

# Kratom: documented risks and negative effects

## What it is / why it's risky

- Kratom (from *Mitragyna speciosa*) contains alkaloids (notably **mitragynine** and **7-hydroxymitragynine**) that can produce **opioid-like effects** (alongside stimulant-like effects), which is a big reason it can lead to dependence and dangerous toxicity. ([National Institute on Drug Abuse](#))
- In the U.S., kratom products are **not FDA-approved** for any medical use, and the FDA warns against using them due to safety risks. ([U.S. Food and Drug Administration](#))

## Addiction / dependence

- **Dependence and addiction can occur.** People may develop **tolerance** (needing more for the same effect) and have **withdrawal** when stopping. ([National Institute on Drug Abuse](#))
- Reported withdrawal symptoms can resemble (often milder-than-classic) opioid withdrawal and include symptoms like **irritability, anxiety, restlessness, insomnia, cravings, sweating, nausea/diarrhea, muscle aches.** ([National Institute on Drug Abuse](#))

## Potentially fatal outcomes

- **Deaths have been reported with kratom detected**, often involving **other substances** (especially opioids), which raises risk substantially; however, CDC documented a subset where **kratom was the only substance detected** (with the caveat that not every possible substance is always tested). ([CDC](#))
- FDA also notes kratom use (frequently with other substances) has been associated with **serious adverse events including death.** ([U.S. Food and Drug Administration](#))

## Major adverse effects reported

- **Brain / nervous system:** sedation, dizziness, confusion, agitation; **seizures** have been reported in case literature (causality can be difficult to prove, but it's a recurring serious adverse event signal). ([Mayo Clinic](#))
- **Breathing / overdose-type toxicity:** because of opioid-like activity, high-risk scenarios include profound sedation and **respiratory depression**, especially when combined with other sedatives/opioids. ([U.S. Food and Drug Administration](#))
- **Cardiovascular:** **rapid heart rate, high blood pressure, palpitations/arrhythmias** have been reported. ([Mayo Clinic](#))
- **Liver:** cases of **drug-induced liver injury** (sometimes with jaundice) have been reported. ([Mayo Clinic](#))
- **GI:** nausea, vomiting, constipation. ([Mayo Clinic](#))
- **Mental health:** worsening anxiety/irritability, mood changes; some users report using it for anxiety/depression, but adverse psychiatric effects are also reported. ([Mayo Clinic](#))

## Unregulated product hazards (a huge part of the danger)

- Potency can vary widely, and products may be **contaminated/adulterated**. The FDA has warned about contamination events and emphasizes these products are not lawfully marketed as supplements/foods. ([U.S. Food and Drug Administration](#))
- Mixing kratom with **opioids, alcohol, benzodiazepines, sleep meds, or other sedatives** is a major red-flag risk for overdose-type outcomes. ([CDC](#))