



MARIJUANA UPDATE: MARIJUANA AND THE REGULATORY STATUS OF CANNABIDIOL IN WISCONSIN

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ASAM Disclosure of Relevant Financial Relationships
Content of Activity:
Review of the Legal Status of Cannabis and Cannabinoids in Wisconsin

Name	Commercial Interests	Relevant Financial Relationships: What Was Received	Relevant Financial Relationships: For What Role	No Relevant Financial Relationships with Any Commercial Interests
David Galbis-Reig	GW Pharmaceuticals	Stock in IRA Rollover Account	Ownership Interest	
Lisa DeFazio (Spouse)	Abbott Pharmaceuticals	Stock Options	Ownership Interest	
Lisa DeFazio (Spouse)	AbbVie	Stock Options	Ownership Interest	
Lisa DeFazio (Spouse)	Hospira	Stock Options	Ownership Interest	



OBJECTIVES

- › Understand the current state of marijuana and cannabinoid legislation and legalization in Wisconsin.
- › Be able to articulate the regulatory status of cannabidiol in Wisconsin.
- › Understand current research, evidence-base, and potential clinical indications for use of cannabidiol.



DECRIMINALIZATION VERSUS LEGALIZATION

- › **Decriminalization:** The abolition of criminal penalties in relation to certain acts, perhaps retroactively, though perhaps regulated permits or fines might still apply.
- › **Legalization:** The process of removing a legal prohibition against something which is currently NOT legal.
- › With respect to marijuana, many people *inappropriately* use the two terms interchangeably.




CURRENT LEGAL STATUS OF MARIJUANA

- › Marijuana remains illegal AND criminalized in Wisconsin except as noted below.
- › Current Legal Status of Marijuana and Cannabinoids in Wisconsin:
 - 2013 Wisconsin Act 267 (Lydia’s Law) permitted physicians to utilize “Cannabidiol in a form without psychoactive effects” only for the treatment of seizure disorders.
 - In April 2017, Governor Walker signed Act 4 expanding the Cannabidiol program to protect all patients who possess CBD and have a letter from their physician.
 - Unfortunately, it remains illegal to produce or distribute CBD products pending additional legislation that has been introduced but not yet become law (S 104/ A 158).




2018 LEGISLATIVE INITIATIVES

- › Decriminalization Bill(s)
 - Assembly Bill 409
 - › Introduced by bipartisan legislative team.
 - › Bill would have reduced the penalty for possession of less than 10 grams of marijuana to a \$100 fine.
 - › Bill failed to pass thus current penalties under Wisconsin law for first offense possession of cannabis remains punishable by a fine or 6 months incarceration. Second offense possession is categorized as a Class I Felony.
 - Senate Bill 318 (Senate Counterpart to Assembly Bill 409)



2018 LEGISLATIVE INITIATIVES

- › **Legalization Bill**
 - 2018 Assembly Bill 482
 - Introduced by State Rep. Melissa Sargent.
 - Seeks to regulate the production and sale of marijuana to adults over the age of 21.
 - › Legalizes possession of 2 ounces (56.8 gm) of MJ for Wisconsin Residents and ¼ ounce (7.1 gm) of MJ for non-residents for recreational use.
 - › Possession of more than the maximum amount but less than 28 grams (≈1 ounce) subject to fine up to \$1000 and/or 90 days in jail.
 - › Possession of greater than 28 grams is guilty of Class B Misdemeanor.
 - Bill failed to Pass.



CURRENT LEGAL STATUS OF MARIJUANA

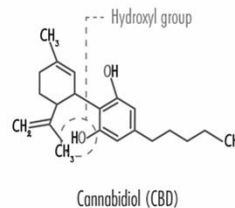
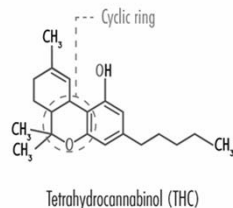
- › Residents in at least 13 Wisconsin Counties will have a chance to vote on an advisory referendum regarding the legalization of marijuana in the November 2018 Elections.

Milwaukee County	Marathon
Rock County	Winnebago
Eau Claire	Walworth
Langlade	Dane
Lincoln	St. Croix
Kenosha	Brown
	La Crosse

LEGAL STATUS OF CANNABIDIOL IN THE UNITED STATES

LEGAL STATUS OF CANNABIDIOL IN THE UNITED STATES

- › Cannabidiol is a non-psychoactive cannabinoid found in Industrial Hemp and Marijuana (two varieties of the Cannabis Sativa Plant).



1 Rudd J. CBD vs THC – What are the main differences. *Analytical Cannabis*. <https://www.analyticalcannabis.com/articles/cbd-vs-thc-what-are-the-main-differences-297486>. 2018, Feb 20. Accessed on 9/2/2018.



LEGAL STATUS OF CANNABIDIOL IN THE UNITED STATES

- › Industrial Hemp (Hemp) was grown commercially in the United States prior to 1970
 - Textiles (Renewable Resource)
 - Pharmaceuticals (Cannabidiol, Moisturizers, Plant-based Omega-3/Omega-6 supplements)
 - Food (Hemp Seeds are rich in plant-based Omega-3/Omega 6)
- › In 1970, growing Hemp became illegal because congress worried that law enforcement would not be able to distinguish Hemp from Marijuana and so lumped it in with all other cannabis products.



LEGAL STATUS OF CANNABIDIOL IN THE UNITED STATES

- › Section 7606 of The Agricultural Act of 2014 permits States to authorize “pilot programs” to grow Industrial Hemp for research or commercial purposes.
- › In September 2018 (this month), Congress will vote on a bill that would legalize growth of Industrial Hemp across the United States for the first time in 50 years.



LEGAL STATUS OF CANNABIDIOL IN UNITED STATES

Industrial Hemp versus Marijuana: What is the Difference?

	Industrial Hemp	Marijuana
THC Content Dry Weight	Not more than 0.3%	3%-15% (or higher)
Plant Characteristics	Stalks Long, Thin, and Fibrous; smaller leaves	Stalks, shorter, thicker, and less fibrous; larger leaves
Growth Pattern	Grown closer together (like corn)	Grown much further apart to encourage branching.
Cannabidiol Content	High	Variable



LEGAL STATUS OF CANNABIDIOL IN UNITED STATES

- › Section 7606 of The Agricultural Act of 2014 permits States to authorize “pilot programs” to grow Industrial Hemp for research or commercial purposes.
- › In September 2018 (this month), Congress is expected to vote on a bill that would legalize growth of Industrial Hemp across the United States for the first time in 50 years.
 - Legalizing Hemp growth does not automatically legalize CBD Products.
 - Even with legalization, many hurdles exist for mass commercialization of Hemp in the United States in order to compete with foreign growers.



LEGAL STATUS OF CANNABIDIOL IN UNITED STATES

- › FDA approved the first prescription pharmaceutical formulation of highly-purified, oral solution of plant-derived cannabidiol (CBD) [Epidiolex®] for the treatment of seizures associated with Lennox-Gastaut syndrome (LGS) or Dravet syndrome in patients two years of age or older.
 - Currently awaiting an announcement regarding rescheduling by the Drug Enforcement Agency
 - Phase 3 Studies demonstrated significant reductions in seizures in patients with LGS and Dravet Syndrome^{2,3}
 - Common Side Effects included somnolence, decreased appetite, diarrhea, elevated transaminases, fatigue, malaise, asthenia, rash, and sleep disturbances

2 Devinsky O, Cross JH, Laux L, et al. Trial of cannabidiol for drug-resistant seizures in the Dravet syndrome. *N Engl J Med* 2017;376:2011-20.
3 Thiele EA, Marsh ED, French JA, et al. Cannabidiol in patients with seizures associated with Lennox-Gastaut syndrome (GWPCARE4): a randomized, double-blind placebo-controlled phase 3 trial. *Published online January 24, 2018* [http://dx.doi.org/10.1016/S0140-6736\(18\)30136-3](http://dx.doi.org/10.1016/S0140-6736(18)30136-3).



LEGAL STATUS OF CANNABIDIOL IN WISCONSIN




LEGAL STATUS OF CANNABIDIOL IN WISCONSIN

- › Lydia's Law (2013 Wisconsin Act 267) authorized physicians to utilize "Cannabidiol in a form without psychoactive effects" only for the treatment of seizure disorders.
 - Did not specify etiology of seizures
 - Did not specify age restrictions
- › In April 2017, Governor Walker signed Act 4 expanding the Cannabidiol program to protect all patients who possess CBD and have a letter from their physician certifying use for a Medical Condition.
 - The law does not specify which medical conditions can be treated with CBD Oil
 - The law requires the client to have a certifying letter from a prescriber (more details on the contents of the letter later)




LEGAL STATUS OF CANNABIDIOL IN WISCONSIN

- › It remains illegal to produce or distribute CBD products pending additional legislation that has been introduced but not yet become law (S 104/ A 158).
- › In November of 2017, Governor Walker signed into law a provision that permits Wisconsin farmers to grow Industrial Hemp under the Federal Hemp "Pilot Programs."
 - A memo issued April 27 by the Wisconsin Statewide Intelligence Center, which is run by the DOJ's Division of Criminal Investigation, said manufacturing and distributing products with CBD oil, even with no or very low levels of THC, was still illegal.
 - In May, after a meeting with representatives who drafted the legislation, DOJ reversed their position stating that farmers who follow the DATCP's rules and regulations may grow industrial hemp without fear of criminal prosecution, sell the entire industrial hemp plant or parts of the plant to anyone, and process the plant as permitted, including producing CBD.



LEGAL STATUS OF CANNABIDIOL IN WISCONSIN

- › Legal status of production and distribution of CBD in Wisconsin is still not completely clear.
- › Attorney General Brad Schimmel has stated that anyone in possession of CBD (that contains less than 1% THC) with an appropriate certification letter from a physician will not be prosecuted in Wisconsin.
 - There is no purity standard or regulation regarding CBD Products
 - No way for consumers to know that the product they are purchasing contains the amount of CBD on the label or that it contains any CBD at all
 - Many products sold as CBD oil contain greater than 1% THC and are not legal under current Wisconsin Law (even with a certifying letter)

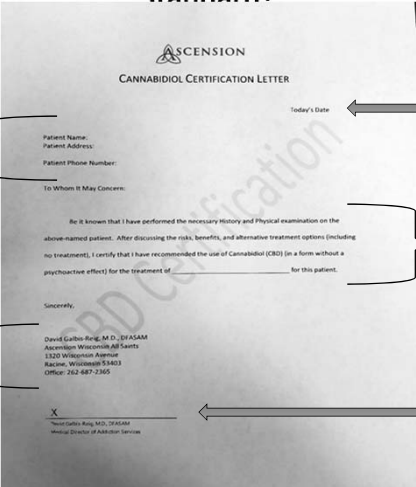


LEGAL STATUS OF CANNABIDIOL IN WISCONSIN

What Must a CBD Certification Letter Contain to meet the Legal Standard?

Patient's Name, Address, and Phone Number

Physician's Name, Address, and Phone Number (Note: Current Law permits ONLY physicians to provide this certification)



Date of Issue (Valid for 1 Year from Date of Issue)

Medical Indication for Certification

Physician's Signature



WHAT IS THE EVIDENCE-BASE FOR CANNABIDIOL

- › Strong Evidence for the Treatment of Epilepsy
 - Purified CBD Oral Solution FDA approved in June, 2018 to treat refractory seizures associated with LGS and Dravet's Syndrome
 - Not a panacea for epilepsy but clinically meaningful for some individuals
 - › Not all individuals responded to cannabidiol (similar to other AED's)
 - › Those who responded saw a significant reduction in seizure frequency but almost none stopped having seizures altogether.
 - May be limited by hepatotoxicity
 - › 10% of individuals in the epilepsy studies demonstrated increased hepatic transaminases.
 - › Approximately 2% of individuals had to discontinue use because transaminases increased to a level of clinical concern.



WHAT IS THE EVIDENCE-BASE FOR CANNABIDIOL

- › Weak Evidence for Multiple Conditions in Descending Order of the Evidence Base
 - Anxiety Disorders, Specifically Social Anxiety⁴
 - › Limited small-scale studies
 - › Large studies needed to prove efficacy
 - Anti-Inflammatory Activity⁵
 - › Primarily animal studies and anecdotal reports
 - › Human studies lacking but underway

4 Blessing EM, Steenkamp MM, Manzanares J, Marmar CR. Cannabidiol as a potential treatment for anxiety disorders. *Neurotherapeutics*. 2015; 12:825–836.

5 Gamble LJ, Boesch JM, Frye CW, et al. Pharmacokinetics, Safety, and Clinical Efficacy of Cannabidiol Treatment in Osteoarthritic Dogs. *Frontiers in Veterinary Science*. 2018, July; 5: 1-9.



WHAT IS THE EVIDENCE-BASE FOR CANNABIDIOL

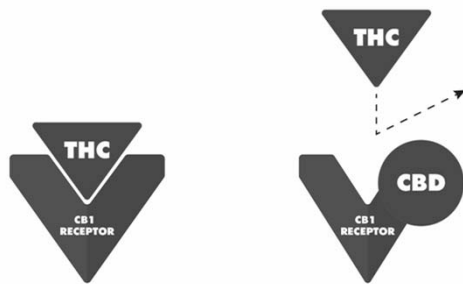
- › Anecdotal or No Evidence for the Following Conditions (primarily animal studies or case reports in humans)
 - Antipsychotic Effects
 - Chronic PTSD⁶
 - Maintenance of Sobriety for Cannabis Use Disorders⁷
 - Anti-Depressant Effects
 - Sleep Aid

6 Shannon S, Opila-Lehman J. Cannabidiol Oil for Decreasing Addictive Use of Marijuana: A Case Report. *Integrative Medicine*. 2015; 14 (6): 31-35.
 7 Bitencourt RM, Takahashi RN. Cannabidiol as a Therapeutic Alternative for Post-traumatic Stress Disorder: From Bench Research to Confirmation in Human Trials. *Frontiers in Neuroscience*. 2018, July 24; 12: 1-10.



WHAT IS THE EVIDENCE-BASE FOR CANNABIDIOL

What is the Theory Behind It's Use for Cannabis Use Disorders?



THC is a potent partial agonist of CB1

CBD is a negative allosteric modulator of CB1

1 Rudd J. CBD vs THC – What are the main differences. *Analytical Cannabis*. <https://www.analyticalcannabis.com/articles/cbd-vs-thc-what-are-the-main-differences-297486>. 2018, Feb 20. Accessed on 9/2/2018.

