Institute For Behavior and Health
Creating Tomorrow's Drug Policy

Commentary

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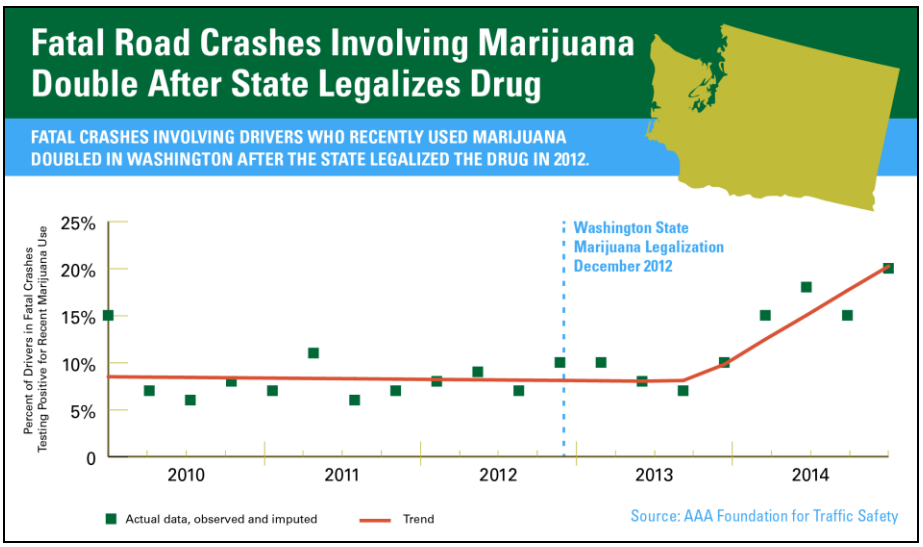
Implement Effective Marijuana DUID Laws to Improve Highway Safety

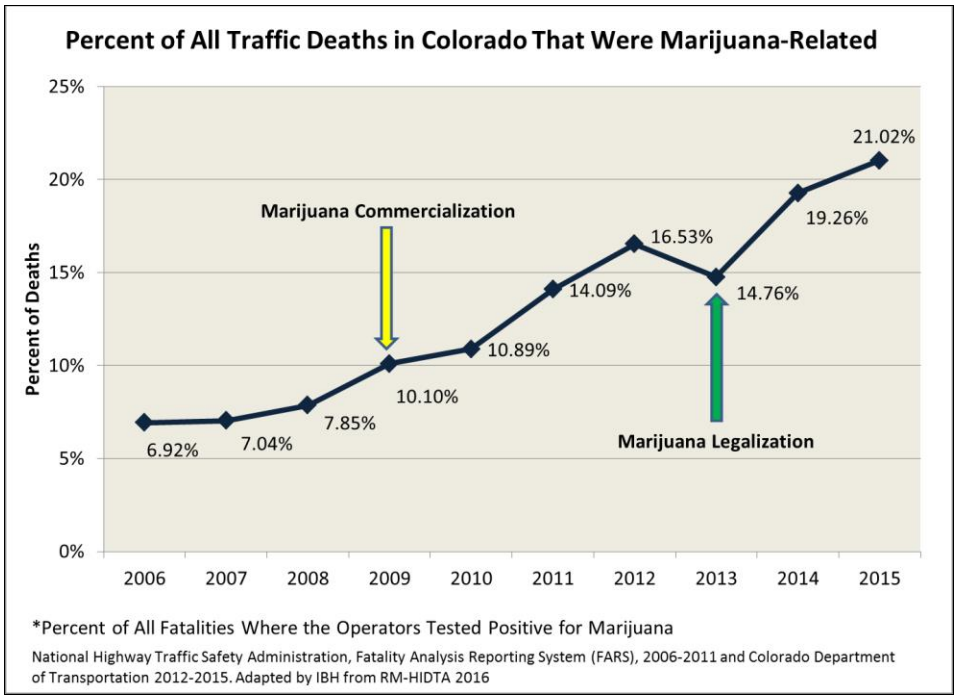
Largely overlooked in the national drug epidemic is the serious threat to public safety of driving under the influence of drugs (DUID). By conservative estimates, 20% of vehicular crashes are caused by drugged driving, translating into thousands of deaths, hundreds of thousands of injuries and billions in property damage costs each year.[1] The recent significant rise in highway fatalities in the United States – after years of steady declines[2] underscores the importance of improving efforts to reduce drugged driving, especially marijuana-impaired driving.

All drug use by drivers poses a significant threat on our nation's roads. A substantial body of research demonstrates that marijuana – the most widely used drug other than alcohol – causes significant short- and long-term effects.[3] [4] Not surprisingly, marijuana is also the most widely detected drug among impaired, injured and deceased drivers, second only to alcohol.

Recent research from Colorado and Washington, states that legalized the use of marijuana, demonstrate the growing extent of the marijuana DUID problem. In Washington, the number of fatally injured drivers who tested positive for marijuana more than *doubled* following marijuana legalization, up to 17% in 2014.[5]



Additionally, 21% of fatally injured drivers in Colorado tested positive for marijuana in 2015.[6] Notably, marijuana-related traffic deaths increased by 48% in the three-year average (2013-2015) since the legalization of marijuana for recreational uses compared to the three-year average (2010-2012) prior to legalization, during which time overall traffic fatalities increased by 11%.



At a time when there is a growing trend to increase legal access to marijuana, policymakers must implement effective DUID laws supported by practical enforcement measures in order to protect the public and promote highway safety.

Given the successful nationwide implementation of DUI alcohol laws that make it illegal to drive with a blood or breath alcohol level of 0.08g/dL or higher, many states have attempted to follow a similar path for marijuana by setting a "illegal limit" for Δ9-tetrahydrocannabinol, the primary psychoactive component in marijuana known as THC. Unfortunately, setting a legal impairment limit is impossible because **there is no consistent relationship between the blood concentration of THC and driving impairment.**[7]

Despite this important fact, some states have set specific illegal limits for THC by drivers. Advocates for marijuana legalization frequently tout Washington's *per se* law that makes it illegal for a person to drive with 5 ng/ml THC in their blood as a public safety measure. In reality, however, few drivers are successfully prosecuted using this law. Colorado has a law that is even less effective than Washington's. Colorado has a permissible inference law that allows, but does not require, a jury to infer that a person who tested at or above 5ng/ml THC was impaired by marijuana. Thus, it is highly unlikely that the prosecution can obtain a conviction

without additional evidence of impairment, rendering Colorado's law the weakest among states attempting to establish an illegal limit for marijuana.[8] Regardless, the 5 ng/ml THC limit is a farce. Data from the Colorado Department of Health and Environment shows an estimated 72% of drivers positive for cannabinoids arrested for suspicion of driving under the influence test below 5ng/ml THC.[9] The bottom line is that laws attempting to establish an illegal limit for marijuana do not facilitate the prosecution of drugged drivers or deter drugged driving.

Because there is no clear level at which most people are impaired by marijuana as there is with alcohol, the best solution is to set the illegal *per se* limit at zero or near-zero for THC. Such laws, often referred to as zero tolerance laws, backed by successful training, enforcement and testing procedures, could have a positive impact on reducing marijuana-impaired driving and as a result, crashes, deaths and injuries. This approach is being used in Australia and many countries in Western Europe. In the United States zero tolerance for THC and metabolites is the standard used for commercial drivers, pilots and train engineers. If society cannot trust the best trained operators to handle their vehicles or crafts with marijuana in their system, how can it trust lesser trained and regulated drivers?

Unfortunately, through its marijuana legalization efforts, the marijuana industry is working to weaken current and future drugged driving laws. For example, Arizona presently has a zero tolerance *per se* law that makes it unlawful to drive with the presence of THC or its metabolites in the body.[10] In November 2016, Arizona residents will vote on Proposition 205, a marijuana legalization initiative that would also prohibit the state from imposing a *per se* THC limit for marijuana. California voters will consider Proposition 64 to legalize marijuana, an initiative that does not specifically address enforcement of marijuana-impaired driving and instead allocates funds for the Department of the California Highway Patrol to develop new enforcement protocols. These and other states considering changes to the legal status of marijuana must not ignore the social and safety burdens marijuana-impaired driving poses.

Further adding to the complexity of the marijuana-impaired driving issue for all states across the country is the fact that drivers use marijuana in combination with other drugs, including alcohol.

The problem of drugged driving is not limited to marijuana.

Today many drivers under the influence of drugs, including marijuana, are not identified, in part because of insufficient training but also because of deficiencies in laws and resources. Most law enforcement agencies do not test drivers arrested for driving under the influence for drugs unless they provide blood or breath samples for alcohol below the illegal limit. Consequently, many drivers with significant and dangerous drug problems are treated solely for alcohol misuse. Even when drug-impaired drivers are identified, they often escape conviction because of legal loopholes and challenges. It is helpful to know typical DUI law enforcement procedures when considering the important changes that can be made to improve DUID detection and enforcement. These are noted in the box below.

Typical Current DUI Law Enforcement Procedures and Proposed New Procedures for DUID

- Law enforcement officers stop a driver only if they have reasonable suspicion that the driver is committing or is about to commit a crime (e.g., traffic infraction, erratic driving, etc.).
- An arrest is made only if there is probable cause. Officers establish probable cause based upon the totality of the circumstances, including Standardized Field Sobriety Test (SFST) test results and/or a preliminary breath test for alcohol.
- Evidentiary testing for alcohol is conducted post-arrest at the station. Arrestees who test below the legal limit for alcohol are tested for drugs; those who test above the 0.08 g/dL limit for alcohol are *not* tested for drugs.
    - ***New DUID Action:*** ***Screen all drivers who test above the 0.08 g/dL limit for drugs. Obtain additional samples (i.e., blood, oral fluid, or urine samples) for laboratory testing for all of those who screen positive for drugs.***
- 41 states and the District of Columbia have implemented Administrative License Revocation (ALR) laws that require law enforcement officers to immediately seize the driver's licenses of individuals arrested for DUI who refuse to provide a sample for toxicological testing or provide a sample above the 0.08 g/dL limit for alcohol.
    - ***New DUID Action:*** ***Apply ALR for drivers arrested for impairment who test positive for drugs or who refuse to provide samples for drug testing.***

The American Automobile Association proposed using a two-component structure for addressing marijuana-impaired driving of behavioral and physiological evidence of impairment and evidence of recent marijuana use.[11] Framed as "Tandem *per se* DUID" legislation by an advocate for victims of drugged driving, such a law would allow the prosecution to prove someone guilty of DUID by showing that evidence of impairment coupled with a positive drug test.[12]

The Institute for Behavior and Health, Inc. (IBH) makes the following recommendations to address the public safety threat of marijuana- and other drug-impaired driving:

1. All states should enact zero tolerance *per se* DUID legislation. Enclosed is model language from the National Partnership on Alcohol Misuse and Crime (NPAMC) and IBH.

2. Officers should test every driver whom they suspect is under the influence for drugs, including marijuana, just as they do for alcohol. This includes drivers who test above the illegal 0.08g/dL alcohol limit.

3. Every driver who is involved in a crash involving serious injuries or death should undergo laboratory based (evidential) testing for alcohol *and* drugs.

4. Law enforcement officers should be permitted to use oral fluid both for data collection purposes and as evidence in legal proceedings.

5. Administrative License Revocation (ALR) should be used for drivers arrested for impairment who fail a drug test or who refuse to provide samples for drug testing.

Effective identification and management of drug-impaired drivers will not only improve traffic safety, but it will also provide an important new path to treatment for individuals with substance use problems, just as drunk driving convictions now lead individuals with alcohol use disorders into treatment.[13]

Robert L. DuPont, M.D.
President, Institute for Behavior and Health, Inc.
Former Director, National Institute on Drug Abuse (1973-1978)
Former White House Drug Chief (1973-1977)

Corinne Shea, MA
Director of Programs and Communications
Institute for Behavior and Health, Inc.

Stephen K. Talpins, JD
Board Member
Institute for Behavior and Health, Inc.

[1] For more information on drugged driving visit www.StopDruggedDriving.org,
[2] National Highway Traffic Safety Administration. (2016, August 26). Traffic fatalities up sharply in 2015: White House and DOT issue call to action to data scientists and public health experts as 2,348 more people died in traffic crashes compared to previous year. Washington, DC: NHTSA. Available: http://www.nhtsa.gov/About+NHTSA/Press+Releases/traffic-fatalities-2015
[3] For an overview of marijuana effects see e.g., National Institute on Drug Abuse, National Institutes of Health, US Department of Health and Human Services. (2016, August). Marijuana. Research Report Series. Bethesda, MD: National Institute on Drug Abuse. Available: https://d14rmgtrwzf5a.cloudfront.net/sites/default/files/mjrrs_8_2016.pdf; Volkow, N.D., Baler, R.D., Compton, W.M., & Weiss, S.R.B. (2014). Adverse health effects of marijuana use. *The New England Journal of Medicine, 370*(23), 2219-2227.
[4] For an overview of marijuana effects on driving see e.g., Hartman, R. L., & Huestis, M. A. (2013). Cannabis effects on driving skills. *Clinical Chemistry*, *59*(3), 478-492.
[5] Tefft, B. C., Arnold, L. S., & Grabowski, J. G. (2016, May). *Prevalence of Marijuana Involvement in Fatal Crashes: Washington, 2010-2014*. Washington, DC: AAA Foundation for Traffic Safety.
[6] Wong, K., Clarke, C., & Harlow, T. (2016). *The Legalization of Marijuana in Colorado: The Impact (Vol. 4).* Denver, CO: Rocky Mountain High Intensity Drug Trafficking Area. Available: http://www.rmhidta.org/html/2016%20FINAL%20Legalization%20of%20Marijuana%20in%20Colorado%20The%20Impact.pdf
[7] Hartman, R. L., & Huestis, M. A. (2013). Cannabis effects on driving skills. *Clinical Chemistry*, *59*(3), 478-492.
[8] Wood, E. (2016). Skydiving without a parachute. *Journal of Addiction Medicine and Therapy*, *4*(1), 1020.
[9] Wood, E. (2016). Why a 5ng/ml THC limit is bad public policy - and the case for Tandem *per se* DUID legislation. *Journal of Global Drug Policy and Practice, 10*(3). Available: http://globaldrugpolicy.com/Issues/Vol%2010%20Issue%203/Articles/Why%20a%205%20ng%20limit%20is%20bad%20public%20policy%20092616.pdf
[10] Walsh, J. M. (2009). *A State-by-State Analysis of Laws Dealing with Driving Under the Influence of Drugs.* DOT HS 811 236. Washington, DC: National Highway Traffic Safety Administration.
[11] Logan, B., Kacinko, S. L., & Beirness, D. J. (2016). *An Evaluation of Data from Drivers Arrested for Driving Under the Influence in Relation to Per se Limits for Cannabis*. Washington, DC: AAA Foundation for Traffic Safety. Available: https://www.aaafoundation.org/sites/default/files/EvaluationOfDriversInRelationToPerSeReport.pdf
[12] Wood, E. (2016). Why a 5ng/ml THC limit is bad public policy - and the case for Tandem *per se* DUID legislation. *Journal of Global Drug Policy and Practice, 10*(3). Available: http://globaldrugpolicy.com/Issues/Vol%2010%20Issue%203/Articles/Why%20a%205%20ng%20limit%20is%20bad%20public%20policy%20092616.pdf
[13] For more information readers are referred to DuPont, R. L., Holmes, E. A, Talpins, S. K., & Walsh, J. M. (in press). Marijuana-impaired driving: a path through the controversies. In: K. Sabet & K. Winters (Eds.), *Contemporary Health Issues on Marijuana*. New York, NY: Oxford University Press.

National Partnership on Alcohol Misuse and Crime

Institute for Behavior and Health, Inc.

TOWARD A MODEL DUI LAW

DUI National Model Law Initiative: Defining the Crimes

An estimated 9,967 people were killed in alcohol-impaired driving crashes in 2014, comprising 31% of all traffic-related deaths in the United States.[i] An unknown number were killed in drugged driving crashes. Every state and territory in the United States has a system of laws designed to address impaired driving; however, the laws vary dramatically in scope and effectiveness. In order to remedy this, the Institute for Behavior and Health, Inc. (IBH) and National Partnership on Alcohol Misuse and Crime (NPAMC) began collaborating on a national model Driving Under the Influence (DUI) law in April 2010.

They convened a committee of prosecutors, toxicologists and other traffic safety experts to review a model drafted by NPAMC CEO Stephen Talpins based on effective laws from around the country. The committee was co-chaired by Omaha City Prosecutor Marty Conboy and the National District Attorneys Association's (NDAA) National Traffic Law Center (NTLC) Senior Attorney, Mark Neil. Committee members included: Clay Abbot, Laura Bailey, Lara Baker, Bruce Chalk, Lee Cohen, Roger Doherty, Elizabeth Earleywine, Laurel Farrell, Paul Glover, Susan Hackworthy, Robert Forrest, Jennifer Messick, Rodney Owen, Corinne Shea, Robert Voas, and David Wallace.

The committee recommended several changes which were reviewed by Stephen Talpins and IBH President Robert L. DuPont. They adopted most of the recommended changes resulting in a model that represented the thinking of the nation's DUI experts. On November 1, 2010, they released the first set of provisions defining the crimes of alcohol and/or drugged driving and "internal possession" of chemical and controlled substances.

[i] National Center for Statistics and Analysis. (2015, December). Alcohol-impaired driving: 2014 data. (Traffic Safety Facts. DOT HS 812 231). Washington, DC: National Highway Traffic Safety Administration

Model DUI Law: DUI and Internal Possession of a Chemical or Controlled Substance, Defined

Section _____
Prohibiting driving under the influence of alcohol or drugs; definition

(1) A person is guilty of the offense of driving under the influence and is subject to punishment as provided in subsection (2) if the person is driving or in actual physical control of a vehicle anywhere within this state and:

(a) The person is under the influence of alcoholic beverages, a chemical or controlled substance as defined in s. _____, any other impairing substance or any combination of two or more of these substances while impaired to the slightest degree; or

(b) The person has an alcohol concentration of 0.080 or more grams of alcohol per 100 milliliters of blood, 0.080 or more grams of alcohol per 210 liters of breath at the time of driving; or

(c) The person has an alcohol concentration of 0.080 or more grams of alcohol per 100 milliliters of blood or 0.080 or more grams of alcohol per 210 liters of breath at the time of driving or any time after driving as a result of alcohol consumed before or during driving; or

(d) There is any amount of a Schedule 1 chemical or controlled substance as defined in s. _____[1] or one of its metabolites or analogs in the person's blood, saliva, urine, or any other bodily fluid; or

(e) There is any amount of a Schedule 2, 3 or 4 chemical or controlled substance as defined in s. _____ or one of its metabolites or analogs in the person's blood, saliva, urine or any other bodily fluid. The fact that a person charged with violating this provision consumed the drug pursuant to a prescription issued by a licensed health professional authorized to prescribe it and injected, ingested, or inhaled the controlled substance in accordance with the health professional's directions shall constitute an absolute affirmative defense against any charge of violating this provision related to that particular drug, but no other substance and not any other provision under subsection 1.

(f) With the exception of (1)(e), the fact that any person charged with violating this subsection is or was legally entitled to consume alcohol or to use a controlled substance, medication, drug or other impairing substance, shall not constitute a defense against any charge of violating subsection 1.

Section _____
Prohibiting the Internal Possession of Chemical or Controlled Substances

Any person who provides a bodily fluid sample containing any amount of a chemical or controlled substance as defined in s. _____ commits an offense punishable in the same manner as if the person otherwise possessed that substance.[2] The fact that a person charged with violating this provision consumed the drug pursuant to a prescription issued by a licensed health professional authorized to prescribe it and

[1] Pursuant to 21 USC Sec. 812, Schedule 1 drugs or substances have a "high level of abuse" and "no currently accepted medical use in treatment in the United States."
[2] This crime would be the equivalent of possession of a controlled substance and would be punished in the same manner.

injected, ingested, or inhaled the controlled substance in accordance with the health professional's directions shall constitute an absolute affirmative defense against any charge of violating this provision.

NOTE: This provision is not a DUI specific law. Rather, it applies to any person who tests positive for chemical or controlled substances. Because so many DUI offenders are tested for drugs, we include this provision in our model.

About the National Partnership on Alcohol Misuse and Crime

The National Partnership on Alcohol Misuse and Crime (NPAMC) is a public-private partnership established to bring together stakeholders in the issue of alcohol misuse and crime in order to effectively change the way the United States justice system manages and rehabilitates offenders who misuse alcohol. Established in April 2008, NPAMC is comprised of more than 50 participating organizations and their representatives, including scientists and researchers, justice professionals, victims groups, treatment professionals, the corrections industry, pharmaceutical and technology companies, policy experts and distilleries. For more information, please visit the NPAMC website at www.alcoholandcrime.org.

About the Institute for Behavior and Health, Inc.

Founded in 1978, the Institute for Behavior and Health, Inc. (IBH) is a 501(c)3 non-profit organization that identifies, develops and promotes new ideas to reduce the use of illegal drugs. For more information, please visit www.ibhinc.org and www.StopDruggedDriving.org.