



**NORTH CAROLINA RESPIRATORY CARE
BOARD
125 Edinburgh South Drive, Suite 100
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POSITION STATEMENT: CBD OIL AND THC

The Impetus for this Position Statement

In 2018, the North Carolina Respiratory Care Board began receiving reports of Respiratory Care Practitioners who were claiming that their positive drug screens for Tetrahydrocannabinol (THC) resulted from their use of Cannabidiol Oil (“CBD Oil”), rather than Marijuana. CBD Oil is one of several compounds found in the Cannabis or Marijuana plant and is becoming a popular remedy to self-treat a number of common ailments, including chronic pain, sleep disruption, or depression and anxiety. It is available in a wide variety of ingestible products such as oil, edibles, and inhaled aerosol products. The increasing use of CBD Oil and recent claims about its connection to positive THC tests by Licensees of the Board have led the Board to address this issue.

THC positive drug screens usually are assessed by a Medical Review Officer to determine whether a sample contains the amount of THC, the psychoactive ingredient in Marijuana, that measures at or above an administrative cut-off; but many employers have a zero THC level threshold to be hired or to continue employment. Like other licensing boards, this Board considers drug screens deemed by a Medical Review Officer to be positive for THC to create “a mandatory reporting event regardless of whether there are signs of physical or cognitive impairment ^{1(p8)}.”

This Position Statement will address situations in which a Licensee has a positive drug screen for Tetrahydrocannabinol (THC) and claims that the positive test results from use of CBD Oil, and the Board is issuing it in order to provide guidance about how the Board interprets the Respiratory Care Practice Act (“the Act”) and the Board’s Rules in that situation. The Board will consider each case on its facts, but with the increasing reports of CBD Oil use, the Board concluded that it was important to convey this cautionary message to all Licensees.

For the reasons set forth in this Position Statement, the Board has determined that a Licensee's claim that a positive THC drug screen resulted from use of CBD Oil will not preclude further scrutiny by the Board, or forestall the ultimate imposition of disciplinary measures by the Board, if sufficient other evidence is presented.

This Position Statement presents the background and key principles that will guide the Board in addressing these cases and is being published so that all Licensees understand its position clearly. There are two fundamental cautions that the Board is sounding with this Position Statement.

1. There is a significant risk of contamination of CBD Oil with Marijuana.

Hemp and Marijuana are indistinguishable in appearance. In a 1992 study of 97 Cannabis strains, DeMeijer et al. concluded that short of chemical analysis of the THC content, there was no way to distinguish between the appearance of marijuana and hemp varieties ².” Hemp and Marijuana are products from similar types of cannabis plants, but there are significant variations in the amount of psychoactive and other chemical compounds between them. CBD Oil derived from hemp is legal, while CBD Oil derived from Marijuana is illegal unless prescribed by the user's physician ¹.

North Carolina's Controlled Substances Act defines Marijuana very broadly, but excludes legally manufactured industrial hemp, from which CBD Oil is derived:

Marijuana” means all parts of the plant of the genus Cannabis, whether growing or not; the seeds thereof; the resin extracted from any part of such plant; and every compound, manufacture, salt, derivative, mixture, or preparation of such plant, its seeds or resin, but shall not include the mature stalks of such plant, fiber produced from such stalks, oil, or cake made from the seeds of such plant, any other compound, manufacture, salt, derivative, mixture, or preparation of such mature stalks (except the extracted resin), fiber, oil, or cake, or the sterilized seed of such plant which is incapable of germination. ***The term does not include industrial hemp as defined in N.C. Gen. Stat. § 106-568.51 when the industrial hemp is produced and used in compliance with rules issued by the North Carolina Industrial Hemp Commission.*** [Emphasis supplied] N.C. Gen. Stat. § 90-87 (16).

Thus, hemp that has been produced in compliance with the rules of the North Carolina Industrial Hemp Commission is excluded from the definition of

Marijuana.

North Carolina is not alone in recognizing this distinction. In 2018, the United States Controlled Substance Act was amended to remove hemp-derived products containing a concentration of less than 0.3% THC from the definition of controlled substances. As a result of these statutory changes, and because of its recognized effectiveness, CBD Oil has become a popular remedy for several common ailments, as previously noted; but caution is in order for its use.

The THC level in hemp-based CBD Oil that is produced under controlled conditions is negligible based on research, and the scientific literature on this subject indicates that hemp does not contain an amount of THC that would produce a feeling of intoxication like Marijuana, and result in an impairment. According to the US Department of Agriculture, “Cannabis sativa L. Marijuana typically contains 3 to 15 percent THC on a dry-weight basis, while industrial hemp contains less than 1 percent (Blade, 1998; Vantreese, 1998). By law, CBD Oil cannot contain more than 0.3% THC dry weight ³.

The rules developed by the North Carolina Industrial Hemp Commission require producers to adhere to federal statutes and test for purity and concentration. Like the United States, most developed countries that permit hemp cultivation require that products contain less than 0.3 percent THC. For these reasons, testing positive due to the use of CBD Oil that is produced from hemp under appropriate controls, and used according to package recommendations, is not likely ^{2 4}.

However, with its similarity of appearance to Marijuana, and with the legal manufacture and distribution of recreational Marijuana in a number of states, there exists the potential for contamination of CBD Oil with other substances, including Marijuana, during its manufacture. Even with state government oversight over hemp production, the production of CBD Oil marketed to the public may not meet all the standards for purity and THC concentration. The FDA has issued warnings to several companies whose products contained more CBD Oil than indicated on the product label ³; and the North Carolina Department of Agriculture has warned consumers that they should ask questions about the purity and THC levels in any CBD Oil products that they use ⁵.

2. Use of CBD Oil May Result in a Positive Drug Test.

There is no scientific mechanism to determine the source of the THC that registers in a drug test: Whether it comes from Hemp or Marijuana, the date of use, or the amount used. Since CBD Oil is derived from hemp and contains varying levels of tetrahydrocannabinol (THC), there is no discernable method of distinguishing CBD Oil from Marijuana in a drug test¹.

Despite the absence of signs of physical or cognitive impairment, licensees who test positive for any illegal substance must be reported according to Board Rule 21 NCAC 61 .0308 (b). This rule states that all supervising respiratory care practitioners are under a continuing duty to report to the Board any and all: (1) terminations of any respiratory care practitioner for violations of the practice act or Board rules; and (2) violations of the practice act or Board rules by any respiratory care practitioner under his or her supervision.

Whether the screen is for pre-employment, for-cause, post-accident, or randomly, all positive tests for THC are required by law to be reported to the Board. This requirement includes reports on Licensees who may be assigned through a travel agency and who test positive in another state, including states where Marijuana is legal for recreational use. Since there is no test that can distinguish a THC-positive test resulting from use of CBD Oil from a positive test due to Marijuana use, both the Board and health care organizations must consider a positive test as a potential indication of Marijuana use.

As a result, any RCP with a positive test for THC will likely be terminated or not hired, and by law, any positive screen must be reported to the Board. When the Board receives a report that a Licensee who has been actively practicing Respiratory Care has tested positive for THC and is claiming that the positive test resulted from use of CBD Oil, the Board confronts several critical considerations:

1. It is impossible to distinguish a positive test that results from use of CBD Oil from one that results from use of Marijuana.
2. The literature recognizes that the residue of THC remains in the body for an extended period of time after use and will result in a positive test for some days or weeks after an individual consumes Marijuana or other products containing THC.

3. State and federal governments generally have not established a ng/ml level for THC that is deemed to constitute impairment, as they have with ethanol use.

Therefore, the Board must approach any positive test as an indication of Marijuana use, that could have caused impairment while the Licensee was providing Respiratory Care. Since it is impossible to determine that a positive test resulted from legal use of CBD Oil, or to identify how recently the consumption of Marijuana or CBD Oil may have occurred, in relation to the dates when an RCP was providing care, any report of a positive THC test of a currently practicing RCP raises the immediate concern that the individual may have consumed Marijuana, or some illegal derivative, during the time period when the individual was providing respiratory care.

Likewise, there is no threshold below which it can be scientifically established that the individual is not currently impaired or could not have been impaired during an earlier point in time when the individual was providing respiratory care. Detection of THC, regardless of the source or mode of ingestion, is a cause for concern since it raises the potential for impaired practice.

According to an article in the American Journal of Toxicology (2017), “driving under the influence criminal statutes where an inferred inference of impairment at five (5) ng/ml whole blood THC (in Colorado and Washington) may serve as a model for working while impaired by THC policies ^{5(p110)}.” However, this threshold is not established in North Carolina law.

The Board has the authority to take action against a license under N.C. Gen. Stat. § 90-659 (a) (1) (d), which empowers the Board to deny or refuse to renew a license, suspend or revoke a license, or impose probationary conditions on a licensee or applicant who has engaged in health care practices that are determined to be hazardous to public health, safety, or welfare. Board Rule 21 NCAC 61 .0307 addresses behaviors and conduct that constitute grounds for license denial or other disciplinary action by the Board pursuant to N.C. Gen. Stat. § 90-659(a) and (b), and N.C. Gen. Stat. § 90-652(4).

In addition, under 21 NCAC 61 .0307 (14), the Board can take disciplinary action based on evidence that a licensee has been “unable to deliver respiratory care services with reasonable skill and safety to patients by reason of incapacitating illness or use of alcohol, drugs, narcotics, chemicals, or other material.”

CONCLUSION

After a THC positive drug screen, an asserted use of CBD Oil will not be considered by the Board to be a valid defense against the imposition of disciplinary measures. Since there is no available test to distinguish the source of THC, positive screens on Licensees who claim to have used CBD Oil in any form or those who claim to have experienced an accidental ingestion of Marijuana-related edibles must be reported. For these reasons, testing positive for THC must be investigated by the board as a possible violation of the *Respiratory Care Practice Act*. Thus, the Board is obligated to pursue complaints on licensees under Board Rule 21 NCAC 61 .0801 to determine whether there was a violation of 21 NCAC 61 .0307 (14), and to consider whether a licensee is “unable to deliver respiratory care services with reasonable skill and safety to patients by reason of incapacitating illness or use of alcohol, drugs, narcotics, chemicals, or other material.

Approved this day 8th of October 2020

Sources

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