CANNABIS CONUNDRUM: THE INTERSECTION OF PROPERTY/CASUALTY INSURANCE AND CANNABIS-IMPAIRED DRIVING

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SETTING THE SCENE

Every year, more than 30 million drivers across the United States are stopped by police for potential traffic violations. Drivers have grown accustomed to police scripts asking for a license and registration and about alcohol use, but soon they may find themselves answering an entirely new set of questions during these interactions: “Have you had any cannabis today? How much? What kind? Was it for medical use?”

The proliferation of cannabis legalization and its widespread medical and recreational use by millions of Americans presents a host of new challenges for law enforcement, public safety officials, lawmakers at all levels of government, and property/casualty insurers. Cannabis, legal for either medical or recreational use in 36 states and Washington, D.C., as of April 2021, has created a public policy labyrinth with a tangled web of unique state and local laws, regulations, and guidelines governing cultivation, manufacture, distribution, food safety, sale, storage, use, and cannabis-impaired driving, among many others. While neither a supplier nor an end user, the insurance industry still finds itself squarely in the middle of this complex legal landscape, with many more questions than answers, and it must think through the best ways to be a good partner in the development of practical public policy solutions moving forward.

INSURERS AND IMPAIRED DRIVING

For more than 60 years, insurers have embraced their role as leading advocates for highway and vehicle safety, individually and collectively through the establishment and support of the Insurance Institute for Highway Safety. The insurance industry has been on the front lines working to reduce traffic crashes and fatalities, and it is that commitment and leadership that have led to the universal adoption of seatbelts and airbags in motor vehicles. These and other insurance-industry-backed improvements to auto safety have saved countless lives and reduced the risk of dying in crashes for millions of drivers and passengers across the United States and the world.

Insurers have consistently offered a perspective that has helped galvanize efforts to enhance automotive safety against driving under the influence of alcohol, drugs, or distractions like cellular telephones. Every kind of potential impairment to drivers presents new and unique challenges. Cannabis is no different, and the insurance industry will play an important and leading role in policy conversations about cannabis, its effects on drivers, and automobile safety as part of an ongoing effort to keep everyone on the road as safe as possible.

It is important to note at the outset, however, that no standardized testing of cannabis impairment exists yet, making it difficult to measure its prevalence on our roadways. It is difficult for law enforcement agencies to identify, apprehend, and prosecute drug-impaired drivers, yet a 2018 survey by the Governors Highway Safety Association indicated that the majority of state highway safety officers considered drugged driving an issue at least as important as driving while impaired by alcohol. A tremendous amount of research must be conducted on cannabis-impaired driving to confidently measure and assess

1 Marijuana is a variety of the Cannabis Sativa plant that contains hundreds of chemical compounds. For purposes of this paper, we have chosen to use the term cannabis except where the word marijuana appears in an original source.
2 As of this writing, laws have been passed and signed in at least three additional states (N.M., N.Y., Va.) with effective dates later in 2021.
4 http://www.iihs.org/about-us
the direct and indirect impacts of cannabis use on driver cognition, reaction times, and sensory impairment, as well as its potential effect on the frequency and severity of automobile accidents. As more data is collected and analyzed, it is incumbent upon the insurance industry, in collaboration with other private and public partners, to advance new studies, analyses, and public educational campaigns on the implications of cannabis-impaired driving.

While cannabis-impaired driving will undoubtedly present some novel challenges, there is at least one parallel technological blueprint that may help inform policymaking: for decades, U.S. law enforcement officials have used breathalyzer technology to ascertain the level of alcohol-related impairment of drivers. Unfortunately, effective systems for determining cannabis impairment are still in nascent phases and remain far from mass distribution and implementation. One reason for this is because the primary psychoactive component in cannabis, tetrahydrocannabinol, can be detected in the body for varying lengths of time, depending on a variety of factors including body composition, metabolism, product type, potency, quantity, and frequency of use, which means the extent to which THC levels correlate with impairment is undetermined. It is also necessary to distinguish THC from cannabidiol, the major non-psychoactive compound found in the cannabis plant, which is sometimes recommended to alleviate anxiety, epilepsy, and even psychosis.⁷

LIMITED, INCONCLUSIVE DATA TO DATE

As early as 2017, the National Academy of Sciences, in a series of recommendations for further research, went so far as to conclude that “there is substantial evidence of a statistical association between cannabis use and increased risk of motor vehicle crashes.”⁶ Prior to the COVID-19 pandemic, several reports were released by the insurance industry and federal agencies exploring potential relationships between cannabis legalization, impairment, and automobile accidents. At a minimum, the reports highlight the need to study further the possible links between cannabis impairment and the implications for driver and auto safety. While the literature varies in scope and is limited by the variance in details of how states legalize cannabis, it does indicate an overall increase in automobile crashes when drivers appear to have traces of THC in the blood stream, often concurrently with alcohol. This trend is primarily observed in states that have legalized cannabis for recreational consumption. The varied results further underscore the many unanswered questions about cannabis’ cognitive impact and how and to what extent it affects driving ability.

SAMHSA SURVEY OF DRIVERS

According to the December 2019 National Survey on Drug Use and Health by the Substance Abuse and Mental Health Services Administration – an agency within the U.S. Department of Health and Human Services – 4.7 percent, or roughly 12 million, of U.S. residents aged 16 or older reported driving under the influence of marijuana in the past 12 months in 2018.⁸ This trend was most prevalent in individuals between the ages of 21 and 25. Interestingly, the same survey noted that participants driving under the influence of illicit drugs other than marijuana were significantly less at 0.9 percent, or 2.3 million. The survey analysis also identified the need for rapid and sensitive assessment tools to ascertain the presence of and impairment by marijuana and other illicit drugs.

⁶ Ohio Medical Alliance. THC vs. CBD. Available at www.ohiomarijuanacard.com/thc-vs-cbd, last accessed on 4/5/21.
⁸ CDC Report. https://www.cdc.gov/mmwr/volumes/68/wr/pdfs/mm6850a1-H.pdf, p. 1153

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Two challenges of conducting this and similar surveys were acknowledged in the summary, noting that (1) some respondents may have feared legal consequences for answering in the affirmative based on their local and state laws; and (2) self-reported data are subject to the respondents’ interpretations of being under the influence of a drug. These two issues permeate much, if not all, the work conducted in this space to date. As a result, impairment may well be more ubiquitous than reflected in the data that has been produced. Acquiring more data on the real number of drivers who have or are driving under the influence of cannabis would be invaluable to stakeholders as they work to mitigate the potential ramifications associated with cannabis-impaired driving.

IIHS REVIEW OF RECREATIONAL CANNABIS AND COLLISION CLAIM FREQUENCY

Related 2018 research by the IIHS underscores salient observations and trends regarding recreational cannabis sales and automobile crashes. IIHS’s research analyzed three states: Colorado, Oregon, and Washington – all of which have legalized cannabis for recreational use and consumption in the past several years. Controlling for differences in rated driver populations, the insured vehicle fleet, the mix of urban versus rural exposure, unemployment, weather, and seasonality, the states were

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* CDC Report. [https://www.cdc.gov/mmwr/volumes/68/wr/pdfs/mm6850a1-H.pdf](https://www.cdc.gov/mmwr/volumes/68/wr/pdfs/mm6850a1-H.pdf), p. 1156.
compared to neighboring states – Idaho, Montana, Utah, and Wyoming – that did not legalize cannabis for recreational use over the course of the study. The findings for two of the three states are striking. In Colorado, collision claim frequencies were 12.5 percent higher than the control states after legalization and claim frequencies in Washington were 9.7 percent higher when compared to the control states. In Oregon, however, the increase in claim frequency was less than 1 percent more than the control states. The analysis estimated “the legalization of retail sales was associated with a 6 percent increase in collision claim frequency.” IIHS also reported that legalization in the same three states “was associated with a 5.2% higher rate of police-reported crashes” compared to the control states.

However, IIHS explains, “marijuana’s role in crashes isn’t as clear as the link between alcohol and crashes.” The report identifies inconsistencies in how driver drug use is collected in crash reports and adds that “more drivers are tested for alcohol than for drugs. When drivers are tested, other drugs are often found in combination with alcohol, which makes it difficult to isolate separate effects.” While IIHS provides a startling glimpse into the potential relationship between cannabis legalization and the frequency of automobile accidents, it also highlights the knowledge gaps preventing a deeper understanding of this policy issue. Further, while this data is valuable, it is imperative to conduct these studies and analyses in more states that have legalized cannabis for both recreational and medical use to have a more complete picture of the situation that can help inform policy.

### III AND NHTSA REPORTS

A March 2019 Insurance Information Institute report, coupled with the National Highway Traffic Safety Administration’s 2016 report, exacerbates the confusion concerning the degree to which cannabis impairment may be involved in an increasing number of automobile crashes. III summarizes one academic review that found “20 to 30 percent of crashes involving marijuana occurred because of the marijuana use” and that “crash risk increased 22 percent while under the influence of marijuana,” which appears to support a fairly straightforward correlation. In contrast, results from NHTSA adjusting for gender, age, race/ethnicity, and alcohol use found “no significant contribution to crash risks from any drug” including marijuana. Importantly, NHTSA emphasized the need for conducting additional research in order to draw more “definite conclusions about drug use and crash risk.” NHTSA also notes, “While useful in identifying how marijuana affects the performance of driving tasks, experimental and observational studies do not lend themselves to predicting real world crash risk.”

This realization further underscores the information gap between available data and substantive research and analysis linking cannabis impairment to crash risk. As a result, studies continue to produce varied, contrasting, and inconclusive outcomes in attempting to draw connections and establish correlation or causation.

III’s report pinpoints even more information gaps that make accurately evaluating the impact of cannabis legalization on impaired driving a challenge. One example is the finding that after recreational cannabis was legalized in Washington state, more people with detectable levels of THC in their bloodstreams were involved in fatal accidents than prior to the legislation’s...
enactment. While this data is helpful, the presence of THC in the bloodstream does not necessarily prove that a driver is or was impaired while driving at the time of testing or when involved in an accident because of the length of time cannabis can remain in the body. In addition, III cites a Colorado Division of Criminal Justice report that found 70 percent of DUI defendants tested positive for both alcohol and marijuana. The report raises similar concerns over the presence of THC and actual impairment but suggests at least one more troubling and under-researched factor in these crashes: the overall cognitive effects of cannabis combined with alcohol. Lastly, the report concludes that young male drivers are identified consistently as the highest risk demographic associated with cannabis-impaired driving.

ADDITIONAL COMPLICATING FACTORS RIPE FOR ADDITIONAL STUDY

The quantitative and qualitative data from these reports represent just the tip of the iceberg in understanding the impact of cannabis-impaired driving. Many of the available studies do not specifically examine the effects of cannabis impairment in states that have legalized only medical cannabis – which adds yet another layer of complication. Medical cannabis may contain either or both CBD and THC. Researchers will need to engage in specific study of the extent to which medical cannabis affects a driver’s cognition and driving ability and thus the risk posed to other drivers on the road and whether it is distinguishable from recreational varieties.

In addition, because cannabis legalization in states across the U.S. is proceeding at varying paces influenced by local politics at odds with federal law, state departments of transportation and public health officials do not yet possess robust, long-term data sets to help inform dialogue and policy that could improve driver education and safety. Until such data is more widely produced, internalized, and accessible, many unanswered questions will remain surrounding the relationship between cannabis legalization and its role in driver impairment and the potential consequences it has for the number and types of automobile accidents.

Yet another potentially complicating factor in any discussion of insurance is the appropriate role for an insurance regulator when considering actions of the industry. The National Association of Insurance Commissioners has formed a Cannabis Insurance (C) Working Group to monitor and inform regulators about cannabis businesses and insurance. To date, this group has been focused on the availability of coverage for the cannabis businesses, but it will be certain to weigh in on future developments as the data and science on cannabis-impaired driving evolves.

THE TECHNOLOGY BARRIER: MEASURING IMPAIRMENT

A primary reason for the lack of research and development for cannabis-impairment testing is that cannabis remains a Schedule I drug at the federal level according to the Drug Enforcement Administration’s classification system and is defined as a substance with no accepted medical use and a high potential for abuse. In addition, THC or CBD, in contrast to alcohol, can remain present in the bloodstream for many hours and days after its initial use – which makes it particularly difficult to determine when, to what extent, and what quantity or variety of cannabis an individual may have consumed. This has presented an acute problem for impairment testing. Field sobriety tests for assessing alcohol impairment have been used effectively across the United States for

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18 https://www.iii.org/sites/default/files/docs/pdf/marijuanaanddui-wp-031119.pdf
20 https://content.naic.org/cmte_c_cannabis WG.htm
several decades, but the same cannot be said for cannabis-sobriety testing. The standards for alcohol-impairment testing devices are developed by the National Highway Traffic and Safety Administration, but, there is not yet an equally effective or accessible mechanism for accurately assessing cannabis impairment.

Today, state and local law enforcement professionals do not have the appropriate means to measure or determine a driver’s level of cannabis-related impairment. Perhaps more importantly, there is no widely accepted, professional consensus of the appropriate legal limit or threshold for cannabis impairment. Unlike the standard .08 blood alcohol content measurement system for alcohol intoxication, such a metric does not exist for cannabis in all but one state in the context of driving impairment. Colorado has a reasonable inference law in the case that THC is found in a driver’s bloodstream in quantities of 5ng/ml or higher when it is permissible to assume the driver was under the influence. According to the National Conference of State Legislatures, there are six states that have “per se limits” for THC from one to five nanograms that “establish that once a person is shown to have reached or surpassed the legal limit, that person will be considered impaired by law.” Companies such as Hound Labs and Cannabix Technologies are among a select few entities currently developing THC detection technology that will mimic the standard alcohol breathalyzer rather than using blood, saliva, or a urine sample. Similarly, Alcohol Countermeasure Systems, a group of more than 40 international companies, has been spearheading the development of a non-intrusive artificial intelligence technology that uses eye tracking as a means of determining THC presence with 95 percent accuracy. While technology could be key in systematizing and determining cannabis impairment, its distribution will face challenges in adhering to local, state, and federal laws. Extensive training of law enforcement will be required before successful deployment; implementation will also demand substantial financial resources and commitment.

State Marijuana-Impaired Driving Laws

* South Dakota has a zero tolerance law for drivers under the age of 21

Source: National Conference of State Legislatures

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21 http://www.fieldsobrietytests.org/fieldsobrietytests.html
22 https://www.nhtsa.gov/drunk-driving/alcohol-measurement-devices
23 https://www.ncsl.org/research/transportation/druugged-driving-overview.aspx
WORKERS’ COMPENSATION

Workers’ compensation has also been affected by the recent wave of cannabis legalization, but because workers’ compensation laws vary at the state level – like cannabis law – it is an increasingly complex subject for employers and employees to understand, address, and comply. In a 2019 National Safety Council survey, 81 percent of employers surveyed were concerned about marijuana having a negative impact on their workforce.26 Additionally, a National Institute on Drug Abuse report found in a study of postal workers that “employees who tested positive for marijuana had 55 percent more industrial accidents, 85% more injuries and 75% greater absenteeism compared with those who tested negative.”27 It is apparent that with the current trajectory of states legalizing cannabis, whether for medical or recreational use, employers of all sizes will have to examine and assess the challenges this presents in the workplace. Employers with vehicle fleets, in particular, will also need to monitor the research, technological, and legal developments that evolve and further educate employees on the risks of cannabis-impaired driving.

PUBLIC AFFAIRS – PERCEPTIONS OF CANNABIS-IMPAIRED DRIVING

As with many public policy discussions, facts and data are unlikely to be sufficient to sway policymakers – their constituent voters need to be convinced, too. It will be critical moving forward to bear in mind the public perception of driving under the influence of alcohol versus under the influence of cannabis. Conflicting perceptions surrounding cannabis impairment demonstrate the need for robust research and education as essential components of any effort to mitigate the consequences of driver impairment in states where cannabis has become more prevalent. A 2017 nationwide survey of 2,800 teens and 1,000 parents by Liberty Mutual Insurance and Students Against Destructive Decisions found that “roughly a third of teens and a quarter of parents of licensed teen drivers think it is legal to drive under the influence of marijuana in states that permit recreational use of the drug for adults.”28 The same report uncovered that among the teens who were surveyed “22 percent said that driving under the influence of marijuana is common among their friends.”29 These perceptions further emphasize the urgent need to engage in multi-faceted educational campaigns for drivers of all ages about the potential risks, as well as the many unknown areas of cannabis-impaired driving. This survey also illustrates the need for more pertinent data that can help guide these educational campaigns and public safety conversations across the country.

CONCLUSION

The list of states that have legalized cannabis for medical and recreational use will only continue to grow as ballot initiatives and legislation are codified. It is incumbent upon the property/casualty insurance industry, along with other advocates of safety among policymakers and private-sector partners, to more comprehensively understand the hurdles and challenges associated with cannabis legalization as it relates to driver impairment.

Ultimately, public and private stakeholders will need to determine how to gather and deploy more resources to enable scientific research, preserve and augment funding, and develop technology that will help better comprehend, address, and mitigate risk that cannabis-impaired driving may present in communities across the nation. Additionally, multi-pronged educational campaigns will be essential in clarifying for drivers of all ages the potential risks associated with cannabis consumption of different varieties.

Capturing more data points to move this policy dialogue forward and enact rational policy will be the most critical component of this endeavor. While there is no silver bullet to this public policy conundrum, the chief aim must remain automobile safety in a rapidly changing driver environment. NAMIC believes federal, state, and local authorities should work together to develop best practices for law enforcement and labs regarding testing for other substances beyond evidence of drunk driving, as well as accelerating research into the development of cannabis-impairment standards.

For its part, the insurance industry and its partners will need to show continued adaptability, flexibility, and creativity in devising and implementing research, technology, and educational initiatives that help stakeholders expeditiously address these policy issues moving forward.
This NAMIC Issue Analysis is brought to you by the NAMIC Advocacy team.

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