



“INTOXICATING HEMP PRODUCTS” – Safe or Not? Legal or Not? More Drug War or not?

By Mary Jane Borden

A college friend recently received an ad in the mail for “[100% legal THC](#).” The glossy card promised “Natural Cannabis, Natural Relief” with photos of “potent edibles,” “disposable vapes,” and “high grade concentrates.” Intrigued, he visited the website and purchased several pre-rolled joints, aka “pre-rolls.” A few days later, a package arrived in the mail with contents that looked, smelled, and tasted like marijuana. In fact, the potency statistics on the packaging appeared nearly identical to those on dispensary products. In excellent health for a 60-year-old, my friend’s only side effect was a good night’s sleep. He liked both the price and the high.

During different conversation, another friend reveled with excitement as she spoke about visiting a nearby gas station to load up on marijuana products. They help her manage the chronic pain that comes from the autoimmune disorder she has had since childhood. Although she has a card to participate in Ohio’s medical marijuana program, the products on dispensary shelves are too expensive, and she despises the long drives to Michigan for purchasing those meds at a lower price.

What do these two friends have in common (other than me)? Their purchases may be illegal. Illegit. While the packaging may appear professional, it might instead be “smoke and mirrors.” An elegant fib, if you will? The contents may be untested, the potency dubious, and the product itself may or may not be as advertised. But should it be illegal?

What we’re talking about are hemp-derived cannabinoids, aka “intoxicating hemp products,” that have the look and feel of legal dispensary cannabis, but arrive at that look using sometimes controversial means.

LET’S DO A DEEP DIVE

What are cannabinoids?

Cannabinoids are naturally occurring compounds found inside both the body and the cannabis plant. There are [three kinds of cannabinoids](#): 1.) **Endocannabinoids**. These inside-the-body cannabinoids comprise the body’s endocannabinoid system (ECS), which regulates sleep, mood, metabolism, appetite, and immune response. All mammals have endocannabinoid systems; 2.) **Phyto-cannabinoids**: Phyto in Greek means ‘plant. These compounds are derived from plants like marijuana/cannabis; and 3.) **Synthetic cannabinoids**: These are lab-made, artificial compounds that may be legal or illegal, and may come with health risks.

What are phyto-cannabinoids?

Phyto-cannabinoids are derived from the [genus Cannabis](#), a fibrous medicinal plant that belongs to the [Cannabaceae](#) (hemp) family. The genus is thought by some to comprise a the single species, [Cannabis sativa](#), aka hemp. Others suggest that *C. sativa* may be a subspecies, with *C. indica* and *C. ruderalis*. In simplistic terms, hemp is cordage and marijuana is medicine. Cannabis plants are [dioecious](#), in that they have two sexes: female “flower” and male “pollen.” Female plants are more cannabinoid rich. Cannabis is also an [oleaginous](#) plant producing the oils from which cannabinoids can be extracted.

What is extraction?

It is the process of separating something from a mixture or compound by chemical, physical, or mechanical means. Cannabis is rarely consumed as a live plant. Because it is [oleaginous](#), the cannabinoids in the oils of cannabis flower can be removed – [extracted](#) – and repurposed for vape pens, foods, gummies, drinks, and tinctures. One way to produce THC is “[isomerization](#),” a chemical process in which a compound is transformed into a similar form, say, hemp-derived CBD into Delta-9 THC. Other extraction methods include [ethanol](#) and [CO2](#), among others. The

extraction process can [introduce mycotoxins](#), microbes, fungal spores, pesticides, heavy metals, and more into consumable marijuana products, illustrating the importance of product testing.

How many phyto-cannabinoids are in the cannabis plant?

[Approximately 100](#). Although they have chemical names, they are often referred to by their abbreviations like CBD, THC, THCA, CBDV, and so on. Many have [therapeutic properties](#) such as anticonvulsant, immunosuppressive, antioxidant, [anti-tumor](#), and more. The most prevalent are CBD (cannabidiol) and THC (Delta-9-tetrahydrocannabinol). Phyto-cannabinoids that have only a scant presence in the plant are referred to as “[minor cannabinoids](#).”

What is THC?

THC stands for **TetraHydroCannabinol**, one of the phyto-cannabinoids found in the cannabis plant. It can be “phyto” (derived from the cannabis plant) or “synthetic” (made chemically in a lab). THC’s interaction with the brain produces a “high” that dubs the cannabinoid “psychoactive:” it alters mood, perception, and awareness. Also known as Delta-9 THC, the compound can be derived from the oils in cannabis flowers, and also from hemp using a [chemical process](#). THC will often be listed as a percentage, which is the amount of the THC by dry weight (water removed). The percentages reflect potency, so the larger the number the greater the high ... in theory.

How is hemp different than cannabis?

For starters, [cannabis, marijuana, and hemp are all the same plant](#). But long-standing prohibitions, stigmas, and illegalities – the War on Drugs – necessitated modifications to the plant’s definitions. Differentiating illegal marijuana from legal hemp makes the latter available to the public while prohibiting the former. As a result, the [2018 Farm Bill](#) defined [hemp as](#), “... a variety of the *Cannabis sativa L.* plant that contains no more than **0.3% concentration** (on a dry weight basis) of the psychoactive compound delta-9-tetrahydrocannabinol (THC).” Thus, plant material testing below 0.3% is hemp; plant material testing above that number is marijuana. But, unlike marijuana, hemp (sometimes called industrial hemp) has other uses such as foods, building materials, cloth, fuel, plastics, paper, and more.

Is hemp psychoactive?

In and of itself, no. The low concentration of 0.3% THC makes that certain. But hemp being cannabis and cannabis being hemp (they are one in the same depending on how they are grown), hemp plants can contain trace amounts of THC and other cannabinoids.

What is Delta-8 THC?

Delta-8 THC (or delta-8 tetrahydrocannabinol) is a [naturally occurring](#) phyto-cannabinoid, that can only be found in hemp and marijuana plants as small traces. After passage of the 2018 Farm Bill and the escalating hemp cultivation that ensued, an [oversupply of extracted CBD](#) found processors seeking alternative markets. Using the wizardry of chemistry, they transformed [CBD into Delta-8 THC](#), which is said to have the same, but milder “high” as Delta-9. [Users claim](#) it relaxes them, stimulates their appetites, and makes them sleepy. (Remember my college friend.) Since the source of Delta-8 is hemp (at less than 0.3% THC), it is said to be federally legal and legal in all 50 states except those that have explicitly outlawed it. However, the DEA does list [Delta-8](#) as Schedule I drug.

What is Delta-9 THC?

This “psychoactive” phyto-cannabinoid alters mood, perception, and awareness. While confusing, Delta-9 THC (Delta-9 tetrahydrocannabinol) from the natural plant is permitted in Ohio because the state [legalized medical marijuana in 2016](#) and [adult use marijuana in 2023](#). In the Ohio Revised Code, Delta-9 is twice named under the [definitions of Cannabidiol](#) (CBD) and hemp, and twice referenced in the definition of [adult use](#). In sum, Delta-9 THC is **legal** if grown as “marijuana.” It is also [legal if extracted from hemp at 0.3% THC or less](#).

What is Delta-10 THC?

Delta-10 is a non-natural cannabinoid that can be synthesized from Delta-9 THC. Delta-10 has rarely been found as a trace component of natural cannabis.

What are “intoxicating hemp products”?

Gummies, candies, vape pens, edibles, beverages, and pre-rolls that appear to be legitimate cannabis products – similar to those sold in dispensaries – but are infused with Delta-9 THC, Delta-8 THC, or other cannabinoids extracted

from hemp. Their “intoxication” is like the “high” generated by their phyto counterparts. These products may have dispensary-like labels, copycat packaging, toll free numbers, and online ordering. But their sales venues – gas stations, smoke shops, convenience stores – tattle tale their largely unregulated and ultimately unaccountable existence.

Are “intoxicating hemp products” dangerous?

While there are many beneficial aspects to cannabis – antiemetic, anticonvulsant, and even antineoplastic – the plant does have its [negative side effects](#) like anxiety, paranoia, depression, fatigue, memory loss, bronchitis, and cough. What is beneficial for Delta-9 is mostly beneficial for Delta-8; what is harmful for the former may also be harmful for the latter.

“Delta-8, Delta-9, and even Delta-10 don’t seem to have any ill effects on people that we know of at this point,” [said scientist Michael Coffin](#). Other researchers tried to flesh out Delta-8’s risks by utilizing the FAERS (FDA Adverse Event Reporting System). From 2011-2021, total number of submitted reports topped [7,748,276](#); of them, only 183 cases listed Delta-8 THC as a suspect drug. The [World Health Organization](#) (WHO) proposed rescheduling Delta-9 THC [to schedule IV](#) of the United Nations Convention on [Psychotropic Drugs](#), since “it does not constitute a substantial risk to public health and its abuse is rare if at all.” In his 1988 rescheduling ruling, DEA administrative [law judge Francis Young stated](#): “Marijuana in its natural form is one of the safest therapeutically active substances known to man.” Per [the DEA](#), “No deaths from overdose of marijuana have been reported.”

While cannabis products themselves may be safe, [mycotoxins](#), microbes, fungal spores, pesticides, and heavy metals are not, again illustrating the importance of product testing. Ohio’s cannabis programs – [medical](#), [adult use](#), and [hemp](#) – mandate this oversight.

Accordingly, the focal concern about Delta-8 and Delta-9 THC has turned to [appealing to and use by children](#). Ohio’s [medical marijuana](#) and [adult use](#) products have age restrictions: 18 years for the former and 21 years for the latter. Under the medical program, though, children can participate with [permission of parent](#). Those statutes [mandate properly labeled](#) tamper proof packaging unattractive to children. Parents have also been admonished to keep cannabis products out of their reach. But since “intoxicating hemp products” lack regulation, unsuspecting children (and parents) become the most vulnerable victims.

The FTC and FDA both sent [Cease and Desist letters](#) to companies marketing edibles containing Delta-8 THC that looked remarkably similar to branded cereals and cookies, and the Ohio Division of Cannabis Control issued a [“Consumer Alert Regarding Cannabis Packaging Targeting Children”](#) in July 2024. [Ohio Governor Mike DeWine](#) warned, “According to data from the Ohio Poison Control Center, there have been at least 257 reports of Delta 8 poisoning in Ohio over the last three years. In 2023 alone, there were 102 reported poisonings, including 40 involving children under the age of six.” Did the center confirm that the culprit was indeed Delta-8 THC, or some other contaminant induced by the extraction process? And, let us not forget that overdosing on the widely available [acetaminophen](#) continues to be a leading cause of accidental and intentional poisoning, with more than 80,000 cases reported in 2021 to U.S. Poison Centers. Why no outrage?

The “danger” from Delta-8 THC should be put into context. The risks imposed by “intoxicating hemp products” lie not in FAERS adverse events, poison control centers, the FTC, the FDA, or the Ohio Governor. Rather, the “boogie man” belongs to the dearth of safety data, chemical contaminants, unforeseen toxicities, disreputable producers, lack of testing, misleading packaging, and public officials who repeatedly cry the drug war “wolf.” As one scientist put it, “... nobody is measuring the pH of delta-8 products or testing for strong acids and residual metals that are left behind ... It’s all bathtub gin.” Yet, these products go to market anyway. Oversight, regulation, and education represent the best antidotes to countering the alleged dangers that accompany “intoxicating hemp products.”

Are Delta 8, Delta 9, and other cannabinoids illegal?

The DEA [lists both Delta-8 THC and Delta-9 THC](#) as a Schedule I substances, meaning [that they have](#) “no currently accepted medical use and a high potential for abuse.” This classification has [prevented serious research](#) into the benefits and dangers of cannabis-related plants, products, and extractions for over 50 years. In the eyes of the federal government, marijuana (not hemp) falls under Schedule I of the [Controlled Substances Act](#) that bans herbal cannabis in all forms. The U.S. Congress passed the 2018 Farm Bill, which permitted marijuana with 0.3% THC or less to be

classified as legal hemp. This “loophole” legalized hemp extracted CBD, Delta-8 THC, and Delta-9 THC. Ohio followed in 2019 and passed its own Farm Bill, [S.B. 57](#), that did the same. So far, 15 states have [fully prohibited](#) “intoxicating hemp products,” while another 15 have regulated them as either consumer goods or cannabis.

What is the market for “intoxicating hemp products”?

Per the [Reason Foundation](#): “The market for intoxicating hemp derivatives, meanwhile, has grown sharply, with industry experts estimating its size at \$28 billion to \$36 billion in annual sales nationally, supporting nearly 330,000 workers across the country. Hemp cultivation for flowers and potential extraction of cannabinoids now comprises over 30 percent of the total harvested hemp acreage. More importantly, perhaps, the income derived from growing hemp for flower now dwarfs that of all other uses, comprising over 95% of hemp income in 2023.”

One market concerned about “intoxicating hemp products” is Ohio’s legal medical and adult use cannabis producers. It’s easy to see how the cheaper unregulated cannabinoids found in gas stations, smoke shops, and convenience stores could affect the bottom lines of the dispensaries, processors, and cultivators that are part of Ohio legal medical and adult use programs. A salient table in a [report from the OSU Drug Policy Enforcement and Policy Center](#) displays the fundamental differences between the cost structure of Ohio’s adult use program and Ohio’s hemp program. The [annual application](#) fees alone tell the cost story: Adult Use Cultivator Level 1 (application fees = \$400,000) and Hemp (application fee = \$100).

Still, Ohio’s medical and adult use programs have garnered [\\$2.2 billion in cannabis sales](#) and sold 632,811 pounds of plant material since inception in 2019.

Is there legislation to address “intoxicating hemp products”?

Yes, three bills have been introduced to the 135th Ohio General Assembly for 2023-2024. They include [S.B. 278](#) sponsored by Senators Kirk Schuring and Stephen A. Huffman. This bill would “Modify regulation of medical marijuana, adult use cannabis, hemp.” The bill was introduced on 5/28/2024 and assigned to General Government Committee. That is as far as it went.

[Ohio Representative Sara Carruthers](#), R-Hamilton, introduced [House Bill 642](#) on 7/18/2024. It would require the Ohio Director of Agriculture to issue recommendations for adult-use hemp products, which would go into effect one year later. The bill was referred to the House Finance Committee on 11/12/2024. Here is its [Legislative Service Commission analysis](#). So far, there have been no cosponsors or hearings.

On 11/6/2024, Ohio Senator Huffman, R-Tipp City, introduced [Senate Bill 326](#). The bill’s short title reads “*Prohibit sale of intoxicating hemp products*,” with a long title, “*Prohibit the sale of intoxicating hemp products and to declare an emergency*.” The “emergency” clause permits the bill to go into “immediate effect” after passage, for the:

“... immediate preservation of the public peace, health, and safety. The reason for such necessity is to protect Ohioans, especially Ohio's youth, from untested, unregulated dangerous tetrahydrocannabinol products.”

[Here](#) is the text of the bill. [Here](#) are the Important points in S.B. 326, which include:

- **“No person shall sell an intoxicating hemp product in this state.”**
- Appears to be **about curtailing Delta-9 THC**, which is present in all products offered by the medical and adult use programs.
- **No mention of Delta-8 THC**, counter to comments voiced by the governor and in testimony.
- Zero clauses to establish and regulate a market, or deal with product testing.
- Only one sponsor. No cosponsors.
- Introduced on 11/6/2024 and referred to the General Government Committee on 11/12/2024. [Proponent testimony](#) hearing occurred on 11/19/2024, and opponent testimony scheduled for 12/3/2024.
- Confusingly written. It’s difficult to grasp what the numbers under Sec. 3779.01 add up to or from where they were sourced.
- Imposes both administrative and criminal penalties that rise to 5th degree felonies, for a product where users “don’t seem to have any ill effects.”

- Declares an emergency to garner immediate enactment to “*protect Ohioans, especially Ohio’s youth, from untested, unregulated dangerous tetrahydrocannabinol products.*” Again, cannabinoid products are relatively safe (compared to acetaminophen), they are widely sold in Ohio’s program, and can and should be regulated accordingly, without writing negative hyperbole into Ohio law.
- Is Senator Huffman really trying to outlaw THC altogether? His [testimony](#) might suggest that.

In summary, it’s difficult to determine if S.B. 326 is a serious bill – it has no cosponsors. No other legislators stepped up to support it? Its “emergency” clause wreaks of hyperbole: “untested, unregulated dangerous tetrahydrocannabinol products.” Wouldn’t a tested, regulated market be better? And it seems that the “bad guy” is the widely common Delta-9 THC, not Delta-8 THC, on which most proponent testimony was based. Delta-8 THC is not mentioned once in the bill. [Stephanie Pike-Moore](#), a research scientist at Case Western Reserve University, called the bill’s language “incredibly vague.” [Ohio Healthy Alternatives Association](#) claimed that S.B.326 was, “... rushed, flawed and catastrophic for our members,” estimating that the bill could lead to over 20,000 job losses and financial disruptions, including defaulted leases and unpaid vendor debts.

Ohio, we can do better. Yes, unregulated, untested, unlabeled, and poorly understood “intoxicating hemp products” do pose problems. Certainly, they should be inaccessible to children and tested for impurities. One would hope that we would learn lessons from the failed War on Drugs: regulations are better than prison sentences, testing is better than contamination, accurate labeling is better than half truths. Education is better than ignorance.

Oh, and my two friends? They’re doing just fine!

P.S. Two publications offer good advice on the structure of regulatory bodies to oversee “intoxicating hemp products,” one from the [Drug Policy and Enforcement Center](#) (DPEC) and the other from the [Reason Foundation](#). The DEPC’s “[Considerations for Regulating Hemp Products](#)” argues for 21-year-old age limits, child resistant packaging, manufacturing and product safety standards, labeling regulations similar to adult use market, and clear definitions of “intoxicating hemp products.” [Reason Magazine](#) suggests accepting whatever federal guidance is available, focus on rules governing manufacturing of products including guidelines on solvents, specific manufacturing standards and quality control measures, and much more. It is suggested that legislators carefully read both publications before composing legislation.

Resources:

Reason Magazine: <https://a8d50b36.rocketcdn.me/wp-content/uploads/framework-federal-state-hemp-derived-cannabinoid-regulation.pdf>

OSU Drug Enforcement and Policy Center: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5014643

S.B. 326 website: <https://www.legislature.ohio.gov/legislation/135/sb326>

S.B. 326 Analysis: <https://www.legislature.ohio.gov/download?key=23549>

S.B. 326 Fiscal Notes: <https://www.legislature.ohio.gov/download?key=23644>

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