicit federal protections for state-based intra-state markets, everything will change once cannabis is de-scheduled. The world of legal cannabis will look nothing like it does now," the Parabola Center wrote in its report. "But this outcome is not inevitable. Congress can protect intrastate markets if it chooses to."

"Without protection for small businesses, a shift from fragmented intrastate markets to one large intrastate market through the end of federal prohibition and the demise of interstate barriers will likely lead to consolidation of the cannabis industry and a monopolization of the market by large cannabis companies," the report continues. "Additionally, large corporations currently operating in other areas will enter the cannabis market once the risks and constraints of federal prohibition are removed."

The Parabola Center is a Massachusetts-based nonprofit, nonpartisan think tank of legal professionals and drug policy experts that advocates for legalizing cannabis in a manner that protects people while limiting the influence of corporations in the industry.





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Legal Section — Legal Section —

#### Ohio Becomes latest State to Legalize Recreational Marijuana

By A.J. Herrington

Ohio became the latest state to legalize recreational marijuana on Tuesday with the approval of Issue 2, a landmark ballot initiative that legalizes cannabis for adults, according to a projection from CNN. Issue 2 led with 55.6% of the vote as of Tuesday evening, prompting CNN to project that the marijuana legalization measure will prevail once all votes have been tallied. With the success of Issue 2, Ohio joins the 24 states that have legalized cannabis for adults. Ohio voters are also deciding on a proposed constitutional amendment to protect abortion and other reproductive rights, setting the stage for strong voter turnout in the state. Early voting on both measures began on October 11 and ended last week on November 5.

Lucas McCann, co-founder and chief scientific officer at cannabis consulting firm CannDelta Inc., hailed the results of Tuesday's election when the passage of Issue 2 became apparent.

"This step towards cannabis legalization signifies a progressive shift and the beginning of a chapter for the state, reflecting the shifting perceptions of cannabis across America," McCann said in a statement about the marijuana legalization vote. "Ohioans will soon see a bolstered state economy, increased job opportunities, and tax revenue that can be reinvested in Ohio's aging infrastructure like schools and hospitals."

#### Ohio's Issue 2 Legalizes Cannabis for Adults

The passage of Issue 2 legalizes recreational marijuana in Ohio for adults 21 and older, who are permitted to possess up to 2.5 ounces of marijuana and up to 15 grams of cannabis concentrates. The proposal also legalizes marijuana cultivation for personal use, with adults allowed to grow up to six cannabis plants at home. Households with more than one adult are permitted to grow a total of 12 plants.

The commercial production and sales of cannabis products will be regulated by a new state agency dubbed the Division of Cannabis Control, which will have the authority to "license, regulate, investigate, and penalize adult-use cannabis operators, adult-use testing laboratories, and individuals required to be licensed," according to the text of the measure. Cannabis products will carry a 10% tax, which will be dedicated to administrative costs of marijuana regulation, substance misuse treatment programs and a social equity and jobs program.

Municipalities with licensed recreational marijuana dispensaries will also receive a share of cannabis tax revenue. Under the proposal's social equity program, some cannabis cultivation and dispensary licenses will be reserved for individuals from communities that have faced disproportionate enforcement of Ohio's current marijuana laws.

The news of Ohio's decision to legalize recreational marijuana for adults was welcomed by representatives of the regulated cannabis industry. Pete Gallagher, CEO and co-founder of Insa, a cannabis company with operations in Ohio and three other states, says that his company views Tuesday's vote to legalize cannabis in Ohio "as a monumental stride towards a more inclusive and regulated cannabis market."

"This decision reflects the state's embrace of a forward-thinking approach to cannabis, fostering economic growth, the potential for job creation, and more community comradery," Gallagher writes in an email. "We're excited about the opportunity to continue contributing to this emerging market by providing a unique and educational retail experience while offering a diverse range of premium, quality cannabis products that meet the evolving needs of both recreational and medicinal consumers."

Last Prisoner Project (LPP), a nonprofit working to secure the freedom of all people incarcerated for cannabis offenses, acknowledged the progress made with the passage of Issue 2. However, the group also noted that the measure does not have provisions to automatically expunge criminal records of past marijuana-related offenses.

"Last Prisoner Project acknowledges the progress but urges Ohio's policymakers to act swiftly in enacting state-initiated, comprehensive relief measures," Stephen Post, senior communications associate at LPP, wrote in a statement. "The fight for justice extends beyond legalization; it demands a commitment to right the wrongs of the past, ensuring that those unjustly burdened by cannabis convictions find redress and freedom."

#### Will Lawmakers Roll Back Issue 2?

Illegal

Legalization advocates are concerned that Republican lawmakers, who have repeatedly declined to advance comprehensive cannabis policy reform measures, will attempt to change Issue 2 despite its success at the polls. As an initiated statute, Issue 2 can be altered or even repealed by the state legislature. In October, Senate President Matt Huffman warned that if Ohio voters approve marijuana legalization, lawmakers might repeal key provisions of Issue 2. Huffman said during a speech on the Senate floor last month that if voters approve Issue 2, "this initiated statute is coming right back before this body."

Recreational

Medical

"We're going to have a mental health crisis on our hands," if legalization becomes law, Huffman warned, according to a report from online cannabis resource Marijuana Moment. "We are going to pay for this for years and years and years, and it's only going to get worse."

Huffman later explained to reporters that he would not try to repeal Issue 2 in its entirety if it succeeds at the polls, saying that he would instead "advocate for reviewing it and repealing things or changing things that

are in it."



#### Ohio Lawmakers Promise Changes to Cannabis Legalization Initiative to Come in 2024

By A.J. Herrington

Republican lawmakers in Ohio have postponed plans to vote on amendments to the cannabis legalization initiative passed in November, saying the legislature needs more time to consider the proposed changes. Ohio voters legalized recreational cannabis in Ohio with the passage of Question 2, which received 57% of the vote in this year's off-year election.

Even before voters went to the polls on November 7, GOP leaders including Ohio Governor Mike DeWine, Senate President Matt Huffman, and House Speaker Jason Stephens pledged to make changes to Question 2 if it passed. DeWine hoped to act quickly and pass amendments to the initiative before it went into effect on December 7.

"There's a lot of holes in what was passed," the governor said in a statement at the time. "I think (it) would be good if that was all done and done by the seventh so that we're not in a situation of taking something away from people. We're not in a situation of telling them, 'For X number of days it's going to be one thing, and then an X number of days after that it's going to be something else."

DeWine said he had several goals for changes to Issue 2, although he did not provide any specific legislative proposals. He called for children to be shielded from cannabis advertising and for policies to protect children from cannabis edibles. The governor also called for measures to ensure the state does not see an increase in cases of impaired driving, as well as policies to protect the public from exposure to marijuana smoke.

The Ohio Senate and the state House of Representatives both developed proposals to amend Question 2. The Senate proposal originally included provisions that would walk back the legalization initiative, including a ban on home cultivation and a delay in legalizing possession of cannabis until dispensaries open, likely next year. But the Senate reversed course and passed a bill on December 6 that essentially broadens Question 2 by allowing existing medical marijuana dispensaries to begin selling adult-use cannabis within 90 days. The bill also changes some tax provisions of the initiative, preserves home cultivation, and adds language to provide automatic expungement of past marijuana convictions.

#### Ohio House Offers Separate Amendment Bill

The House of Representatives has not voted on the Senate proposal, with Republican lawmakers in the lower chamber of the state legislature offering a plan to amend Question 2 with a bill from Representative Jamie Callender. The House bill is considered more palatable to supporters of Question 2, many of whom have criticized Republican leaders' plans to alter the voter-approved initiative. The House bill also includes new tax provisions and preserves home cultivation, although it adds residency requirements for where plants can be cultivated to avoid "multiple individuals aggregating their home grow plants into a single location, in essence creating an unofficial cultivation facility."

Although some Republican leaders had hoped to pass the amendments to Question 2 before it went into effect on December 7, the day before that date the House speaker announced that neither proposal would receive a vote in that timeline.

"It's just such a big change in Ohio's law that we need to be deliberate and we need to respect that there are concerns from the administration and the Senate, and we respect those concerns," Stephens said on the House floor. "Most of the provisions of Issue 2 don't come into effect until the summer, so that's really why you don't see that sense of urgency."

Instead, Ohio lawmakers will take up changes to the cannabis legalization initiative when the legislature reconvenes in mid-January. Supporters of the initiative, however, believe that lawmakers should refrain from amending Question 2. After Ohio's Republican leaders indicated their intention to scale back Issue 2, Tom Haren, a spokesman for the Coalition to Regulate Marijuana Like Alcohol, the sponsor of the ballot measure, said that political leaders should follow the will of voters as expressed through November's vote.

"I can't believe in 2023 we're actually talking about elected officials not respecting the will of the voters and not respecting the outcome of an election," Haren said. "I expect, I think that every single voter in Ohio has a right to expect, that elected officials will implement and respect the will of voters."

"I can't believe in 2023 we're actually talking about elected officials not respecting the will of the voters and not respecting the outcome of an election."

– Tom Haren

✓ Allows existing medical marijuana dispensaries to begin selling adult-use cannabis within 90 days.

✓ Changed some tax provisions of the initiative.

✓ Preserves home cultivation.





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