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Legal Sidebar

Temporary Control of 7-Hydroxymitragynine (7-OH) and Related Substances Under the Controlled Substances Act

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On July 1, 2026, the U.S. Drug Enforcement Administration (DEA) announced its intent to temporarily place a chemical found in the kratom plant, 7-hydroxymitragynine (7-OH), and three related substances in Schedule I of the Controlled Substances Act (CSA). The planned temporary scheduling will not apply to the kratom plant itself or other derivatives of the plant, as long as they contain concentrations of 7-OH that fall below specified thresholds.

This Legal Sidebar provides an overview of the temporary scheduling of 7-OH and related substances. After outlining the CSA's scheduling regime and providing background on the kratom plant and its derivatives, it summarizes the July 2026 temporary scheduling notices and the legal effects of the planned temporary scheduling. The Sidebar closes with considerations for Congress related to the regulation of kratom and 7-OH.

CSA Legal Framework

The CSA regulates drugs and other substances—whether medical or recreational, legal or illicit—that pose a risk of abuse and dependence. DEA, an agency within the Department of Justice, is the federal agency primarily responsible for implementing and enforcing the CSA.

Substances become subject to the CSA through placement in one of five lists, known as Schedules I through V. Controlled substances in Schedule I are subject to the most stringent controls, as they are deemed to have a high potential for abuse and no currently accepted medical use. It is legal to produce, dispense, and possess Schedule I substances only in the context of federally approved scientific studies. Substances in Schedules II through V have accepted medical uses and have been deemed to pose progressively lower risks of abuse and dependence. Those substances may be used for medical purposes, generally by prescription. Anyone who handles a controlled substance, other than an ultimate user, must register with DEA and comply with CSA registration requirements, which include security and reporting obligations. Unauthorized activities involving controlled substances are criminal offenses that can carry significant fines and imprisonment.

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Either Congress or the DEA Administrator can place a substance in a CSA schedule, move a substance to a different schedule, or remove a substance from the schedules. Congress can take those scheduling actions by enacting legislation. DEA, for its part, may make permanent scheduling decisions through a formal rulemaking process. The agency can also temporarily place substances in Schedule I on an emergency basis when "necessary to avoid an imminent hazard to the public safety." The CSA does not authorize DEA to use this temporary scheduling authority to place a substance in Schedules II-V. DEA must notify the Secretary of Health and Human Services and publish notice of its intent to temporarily schedule a substance in the *Federal Register* at least 30 days before implementing such scheduling, but is not required to follow the administrative rulemaking process for permanent scheduling. An initial temporary scheduling order may be effective for up to two years. If DEA undertakes permanent administrative scheduling of a substance, it may extend the temporary scheduling for up to one year while permanent scheduling proceedings are pending. Unlike permanent administrative scheduling, temporary scheduling is not subject to judicial review.

Kratom and Its Derivatives

Kratom, scientific name *Mitragyna speciosa*, is an evergreen tree related to the coffee plant that is native to parts of Southeast Asia. People living in the plant's range have traditionally consumed the leaves of the tree for medicinal and religious purposes. The effects of kratom depend on the dosage consumed. At low doses, it has a stimulant effect, while at higher doses it acts as a sedative.

According to the National Institute on Drug Abuse (NIDA), the most well-studied compounds in kratom are 7-OH and mitragynine. DEA has determined that the kratom plant contains only trace amounts of 7-OH, but 7-OH can be synthesized from mitragynine, which is present in the plant in larger quantities. Both compounds activate mu-opioid receptors, meaning they physically affect the brain in the same way as opioids, but NIDA states that "the resulting effects only partially compare to those of opioids like heroin or oxycodone." According to NIDA, kratom leaves and mitragynine have not been found to cause the respiratory depression (i.e., slow and shallow breathing) associated with a life-threatening opioid overdose, while 7-OH has been found to cause respiratory depression that can be reversed by naloxone.

Products containing kratom and 7-OH are widely sold in gas stations and smoke shops and online in various forms including powders, tablets, gummies, and sublingual films, and are sometimes colloquially called "gas station heroin." Some have raised health and safety concerns about the use of kratom and 7-OH, while others warn that consumer kratom products may contain dangerous contaminants. At the same time, some point to potential medical uses of kratom, including in the treatment of opioid use disorder, though more study would be required to determine whether kratom or its derivatives are safe and effective for medical use.

Temporary Scheduling of Kratom

Federal and state regulators have been considering whether and how to regulate kratom for years. In 2016, DEA issued notice of its intent to temporarily place mitragynine and 7-OH in Schedule I on an emergency basis. However, after receiving numerous comments from stakeholders, DEA withdrew that notice and did not control the two compounds. DEA has listed kratom as a Drug and Chemical of Concern, which does not impose legal restrictions on the substance under the CSA. In addition, the Food and Drug Administration (FDA) has taken the position that kratom is an unapproved new dietary ingredient and an unsafe food additive and therefore may not be marketed in the United States as a drug product, a dietary supplement, or a food additive pursuant to the Federal Food, Drug, and Cosmetic Act (FD&C Act). FDA has issued warning letters to firms marketing products containing 7-OH and has seized foods and dietary supplements containing the compound. In addition, as outlined in a 2023 Legal Sidebar, multiple states have imposed various regulations on kratom and its derivatives.

On July 1, 2026, DEA issued a new notice of its intent to temporarily control 7-OH in Schedule I. Specifically, the notice states the intent to schedule substances that contain a concentration of "7-[OH] above a specified threshold, including its isomers, esters, ethers, salts, and salts of isomers, esters, and ethers." The threshold is to be set at 0.05% 7-OH for the kratom plant. For articles produced synthetically or derived from the kratom plant "and further processed to manufacture alternative dosage forms such as extracts, concentrates, processed edibles, or pressed pills," the threshold is set to be either 0.05% 7-OH or 1 milligram of 7-OH in the article.

In a separate notice, DEA announced its intent to temporarily place in Schedule I three 7-OH-related substances known as mitragynine pseudoindoxyl (MP), dihydro-7-hydroxymitragynine (MGM-15), and 9-fluoro-dihydro-7-hydroxymitragynine (MGM-16), "including their isomers, esters, ethers, salts, and salts of isomers, esters, and ethers." The notice states that MP is a "chemical rearrangement product" of 7-OH, MGM-15 is "derivative of 7-OH," and MGM-16 is a "highly potent opioid and shares a similar pharmacological profile with [MP] and MGM-15." It further states that all three compounds are "potent opioids that share a similar pharmacological profile with 7-[OH]" and "produce analgesic effects that [are] more potent than morphine." The notice indicates that MP and MGM-15 are currently available in the consumer marketplace. While DEA has not found evidence of consumer sales of MGM-16, it has identified a vendor site listing it for future sale, and thus concludes that "to schedule MGM-15 without MGM-16 would create a regulatory loophole that manufacturers are already poised to exploit." The temporary scheduling of MP, MGM-15, and MGM-16 will not be limited to substances containing threshold amounts of the compounds.

The two notices of intent were published in the *Federal Register* on July 6, 2026. Each notice stated that a temporary scheduling order would be published in the *Federal Register* on or after August 5, 2026, would take effect on the date published, and would remain in effect for two years, subject to a possible one-year extension if permanent scheduling proceedings are pending. If the temporary scheduling orders are issued and take effect as planned, 7-OH above the specified threshold, MP, MGM-15, and MGM-16 would be legally treated as Schedule I controlled substances for the duration of the temporary scheduling. They would thus be subject to the applicable regulatory and criminal trafficking provisions of the CSA, and handling these substances outside the context of federally approved research studies would be a federal crime.

Considerations for Congress

DEA has previously used its temporary scheduling authority to control numerous substances other than 7-OH, MP, MGM-15, and MGM-16. One such instance that attracted significant interest from Congress was the control of certain fentanyl-related substances (FRS). As discussed in more detail in a Legal Sidebar, in 2018 DEA issued a temporary scheduling order controlling in Schedule I a large class of FRS defined by their chemical structure. DEA subsequently took permanent scheduling actions with respect to certain specific fentanyl analogues, including some FRS subject to the temporary scheduling order, but did not undertake permanent scheduling with respect to the full class of FRS.

The CSA requires DEA to make limited factual findings before temporarily scheduling a controlled substance, and more involved factual findings before permanent scheduling. It appears that DEA was unable to undertake permanent scheduling with respect to the full class of FRS because the class includes thousands of chemicals and the effects, potential for abuse and dependence, and medical utility of many of those substances are unknown. By contrast, Congress is not bound by the CSA's fact-finding requirements when it schedules controlled substances via legislation. Congress enacted legislation to extend the temporary scheduling of FRS multiple times, then, in July 2025, enacted the Halt All Lethal Trafficking of Fentanyl Act, also known as the HALT Fentanyl Act, to permanently place the class of FRS in Schedule I.

While congressional action was required to make classwide scheduling of FRS permanent, it may not be necessary with respect to 7-OH, MP, MGM-15, and MGM-16. With four substances at issue rather than thousands, DEA may be able to undertake the required fact-finding for all the substances, though it remains to be seen whether all the statutory factors for permanent scheduling will be satisfied. Nonetheless, if Congress wishes to change the status of 7-OH, MP, MGM-15, and MGM-16 under the CSA, it could do so by enacting legislation either before or after DEA takes administrative action. The END 7-OH Act (H.R. 8000), which was introduced in the 119th Congress before DEA issued the temporary scheduling notices discussed above, would permanently add 7-OH to Schedule I, "including its synthetic equivalents" but "not including 7-[OH] naturally contained in . . . kratom." Congress could also consider whether to control the kratom plant itself or other compounds in kratom, such as mitragynine. Beyond the context of scheduling specific substances, Congress has the authority to amend the CSA to change general scheduling procedures, and could change the procedures or fact-finding requirements that apply to permanent or temporary administrative scheduling.

Congress could also enact legislation related to kratom or its derivatives outside the scope of the CSA. Substantially similar proposals from the 118th and 117th Congresses, the Federal Kratom Consumer Protection Act (H.R. 5905/S. 3039) and the Federal Clarity for Kratom Consumers Act (H.R. 9634/S. 5316), would have directed the FDA Commissioner to "hold at least one hearing that provides an open forum for the discussion on the current scientific data and information about safety and use of products containing kratom or kratom-derived products marketed as a food, dietary ingredient, or dietary supplement." These bills would have established a Kratom Research Task Force charged with holding public meetings and reporting to Congress on all federally funded kratom-related research. They would also have imposed certain limits on the ability of the FDA Commissioner or the Secretary of Health and Human Services to regulate kratom, including but not limited to prohibiting "impos[ing] requirements on kratom or kratom-derived products that are more restrictive than the requirements for food, dietary supplements, and dietary ingredients that apply under [the FD&C Act]" and "requir[ing] kratom to undergo requirements for notification as a new dietary ingredient under section 413 of the [FD&C Act]."

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