



CBD Products Have Promise for Farriers, but Buyer Beware

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Farrier Takeaways

- ▶ Hemp CBD products are now legal under federal law. Federal laws, however, do not supersede state laws in this matter. It might still be illegal in your state.
- ▶ Consumers need to be careful when selecting a CBD product because there are inconsistencies in product purity, content and dosage.
- ▶ There has been no Food and Drug Administration evaluation of whether unapproved CBD products are effective for their intended use, what the proper dosage might be or how they could interact with FDA-approved drugs.

CBD Oil Basics

Cannabidiol (CBD) is appearing in a variety of products for humans and animals, promising to relieve pain, reduce stress and anxiety, improve sleep and solve a multitude of other problems. For humans, it is commonly sold as a liquid placed under the tongue, although it also comes in oils, pills and topical creams, and edibles. But what is this purported cure-all?

Most CBD products are made from hemp, which, like marijuana, is one of the many types of cannabis plants. Plants within the cannabis genus contain naturally occurring compounds known as cannabinoids. The two that have generated the most public interest are tetrahydrocannabinol (THC), which is the psychoactive ingredient in cannabis, and cannabidiol (CBD). The amount of THC varies in cannabis plants, but marijuana typically contains about 10% or more. Hemp, on the other hand, is federally restricted to levels of 0.3% or less.

All CBD products contain CBD oil, which is extracted from the hemp plant. The most common methods of extraction use carbon dioxide, steam distillation or solvents — natural or hydrocarbon. The preferred method is carbon dioxide because it is efficient and leaves behind no neurotoxic residue — but it also involves costly machinery.¹

Louis Police, a co-founder of Dwell CBD in Brannon Crossing, Ky., notes “most people can’t afford to use a supercritical carbon dioxide extraction methodology as it is a very expensive proposition.”

Steam distillation is also safe, and has been used to extract essential oils for centuries, but it is less efficient than carbon dioxide. Solvent extraction, when done naturally, can result in a lowered

CBD Pre-Purchase Checklist

Louis Police, co-founder of Dwell CBD, advises consumers to ask these questions before purchasing CBD products:

- ▶ How has it been tested?
- ▶ Does it contain THC?
- ▶ What other ingredients does it contain?
- ▶ How was it sourced?
- ▶ How was it grown?
- ▶ How was it extracted?

FDA Offers CBD Warnings

The FDA issued a number of warnings about CBD. Here are a few. For more information visit [FDA.gov](https://www.fda.gov)

- ▶ CBD has the potential to harm you, and harm can happen even before you become aware of it.
- ▶ CBD can cause liver injury.
- ▶ CBD can affect the metabolism of other drugs, causing serious side effects.
- ▶ Use of CBD with alcohol or other Central Nervous System depressants increases the risk of sedation and drowsiness, which can lead to injuries.

concentration of CBD and a residual taste of chlorophyll. (1) Those who opt to extract with a hydrocarbon solvent often chose ethanol, or butane, which could contaminate the final product.

“You can’t be sure there are no residual contaminants,” Police says. “You may not want to buy your CBD from a person or pharmacy without asking how they extracted it or if they can’t provide a third party lab report.”

Extraction of CBD for humans and animals is now legal in all states except Idaho, Nebraska and South Dakota. In states where marijuana has been legalized for medicinal and recreational use, CBD products can be also made from marijuana, but might contain more than the legal limit of THC — and can’t be shipped across state lines.

The term “full-spectrum” is used to describe CBD that contains 0.3% THC that is federally legal. It is also possible to purchase CBD products without THC, Police says, but stresses that third-party testing is needed to guarantee it is truly THC-free.

How CBD Works

All mammals have an endocannabinoid system (ECS). Its function is to regulate homeostasis, creating equilibrium between the body’s interdependent elements and physiological processes. The ECS is composed of endogenous cannabinoids (endocannabinoids), cannabinoid receptors, and the enzymes responsible for their synthesis.²

Human and animal bodies manufacture endocannabinoids, but CBD and several other plant-derived cannabinoids interact with this system. Cannabinoids, both naturally produced by the body (endogenous), and those supplemented from plants such as cannabis (exogenous), act as “keys” to certain receptors, turning on a variety of functions. The body does the work, but CBD unlocks these mechanisms at the cellular level to help stop pain, reduce anxiety, inflammation, etc.

“If you stop taking CBD, conditions that existed before may come back again,” Police says. “It doesn’t ‘cure’ anything; it just helps your body deal with symptoms of those conditions a little better. It’s not something you use just when you are in pain, or when you need to sleep. You need to take it on a daily basis and have a constant level of CBD in your bloodstream for it to be effective.”

CB1 receptors exist mainly in the brain and central nervous system. They affect things such as appetite regulation, memory, emotions and pain. CB2 receptors are mainly in the gastrointestinal tract and peripheral nervous system (nerve cells outside the brain and spinal cord) and tend to modulate immune cell functions. When activated, they help reduce inflammation.

Farriers Try CBD



Beth Carter, a farrier in Los Angeles, Calif., has been using CBD for several years and credits it with helping her through her cancer battle and restoring her ability to work.

“After being sick and starting on CBD, I noticed I was feeling better. Being a farrier for 35 years, with all the wear and tear this career entails, and handling more than 400,000 equine feet, I found CBD made a huge difference,” she says. “It also helped with anxiety — all the anxiety of being sick and feeling bad, and the stress.”

Carter takes 1 full milliliter containing about 25 mg of CBD in the morning before work, 1 milliliter in the afternoon, then a 10 mg gummy before she goes to bed. She also uses CBD cream on her wrists and hands to help with arthritis.

“If a farrier is having problems with pain and arthritis, I recommend the hand cream and the tincture (oil under the tongue). I like the Dwell sports cream the best; I’ve found it to be most effective.”

Carter notes that not all CBD products are created equally, and some of the products she used initially were of less quality and ineffective. Hemp absorbs whatever is in the soil and environment — including pesticides, herbicides, heavy metals, etc. Before buying a CBD product, consumers are advised to read a certificate of analysis (COA) from the manufacturing company

“Even if it’s grown in the U.S., if the soil isn’t right and processing isn’t correct it may not be effective or even safe,” says Carter.



Lester Yoder, a farrier in north central Ohio, started using CBD in March 2019. Yoder has been a farrier for 23 years; full-time for the past 10. He takes one drop a day — at night before he goes to bed — to relieve joint pain.

“It’s not a huge, drastic difference, but enough that I can sleep better and feel more refreshed in the morning,” he says.



Dean Moshier, a farrier in Delaware, Ohio, began using CBD after experiencing a severe gluteal tear a year ago. He iced the injury and took ibuprofen but could not break the pain cycle.

He’d just met a representative for CBD manufacturer Kannaway and asked what might help his pain. She recommended two CBD products — a capsule and liquid drops administered under the tongue. The nature of the pain changed significantly within half an hour, Moshier says.

“I knew the tear was still there, but I could actually lift my leg,” Moshier says. He took some more before going to sleep and when he woke up the next morning the pain had dulled to a tenderness. He continued taking CBD for a while and noticed in addition to alleviating pain, it helped in other ways.

“I think it helped me mentally (in terms of sharpness and clarity),” he says. “I’m plagued with anxiety and depression and I thought the CBD helped with that, too.”

Before You Buy

Although many businesses are popping up to capitalize on the claims made about CBD, the Food and Drug Administration still has many questions about the science, safety and quality of products containing cannabis and cannabis-derived compounds. The FDA has approved only one CBD product, Epidiolex, a prescription drug product to treat two rare, severe forms of epilepsy.³

“Many people are selling CBD products,” says Police, “and you can’t be assured of quality or safety unless you check the source. The product should have a certificate of analysis (COA) provided by a third-party testing and verification facility.”

When Police went into business with Dwell CBD co-founders Kara Police and David Kwun, they made it a priority to partner with scientists, geneticists and botanists to find the best methods and innovations in growing the proper type of hemp, and safest and best extraction methods for obtaining the CBD that they market.

There has been no FDA evaluation of whether unapproved CBD products are effective for their intended use, what the proper dosage might be, how they could interact with FDA-approved drugs or whether they have dangerous side effects or other safety concerns.³

“Each person’s physiology is different so we recommend starting with a low dose and gradually increase it if they need to,” Police says. “People who take CBD for arthritis, pain, etc., generally take 25 to 50 mg per day, whereas the dose in Epidiolex, which is FDA-approved for children, is as much as 300-1,500 mg per day.”

Police notes that the World Health Organization (WHO) published a paper that specifically stated CBD is “well-tolerated” and generally considered to be safe. The WHO paper also states the reported adverse side effects may be the result of interaction between CBD and a consumer’s existing medications.⁴

“We are currently just scratching the surface of the potential long-term benefits of this plant-derived product,” Police says.

References

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