



Are they abusing “synthetic marijuana”?

With alarming positivity rates, designer drug testing has proven to be an essential tool for a variety of drug treatment and criminal justice situations. We'll find out.

TEST PANEL EXPANDED TO COVER 6 DRUGS: 4 EMERGING “LEGAL HIGH” SYNTHETIC CANNABINOID DRUGS ADDED FREE.

We can confidently say we're at the forefront of researching and identifying synthetic cannabinoids. Redwood Toxicology Laboratory was the first lab in the world to develop a urine-based metabolite test and oral fluid parent drug test for “synthetic marijuana.”

Synthetic cannabinoid compounds, found to be 4 to 100 times stronger than marijuana, are deceptively marketed as incense or herbal smoke products and sold under names such as K2, K3 Legal, Spice, Syn, Haze, Cloud Nine and many others.

On March 1, 2011, the possession and distribution of 5 synthetic cannabinoid compounds became illegal in the United States per an emergency ban by the U.S. Drug Enforcement Administration (DEA). This makes expanding drug tests to cover synthetic cannabinoids compounds more vital than ever.

FEATURES AND BENEFITS

- *First to develop reliable test methods, we offer considerable expertise and a strong reputation for scientific innovation*
- *Accurately identifies JWH-018, JWH-073, JWH-081, JWH-250, AM-2201, RCS-4 and their metabolites*
- *Detects 2 federally banned yet prevalent drugs, also detects 4 emerging “legal high” drugs*
- *Performed on advanced QTrap LC/MS/MS equipment; providing definitive biomarker test results*
- *Average window of detection is 72 hours following a single low dose; in case of chronic use the window is much longer*

Start testing synthetic cannabinoids

800-255-2159

or visit: www.redwoodtoxicology.com



Member of the Alere group of companies.

SYNTHETIC CANNABINOID URINE TEST

Complete list of cutoffs and test methods available online at: www.redwoodtoxicology.com

Panel 6473: Urine Synthetic Cannabinoid Test—Detects 6 drug compounds

JWH-018

(1-pentyl-1H-indol-3-yl)-1-naphthalenyl-methanone

JWH-073

*(1-butyl-1H-indol-3-yl)-1-naphthalenyl-methanone*JWH-250 **NEW!***1-(1-pentyl-1H-indol-3-yl)-2-(2-methoxyphenyl)-ethanone*JWH-081 **NEW!***(4-methoxy-1-naphthalenyl)(1-pentyl-1H-indol-3-yl)-methanone*AM-2201 **NEW!***[1-(5-fluoropentyl)-1H-indol-3-yl]-1-naphthalenyl-methanone*RCS-4 **NEW!***(4-methoxyphenyl)(1-pentyl-1H-indol-3-yl) methanone***Also available: Oral Fluid Synthetic Cannabinoid Test (Panel F25)**—Detects JWH-018, JWH-073, JWH-250, JWH-210, JWH-081, RCS-4 and AM-2201

FREQUENTLY ASKED QUESTIONS

Complete list of FAQ's available online at www.redwoodtoxicology.com.**What are synthetic cannabinoids?**

Synthetic cannabinoids are chemical compounds that mimic the effect of THC, the principle active ingredient of cannabis. Like THC, they bind to cannabinoid receptors in the brain and were initially developed as therapeutic agents for the treatment of pain. However, these psychoactive research chemicals are frequently being sprayed on herbal mixtures and sold as “fake weed” or “synthetic marijuana.” Initially, JWH-018 and JWH-073 were the two most common synthetic cannabinoid chemicals found in a variety of herbal smoking blends. Others like JWH-250, JWH-210, JWH-081, AM-2201 and RCS-4 have started appearing in newer synthetic cannabinoid products and preparations.

How are synthetic cannabinoids being used?

Herbal smoking products laced with synthetic cannabinoid chemicals are readily available via the internet and in many head shops around the country. These products are sold as incense under names like K2, K3 Legal, Spice, Syn, Haze, Cloud Nine and many others. Users looking for a marijuana-like high often turn to these herbal smoking or incense products because they do not show up on a standard urine drug test.

The product is usually smoked by wrapping it in joints, smoking it in pipes, or inhaling fumes via vaporizers. Users also report that herbal blends or pure chemical concoctions can be ingested with an infusion or solvent process; purportedly allowing them to manage the potency and dose of the active ingredient(s).

What are the effects of using synthetic cannabinoids?

JWH-018, JWH-073, JWH-250, JWH-081, JWH-210, AM-2201, RCS-4 and other similar chemicals are the primary synthetic cannabinoid receptor agonists responsible for the euphoric and psychoactive effects that imitate marijuana.

These synthetic cannabinoids do not contain cannabis but when smoked produce effects similar to marijuana. Some of these synthetic cannabinoid chemicals are 4 to 100 times stronger in potency to marijuana. There have been many reports about the adverse effects including agitation, rapid heart rate, confusion, dizziness and nausea. According to the American Association of Poison Control Centers, the number of human exposure calls relating to synthetic cannabinoids increased 139% between 2010 and 2011.

What herbal incense brand names are being used?

Users looking for a marijuana-like high often turn to popular herbal smoking products marketed under brand names such as K2, K3 Legal, Spice, Syn, Haze, Cloud Nine, Mr. Myagi Zero, Tyranny Green, Warped, Dragon Spice, Triple Diamond, Dream Smoke, Genie, Smoke, Pot-pourri, Buzz, Pulse, Hush, Mystery, Earthquake, Ocean Blue, Stinger, Serenity and many others. RTL maintains a composition list for different products, brands and preparations. View the list on our website at: www.redwoodtoxicology.com (list updated periodically).

The Food and Drug Administration (FDA) does not regulate the products, but maintains they are not approved for human consumption. Without proper ingredient labeling or measured potency, users increase the risk of overdosing. To complicate labeling and dose concerns, some reports indicate many popular brands are now counterfeit or fake brands.

What is the legal status of these chemicals?

Under the U.S. Drug Enforcement Administration (DEA) “Emergency Scheduling Authority,” 5 synthetic cannabinoid compounds became illegal March 1, 2011. The nationwide temporary ban was extended February 29, 2012 for another six months and restricts the manufacture, purchase and use of synthetic cannabinoids, including JWH-018, JWH-073, JWH-200, CP-47,497 and cannabicyclohexanol. The substances are categorized as Schedule I drugs, a restrictive category reserved for highly abused substances that provide no medical use. However, persistent designer drug chemists attempt to circumvent existing drug laws by developing new products containing compounds with similar chemical structures. Scientific research at RTL has found federally unregulated chemicals, such as: JWH-081, JWH-250, AM-2201, and RCS-4 are gaining prevalence as active ingredients in newer generation synthetic marijuana products.

How long can synthetic cannabinoids be detected in urine?

Following a single low dose exposure, synthetic cannabinoids can be detected up to 72 hours in human urine. In case of chronic exposure the window of detection is much longer.

What are the urine cutoff levels?

There are no cut-off levels for RTL's Urine Synthetic Cannabinoid Test. Toxicology result reporting will indicate either “Detected” or “Not Detected.”