

MARIJUANA

Its Effect on Workplace Safety

By Thomas E. Moore

MANY NICKNAMES ARE USED for the drug produced by drying and processing leaves from the flowering plant *Cannabis sativa*, which is most commonly known as marijuana (Vertava Health, n.d.).

Since 1996, 36 U.S. states and territories have legalized marijuana for medical reasons, and another 15 have legalized the recreational use of marijuana (NCSL, 2020b). While the legalization of marijuana is increasing at the state level, the federal level has become mixed with marijuana's twin, hemp, being made legal and marijuana remaining illegal, any of which could change with the next administration (Agriculture Improvement Act, 2018). The health effects of marijuana may be in dispute, but marijuana impairs employees who use it to varying degrees in ways similar to alcohol, with new users affected differently than regular users (Hall, 2014). The psychoactive compound in marijuana has increased over the past few decades as growers try to make their product more potent, thus making impairment an even larger problem (Hall, 2014). While a blood alcohol content of 0.08 is widely recognized as legally drunk, there is no similar government standard for impairment from marijuana.

With each state having different laws about marijuana in the workplace, employers—particularly interstate employers—in states where marijuana is legal are facing questions and problems about whether to

allow marijuana in the workplace or even its presence in the bloodstream of employees while on duty, off duty or both. Employers may have the ability to determine which jobs are critical to the safety of others and keep those jobs drug free but may be restricted from keeping the remainder of their workforce drug free. Some employers have

essentially been given an option to follow either the state law or the stricter guidance of the federal statutes. For others, the option could be made for them depending on whether they are a federal contractor, whether only state law requirements apply or whether they are seeking every workers' compensation premium discount available.

There have been few legal cases regarding marijuana in the workplace, and, while legal decisions may have sided with the employer before, there has been a slow swing of the pendulum toward favoring the employee. With regard to enforcement, the Obama Administration leaned more toward states' rights as opposed to the Trump Administration's initial nod toward maximum enforcement of the federal law, which has since become almost complete silence (Prince, 2019). With that silence, some states are attempting to, in essence, overturn the courts and the federal government when it comes to marijuana both within and outside of the workplace to ensure that workers have the right to do whatever they want while off duty. OSHA has yet to wade into the issue, but the General Duty Clause could be used to start the agency's foray into the marijuana concern. One thing is certain: Marijuana is affecting workplace safety and, as such, must be addressed.

What Is Cannabis?

Cannabis is a genus of the family *Cannabaceae*, to which hackberries (*Celtis*) and hops (*Humulus*) also belong (Kew Science, n.d.). Cannabis is usually referred to by its use: "marijuana" if used as a psychoactive; "hemp" if used as a textile. Some in the world of cannabis believe this naming to be dysfunctional, comparing it to calling citrus fruits "sour" or "sweet" instead of using their familiar names (e.g., orange, lemon, lime). Arguably, the three species of cannabis are *C. sativa*, *C. indica* and *C. ruderalis* (Cadena, 2021). Debate continues as to whether there are three separate species or whether these are subspecies of another. In 2014, John McPartland published a paper offering to completely change the nomenclature, changing *C. sativa* to *C. indica*, *C. indica* to *C. afghanica*, and *C. ruderalis* to *C. sativa*. While McPartland's research appears to have originally

KEY TAKEAWAYS

- Legalization of marijuana use is increasing at the state level, but its use is still illegal at the federal level.
- Employers must be familiar with the rights of the worker and the employer with regard to marijuana use at the state level.
- Unlike with alcohol, no definitive way exists to test for THC impairment.
- THC can remain in the bloodstream for days or weeks after initial impairment.

intended to prove *C. indica* and *C. sativa* were separate species, it did the opposite and showed that they were subspecies (O'Shaughnessy's News Service, 2015). However, *C. sativa* is the only accepted species of cannabis (Kew Science, n.d.).

According to Drugs.com (n.d.):

Marijuana (cannabis) is a green, brown or gray mixture of dried, shredded leaves, stems, seeds and flowers of the hemp plant *Cannabis sativa*. Marijuana is used as a psychoactive (i.e., mind altering) recreational drug, for certain medical ailments and for religious and spiritual purposes.

The psychoactive nature of marijuana comes from THC (delta-9-tetrahydrocannabinol) found in highest concentrations in the buds and dried flowers of the plant. Marijuana had been legal in the U.S. until the passing of the Controlled Substances Act of 1970. The Marijuana Tax Act of 1937 had regulated commerce associated with cannabis and all but made it illegal. The Controlled Substances Act of 1970 made it completely illegal. Coincidentally, the Controlled Substances Act of 1970 was signed into law 63 days prior to the OSH Act of 1970. The Controlled Substances Act classified marijuana as a Schedule I drug, defined as having "a high potential for abuse, no currently accepted medical use . . . and a lack of accepted safety for use of the drug under medical supervision" (Controlled Substances Act, 1970).

Marijuana's vernacular twin, hemp, has been used for thousands of years. Remnants of 8,000-year-old cloth made of hemp have been found by archaeologists in the area of ancient Mesopotamia. Hemp paper documents from 150 B.C.E. China and second and third-century Buddhist texts have also been found. Europe in the Middle Ages was dependent on hemp for canvas (coming from the Arabic word for hemp), sails, rope and clothing. Up to the 1920s, hemp accounted for 80% of textiles used in clothing. Even the U.S. Declaration of Independence was written on hemp paper (The Thistle Staff, 2000). A 1942 war film produced by the U.S. Department of Agriculture titled "Hemp for Victory" stated that the USS *Constitution* had more than 60 tons of hemp for rigging (Evans, 1942). It further stated that "in 1942, patriotic farmers at the government's request planted 36,000 acres of seed hemp, an increase of several thousand percent. The goal for 1943 is 50,000 acres of seed hemp." That allowance and request were quickly eliminated after the defeat of Japan.

Today, the U.S. Congress has defined hemp in the Agriculture Improvement Act of 2018 as "the plant *Cannabis sativa* L. and any part of that plant . . . with a delta-9-tetrahydrocannabinol of not more than 0.3% on a dry weight basis." The Agriculture Improvement Act of 2018 made hemp legal again in the U.S. but did not change the legal status of marijuana. Many proponents of marijuana legalization liken the drug to alcohol, saying marijuana is no more addictive than alcohol with similar effects. However, research has shown that marijuana's effects on the human body are substantially different from alcohol (American Addiction Centers, n.d.; Hall, 2014; Marijuana Policy Project, n.d.; NBC News, 2015; Riffe, 2013).

Over time, the THC content in some strains of marijuana has increased significantly. Through the 1980s, THC levels in marijuana were less than 2% (Stuyt, 2018). With no regulations from any level of government stipulating a range of THC levels, some Colorado dispensaries have strains of cannabis with THC levels of more than 15% (Orens et al., 2018). Concentrates have an average potency in the 80% range (Chatterjee, 2019). The use of the drug at these levels could lead to significant impairment of an individual for some time.

A clinical review found that the use of medical marijuana was supported for "chronic pain, neuropathic pain and spasticity due to multiple sclerosis" (Hill, 2015). Connelly (2017) showed that on a scale of 0% to 100%, medical marijuana patients rated the effectiveness of marijuana an average of 74.6%. Also in 2017, National Academies of Sciences, Engineering and Medicine published a comprehensive review of current research, which found "substantial evidence of a statistical association between cannabis use and increased risk of motor vehicle crashes," but also stated that there was "insufficient evidence to support or refute" a link between using marijuana and occupational injuries.

Marijuana and alcohol have some similar health effects: short-term memory loss, diminished ability to focus and make rational decisions, diminished ability to process and analyze information, altered sensory perception, and delayed reaction time (Vargas, 2019). While alcohol is water-soluble, THC is lipid-soluble, which means it can be stored in fatty tissue in the body. THC stored in fatty tissue also means that THC can be released into the bloodstream over hours, days or perhaps even weeks, compared to alcohol, which typically leaves the body at a rate of 0.015 grams per 100 milliliters per hour, or about one drink per hour (BGSU, n.d.; Vargas, 2019). Like alcohol, impairment from the use of marijuana is different for each person and that person's usage. While a social drinker could die from alcohol poisoning with a blood alcohol content of 0.31, a high-functioning alcoholic could survive with little more than a hangover. Likewise, with marijuana, a habitual user may not show signs of impairment (Lapham, 2010; Vargas, 2019).

Impairment

Impairment could be fatal on the job, particularly in industries such as construction, transportation, maritime, logging or any part of public safety. Workers in these industries must be clear-minded and without physical, mental or cognitive impairment while performing their duties. This is true not only for alcohol but also any narcotic including medical marijuana. Medical marijuana may be a pharmaceutical solution for some issues, but adverse effects still exist. A test for marijuana can detect the drug in a person's system days or weeks after use, which, depending on the state, could presume that the cause of an incident was marijuana impairment (Glader, 2019). A noninvasive oral fluid test exists as the current best practice because it can detect recent marijuana use while excluding use from more lengthy periods (Pirone, 2019). But what constitutes impairment? Unlike alcohol, breathalyzers to measure acute impairment by THC are primar-

ily prototypes and untested in the courts (Paris, 2019). In addition, there is no definitive definition or measurement of acute impairment.

In 2006, the Experimental Psychopharmacology Unit at Maastricht University conducted a study on the relationship between THC and driver impairment. The study used performance tests measuring perceptual-motor control, cognitive function and motor impulsivity. The researchers found “an initial and significant shift toward impairment in the critical tracking task” in blood serum concentrations at 2 to 5 ng/ml (Ramaekers et al., 2006). In 2015, American Association of Occupational Health Nurses and American College of Occupational and Environmental Medicine published joint guidelines that a blood test showing a THC level of 5 ng/ml was the rough equivalent of 0.04 blood-alcohol content (Phillips et al., 2015). Governor’s Highway Safety Association’s (GHSA, n.d.) listing of marijuana-related laws shows that 12 states have zero-tolerance laws for THC, six states have per se laws and one (Colorado) has a reasonable inference law. Of the per se law states, Illinois, Montana and Washington have all set the legal limit to 5 ng/ml, while Nevada and Ohio set their limit at 2 ng/ml, and Pennsylvania at 1 ng/ml. [While researching this topic, the author was only able to find evidence of one state, Washington, that proposed lowering the blood-alcohol content required for driving under the influence to a level commensurate with the THC level; however, the bill died in committee (H.B. 1874-2017-18, 2017)].

No matter what the level of THC in the system, as noted, THC can remain in the bloodstream for days or weeks after initial impairment; but is the user still impaired? Studies have shown that the initial effects of marijuana may take approximately 5 minutes, and maximum impairment may occur approximately 15 to 30 minutes after inhalation (Grotenhermen, 2003; Harder & Rietbrock, 1997). Law enforcement officers will not call a judge for a blood test warrant without probable cause and will likely gain any probable cause through the use of a standard field sobriety test; however, research has shown that standard field sobriety tests produce false negatives and false positives (Logan, 2016). Add to that the time to obtain a blood-draw warrant and the nonmathematical rate of metabolism, and per se laws and the evidentiary rules could take some time to sort out. That said, if the person is at work, little or no government guidance exists.

Safety Sensitive

National Safety Council (NSC) and American College of Occupational and Environmental Medicine have both released statements to keep marijuana out of the workplace. In a press release, NSC (2019) stated, “This is particularly concerning for those individuals working in safety-sensitive positions where impairment can affect the health and safety of other workers, customers,

the general public or others.” The organization defines a safety-sensitive position as a job that impacts the “safety of the employee and the safety of others as a result of performing” their tasks (NSC, 2019). A definitive list of jobs or careers that fit this definition does not exist; however, some states and employers have defined it for their use.

The state of Oklahoma passed the Oklahoma Medical Marijuana and Patient Protection Act (2019), the so-called “Unity Bill,” wherein lawmakers followed NSC’s definition and created a partial list of job examples classified as safety sensitive. This list includes:

The handling, packaging, processing, storage, disposal or transport of hazardous materials, the operation of a motor vehicle, other vehicle, equipment, machinery or power tools, repairing, maintaining or monitoring the performance or operation of any equipment, machinery or manufacturing process, the malfunction or disruption of which could result in injury or property damage, performing firefighting duties, the operation, maintenance or oversight of critical services and infrastructure including, but not limited to, electric, gas, and water utilities, power generation or distribution, the extraction, compression, processing, manufacturing, handling, packaging, storage, disposal, treatment or transport of

potentially volatile, flammable, combustible materials, elements, chemicals or any other highly regulated component, dispensing pharmaceuticals, carrying a firearm, or direct patient care or direct child care. (Oklahoma Medical Marijuana and Patient Protection Act, 2019)

The law also provides employers the discretion to decide on their own what positions are safety sensitive falling under the exemptions of the antidiscrimination language of the Oklahoma Medical Marijuana Act (Albert & Grose, 2019).

Employer Policy

Employers can always follow stricter guidance (e.g., federal law states that THC is illegal, and Company X will comply with federal law). If the company states and enforces that type of policy, case law would tend to support the company even when the usage is for medical purposes. In *Ross v. RagingWire Telecomm Inc.* (2008), Ross, a medical marijuana user, tested positive in a pre-employment drug screening. “The California Supreme Court held California law did not require the employer to accommodate any employee’s on- or off-premises medical marijuana usage and it could conduct preemployment drug testing” (Russell, 2018).

The Colorado Supreme Court held in *Coats v. Dish Network LLC* (2015), while off-duty, medical marijuana use was lawful, it was grounds for termination of an employee even in jobs not considered safety sensitive (Russell, 2018).

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Dish Network had a zero-tolerance, drug-free workplace policy, and Coats failed a random drug test. According to the Colorado Lawful Activities Act (2016), an employee cannot be terminated for “engaging in any lawful activity off the premises of the employer during nonworking hours.” This type of law was designed to protect tobacco smokers (Nagele-Piazza, 2020). The court held that to be considered lawful, the activity must be legal under federal law as well as state law. Since marijuana was still illegal at the federal level, the protection did not extend to the employee’s termination. While this case is not legally binding in other states, it could set the stage in the other 35 states with statutes similar to Colorado’s (Russell, 2018).

Federal Enforcement

This employer protection could end, perhaps inadvertently. When in office, former President Barack Obama instructed federal authorities to give way to state laws regarding marijuana. Former Attorney General Jeff Sessions reversed the policy. However, as of this writing, the Justice Department had yet to enforce the federal regulations (Prince, 2019). Former Attorney General William Barr (as cited in Hanson, 2019) favored:

... one uniform federal rule against marijuana, but if there is not sufficient consensus to obtain that, then I think the way to go is to permit a more federal approach so states can make their own decisions within the framework of the federal law, so we’re not just ignoring the enforcement of federal law.

Former President Donald Trump himself appeared to favor allowing states to develop their own policies. When asked in August 2019 if, as president, he would legalize marijuana, Trump responded, “We’re going to see what’s going on. It’s a very big subject and right now we are allowing states to make that decision. A lot of states are making that decision, but we’re allowing states to make that decision” (Williams, 2020). This tacit approval of states’ rights with regard to marijuana has led to three cases in the past year going against employers. According to legal expert Kathryn Russo (as cited in Prince, 2019), “Some state courts are saying, the federal government isn’t enforcing it, so we’re going to enforce state law that says you need to accommodate.”

Lawful Off-Duty Use

On Jan. 10, 2020, Colorado House Bill 20-1089 was introduced to essentially overturn *Coats*. The bill was to act as an extension of the Colorado Lawful Activities Act prohibiting “an employer from terminating an employee for the employee’s lawful off-duty activities that are lawful under state law even if those activities are not lawful under federal law” (Employee Protection Lawful Off-Duty Activities, 2020). If taken to court, the bill could have been ruled unconstitutional, under Amendment 64, which Colorado voters approved in 2012. The amendment added Section 16 to Article XVIII of the Constitution of the State of Colorado. Section 16(6)(a) states:

Nothing in the section is intended to require an employer to permit or accommodate the use, consumption, possession, transfer, display, trans-

portation, sale or growing of marijuana in the workplace or to affect the ability of employers to have policies restricting the use of marijuana by employees.

It also states in Section 16(6)(d):

Nothing in the section shall prohibit a person, employer, school, hospital, detention facility, corporation or any other entity who occupies, owns or controls a property from prohibiting or otherwise regulating the possession, consumption, use . . . of marijuana on or in that property.

On Feb. 19, 2020, citing the lack of a suitable test to ascertain impairment, the 10-member Colorado House Business Affairs and Labor Committee unanimously voted down HB20-1089 after 3 hours of testimony (Ricciardi, 2020). Even if the bill had passed and was signed into law, the Colorado Lawful Activities Act (2016) includes language that would allow employers to terminate employees if there is a “bona fide occupational requirement or is reasonably and rationally related to the employment activities and responsibilities of a particular employee or a particular group of employees, rather than to all employees of the employer.” While the term “safety sensitive” is not used, the statute essentially allows employers to declare an employee or group of employees as safety sensitive by declaring a bona fide occupational requirement to not be under the influence of marijuana, alcohol or any other illicit drugs.

Workers’ Compensation

Workers’ compensation statutes in many states require drug-testing after an incident and have those tests tied to premium discounts. Florida offers a workers’ compensation premium discount of 5% for employers with a drug-free workplace policy (Connelly, 2017). When a worker is found to be impaired by drugs or alcohol, most states allow employers to reduce or deny a workers’ compensation claim. Even with Colorado’s legalization, the state’s workers’ compensation statute allows for an injured worker to lose up to 50% of benefits and wages if the worker may have been impaired by marijuana (Babcock Law Firm LLC, n.d.). As of October 2017, only “Connecticut, Maine, Minnesota, New Jersey and New Mexico officially require insurers to pay [workers’ compensation] claims involving medical marijuana” (Connelly, 2017).

A recent Oklahoma case demonstrates the fickle nature of workers’ compensation with regard to cannabis. *Rose v. Berry Plastics Corp.* (2019) began when about 4 hours into his shift on April 11, 2017, Dillon Rose had his wrist crushed after a coworker restarted the jammed guillotine machine that Rose was attempting to clear. Rose’s post-incident drug test was positive for THC and morphine (without quantitative measurement), and Berry Plastics rejected Rose’s workers’ compensation claim. Rose testified to an administrative law judge admitted to smoking marijuana the night before the incident, but that he was clear-headed at the time of the incident. The judge held that there was no indication that Rose was impaired at the time of the incident, and without the coworker restarting the machine, the incident would not have occurred, granting temporary benefits and medical treatment to

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Rose. Berry Plastics appealed to the state's workers' compensation commission, which reversed the administrative law judge's ruling, and Rose appealed. The commission was reversed by the appellate court, which reinstated the administrative law judge's ruling. The appellate court held that the presence of THC in the post-incident drug test did not automatically mean that Rose was impaired at the time of the incident, opening the door for future workers' compensation claims until a standard definition and standard for detection are implemented (Childers, 2019).

Where Is OSHA?

OSHA has yet to wade into the subject of marijuana in the workplace. Although its mission is seen as protectionist for the worker, OSHA does not prohibit drug-testing after an incident. Because of the detrimental effects of marijuana on a worker, if provided a positive drug test, OSHA could use the General Duty Clause against an employer for failing to "furnish to each of [its] employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to [its] employees" including recreational and medical marijuana (Russell, 2018). An employer might defend against such a citation if the employer had a record of enforcing a drug-free workplace.

With the changing legal landscape and the requirement to provide a safe and healthful work environment, it can be difficult for executives, human resources personnel and safety professionals to employ a comprehensive policy regarding marijuana. States such as Colorado have or are attempting to restrict employers from conducting marijuana drug screenings (Nagele-Piazza, 2020). Employers in Alaska, Arizona, Delaware and Minnesota are prohibited from discriminating "against qualified medical-marijuana users," as compared to employers in Colorado (for now), California, Montana, Michigan, Oregon and Ohio, which can (Nagele-Piazza, 2020). Employers must consider not only the laws but business needs. Safety-sensitive positions, drivers and businesses with a federal contract may be forced to follow drug-free workplace laws, but low unemployment and the battle to fill vacant positions could force an employer to ease its marijuana policy, treating marijuana use and alcohol use equally (Nagele-Piazza, 2020). A survey conducted by Employers Council would appear to back the equal treatment when the group found that 10% of employers in Denver, CO, stopped screening for marijuana as of 2016 (Prince, 2019). The biggest stumbling block for an employer appears to be knowing when an employee is impaired by marijuana.

Conclusion

Marijuana's effect on workplace safety must be addressed. OSHA has yet to wade in, but it may be a matter of time. A new president could install an attorney general or secretary of labor with a penchant for enforcement at the federal level. As it is, the patchwork of legalization of medical and recreational marijuana at the state level along

with case law make it difficult for employers to set effective associated human resources policies. While case law has favored employers keeping a drug-free workplace in the past, new state laws and cases could restrict employers from

having a 100% drug-free workforce. One part of their workforce employers should be able to keep drug-free are those positions critical to the safety of others. New advancements in detection and a consensus of what is and is not impairment could help employees enjoy recreational marijuana and help employers keep it out of the workplace. Legalization is spreading, and soon every employer and safety professional will have to deal with marijuana in the workplace. **PSJ**

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