

OVERDOSE RESPONSE STRATEGY

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Public Health Brief: Understanding Kratom

WHAT IS KRATOM?

Kratom refers to the leaves of the tree *Mitragyna speciosa*, a tree native to the tropical regions of Southeast Asia. Its primary active compounds include mitragynine and its byproduct 7-hydroxymitragynine (7-OH).¹ Kratom leaves have been used in traditional medicine for hundreds of years to increase alertness and energy. Today, people use kratom as an alternative treatment for pain, mood disorders and opioid withdrawal. It is marketed as an herbal supplement and is available in liquid, capsule or powder form.



WHAT ARE ITS EFFECTS?

The effects of kratom can vary based on the strain, its formulation and how much is consumed. Many people report that low doses tend to have stimulant effects, such as increased energy and alertness, while higher doses tend to have sedative, opioid-like effects, such as relaxation, pain relief and dizziness. Both mitragynine and 7-OH activate mu-opioid receptors in the brain, but the effects only partially compare to those of opioids.² Users report higher doses being more likely to result in negative experiences.³

WHAT ARE THE RISKS?

Studies suggest people may experience mild to moderate side effects when discontinuing regular kratom use.^{4,5} A small minority of users have reported symptoms consistent with substance use disorder.^{6,7} Some users have experienced seizures or hallucinations,⁸ and while extremely rare, there have been a small number of deaths associated with kratom exposure, typically with other drugs present.

In Louisiana, kratom has been identified in a small percentage of drug-related deaths in recent years (see Figure 1). It is usually found in combination with other drugs; deaths where mitragynine is the only substance listed on a death certificate are extremely rare. Between 2019 and 2024, 221 of the 11,391 drug-involved deaths in Louisiana involved mitragynine; of those, mitragynine was the only drug listed in 34 cases. **Because kratom activates mu-opioid receptors, naloxone should be administered if someone is thought to have overdosed on kratom.**⁹

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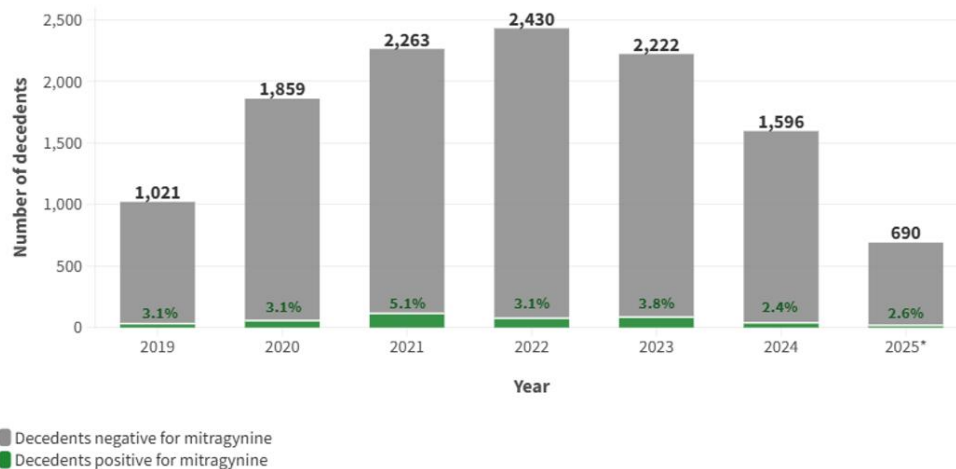
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Figure 1.

Number of decedents and percent positive in Louisiana, 2019-2025

Number of decedents and percent positive for mitragynine in Louisiana, 2019-2025*



Source: NMS Labs, extracted and analyzed August 2025 by the Louisiana Opioid Surveillance Initiative
*2025 data are preliminary

POLICY AND REGULATION

LOUISIANA POLICY

As of August 1, 2025, kratom is no longer allowed to be sold or distributed in Louisiana and new penalties are in effect for its possession. Depending on the amount of kratom involved, offenders may face up to five years in prison and a \$50,000 fine.¹⁰

FEDERAL POLICY

Currently, kratom is not regulated at the federal level and is not listed as a controlled substance by the Drug Enforcement Agency (DEA). However, in July 2025, the U.S. Food and Drug Administration announced it would begin taking steps to ban over-the-counter products containing 7-OH, a concentrated byproduct that is increasingly recognized as having potential for misuse because of its ability to bind to opioid receptors.¹¹

RECOMMENDATIONS

- **Make information available** to people who use kratom about the recent changes in legislation and potential penalties. Community overdose prevention organizations and others who engage directly with people who use drugs should communicate this information to program participants.
- **Providers and first responders** should be aware that any changes to the drug supply can result in additional risks for people who use drugs being exposed to alternative substances that are potentially more harmful.

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- **Individuals who use kratom regularly** and are stopping use may experience withdrawal. These symptoms can be similar to opioid withdrawal and can include runny nose, muscle pains, nausea, vomiting and diarrhea. Typically, these symptoms are mild and can be self-managed, but tapering use is often recommended. Individuals who use formulations other than raw kratom leaf should be aware that those products *may* contain other, more addictive substances. This could result in more severe withdrawals.
- **Individuals using kratom to manage opioid withdrawal symptoms** may be at risk of relapsing and should speak to a doctor about medications for opioid use disorder (MOUD) to manage their symptoms. For a list of MOUD providers, go to <https://opioidhelpla.org/>.

For questions about this brief, please contact Louisiana Public Health Analyst, Dana Wilkosz at dwilkosz@cdcfoundation.org

NOTES

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- ¹ "Kratom." National Institute on Drug Abuse. March 2022. <https://nida.nih.gov/research-topics/kratom>
 - ² "How do kratom compounds work in the brain?" National Institute on Drug Abuse. March 2022. <https://nida.nih.gov/research-topics/kratom#kratom-compounds>
 - ³ Oliver Grundmann. "Patterns of kratom use and health impact in the US-Results from an online survey." *Drug and Alcohol Depend.* 2017 Jul 1;176:63-70. <https://pubmed.ncbi.nlm.nih.gov/28521200/>
 - ⁴ Cornel N Stanciu et al., "Kratom withdrawal: A systematic review with case series." *J Psychoactive Drugs.* 2019;51(1):12-18. <https://pubmed.ncbi.nlm.nih.gov/30614408/>
 - ⁵ Darshan Singh et al., "Severity of pain and sleep problems during kratom (*Mitragyna speciosa* korth) cessation among regular kratom users." *J Psychoactive Drugs.* 2018;50(3):266-274. <https://pubmed.ncbi.nlm.nih.gov/29558272/>
 - ⁶ Albert Garcia-Romeu et al., "Kratom (*Mitragyna speciosa*): User demographics, use patterns, and implications for the opioid epidemic." *Drug Alcohol Depend.* <https://pubmed.ncbi.nlm.nih.gov/32029298/>
 - ⁷ "Kratom: Drug Fact Sheet." U.S. Drug Enforcement Agency. April 2020. https://www.dea.gov/sites/default/files/2020-06/Kratom-2020_0.pdf
 - ⁸ "Is kratom safe?" National Institute on Drug Abuse. March 2022. <https://nida.nih.gov/research-topics/kratom#safe>
 - ⁹ Daniel L Overbeek D, Jonathan Abraham and Brendan W Munzer. "Kratom (*Mitragynine*) Ingestion Requiring Naloxone Reversal." *Clinical Practice and Cases in Emerg Medicine.* 2019 Jan 4;3(1):24–26. <https://pubmed.ncbi.nlm.nih.gov/30775658/>
 - ¹⁰ Louisiana State Senate. Act No. 41. 2025 Regular Session (2025). <https://legis.la.gov/legis/ViewDocument.aspx?d=1422223>
 - ¹¹ "FDA News Release: FDA Takes Steps to Restrict 7-OH Opioid Products Threatening American Consumers." U.S. Food and Drug Administration. July 29, 2025. <https://www.fda.gov/news-events/press-announcements/fda-takes-steps-restrict-7-oh-opioid-products-threatening-american-consumers>