

WHAT IS KRATOM?

ANALYTICAL STUDY ON KRATOM CALLS TO POISON CONTROL
CENTERS FROM 2011-2017

FROM 2011-2017, 1807 KRATOM EXPOSURES WERE REPORTED

OF THOSE, ALMOST 2/3
OCCURRED DURING 2016-2017

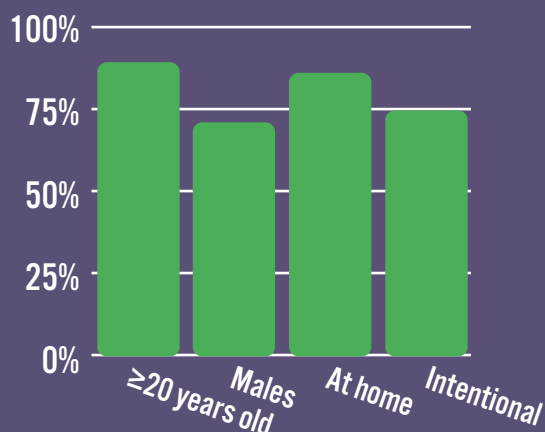
OF THE 1807 EXPOSURES

2011-2015

35%

2016-2017

60%



MOST EXPOSURES OCCURRED AMONG ADULTS
WHO WERE 20 YEARS OLD OR OLDER,
WERE MALE, WERE EXPOSED AT HOME,
AND WERE INTENTIONALLY EXPOSED.

11 DEATHS

were associated
with kratom exposure



2 DEATHS WERE ASSOCIATED WITH KRATOM ONLY



Tachycardia (22.9%)

MOST COMMON CLINICAL EFFECTS



Agitation/Irritability (21.4%)

Kratom and its Threat to the Public Health

By USDTL Staff

As a country, we have found ourselves in the abyss of an addiction epidemic. Policymakers, law enforcement, and public health officials analyzing the true magnitude of this American crisis are faced with yet another public health concern—drug “alternatives”.

Kratom, native to the tropical tree *Mitragyna speciosa*, is quickly gaining popularity among those seeking alternative solutions to treating opioid dependency. The plant’s leaves are known to contain compounds that produce psychotropic effects. It is currently listed as a “drug of concern” by The Drug Enforcement Administration (DEA) due to the substance’s similar addictive traits to opioids including risks of misuse, overdose, and fatality.¹

In understanding the heightened concern regarding Kratom, a study published in the *Journal of Clinical Toxicology* found that calls to U.S. poison control centers increased more than 50-fold from 13 calls in 2011 to 682 calls in 2017 (equivalent from about one call a month to two calls a day).² Of those calls, serious medical outcomes ranged from rapid heartbeat, agitation, irritability, and hypertension to seizures, coma, kidney failure, and death.

The added risk of Kratom in comparison to other substances is that it’s currently classified as an herbal supplement and not an illicit substance. According to the National Institute on Drug Abuse (NIDA), kratom is sometimes sold as a green powder in packets labeled “not for human consumption”,³ although kratom consumers report that the botanical supplement can be used for many things including minor pain as well as promoting a sense of health and well-being.

Kratom, available as a pill, capsule, or extract can work like an opioid or a stimulant. The two present compounds in its leaves—mitragynine and 7-a-hydroxymitragynine, interact with opioid receptors in the brain, producing sedation and pleasure while also minimizing pain.³ The chemical structure of kratom

compounds binds strongly to opioid receptors similar to scheduled opioid drugs.⁴ Through scientific analyzation, kratom compounds are predicted to affect the body just like opioids, producing adverse side effects including seizures and respiratory depression.⁴

Regardless of these findings, kratom in recent years has been used as an herbal alternative for medical treatment in attempts to manage opioid withdrawal symptoms/cravings. In response, the Food and Drug Administration (FDA) in 2017 began issuing a series of warnings about kratom, along with identifying 44 deaths associated with its use.⁴ Supporting studies have found that similar to other drugs that emit opioid-like effects, kratom is subject to dependence and withdrawal symptoms including: muscle aches, insomnia, irritability, hostility, aggression, emotional changes, runny nose, jerky movements³.

In efforts to prevent new epidemics of misuse, the FDA is working diligently to educate, warn, and fight against how kratom is being misrepresented to the public. According to the FDA, there have been no adequate and well-controlled scientific studies involving the use of kratom as a treatment for opioid withdrawal or other diseases in humans. The substance is currently illegal in Australia, Denmark, Germany, Malaysia, and Thailand and banned in a number of states and municipalities in the U.S.⁵

To combat the use of kratom for treating serious diseases like opioid use disorder (OUD), the FDA has issued additional warning letters to unscrupulous vendors for marketing kratom products with scientifically unsubstantiated claims, which they find a clear violation of federal law. The American Kratom Association claims the contrary, in fact, they have stated that kratom is regulated by the FDA as a dietary ingredient/supplement and nearly 5 million Americans safely use the substance.⁶

Understanding the true depth of the opioid epidemic requires a wealth of information



regarding the various drugs that are involved and their risk factors. If a drug of concern or an alternative form of the drug is posing a potential health risk to your community, incorporating that drug into your substance testing efforts can provide a proactive, comprehensive, and advanced approach in addressing the prevalence of opioid use disorder within today’s substance use landscape. USDTL has added Kratom to a number of specimens. Reach out to us to learn more.

References:

- 1) “Poison control calls for kratom have soared in recent years.” (n.d.). Retrieved from <https://www.cbsnews.com/news/kratom-poison-control-calls-soared-in-recent-years/>
- 2) “Kratom exposures reported to United States poison control centers”: 2011–2017. (n.d.). Retrieved from <https://www.tandfonline.com/doi/full/10.1080/15563650.2019.1569236?scroll=top&needAccess=true>
- 3) National Institute on Drug Abuse. (n.d.). “Kratom.” Retrieved from <https://www.drugabuse.gov/publications/drugfacts/kratom>
- 4) Office of the Commissioner. (n.d.). Press Announcements – “Statement from FDA Commissioner Scott Gottlieb, M.D., on the agency’s scientific evidence on the presence of opioid compounds in kratom, underscoring its potential for abuse.” Retrieved from <https://www.fda.gov/newsevents/newsroom/pressannouncements/ucm595622.htm>
- 5) Office of the Commissioner. (n.d.). Press Announcements – “Statement from FDA Commissioner Scott Gottlieb, M.D., on new warning letters FDA is issuing to companies marketing kratom with unproven medical claims; and the agency’s ongoing concerns about kratom.” Retrieved from <https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm620106.htm>
- 6) “American Kratom Association.” (n.d.). Retrieved from <https://www.amerikankratom.org/>