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## Using Cannabis and Cannabidiol (CBD Oil) in Dog Training and Behavior Work

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Helen Prinold

The continuing legalization of cannabis has led to a growing number of CBD oil products available for sale in the pet market, where sales have quadrupled since 2017. Dog owners are increasingly using these products for their dogs, and may be seeking advice on their use from their trainer or behavior consultant. Despite the wild claims, there is limited science to support the use of these products, and a number of cautions and issues that trainers and behaviour specialists may want to be aware of when working with clients.

### Mellow dog or dangerous overdose?

As a result of legalization of cannabis in several states and across Canada, trainers and behaviorists are likely increasingly faced with questions from clients about whether cannabis might be helpful for their dog. After all, the owner who feels their dog is “hyper” or “anxious” might think it is good common sense to “mellow their dog out” with a bit of pot. This may be why the survey firm Brightfield Group states that [sales of cannabis-derived products for pets quadrupled from 2017 to 2018](#) — a trend they predict will continue over the next couple of years.

Unfortunately, dogs react badly to the THC, the psychoactive ingredient in cannabis/marijuana (Brutlag and Hommerding, 2018). THC is toxic to dogs — and dogs have been poisoned by exposure to edibles. In some of these cases, there were additional toxic ingredients involved — such as chocolate, raisins, or xylitol — the combination of which resulted in a poorer outcome. Cases of THC toxicity have been reported by both the American and Canadian Veterinary Medical Associations (personal communications), as well as to the Animal Poison Control Center of the American Society for the Prevention of Cruelty to Animals (Means and Wismer, 2018).

This rise is attributed both to the increased legalization of marijuana but also to stronger THC concentrations. As manufacturers moved from cannabis production to producing sensamilla (unpollinated flowering female tops of the cannabis plant), THC concentrations in a typical sample have risen from 1.5% in the 1960s to 24% by 2014 (Brutlag and Hommerding, 2018). Cats do not appear to be as susceptible to THC overdoses — in fact an early study showed THC was an appropriate treatment for epilepsy in cats (Wade et al., 1973).

Typical signs of a dog with cannabis toxicosis are a depressed and uncoordinated dog “seeming drunk,” and often dribbling urine (Means and Wismer, 2018). A limited number of deaths have also been reported due to cannabis toxicity and associated complications, such as choking on vomit (Brutlag and Hommerding, 2018). So it is vital we encourage clients to avoid giving THC-laden products to dogs. It’s also good practice to mention that clients should practice safe storage of their cannabis to protect their pets and avoid exposing their pets to smoke.

Despite this toxicity, clinical applications for THC in dogs will likely be investigated in the future. At the North American Veterinary Community’s Veterinary Medical Expo in 2018, veterinarian Dr. Robert Silver highlighted in his presentation that dogs might be able to habituate to THC with a dose that it titrated (built up) over time. However, it is not yet clear how to do this safely. As Dr. Silver works for Rx Vitamins in Boulder, Colorado, it is possible this is something his firm may be investigating. In the same address he encouraged the exploration of THC-containing products for cancer treatment (Silver, 2018). There are, however, some cannabis-based products that are less toxic to dogs — there are a plethora of North American manufacturers making products from hemp that are marketed as being THC-free. They only contain cannabidiol. THC and cannabidiol are the two most abundant cannabinoids (active ingredients that affect the brain) in cannabis.

### CBD for all a dog’s ills

Cannabis that has extremely low levels (less than 0.3% by dry weight) of THC is classified as hemp. At this point it appears that the most common products on the market for dogs are hemp-derived cannabidiol (CBD) oils and chews. You’ll see the contradiction, I hope: Claims that hemp-based products are “THC-free” are primarily false, as most hemp products do contain some residual THC at — hopefully — non-toxic levels.

Unfortunately, there is no research on the long-term effects of using CBD oils containing small amounts of THC in dogs. Regulations are still being developed or are just being rolled out, and in most cases the regulators can’t keep up with the wide variety of products hitting the shelves in most pet or human health-food stores.

In Canada, hemp-based products for dogs are legal and are approved for sale under the Veterinary Health Products Act *Industrial Hemp Regulations*. These products must contain less than 10 ppm THC and have a VHP notification number on the label (College of Veterinarians of Ontario, 2019). Oils derived from marijuana — not hemp — should not be used with dogs as they are illegal in the U.S. and Canada, and generally contain higher levels of THC.

Across North America, governments have no approved drugs that are legally licensed to actually treat health conditions in animals — and this includes CBD oil (American and Canadian Veterinary Medical Associations, 2018). So, to clarify, you can use CBD oils for a dog with mild non-clinical anxiety, but there are no legal and safe cannabis-containing drugs to treat serious generalized anxiety disorders as diagnosed by veterinarians.

Normally, in human and veterinary medicine, claims about drugs and health products curing cancer or other diseases must be backed up by solid research and are policed strictly. Regulations for products for dogs are somewhat less well-policed when it comes to supplements and health-maintaining products.

The most important thing to know is that there is currently no scientific evidence to support claims that CBD oils can effectively treat separation anxiety, noise phobias, cancer, or dermatitis in dogs, nor are they shown to be good “vitamins” to be used daily by our pets. Unfortunately, all of these are claims being made daily by manufacturers and industry-sponsored associations!

Without studies, for every anecdote about a pet that does well on CBD oil, it is possible to find a story of an owner who stopped

using it because “nothing changed”. And there are stories aplenty in the world of CBD oil marketing. I generally prefer not to base my recommendations to clients on such flimsy evidence.

There are two recent exceptions currently to the lack of evidence. That does not mean, however, that there should be a green light “go ahead” for us to inform our clients to use CBD oil to treat these conditions.

Gamble et al. (2018) and McGrath et al. (2019) reported using CBD successfully to reduce pain and epileptic episodes in small samples of dogs. However, both studies also reported disturbing changes in a key liver function enzyme (which indicates liver disease and dysfunction). McGrath also reported there was no difference from placebo results in their study. So, basically, CBD might have a use in controlling pain and epilepsy, but more study is needed to make sure it can be used safely.

In addition to the concerns about liver function, in the case of dogs currently on medication metabolized by the liver, CBD metabolism could potentially reduce the effectiveness of the existing medication and increase liver damage risk (Greb and Puschner, 2018). We know that CBD can also act to suppress the immune system (ibid).

Also concerning are recent reports of lab analyses in the U.S. indicating that a portion of products currently available on the market are labeled inaccurately with respect to both the identity and amount of active ingredient found within the product. The U.S. Food and Drug Administration is regularly sending warning letters to manufacturers about this. Products marketed as not having THC are also being found incorrectly labeled. This could lead to accidental poisonings in pets.

Finally, I have heard veterinarians and trainers alike suggest that recommending CBD may encourage owners to try to use cheaper and more dangerous versions containing THC, by “smoking up” their dogs, using less expensive home-grown edibles and making their own non-hemp-based CBDs. This does make sense when you consider the fairly high cost of many of these new products.

## Consulting room concerns

All of these concerns don’t mean that the next dog owner into your consulting room won’t already be giving their dog CBD oils or related products — or at least considering it.

As a result of the increase in sales of these products, I now always ask specifically in my intakes whether a client is using cannabis-based products with their dogs. Exposure to cannabis, synthetics, and CBD oil has been shown to cause increases in agitation and irritable aggression (Brutlag and Hommerdang, 2018), and I want to be as aware as possible of all of the factors that might influence the dog in front of me.

Use of these products can also reduce the effectiveness of training at times. Dog trainers with clients using CBD oils have reported that dogs have shown dry mouth and drowsiness, both of which are known CBD side effects that can interfere with training and behavior modification work (Means and Wismer, 2018).

As I always start my behaviour work by recommending a veterinary health check, I also have taken to encouraging my clients to let their veterinarians know if they are using these products, to check with the veterinarian for possible interactions if their dog is on other medications, and to ask for a blood test now (and periodically in the future) to ensure the dog’s liver function is stable.

According to the veterinarians I have spoken with about these issues, clients with dogs who present in consultations as being excessively sleepy, sensitive to light or sound, with dilated pupils and lots of salivation, irritable aggression, or agitation should be asked about possible exposure to THC in the last few days. I always start this area of questioning by asking “Is it possible that your dog might have gotten into any marijuana products — maybe a friend left some lying around?” That gives the client an opportunity to mention a possible exposure without having to feel blamed for it.

After any concerns about THC-toxicosis are dealt with, I am occasionally asked by clients whether a CBD product might help their dog. Based on all of the concerns noted above, I don’t make any blanket positive recommendations. I don’t hand out flyers, and I don’t comment on any particular products in my local market.

A veterinary regulator also recently reminded me that product recommendations always can lead to some liability for veterinarians and behavior experts. In her example, a doctor who recommended a good stiff drink of alcohol for social anxiety is not responsible for the safety or sale of alcohol, but they can be liable if the patient became an alcoholic or developed cirrhosis of the liver. I expect the same holds true if behavior consultants recommend CBD oils for anxiety and the dog develops liver disease. That alone gives me a bit of pause.

Instead of saying “go for it,” what I do is suggest to clients that there are already reasonably good, effective and well-regulated products for medical issues such as pain control, anxiety, and noise phobias that can be prescribed by a veterinarian. I suggest that if their dog is showing significant symptoms of a disorder, veterinary medications might be a better choice right now, particularly until the CBD oil market stabilizes in the next few years and the significant issues around CBD oils are resolved. I tell them my position may well change in the next few years as the science catches up to the reality of what our clients try with their dogs.

I suggest that if clients do want to go ahead and try CBD oil, they read over the version of this article I use as a client handout. I also suggest they do their own research on the product they are thinking of buying, and check if the company is willing to provide some information on the product and its ingredients on a batch-by-batch basis. I tell them they would avoid CBD in tinctures that have an alcohol base (as alcohol is also not great for dogs). After all that, I tell them that the decision is totally up to them and that I will work with them either way.

This may be a little over the top, but I find clients right now are being bombarded by well-meaning fellow pet owners and in-store marketing material. Social pressure to have tried these products is not insignificant. Most clients seem relieved to get a broader perspective and to be aware of the other issues involved. I suspect their “if it sounds too good to be true it probably is” radar has been subconsciously alerting them that there might be a problem with the glowing claims they are hearing. Sometimes the client feels comfortable enough at that point to share that they have been giving their dog some of their own CBD products. Whether the client indicates an interest or not, our dialogue has placed me beside them, as a caring partner working on their behalf who they can trust to provide thoughtful and well-curated advice. I have found my client relationships become stronger after these discussions.

Finally, I always ask clients who have decided to use CBD products to avoid using them for at least 24 hours before coming to class or doing behavior modification work. And I make sure to have water available for dogs in the consult room just in case.

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*Helen Prinold owns Dog Friendship in Ontario, Canada, where she provides puppy socialization classes, helps raise great family pets, and supports clients as they build dog sport skills. She has a behaviour consulting practice, is the weekly volunteer behaviourist at her local animal shelter, and has also run the puppy training program for a service dog charity. She holds a master's degree in animal behaviour and welfare, has a CPDT-KA certification, and is Certified Dog Behavior Consultant through IAABC. Currently, she is president of the Canadian Association of Professional Pet Dog Trainers. Helen has two dogs - a Lyme-diseased shelter rescue American Eskimo and an undersocialized YorkiePoo rescued after two years living indoors in just one room. From time to time she reminds herself that despite the high costs of working with dogs, they are still cheaper and more portable than the horses that she trained for many years.*

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