

UNDERSTANDING THE STATE OF

# MEDICAL MARIJUANA

USAGE IN SENIORS

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# Understanding The State of Medical Marijuana Usage In Seniors

Written For Seniors and Caregivers of Seniors To Facilitate Discussion With Medical Oversight

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*Note: This article is written in five sections for readability and shareability. Please feel free to reference and share to facilitate discussion. This information was written and compiled by the team at Accredited Home Healthcare Directory, a group of caregivers and supporters of caregivers, who are not medically certified. However, this article is compiled from a number of trusted resources, all of which are cited.*

## Part One: The Marijuana Trend & Its Barriers

[Marijuana](#) or [cannabis](#) usage among seniors is on the rise: from 2006 to 2013, cannabis use among seniors [increased by 250 percent](#). Additionally, according to data gathered in the [National Survey on Drug Use and Health](#), 3.7% of U.S. adults age 65 or older used cannabis in the past year, a more than tenfold increase from 0.3% in 2007. In 2017, 9.4% of adults ages 60 to 64 reported using marijuana in the past year, up from 1.9% 10 years earlier.



As more states legalize medical and recreational cannabis, the number of older Americans using the drug is expected to continue to rise. Since the usage of marijuana has only recently been re-legalized in some states, there is a dearth of studies pertaining to usage in seniors and the benefits and risks for this age group are only now being examined and debated.

*No matter where one falls on the debate, everyone agrees on this: It's important to consult a medical professional about how much, when, and how often to use marijuana/cannabis. However, this may be harder than it sounds.*

According to a recent study entitled [Qualitative Analysis of Cannabis Use Among Older Adults in Colorado](#) by the University of Colorado Colorado Springs and funded by the Colorado Department of Public Health and Environment, there are five key barriers preventing seniors from using marijuana with a doctor's oversight.

These are:

1. A lack of research and education about cannabis
2. A lack of health provider communication about cannabis
3. A lack of access to medical cannabis
4. A lack of outcome information about cannabis use

## 5. A reluctance to discuss cannabis use

Many study participants expressed challenges accessing medical cannabis, emphasizing a lack of education and approbation among physicians. It appears that many doctors have adopted a “don’t ask, don’t tell” policy, according to study participants who said their doctors didn’t want to know why they were taking cannabis, how they were taking it, side effects or benefits, interactions with current medications, etc. Other study participants didn’t ask their doctors about it because of the attached stigma. *Both situations could have obvious and costly health detriments.*

In addition to a health detriment, this disconnect from the medical advisors leads to a financial one: many study participants have chosen instead to purchase their marijuana from recreational dispensaries, which has less oversight and often costs more. Many study participants said they purchased at a recreational dispensary because 1) their doctors were either unable or unwilling to approve a medical marijuana card, which would allow them to purchase the drug at a medical dispensary, 2) they would have to leave their health insurance network to find another provider that would give them a card, or 3) the stigma caused them to feel a reluctance to ask their doctors for a medical marijuana card.

The removal of these barriers will take time and training. The authors of the University of Colorado study suggests increasing studies on cannabis as a medical treatment, risks, benefits, and challenges of marijuana use in older adults, medication interactions, and more. Once that research has been completed the evidence can be brought to practice and health care providers will be more comfortable having discussions about medical cannabis.

In the meantime, patients considering using or using marijuana in any form should be clear that there are no reasons to avoid talking with medical care providers about marijuana use—in the past, present, or future. There are also no legal ramifications since a patient’s health record is confidential and providers have no legal obligations to

report illegal activity unless a patient has expressed real and imminent intention to cause substantial harm to themselves or others.

However, a medical provider will not likely recommend something they aren't willing to put their license(s) behind. Oftentimes providers don't recommend cannabis products for certain conditions because of current studies where a cannabis product didn't work as well as other medications that could be obtained more reliably, at less cost, or with less potential side effects.

## **Part Two: Understanding Cannabis, THC, CBD, Hemp, & Marijuana**

### **Cannabinoids**

*Cannabinoids are either a chemical compound (multiple chemicals) found in a plant or a neurotransmitter in your body as a part of the endocannabinoid system, an entire system in the human body that interacts with cannabis.* For example, the cannabis plant has over 100 components, but the primary components people refer to when using the term “cannabinoids” are known as *phytocannabinoids* and *endocannabinoids*, the latter of which already exists in our bodies. Phytocannabinoids discussed most commonly are CBD and THC.

### **CBD (Short for "cannabidiol")**

*A chemical compound (phytocannabinoid) found in cannabis plants.* CBD appears to have some medical and health-related effects but does not provide a “high” or psychoactive effect. Since it does not have these effects, it does not appear to be addictive. Known health-related effects range from alleviating anxiety to inflammation. More studies are needed, but early indications demonstrate that CBD is not a generalized pain reliever, but may be effective in treating neuropathic pain or mitigate pain related to chemotherapy.

[The World Health Organization lists several major diseases](#) and conditions CBD can potentially (keyword: potentially) treat, but notes that there is only enough research to prove its efficacy on epilepsy. These potential diseases include Alzheimer's disease, Parkinson's disease, Huntington's disease, Crohn's disease, multiple sclerosis, psychosis, anxiety, pain, depression, cancer, hypoxia-ischemia injury, nausea, IBD, inflammatory disease, rheumatoid arthritis, infection, cardiovascular diseases, and diabetic complications.

The World Health Organization says there are no significant side effects, but does caution that CBD could [potentially cause dry mouth or impact blood pressure](#). It is also contraindicated with certain chemotherapy medications—underscoring again the importance of communication with a primary care doctor before considering use.

Currently, there are no recommendations on how to use it and the dose varies based on the individual and the ailment, so doctors do not have a milligram-specific, universal dosing method for CBD in the way they do with classic prescription medication.

### **THC (Short for “tetrahydrocannabinol”)**

*A psychoactive compound (phytocannabinoid) found in cannabis plants, THC is used to treat a number of maladies but gives the user a “high.”*

"THC is commonly known and is helpful for pain relief, anxiety control, appetite stimulation, and insomnia," says Dr. Jordan Tishler, M.D., a cannabis specialist, Harvard-trained physician, and founder of InhaleMD. "However, we've learned that THC does not work alone. Many of those chemical [compounds in marijuana] work together to produce the desired results. This is called the entourage effect."

While CBD is often used as an isolated extract, THC is more frequently used for therapy in its whole flower state (and not extracted).

Since it is a psychoactive compound, it can cause feelings of euphoria, a head high, and in some patients, anxiety (the very thing some patients are attempting to treat). Each person's reaction to THC varies.

Currently, THC is legal (regardless of medical necessity) in 10 states. In 23 additional states, THC can be used with a doctor's prescription, though this is subject to change as the laws in many states are in flux. (Here's a full [map of every state's cannabis rules](#).)

## **Cannabis**

*A family (genus) of plants, comprising both marijuana and hemp plants, among others.*

Some may use the term cannabis in lieu of more casual terms like “pot”, “weed”, etc. Using the term cannabis also potentially creates a softer barrier to entry for those who have been a bit apprehensive when it comes to discussing marijuana or hemp. When someone uses the term “cannabis”, they could be referencing either hemp or marijuana.

## **Hemp**

*A variety of the cannabis plant, containing high levels of CBD while low in THC (usually less than 0.3 percent).*

Despite the higher CBD ratio, hemp plants don't typically yield a lot of extractable CBD, so it takes a lot of hemp plants to create a CBD oil or tincture.

Caution: Hemp oil doesn't necessarily mean CBD oil. It's important to know the difference *and* where the hemp was grown since CBD is not currently regulated by the FDA. If the hemp from which the CBD is derived was grown overseas, one could be putting their health at risk, since hemp is a bioaccumulator, absorbing anything the soil has in it (e.g. toxins, pesticides, insecticides, fertilizers, pollution, etc.). American-grown hemp grown by companies with a COA-certificate of analysis—especially from states that produce both medically and recreationally legal cannabis—tends to be safer because there are stricter standards, according to [Consumer Reports](#).

## **Marijuana**

*A high-THC variety of cannabis plant, specifically the cannabis Sativa species; typically has high amounts of THC and moderate amounts of CBD, depending on the strain.*

There aren't enough long-term studies on marijuana to know if there are negative effects from prolonged use but short-term effects seem to be limited to a psychoactive effect or high.

## **Part Two: Common Uses of Medical Marijuana**

When discussing the uses of medical marijuana, clarification is necessary on FDA approved uses versus prescription medications made from cannabis compounds (such as those used to treat appetite in Alzheimer's patients), versus possible adjunct uses that may be recommended by providers in states where medicinal marijuana is legal and those that show promise but more research is required.

Since this article cannot address the full extent required to adequately do so, we have compiled the following list containing the most common uses. It is by no means an exhaustive list and is meant to provide a starting point for discussion. Additionally, as studies expand, so will the uses.

## **Cancer**



One of the primary uses of medical marijuana is to help cancer patients, especially as they undergo rounds of chemotherapy.



Some studies have shown that smoking marijuana can [help with nausea and vomiting](#) in chemotherapy patients. When dealing with palliative (end of life) care, especially for patients with cancer, a study points out that 60 percent of cancer patients [experience both of these symptoms](#) rather than one or the other, so medical marijuana may help relieve two symptoms at once.

Additionally, according to the American Cancer Society, it has been shown to reduce inflammation and is an antioxidant. Studies have also shown smoked or vaporized marijuana can help with the pain suffered due to neurological damage caused by treatments and can help patients get their eating habits back on schedule.

### **Alzheimer's Disease**

Alzheimer's affects more than four million Americans' cognition and memory every year. According to the Alzheimer's Association, about [10 percent of seniors](#) have the disease.

Patients with Alzheimer's Disease have used medical marijuana to alleviate the symptoms of depression and loss of appetite that often accompany degenerative brain disease.

The study published in the [Journal of Alzheimer's Disease](#) analyzed the potential therapeutic effects of THC on the disease. Researchers introduced THC to beta-amyloids, which are clumps of proteins that build upon the brain and are one of the leading signs of the presence of Alzheimer's. They found that THC helped slow the advancement of these beta-amyloids, and the results from the study "strongly suggest

that THC could be a potential therapeutic treatment option for Alzheimer's disease through multiple functions and pathways.”

### **Anxiety/Mental Health Disorders**

Studies have shown that CBD can help treat anxiety and other mental health issues, including:

- Obsessive-compulsive disorder (OCD)
- Post-traumatic stress disorder (PTSD)
- Panic attacks
- Moderate depression
- General anxiety

While using medical marijuana to treat anxiety may help for some, others have reported anxiety as a side effect of using it. As [Harvard's health department](#) points out, about 20 to 30 percent of recreational users say smoking marijuana causes anxiety or panic attacks after smoking. This highlights an additional reason to use medical marijuana with a doctor's care.

### **Eating Disorders**

Eating disorders are very common among the elderly. Nearly [80 percent of deaths](#) that occur due to anorexia occur among the elderly.

As seniors age, they may lose the desire to eat, often due to body image issues or psychological reasons beyond their control. Poor eating, amidst other issues like bone loss and heart problems, creates a number of chronic issues. Medical marijuana may increase their appetite and help seniors gain more healthy weight. This happens because when the endocannabinoid system is underutilized or impaired (such as in anorexic or bulimic patients), triggering the endocannabinoid system can make food a “reward” to the brain again.

## **Glaucoma**

Glaucoma occurs when a buildup of fluid damages the nerves in an eyeball and is the [leading cause of blindness](#) for people over the age of 60. This disease causes increased pressure in the eyes as the amount of fluid increases, which affects eyesight.

Doctors prescribe glaucoma eye drops that help relieve the pressure in the eyes and [marijuana can help relieve pressure](#) for hours at a time. According to [a website dedicated to Oregon eye doctors](#), a patient with glaucoma needs to relieve pressure in the eyes throughout the entire day to combat glaucoma, which can be done by applying multiple eye drops a day. Alternatively, marijuana may provide a cost-effective solution with fewer applications per day and may be preferred by the patient to eye drops.

## **Sleep Issues & Insomnia**

Some seniors have found medical marijuana to be a viable alternative for sleeping pills, which should not be taken for long periods of time. Much of the evidence that medical marijuana helps with sleep issues seem to be anecdotal and varies from person to person.

## Part Four: Common Methods of Marijuana Consumption

*Disclaimer: The following list of ways to consume or use marijuana is provided for educational purposes and discussion. It should not be construed as a recommendation in any way.*

**Inhaled:** Smoking marijuana provides the most instant result when it comes to extracting the medical benefits from the plant, but may have it's own medical risks to consider (see Section Five). There are several ways to smoke marijuana, including through a smaller handheld pipe or device, a water bong (a pipe with a long neck), or a joint (using rolling papers). Smoking is typically the least expensive option.



**Consumed:** Medical marijuana can be infused into foods and drinks to help ease the process of consumption. Essentially, the THC needs to be extracted from marijuana, then mixed in with whatever food or drink desired (commonly brownies, smoothies, cookies, herbal tea, etc.).

Eating marijuana usually takes longer to take effect, and even a small increase in dosage can create a drastically more intense effect, so avoid self-dosing. There are many quality products available if the extraction step is too labor-intensive. (Forbes reports that [more \\$180 million worth of marijuana-infused foods and drinks were sold in California alone in 2016.](#))

When eaten, the THC is absorbed poorly and can take hours to be fully absorbed. Once it is absorbed, it is processed by the liver, which produces a second psychoactive compound (a substance that acts on the brain and changes mood or consciousness) that affects the brain differently than THC.

However, edibles are not fully in the clear: that rainbow-hued gummy bear or little chocolate square could contain 10 milligrams of THC, plus CBD. That's three to four times the amount experts recommend for older adults. "Edibles take from 30 minutes to four hours to take effect. It's easy to eat more because you aren't feeling anything after a few minutes," says Danielle Fixen, an assistant professor at the University of Colorado's pharmacy school. "But then the effects last six to eight hours."

**Vaporized:** Similar to smoking, vaporizing marijuana into a mist provides quicker results. For this method, a small amount of cannabis is placed inside a machine called a "vaporizer," which turns the heated cannabis into a vapor that isn't as hot as smoke but still hot enough to extract the medical benefits. The devices used for vaporizing are expensive, making vaporizing a more expensive option, but may be preferable to the damage inhaling smoke causes the lungs.

When marijuana is inhaled, THC enters the bloodstream and goes to the brain quickly. The second psychoactive compound is produced in small amounts, and so has less effect. For this reason, the effects of inhaled marijuana fade faster than marijuana taken by mouth.

**Topical:** Topical treatments like lotions and creams are purported to help relieve maladies like muscle soreness and arthritis, but the evidence is largely anecdotal and seems to be related to continued, daily use. Since they're applied through the skin, topicals avoid the "high" often associated with cannabis. They also allow users to target one specific area of pain rather than inducing a full-body effect for one localized area of pain.

**Droplets or sprays:** Using droplets or sprays can help users better control the dosage. The treatment is placed underneath the tongue, letting the saliva and tissues absorb the THC. While not as immediate as smoking or vaporizing, using sprays is more cost-effective, especially if users need smaller doses.

**Pill form:** It's one of the least popular options, but there are suppositories and other cannabinoid medicines that are FDA-approved and help ease symptoms like nausea and vomiting.

Whatever method chosen, it's vital that patients consult a medical professional about how much, when, and how often to use it.

## Part Five: Potential Negative Side Effects Of Medical Marijuana

### Possible Lung Damage & Cancer

As with all types of smoking, marijuana consumed via a “joint” or water pipe can have long-term negative effects. The smoke itself "contains a similar range of harmful chemicals" that could lead to respiratory disease. Just as in tobacco smoke, marijuana smoke includes ammonia, hydrogen cyanide, and [formaldehyde](#). Some of these chemicals are known to cause [cancer](#). Most users smoke pot in a joint or water pipe, so they breathe the smoke and chemicals go straight into their lungs.

Currently, there are no studies on a link between smoking marijuana and [lung cancer](#), but people who smoke marijuana show signs of damage and pre-cancerous changes in their lungs, especially if they also smoke tobacco cigarettes. A study published in 2013 entitled [Cancer Causes & Control](#) found that heavy marijuana smoking may raise the risk of lung cancer.

- Marijuana can have effects beyond the lungs, including:
  - [Anxiety](#)
  - [Depression](#)
  - Tachycardia or rapid heart rate
  - Increased risk of [heart attack](#) (within the first hour after smoking)
  - [Suicidal thoughts](#) in teens
  - Trouble thinking and remembering
  - Bloodshot eyes
  - [Dry mouth](#) (“cotton mouth”)
  - Increased appetite (the "munchies")
  - Slowed coordination
  - [Cognitive motor deficits](#)

### Mental & Brain-Related Issues

Heavy and long-term marijuana smokers in studies score lower than non-users on tests of memory, attention, and learning. The more they smoked, the worse they did. However, there are no available similar tests on subjects consuming marijuana via other methods.

Several studies highlight that the effects of smoking marijuana may be even more pronounced in teenage smokers than adults because teens' brains are still developing. Again, very few studies have been conducted at the time of this publishing, on elderly patients.

Regular users who have a history of mental illness, such as schizophrenia, should beware as they are more likely to be diagnosed with such mental illness, especially when they have a family history of the condition.

Of particular concern is marijuana use among older people who combine it with other drugs—such as opioids or alcohol. Baby boomers who have had youthful experience with marijuana should not jump to using the same amount they did in their college days. The potency may be different, as well as their ability to metabolize the drug.

According to Staci Gruber, the director of the Marijuana Investigations for Neuroscientific Discovery (MIND) program at Harvard-affiliated McLean Hospital in Belmont, Massachusetts, “This is not the marijuana people smoked in dorm rooms in the 1970s,” he says. “You have to be careful. A smaller amount is going to hit you a lot harder when you're older,” he says.

Marijuana growers have for decades been cross-breeding and selecting the highest-potency plants to create a more powerful product. Levels of delta-9-tetrahydrocannabinol, or THC, in cannabis, averaged 4% in 1995 and rose to 17% percent by 2017, studies show. It hasn't stopped there. Sealed bags and rolled joints



featuring marijuana strains topping 28% THC can be purchased and concentrates with 85 to 90%.

Cannabis use and use disorders seem to co-occur commonly with several psychiatric disorders, including other substance use disorders. It is often unclear to what extent this is due to a direct cause-and-effect relationship, the chance co-occurrence of two common conditions, or the presence of risk factors common to both conditions.

These include:

- Alcohol
- Tobacco
- Opiates
- Stimulants
- Other psychoactive drugs
- Mood disorders
- Schizophrenia (nonaffective psychosis)
- Anxiety disorders
- Posttraumatic stress disorder
- Obsessive-compulsive disorder
- Attention deficit hyperactivity disorder
- Personality disorders
  - Antisocial personality disorder
  - Borderline personality disorder
  - Schizotypal personality disorder

## SUMMARY OF FINDINGS

In summary, more studies are needed but until then, marijuana use should be overseen by a medical professional and the hard conversations must be held. Marijuana has the potential, as indeed the current body of evidence suggests, to be a cost-efficient, safer alternative to many prescription drugs like opioids and antipsychotics, and with fewer severe side-effects.

Finally, states have varying laws for how much one is allowed to possess on one's person at one time, how much one is allowed to personally grow, and what conditions are recognized as being helped by medical marijuana. To find out more information on a state's laws on medical marijuana, visit the National Conference of State Legislature website.

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