

Cannabis/Marijuana Use & Professional Baseball

Policy Update & Fact Sheet: February 2020

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Policy Update (MLB & Orioles): On 13 December 2019 the Office of the Commissioner of Major League Baseball announced that plant-derived cannabinoids (e.g. tetrahydrocannabinol-THC, cannabidiol-CBD) would be removed from the prohibited list for non 40-man rostered players and for club non-playing personnel. Therefore, effective on the first voluntary reporting date of spring training for 2020, there will be no random or reasonable cause testing for plant-based cannabinoids for players or non-playing personnel. There will, however, still be testing for synthetic cannabinoids such as K2, Spice, other cannabinoid agonists like JWH compounds and other drugs of abuse.

Going forward, marijuana-related misconduct will be treated the same as alcohol-related and off-field misconduct. Consequently, players will be subject to discipline by their club or the commissioner's office for distribution or selling of cannabis or plant-derived cannabinoids (e.g., THC, CBD) and/or the operation of a vehicle while under the influence of these substances. Neither MLB nor the Baltimore Orioles condones the use of any plant-derived cannabinoids or any synthetic cannabinoid due to the reasons listed below.

Facts

Cannabis- A flowering plant (e.g. *cannabis sativa* & *cannabis indica*) that is used to produce both medical and recreational marijuana. The cannabis plant contains more than 100 natural chemicals called cannabinoids. Although the effects of many of these cannabinoids are unknown, the two major chemicals are delta-9-tetrahydrocannabinol (THC) which is the main psychoactive (high-producing) chemical and cannabidiol (CBD) which does not produce a high but may have some medicinal properties. Cannabis is federally illegal and is classified as a Schedule 1 controlled substance. There is evidence however, that cannabis has a variety of therapeutic uses, including the treatment of glaucoma, nausea from chemotherapy, anorexia and wasting (AIDS), chronic pain, inflammation, anxiety, and certain seizure disorders.

Hemp (industrial)-is defined by law as any variety or strain of the *Cannabis sativa* plant that contains no more than 0.3% THC. Hemp is grown for the industrial use of its many derived products, including cosmetics, fuels, supplements, fiber, textiles, fabrics and CBD etc. Forty-seven (47) states have enacted laws that regulate its cultivation & production. Hemp has higher levels of CBD than THC.

Medical Marijuana-Legal in 33 states plus the District of Columbia, Guam, Puerto Rico, and the US Virgin Islands. In most cases to obtain medical marijuana you must submit an application and if approved undergo an evaluation by a physician who determines that you have a qualifying condition that is considered "treatable" with marijuana.

Qualifying conditions for marijuana vary by state but include: severe loss of appetite with weight loss, severe or chronic pain, severe nausea or vomiting, seizures, severe or persistent muscle spasms, glaucoma, post-traumatic stress disorder, and anxiety.

Recreational Marijuana-11 states (Washington, Oregon, California, Nevada, Colorado, Illinois, Michigan, Maine, Vermont, & Alaska) plus the District of Columbia and Guam have legalized marijuana for adults over the age of 21; while 14 other states have decriminalized it.

Cannabidiol (CBD)-this is one of many cannabinoids that have been isolated from the marijuana and hemp plants. Hemp plants may have much higher amounts of CBD than marijuana plants. Hemp-derived CBD is readily available over the counter in all states and can be used via vaping, smoking, oral aerosol, topicals and tinctures for swallowing. Since CBD can be derived from the hemp or marijuana plant, it can contain variable levels of THC or other cannabinoids. CBD products sold on-line have inaccurate labels about two-thirds of the time. In addition, they may contain high enough levels of THC to result in a positive test for jobs that require workplace or pre-employment testing. It should be noted that in 2018, the FDA approved Epidiolex (a CBD-based medication) for the treatment of severe childhood seizures.

Marijuana: Routes of Administration-The ways to use marijuana have increased over the past 2 decades as the potency has increased. Marijuana can be inhaled as a vapor, i.e., vaped (either as an oil, wax or plant bud, or in an e-cigarette or vape pen), smoked (weed or bud), or ingested orally, i.e., tincture, capsule, lozenge, edibles (candy, chocolate, baked goods). The typical level of THC in marijuana products are significantly higher now compared to five and ten years ago. The THC content for concentrates is the highest ranging from 50-90%. Edibles usually range from 30-50% THC content while trimmed flowers are 10-25%. The higher the THC level, the greater the likelihood for negative effects. THC is available as a synthetic medication (dronabinol) approved by the FDA since 1985 for the treatment of HIV-AIDS-induced loss of appetite or for nausea and vomiting related to cancer chemotherapy. Over the past year, there have been 2000+ cases of cannabis vaping associated with severe respiratory distress and even death (40+). This seems to relate to the liquids in which cannabis was dissolved or to added flavorings and/or to the use of black-market devices.

Negative Health Effects of Marijuana-Despite the view of marijuana is safe or safer than alcohol about 9% of those who use it regularly will become addicted. That number almost doubles (17%) among those who start using as teenagers and is 25-50% among those who use daily.

Negative effects of long-term or heavy use, especially when starting during adolescence, include altered brain development, cognitive impairment, reduced life satisfaction and achievement, and increased risk of a psychotic disorder in persons with a predisposition to such disorders.

Negative effects of short-term use include cough, impaired short-term memory (making learning and information retention harder), impaired motor coordination (impairing driving and making injury more likely), impaired judgement (increasing the risk for sexually transmitted diseases), and, in high doses, anxiety, panic attacks, paranoia, and psychosis.

Synthetic Cannabinoids-A class of chemicals that bind to the same receptors in the brain as does THC and produce many of the same cannabis-like effects. Synthetic cannabinoids do not necessarily have the same chemical structure as THC. Their effects are usually much more intense and long-lasting than those of THC, and sometimes can be unpredictable. Because of this, and their very high potency, even low doses of synthetic cannabinoids can produce toxic effects. The most common severe negative effects include irregular heartbeat, paranoia, severe depression with suicidal thinking, psychosis (e.g., hallucinations or delusions), inability to speak, anxiety or panic attacks, vomiting, confusion, poor coordination, kidney failure, and seizures. Use can lead to hospitalizations or even death. This class of chemicals are very dangerous and should be avoided

Summary: Research on the helpful effects of marijuana and plant-derived cannabinoids (e.g., THC, CBD) in the United States has been hindered by the fact that cannabis and all cannabinoids is labeled as a Schedule I controlled substance (the most restrictive level) under the Controlled Substances Act (CSA) of 1970. Schedule 1 substances are described as having no medical use and a high potential for abuse. The removal of hemp from the CSA in 2018 and the legalization of marijuana in many US states and other countries over the past 10 years, has led to more research and the demonstration of some of its therapeutic effects. However, cannabis and commercially available CBD are largely unregulated, so there is little certainty of the exact contents of either product. There is significant risk of higher or lower levels of the cannabinoids in each product or the possibility of contamination of CBD products with THC or synthetic cannabis. Therefore, the overall assessment is that despite cannabis being placed in the same category as alcohol under the new MLB drug prevention policy, it differs in state by state regulation, consistency, and side effect profile.

Any user should be fully aware of the risk of contamination, vaping and of short and long-term use.

Bottom line is stay healthy: exercise caution with high-potency forms of cannabis; be aware of vaping-related lung injury; and stay away from synthetic cannabinoids and black-market vaping devices.

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