PENNSYLVANIA DEPARTMENT OF HEALTH

2026 – PAHAN –837-08-19 -ADV

Increased Risk of Withdrawal Symptoms Associated with 7-hydroxymitragynine (7-OH) and Tianeptine After Federal Scheduling

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DATE:	8/19/2026
TO:	Health Alert Network
FROM:	Debra L. Bogen, MD, FAAP, Secretary of Health
SUBJECT:	**Increased Risk of Withdrawal Symptoms Associated with 7-hydroxymitragynine (7-OH) and Tianeptine After Federal Scheduling**
DISTRIBUTION:	Statewide
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This transmission is a "Health Advisory": provides important information for a specific incident or situation; may not require immediate action.	

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Situation Summary

- The Drug Enforcement Agency (DEA) has issued two notices of intent to schedule
  - three 7-hydroxymitragynine-related substances: mitragynine pseudoindoxyl, MGM-15, MGM-16
  - tianeptine
- Both 7-hydroxymitragynine (7-OH) and tianeptine products are available through online and retail markets including: gas stations, smoke/vape shops, and convenience stores.
- Both 7-OH and tianeptine products act like opioids in the body and are associated with dependence. Sudden loss of access may lead to consumers experiencing withdrawal symptoms that resemble the symptoms of opioid withdrawal, including nausea, vomiting, diarrhea, heavy sweating, aches, pains, insomnia, elevated heart rate and blood pressure, and intense cravings.
- Individuals experiencing withdrawal from 7-OH or tianeptine products may transition to a street supply to manage withdrawal symptoms, which may increase risk for overdose.
- Health care, behavioral health, substance use disorder, and public health professionals should proactively identify and support individuals using 7-OH or tianeptine by screening for use, monitoring for shifts in substance use following market disruption, and connecting affected individuals to treatment and recovery services.
- If you have additional questions about this guidance, please contact DOH at 877- PA-HEALTH (877-724-3258).

Background

This Health Alert Network (HAN) Advisory is to alert Pennsylvania health care professionals, first responders, behavioral health and substance use disorder providers, and public health partners about emerging concerns involving 7-hydroxymitragynine (7-OH) and tianeptine.

Recent federal scheduling actions[1,2] for these specific substances are expected to reduce access in online and retail markets, including gas stations, smoke/vape shops and convenience stores. Their availability in these settings may have led consumers to believe these products were safe, despite historically being unregulated and often mislabeled. Many individuals who use 7-OH or tianeptine may be unaware of the risks of dependence and other health complications.

Health care and public health partners should be aware that people currently using these substances may experience withdrawal if their access is disrupted. Some may seek medical care without recognizing the cause of their symptoms, or may switch to other substances, including illicit opioids. This could increase the need for overdose prevention, treatment, and harm reduction services. A portion of individuals use 7-OH or tianeptine to manage depressive symptoms, chronic pain, or opioid withdrawal and may be at particularly high risk for withdrawal-related physical and behavioral health symptoms.

Tianeptine is an atypical tricyclic antidepressant and causes effects similar to opioids. Tianeptine is not approved for medical use by the United States Food and Drug Administration. However, tianeptine is sold online and at gas stations, and is an emerging substance for misuse. Additional information on tianeptine:

- Tianeptine, an Antidepressant with Opioid Agonist Effects: Pharmacology and Abuse Potential, a Narrative Review - PMC
- Tianeptine | FDA

Tianeptine Withdrawal

Tianeptine withdrawal can be dangerous. People may experience symptoms including anxiety, chills, depression, diarrhea, rapid heartbeat, high blood pressure, nausea, vomiting, and seizures. These symptoms resemble opioid withdrawal symptoms and can require medical treatment. Diagnostic and treatment protocols for tianeptine withdrawal are in development and so far, are similar to those for opioid withdrawal (See: RESEARCH ANALYSIS | Reported Adverse Effects, Withdrawal Symptoms, and Misuse Patterns Associated with Non-Prescription Tianeptine Use; Tianeptine misuse and addiction: A systematic review of withdrawal, toxicity, and clinical management - ScienceDirect)

7-hydroxymitragynine (7-OH) is a naturally occurring alkaloid found in the kratom plant. It is a more potent opioid-active compound than mitragynine, the primary alkaloid found in kratom. While 7-OH occurs naturally in kratom leaves at very low levels, concentrated 7-OH products, as well as synthetic 7-OH derivatives, have increasingly emerged in the marketplace. They are marketed as tablets, gummies, drink mixes, and other products available online and at smoke/vape shops, gas stations, and convenience stores. 7-OH binds opioid receptors and will produce opioid-like effects, including effects associated with tolerance, dependence, and withdrawal. Additional information on 7-OH:

- Hiding in Plain Sight: 7-OH Products | FDA
- What Clinicians Should Know About Kratom and 7-OH Mitragynine | Annals of Internal Medicine: Clinical Cases

[1] Federal Register :: Schedules of Controlled Substances: Temporary Placement of Mitragynine Pseudoindoxyl, MGM-15, and MGM-16 in Schedule I

[2] Federal Register :: Schedules of Controlled Substances: Placement of Tianeptine in Schedule I

7-OH Withdrawal

7-OH withdrawal symptoms are similar to those for Tianeptine and include anxiety, insomnia, muscle aches, nausea, chills and depression. Onset of withdrawal symptoms usually occurs 6 to 24 hours after last use. Acute symptoms last for 1 to 7 days with post-acute symptoms sometimes lasting weeks longer (See: 7-OH Withdrawal: Symptoms, Timeline, and Treatment Considerations | International Society of Substance Use Professionals).

Clinical

Patients with 7-OH or tianeptine withdrawal may present in a variety of health care settings, including emergency departments, urgent care centers, primary care offices, behavioral health settings, and substance use disorder (SUD) treatment programs. Withdrawal may be the primary reason for presentation or may emerge incidentally during care of another condition (e.g., injury). Providers should consider obtaining a detailed substance use history that includes questions about gray market products, including products marketed as kratom derivatives, enhanced kratom products, or other supplements. Individuals may report symptoms or concerns without initially disclosing use of these products.

There are currently limited clinical guidelines specific to management of 7-OH or tianeptine dependence and withdrawal. However, available evidence and clinical experience indicate that medications for opioid use disorder (MOUD) may be considered for individuals experiencing clinically significant opioid-like withdrawal who meet criteria for OUD related to 7-OH, tianeptine, and/or opioid use. Clinical evaluation should consider the patient's substance use history, current symptoms, risk factors, and goals.

Both buprenorphine and methadone have been used to stabilize patients presenting with 7-OH withdrawal. In one case series of 9 patients presenting with 7-OH withdrawal, those patients were stabilized using buprenorphine, with most titrated to a total daily dose of 16mg or more. Some patients experienced persistent neuropsychiatric symptoms including anhedonia, fatigue, anxiety, and insomnia following cessation of 7-OH use and despite substance use treatment. In another case series of 14 patients presenting for treatment for 7-OH or kratom use, patients were stabilized on methadone and titrated up to a mean dose of 100mg daily. (Buprenorphine for the Management of... : Journal of Addiction Medicine and Treatment of Kratom Use Disorder With Methadone in an Opioid Treatment Program - PubMed).

Health care professionals should maintain an increased awareness of potential use of these products among individuals using them for pain management, older adults, pregnant people, and individuals who do not identify as having a substance use disorder. These groups may be at heightened risk for difficulty accessing care or negative health outcomes following the scheduling action. Providing accurate, nonjudgmental information and improving awareness among healthcare professionals can support earlier identification, reduce overdose risk, and improve linkage to appropriate care.

Overdose Data

Fatal Overdose

While tianeptine dependence is a growing concern, it is not often associated with drug overdose death; tianeptine contributed to 9 overdose fatalities in Pennsylvania between 2023 and 2026 (as of June 2026), most commonly in combination with additional substances**.**

Current overdose death data does not allow for distinction between ingestion of plant-based kratom products vs. concentrated, semisynthetic 7-OH products as detection of 7-OH has traditionally been assumed to indicate kratom use. However, some labs used for overdose decedent toxicology have expanded to start testing specifically for 7-hydroxymitragyine-related substances.

- When coroners do not specify drugs contributing to death on the death record, DOH considers all drugs contributory, excluding nicotine and naloxone. Some records meet this criterion.

- Fewer than 6 deaths each year involve mitragynine only, the rest have at least one additional drug contributing to death.

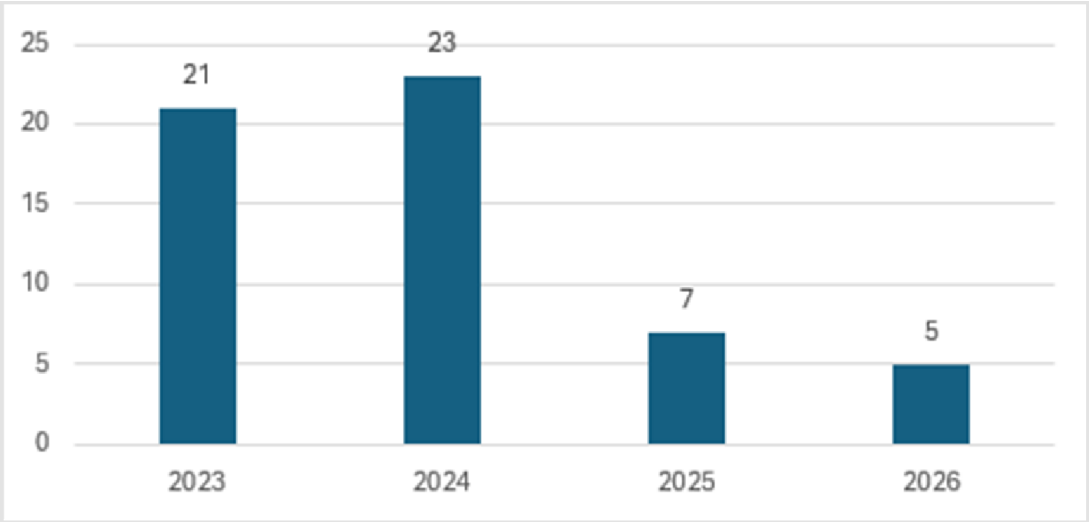
Fatal Overdoses Where Kratom/Mitragynine was Noted as Contributing to Death, 2023-2026*

Year	Count	% total Overdose Deaths
2023	65	1.4%
2024	38	1.1%
2025*	33	1.2%
2026*	17	2.0%

*2025/2026 data is preliminary based on death records as of July 2026.

Poison Center Data

Summary of cases involving tianeptine reported to Pennsylvania Poison Centers, from January 1, 2023, to June 30, 2026*.

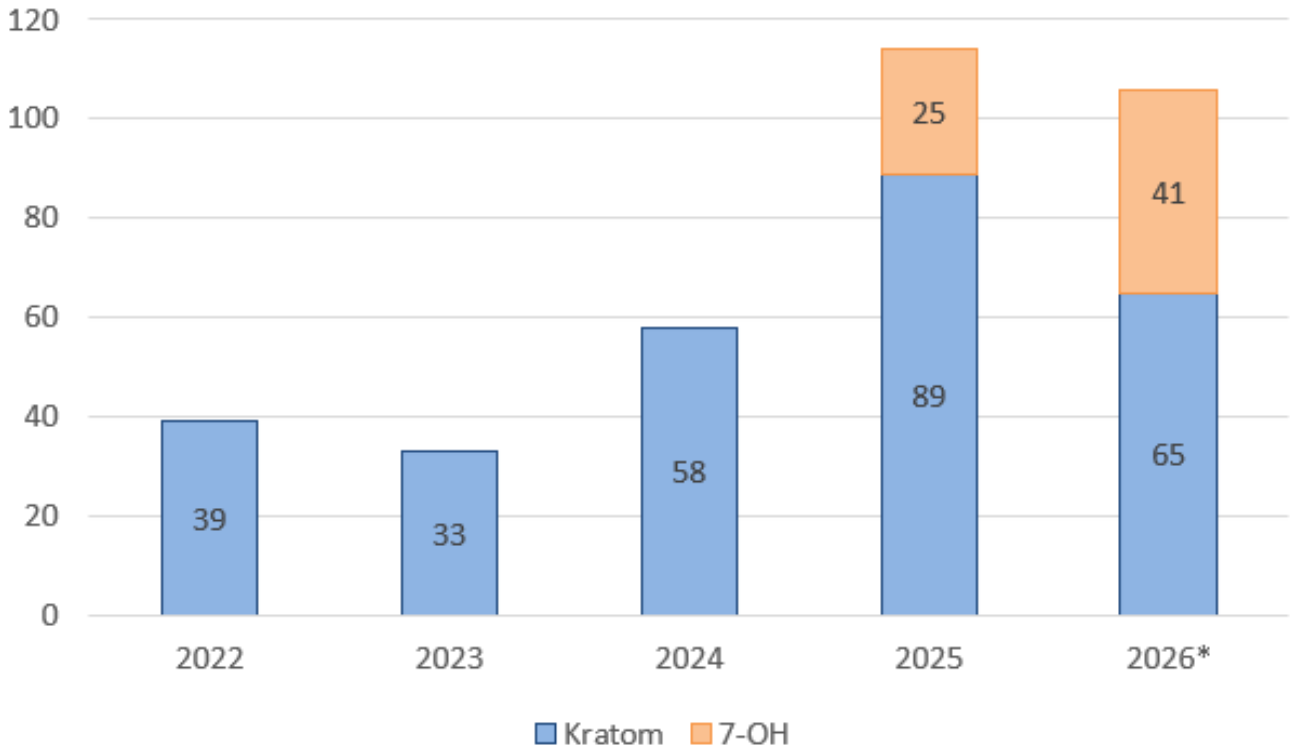


* 2026 data through June 30, 2026.

Total case-count: 56
Reasons for exposure:
- Intentional = 43
- Withdrawal = 8
- Other/Unknown = 5

Cases resulting in moderate/severe injury: 38 (including one death)
Cases where patients were treated with mechanical ventilation: 13

Summary of kratom and 7-hydroxymitragynine (7-OH) cases reported to Pennsylvania Poison Centers, from January 1, 2022, to June 30, 2026*.



* 2026 data through June 30, 2026.

Age range: 10 months to 85 years
Gender: 109 Female, 239 Male, 2 Unknown
Top impacted counties: Allegheny (40 cases), Bucks (17 cases), Montgomery (25 cases), Philadelphia (28 cases)
Coded Reasons for exposures:

- Abuse: 130
- Misuse: 37
- Withdrawal: 54
- Suspected suicide: 24
- Other reasons: 105

Severity of Toxicity:

- 156 individuals with significant illness, no deaths
- Naloxone administered in 38 individuals
- 26 individuals were mechanically ventilated (8 cases involved kratom only)

Recommendations

Due to disrupted access, individuals currently using 7-OH or tianeptine may experience challenges related to dependence and withdrawal, leading them to seek healthcare services. In addition, some individuals may transition to other substances as 7-OH and tianeptine products are removed from online and retail settings, introducing additional health concerns. The Pennsylvania Department of Health recommends the following:

1. Healthcare professionals should assess patients for use of 7-OH or tianeptine, particularly when

evaluating patients with symptoms consistent with opioid-like withdrawal or substance use-related concerns.

- Patients may not recognize these products as substances associated with dependence or that they can cause withdrawal symptoms if used regularly — particularly when products have been marketed as supplements, wellness products, or safer alternatives to controlled substances.
- Healthcare professionals should ask patients about use of products obtained from online retailers, gas stations, smoke/vape shops, convenience stores, and other nontraditional sources, as standard toxicology screening may not detect emerging substances such as 7-OH or tianeptine, making a thorough patient history an essential component of clinical evaluation. Individuals may present to emergency departments, urgent care centers, primary care settings, behavioral health providers, or SUD treatment programs without identifying these products as a contributing factor to their symptoms or healthcare needs.
- Healthcare professionals can contact The Poison Control Center for more information, including guidance on withdrawal management and to report suspected cases. The Poison Control Center can be reached at 1-800-222-1222.

2. Healthcare and public health partners should prepare for potential changes in substance use patterns following market disruption.

- Individuals who currently use 7-OH or tianeptine may seek alternative substances if these products become less available, including transitioning to the illicit drug supply. Advise patients that many products labeled as supplements are unregulated and the labelling may not always reflect the potency or ingredients accurately.
- Individuals who have not previously used illicit drugs (i.e. street supply) may be at increased risk of overdose due to unfamiliarity with substance potency, adulterants, dosing, and other factors associated with unregulated substances.
- Harm reduction strategies, including access to naloxone, MOUD prescribing and overdose prevention education remain important components of care.
- Patients should be prescribed, provided, or connected to naloxone in their community. For more information about where to access naloxone visit: Get Overdose Prevention Supplies for Individuals | Commonwealth of Pennsylvania.

3. Providers should be prepared to connect individuals using 7-OH or tianeptine to evidence-based SUD treatment and recovery services.

- Some individuals may use 7-OH or tianeptine to reduce or stop use of other opioids, manage cravings, or self-treat symptoms associated with OUD.
- Patients seeking to reduce or discontinue use may benefit from evaluation for OUD and consideration of MOUD when clinically appropriate.
- Some individuals may choose to self-manage their withdrawal by slowly reducing their dose similar to self-management of opioid withdrawal. (See: Next Distro's Tianeptine Quick Guide for People Who Use Drugs).
- Advise patients experiencing sudden loss of access to these products to seek medical guidance and encourage them to seek support from local organizations that offer harm reduction resources, guidance, and support.

Additional Information

FDA Alert: Hiding in Plain Sight: 7-OH Products

FDA Alert: Tianeptine

Podcast: ASAM Practice Pearls – Kratom and 7-OH: What Clinicians Need to Know

Online Training: Between the Leaves: Prevalence, Withdrawal and Approaches to Care for Kratom Use (Live training offered regularly through BMC's Grayken Center for Addiction Training and Technical Assistance)

Webinar: From Leaf to Lab: Kratom-Related Deaths in an Evolving Alkaloid Landscape (NMS Labs)

Review Article: From kratom to 7-hydroxymitragynine: evolution of a natural remedy into a public-health threat (Pharmaceutical Biology)

Research: Gas station heroin- tianeptine and its impact: a systematic review and exploratory analysis (BMC Public Health)

Case Report: Tianeptine Misuse, Dependence, and Clinical Management: Three Case Reports and Literature Review (Case Reports in Psychiatry)

If you have additional questions about this guidance, please contact DOH at 877-PA-HEALTH (1-877-724-3258).

Report suspected cases to The Poison Control Center 1-800-222-1222.

PA Get Help Now Line

Individuals seeking treatment or support for themselves or a loved one can call the toll-free PA Get Help Now helpline at 1-800-662-HELP (4357). It's available 24 hours a day, 365 days a year, and staffed by trained professionals.

A live chat option is also available online or via text message at 717-216-0905 for those seeking help who may not be comfortable speaking to a helpline operator.

- Call 1-800-662-HELP (4357)
- Text 717-216-0905
- Chat - a live chat option is available here

Individuals interested in receiving future PA-HANs can register here.

Categories of Health Alert messages:
Health Alert: conveys the highest level of importance; warrants immediate action or attention.
Health Advisory: provides important information for a specific incident or situation; may not require immediate action.
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This information is current as of August 19, 2026, but may be modified in the future.