

The use of cannabidiol-derived products has been rapidly increasing in the 2010s. CBD is an abbreviation for cannabidiol, which is extracted from *cannabis*. CBD lacks the psychogenic effects typical of cannabis while maintaining various positive medicinal properties. It is touted for numerous health benefits, such as relieving pain, reducing anxiety, and improving sleep.

Cannabinoids are chemicals unique to the *Cannabis* sp. More than 100 unique cannabinoids occur exclusively in *Cannabis* sp. plants. The most well-known of these is THC, the compound that causes the hallucinogenic effects.

But how does it affect our pets?

What Medical Conditions are Treated?

The potential therapeutic indications for CBD in people are many and increasing. Currently, cannabinoid drugs, including CBD, have been approved in the United States to treat anorexia nervosa, lack of appetite, and epilepsy in humans.

CBD has been studied in people mostly as an anticonvulsive therapy in seizure disorders, and has been shown to lessen neuropathic pain. It also has anti-nausea effects and has shown similar effects in rats and ferrets when using a behavioral surrogate of nausea. Anecdotally, it helps relieve pain, sleeplessness and anxiety.

What Medical Conditions in Dogs and/or Cats Might Benefit from CBD?

In the last several years, several studies examining CBD in dogs have been published. These include a study examining the safety and efficacy of a CBD product for managing chronic osteoarthritis and a study examining the ability of CBD to decrease seizures in epileptic dogs that were already receiving anticonvulsant medications.

Dogs with arthritis appeared to benefit from the CBD similar to the effect observed with nonsteroidal anti-inflammatory drugs. Dogs showed increased activity and decreased pain. However, dogs with epilepsy did not have a greater reduction in seizure frequency than dogs given a placebo.

No studies have examined whether CBD could help with anorexia or nausea experienced by dogs undergoing chemotherapy.

The field of medical use of CBD is burgeoning and will evolve over the coming years. No studies have examined CBD in cats.

What are the Potential Negative Effects of CBD Products?

CBD appears to be extremely safe in dogs and cats as seen by the LD50. LD stands for lethal dose, and LD50 is the amount of a material, given all at once, that causes the death of 50% of a group of test animals. The LD50 is one way to measure a material's short-term poisoning potential.

An LD50 for the THC in cannabis cannot be established in dogs, and a dose that exceeds by 1000 the dose necessary for hallucinogenic effects is not lethal in them. Adverse events do occur (lack of muscle coordination is particularly unique in dogs) but these do not necessarily harm to the patient. Lethal events are more likely to involve eating chocolate or significantly concentrated cannabidiol products. Note, however, that synthetic cannabinoid products (marketed as substances of abuse) are not included here.

CBD products are considered extremely safe in both humans and experimental animals.

A number of businesses market *CBD* pet products. As with any herbal product or dietary supplement, these products are not approved by the FDA; no one regulates any supplements, not vitamins nor nutritional products. Because premarket assessment is not required in these products, neither quality, safety, nor effectiveness of the products can be assured. For example, analysis of several products by the FDA in recent years revealed that the CBD content varied and in many products was either absent or nearly absent; this is the case with many supplements. This variability in product content will complicate interpretation of clinical trials in animals and their use in other products.

In the absence of scientific support of dosing regimens, we have no basis for determining a dose for the various CBD preparations in animals. The best dose must be found by trial and error; interested consumers should discuss a beginning dose with the manufacturer before giving any to their pet.

In several studies, the only obvious biochemical change in dogs was an increase in alkaline phosphatase (ALP), a liver enzyme. However, no clinical consequences were observed with this increase.

What are the Laws Governing CBD Products in the U.S?

As cannabis has become legalized by many states, the DEA keeps reminding us that federally, cannabis is still a schedule 1 controlled substance. However, with the approval of Epidiolex and the passing of the 2018 Farm Bill, this has become an increasing debatable statement.

A [map of the U.S.](#) that identifies the states in which marijuana is legal is available. However, it's always best for you to check the laws in a specific state.

The FDA clarified its new position on CBD products in the [Agriculture Improvement Act of 2018](#) (also known as the 2018 Farm Bill): it declassifies **hemp** as a Schedule I controlled substance under federal law (state laws may differ and still apply), and legalizes hemp cultivation; however, they have *not* declassified CBD from cannabis, only from hemp. Hemp and cannabis are two varieties of the cannabis plant. Hemp is any part or derivative of the *Cannabis sativa L.* plant that contains less than 0.3% THC by

weight. The bottom line is that while hemp products with less than 0.3% THC are declassified, CBD products from cannabis, which has too much THC to be declassified, are not. It is also illegal to add CBD to the food supply and dietary supplements.

Although hemp is no longer an illegal substance under federal law, the FDA now regulates products made with it: any cannabis product marketed with a claim of therapeutic benefit, even if it is hemp-derived, must be approved by the FDA before it can be sold. All cannabis and cannabis-derived products remain subject to the same rules as any other FDA-regulated products.

In November 2018, a CBD-based human drug called Epidiolex, provided by GW Pharmaceuticals, came on the market as a prescription drug for people. It treats two specific forms of epilepsy. Whether or not it will help animals is unknown at this point.

CBD-derived pet products are available over the counter. If you wish to see if it helps your pet, find the website of a company that provides a product you're interested in and read about it and where to get it. If you have any questions after reading their basic information, contact the company and ask directly.

What can U.S. veterinarians legally do about prescribing, recommending or administering CBD products?

Your veterinarian cannot prescribe CBD products because no product, other than Epidiolex, has been approved and licensed by the FDA. Theoretically, your veterinarian could prescribe Epidiolex to your pet, however, this drug will likely be cost-prohibitive for most consumers (approximately \$100/day). Your veterinarian cannot suggest obtaining CBD as a potential treatment for your pet's condition. If you ask your veterinarian about CBD for your pet's condition, the veterinarian can discuss the potential benefits and harms, but cannot recommend any products.

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