

# The Ultimate Guide to CBD Hemp Oil for Dogs

by Amber King, iHeartDogs.com, March 2, 2018

## Introduction to CBD Hemp Oil for Dogs

Cannabidiol (CBD) is a compound found in the cannabis plant. While marijuana may be the most well-known form of cannabis, CBD oil is derived from the drug's safer and more medicinal cousin—hemp. People have been using hemp for medicinal purposes for nearly 1,000 years, and the world of holistic veterinary science is embracing CBD oil for its healing properties. Evidence shows it's a natural and effective treatment for a growing list of medical and behavioral issues in dogs.



There are over 60 chemicals found in the cannabis plant, and they're all called cannabinoids. Out of those 60, there are two main types: cannabidiol (CBD) and tetrahydrocannabinol (THC). Most people recognize THC as the psychoactive substance in marijuana that makes you high, but CBD is not as familiar. As a therapeutic cannabinoid, isolated CBD oil is safe and non-psychoactive. It stimulates the body's endocannabinoid system to promote overall healing and wellness.

The endocannabinoid system is an interconnected chain of receptors found in the brain, nervous system, glands, and organs. It's the body's command center for controlling health and healing, and its main job is to maintain balance within the body. All mammals—humans and dogs included—rely on the endocannabinoid system to regulate immune response. CBD oil interacts with receptors to act as a natural neuroprotective agent with multiple health benefits. CBD oil opens up two-way communication between endocannabinoid receptors to allow the body to either increase or decrease the immune response as needed. CBD oil is the natural way of regulating the system to maintain the perfect balance.

## **For What Reasons Are Dog Owners Using CBD Oil?**

A few internet searches will review dog owners are using CBD for a plethora of reasons, some of which include:

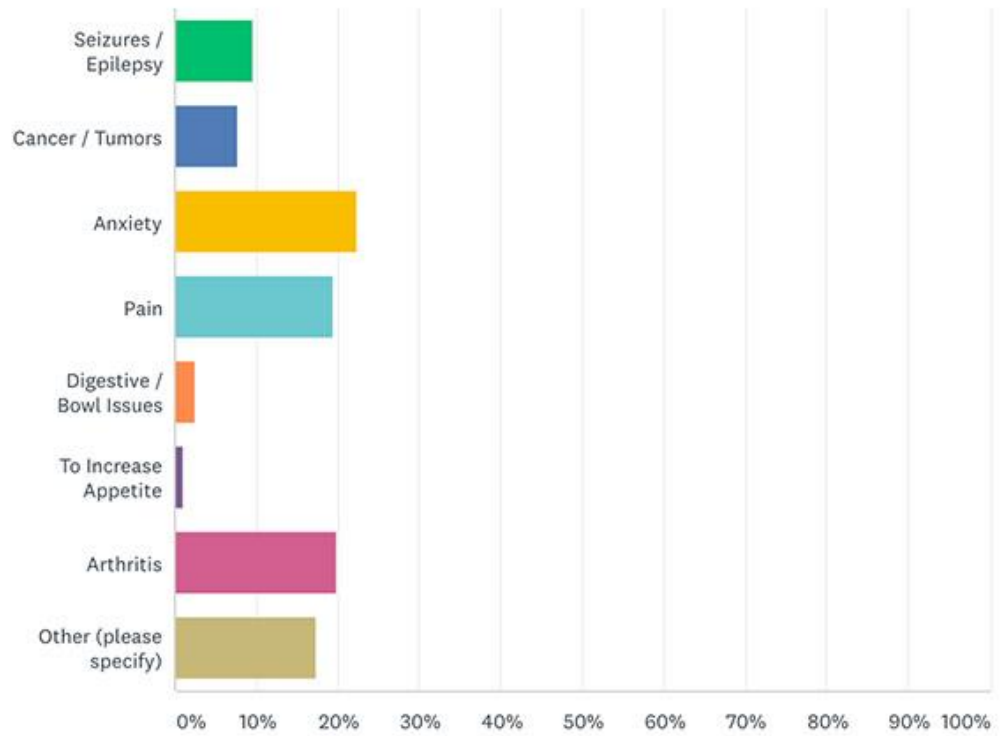
- Joint pain and inflammation, especially in aging dogs
- Lack of appetite
- Separation anxiety
- Excessive barking
- Nausea from car rides
- Stressful car rides or trips to the vet or groomer
- Muscle spasms or seizures
- Pain or nausea from cancer or cancer treatment
- Aid in recovery from surgery or illness
- Pacing or inability to relax
- Fear of thunderstorms, fireworks or other loud noises
- Aggression toward other dogs
- Constant itching from allergies or other causes
- 

In an effort to understand the most common reasons pet owners gave CBD to their dogs, and whether the product was perceived to be working, we set out to survey our readers who had claimed to use it.

A survey was conducted with iHeartDogs readers in February of 2018. A total of 196 readers completed the survey who had recently given CBD hemp oil to their dogs for various reasons.

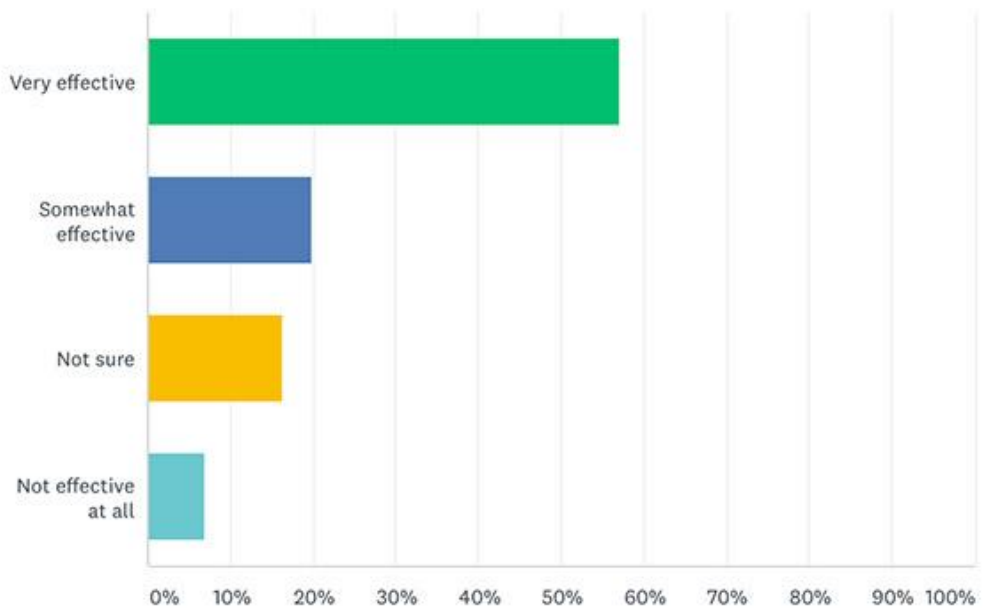
The following graphs represent their responses.

**Question: For what purpose did you give CBD oil to your dog?**



| ANSWER CHOICES          | RESPONSES                        |
|-------------------------|----------------------------------|
| Seizures / Epilepsy     | 9.69%                            |
| Cancer / Tumors         | 7.65%                            |
| Anxiety                 | 22.45%                           |
| Pain                    | 19.39%                           |
| Digestive / Bowl Issues | 2.55%                            |
| To Increase Appetite    | 1.02%                            |
| Arthritis               | 19.90%                           |
| Other (please specify)  | <a href="#">Responses</a> 17.35% |

**Question: How effective do you feel CBD oil was for your dog's condition?**



| ANSWER CHOICES         | RESPONSES |
|------------------------|-----------|
| ▼ Very effective       | 57.07%    |
| ▼ Somewhat effective   | 19.90%    |
| ▼ Not sure             | 16.23%    |
| ▼ Not effective at all | 6.81%     |

Let's dive into the most common reasons given, and how CBD may be able to help.

### **CBD Oil for Joint Pain**

PetCareRx reports 20% of all dogs will suffer from the effects of either developmental or degenerative joint pain sometime in their lives.<sup>11</sup> Whether the main cause is due to genetics or age, joint pain always reduces a dog's quality of life. It can start as mild discomfort, but it can eventually turn into chronic pain that stops them from doing the activities they love.



Conventional treatment options for joint pain include weight management, exercise, surgery, steroid injections, and pain medications. Those paths, however, aren't right for every dog. Holistic vets often recommend CBD oil for a safer and more affordable alternative. Research shows CBD oil has anti-inflammatory properties that target painful joints. It isn't a cure for arthritis, but it soothes inflammation and reduces pain. With no pain, dogs are free to run, jump, fetch, and play without joint disease holding them back.

### **CBD Oil for Pain**

Arthritis isn't the only kind of pain CBD oil is known to relieve. With endocannabinoid receptors located throughout the body, the effects of CBD oil target different areas experiencing abnormal inflammation and nerve-related pain. Dogs diagnosed with acute pancreatitis, for example, experience sudden and debilitating abdominal pain usually accompanied with vomiting and lack of appetite. It's caused by inflammation in the pancreas that leads digestive enzymes to become active too early in the digestive process. CBD oil targets the pancreas to bring much-needed relief. It invokes the immune system to start the appropriate response to bring the body back into balance.





In addition to pain caused by pancreatitis, studies have also been done on the effectiveness of CBD oil in decreasing the influence of oxidated stress caused by free radicals. Oxidated stress leads to premature aging and all the bodily aches and pains that come with it. Dog owners also choose to take advantage of the general healing properties of CBD oil by administering it after an injury, illness, or surgery. It serves as a general pain reliever to help dogs recover faster.

### **CBD Oil for Anxiety**

Most scientific studies testing CBD oil as a treatment for anxiety focus on human use, but the similarities between the human and canine endocannabinoid systems suggest dogs benefit from CBD oil in the same way humans do. Holistic vets often recommend CBD oil for dogs that suffer with separation anxiety, phobias, and general stress. It works to ease anxiety and encourage calmness via communication between endocannabinoid receptors. When the CBD oil enters the body, it activates the receptors to initiate better chemical transmissions. CBD oil triggers a response that makes it easier for the body to release tension and calm down.



CBD oil works well with situational anxiety where a dog owner knows in advance a specific situation is going to cause their dog stress. A trip to the vet's office, a thunder storm, having guests visit the home, and being left alone during the day are all common situations that can cause anxious dogs to exhibit behavioral problems. Administering CBD oil in advance helps dogs better cope with stressful emotions. Many dog owners prefer CBD oil to anti-anxiety drugs that have unwanted side effects.

### **CBD Oil for Seizures**

An estimated 5% of dogs suffer from seizures, and a cocktail of anti-seizure medication is usually the go-to treatment. According to Consumer Reports, however, drugs meant to control electricity in the brain and prevent symptoms of epilepsy fail in about one third of human patients. Statistics about dogs with epilepsy aren't as available, but documentation from dog owners and veterinarians indicate a similar pattern of failed medication exists.



When conventional medication doesn't work and the risk of drug side effects is too great, many people turn to CBD oil to treat epilepsy and stave off seizures. Scientific studies support evidence that CBD has an effect on drug-resistant epilepsy in humans, and testimonies from dog owners suggest the same is true for dogs. Hemp derived CBD oil is known to have properties that block epileptic symptoms from taking over the brain. Dogs that take CBD oil for epilepsy often experience fewer seizures.

#### **CBD Oil for Side Effects of Cancer Treatment**

There are still a lot of questions about CBD oil potentially treating and preventing cancer. In most known cases, dogs that regularly take CBD oil do so in support of conventionally recommended chemotherapy and radiation. The role of CBD oil is to help induce appetite for much-needed strength and nutrition and to keep the dog as pain-free as possible. Future studies are expected to delve deeper into how CBD may support treatment of a dog affected by cancer.





### **CBD Oil for Allergies**

Allergies are a body's reaction to a foreign substance. Whether it's pollen, mold, or a type of food, the immune system mistakenly identifies that particular substance as threatening. The immune system attempts to protect the body by signaling mast cells to release chemicals. One of those chemicals is called histamine. Histamine causes a number of allergy symptoms including itchiness, hives, swelling, and nasal congestion.

Recent studies show along with general anti-inflammatory properties, CBD oil may also stop the immune system from releasing histamine. A study published in *Pulmonary Pharmacology & Therapeutics* looked at the validity of using CBD oil to reduce the effects of a common histamine trigger—raw egg whites. The study was done on guinea pigs and found CBD reduced the animals' airway obstruction that resulted from released histamine. Combined with the capability of reducing inflammation that causes itchiness, evidence suggests CBD oil is a viable way to treat allergies in both humans and dogs.

### **Will CBD Oil Make My Dog High?**

The short answer to the question on everyone's mind is, no, CBD oil cannot and never will make you or your dog high. The reason why goes back to the two types of cannabinoids found in cannabis—CBD and THC. Marijuana contains the mind-altering THC that when smoked or ingested leads to a type of euphoric or hazy mindset. Hemp, however, contains only insignificant traces of THC. While the average strain of marijuana contains between 15% and 30% THC, hemp-derived CBD oil contains less than .3%. It's possible to purchase high-quality CBD oil with zero traces of THC, but as long as the percentage is less than .3, it's impossible to make your dog high. For maximum safety, however, we strongly recommend purchasing a CBD product where 100% of the THC has been removed (these products are a lot more rare).



### **Is CBD Oil Legal?**

Yes, CBD oil derived from hemp is legal in all 50 states.<sup>2</sup> CBD oil from hemp is a completely different product than THC-rich marijuana, but the complex legality of cannabis in general is an obstacle deterring consumers from taking advantage of CBD oil. Only half of states have legalized marijuana for medical purposes, but CBD is legal no matter what state you live in.





The laws regarding legality, however, are confusing. The problem comes in when considering the fact CBD oil doesn't always come from hemp. Marijuana also contains CBD, and even in its isolated form, it's still considered a marijuana product and therefore illegal in many states. This difference has caused serious confusion among both consumers and manufacturers of CBD from hemp.

The important thing to remember is that as long as the CBD oil comes from hemp, and not marijuana, it is completely legal to both purchase and possess in every state.

### **What Scientific Studies Have Been Done on CBD Oil?**

While research on CBD oil is still new, there are several human studies confirming it to be a viable treatment method for a number of medical conditions. The research is based off the human endocannabinoid system, which scientists and medical professionals already know to be the same for all mammals. This information suggests the studies done on humans can also be translated to use in dogs. Confirmation will come as veterinarians push for more studies done on using CBD oil for veterinary purposes. Veterinary researchers are optimistic that because CBD oil is being proven to be an effective treatment for humans, future studies on dogs will show similar results.

### ***Epilepsy in Dogs: Reduction in Seizures***

A group of researchers from Colorado State University are focusing on learning more about CBD oil as a viable treatment for epilepsy in dogs. For 24 weeks, dogs that experience at least two seizures a month will receive either CBD oil treatment or a placebo. Preliminary results released in July of 2018 have shown that a surprising 89% of the dogs studied showed a drop in regular seizures. The study is a double blind, placebo-controlled test.

### ***CSU Study on CBD Delivery Method***

In 2016, Colorado State University completed work on a pharmacokinetic study of CBD in healthy dogs that was the first to demonstrate the compound was measurable in the blood. The study suggests that CBD usage in dogs is safe enough to warrant studies in a clinical population.

For the study, 30 healthy dogs were given 2 different dosages CBD in 3 different methods of delivery: capsules, oil tincture, and a cream applied on the skin. The results showed that CBD given orally in an oil tincture was most absorbed and bioavailable to the body. (This is why we always recommend buying CBD in a tincture instead of CBD treats).

### ***Osteoarthritis in Dogs***

Veterinary researchers from Colorado State University Teaching Hospital recently completed clinical trials testing the efficacy of CBD oil as a treatment for dogs suffering from osteoarthritis. All participating dogs showed visible lameness due to arthritis in one or more of their joints at the beginning of the trial. The study went on for 12 weeks, and results are currently pending.

### ***CBD in Treatment-Resistant Epilepsy***

Scientists surveyed a group of parents who were interested in sharing information about their children's experiences with treatment-resistant epilepsy. Nineteen individuals who used cannabidiol-enriched cannabis to treat their children participated. It was found that 84% of the children experienced fewer seizures after taking CBD.

### ***CBD Helps Mice with Acute Pancreatitis***

Mice showed evidence that cannabidiol treatment successfully reduces enzyme activity within the pancreas organ tissue. CBD showed anti-inflammatory properties that lead to "improved pathological changes."

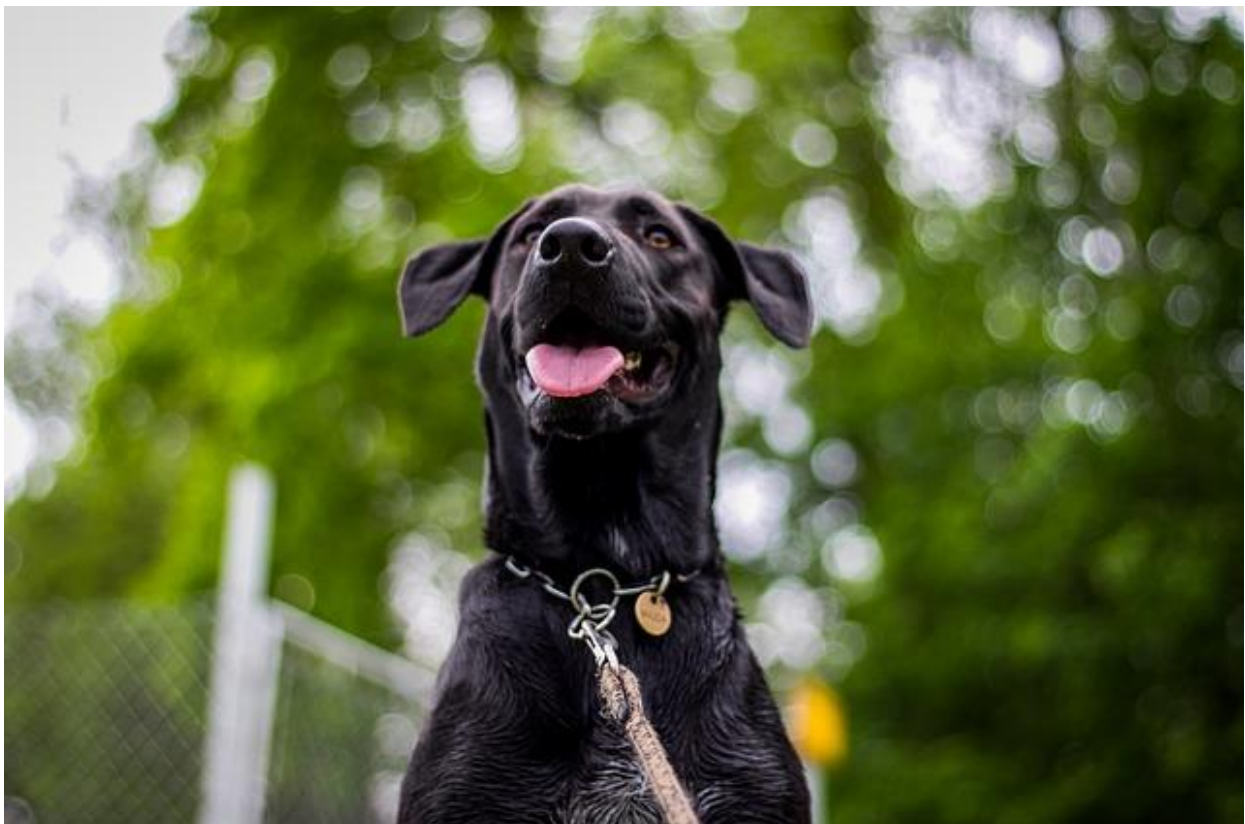
### ***Generalized Social Anxiety Disorder***

Researchers administered doses of either CBD oil or a placebo drug to people with generalized social anxiety disorder to determine possible anxiolytic properties of CBD. They measured cerebral blood flow before and after treatment and found CBD oil to be associated with decreased subjective anxiety.

### **What Side Effects or Risks Are Involved with Giving CBD Oil to My Dog?**

Initial studies show CBD oil is safe for dogs, but veterinary professionals always recommend to start with small doses. There's still a lot of information researchers don't know, and it's best to introduce CBD oil slowly while being alert for possible side effects. Potential side effects found in humans and dogs include:

- Dry mouth
- Tremors
- Lightheadedness
- Low blood sugar
- Drowsiness
- Diarrhea





CBD oil may also interact with certain medications as it affects enzymes in the liver. In some cases, this action actually has a positive side effect and helps make the medication more effective. As always, speak with a knowledgeable veterinarian about proper dosing and possible side effects before administering CBD oil to your dog.

### **What Dosage of CBD Oil Should I Give My Dog?**

Information on proper dosing of CBD oil is still in the works, but veterinarians recommend starting low and slow to gauge how an individual dog will respond. As a guideline, the current suggested dosing is 1 mg – 5 mg per 10 pounds of the dog's body weight for the first week.<sup>2</sup> If the dog has never taken CBD oil or anything similar in the past, it's best to start at the lower end of that range. If there are no negative side effects after the first week, the same dosing can be increased to twice a day.

- 10 pounds: 1 mg – 5 mg
- 20 pounds: 2 mg – 10 mg
- 30 pounds: 3 mg – 15 mg
- 40 pounds: 4 mg – 20 mg
- 50 pounds: 5 mg – 25 mg
- 60 pounds: 6 mg – 30 mg
- 70 pounds: 7 mg – 35 mg
- 80 pounds: 8 mg – 40 mg
- 90 pounds: 9 mg – 45 mg

On average, it takes about 30 minutes to notice therapeutic effects. The key to dosing is finding a balance where the dog reaps all the benefits without experiencing side effects. If the dog starts to show signs of a negative reaction, reduce the dosage.

It might also be necessary to increase the dosage over time to maintain the same positive effects. If changes to the dosage need to happen, make them slow and gradual to give the dog's body time to adjust. Remember, there is no toxicity related to CBD, and it's impossible to overdose. Talk to a vet about what works best for your dog and monitor them after each dose.

### **How Do I Choose a Quality CBD Hemp Oil Product for Dogs?**

Choosing a high-quality CBD product can be confusing since the market is currently exploding and your options appear endless. The iHeartDogs team put together a buying guide for CBD, containing 8 things to watch out for before making a purchase.

### **Which CBD Product Does iHeartDogs Recommend?**

The iHeartDogs team was consulted on the creation of the Cannanine brand of CBD Oil. In addition to containing nano-sized emulsion (best for absorption) the formula is 100% THC free, which is relatively rare but very important for animal use.

#### Sources

1. *AVMA: Veterinary Marijuana?* [<https://www.avma.org/news/javmanews/pages/130615a.aspx>]

2. *All the Best Pet Care: What Hemp CBD Can Do For Your Dog Or Cat*

[<https://www.allthebestpetcare.com/information-library/what-hemp-cbd-can-do-for-your-dog-or-cat/>]

3. [Consumer Reports: Can Cannabis Oil Really Treat Seizures?](https://www.consumerreports.org/seizures/cannabis-oil-cbd-treat-seizures/)  
[<https://www.consumerreports.org/seizures/cannabis-oil-cbd-treat-seizures/>]
4. [Dogs Naturally Magazine: 10 Things You Didn't Know About CBD Oil for Dogs](http://www.dogsnaturallymagazine.com/cbd-oil-for-dogs/)  
[<http://www.dogsnaturallymagazine.com/cbd-oil-for-dogs/>]
5. [Dog's Naturally Magazine: Cannabis For Your Dog: How It Can Help](http://www.dogsnaturallymagazine.com/cannabis-dog-can-help/)  
[<http://www.dogsnaturallymagazine.com/cannabis-dog-can-help/>]
6. [Healing Histamine: Cannabidiol for Mast Cell Activation and Histamine Intolerance](https://healinghistamine.com/cannabidiol-for-mast-cell-activation-and-histamine-intolerance/)  
[<https://healinghistamine.com/cannabidiol-for-mast-cell-activation-and-histamine-intolerance/>]
7. [Mayo Clinic: Allergies](https://www.mayoclinic.org/diseases-conditions/allergies/symptoms-causes/syc-20351497) [<https://www.mayoclinic.org/diseases-conditions/allergies/symptoms-causes/syc-20351497>]
8. [Medical Hemp: Cannabinoids & CBD](http://medicalhemp.com/cannabidiol/) [<http://medicalhemp.com/cannabidiol/>]
9. [Ministry of Hemp: Hemp vs Marijuana](https://ministryofhemp.com/hemp/not-marijuana/) [<https://ministryofhemp.com/hemp/not-marijuana/>]
10. [Modern Dog Magazine: A Natural Solution to Separation Anxiety](https://moderndogmagazine.com/articles/natural-solution-separation-anxiety/98854)  
[<https://moderndogmagazine.com/articles/natural-solution-separation-anxiety/98854>]
11. [PetCareRx: 8 Ways to Treat Dog Joint Pain](https://www.petcarerx.com/article/8-ways-to-treat-dog-joint-pain/1403) [<https://www.petcarerx.com/article/8-ways-to-treat-dog-joint-pain/1403>]
12. [Pet MD: Cannabis Oil for Dogs: Everything You Need to Know](https://www.petmd.com/dog/general-health/cannabis-oil-dogs-everything-you-need-know)  
[<https://www.petmd.com/dog/general-health/cannabis-oil-dogs-everything-you-need-know>]
13. [Pet Releaf Hemp Health: How CBD Hemp Oil Can Help Your Pet's Anxiety](https://www.petleaf.com/cbd/pet-anxiety-prevention)  
[<https://www.petleaf.com/cbd/pet-anxiety-prevention>]
14. [Preventative Vet: What to Know if You Want to Give Your Dog CBD](https://www.preventivevet.com/dogs/what-to-know-if-you-want-to-give-your-dog-cbd-cannabidiol)  
[<https://www.preventivevet.com/dogs/what-to-know-if-you-want-to-give-your-dog-cbd-cannabidiol>]
15. [WellSpring: Arthritis in Dogs: How CBD Oil Can Help](https://www.wellspringcbd.com/arthritis-dogs-cbd-oil-can-help/)  
[<https://www.wellspringcbd.com/arthritis-dogs-cbd-oil-can-help/>]
16. [Westword: Colorado State University Leading the Way in Veterinary CBD Treatment](http://www.westword.com/marijuana/colorado-state-university-leading-the-way-in-veterinary-cbd-treatment-9573197)  
[<http://www.westword.com/marijuana/colorado-state-university-leading-the-way-in-veterinary-cbd-treatment-9573197>]
17. [Colorado State University Veterinary Teaching Hospital: Efficacy of Cannabidiol for the Treatment of Epilepsy in Dogs](https://cvmb.ssource.colostate.edu/preliminary-data-from-cbd-clinical-trials-promising/) [<https://cvmb.ssource.colostate.edu/preliminary-data-from-cbd-clinical-trials-promising/>]
18. [Colorado State University Veterinary Teaching Hospital: Efficacy of Cannabidiol for the Treatment of Osteoarthritis in Dogs](http://csu-cvmb.colostate.edu/vth/veterinarians/clinical-trials/Pages/efficacy-of-cannabidiol-for-the-treatment-of-osteoarthritis-in-dogs.aspx) [<http://csu-cvmb.colostate.edu/vth/veterinarians/clinical-trials/Pages/efficacy-of-cannabidiol-for-the-treatment-of-osteoarthritis-in-dogs.aspx>]
19. [National Center for Biotechnology Information: Anti-Inflammatory Role of Cannabidiol in Acute Pancreatitis in Mice](https://www.ncbi.nlm.nih.gov/pubmed/22850623) [<https://www.ncbi.nlm.nih.gov/pubmed/22850623>]
20. [National Center for Biotechnology Information: Cannabidiol-Enriched Cannabis Use in Pediatric Treatment-Resistant Epilepsy](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4157067/)  
[<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4157067/>]
21. [National Center for Biotechnology Information: Neural Basis of Anxiolytic Effects of CBD in Generalized Social Anxiety Disorder](https://www.ncbi.nlm.nih.gov/pubmed/20829306/) [<https://www.ncbi.nlm.nih.gov/pubmed/20829306/>]
22. [Molecular Pharmacology: Cannabidiol-Induced Apoptosis in Human Leukemia Cells](http://molpharm.aspetjournals.org/content/70/3/897.full)  
[<http://molpharm.aspetjournals.org/content/70/3/897.full>]
23. [Pulmonary Pharmacology & therapeutics: Effects of CBD on Antigen-Induced Contraction of Smooth Muscle in Guinea-Pig](https://www.sciencedirect.com/science/article/pii/S109455391300059X)  
[<https://www.sciencedirect.com/science/article/pii/S109455391300059X>]
24. [Pharmacokinetics of cannabidiol administered by 3 delivery methods at 2 different dosages to healthy dogs.](https://www.ncbi.nlm.nih.gov/pubmed/30026641) [<https://www.ncbi.nlm.nih.gov/pubmed/30026641>]