

Beyond The Leaf:

The Rise Of 7-OH And The Battle Over Gas Station Heroin



In smoke shops and convenience stores across Missouri and the United States, a new product is posing a major public health risk. Often referred to in street vernacular as “Cloud 7,” “Hydroxie,” and “Press’d,” these items contain 7-hydroxymitragynine (7-OH), and they have been linked to concerning rates of overdose risk. Marketed as supposedly “natural” remedies for pain and energy, these potent substances have triggered a regulatory firestorm, attracting attention from public health officials who warn of addiction risks, as well as traditional kratom advocates. This is about more than retail trends; it is about a new epidemic brewing in the heart of America.

What Are Kratom And 7-OH?

To understand the controversy, it is necessary to distinguish between the plant itself, and the concentrated chemical derived from it.

- **Kratom (*Mitragyna speciosa*)** is a tropical tree native to Southeast Asia. Its leaves have been used for centuries for their stimulant effects at low doses and sedative

effects at high doses. The plant contains over 50 alkaloids, the most abundant being mitragynine. Traditional leaf dosages range from 1 to 5 grams, utilized for their stimulating properties, though higher doses around 8 to 15 grams can yield sedative effects. In sharp contrast, 7-OH products typically contain several milligrams of the alkaloid, sometimes exceeding safe consumption levels, making their potency considerably higher.

- **7-Hydroxymitragynine (7-OH)** is a minor alkaloid found in the kratom plant, typically making up less than 2% of the plant’s total alkaloid content and often less than 0.05% of the dried leaf mass. Despite its trace presence in nature, 7-OH is significantly more potent than mitragynine and even morphine, with research suggesting it is 10 to 13 times more powerful than morphine. However, significant gaps in research remain, notably regarding human respiratory depression data linked to 7-OH. Understanding these effects is necessary for informed policy decisions.

The “7-OH products” currently flooding the market are not raw plant matter. They are often unregulated, semi-synthetic items in which mitragynine has been chemically converted (oxidized) to a concentrated 7-OH. Critics and health officials warn that these products carry a high risk of addiction, respiratory depression, and severe withdrawal, earning them the moniker “Gas Station Heroin.” However, advocates assert potential medicinal uses, claiming that 7-OH can aid in pain relief and energy enhancement. To weigh these considerations critically, it is important to juxtapose the reported benefits of pain management and increased energy against the documented harms of addiction and serious health risks. This balance is a bedrock of best practices in addiction-medicine education, urging well-informed decisions on 7-OH’s use.

Federal Regulation: A Looming Crackdown

Currently, neither kratom nor 7-OH is controlled under the federal **Controlled Substances Act (CSA)**. However, the federal government has recently shifted its stance toward aggressive regulation.

- **FDA Action:** The FDA has not approved kratom or 7-OH for any medical use. In July 2025, the FDA issued warning letters to seven companies for illegally distributing 7-OH products.
- **Schedule I Recommendation:** In July 2025, U.S. Health and Human Services Secretary Robert F. Kennedy Jr. and FDA Commissioner Dr. Marty Makary announced their intent to classify 7-OH as a **Schedule I controlled substance**. This classification would place it in the same legal category as heroin and LSD, effectively banning it nationwide.

The Legal Landscape In Missouri

While federal scheduling can take years, the situation in Missouri is a patchwork of local enforcement and proposed state legislation.

Current State Laws

As of late 2025, kratom and 7-OH generally remain unregulated at the state level in Missouri. However, the Missouri Attorney General recently launched a statewide investigation into deceptive practices by kratom companies.

Local Enforcement

Frustrated by the lack of state guidance, some Missouri municipalities are taking matters into their own hands:

- **Gladstone:** In October 2025, Gladstone police began enforcing a ban on 7-OH using an existing city ordinance that prohibits “synthetic mimics” of opioids and cannabinoids. Police ordered smoke shops to remove the products within 24 hours or face arrest.
- **Independence:** City officials are actively reviewing their controlled substance codes to potentially adopt a ban similar to Gladstone’s or explicitly list 7-OH as a prohibited substance, following the model of Rockford, Illinois.
- **Kansas City:** The City is reportedly studying the issue, while federal

authorities have already seized products in North Kansas City and Riverside.

Future Legislation: SB 927

Significant changes may be on the horizon for Missouri. State Senator Maggie Nurrenbern has filed **Senate Bill 927** that aims to regulate the industry rather than enact a blanket ban on the plant itself. The bill proposes to prohibit the sale of any kratom product that:

1. Is **adulterated**.
2. Is sold to anyone **under 21 years of age**.
3. Contains a **7-OH alkaloid fraction greater than 2%** of the product’s alkaloid composition (effectively banning the highly concentrated 7-OH products while preserving natural kratom).
4. **Mimics candy** or is designed to appeal to children.
5. Is intended for **combustion or vaporization**.

An Industry At War With Itself

The rise of 7-OH has caused a rift in the industry. Traditional kratom

advocates, such as the **American Kratom Association (AKA)**, argue that 7-OH products are adulterated synthetics that threaten the legality of the natural plant. Conversely, major players like **Vince Sanders**, founder of the Kansas City-based **CBD American Shaman**, defend 7-OH. Sanders, whose company manufactures these products, argues that 7-OH acts as a safer “off-ramp” for opioid addiction and vows to fight any bans.

As federal agencies move toward scheduling and local police departments begin clearing shelves, the window for legally purchasing “Gas Station Heroin” in Missouri appears to be closing. If local communities are wanting to regulate this without waiting to see what the state or federal governments are going to do, they should look to their general health and welfare powers. 🍀

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