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DEA to Schedule 7-hydroxymitragynine (7-OH) and Related Substances: What Alaska Clinicians Should Know

September 24, 2026

Background

Kratom (*Mitragyna speciosa*) is a plant that contains several biologically active compounds, including mitragynine and 7-hydroxymitragynine (7-OH), which are alkaloids that interact with the mu-opioid receptor. Mitragynine pseudoindoxyl, MGM-15, and MGM-16 are chemically modified compounds derived from kratom alkaloids that also act at the mu-opioid receptor. Concentrated 7-OH products are different from traditional kratom leaf. They may contain much higher concentrations of 7-OH than naturally occurs in the plant and may increase the risk of tolerance, physical dependence, withdrawal, and opioid-like toxicity.¹

Kratom products have become increasingly available in the United States and have been sold in Alaska through smoke shops, gas stations, and online marketplaces.² They have been marketed for purposes including performance enhancement, pain relief, and treatment of addiction, despite limited and insufficient clinical evidence supporting these uses. The purpose of this PHAN is to alert clinicians that the federal regulatory status of these substances is changing, which might impact availability and increase the near-term likelihood of withdrawal and/or overdose.

On August 26, 2026, the DEA issued two regulatory actions that followed July 2026 notices of intent to schedule:³

- DEA temporarily placed mitragynine pseudoindoxyl, MGM-15, and MGM-16 in Schedule I under the Controlled Substances Act.⁴ The temporary scheduling is effective for 2 years, with a possible 1-year extension under the applicable statutory process.
- DEA extended the public comment period for its proposed temporary scheduling of 7-OH through September 10, 2026.⁵ The proposed scheduling of 7-OH is a separate regulatory action from the scheduling of mitragynine pseudoindoxyl, MGM-15, and MGM-16.

Clinical Considerations

Changes in product availability and regulation may affect patterns of use. Emergency and addiction medicine clinicians may encounter patients with:

- Intoxication or overdose after using concentrated 7-OH or other kratom-derived products.
- Tolerance, physical dependence, and withdrawal after regular use.

- Changes in substance use, including substitution with other substances if preferred products become unavailable.

Clinicians should ask specifically about kratom, concentrated 7-OH, and other kratom-derived products when evaluating unexplained opioid-like intoxication or withdrawal, particularly because these substances may not appear on routine urine drug screens. Kratom's effects vary by dose and product composition.

- At lower doses, kratom users commonly report stimulant-like effects such as increased alertness and energy.
- At higher doses, mitragynine and 7-OH can produce opioid-like effects, including analgesia, sedation, and euphoria.
- There have been multiple reports of seizure activity associated with kratom use and this association has been explored to some extent in the literature.⁶ It is unknown if a similar association between 7-OH products (specifically) and seizure activity has been established.
- 7-OH has greater mu-opioid receptor activity than mitragynine and appears to have greater potential for respiratory depression.
- Experimental studies have demonstrated dose-dependent respiratory depression with 7-OH, and naloxone has reversed this effect in laboratory studies.⁷
- Human data on 7-OH toxicity remain limited.

Overdose and Withdrawal

- Clinicians should prioritize respiratory support in all cases of opioid overdose.
- Medications like naloxone and nalmefene are effective in reversing overdose from 7-OH and associated substances.⁸
- Given that kratom products are frequently used to manage other substance use disorders, other drug toxidromes may manifest in the patient's presentation.
- Withdrawal from 7-OH and associated substances is like other opioid withdrawal syndromes and is characterized by anxiety, restlessness, myalgias, nausea, diarrhea, and malaise. While data are limited, case series and anecdotal reports to Alaska addiction medicine providers suggest that withdrawal can be severe.⁹

Clinical Vignettes (Source: Alaska Syndromic Surveillance Database)

- A middle-aged man presented to the ED complaining of insomnia, anorexia, feeling jittery, and vomiting. He reported having taken a substantial amount of kratom daily for back pain for the past several months but had stopped a few days prior. He was diagnosed with drug-induced akathisia and admitted to the hospital.
- A young man was brought to the ED by ambulance after his family reported seizure-like activity at home. The family reported that he had taken kratom. He was admitted to the hospital.
- A teenager was seen at the ED after friends witnessed 'seizure-like' activity. The friends reported that the patient had consumed several pills of 7-OH throughout the day. The friends gave the patient Narcan. The patient was discharged home several hours later.

Alaska-specific Data

- Kratom- and 7-OH-related intoxication, overdose, and withdrawal are not reportable to the Alaska Department of Health.
- Syndromic surveillance data: Because kratom- or 7-OH-specific diagnosis codes are not currently available, potential cases were identified using relevant free-text terms in emergency

department (ED) chief complaints and clinical notes. This approach captures visits in which kratom use or exposure was reported, suspected, or documented, but misses cases that were not documented or were described using different terminology. Additionally, the presence of a kratom-related term does not establish that kratom or 7-OH caused the patient's symptoms. These data therefore provide descriptive context on identified ED visits and should not be interpreted as an estimate of the true statewide burden or incidence of kratom- or 7-OH-related adverse events.

- 2025: 49 visits identified
- 2026: 58 visits identified through August
- 2025–2026 combined: 65% involved males; ages ranged from 15–72 years (median 36)
- Residence: 44% Anchorage, 18% Kenai Peninsula, and 13% Matanuska-Susitna Valley
- Products reported: pills/tablets, tea, beverages, “shots,” powder, edibles, and smoked products.

Recommendations

1. When patients present with opioid withdrawal, specifically ask about use of kratom or concentrated 7-OH products as these may not be reflected on drug screening.
2. Use the Clinical Opioid Withdrawal Scale (COWS) to stage the severity of withdrawal and consider offering buprenorphine to manage withdrawal and any coinciding opioid use disorder. Higher buprenorphine initiation doses may be required depending on patient use history and COWS score.¹⁰
3. Consider symptomatic treatment with medications like clonidine or other alpha-2 adrenergic agonists, antiemetics, antidiarrheals, and non-steroidal anti-inflammatory drugs when appropriate.
4. Counsel patients on the difference between kratom leaf and concentrated alkaloids. Reinforce that just because a product is “natural” that does not mean it's safe.
5. Assess patients for co-occurring substance use disorders and connect patients to treatment for substance use disorder if indicated and provide resources for overdose prevention.

Resources

- For help finding substance use disorder treatment near you, navigate to findtreatment.gov to find a provider.
- Naloxone is available for free statewide through Project HOPE partners. Navigate to <https://health.alaska.gov/en/services/project-hope-get-naloxone/> to find a local overdose response program.
- Information about DEA's notice of intent to schedule 7-OH and associated substances can be found at <https://www.dea.gov/press-releases/2026/07/01/dea-temporarily-schedule-7-oh-and-related-substances-protect-public>

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