



June 10th, 2026

To: The Honorable Akilah Weber Pierson
Chair
California Senate Health Committee
1021 O Street, Suite 3310 Sacramento, CA 95814

Statement of Opposition to California's A.B. 1088

To The Honorable Chair Pierson and Members of California Senate Health Committee:

My name is Brooke Sanders and I am a Neuroscience PhD researcher at the University of South Florida, where I study the epigenetic impacts of various substances on the human genome, as well as Director of Network Relations at Students for Sensible Drug Policy (SSDP).

Students for Sensible Drug Policy respectfully urges the California legislature to oppose A.B. 1088.

As the world's largest youth-led nonprofit dedicated to advancing evidence-based, public health-oriented approaches, SSDP supports thoughtful policy that protects health and safety. However, **A.B. 1088's approach to regulating kratom products is not grounded in a comprehensive scientific assessment and risks creating unintended harms while failing to address the broader marketplace it seeks to regulate.**

Summary of Evidence and Harms

What is 7-OH?

7-hydroxymitragynine (7-OH) is a naturally occurring alkaloid found in the kratom plant (*Mitragyna speciosa*), a tropical tree native to Southeast Asia. **It is not a novel synthetic drug, nor is it a laboratory invention.** Like many plant-derived compounds — from morphine in poppy plants to caffeine in coffee — 7-OH exists as part of a complex botanical profile that humans have interacted with for centuries. It can be present naturally in kratom leaves or produced through simple oxidation processes, similar to how other botanical compounds are stabilized or concentrated for consistency.

How 7-OH Works in the Body

7-OH is a partial agonist at the mu-opioid receptor, meaning it binds to the same receptors targeted by prescription pain medications, but does so in a fundamentally different way. Unlike full opioid agonists such as oxycodone or fentanyl, partial agonists have a natural ceiling effect — beyond a certain dose, additional amounts do not produce proportionally greater receptor activation. This pharmacological distinction is significant from a safety and policy standpoint. Importantly, 7-OH appears to act through pathways that may produce less respiratory depression — the primary cause of opioid overdose fatalities — compared to traditional opioids. These characteristics make 7-OH a **compound of genuine scientific interest**, particularly in the context of the ongoing search for safer pain management alternatives.

Who Uses 7-OH

7-OH products are used by adults seeking

- Alleviation of chemotherapy side effects ([Farkas et al., 2022](#))
- Relief from chronic pain ([Spetea & Schmidhammer, 2019](#))
- A reduced dependence liability on opioids ([Boyer et al., 2008](#))

For many individuals, access to kratom-derived compounds has been life-changing — particularly for those failed by conventional pain and substance-use treatment systems.

Current Scientific Evidence

The available scientific literature does not support characterizing 7-OH as a unique public health emergency relative to other kratom products.

Available evidence indicates that severe adverse outcomes associated with kratom-derived compounds are consistently linked to polysubstance use, contamination, or prior history of substance abuse — not typical use alone ([United Nations Commission on Narcotic Drugs, 2021](#)).

Research has further demonstrated potential therapeutic properties of mitragynine and its metabolites, including anti-tumor effects and other areas of emerging medical interest. Additional studies continue to examine the pharmacology, safety profile, and therapeutic potential of kratom alkaloids, including 7-OH.

Potential for Research Harm

The incredible potential of 7-OH for public health purposes supports the need for continued scientific investigation rather than premature restrictions that may impede future research.

A 2023 study showed that the viability, proliferation, and migration of cancer cells is directly inhibited by mitragynine and its active metabolites, such as 7-OH ([Vivatpinyo et al., 2023](#)). The reduction of brain tumor cells were observed via mitragynine and its metabolites ability to induce targeted cell death, cell cycle arrest, and cell migration of C6 rat glioma, SHSY-5Y human neuroblastoma, and HT22 mouse hippocampal neuronal cells. The evidence presented by Vivatpinyo and colleagues represents mitragynine and its active metabolites' unique ability to induce antitumor effects in three different organisms.

7-OH has been noted as a novel therapeutic agent for the treatment of Human Epidermal Growth Factor Receptor 2 (HER2) positive breast cancer ([Akbar et al., 2025](#)). 7-OH exhibited strong and stable interactions in high affinity to HER2, which is a classic pharmacological identifier of a drug with chemotherapeutic properties. Akbar and colleagues present significant data which supports 7-OH as a “viable candidate for HER2-targeted breast cancer therapy”.

When assessing the genotoxicity risk of 7-OH enriched mitragynine, there is no significantly observed hazard ([Harnkit et al., 2026](#)). In in-silico genotoxicity, 7-OH was inactive in a model of micronucleus activity and non-genotoxic. In addition, this work exemplifies the compound's low risk profile for chromosomal damage. Computational analysis concluded that the assays conducted were “quite trustworthy” in the lack of genotoxic evidence found with 7-OH.



California has long positioned itself as a leader in biomedical innovation and scientific inquiry.

Restricting access to 7-OH products before the science is settled risks undermining ongoing and future research into the pharmacology, toxicology, therapeutic applications, and public health impacts of kratom alkaloids. Policymakers should encourage rigorous scientific investigation rather than adopt restrictions that may outpace the evidence.

The Facts Do Not Justify a Ban On Kratom and Its Derivatives

While there are legitimate concerns about products sold without clear labeling, age restrictions, testing requirements, or regulatory oversight, these concerns apply broadly across the kratom marketplace — not solely to products containing 7-OH.

A.B. 1088 creates a regulatory framework that targets one naturally occurring kratom alkaloid while leaving other kratom products largely untouched. This approach is difficult to reconcile with the available evidence.

No category of kratom product is entirely risk-free. Physical dependence and withdrawal symptoms may occur across multiple categories of kratom products, particularly with heavy or frequent use. Yet available evidence has not demonstrated that 7-OH products represent a uniquely dangerous category warranting special treatment.

The legislation therefore risks creating an inconsistent regulatory framework that favors some segments of the kratom industry while disadvantaging others, without clear scientific justification.

Restricting Access Will Not Eliminate Demand

While A.B. 1088 is not a traditional criminal prohibition, restricting concentrated 7-OH products to trace amounts would function as a de facto ban for many existing products currently used by consumers.

If demand for these products remains, consumers will likely seek them through out-of-state vendors, online sellers operating beyond California oversight, or unregulated markets. Such outcomes undermine consumer safety by reducing transparency and limiting the effectiveness of quality-control measures.

Public health is best served when products are subject to testing, labeling, age restrictions, and regulatory oversight — not when consumers are pushed toward less transparent markets.



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A Sensible Path Forward

Rather than targeting one naturally occurring kratom alkaloid while leaving the broader marketplace largely unregulated, lawmakers should pursue a comprehensive, evidence-based framework for all kratom products.

Such a framework could include:

- Product testing and accurate labeling
- Transparent reporting of potency and ingredients
- Clear dosage and consumer education standards
- Ongoing research access for universities and medical institutions
- Age verification through valid ID at the point of purchase
- Good Manufacturing Practice (GMP) standards to ensure product consistency and purity
- Adverse event reporting requirements so regulators and researchers can track safety data over time

Conclusion

While SSDP supports sensible regulation over a ban of kratom and its derivatives, including 7-OH, A.B. 1088 establishes an inconsistent regulatory framework that singles out one kratom alkaloid without adequately addressing the broader marketplace or reflecting the current state of scientific evidence.

For this reason, **Students for Sensible Drug Policy respectfully urges the Senate Health Committee to vote NO on A.B. 1088** and instead pursue comprehensive, evidence-based regulation that protects public health while preserving research, consumer safety, and informed choice.

Thank you for your consideration.

Sensibly,

A handwritten signature in black ink, appearing to read 'Brooke Sanders', is written over a white background.

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