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Ohio Medical Marijuana Patients and Risks Behind the Steering Wheel

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- Note -

Ohio Medical Marijuana Patients and Risks Behind the Steering Wheel

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INTRODUCTION

Each time a medical marijuana patient drives in Ohio, the patient may be illegally operating a vehicle while under the influence of marijuana (marijuana OVI). It is not a novel idea that a patient actually impaired by medical marijuana should not be driving, but the Ohio marijuana OVI law criminalizes driving with a certain amount of marijuana detectable in a driver's bodily fluids.¹ Ohio may charge a patient with a marijuana OVI without proof beyond a reasonable doubt of actual impairment. Instead, a patient's blood or urine test that is positive for a prohibited amount of marijuana satisfies the crime of a marijuana OVI in Ohio. The issue is that the prohibited amount of marijuana detected in blood or urine does not correlate with actual impairment.² Marijuana detected in patients' blood or urine does not indicate that those patients really are driving impaired.

This Note incrementally explains the risks behind the wheel for patients enrolled in the Ohio Medical Marijuana Control Program³ (OMMCP) and the challenges that all parties involved must solve for patients to drive safely without fear of unjust punishment.

This Note begins with the basics of marijuana, how marijuana affects driving, and the difficulties testing for marijuana impairment. Second, this Note briefly explains rational basis scrutiny and then applies it to the Ohio marijuana OVI law. Third, this Note addresses the relevant parts of the OMMCP laws that facilitate the medical marijuana product and information about the product to the patient. Then, the fourth Part of this Note opines that the Ohio marijuana OVI law wrongly captures medical marijuana patients who have marijuana in their body but are unimpaired. Lastly, this Note argues that a

- 1. See Ohio REV. CODE § 4511.19(A)(1)(a) (2019) ("No person shall operate any vehicle, streetcar, or trackless trolley within this state, if, at the time of the operation, . . . the person is under the influence of alcohol, a drug of abuse, or a combination of them."); see also Ohio REV. CODE § 4511.19(A)(1)(j)(vii) (2019) ("No person shall operate any vehicle, streetcar, or trackless trolley within this state, if, at the time of the operation, . . . the person has a concentration of marihuana in the person's urine of at least ten nanograms of marihuana per milliliter of the person's urine or has a concentration of marihuana in the person's urine or has a concentration of marihuana in the person's whole blood or blood serum or plasma of at least two nanograms of marihuana per milliliter of the person's whole blood or blood serum or plasma.").
- See RICHARD P. COMPTON, U.S. DEP'T OF TRANSP., DOT HS 812 440, MARIJUANA-IMPAIRED DRIVING: A REPORT TO CONGRESS 13–16, 27 (July 2017), http://www.nhtsa.gov/Driving%20Safety/Research%20&%20Eval uation [https://perma.cc/72BQ-LLFD] [hereinafter NHTSA REPORT].
- See Ohio's Office Resource for the Medical Marijuana Control Program, OHIO MED. MARIJUANA CONTROL PROGRAM, https://www.medical marijuana.ohio.gov/ [https://perma.cc/BF4D-49P3] (last visited Mar. 19, 2020).

permissible-inference law is fairer and more scientifically valid than a per se law for marijuana OVIs and recommends actions for parties involved in the OMMCP and law enforcement.

I. MARIJUANA AND DRIVING

A. Marijuana

Marijuana is a psychoactive drug derived from the leaves and flowers of the Cannabis sativa plant.⁴ Delta-9-tetrahydrocannabinol (THC) is the chemical in marijuana most responsible for psychoactive effects.⁵ Common effects of THC include relaxation and pleasant experiences, though users might also suffer unpleasant experiences of anxiety, schizophrenia, fear, or panic.⁶

Health organizations consistently warn that THC has a short-term effect on impairing attention, memory, spatial orientation, and learning.⁷ Cannabidiol (CBD), another dominant chemical found in cannabis, lacks the impairing characteristics of THC.⁸

"Medical marijuana" refers to marijuana used with the intent of treating symptoms and conditions of illness.⁹ Medical marijuana is derived from a variety of cannabis plants, compounded into a non-stan–dardized dose, and presented through both smoking and non-smoking forms for consumption.¹⁰ There is substantial evidence that medical marijuana has therapeutic benefits for the treatment of chronic pain in adults, nausea and vomiting after chemotherapy, and muscle spasticity

- Jon O. Ebbert, Eugene L. Scharf & Ryan T. Hurt, Medical Cannabis, 93 MAYO CLINIC PROC. 1842, 1844 (2018).
- Drug Facts: Marijuana, NAT'L INST. ON DRUG ABUSE 6 (Dec. 2019), https://www.drugabuse.gov/sites/default/files/drugfacts-marijuana.pdf [https://perma.cc/7R56-R3P8].
- 7. See Ebbert et al., supra note 5, at 1844; see also Marijuana: How Can It Affect Your Health?, CTRS. FOR DISEASE CONTROL & PREVENTION (Feb. 27, 2018), https://www.cdc.gov/marijuana/health-effects.html [https://perma.cc/D4AD-ECRJ] (providing an overview of the impact of marijuana use on various types of physical health).
- 8. Ebbert et al., *supra* note 5, at 1844.
- 9. *Id.* at 1842–43. But Mayo Clinic physicians warn their peers that "conclusive or substantial evidence suggesting that cannabis is effective for the treatment of any medical condition does not presently exist and instead suggests that it may be effective for symptom control only." *Id.* at 1845.
- 10. Ebbert et al., *supra* note 5, at 1842. While some states allow patients to smoke medical marijuana, Ohio law prohibits the "smoking or combustion of medical marijuana." OHIO REV. CODE § 3796.06(B)(1).

^{4.} Drug Facts: Marijuana, U.S. DRUG ENF'T ADMIN., https://www.dea.gov/factsheets/marijuana [https://perma.cc/FW5Q-7AJL] (last visited Jan. 3, 2020).

in patients with multiple sclerosis.¹¹ The FDA approved synthetic THCactive pills, dronabinol and nabilone, to treat chemotherapy-induced nausea and vomiting and to improve appetite for AIDS patients, and the FDA recently approved a CBD-active liquid, Epidolex, to treat childhood seizure and epilepsy.¹² The FDA has approved only these specific drugs,¹³ and the types of medical marijuana this Note later discusses are not approved by the FDA.

B. Marijuana's Effects on Driving

Medical marijuana can impair safe driving skills.¹⁴ Judgment, motor coordination, and reaction time are major driving skills that THC significantly impairs.¹⁵ One of the most consistent manifestations of marijuana impairment on the road is that drivers under the influence of marijuana tend to sway into other lanes.¹⁶ For example, drivers are likely to engage in "lane weaving, driving on the wrong side of the road,

- ROBERT A. GILCHICK, AM. MED. ASS'N COUNCIL ON SCI. AND PUB. HEALTH, REP. NO. 5-I-7, CLINICAL IMPLICATIONS AND POLICY CONSID– ERATIONS OF CANNABIS USE 5 (2017), https://www.aapmr.org/docs/ default-source/advocacy/ama-hod/ama-council-on-science-and-public-health -(csph)-report-on-the-clinical-implications-and-policy-considerations-of-cann abis-use.pdf [https://perma.cc/ZHQ7-FNFQ] [hereinafter AMA REPORT].
- 12. Steven A. King, Cannabinoids and Pain, Psychiatric Times (Feb. 1, 2008), https://www.psychiatrictimes.com/view/cannabinoids-and-pain [https:// perma.cc/5YHJ-ZBLA]; FDA Approves First Drug Comprised of an Active Ingredient Derived from Marijuana to Treat Rare, Severe Forms of Epilepsy, FDA, https://www.fda.gov/news-events/press-announcements/ fda-approves-first-drug-comprised-active-ingredient-derived-marijuana-trea t-rare-severe-forms [https://perma.cc/LEZ4-LVNY] (last updated Mar. 27, 2020).
- FDA Regulation of Cannabis and Cannabis-Derived Products: Questions and Answers, FDA, https://www.fda.gov/news-events/public-health-focus /fda-regulation-cannabis-and-cannabis-derived-products-questions-and-ans wers#othercbdapproved [https://perma.cc/D2HK-EGGY] (last updated Jan. 22, 2021).
- Marijuana and Public Health: Driving and Car Crashes, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/marijuana/ nas/driving.html [https://perma.cc/27PQ-L7GE] (last updated Feb. 26, 2018).
- Does Marijuana Use Effect Driving?, NAT'L INST. ON DRUG ABUSE (July 2020), https://www.drugabuse.gov/publications/research-reports/marijua na/does-marijuana-use-affect-driving#:~:text=Marijuana%20significantly %20impairs%20judgment%2C%20motor,concentration%20and%20impaire d%20driving%20ability [https://perma.cc/2PSE-M76S].
- See R. Andrew Sewell, James Poling & Mehmet Sofuoglu, The Effect of Cannabis Compared with Alcohol on Driving, 18 AM. J. ON ADDICTIONS 185, 186–87 (2009); see also Mary A. Celeste, The Impact of the Gerhardt Decision on Marijuana Driving Cases, 53 CT. REV. 170, 171 (2017); AMA REPORT, supra note 11, at 8.

drifting, following too close, driving a large distance from the vehicle ahead, [and] not responding to questions."¹⁷ In an experimental study, drivers under the influence of marijuana adopted strategies to compensate for their perceived level of impairment.¹⁸ Likewise, the American Medical Association found that drivers under the influence of marijuana drove slower and under the speed limit more frequently than those not under the influence of marijuana, and drove with greater space between the preceding vehicle.¹⁹ The studies, mostly controlled, illuminate how marijuana affects driving—but the question presented is how can law enforcement actively test for marijuana impairment on the road?

C. Problems with Testing for Marijuana Impairment

The key problem with testing for marijuana impairment is the lack of technology that can detect THC *impairment* and the lack of a scientifically agreed-upon level of THC that could cause impairment.²⁰ Drivers' level of detectable THC does not correlate with their extent, if any, of impairment.²¹ Quite notably, people may not show symptoms of impairment when their THC levels are high, and may actually show symptoms of impairment when their THC levels are low.²² If a driver consumes marijuana frequently, such as when a patient consumes daily medicinal doses, law enforcement may detect THC one week after

- 19. AMA REPORT, *supra* note 11, at 8.
- Drugged Driving: Marijuana-Impaired Driving, NAT'L CONF. OF STATE LEGISLATURES (Nov. 9, 2020), https://www.ncsl.org/research/transpor tation/drugged-driving-overview.aspx [https://perma.cc/6S28-3ZXV].
- 21. See, e.g., Sewell et al., supra note 16, at 187 ("Meta-analyses of over 120 studies have found that in general, the higher the estimated concentration of THC in blood, the greater the driving impairment, but that more frequent users of marijuana show less impairment than infrequent users at the same dose, either because of physiological tolerance or learned compensatory behavior. Maximal impairment is found 20 to 40 minutes after smoking, but the impairment has vanished 2.5 hours later, at least in those who smoke 18 mg THC or less (the dose often used experimentally to duplicate a single joint).").

Celeste, supra note 16, at 171 (citing Edward M. Kosinski, Robert L. Yolton, Karl Citek, Charles E. Hayes & Richard B. Evans, The Drug Evaluation Classification Program: Using Ocular and Other Signs to Detect Drug Intoxication, 69 J. AM. OPTOMETRIC ASS'N 211, 213 (1998)).

^{18.} See Sewell et al., supra note 16, at 186.

^{22.} AMA REPORT, supra note 11, at 8.

consumption.²³ Therefore, even if there is a great accumulation of THC in a driver's body, the driver may actually be driving unimpaired.²⁴

In Commonwealth v. Gerhardt,²⁵ the Massachusetts Supreme Court decided that police cannot conclude that a driver is impaired from marijuana after the driver's poor performance on a field sobriety test (FST).²⁶ The court held, however, that the driver's performance on an FST is an observation that is admissible evidence for determining if the driver was impaired.²⁷ In that case, Thomas Gerhardt was pulled over because his vehicle's rear lights were off. The officer subsequently smelled marijuana burning.²⁸ Gerhardt admitted to the officer that he smoked about one gram of marijuana three hours earlier.²⁹ The officer then asked Gerhardt to exit his vehicle and instructed him to complete three FSTs: the horizontal gaze nystagmus test, the nine-step walkand-turn test (WAT), and the one-leg-stand test (OLS).³⁰ Gerhardt failed the WAT and OLS, both tests of "an individual's balance, coordination, dexterity, ability to follow directions, and ability to focus attention on multiple subjects at the same time."³¹ The court held that Gerhardt's failure on the WAT and OLS was admissible evidence because the skills the two tests assess are skills that are necessary for safe driving.³² FSTs, therefore, are valid tests for officers to employ when they have a suspicion that a driver is under the influence of marijuana because the tests are designed to determine if a person has the ability to drive safely, not if a person is actually under the influence of marijuana.³³ Unlike the proven correlation between FSTs and alcohol impairment, FSTs do not have a proven correlation with marijuanaintoxication levels that cause impairment.³⁴

- 24. Drugged Driving: Marijuana-Impaired Driving, supra note 20.
- 25. 81 N.E.3d 751 (Mass. 2017).
- 26. *Id.* at 754.
- 27. Id.
- 28. Id. at 755.
- 29. Id.
- 30. Id. at 755–56.
- 31. Id. at 756.
- 32. Id. at 759.
- 33. Id. at 760.
- 34. Id. at 754.

See Matthew Berger, Why it's Difficult to Develop a Roadside Test for Marijuana, HEALTHLINE (Sept. 24, 2018), https://www.healthline.com/ health-news/difficult-to-develop-roadside-test-for-marijuana [https://perm a.cc/8XRC-9SEB].

The correlation that allows law enforcement to determine if a driver is too impaired by alcohol to drive safely is the result of a long scientific history of developing a standard of impairment of alcohol, a standard that is not yet developed for impairment of marijuana.³⁵ The inebriation-inducing properties of alcohol were well-understood and legitimized by systemic case-control studies.³⁶ A per se standard of impairment for alcohol was possible because there was a nationally recognized level of alcohol in a driver's body that correlated with an increased crash risk.³⁷

The alcohol model of developing a standard of impairment is not informative for developing laws for marijuana-impaired driving because there is not a significant relationship between THC levels in a driver's body and an increased crash risk.³⁸ For an impairment law that conditions criminality on the amount of a drug in a driver's body to be valid, there must be a scientifically understood level of the drug in a driver's body that causes impaired driving.³⁹ Research has not yet established a relationship between a specific THC level and impairment.⁴⁰

Additionally, the underlying method of determining alcohol impairment is inconsistent with marijuana impairment because alcohol and THC molecules function very differently.⁴¹ In terms of solubility, alcohol is small and water-soluble while THC is large and fat-soluble.⁴² Therefore, alcohol molecules transverse the blood-brain barrier much faster than THC molecules and create an equilibrium of alcohol molecules in a person's blood and their brain.⁴³ On the other hand, THC

- 36. Id. at 2.
- 37. Id. at 2, 14-15.
- 38. See Michael McWaters, The High Road: An Analysis of Marijuana as an Impairing Substance and Why Marijuana Laws Fail to Adhere to the Framework of DUI Alcohol Legislation, 1 U. CENT. FLA. DEP'T LEGAL STUD. L.J. 51, 57–58 (2018) (arguing that the use of the alcohol methodology of determining impairment is opposite from the kind of methodology that should be used for determining marijuana impairment because there is no correlation found in marijuana epidemiological studies like the studies of alcohol in which amount and time of alcohol consumption, BAC, and accident risk all correlate).
- 39. See Wood, supra note 35, at 16.
- 40. See NHTSA REPORT, supra note 2, at 11.
- 41. See Wood, supra note 35, at 4.
- 42. Id.
- 43. Id.

See Ed Wood, Why a 5 ng/ml Limit is Bad Public Policy—and the Case For Tandem per se DUID Legislation, 10 J. GLOB. DRUG POL'Y & PRAC. 1, 2–4 (2016).

molecules transverse the blood-brain barrier much slower. Instead, THC molecules diffuse into fatty tissue, such as a person's heart, lungs, and brain where the THC molecules are active beyond the time frame when marijuana may be detectable in blood.⁴⁴

Marijuana and alcohol also differently affect drivers' behavior. Most importantly, the behavioral effects of marijuana vary by individual and their tolerance and consumption method, while the effects of alcohol are more uniform and predictable across individuals.⁴⁵ Marijuana affects automatic functions more than cognitive functions, but alcohol affects cognitive functions more than automatic functions.⁴⁶ The difference in how the molecules react in drivers' bodies and affect behavior is why it is challenging, if not faulty, to apply alcohol-impairment testing metho– dology to marijuana-impairment testing.⁴⁷

Despite the complex and individualized relationship between THC and impairment, healthcare companies, technology start-ups, and universities are creating devices for law enforcement to easily detect the presence of THC in a driver's body.⁴⁸ A front-runner in manufacturing a THC breathalyzer is Hound Labs. The Hound Marijuana Breathalyzer detects marijuana consumption within two to three hours of use, and the company asserts that the breathalyzer is not measuring impairment but "objective data" about recent marijuana use.⁴⁹

Because a chemical test alone cannot prove impairment, interested parties argue that a driver must exhibit other evidence of impairment in order to support a valid determination that an individual is unsafely driving under the influence of marijuana.⁵⁰ The National Highway Traffic Safety Administration (NHTSA) disclosed in 2017 that tests other than chemical tests are necessary to test for marijuana impairment, but "available research does not support the development of such a psychomotor, behavioral or cognitive test that would be

- 47. See Berger, supra note 23.
- Alicia Wallace, Testing Drivers for Cannabis is Hard. Here's Why, CNN: BUS. (Jan. 2, 2020, 4:50 PM), https://www.cnn.com/2020/01/02/business/ cannabis-breathalyzers-are-coming-to-market/index.html [https://perma.c c/4AA9-XS46].
- 49. *Id.* ("We aren't measuring impairment, we're measuring THC in breath where it lasts a very short period of time, providing objective data about THC in breath to law enforcement and employers to use in conjunction with other information they have gathered,' said Hound Labs founder Mike Lynn").
- 50. See McWaters, supra note 38, at 67–68; see also NHTSA REPORT, supra note 2, at 13.

^{44.} See id.

^{45.} Sewell et al., *supra* note 16, at 190.

^{46.} *Id.* at 187.

practical and feasible for law enforcement use at this time."⁵¹ Alternative tests, like the FSTs used in *Gerhardt*,⁵² may be able to determine impairment, but the tests may not determine that the impairment was caused by marijuana instead of other factors like a driver's emotional state, intelligence, or drowsiness.⁵³

II. RATIONALITY OF OHIO MARIJUANA OVI LAW

Drivers should not be subject to arbitrary state driving laws. Laws that infringe on non-fundamental rights, such as driving laws, must be only rational under current constitutional doctrine. This section explains rational basis review and the Ohio marijuana OVI law. If challenged, a court would likely defer to the Ohio General Assembly and find the law constitutional because the marijuana OVI law is one rational means to prevent drivers who are impaired by marijuana from driving, regardless of better alternatives.

A. Rational Basis Standard

The Fourteenth Amendment provides: "No State shall . . . deprive any person of life, liberty, or property without due process of law."⁵⁴ In the marijuana OVI law context, the issue is substantive due process, which demands a certain degree of justification for a law that infringes life, liberty, or property.⁵⁵ The extent of the justification for a law depends on the nature of the right infringed upon.⁵⁶ If the law limits a non-fundamental right, such as driving, then rational basis scrutiny applies and demands that the law be reasonably related to a legitimate government interest, such as roadway safety.⁵⁷

It is relatively easy for a law to meet the minimal standard of mere rationality. If a court reviews a state law using rational basis scrutiny, the court will decide that a law is rational if the law is targeted at a legitimate state interest and the state legislature *could* have thought that the law was a rational way to address that interest.⁵⁸ The court

52. Commonwealth v. Gerhardt, 81 N.E.3d 751, 755–56 (Mass. 2017).

- 54. U.S. CONST. amend. XIV, § 1.
- 55. Meyer v. Nebraska, 262 U.S. 390, 399–400 (1923).
- See, e.g., San Antonio Indep. Sch. Dist. v. Rodriguez, 411 U.S. 1, 16–17 (1973).
- 57. See, e.g., Williamson v. Lee Optical, 348 U.S. 483 (1954).
- 58. Id. at 488 ("It is enough that there is an evil at hand for correction, and that it might be thought that the particular legislative measure was a rational way to correct it.").

^{51.} NHTSA REPORT, *supra* note 2, at 13.

^{53.} NHTSA REPORT, *supra* note 2, at 12.

will not consider if the state legislated wisely in determining if the law is rational because of the separation of powers.⁵⁹ Therefore, even if the court would weigh the facts and interests underlying the law differently than the legislature, the legislature's decision satisfies substantive due process under rational basis scrutiny so long as the court finds that the legislature's decision might be a rational way to meet the state's interest.⁶⁰

B. Ohio Marijuana OVI Law

Ohio charges drivers with "Operating a Vehicle while under the Influence" (OVI) who test positive for marijuana or marijuana metab– olite according to the amount of nanograms per milliliter (ng/mL) in a driver's urine, whole blood, blood serum, or plasma.⁶¹ Ohio's law is categorized as a "per se" law because if a driver tests positive for a particular amount of marijuana or marijuana metabolite, then the driver drove under the influence of marijuana.⁶² A driver may face criminal penalty when testing positive for (1) 10 ng/mL in urine or 2ng/mL in blood for marijuana;⁶³ (2) 35 ng/mL in urine or 50 ng/mL in blood for marijuana metabolite;⁶⁴ or (3) 15ng/mL in urine or 5 ng/mL in blood for marijuana metabolite combined with alcohol or another drug of abuse.⁶⁵ A driver who tests positive may be incarcerated, ordered to participate in Ohio's Drug Intervention Program, fined, suspended from driving, and ordered to change to license plates denoting that the driver has been charged with a marijuana OVI.⁶⁶

C. Rational Basis Scrutiny and Ohio Marijuana OVI Law

In order for Ohio's marijuana OVI law to satisfy rational basis scrutiny, a court must find that the law is a rational means to achieve a legitimate governmental interest. A court would likely defer to the decision of the Ohio legislature to enact a per se law of impairment, even in light of its tenuous grounding in science.⁶⁷

- 59. See U.S. v. Carolene Prods. Co., 304 U.S. 144, 154 (1937).
- 60. See Williamson, 348 U.S. at 487-88 (1954).
- 61. Ohio Rev. Code § 4511.19(A)(1)(j)(vii) (2019).
- See Charles R. Cordova, Jr., DWI and Drugs: A Look at Per Se Laws for Marijuana, 7 NEV. L.J. 570, 570 n.1 (2007).
- 63. Ohio Rev. Code § 4511.19(A)(1)(j)(vii).
- 64. Id. § 4511.19(A) (1) (j)(viii)(II) (2019).
- 65. Id. § 4511.19(A)(1)(j)(viii)(I) (2019).
- 66. Id. § 4511.19(G)(1)-(3) (2019).
- 67. Other state courts have found that marijuana OVI laws satisfy rational basis scrutiny for substantive due process. *See, e.g., Williams v. State,* 50 P.3d 1116, 1120, 1122 (Nev. 2002) (rejecting the plaintiff's argument that the state should not prosecute unimpaired drivers for low levels of marijuana because

First, Ohio has a legitimate state interest that the marijuana OVI law targets. Public health and safety are within the police power of any state,⁶⁸ and Ohio's interest in maintaining safe roads is a legitimate state interest.⁶⁹

Second, Ohio's marijuana OVI law likely satisfies the minimal constitutional requirement that it be a rational means of maintaining safe roads. There is a rational connection in demanding that an individual who has consumed a drug that negatively influences safedriving skills not be allowed to drive so as to protect that individual's and others' safety. Additionally, a per se law like Ohio's has a deterrent effect that benefits roadway safety: per se laws reduce the likelihood of drivers testing positive for marijuana.⁷⁰ On the other hand, there is not a rational connection in penalizing individuals driving with a state-prohibited amount of marijuana in their bodily fluids when the state-prohibited amount is not an accurate measure of risk to roadway safety.

Ohio's law suffers from a lack of scientific validation. While the Ohio marijuana OVI law may pass constitutional muster, it does not satisfy scientific legitimacy. In order for Ohio's per se law of impairment to be *scientifically valid*, the established ng/mL levels of marijuana in the Ohio Revised Code must be shown to define unsafe impairment.⁷¹ There is little evidence to support the scientific validity of per se limits for marijuana.⁷² Specifically, research does not consistently show a meaningful level between a testable amount of marijuana in a person's urine or blood and impairment.⁷³ A person testing positive for a high amount of THC can be minimally impaired; likewise, a person testing positive for a low amount of THC can be highly impaired.⁷⁴

- 68. Metro. Life Ins. Co. v. Mass., 471 U.S. 724, 756 (1985).
- See Cindy Antrican, Drugged Driving Has Become Too Common; Safety Tips, DAYTON DAILY NEWS (June 1, 2017), https://www.daytondaily news.com/news/local/drugged-driving-has-become-too-common-safety-tips/ LTvUQniygxnbH4Kmg3508N/ [https://perma.cc/76GF-2XUC].
- Eric L. Sevigny, The Effects of Medical Marijuana Laws on Cannabis-Involved Driving, 118 ACCIDENT ANALYSIS & PREVENTION 57, 64 (2018).
- 71. See McWaters, supra note 38, at 57–58 ("For these laws to be validly enforced, however, it must be scientifically demonstrated that a measurable quantity of the drug in an individuals' body causes criminal impairment.").
- 72. AMA REPORT, supra note 11, at 10.
- 73. NHTSA REPORT, supra note 2, at 11.
- 74. AMA REPORT, supra note 11, at 8.

the legislature could have had at least one plausible ground for enacting the marijuana OVI law, and the marijuana OVI law is constitutional regardless of if the law is an "imperfect fit" between the behavior it criminalizes and the goal of roadway safety sought); People v. Rennie, 10 N.E.3d 994, 998 (Ill. App. Ct. 2014).

Statutory limits on marijuana in a driver's bodily system do not reflect impairment. The NHTSA criticized Ohio and Nevada's per se laws set at 2 ng/mL for marijuana in blood. The NHTSA reported that 24.2% of drivers who were suspected of marijuana-impaired driving by drug recognition experts or other arresting officers had less than 2 ng/mL of marijuana in their blood.⁷⁵ Almost a quarter of drivers who presented symptoms or other evidence of impairment from marijuana were not caught by the threshold set in the Ohio marijuana OVI law.⁷⁶ The source of this discrepancy is likely because of the timing of use and testing. If marijuana use occurred on the day of a traffic violation, "because THC can spike and leave the bloodstream in less than three hours—despite impairment potentially lasting six to eight hours—a blood test taken an hour or more after a traffic stop may fail to identify impairment due to marijuana use."77 And if marijuana use occurred prior to the day of a traffic violation, a person may still test positive for the established levels of marijuana because THC may remain in the body for days and possibly weeks.⁷⁸

The lack of relationship between Ohio's proscribed THC level that constitutes impaired driving and that required to produce actual impairment indicates that Ohio's per se law is invalid in the eyes of science, though it may nevertheless satisfy rational basis scrutiny in the eyes of the law. The remainder of the Note illustrates why per se laws for marijuana impairment, like Ohio's, are particularly troublesome for medical marijuana patients.

III. MEDICAL MARIJUANA IN OHIO

A. Medical Marijuana Products

The medical marijuana available through state medical marijuana programs is not an FDA-approved medicine and does not satisfy federal requirements that a drug's benefits be shown to outweigh its risks to receive the "medical" label.⁷⁹ Unlike FDA-approved medicines, medical marijuana's purity, potency, safety, quality, and effectiveness may vary widely.⁸⁰ The FDA has sent warning letters to medical marijuana

^{75.} NHTSA REPORT, *supra* note 2, at 28–29.

^{76.} Id.

^{77.} See Berger, supra note 23.

^{78.} NHTSA REPORT, *supra* note 2, at 4–5.

^{79.} FDA and Cannabis: Research and Drug Approval Process, FDA, https://www.fda.gov/news-events/public-health-focus/fda-and-cannabisresearch-and-drug-approval-process [https://perma.cc/S9W8-WLB6] (last updated Oct. 1, 2020).

^{80.} Id.

companies that advertise marijuana products as a medicine with the rapeutic benefits because labeling a drug as a medicine without obtaining FDA approval violates federal law and puts patients at risk.⁸¹ While the FDA encourages states to research and develop safe and effective marijuana products, the FDA maintains the position that marijuana is not scientifically proven to treat illness.⁸² The word "medical" in state "medical marijuana" programs is thus deceptive because marijuana is not an FDA-approved medicine. To the contrary, the federal government labels marijuana as a drug with no acceptable medical use.⁸³

B. Ohio Medical Marijuana Control Program

On September 8, 2016, the 131st Ohio General Assembly passed House Bill 523 to authorize the use of marijuana for medical purposes,⁸⁴ enabling Ohio to create a pathway for patients with any of twenty-one qualifying medical conditions to receive medical marijuana.⁸⁵ Ohio reg– ulates the licensed entities—cultivators, processors, testing laboratories, dispensaries, and physicians—involved in the OMMCP, including by requiring testing and labeling throughout the transactions.⁸⁶ Every step of the distribution chain contributes to ultimately inform the end

- 82. FDA and Cannabis: Research and Drug Approval Process, supra note 79.
- See Controlled Substances Act, 21 U.S.C. § 812(b) (2018) (describing Schedule I substances as including those with no currently accepted medical use in the US); see also Drug Scheduling, U.S. DRUG ENF'T ADMIN., https://www.dea.gov/drug-scheduling [https://perma.cc/6JZU-DZU5] (last visited Mar. 29, 2021).
- See House Bill 523, OHIO LEGISLATURE, https://www.legislature.ohio. gov/legislation/legislation-summary?id=GA131-HB-523 [https://perma. cc/LB8Y-SP5W] (last visited Mar. 29, 2021).
- 85. OHIO REV. CODE § 3796.01(A)(6) (2019) (listing acquired immune deficiency syndrome, Alzheimer's disease, amyotrophic lateral sclerosis, cancer, chronic traumatic encephalopathy, Crohn's disease, epilepsy or another seizure disorder, fibromyalgia, glaucoma, hepatitis C, inflammatory bowel disease, multiple sclerosis, pain that is chronic or severe or pain that is intractable, Parkinson's disease, positive HIV status, post-traumatic stress disorder, sickle cell anemia, spinal cord disease or injury, Tourette's syndrome, traumatic brain injury, and ulcerative colitis each as a "quali-fying medical condition").
- 86. See generally id. ch. 3796 (2019) (including sections regulating number of cultivator licenses, licenses for processing or testing medical marijuana, dispensary licenses, and caregiver rights); OHIO DEP'T OF COM. MED. MARIJUANA CONTROL PROGRAM, PRODUCT PACKAGING AND LABELING GUIDANCE (May 2019).

^{81.} FDA Regulation of Cannabis and Cannabis-Derived Products, supra note 13.

consumer, the patient, about the potency and risks of medical marijuana.

Cultivators are the first party in the distribution chain, and they are the first party charged with documenting the variable contents in each batch of marijuana plant material.⁸⁷ Cultivators must submit each batch of marijuana to testing laboratories, and then processors are also obliged to submit a random sample from every lot of marijuana to testing laboratories.⁸⁸ Before a processor may sell any marijuana product to a dispensary, the processor must first send information about each product to the Ohio Board of Pharmacy (BOP) for approval.⁸⁹ The BOP reviews identifying product information and determines if the marijuana product contains a permissible amount of THC under Ohio law.⁹⁰ If the product is marijuana plant material, then the THC content must be 35% or less.⁹¹ If the product is an extract, then the THC content must be 70% or less.⁹² BOP issuance of a product identifier for the marijuana product signifies that the marijuana product has a permissible amount of THC.⁹³ Any dose of a medical marijuana product to be sold by a dispensary must not have more than fifty milligrams of THC, and each dose must contain a concentration of THC, THCA, CBD, and CBDA within 95% to 105% of the concentration indicated on the product label.⁹⁴

After manufacture and BOP approval, processors package and label the medical marijuana product or plant for distribution to a dispensary in a package approved by the Ohio Department of Commerce.⁹⁵ On the label for medical marijuana plant material, the processor must include the name of the strain of plant material that is registered with the Ohio Department of Commerce.⁹⁶ On the label for a medical marijuana product, the processor must include the registered name of the originating strain, the form, and the dose.⁹⁷ On all forms of medical

- 88. Ohio Admin. Code 3796:3-2-06 (2019).
- 89. Ohio Admin. Code 3796:8-2-05 (2019).
- 90. Ohio Admin. Code 3796:8-2-05(C) (2019).
- 91. Ohio Rev. Code § 3796.06(D)(1) (2019).
- 92. Id. § 3796.06(D)(2).
- 93. Ohio Admin. Code 3796:8-2-05(C) (2019); Ohio Rev. Code § 3796.06 (2019).
- 94. Ohio Admin. Code 3796:8-2-06(B)–(D) (2019).
- 95. Ohio Admin. Code 3796:3-2-02(A) (2019).
- 96. Ohio Admin. Code 3796:3-2-02(A)(2)(d) (2019).
- 97. Id.

^{87.} See Ohio Admin. Code 3796:2-2-01, 3796:2-2-02 (2019) (establishing minimum requirements for cultivator operations).

marijuana packaged for dispensaries, the processors must include the cannabinoid profile from the testing laboratory; the dates of manufacture, final testing, packaging, and future expiration; the licenses of the cultivator and processor; and the following statement: "This product is for medical use and not for resale or transfer to another person. *This product may cause impairment and may be habit-forming.* This product may be unlawful outside the State of Ohio."⁹⁸ If the marijuana product is edible, the processor must also write, "*Caution: When eaten or swallowed, the effects and impairment caused by this drug may be delayed.*"⁹⁹

Medical marijuana dispensaries are the entities that ultimately place medical marijuana products in the hands of approved patients or their caregivers. Ohio requires that all medical marijuana sales must be in a face-to-face meeting with a dispensary employee and the patients or caregiver.¹⁰⁰ Dispensaries are responsible to communicate information about the specific product and medical marijuana generally via product labels,¹⁰¹ accompanying printed material with the product,¹⁰² and a "patient and caregiver education and support policy."¹⁰³ Each product label must include the cannabinoid profile and concentration levels of THC as determined by the testing laboratory and the same warning that states: "*Caution: When eaten or swallowed, the effects and impairment caused by this drug may be delayed.*"¹⁰⁴ The accompanying printed material must also include a warning that states: "*Marijuana can impair concentration, coordination and judgment. Do not operate a vehicle or machinery under the influence of this drug.*"¹⁰⁵

A dispensary's policy must educate patients and caregivers about medical marijuana.¹⁰⁶ Ohio requires the policies to include information about the "purported effectiveness" of medical marijuana; signs of substance abuse and dependency; the illegal status of marijuana under federal law; possible interactions with other drugs including alcohol; and "[i]nformation about possible side effects and contraindications for

- 100. Ohio Admin. Code 3796:6-3-08(I) (2019).
- 101. Ohio Admin. Code 3796:6-3-09(A) (2019).
- 102. Ohio Admin. Code 3796:6-3-09(C) (2019).
- 103. Ohio Admin. Code 3796:6-3-15 (2019).
- 104. Ohio Admin. Code 3796:6-3-09(A)(10)(c) (2019) (emphasis added).
- 105. Ohio Admin. Code 3796:6-3-09(C)(5) (2019) (emphasis added).
- 106. See Ohio Admin. Code § 3796:6-3-15.

OHIO ADMIN. CODE 3796:3-2-02(A)(2)(m) (2019) (emphasis added). The specific "cannabinoid profile" includes the percentage by weight or total milligrams per unit for THC, THCA, CBD and CBDA. OHIO ADMIN. CODE 3796:3-2-02(A)(2)(i) (2019).

^{99.} Ohio Admin. Code 3796:3-2-02(A)(2)(k)(iii) (2019) (emphasis added).

medical marijuana including possible impairment with use and operation of a motor vehicle or heavy machinery " 107

Ohio also requires that dispensaries "make available information to patients and caregivers regarding the possession and use of marijuana," including "[l]imitations on the right to possess and use marijuana" in Ohio law.¹⁰⁸ One such limitation is that the medical marijuana program passed by the Ohio legislature "does not authorize a registered patient to operate a vehicle, streetcar, trackless trolley, watercraft, or aircraft while under the influence of medical marijuana."¹⁰⁹ But the legislation also cautions:

Notwithstanding any conflicting provision of the Revised Code, a person's status as a registered patient or caregiver is not a sufficient basis for conducting a field sobriety test on the person or for suspending the person's driver's license. To conduct any field sobriety test, a law enforcement officer must have an independent, factual basis giving reasonable suspicion that the person is operating a vehicle under the influence of marijuana or with a prohibited concentration of marijuana in the person's whole blood, blood serum, plasma, breath, or urine.¹¹⁰

If a patient operates a "vehicle, streetcar, trackless trolley, watercraft, or aircraft while under the influence of medical marijuana," then the BOP may sanction the patient by revoking, suspending, or restricting the patient's status as a medical marijuana patient.¹¹¹ Dispensaries are the party charged with "mak[ing] available information" about the risks of driving under the influence of medical marijuana.¹¹²

IV. Ohio's Medical Marijuana Patients' Risks When Driving

Medical marijuana patients are deciding, either uninformed or informed, to accept great risks each time they decide to drive. These risks include the risk to their safety, their risk to their status as a patient in the OMMCP, and even their risk to exposure to criminal liability. Their driving skills may be impaired, threatening a higher likelihood of a car accident. Their driving skills may *not* be impaired, but they may nevertheless lose their status as a medical marijuana

- 107. Ohio Admin. Code 3796:6-3-15(B)(2), (5) (2019).
- 108. Ohio Admin. Code 3796:6-3-15(C) (2019).
- 109. Ohio Rev. Code § 3796.22(D) (2019).
- 110. *Id.* § 3796.24(E).
- 111. Ohio Admin. Code 3796:7-2-08 (2019).
- 112. Ohio Admin. Code 3796:6-3-15(C) (2019).

patient and face criminal penalties if suspected of being under the influence by a police officer and tested for marijuana in their bodily system.

A. Actual Impairment from Medical Marijuana

Is it possible for daily consumers of medical marijuana to feel confident in their ability to drive safely? There is not a recommended timeline for medical marijuana patients to follow between the time of consumption and time when it is safe to drive, and the safest advice is not to drive at all.¹¹³ Any formula for when it may be safe for patients to drive is difficult to calculate, as experts agree that the effects of marijuana are individualized and vary according to every individual's tolerance, method of consumption, and absorption of the marijuana product,¹¹⁴ as well as the nature and potency of the medical marijuana product consumed.¹¹⁵ Therefore, the question of when, or if, it is safe for a medical marijuana patient to drive must be an individualized inquiry.

It is legally appropriate for patients driving while actually impaired by marijuana to face criminal penalties and suspension of their medical marijuana license. Those who drive unsafely as a result of a psycho– active drug are the drivers whom traffic safety laws should penalize.¹¹⁶ While medical marijuana is not an illegal substance for a medical marijuana patient, the legal status of patients' use is not a mitigating factor.¹¹⁷ Regarding a patient's medical marijuana license, a patient who cannot safely benefit from medical marijuana without placing themself

Ryan Felton, More than Half of Medical Marijuana Users in a Study Drove While High, CONSUMER REPS. (Jan. 9, 2019), https://www.consumer reports.org/marijuana/more-than-half-of-medical-marijuana-users-in-a-stu dy-drove-while-high/ [https://perma.cc/YL88-VUYB].

^{114.} See Sewell et al., supra note 16, at 190.

^{115.} Felton, supra note 113.

^{116.} For example, "driving under the influence of cannabis indicated by selfreport or the presence of THC in bodily fluid is associated with significantly higher odds of [a motor vehicle collision]." Ebbert et al., *supra* note 5, at 1846.

^{117.} Ohio OVI law does not criminalize drivers testing positive for an illegal level of a controlled substance in their bodily fluids when drivers' use is pursuant to "a *prescription* issued by a licensed health professional authorized to prescribe drugs" and the use is "in accordance with the health professional's directions." OHIO REV. CODE § 4511.19(K) (2019) (emphasis added). Medical marijuana does not fall into this prescription category because medical marijuana is not prescribed by a licensed health care professional; rather, licensed health care professionals *recommend* patients to the OMMCP. Joseph Gregorio, *Physicians, Medical Marijuana, and the Law*, 16 VIRTUAL MENTOR 732, 733 (2014).

and others in harm's way should not have the privilege to continue medical marijuana use without accepting the risk of impairment.

B. Unimpaired from Medical Marijuana, But Testing Positive for Marijuana

On the other hand, those medical marijuana patients who are capable of consuming marijuana without experiencing impairment— possibly because of self-awareness, timing, potency, absorption, or tolerance—should not suffer consequences for driving only because there is detectable marijuana in their bodily systems. As earlier explained, even if a driver tests positive for a punishable level of marijuana in their blood or urine, science does not support the conclusion that a particular level of marijuana in a person's body causes impairment.¹¹⁸ Also as opined above, Ohio's per se law for driving under the influence of marijuana is scientifically invalid because it punishes drivers for an amount of marijuana in their bodies that does not correlate with actual impairment.

Ohio's medical marijuana patients may violate the law whenever driving, not because they are impaired, but merely by consuming their medical marijuana as instructed by their physician and distributor.¹¹⁹ A patient consuming medical marijuana daily may always test positive for a criminal amount of marijuana in urine or blood while nevertheless driving unimpaired by marijuana.¹²⁰ Similarly, a patient consuming medical marijuana sparingly may test positive for a criminal amount of marijuana while driving unimpaired because detectable amounts may remain for days to weeks after consumption.¹²¹

Under the current Ohio laws for operating a vehicle while under the influence of marijuana, a patient in the OMMCP should not drive if the patient values continued status as a medical marijuana patient and

120. See *id.*; see also OHIO ADMIN. CODE 3796:8-2-04(A) (2019) (regulating the amount of plant material or THC content authorized to be purchased in a single day).

^{118.} Wallace, supra note 48.

^{119.} See McWaters, supra note 38, at 59 (footnote omitted) ("Chronic and medical users can maintain levels of 10 ng/mL several hours after consumption, far above the 2 ng/mL and 5 ng/mL levels established by various states. Prosecuting these individuals as dangerous when they are not legitimately impaired represents a denial of justice and enforcing these standards that criminalize impaired as well as non-impaired drivers is irresponsible.").

^{121.} Dan Wagener, How Long Does Pot Stay in Your System?, AM. ADDICTION CTRS., https://americanaddictioncenters.org/marijuana-rehab/how-long-system-body [https://perma.cc/64C3-8WPB] (last updated April 5, 2021) ("Typically, THC is detectable for up to 90 days in hair, anywhere between 3 days to a month or longer in urine (depending on how often the person uses), up to 48 hours in saliva, and up to 36 hours in blood.").

fears criminal penalties. Ohio law relating to the OMMCP expressly prohibits medical marijuana patients from driving while "under the influence" of marijuana,¹²² but Ohio law for operating a vehicle while under the influence of marijuana captures all drivers testing positive for the specified amounts of marijuana detected in drivers' urine or blood.¹²³ Therefore, Ohio law criminalizes medical marijuana patients if they drive—not because of actual impairment, but because patients following daily medication instructions from their physicians and dispensaries may test positive for the prohibited level of marijuana in their bodies. Reading the OMMCP laws in conjunction with the Ohio marijuana OVI law leads to the conclusion that medical marijuana patients cannot legally drive.¹²⁴

V. How Ohio Can Improve

The message is confusing: Ohio established that marijuana is safe enough for use as a medicine, but Ohio does not know enough about marijuana to accurately capture whether a person is impaired by marijuana or not. There are five ways Ohio can better protect its citizens while continuing the medical marijuana program. First, the Ohio General Assembly should consider amending the per se under-theinfluence-of-marijuana law to a permissible-inference law. Second, law enforcement should continue to increase training of drug recognition experts. Third, the OMMCP should provide targeted information about the risks of impaired driving for physicians choosing to recommend patients for the OMMCP. Fourth, the Ohio Department of Transportation should invest in public education about the safety and criminal risk of driving while impaired by marijuana. And lastly, but perhaps most importantly, participants in the OMMCP, especially private interest groups, need to support research and innovation related to testing for marijuana impairment.

A. Legal Reform

States should enforce laws that are at least scientifically valid. In the absence of a scientifically approved method for testing marijuana

123. See Ohio Rev. Code § 4511.19(A)(1)(j)(vii) (2019).

^{122.} Ohio Admin. Code 3796:6-3-09(C)(5) (2019).

^{124.} Of course, an officer must have an independent and reasonable basis in fact to believe that a driver is impaired, but once an officer passes this threshold, a positive test for marijuana beyond the established limits is a criminal violation. Defense attorneys in Ohio can challenge a marijuana OVI by attacking the actions, reasonable suspicions, and probable cause of the officer who ordered the bodily fluid test. *See Ohio Marijuana/THC OVIs*, LAW OFFS. OF BRIAN J. SMITH, LTD., https://www.briansmithlaw.com/ ohio-marijuana-thc-ovi [https://perma.cc/B6K9-35CF] (last visited Mar. 17, 2019).

impairment, states' standards for driving while under the influence of marijuana vary.¹²⁵ The National Conference of State Legislatures divides the state laws into four main categories: zero-tolerance laws, per se laws, under-the-influence laws, and permissible-inference laws.¹²⁶ In states with zero-tolerance laws, a driver who tests positive for any amount of marijuana is violating state law.¹²⁷ States with per se laws, like Ohio, establish limits for the amount of marijuana that can be detectable in a driver, and a driver with test results that exceed the established limit violates state law.¹²⁸ Under-the-influence laws require that the state prove a driver was affected by THC while driving.¹²⁹ Lastly, Colorado is the only state with a permissible-inference law. There, if a driver tests positive for a certain amount of marijuana, then it is *permissible* for a factfinder to draw to the conclusion that the driver was under the influence of marijuana.¹³⁰

Colorado's permissible-inference law is more scientifically valid, especially for medical marijuana patients, than Ohio's per se law. In Ohio, testing positive for 2 ng/mL of marijuana will almost certainly result in a DUI charge.¹³¹ In Colorado, testing positive for 5 ng/mL of THC in blood allows for a DUI conviction, but state authorities or the factfinder may allocate more weight to other facts and decide to not charge or convict a driver testing positive.¹³² Consider the following hypothetical as an example of how a permissible-inference law is a superior law to a per se law in the absence of a proven correlation between the amount of THC in a person's body and the person's level of impairment.

Your responsible friend suffers from multiple sclerosis. Her doctors treated her muscle spasticity, which is painful tightening and stiffening of muscles, with medical marijuana as a last resort. Her doctors recommended her for the OMMCP, and she and an employee at her nearest medical marijuana dispensary discussed at length how she should orally consume a THC oil product. She read the label on the product when the employee gave her the oil: "Caution: When eaten or swallowed, the effects and impairment caused by this drug may be

- 128. Id.
- 129. Id.
- 130. Id.
- 131. See, e.g., Ohio Marijuana/THC OVIs, supra note 124.
- 132. See Drugged Driving: Marijuana-Impaired Driving, supra note 20.

^{125.} Drugged Driving: Marijuana-Impaired Driving, supra note 20.

^{126.} Id.

^{127.} For states with medical marijuana programs, a zero-tolerance law creates a clear rule that medical marijuana patients cannot drive. *Id.*

delayed."¹³³ The employee bagged the oil for her, and in her car, she saw a printed document included in the bag. It warned, "Marijuana can impair concentration, coordination and judgment. Do not operate a vehicle or machinery under the influence of this drug."¹³⁴

Your friend discussed her new medical marijuana with her family, and she expressed concern about whether she would feel impaired by the oil. A few of her family members also read the product label and the printed document found in the bag. She decided that she should begin using the THC oil immediately because her muscle spasticity continued to worsen, and a family member agreed to drive her to work for the rest of the week in case she felt strange on the new medication. She placed a drop of THC oil under her tongue twice a day, once at six o'clock in the morning and again at ten o'clock in the evening. Each drop contained approximately fifty milligrams of THC.

After a few weeks of relying on others to drive her, she realized that she actually felt comfortable and in control of herself while consuming daily doses of medical marijuana. She began to drive herself to work, and she drove without flaw for one year.

One day while driving home from a new restaurant around nine o'clock at night, she did not see a stop sign. A police officer pulled her over for running through the intersection. She apologized with startled eyes, and her hands fumbled around her glove compartment to find her registration. She began crying in frustration, and her eyes were bloodshot when she finally turned towards the officer with her license and registration. Upon viewing her bloodshot eyes after her moment of panic, the officer asked her if she recently consumed drugs or alcohol. She answered in the negative. Nevertheless, the officer insisted that she ride in the officer's vehicle and complete a blood test for drugs.

Your friend's blood tested positive for 7 ng/mL of THC. In Ohio, your friend is likely charged and convicted.¹³⁵ After one year of safe driving and not showing any signs of impairment while driving with friends in her car, she is convicted for driving under the influence of marijuana.

Colorado, on the other hand, may or may not convict your friend. The factfinder could convict her because of the 7 ng/mL of THC in her blood, but the law does not require the factfinder to convict her. The factfinder could listen to her testimony about initially waiting to drive until she felt comfortable medicating with the THC oil; her friends' testimony about her unimpaired driving; the arresting officer's testimony that he only saw her red eyes after she began crying; and an

^{133.} Ohio Admin. Code 3796:6-3-09(A)(10)(c) (2019).

^{134.} Ohio Admin. Code 3796:6-3-09(C)(5) (2019).

^{135.} See Ohio Marijuana/THC OVIs, supra note 124 (pointing out the possibility of being charged with an OVI despite not feeling impaired, if an individual tests over the State's limit for THC).

expert's testimony that missing a stop sign is not a typical driving error for drivers impaired by marijuana. Colorado courts can consider that your friend was not impaired by marijuana while driving and that she made a driving error that a perfectly sober driver could make. The Colorado court does not convict your friend just because she has THC from her medical marijuana, that she most recently administered fifteen hours earlier, in her blood.

Ohio needs to take seriously the THC levels that patients in the state's own medical marijuana program will maintain whenever driving and amend the marijuana OVI law to reflect that testing positive for 5 ng/mL or more THC in a patient's blood does not mean that the patient is impaired by the state-approved medical marijuana. A permissible-inference law is one viable solution.

B. Drug Recognition Expert Training

Before testing for drug intoxication, an officer must first have a reasonable basis in sufficient facts that the driver is likely under the influence of a drug.¹³⁶ Therefore, if an officer does not suspect that a driver is under the influence of drugs, the officer cannot order a blood or urine test.¹³⁷ Ohio should continue to offer "Drug Recognition Expert" training to officers.¹³⁸ Medical marijuana patients will have less risk of testing positive for an illegal amount of marijuana in their bodies without being actually impaired if more officers are skilled in detecting actual impairment.

C. Physicians

Physicians play the central role in educating patients about the benefits and risks of particular medicines. Ohio established a separate standard of care for physicians recommending patients for the OMMCP.¹³⁹ The physician is required to inform the patient about "the risks and benefits of treatment with medical marijuana as it pertains to the patients [sic] qualifying medical condition and medical history."¹⁴⁰ The American Medical Association and the Mayo Clinic believe

^{136.} Lewis R. Katz, Ohio Arrest, Search and Seizure §18:17 (2019 ed.).

^{137.} Id.

^{138.} See Brian Duffy, Drug Recognition Experts Climbing in Northeast Ohio to Combat Drugged Driving, 19 NEWS (Aug. 22, 2018, 3:16 AM), https://www.cleveland19.com/story/38933913/drug-recognition-experts-cli mbing-in-northeast-ohio-to-combat-drugged-driving/ [https://perma.cc/6 WW3-MESE]; see also The Ohio Drug Recognition Expert Program Application Information, OHIO HIGHWAY SAFETY OFF., https://ohiohigh waysafetyoffice.ohio.gov/doc/DRE_Application.pdf [https://perma.cc/FA 9A-HWD7] (last visited May 25, 2021).

^{139.} Ohio Admin. Code 4731:32-03 (2019).

^{140.} Ohio Admin. Code 4731:32-03(C)(4) (2019).

physicians should also be capable of counseling patients about the dangers of impaired driving and motor vehicle accidents caused by medical marijuana.¹⁴¹ If Ohio physicians warn patients about the adverse effects marijuana may have on patients' driving, then patients could make well-informed decisions about whether the benefits of medical marijuana are worth the risks to them.

D. Public Education

As instances of driving under the influence of marijuana increase, Ohio needs to educate the public that the state enterprise for marijuana use as a medicine does not mean that medical marijuana is without psychoactive and unsafe consequences.¹⁴² National Highway Traffic Safety Administration statistics, as well as state statistics, indicate a growing prevalence of individuals consuming marijuana and then getting behind the wheel.¹⁴³ Nationally, drivers testing positive for THC increased by 48% from 2007 to 2014.¹⁴⁴ In states with licensed medical marijuana dispensaries, there is a 14% increase in individuals driving under the influence of marijuana compared to states without licensed medical marijuana dispensaries.¹⁴⁵

A significant population of medical marijuana patients drive while in an unsafe mental state. Researchers in Michigan shared concern about the percent and frequency of medical marijuana chronic pain patients driving soon after consuming marijuana.¹⁴⁶ Surveying a sixmonth period, a majority of Michigan patients surveyed disclosed that they drove within two hours of consuming marijuana, half disclosed driving while feeling "a little high," and 21.1% disclosed driving while feeling "very high."¹⁴⁷ When surveyed about their driving behavior in the same six-month time period, 21.6% of patients drove ten or more times within two hours of consuming marijuana, 18.7% of patients

- 143. NHTSA REPORT, supra note 2, at 20-21.
- 144. Id. at 20–21.
- 145. Sevigny, supra note 70, at 61.
- 146. Erin E. Bonar, James A. Cranford, Brooke J. Arterberry, Maureen A. Walton, Kipling M. Bohnert & Mark A. Ilgen, *Driving Under the Influence of Cannabis Among Medical Cannabis Patients with Chronic Pain*, 195 DRUG AND ALCOHOL DEPENDENCE 193, 195–96 (2019).
- 147. Id. at 194.

^{141.} See Ebbert et al., supra note 5, at 1846; see also AMA REPORT, supra note 11, at 11.

^{142.} It's Legal in Many States, so Doesn't that Mean Marijuana is Safe?, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/marijuana/ faqs/is-marijuana-safe-because-its-legal.html [https://perma.cc/2VC8-58L R] (last visited Mar. 7, 2021).

drove ten or more times while feeling "a little high," and 7.2% of patients drove ten or more times while feeling "very high."¹⁴⁸

Similarly, in Colorado a majority of marijuana consumers have driven within two hours of consuming marijuana, and the frequency of driving within two hours of consumption increased from 10% in 2014 to 21% in 2016.¹⁴⁹ Some blame the increase in driving under the influence of marijuana on the perception that marijuana is safe, or at least safer than alcohol.¹⁵⁰ With the increased frequency of drivers operating under the influence of marijuana in Colorado, there is a corresponding increase in marijuana-related motor vehicle deaths. Within three years of Colorado's recreational marijuana program, there was a 48% increase in motor vehicle fatalities related to marijuana.¹⁵¹ The increase in Washington was even more dramatic: the presence of THC in the deceased drivers' blood increased by 120% from 2010 to 2014.¹⁵²

In light of the studies from other states, Ohio should begin to take notice of any increases in incidents of driving under the influence of marijuana since the OMMCP began. The Colorado Department of Transportation is taking notice of the increased incidents and spending almost one million dollars in an education effort to deter driving while under the influence of marijuana.¹⁵³ Ohio has a responsibility to educate the public that driving while under the influence of marijuana is dangerous and illegal, whether the driver used legal medical marijuana or illegal recreational marijuana.

- 151. AMA REPORT, supra note 11, at 8–9.
- 152. *Id.* at 9.
- 153. See Wallace, supra note 149.

^{148.} Id.

^{149.} Alicia Wallace, Efforts to Curtail Marijuana-Impaired Driving Collide with Evolving Attitudes, Medicinal Use, DENVER POST (Oct. 30, 2017, 6:59 AM), https://www.denverpost.com/2017/08/25/marijuana-impaired-driving-effo rts-evolving-attitutes [https://perma.cc/U95Z-HTYL].

^{150.} See id. ("A recent Colorado Department of Transportation survey found that 72 percent of Colorado cannabis consumers thought it was safer to drive under the influence of marijuana than under the influence of alcohol"); see also Jacob T. Borodovsky, Lisa A. Marsch, Emily A. Scherer, Richard A. Grucza, Deborah S. Hasin & Alan J. Budney, Perceived Safety of Cannabis Intoxication Predicts Frequency of Driving While Intoxicated, 131 PREVENTIVE MED. 1, 4–5 (2020) (explaining that those who perceive a high level of marijuana intoxication as an unsafe level to drive more frequently drive while under the influence of marijuana, regardless of their own level of intoxication, compared to those who perceive a lower level of marijuana intoxication as unsafe).

$E. \ Research$

Ohio and private interest groups need to invest in research and development for medical marijuana and roadway safety. While the FDA "supports" state research to develop safe and effective marijuana products,¹⁵⁴ Congress placed a general prohibition on federal agencies and states using federal funds for marijuana research.¹⁵⁵ Marijuana is still illegal under federal law.¹⁵⁶ Although a majority of states permit marijuana use through state medical marijuana programs,¹⁵⁷ the federal government categorizes marijuana as an illegal substance with "a high potential for abuse;" "no currently accepted medical use in treatment in the United States;" and "a lack of accepted safety for use of the drug or other substance under medical supervision."¹⁵⁸ This Note is not about the conflict between the current federal and state laws, but for the purposes of this Note, it is important to know that the illegal status of marijuana is a large barrier to marijuana research.

States and private parties are nevertheless engaging in necessary research for medical marijuana. The NHTSA recommends that state law enforcement agencies at least collect data from incidents of marijuana use by drivers.¹⁵⁹ Additionally, the NHTSA implores researchers to develop a workable standard of impairment.¹⁶⁰ If Ohio is charging drivers for impairment caused by marijuana because of a level of detectable marijuana in their bodies, Ohio ought to have a valid basis in science to criminalize that level of detectable marijuana, and Ohio can only discover a valid basis in science through research.

CONCLUSION

Medical marijuana patients are ultimately responsible for their own behavior. But patients cannot drive responsibly unless they know when they are unimpaired, and they cannot drive without risk of jeopardizing their OMMCP patient status and facing criminal penalties unless the marijuana OVI law reflects actual impairment. A difficult consequence to accept if deciding to use medical marijuana may be to no longer drive

- 158. 21 U.S.C. § 812(b)(1)(A)–(C).
- 159. See NHTSA REPORT, supra note 2, at 30.
- 160. Id. at 28.

^{154.} FDA and Cannabis: Research and Drug Approval Process, supra note 79.

^{155.} See NHTSA REPORT, supra note 2, at 21.

^{156.} Controlled Substances Act, 21 U.S.C. § 812 sched. I(c)(10) (2018).

^{157.} Thirty-six states permit marijuana for medicinal use. See State Medical Marijuana Laws, NAT'L CONF. OF STATE LEGISLATURES (Apr. 5, 2021), https://www.ncsl.org/research/health/state-medical-marijuana-laws.aspx [https://perma.cc/Z983-SQLU].

because there is not even a concrete medical recommendation for how long a patient can wait after consuming a medical marijuana product before any symptoms of impairment diminish.¹⁶¹ The entities involved in the OMMCP need to take responsibility for educating patients about the safety, medical, and legal risks patients must accept if using medical marijuana. Finally, the Ohio General Assembly must amend the marijuana OVI law to capture impaired drivers more accurately instead of unimpaired medical marijuana patients.

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^{161.} See Ebbert et al., supra note 5, at 1846.

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