

**Chairman Wilkin, Vice Chair Reineke, Ranking Member DeMora, and members of the Senate General Government Committee:**

Thank you for the opportunity to present testimony regarding Senate Bill 326.

My name is Douglas Berman. I am a Professor and Executive Director of the Drug Enforcement and Policy Center at The Ohio State University Moritz College of Law. Drawing on a report prepared by my Center's research staff (which is attached to this testimony), I wish to share information regarding how states have responded to the proliferation of intoxicating hemp products. Concerns about the health and safety of consumers and communities have prompted legal reforms nationwide, but states have approached regulating intoxicating hemp products in diverse ways.

Our research revealed Ohio is now in the minority of states to have not addressed intoxicating hemp products in any focused way. As many as 15 states now fully prohibit intoxicating hemp products. Many states fall between these extremes with some regulating intoxicating hemp as marijuana products, others banning particular cannabinoids (such as delta-8 THC), and some relying on consumer regulations to address manufacturing and sales. Each approach has potential pros and cons, which I can only briefly outline here.

**States that have completely banned intoxicating hemp products** are largely driven by concerns about public health and safety, youth access, and the lack of regulation in the manufacturing of these products. While these states offer a strong stance on limiting access to potentially harmful substances, complete bans can present challenges in enforcement and market adaptation, including for non-intoxicating hemp products and businesses.

**Other states regulate intoxicating hemp products using their marijuana regulations.** For instance, Michigan, through its Cannabis Regulatory Agency, treats hemp products with intoxicating cannabinoids as part of its broader cannabis program for purposes of testing, labeling, packaging, and licensing requirements for producers and retailers. This approach seeks to level the playing field between marijuana and hemp industries, though it can present its own distinct enforcement issues.

**Other states have adapted consumer protection measures to intoxicating hemp products.** Kentucky, for example, has allowed production and sale of products with hemp-derived intoxicating cannabinoids subject to licensing, product registration, testing, packaging and age requirements. This approach, which also has its own regulatory challenges, appears to be most common in states that do not have regulated adult-use marijuana markets.

Based on the research and policy analysis our Center has conducted, these diverse legal and regulatory responses appear influenced by three primary policy concerns. Let me briefly note these concerns and encourage review of our full report for discussion of these issues in greater detail.

- 1. Concern about Youth Access and Exposure**
- 2. Concern with Consumer Safety and Accurate Product Information**
- 3. Balancing Hemp Industry and Adult-Use Marijuana Industry Interests**

Due to passage of Issue 2 and the work of the Division of Cannabis Control, the manufacture and sale of marijuana products in Ohio for adult use are subject to robust regulations (and a special excise tax). Our report details dozens of Ohio rules and restrictions that apply to marijuana products, many of which seek to advance the health and safety of consumers and communities and limit youth access. But intoxicating hemp products can be sold anywhere to anyone and have no restrictions on packaging or marketing to children even though all psychoactive THC substances can negatively affect brain development in adolescents and impact other aspects of their lives.

Consumer safety concerns have also emerged nationwide with intoxicating hemp products due to inconsistent and unregulated production processes, lack of rigorous testing, lack of research on possible effects of new and novel compounds, and lack of standardized, easy-to-understand labeling. Rigorous analyses of various Delta-8 products have commonly found discrepancies in potency relative to what is stated on packaging, as well as heavy metals and other adulterants.

To address youth access and consumer safety, Ohio legislators could consider targeted regulations such as age limits, child-resistant packaging, prohibiting advertising to minors, retail licensing and/or location restrictions, manufacturing and product safety standards, testing and labeling regulations. Because these types of regulation have been developed for the Ohio adult-use marijuana market, the General Assembly might find it efficient and effective to subject intoxicating hemp products to existing marijuana regulations.

Of course, a total ban might be another means to try to address concern about these products. Enforcing such a ban presents various challenges, can interfere with certain public health interventions, and will adversely impact Ohio businesses now involved in producing and distributing these products. According to the Department of Agriculture, in Ohio 24 farmers planted hemp in the 2024 growing season and there were 33 active processors. In addition, an unknown number of Ohio retailers are selling intoxicating hemp products. One advocacy group has asserted significant job and revenue loss would result from a complete ban on intoxicating hemp products, but clear and detailed data on sales of intoxicating hemp products in Ohio is lacking.

Whatever legal reform path Ohio may take, the General Assembly should ensure robust data collection to track intoxicating hemp and traditional marijuana products. Detailed data collection distinguishing between these products is essential to effective on-going regulatory efforts, and lawmakers should consider developing a reporting system for these products to be tracked in real time across retail and public-health spaces.

Thank you for giving me an opportunity to testify and thank you for your attention to these important policy matters.



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# Considerations for Regulating Intoxicating Hemp Products



THE OHIO STATE UNIVERSITY  
MORITZ COLLEGE OF LAW

DRUG ENFORCEMENT  
AND POLICY CENTER

## DRUG ENFORCEMENT AND POLICY CENTER

# Considerations for Regulating Intoxicating Hemp Products

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## I. INTRODUCTION

In 2018, the United States Congress made a significant change to the legal definition of marijuana in the Agriculture Improvement Act, frequently referred to as the 2018 Farm Bill. This legislation removed legal barriers to industrial hemp production by removing hemp, defined as the plant *cannabis sativa* L. with a Delta-9 tetrahydrocannabinol (THC) concentration of not more than 0.3% on a dry weight basis, from the federal Controlled Substances Act. In response, Ohio enacted Senate Bill 57 in July 2019 to legalize production of hemp in Ohio (using the same hemp definition as in the 2018 Farm Bill). Ohio subsequently received one of the first hemp production approvals from the U.S. Department of Agriculture in December 2019.<sup>1</sup>

In the 19th and early 20th century, hemp agriculture and use in the U.S. was focused on the production of fiber and seeds for rope, fabric, and other industrial product. But the vast majority of today's hemp industry revenue is derived from the plant's production of metabolites such as cannabigerol (CBG) or cannabidiol (CBD).<sup>2</sup> These metabolites are used not only in their original form as non-euphoric additives in a variety of products, but also to extract psychoactive substances, such as Delta-8 tetrahydrocannabinol, which are used in the production of intoxicating consumer products. Because the 2018 Farm Bill legalized "any part of that plant, including the seeds thereof and all derivatives, extracts, cannabinoids, isomers, acids, salts, and salts of isomers, whether growing or not" and the federal government has not yet acted to regulate this aspect of the hemp industry, the production and sale of so-called "intoxicating hemp products" exist in a legal gray area under federal law.

Despite legal uncertainties at the federal level, a significant commercial market for intoxicating hemp products has emerged and grown across the U.S. One report estimated that the "U.S. market for Delta-8 THC and other hemp-derived cannabinoids has increased a whopping 1,283% in just three years, growing from \$200.5 million in sales [in] 2020 to nearly \$2.8 billion in 2023."<sup>3</sup> Another recent report from the fall of 2023 stated that "the total demand for hemp-derived cannabinoids is valued in excess of \$28 billion."<sup>4</sup>

Because intoxicating hemp products are not subject to any federal regulation, the proliferation of these products in many retail outlets and settings has led to concerns about their safety, quality, and marketing among policymakers and public health experts. Amid calls for more federal oversight in this arena, many states have taken specific steps under state law to regulate intoxicating hemp product. As shown in Table 1, which is adapted from a recent report from Reason Foundation,<sup>5</sup> a majority of states have fully prohibited or placed significant regulations on intoxicating hemp products. Ohio is currently among a minority of states with minimal or no regulations on these products, though some Ohio lawmakers and public health experts have called for a legal response to the proliferation of unregulated intoxicating hemp products in the state. As detailed in the Appendix, several bills have been introduced in the Ohio General Assembly to address intoxicating hemp products.

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<sup>1</sup> The first approved plans in December 2019 were submitted by the states of Louisiana, New Jersey, and Ohio, and the Flandreau Santee Sioux, Santa Rosa Cahuilla, and La Jolla Band of Luiseno Indian Tribes. *USDA Approves First State and Tribal Hemp Production Plans*. December 27, 2019. U. S Department of Agriculture. [USDA Approves First State and Tribal Hemp Production Plans | Agricultural Marketing Service](https://www.usda.gov/media/press-releases/2019/12/27/usda-approves-first-state-and-tribal-hemp-production-plans), visited on November 4, 2024.

<sup>2</sup> According to the National Hemp Report released on April 17, 2024, by the National Agricultural Statistics Service of the United States Department of Agriculture, over 90% of industrial hemp value comes from floral hemp, which is mainly cultivated for the production of metabolites. <https://downloads.usda.library.cornell.edu/usda-esmis/files/gf06h2430/3t947c84r/mg74s940n/hempnan24.pdf>, accessed on November 5, 2024.

<sup>3</sup> Noelle Skodzinski. March 6, 2024. "How Big Is the U.S. Market for Delta-8 THC and Other Intoxicating Hemp-Derived Cannabinoids?" *Cannabis Business Times*. <https://www.cannabisbusinesstimes.com/business-issues-benchmarks/cannabis-sales-trends/news/15686872/how-big-is-the-us-market-for-delta-8-thc-and-other-intoxicating-hemp-derived-cannabinoids>.

<sup>4</sup> Beau Whitney. Oct 26, 2023. "2023 U.S. National Cannabinoid Report." *Whitney Economics*. <https://whitneyeconomics.com/blog/us-national-cannabinoid-report---executive-summary>.

<sup>5</sup> Michelle Minton and Geoffrey Lawrence. September 2024. "A Framework for Federal and State Hemp-Derived Cannabinoid Regulation." *Reason Foundation*. <https://reason.org/policy-brief/a-framework-for-federal-and-state-hemp-derived-cannabinoid-regulation/>.



The purpose of this report is to highlight the main areas of concern in respect to intoxicating hemp products and present various steps Ohio can take in trying to balance the various concerns and priorities. We begin with a short overview of the most common components of intoxicating hemp products and key areas of concern in respect to their proliferation.

**Table 1. State legality of intoxicating hemp products<sup>6</sup>**

Illegal	Legal			Legal with Exceptions	
Fully prohibited	Unregulated	Regulated as consumer goods	Regulated as cannabis	Bans on synthesized hemp-cannabinoids	Bans on specific hemp-cannabinoids
Colorado, Delaware, Hawaii, Idaho, Iowa, Mississippi, Montana, Nevada, New York, North Dakota, Rhode Island, South Dakota, Utah, Virginia, Washington	Alabama, Arkansas, D.C., Illinois, Indiana, Kansas, Maine, Massachusetts, Missouri, Nebraska, New Hampshire, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Texas, West Virginia, Wisconsin, Wyoming	Louisiana, Maryland, Minnesota, Tennessee, Florida, Georgia, Kentucky	Alaska, Arizona, California, Connecticut, Michigan, Vermont, Oregon	Alaska, Oregon, Vermont, Hawaii, Nevada, North Dakota, Washington, Wyoming (contested)	Louisiana (THCA flower), Virginia (Delta-8), Indiana (smokable hemp flower), New York (synthesized THC, Delta-8, Delta-10), Washington (Delta-8), West Virginia (Delta-8, Delta-10), Wyoming (Delta-8)

## II. UNDERSTANDING “INTOXICATING HEMP PRODUCTS”

In broad terms, an “intoxicating hemp product” is a hemp-derived product that contains cannabinoids in concentrations high enough to produce psychoactive effects when consumed. These cannabinoids occur naturally in hemp plants, although their extraction requires extensive manipulation via chemical processes. Below we list the most commonly used naturally occurring cannabinoids in hemp:

1. **CBD** (cannabidiol) is naturally derived from the hemp plant, most commonly from its flower. It is the second most prevalent active ingredient in cannabis plants but is not psychoactive. The 2018 Farm Bill legalized CBD as long as it is hemp-derived and does not come from marijuana. CBD has been used for treating childhood epilepsy syndromes and evidence suggests that CBD may also help with a variety of

<sup>6</sup> Ibid.

conditions such as anxiety, insomnia, and chronic pain.<sup>7</sup> Consumer products with CBD come in many forms such as edibles, topical formulas, patches, tinctures, and vapes, among others.

2. **Delta-8 THC** is a psychoactive cannabinoid found in the *Cannabis sativa* plant.<sup>8</sup> It is an isomer of Delta-9 THC (which is also present in hemp) but occurs only at minuscule levels in natural cannabis. High levels of Delta-8 THC can be produced by chemically converting CBD or Delta-9 THC through a process known as isomerization. All Delta-8 THC products are manufactured by some form of chemical conversion.<sup>9</sup> Delta-8 THC is often considered moderately less potent than Delta-9 THC, and so has also been called “weed light,” “diet weed,” and Delta-9 THC’s “nicer younger sibling.”<sup>10</sup> The psychoactive effects are similar and occur by binding to cannabinoid receptors in the brain.<sup>11</sup> Consumer products with Delta-8 include gummies, other edibles, drinks, tinctures, vapes, and more.
3. **THC-A** (tetrahydrocannabinolic acid) occurs naturally in cannabis plants and is a precursor of THC. THC-A does not produce a high unless smoked or vaporized, which causes it to change into Delta-9 THC.<sup>12</sup> It is present in hemp products such as vapes and pre-rolls, which can then be heated to convert it to THC.
4. **THC-O**, also known as THC-O acetate, is a semi-synthetic cannabinoid. It is not found naturally in the cannabis plant, but is technically derived from hemp, making the chemical compound synthetic.<sup>13</sup> It is derived from Delta-8 THC and is said to be stronger than regular THC; however, more research is required to understand its effects.<sup>14</sup> THC-O products can include vapes, edibles, and concentrates.

### III. PRIORITY AREAS OF CONCERN

Policymakers and stakeholders nationwide and in Ohio have expressed a range of concerns regarding the proliferation of intoxicating hemp products. As discussed below, some of the most common and prominent concerns include use by youth and children’s accidental exposure, consumer safety, and balancing interests of the hemp and adult-use marijuana industry.

#### A. Use by Youth and Children’s Accidental Exposure

At present, the state of Ohio does not have any laws or regulations restricting access to intoxicating hemp products to teens and young adults. Unlike marijuana products that are restricted to adults who are 21 or older and that can only be sold in licensed dispensaries, intoxicating hemp products can be sold at any store and do not carry any age restrictions. Additionally, because they are not covered by any of the adult-use marijuana

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<sup>7</sup> Peter Grinspoon, MD. April 4, 2024. “Cannabidiol (CBD): What we know and what we don’t.” *Harvard Health Publishing*. <https://www.health.harvard.edu/blog/cannabidiol-cbd-what-we-know-and-what-we-dont-2018082414476>.

<sup>8</sup> Qamar S., Manrique Y.J., Parekh H.S., Falconer J.R. May 2021. “Development and Optimization of Supercritical Fluid Extraction Setup Leading to Quantification of 11 Cannabinoids Derived from Medicinal Cannabis”. *Biology*. 10(6):481. doi:10.3390/biology10060481.

<sup>9</sup> Dale Gieringer. “NORML’s Guide to Delta-8 THC and Other Novel Cannabinoids”. <https://norml.org/marijuana/fact-sheets/normls-guide-to-delta-8-and-other-novel-cannabinoids/>.

<sup>10</sup> Kruger, J.S., and Kruger, D.J. 2022. “Delta-8-THC: Delta-9-THC’s nicer younger sibling?” *J Cannabis Res* 4, 4. <https://doi.org/10.1186/s42238-021-00115-8>.

<sup>11</sup> Geci M., Scialdone M., Tishler J. 2023. “The Dark Side of Cannabidiol: The Unanticipated Social and Clinical Implications of Synthetic Δ8-THC.” *Cannabis Cannabinoid Res*. 8(2):270–282. doi:10.1089/can.2022.0126.

<sup>12</sup> Michigan Cannabis Regulatory Agency, Cannabis Regulatory Agency Answers Recent Questions Regarding THCA, <https://www.michigan.gov/cra/-/media/Project/Websites/cra/bulletin/2MMFL-Advisory/CRA-Answers-Recent-Questions-Regarding-THCA.pdf?rev=71249278721940eba6bdc5dcbcb00ce6&hash=AC7BDDBC274C7A6EABD8FBEF7A0BE80F>.

<sup>13</sup> Kaufman, Anna. June 2, 2023. “What is THC-O? Similar to Delta-8, it’s making waves in the cannabis market.” *USA Today*. <https://www.usatoday.com/story/news/health/2023/06/02/what-is-thco/70252031007/>.

<sup>14</sup> See Hill, David J. July 10, 2023. “New study debunks claims of a psychedelic cannabinoid.” <https://www.buffalo.edu/news/releases/2023/07/thc-o-acetate.html>.

regulations, there are no restrictions on how they are packaged, whether they are designed to appeal to children, or whether they are marketed specifically to children and adolescents. According to the 2023 Monitoring the Future survey from the National Institute on Drug Abuse, 11.4% of high school seniors reported Delta-8 THC use, with prevalence higher in states without marijuana legalization or existing Delta-8 THC regulations.<sup>15</sup> The unfettered access is problematic in part because any psychoactive THC substance, whether Delta-8 or Delta-9, can negatively affect brain development in adolescents and impact other aspects of their lives.<sup>16</sup> These concerns have been emphasized by Ohio Governor Mike DeWine in his advocacy for legislation in Ohio to address intoxicating hemp products.

## B. Consumer Safety

Various consumer issues have emerged with intoxicating hemp products: inconsistent and unmonitored production processes, lack of rigorous testing conducted by reputable testing labs, lack of research on possible effects of use, and lack of standardized, easy-to-understand labeling of products. According to the FDA, some manufacturers use potentially dangerous household chemicals to make Delta-8 THC, and other chemicals may be used to alter the look of the final product.<sup>17</sup> Other contaminants may be present in the raw material which could lead to adverse health effects for people who use the products. Analysis of Delta-8 products has found discrepancies in potency between the product and what is stated on the packaging, along with heavy metals and other adulterants.<sup>18</sup> Due to the questionable quality of the raw material, the chemicals used in the production process, and potential by-products created during synthesis, there are many opportunities for harmful contamination and by-products that could cause short- and/or long-term health issues. In addition to the safety of products, intoxicating hemp products have been shown to be mislabeled in terms of their potency, with some labs reporting concentrations ten times higher, which can lead to adverse health effects.<sup>19</sup>

## C. Balancing Interests of the Hemp and Adult-Use Marijuana Industry

With the growth of a significant new hemp-based industry, policymakers nationwide have been forced to consider how to balance the interests of the hemp industry and the adult-use marijuana industry. Though the national market for intoxicating hemp products is estimated to be only about 10% of the overall size of the marijuana industry,<sup>20</sup> the market has grown rapidly and provides a form of competition to highly regulated marijuana products. But it is not often clear how these industry sectors interact in any particular state, especially because the intoxicating hemp industry is not burdened by restrictions on interstate commerce that limit the marijuana industry.

There is limited data on the intoxicating hemp industry in Ohio, though the Ohio Department of Agriculture reports

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<sup>15</sup> Alyssa F. Harlow, Miech R.A. and Leventhal A.M. 2024. "Adolescent  $\Delta$ 8-THC and Marijuana Use in the US." *JAMA* 331(10):861–865. <https://doi.org/10.1001/jama.2024.0865>.

<sup>16</sup> Aimee Cunningham. January 5, 2024. "The teen brain is especially susceptible to the harms of THC." *ScienceNews*. [How does THC affect teens' mental health?](#)

<sup>17</sup> "5 Things to Know about Delta-8 Tetrahydrocannabinol." *U.S. Food and Drug Administration*. <https://www.fda.gov/consumers/consumer-updates/5-things-know-about-delta-8-tetrahydrocannabinol-delta-8-thc>.

<sup>18</sup> Nachnani, R., Raup-Konsavage, W.M. & Vrana, K.E. 2022. "The Rise and Risk of Delta-8 THC (Delta-8-Tetrahydrocannabinol)." *Curr Addict Rep* 9, 622–629. <https://doi.org/10.1007/s40429-022-00456-1>.

<sup>19</sup> Brian McNeill, December 15, 2021. "VCU lab testing delta-8 products finds misleading labeling, lack of safety standards." *VCU News*. <https://news.vcu.edu/article/2021/12/vcu-lab-testing-delta-8-products-finds-misleading-labeling-lack-of-safety-standards>, accessed on November 5, 2024.

<sup>20</sup> Noelle Skodzinski. March 6, 2024. "How Big Is the U.S. Market for Delta-8 THC and Other Intoxicating Hemp-Derived Cannabinoids?" *Cannabis Business Times*. <https://www.cannabisbusinesstimes.com/business-issues-benchmarks/cannabis-sales-trends/news/15686872/how-big-is-the-us-market-for-delta-8-thc-and-other-intoxicating-hemp-derived-cannabinoids>.



that the number of farmers involved in the hemp production is relatively small in the Buckeye State.<sup>21</sup> What is quite clear, however, is the presence of vastly different regulatory regimes for the production and sale of marijuana and intoxicating hemp products in Ohio. As shown in Table 2, while the Ohio adult-use marijuana industry carries a heavy regulatory burden and is subjected to high regulatory costs, the hemp industry and its products are regulated very lightly thus creating an uneven playing field for their products. Unless the Ohio legislature chooses to completely ban intoxicating hemp products, which has been an approach taken by a number of states and has been proposed in some bills, Ohio legislators should consider the range of regulatory realities noted below as it considers ways to balance the interests of these two competing industries.

**Table 2. Regulatory differences between the adult-use marijuana and hemp industries**

Sector	Area of regulation	Adult-use marijuana regulations <sup>22</sup>	Hemp regulations <sup>23</sup>
<b>Cultivator</b>	License fee	Cultivator Level 1: <ul style="list-style-type: none"> <li>\$20,000 Application fee</li> <li>\$180,000 Licensure fee</li> <li>\$200,000 Annual renewal fee</li> </ul> Cultivator Level 2: <ul style="list-style-type: none"> <li>\$2,000 Application fee</li> <li>\$18,000 Licensure fee</li> </ul> \$20,000 Annual renewal fee	Application fee: \$100.  Annual license fee: \$500 for each growing location.
<b>Cultivator</b>	License limit	No official caps on licenses. However, there are certain limits to the initial number of licenses and how many will be allocated over time. License holders are limited to one adult-use cultivator license unless authorized additional licenses by the Division.	No limit.
<b>Cultivator</b>	Geographic location	Cannot be located within 500 feet of a prohibited facility, which includes churches, public libraries, public playgrounds, public parks, and schools. ORC 3780 establishes specific exceptions for cultivator licenses.  Municipalities can prohibit operators within their jurisdiction.	Prohibited from growing within 100 feet from any structure that is used for residential purposes. Prohibited from growing within a half a mile from a medical marijuana cultivator (with exceptions). Prohibited from growing within 500 feet of a school or public park (with exceptions).  Municipalities cannot restrict operators from their jurisdiction.

<sup>21</sup> According to information provided by the Ohio Department of Agriculture, only 24 of the 36 registered farmers grew hemp in 2024 for a total of 237 acres, of which 47 acres were grown for fiber, 171 acres were grown for grain and 19 acres were grown for flower (additional 19,500 sq ft of flower hemp were grown indoors). In addition to the farmers, there are 33 registered and active processors, seven of which produce raw flower products, four act as an extraction facility, 30 act as a wholesale facility, and 18 engage in retail.

<sup>22</sup> Ohio Revised Code 3780

<sup>23</sup> Ohio Revised Code 928

Sector	Area of regulation	Adult-use marijuana regulations <sup>22</sup>	Hemp regulations <sup>23</sup>
<b>Cultivator</b>	Size limitation	<p>Level I Cultivators: up to 100,000 sq ft of cultivation area.</p> <p>Level II: up to 15,000 sq ft of cultivation area.</p> <p>Level III: up to 5,000 sq ft of cultivation area.</p>	<p>Outdoor: minimum ¼ acre (with exceptions).</p> <p>Indoor: Minimum area of at least 1,000 sq ft (with exceptions).</p> <p>Growing location must have a minimum of 1,000 plants (with exceptions).</p>
<b>Cultivator</b>	Security regulations	<p>Must have standards for security and surveillance equipment for adult-use operators.</p> <p>Operators have the option to use armed or unarmed guards for license locations.</p> <p>Operators must develop plans for risk prevention, theft and fraud prevention, surveillance and security, and other emergency-related measures.</p>	No regulations in respect to security of property.
<b>Cultivator</b>	Tracking of product	<p>Seed-to-sale electronic tracking data system.</p> <p>Tracking system is live and updated in real time.</p>	Growing locations may be subjected to a random sampling and inspection at any time to make sure plants are under the required 0.3% of Delta-9 THC. Licensee must submit annual planting and production reports. This includes location, acres planted and harvested, plant variety name, primary use of harvest for each planting, and any other required information. There is no seed-to-sale tracking system.
<b>Cultivator</b>	License fee	<p>Cultivator Level 1:</p> <ul style="list-style-type: none"> <li>\$20,000 Application fee</li> <li>\$180,000 Licensure fee</li> <li>\$200,000 Annual renewal fee</li> </ul> <p>Cultivator Level 2:</p> <ul style="list-style-type: none"> <li>\$2,000 Application fee</li> <li>\$18,000 Licensure fee</li> </ul> <p>\$20,000 Annual renewal fee</p>	<p>Application fee: \$100.</p> <p>Annual license fee: \$500 for each growing location.</p>
<b>Processor</b>	License fee	<p>\$10,000 Application fee.</p> <p>\$90,000 Licensure fee.</p> <p>\$50,000 Annual renewal fee.</p>	<p>Application fee: \$100.</p> <p>Annual license fees: Range from \$250 to \$3,000 depending on how the plant is being processed.</p> <p>Licenses are valid for three years.</p>

Sector	Area of regulation	Adult-use marijuana regulations <sup>22</sup>	Hemp regulations <sup>23</sup>
<b>Processor</b>	License limit	No official caps on licenses. However, there are certain limits for the initial number of licenses and how many will be allocated over time. License holders are limited to one adult-use processor license unless authorized additional licenses by the Division.	No limit.
<b>Processor</b>	Geographic location	Cannot be located within 500 feet of a prohibited facility, which includes churches, public libraries, public playgrounds, public parks, and schools.  Municipalities can prohibit operators within their jurisdiction.	Prohibited from processing, handling, or storing hemp/hemp products in or adjacent to any structure used/zoned for residential purposes.  Prohibited from processing hemp within 500 feet of a school or public park with exceptions.  Municipalities cannot restrict operators from their jurisdiction.
<b>Processor</b>	Security regulations	Must have standards for security and surveillance equipment.  Operators have the option to use armed or unarmed guards for license locations.  Operators will develop plans for risk prevention, theft and fraud prevention, surveillance and security, and other emergency-related measures.  Marijuana is tracked through an electronic tracking system.	No security regulations, except OSHA.
<b>Processor</b>	Testing requirement	Products must be tested by a laboratory certified and licensed by the Division of Cannabis Control.  Processors must abide by testing standards and regulations established by ORC 3780 and subsequent rules.	Randomly sample each batch or lot.  Must be tested by an ISO-certified lab that meets the requirements established by law.  Test for cannabinoid potency, contaminants, mycotoxins, heavy metals, and residual solvents.
<b>Retailers</b>	Retailer License	\$5,000 Application fee.  \$70,000 Licensure fee (2-year license).  \$70,000 renewal fee.	No retailer license for businesses selling hemp products.

Sector	Area of regulation	Adult-use marijuana regulations <sup>22</sup>	Hemp regulations <sup>23</sup>
<b>Retailers</b>	License Limits	No official caps on licenses. However, there are certain limits to the initial number of licenses and how many will be allocated over time. License holders are limited to eight adult-use dispensary licenses unless authorized additional licenses by the Division.	There are no license limits or caps on retailers selling hemp-derived products to consumers.
<b>Retailers</b>	Oversight Entity in Charge of Retail Sales	Division of Cannabis Control (within the Department of Commerce)	Department of Agriculture oversees the hemp program but does not explicitly license retailers selling hemp products.
<b>Retailers</b>	License Enforcement	The Division has the authority to immediately revoke and suspend licenses found non-compliant with the rules and regulations of the adult-use program.	ODA does not have authority over retailers because they are not licensed.  Products sold by retailers must meet Ohio's food safety standards and be inspected by the appropriate state or local agency.
<b>Retailers</b>	Product Sourcing	Licensed marijuana dispensaries can only purchase products from processors licensed in the state of Ohio.  No product can be purchased from another state.	Products can be purchased from any licensed processor, regardless of where the processor is licensed, where the hemp is grown, and where the product is produced.
<b>Retailers</b>	Product Testing	Products sold by licensed dispensaries must undergo testing and be approved by a certified testing laboratory approved by the Division.	Products are tested by a third-party testing laboratory with ISO/IEC accreditation. Testing occurs during cultivation and processing. Products must be under the 0.3% THC threshold.
<b>Retailers</b>	Employee Standards	Dispensary employees must be 21 years old, undergo training and background checks, and obtain a license to sell to adult-use consumers.	There are no requirements or standards for employees selling hemp products at retailers.

Sector	Area of regulation	Adult-use marijuana regulations <sup>22</sup>	Hemp regulations <sup>23</sup>
<b>Retailers</b>	Geographic Location	<p>Cannot be located within 500 feet of a prohibited facility, which includes churches, public libraries, public playgrounds, public parks, and schools. A dispensary cannot be located within one mile of another dispensary. ORC 3780 establishes specific exceptions for dispensary licenses.</p> <p>Municipalities can prohibit operators within their jurisdiction.</p>	<p>No geographical restrictions for hemp retailers.</p> <p>Municipalities cannot prohibit operators within their jurisdiction.</p>
<b>Testing Laboratories</b>	Standards	Testing laboratories must be independent and licensed through the Division of Cannabis Control using their certification process.	Testing labs must be ISO/IEC 17025 accredited. ODA may contract with third-party laboratories to provide testing services on its behalf. ODA is the official regulatory body for compliance testing.
<b>Testing Laboratories</b>	Conflict of Interest	Testing laboratory licenses cannot be owned, have any investment, or have compensation ties with any adult-use operator licensee or applicant.	There are no restrictions limiting ownership or investment interests in hemp testing laboratories.
<b>Consumers</b>	Age Limitations	Consumers must be 21 years of age to purchase adult-use marijuana from a licensed dispensary.	There are no age requirements for individuals purchasing hemp products from a retailer.
<b>Consumers</b>	Possession Limits	2.5 ounces of marijuana in any form except extract, 15 grams of extract. May purchase 2.5 ounces from dispensary per day.	There are no possession limits for an individual possessing a hemp-derived product.
<b>Other Administrative Rules</b>	Local Authority	Localities may ban adult-use dispensaries but cannot restrict existing medical marijuana businesses or co-located adult-use operations with medical certificates at the same location.	There are no provisions allowing local authorities to ban licenses or retailers.
<b>Other Administrative Rules</b>	Taxes	Adult-use marijuana is subject to a 10% excise tax, in addition to the state and local sales taxes ranging from 5.25% to 7.5%.	Hemp-derived products are not subject to an excise tax, but state and local taxes do apply.



Sector	Area of regulation	Adult-use marijuana regulations <sup>22</sup>	Hemp regulations <sup>23</sup>
Other Administrative Rules	Advertising	Adult-use products may not be advertised in a way that targets minors, promotes illegal activity, or promotes excessive use. The Division of Cannabis Control may adopt time and place restrictions to prevent advertising to minors.	The hemp program has not established advertising restrictions for hemp-derived products.
Other Administrative Rules	Packaging and Labeling Standards	Cannabis packaging regulations mandate child-resistant containers, clear THC warnings, and potency details to ensure consumer safety and prevent misuse.	<p>Hemp product labeling must state CBD content and confirm Delta-9 THC levels below 0.3%.</p> <p>There are no standards or regulations requiring labeling for other psychoactive ingredients.</p> <p>There are no regulations prohibiting products that are attractive to children.</p> <p>There are no regulations for child-resistant packaging.</p>

#### IV. REGULATORY OPTIONS BASED ON PRIORITY AREAS OF CONCERN

There are several bills that have been introduced in the Ohio General Assembly that address the challenge of regulating intoxicating hemp products (see the Appendix for detailed review of all bills). Below we present some of the regulatory options Ohio legislators might want to consider as they consider various proposals for the regulation of intoxicating hemp products.

##### A. Regulatory Options to Prevent Use by Youth and Children’s Accidental Exposure

Besides a complete ban on intoxicating hemp products, the following regulatory options would help prevent use of these products by youth and children and also move Ohio law a step closer to regulatory parity between the hemp industry and the adult-use marijuana industry.

##### Adopt a 21-year-old age limit requirement for purchases of intoxicating hemp products

There is a wide scientific consensus that intoxicating THC products are especially harmful to developing brains of adolescents and young adults. Setting a legal age of 21 for the purchase of intoxicating hemp products is consistent with practices in other states as well as practices involving other intoxicating substances such as alcohol or marijuana.

##### Adopt child-resistant packaging requirements developed for Ohio adult-use marijuana market

Accidental exposure of children to intoxicating THC products in Ohio has increased sharply from 2019 to 2023. For example, Dayton Children’s hospital has reported a 571% rise<sup>24</sup> in emergency department visits for children who accidentally consumed or were exposed to cannabis products, and Central Ohio Poison Center registered a

<sup>24</sup> Blog post, Oct. 17, 2024. "More than 500% increase in children marijuana exposures after recreational pot legalization." <https://www.childrensdayton.org/the-hub/increase-in-children-accidently-exposed-marijuana>.

similar uptick.<sup>25</sup> Adopting the same rules in respect to child-resistant packaging developed for the Ohio adult-use marijuana market should help prevent accidental exposure to children, especially those under 5 years of age.

### **Adopt regulations prohibiting advertising to minors developed for Ohio adult-use marijuana market**

Similarly to other age-restricted products, such as alcohol or tobacco, the state of Ohio should ensure that intoxicating hemp products are not marketed in a manner that appeals to children. Currently, the Ohio Division of Cannabis Control is preparing administrative rules regulating marketing of adult-use marijuana, which includes restrictions on marketing products in a way that appeals to children. In the interest of uniformity and safety of Ohio's children, the same rules should be adopted for the marketing of intoxicating hemp products.

### **Adopt location restrictions developed for Ohio adult-use marijuana market for intoxicating hemp product retailers in respect to schools, libraries, parks, and playgrounds**

In addition to enacting an age requirement, policymakers should consider enacting location restrictions for retailers selling intoxicating hemp products similar to restrictions imposed on adult-use dispensaries. At minimum, policymakers should consider banning the sale of intoxicating hemp products within 500 feet of schools, libraries, public playgrounds, and parks.

## **B. Regulatory Options to Protect Consumer Safety**

### **Adopt manufacturing and product safety standards**

At present, intoxicating hemp products do not need to meet any specific safety or production standards in the state of Ohio. This means that consumers cannot be sure that the product they are purchasing does not contain harmful ingredients or that proper extraction methods for cannabinoids were followed and did not leave any residual harmful chemicals in the finished product. On the other hand, Ohio has comprehensive manufacturing and product safety standards for its adult-use marijuana industry, which could be adopted with certain modifications for intoxicating hemp products.

### **Establish testing regulations for finished intoxicating hemp products at the wholesale level**

At present, the Ohio Department of Agriculture oversees the testing requirements for hemp cultivators and processors to verify that plants and finished products do not exceed the legal THC limit of 0.3% Delta-9 tetrahydrocannabinol. While this testing is important, it does not encompass any other tests focused on the safety or adulteration of the final product, or accurate labeling of the final product. Similar to the adult-use marijuana market, hemp oversight should establish a testing laboratory license to ensure quality and consistency in products being sold to Ohio consumers. This would standardize the testing process and reduce inconsistent testing by third-party licensees. Regulators should also consider establishing language that ensures hemp retailers and other licensees cannot have any ownership or investment interests in laboratories testing hemp products.

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<sup>25</sup> "Data show yearly increase in accidental marijuana exposures in Ohio children under 12." 10 WBNS. <https://www.10tv.com/article/news/local/data-shows-yearly-increase-accidental-marijuana-exposures-in-ohio-children-under-12/530-e1defc0b-e252-4c8f-a87c-9d73fd4de490>.

## Adopt labeling regulations developed for Ohio adult-use marijuana market

One of the concerns with unregulated intoxicating hemp products is that consumers often do not know what they consume due to incomplete labels or mislabeling. Similarly to adult-use marijuana products, producers who want to sell their products in Ohio should be held to strict labeling regulations denoting not only the potency of the product but also serving sizes. Similar regulations have already been developed for the medical and adult-use marijuana products and could be adopted for use with intoxicating hemp products as well.

## C. Regulatory Options to Balance Interests of the Hemp and Adult-Use Marijuana Industry

### Charge the same excise tax on intoxicating hemp-infused products

At present, intoxicating hemp products sold in Ohio are only subject to the standard state and local sales tax. In contrast, adult-use marijuana products carry an additional 10% excise tax. Given the intoxicating nature of Delta-8 and some of the other hemp-derived cannabinoids, Ohio should impose the same excise tax on intoxicating hemp products to generate additional revenue that can be devoted to youth prevention efforts, public education, data collection and research, and other public causes.

### Regulate retail outlets

One of the starkest differences between intoxicating marijuana products and intoxicating hemp products in Ohio is that intoxicating hemp products can be found in a variety of retail stores such as gas stations, smoke shops, convenience stores, health and wellness stores, and others. At present, none of these establishments have to register with the state and no government agency is keeping track of where these products are being sold, unlike other intoxicating products such as alcohol or marijuana. Policymakers can decide to regulate retail outlets in two distinct ways: allow sale of intoxicating hemp products only in licensed marijuana dispensaries or establish a licensing process for retailers similar to the process currently in place for tobacco or alcohol. By limiting sales of intoxicating hemp to licensed marijuana dispensaries, the state would effectively eliminate access for adolescents and children and would make purchasing more difficult as there are a limited number of dispensaries throughout Ohio. Requiring a license to sell intoxicating hemp products would still allow easy access to these products but would allow the state to keep track of who is selling these products, ensure that they are not being sold near places frequented by children, and allow the state to conduct inspections to ensure that retailers are abiding by any regulations with respect to underage use or inappropriate marketing.

### Establish clear penalties for non-compliance

Another recommendation for policymakers seeking to improve the quality of the hemp program would be to increase penalties and bolster regulatory authority for oversight entities handling non-compliant licensees. Under the adult-use cannabis legislation, the Division of Cannabis Control can immediately revoke or suspend licenses, while the hemp authority can only revoke or suspend licenses after a corrective action plan has been issued. Hemp licensees also have to engage in repeated violations before the hemp authority can revoke a license. Granting the Department of Agriculture increased regulatory authority over non-compliant licensees would limit the possibility of licensees repeating violations that might harm the public or create issues for the industry.

## D. Administrative Regulatory Considerations

### Define what constitutes an intoxicating hemp product

Effectively regulating a product requires clear definitions. The cannabis plant produces over 100 different cannabinoids, not all of which are intoxicating and some of which are intoxicating at different levels. Definitions should thus take into consideration not only the type of cannabinoid, but also its potency, when defining intoxicating hemp products. For example, in the summer of 2023 the state of Colorado adopted legislation that created a three-tiered classification system that includes nonintoxicating cannabinoids, potentially intoxicating cannabinoids, and intoxicating cannabinoids. According to the legislation, a hemp product is identified as intoxicating if it contains more than 1.75 mg of THC per serving and has a CBD to THC ratio of less than 15:1.<sup>26</sup> As detailed in the Appendix, there are several pending bills in Ohio that would establish similar definitions.

### Adopt regulations for all products sold in the state of Ohio irrespective of where they are produced

Unlike marijuana products, which cannot be imported for sale in Ohio dispensaries, hemp-derived products can be freely sold across state lines. This means that it is not enough to impose production and safety standards on products produced in the state of Ohio. Similarly to products such as alcohol, regulations will have to address the quality, standards, and safety of products regardless of their point of origin.

### Collect data and provide education

If the state of Ohio decides against an outright ban of intoxicating hemp products, it will be crucial to distinguish between marijuana and intoxicating hemp products in any data collection undertaken by the state or other agencies. For instance, the increased accidental exposures of children to THC products do not specify whether the product involved was a marijuana product or a hemp product. As the regulatory regime in Ohio develops, it will be important to distinguish between these products to ensure that any issues can be addressed by changes in regulations. Public health officials and lawmakers should develop a reporting system that distinguishes between marijuana and hemp that is tracked in real time across various health-care providers and public health agencies. If a product is tainted or involved in an accidental exposure, regulators can take action to remove or prevent this product from being consumed.

Additionally, policymakers should consider a statewide public education campaign focused on preventing underage consumption and clarifying the different types of hemp-derived products and their uses. Similar to alcohol, cannabis plants can be grown and processed into many different formats and compounds, creating confusion and uncertainty for consumers. A public education campaign could assist users in understanding the different types of available products and the potential dangers associated with their use.

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<sup>26</sup> Colorado Revised Statute § 25-5-427. <https://casetext.com/statute/colorado-revised-statutes/title-25-public-health-and-environment/products-control-and-safety/article-5-products-control-and-safety/part-4-pure-food-and-drug-law/section-25-5-427-classes-of-hemp-derived-compounds-and-cannabinoids-definitions-registration-required-prohibitions-safe-harbor-rules-repeal>.

## APPENDIX

**Table 1. Pending legislations in Ohio General Assembly addressing intoxicating hemp products**

<b>Policy Option</b>	<b>House Bill 86</b> (introduced Feb. 2023)	<b>Senate Bill 278</b> (introduced May 2024)	<b>House Bill 642</b> (introduced July 2024)	<b>Senate Bill 326</b> (introduced Nov. 2024)
Age Limit Requirement	Not addressed	No one may sell adult-use hemp products to anyone under 21	HB 642 requires the Director of Agriculture to study and recommend minimum age requirements for buying adult-use hemp and penalties for underage sales.	SB 326 sets penalties for selling intoxicating hemp to anyone under 21 and prohibits all sales of intoxicating hemp in Ohio.
Child Resistant Packaging	Not addressed	Not addressed	Not addressed	Not addressed
Advertising Restrictions for Minors	Not addressed	Not addressed	HB 642 requires the Director of Agriculture to study and recommend advertising and labeling rules for adult-use hemp. It also calls for additional recommendations, with input from the Department of Public Safety, to help ensure these products are safe and inaccessible to children and underage individuals.	Not addressed
Retailer License Requirements	Not addressed	No retail license is required, but retailers must restrict sales to those 21+, verify age, sell only from permanent buildings, keep products behind the counter, and only remove them after sale completion.	HB 642 requires the Director of Agriculture to recommend locations for adult-use hemp sales, including storage restrictions at retail locations.	SB 326 prohibits any business from selling intoxicating hemp products.



<b>Policy Option</b>	<b>House Bill 86</b> (introduced Feb. 2023)	<b>Senate Bill 278</b> (introduced May 2024)	<b>House Bill 642</b> (introduced July 2024)	<b>Senate Bill 326</b> (introduced Nov. 2024)
Geographic Limitations (Prohibited Places)	Requires hemp cultivators to keep a set distance from medical or adult-use marijuana cultivation sites, unless the marijuana cultivation begins after the hemp operation. Prohibits hemp processing in residences or on residential-zoned land.	Not addressed	HB 642 requires the Director of Agriculture to recommend locations for selling adult-use hemp, including any storage restrictions at retail sites.	Requires hemp cultivators to maintain a set distance from locations where medical or adult-use cannabis is grown, except if cannabis cultivation begins after hemp operations are established. Prohibits hemp processing in residences or on residential-zoned land.
Product and Safety Standards	Cannabinoid hemp product excludes items with over 0.5 mg of Delta-9 THC per serving, 2 mg per package, or any other THC. Sets rules for hemp byproduct production, storage, and disposal, along with hemp processing standards.	Not addressed	HB 642 requires the Director of Agriculture to recommend testing standards for adult-use hemp products.	Establishes production standards and manufacturing practices for hemp processing.
Testing Laboratory License	Not addressed	Not addressed	Not addressed	Not addressed
Labeling Requirements for Products	Sets standards for testing and labeling hemp and hemp products.	Not addressed	HB 642 requires the Director of Agriculture to recommend advertising restrictions and labeling requirements for adult-use hemp products.	Establishes standards for testing and labeling of hemp and hemp products.
Excise Tax	Not addressed	Not addressed	Not addressed	Not addressed

Policy Option	House Bill 86 (introduced Feb. 2023)	Senate Bill 278 (introduced May 2024)	House Bill 642 (introduced July 2024)	Senate Bill 326 (introduced Nov. 2024)
Non-compliance monitoring	Sets requirements and procedures for issuing, administering, and enforcing corrective action plans under this chapter.	Any enforcement agent of the Ohio investigative unit or any law enforcement officer may inspect any premises or location at which an adult-use hemp product is sold at retail without prior notice to the retailer.	HB 642 requires the Director of Agriculture to recommend enforcement mechanisms, including inspection authority for the Ohio Investigative Unit in the Department of Public Safety.	Sets procedures for issuing, renewing, and revoking hemp licenses, including a 10-year revocation for controlled substance felonies, with rights to hearings and corrective action plans.
Hemp Definitions	Provides specific definitions for hemp, cannabinoid hemp products, non-cannabinoid hemp products, floral hemp products, and topical hemp products.	Defines "adult-use hemp product" as a hemp product containing THC that has at least 2.5 mg of THC per serving, more than four servings per package, and a CBD to THC ratio of no more than 15:1 per package.	HB 642 requires the Director of Agriculture to recommend a definition of adult-use hemp products, covering all intoxicating forms, with THC restrictions based on serving size and package content.	Provides definitions for an intoxicating hemp product, hemp products, and non-cannabinoid hemp products.