



## Studies on Driving Under the Influence of Marijuana

Twenty-two states, several countries, and the District of Columbia no longer prohibit marijuana possession and use by adults 21 years of age and older. With polls showing that over two-thirds of Americans support legalization, numerous states are considering legalizing and regulating cannabis for adults. Many lawmakers wonder how this sensible reform might impact road safety and how to best address impaired driving.

Data from Canada, which legalized cannabis for adults nationwide in 2018, has shown legalization is not linked to increases in traffic crashes. In May 2023, the journal *Drug and Alcohol Review* published a study in which researchers assessed trends in traffic crashes in Toronto in the years prior to and immediately following the adoption of adult-use legalization. Researchers found, “[N]either the CCA [Canadian Cannabis Act] nor the NCS [number of cannabis stores per capita] is associated with concomitant changes in (traffic safety) outcomes. ... During the first year of the CRUL’s [cannabis recreational use laws] implementation in Toronto, no significant changes in crashes, number of road victims and KSI [all road users killed or severely injured] were observed.”

In May 2016, the AAA Foundation for Traffic Safety released two studies related to marijuana and driving. The first, *An Evaluation of Data from Drivers Arrested for Driving Under the Influence in Relation to Per se Limits for Cannabis*, concluded that per se laws — which criminalize having a set amount of THC in one’s system — have no scientific basis, and called for lawmakers to scrap such laws altogether. It found, “There is no evidence from the data collected, particularly from the subjects assessed through the DRE [Drug Recognition Expert] exam, that any objective threshold exists that established impairment, based on THC concentrations measured in specimens collected from cannabis-positive subjects placed under arrest for impaired driving.”

AAA instead endorses the impairment standard for detecting drivers under the influence of marijuana. This means police officers rely on field sobriety tests — such as the walk-and-turn or the one-legged stand — to determine impairment. Such tests can also be used to conclude whether a driver may be under the influence of other substances, such as prescription drugs.

“There is understandably a strong desire by both lawmakers and the public to create legal limits for marijuana impairment in the same manner we do alcohol,” said Marshall Doney, AAA’s President and CEO, in a statement released with the report. “In the case of marijuana, this approach is flawed and not supported by scientific research.”

The second AAA study, *Prevalence of Marijuana Use Among Drivers in Fatal Crashes: Washington 2010-2014*, found a significant increase in the number of drivers involved in fatal crashes with THC in their system after the passage of Initiative 502, which established a system of cannabis regulation and taxation in Washington state. However, researchers were careful to point out that the drivers who tested positive for marijuana may not have actually been impaired or even at fault in the accidents. “[R]esults of this study do not indicate that drivers with detectable THC in their blood at the time of the crash were necessarily impaired by THC or that they were at-fault for the crash; the data available cannot be used to assess whether a given driver was actually impaired, and examination of fault in

individual crashes was beyond the scope of this study.”<sup>2</sup>

The study found that, of the 3,031 drivers involved in fatal accidents from 2010-2014, just 3% had only marijuana in their systems. Nearly half of the drivers who tested positive for marijuana also tested positive for alcohol, and more than 25% tested positive for drugs other than marijuana.

Finally, in 2015, the National Highway Traffic Safety Administration (NHTSA) released a major study, *Drug and Alcohol Crash Risk*, examining accident risk associated with the use of alcohol, marijuana, and other drugs, which it called the “largest and most carefully controlled [study] of its kind to date.”<sup>3</sup> It concluded that while alcohol use dramatically increases accident risk, after controlling for alcohol use and demographic factors, drivers testing positive for THC were no more likely to crash than sober drivers.

THC can remain in one’s system for days or even weeks after impairment wears off, which is one reason *per se* and zero tolerance laws are such a poor way to address driving under the influence.

While studies have shown that marijuana increases one’s crash risk far less than alcohol, driving under the influence of marijuana is still dangerous. Marijuana can impair drivers’ ability to track lanes, and their divided attention may affect driving performance. The Marijuana Policy Project (MPP), the nation’s largest organization dedicated to reforming our country’s marijuana laws, joins AAA in its support of impairment-based drugged driving laws. Law enforcement officers typically have no problem securing convictions of impaired drivers by using a combination of blood tests — which establish that the person had THC in their system, but don’t prove impairment — and all other evidence, which would include the results of failed field sobriety tests, any smell of marijuana, and other factors.

MPP does not support — and national AAA agrees — *per se* or zero tolerance laws, such as are currently on the books in many states. Such laws may lead to unsafe drivers going free while others may be wrongfully convicted. MPP also supports more field-testing training for officers — both Advanced Roadside Impaired Driving Enforcement (ARIDE) and DRE training — in addition to public education to discourage driving under the influence.

Marijuana is widely available in every state in the nation regardless of its legal status. Strategies for deterring impaired driving cannot rely on prohibiting marijuana for adults’ use. Marijuana prohibition has caused a great deal of suffering and diverts law enforcement from serious crime, all while fostering a sometimes-dangerous illicit market. Instead of maintaining prohibition or unscientific *per se* laws, to keep our roads safe we must focus on public education and the development of evidence-based enforcement policies.

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1 [www.aaafoundation.org/sites/default/files/EvaluationOfDriversInRelationToPerSeReport.pdf](http://www.aaafoundation.org/sites/default/files/EvaluationOfDriversInRelationToPerSeReport.pdf)

2 [www.aaafoundation.org/sites/default/files/PrevalenceOfMarijuanaInvolvement.pdf](http://www.aaafoundation.org/sites/default/files/PrevalenceOfMarijuanaInvolvement.pdf)

3 [www.nhtsa.gov/sites/nhtsa.dot.gov/files/11388a-crashriskstudy-execsummary.pdf](http://www.nhtsa.gov/sites/nhtsa.dot.gov/files/11388a-crashriskstudy-execsummary.pdf)