

## Medical Cannabis

**Medical cannabis** refers to preparations of the cannabis plant that patients use to treat medical conditions.

The cannabis plant has been used for medicinal purposes for thousands of years by many civilizations. As of January 2020, 33 states and the District of Columbia had put laws into place so physicians can certify the use of "medical marijuana," or medical cannabis, for debilitating medical conditions—although cannabis remains illegal federally. After obtaining a certification, patients may buy medical cannabis in special stores called **dispensaries**. Although this cannabis is not different from the cannabis that was available before medical marijuana laws, cannabis sold in dispensaries is subject to various state safety regulations and taxes.

### Is There Scientific Evidence Supporting Use of Medical Cannabis?

Many physicians debate the strength of the evidence supporting the benefits of medical cannabis and cannabinoids. Cannabinoids are chemicals like **tetrahydrocannabinol (THC)** and **cannabidiol (CBD)** found in the cannabis plant. Beyond conditions for which cannabinoids are approved by the US Food and Drug Administration (FDA), such as chemotherapy-induced nausea and vomiting, appetite stimulation in wasting conditions associated with HIV and other diseases, and pediatric epilepsies, there is an increasing body of evidence suggesting that cannabis and cannabinoids are effective for managing chronic pain and muscle spasticity resulting from multiple sclerosis. It is important to note that the majority of the evidence comes from studies of the 3 FDA-approved cannabinoids, which are very different from cannabis obtained from dispensaries, calling into question whether these findings extend to medical cannabis. Medical cannabis may ultimately prove to be effective in treating many other medical conditions, including posttraumatic stress disorder and Tourette syndrome, but as yet, there is little evidence to show that this is the case.

### Risks of Medical Cannabis

There are risks involved with both short-term and long-term cannabis use. Using cannabis in the short term may result in problems with learning, memory, attention, judgment, and coordination, while long-term use is associated with an increased risk of psychiatric illness and addiction and worse outcomes in pregnancy. There are other possible side effects as well, including dizziness, nausea, vomiting, sedation, confusion, disorientation, and hallucinations.

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### Medical cannabis

Cannabinoids are the active chemicals in cannabis or marijuana and include tetrahydrocannabinol (THC) and cannabidiol (CBD). Only THC causes intoxicating effects.

Most states have legalized cannabis use for medical conditions, and some states have legalized cannabis use for adult recreation. However, the federal government considers cannabis use to be illegal.

Three cannabinoids are FDA-approved for the treatment of

- Some pediatric epilepsies
- Chemotherapy-induced nausea and vomiting
- Wasting conditions like HIV

Increasing evidence shows that cannabinoids may be an effective treatment for other conditions including chronic pain and spasticity associated with multiple sclerosis.

Adverse effects of cannabinoid use may include


- Impairment of memory, judgment, and motor skills
- Long-term psychiatric conditions
- Addiction
- Dizziness
- Nausea and vomiting
- Sedation
- Confusion and disorientation
- Hallucinations

### When Should Medical Cannabis Be Used?

The scientific evidence suggests that medical cannabis is neither a first- nor second-line treatment for any medical condition. However, if a patient has tried many medications or procedures to treat a medical condition and none has worked, it is reasonable to try medical cannabis after a conversation between the patient and their clinician about its potential risks and benefits. Whenever possible, the medical cannabis certification and associated follow-up should be handled by the clinician treating the medical condition and not a clinician who only provides certificates for medical cannabis use.

### FOR MORE INFORMATION

National Center for Complementary and Integrative Health  
[nccih.nih.gov/health/marijuana-cannabinoids](https://nccih.nih.gov/health/marijuana-cannabinoids)

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