



OraSure Technologies

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What's the Buzz



EMERGING DRUGS



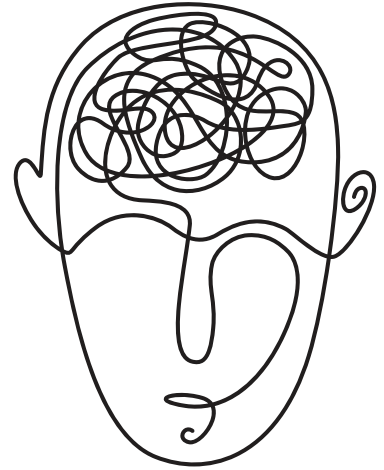
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MID-YEAR REVIEW

EMERGING DRUGS

BY YVETTE FARNSWORTH BAKER, ESQ.



Psilocybin
legalization
is the next
wave of drug
legalization.



Illegal drug use will always remain a top concern for the workplace. Yet the use and abuse of legal or quasi-legal drugs is also something that employers should understand. For some legal substances, drug testing is effective, while for others, watching for signs of impairment is the key. This article briefly examines several emerging drugs rising in use and popularity that are legal in some jurisdictions or under some circumstances.

Psychedelics

Legalization and decriminalization of psychedelic drugs such as psilocybin is a growing trend across the United States. Nine states as diverse as Kansas and Hawaii currently have proposed legislation that would legalize or decriminalize psilocybin. While not all nine states will pass these bills, it is likely that psilocybin legalization is the next wave of drug legalization.

What is psilocybin? Psilocybin is a hallucinogenic substance found in more than 200 species of mushrooms. Its psychedelic effects are in some ways like LSD. It can induce a wide range of subjective effects, from feelings of disorientation to lethargy, giddiness, euphoria, joy and depression.

As we saw with marijuana legalization, advocacy for psychedelic legalization has at first focused on advocacy for medical use rather than recreational. Evidence is growing that psilocybin can reduce chronic, clinical depression and anxiety, particularly in patients with life-threatening medical conditions.¹ Most psychedelic legalization advocacy so far has focused on the benefits of medical use in partnership with psychotherapy. For example, Oregon's psilocybin legalization act lists as its purposes:

"To educate the people of this state about the safety and efficacy of psilocybin in treating mental health conditions;

...To reduce the prevalence of mental illness among adults in this state, and to improve the physical, mental, and social well-being of all people in this state;

...To develop a long-term strategic plan for ensuring that psilocybin services will become and remain a safe, accessible and affordable therapeutic option for all persons 21 years of age and older in this state for whom psilocybin may be appropriate...."²

While advocacy has focused on therapeutic use of psychedelics, most legalization thus far has decriminalized or deprioritized possession of the substances. Full-blown legalization generally provides a framework for legal possession and legal use, including methods of safe and lawful purchase. Decriminalization, on the other hand, does not provide a legal framework but simply removes criminal punishment for possession. Deprioritization does not legalize or even decriminalize possession, but officially pronounces that enforcement of those criminal laws will not be a priority in the jurisdiction.

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If proponents have learned anything from cannabis legalization, they have learned to start small with state and local governments rather than focusing on federal legalization. Advocates for legalization bet on the federal government's reluctance to enforce federal drug law when it conflicts with state legalization. Following the model of marijuana, several localities and one state have legalized, decriminalized or deprioritized possession of psilocybin since 2019 despite the fact that it remains an illegal drug under federal law. These jurisdictions include Denver, Colorado; Oakland, California; Washington, DC; Seattle, Washington; and the state of Oregon. While it is unlikely that the federal government will take up psychedelic legalization anytime soon, state and local legislation is where the action is currently happening.

Kratom

Opposite of psilocybin, kratom is a substance that is on trend for regulation and criminalization. Six states currently ban possession of kratom and seven states have pending legislation to do so.³ However, most states do not currently have any restriction on the use or abuse of kratom.

Kratom is a plant from Southeast Asia that has opioid-like properties and a stimulant effect. It is used by some to treat chronic pain, to alleviate opioid withdrawals or as a recreational substance. In 2019, the United States Food and Drug Administration (FDA) issued a warning to consumers that kratom "appears to have properties that expose users to the risks of addiction, abuse, and dependence."⁴ The FDA has kratom on "import alert" due to concerns about its safety and effectiveness as a drug.⁵

One study estimated that use of kratom in the United States rose sharply from 2011 to 2017.⁶ With its potential harmful effects, kratom use and regulation is something to watch as an emerging trend.

Opioids

Opioid abuse continues to increase in the United States.⁷ While it appeared that abuse was beginning to decrease in 2019, the pandemic sent 2020 usage to its highest levels.^{8,9} Opioid deaths are at startling highs, topping 100,000 deaths annually and increased 28.5% from 2020 to 2021.¹⁰

Handling opioid use in the workplace can be complicated, as many opioid users, and even abusers, can produce a valid prescription. Restrictive guidelines that the CDC issued in 2016 led to a drastic decrease in the amount of opioids prescribed to patients. Those restrictions are set to be relaxed this year, however, to give doctors more flexibility in prescribing opioids to patients with acute or chronic pain. What effect this will have on opioid abuse remains unclear. Even employees who use opioids in accordance with a valid prescription should be closely monitored for signs of impairment, overuse or addiction.

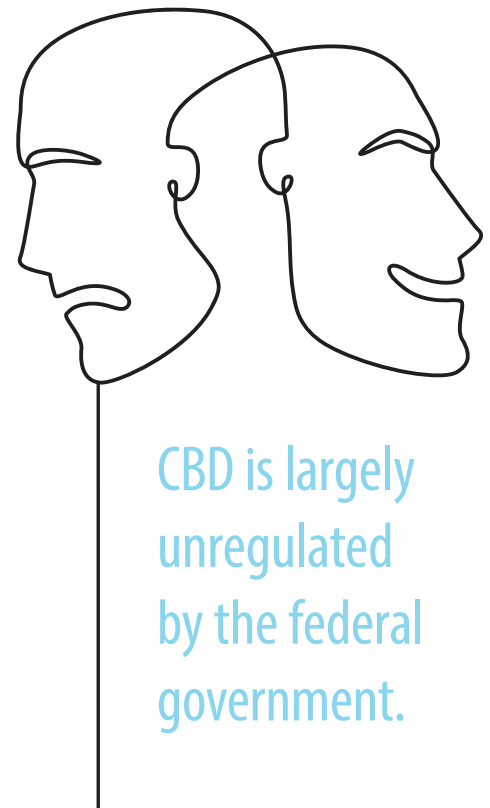
Cannabidiol (CBD)

Cannabidiol, or CBD, is a substance found in the cannabis plant believed to have therapeutic qualities. CBD itself does not cause a "high," as it is a distinct and different chemical from THC, the psychoactive chemical in cannabis. CBD is now legal in some form in about 46 states. While CBD is legal in most states under state law, the complicated nature of federal cannabis law means that CBD is largely unregulated by the federal government, including the Food and Drug Administration (FDA).

Because CBD is not subject to the strict regulations of medical therapeutics or even food products, what is contained in a marketed CBD product is questionable. Many CBD products claiming to not contain THC do in fact contain THC.¹¹ Some people have reported testing positive for THC even though they consumed only CBD products and not marijuana.¹² Employees receive no legal protection from workplace discipline and termination if they consume a prohibited substance ignorantly.

Conclusion

Employers should watch the trends of emerging drugs, particularly those that inhabit a legal or quasi-legal status. Their effects on users may still be unpredictable, and as a result could have an unpredictable effect on the safety, security and productivity of the workplace.



CBD is largely unregulated by the federal government.

1. Griffiths, Roland R, et al. "Psilocybin Produces Substantial and Sustained Decreases in Depression and Anxiety in Patients with Life-Threatening Cancer: A Randomized Double-Blind Trial." *Sage Journals, British Association for Psychopharmacology*, 30 Nov. 2016, <https://journals.sagepub.com/doi/full/10.1177/0269881116675513>.
2. "The Oregon Psilocybin Services Act." 2 July 2019, <http://oregonvotes.org/irr/2020/034text.pdf>.
3. Kraoma. "Kratom Legality 2022: Map, Legal Status, and Ban Updates." Kraoma, Kraoma LLC, 7 Aug. 2020, <https://kraoma.com/kratom-legality-united-states/>.
4. "FDA and Kratom." U.S. Food and Drug Administration, U.S. Food and Drug Administration, 11 Sept. 2019, <https://www.fda.gov/news-events/public-health-focus/fda-and-kratom>.
5. "Import Alert 66-41." U.S. Food and Drug Administration, U.S. Department of Health and Human Services, 9 Mar. 2022, https://www.accessdata.fda.gov/cms_ia/importalert_190.html.
6. Post, Sara; Spiller, Henry A.; Chounthirath, Thitphalak; Smith, Gary A. (20 February 2019). "Kratom exposures reported to United States poison control centers: 2011–2017". *Clinical Toxicology*. 57 (10): 847–854.
7. Ahmad FB, Rossen LM, Sutton P. Provisional drug overdose death counts. *National Center for Health Statistics*. 2022. <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>.
8. *Fact Sheet: Combating the Opioid Crisis*. U.S. Department of Health and Human Services, Apr. 2019, <https://www.hhs.gov/sites/default/files/opioids-fact-sheet-april-2019.pdf>.
9. Nissen, Dr. Nicholas. "Opioid Overdoses 29% Higher in 2020 than before the Pandemic: Study." ABC News, ABC News Internet Ventures, 10 Feb. 2021, <https://abcnews.go.com/Health/opioid-overdoses-29-higher-2020-pandemic-study/story?id=75785104>.
10. "Drug Overdose Deaths in the U.S. Top 100,000 Annually." *National Centers for Health Statistics, Centers for Disease Control and Prevention*, 17 Nov. 2021, https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2021/20211117.htm.
11. Bonn-Miller, Marcel O., et al. "Labeling Accuracy of Cannabidiol Extracts Sold Online." *JAMA, JAMA Network*, 7 Nov. 2017, <https://jamanetwork.com/journals/jama/article-abstract/2661569>.
12. Gill, Lisa L. "Can You Take CBD and Pass a Drug Test?" *Consumer Reports, Consumer Reports, Inc.*, 15 May 2019, <https://www.consumerreports.org/cbd/can-you-take-cbd-and-pass-a-drug-test/>.

DELTA 8-THC IMPACT ON DRUG TESTING

BY DR. DAVID KUNTZ

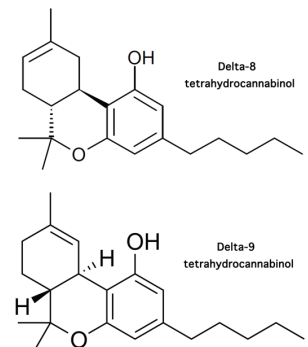
The cornerstone for marijuana testing has been the detection of delta 9-THC ($\Delta 9$ -THC) in oral fluids or its metabolite, delta 9-THCA ($\Delta 9$ -THCA), in urine. Under federal and non-regulated drug policies, $\Delta 9$ -THCA metabolite is the only reportable metabolite. Specifically identifying $\Delta 9$ -THCA as the prohibited cannabinoid has created an opportunity for marijuana chemists to create alternative cannabinoids with similar effects to avoid reporting a positive result in a workplace drug testing situation.

What is delta 8-THC?

Delta 8-THC ($\Delta 8$ -THC) is one of the naturally occurring cannabinoids found in very low levels in cannabis plants. It was never considered a cannabinoid of concern, although the psychological effects are very similar to $\Delta 9$ -THC. Both $\Delta 8$ -THC and $\Delta 9$ -THC interact with a receptor in the brain, which creates the psychological high associated with marijuana use. Another naturally occurring cannabinoid, cannabidiol (CBD), is widely used by the public for its reported benefits for the treatment for chronic pain, anxiety, neurological diseases, GI disorders and many more medical conditions. CBD interacts with a different receptor which primarily affects systems other than the brain.

How did $\Delta 8$ -THC come into being?

Marijuana confirmation testing began to change around 2018 when marijuana chemists began creating $\Delta 8$ -THC. CBD or $\Delta 9$ -THC can be converted into $\Delta 8$ -THC by adjusting the substance's chemical structure (see figures below). These new $\Delta 8$ -THC products are available as edibles and included in vape pens sold through CBD shops, gas stations and convenience stores.



Is $\Delta 8$ -THC legal?

The legality of $\Delta 8$ -THC is under review at the federal level. Sellers of $\Delta 8$ -THC products are claiming that it comes from hemp, which by definition has < 0.3% THC. The federal counter argument to this is that the Hemp Farm Bill does not allow for the conversion of CBD to other cannabinoid products. Both state and federal courts are reviewing the issue.

$\Delta 8$ -THC and the workplace

The introduction of $\Delta 8$ -THC has had a major impact on laboratory testing. Individuals ingesting $\Delta 8$ -THC products test positive using traditional immunoassay screening tests. In confirmation testing using mass spectrometry, $\Delta 8$ -THC and $\Delta 9$ -THC are similar and must be separated from each other to allow the laboratory to make the forensic identification that is required in drug testing. This requires more instrument time and additional tools to make this happen.

In work performed at CRL, individuals using large amounts of $\Delta 8$ -THC as a replacement for traditional marijuana are identified in the laboratory. The problem for these individuals is that $\Delta 8$ -THC products are not pure and various amounts of $\Delta 9$ -THC remain from the chemical conversion, meaning they test positive for both substances.

The legality of $\Delta 8$ -THC is under review at the federal level.

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A GUIDE TO COMMONLY ABUSED EMERGING DRUGS



STIMULANTS


AMPHETAMINE


Amphetamine

 Amphetamine, Adderall®, Dexedrine®, Vyvanse™, Desoxyn®

 Bennies, black beauties, crank, ice, speed, uppers, ice

 Oral, injected, snorted


 Increased blood pressure and pulse, insomnia, loss of appetite, physical exhaustion


 2–4 hours


COCAINE


Cocaine

 N/A

 Blow, coca, coke, crack, flake, snow, soda cot

 Snorted, injected, smoked


 Euphoria, increased blood pressure, dilated pupils, insomnia, loss of appetite


 1–2 hours


METHAMPHETAMINE


Methamphetamine, methylenexioyamphetamines, MDA, MDMA, MDE

 Desoxyn®, Methadrine®, Enactogens








 Batu, black beauties, chicken feed, crank, crystal, ice, meth, speed, poor man's cocaine, uppers, Ecstasy, Molly

 Oral (generally)

 Brief rush, sustained high, violent behavior, anxiety, confusion, insomnia, paranoia, increased wakefulness, increased physical activity, decreased appetite, rapid breathing, irregular heart rate, hyperthermia

 2–4 hours

KEY

-  CLASSIFICATION
-  DRUG
-  COMMON TRADE NAMES
-  STREET NAMES
-  HOW IS IT USED?
-  EFFECTS
-  DURATION OF EFFECTS*


NARCOTICS





OPIATES


Heroin, codeine, hydromorphone, morphine, oxycodone, oxymorphone

 Oxycontin®, hydromorphone, methadone, hydrochloride

 Dillies, dust, footballs, juice, smack, dreamer, God's drug, mister blue, morf

 Oral, injected, smoked, snorted

 Euphoria, relaxation, sedation, reduced anxiety

 3–6 hours


CBD


CANNABIDIOL


Cannabidiol, CBD

 N/A

 CBD

 Oral, sublingual, topical

 Pain relief, relaxation, sleepiness

 2–6 hours



*Duration of physical effects, also known as "the high", not necessarily the duration of how long someone is impaired or how long a drug can be detected in someone's system. This information is provided for educational purposes only. Reader retains full responsibility for the use of the information contained herein.



DEPRESSANTS



BARBITURATES

Amobarbital, butabarbital, butalbital, pentobarbital, phenobarbital, secobarbital

Rx Amytal®, Seconal®

S *Barbs, block busters, Christmas trees, goof balls, pinks, red devils, reds & blues, yellow jackets*

P Oral, injected

M Mild euphoria, lack of restraint, anxiety relief, sleepiness, memory/judgment impairment, irritability, paranoid and suicidal ideation

C 3–24 hours

BENZODIAZEPINES

Alprazolam, chlordiazepoxide, clorazepate, diazepam, flunitrazepam, flurazepam, lorazepam, oxazepam

Rx Alprazolam, clonazepam, Valium®, Xanax®, Halcion®, Ativan, Klonopin®

S *Benzos, downers*

P Oral, injected

M Amnesia, hostility, irritability, vivid dreams, sleepiness, relaxed mood

C 4–12 hours

KRATOM

Kratom

Rx N/A

S *Thang, kakuam, thom, ketum, biak*

P Oral, smoked

M Increased alertness, increased physical energy, sedation, hallucinations, delusion, confusion, nausea, insomnia

C 2–5 hours

HALLUCINOGENS



MARIJUANA/CANNABINOIDS

Marijuana, hashish, hashish oil

Rx Marinol®, Cesamet® (both THC-based medications)

S *Aunt Mary, blunts, dope, ganja, grass, hash, herb, joint, Mary Jane, pot, reefer, smoke, weed*

P Smoked, oral

M Problems with memory and learning, distorted perception, difficulty thinking, loss of coordination, dizziness, nausea, facial flushing, dry mouth, tremor, merriment, relaxation, enhanced sensory perception, increased creativity, impaired judgment, increased appetite, sedation, bloodshot eyes, increased blood pressure

C 2–4 hours

PHENCYCLIDINE (PCP)

Phencyclidine

Rx N/A

S *PCP, angel dust, supergrass, zoom, shermans*

P Oral, injected, snorted, smoked

M Dissociative anesthesia, depression, psychosis, stupor, coma, seizures

C 2–4 hours

PSILOCYBIN

Psilocybin

Rx N/A

S *Magic mushrooms, shrooms, mushrooms*

P Oral

M Hallucinations, panic attacks, psychosis, nausea, muscle weakness, lack of coordination

C 3–6 hours



2022 TO DATE: A MID-YEAR REVIEW

BY KATHERINE MILLER

With 2022 halfway over it's time to take a look back on what's already happened this year, what we can expect to happen in the second half of the year and major industry changes on the horizon.

So far in 2022

The largest industry change to have already occurred in 2022 is the passage of medical cannabis in Mississippi. But wait—didn't that already happen in 2020? Yes...and no. Mississippi voters approved a ballot initiative in November 2020 that legalized medical cannabis. However, in spring 2021 the state Supreme Court ruled the ballot initiative unconstitutional, effectively nullifying the program before it ever got on its feet. In February 2022 the state legislature passed the Mississippi Medical Cannabis Act (the Act), immediately re-legalizing medical cannabis for Mississippi residents.

The Act generally favors Mississippi employers, allowing them to take adverse employment action against individuals because of their use of medical cannabis regardless of the level of impairment. Additionally, employers can establish and enforce drug testing policies and can discipline employees for either ingesting medical cannabis in the workplace or for working while under the influence of medical cannabis.

Mississippi employers are not required to permit or accommodate the use of medical cannabis in the workplace, nor are they required to modify the job or working conditions of an employee that uses or seeks to use medical cannabis. Additionally, employers are not required to reimburse or pay for costs associated with the use of medical cannabis. Mississippi employers should carefully review the law in its entirety to ensure compliance.

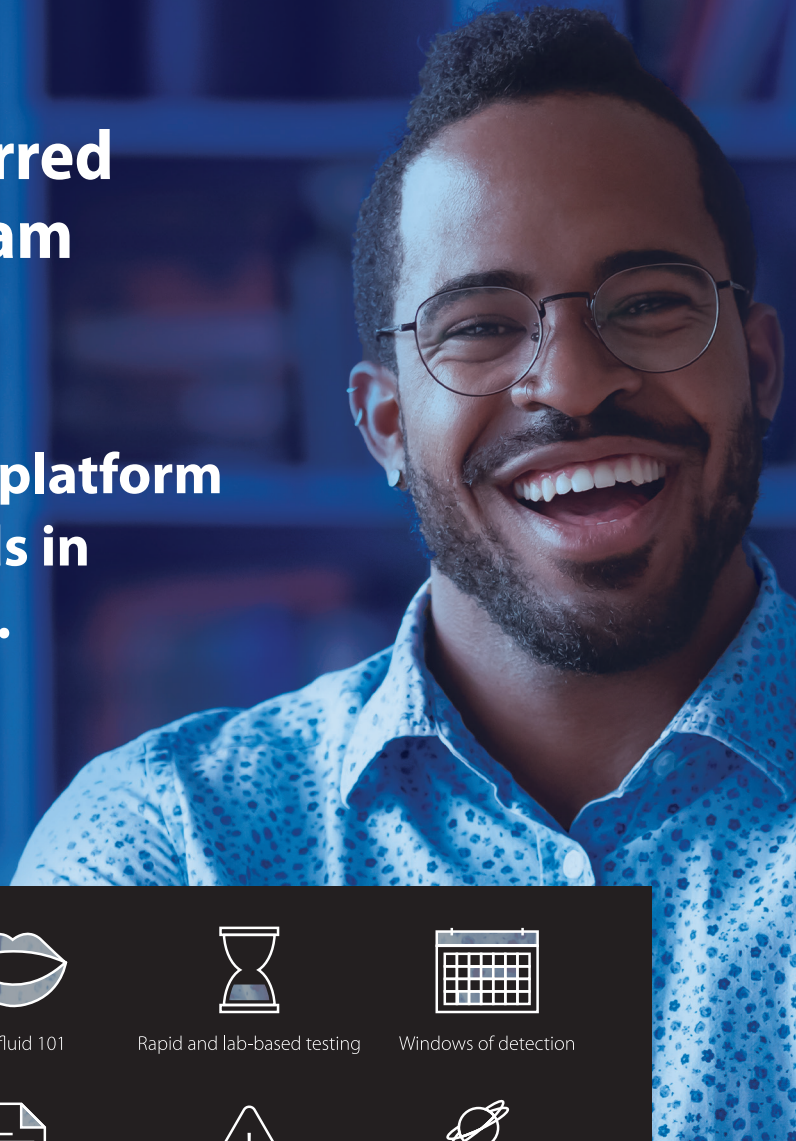
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