

## **Mothers Against Drunk Driving®**

Survey Conducted February 2020 Released September 2020





## **AMANDA HILL**

## MADD DEDICATES THIS REPORT TO AMANDA. DENISE AND ED, THE ENTIRE HILL FAMILY, AND TO ALL THE VICTIMS OF THE 100 PERCENT PREVENTABLE CRIMES OF DRUNK AND DRUG-IMPAIRED DRIVING.

marijuana. She was 24 years old. Amanda loved life and was very kind and compassionate.

Amanda was a talented veterinary technician and loved working with exotic animals. She had a bright future ahead of her, having recently completed an internship at the Denver Zoo. At home, she had her own little zoo consisting of a chinchilla, hedgehog, parrot, bunny, sugar gliders and cats.

Amanda's mother, Denise, shared these thoughts. "Our family understands all too well the impact of drug-impaired driving.

n June 2018, Amanda Hill was hit head on by a driver high on Our beautiful daughter lost her life due to the injuries she sustained in that horrific crash. That one decision to drive impaired changed many lives that fateful day. She was a cherished daughter and loved sister, and has many friends and family that mourn her loss."

> After working with MADD, Denise and Amanda's father, Ed, have become powerful advocates for stricter laws surrounding marijuana use while operating a vehicle and participated in MADD Colorado's drugged driving prevention campaigns in 2019 and 2020. We will be forever grateful to Denise, Ed, and the Hill family for dedicating their lives to saving others in memory of Amanda.

## I could not have imagined that in June of that year, a 17-year old who spent the day consuming alcohol and marijuana would end Helen Marie's life and permanently alter ours.

overwhelmed. She screamed when the nurses cleaned her up, and she screamed when they swaddled her. Then, like a miracle, it stopped. The instant Helen Marie felt the warmth of my chest and heard my heartbeat, the crying stopped. She had spent nine months next to my heart. I imagine all she knew was that she was there again.

Over the next months and years, Helen Marie and her brother, John, born three years later, showed me what motherhood meant. Sixteen years later, that spirited baby girl had turned into a thoughtful. well-adjusted teen, and my husband and I were so proud of both our children. I could not have imagined that in June of that year, a 17-year old who spent the day consuming alcohol and marijuana would end Helen Marie's life and permanently alter ours.

It happened on a sunny afternoon, I listened as 16-year-old Helen Marie strapped on her rollerblades. She was directing a play at school the next day, and she was nervous. Rollerblading her regular route on the bike path near our home would help calm her, she told me. My daughter was just a few blocks from home when the teen driver who'd been working off her stress with shots of tequila and marijuana lost control of her speeding car and ran onto the bike path. My daughter died an instant, violent death. Her teenage killer went to prison. Our lives were shattered. Forever changed. This tragedy didn't have to happen. It shouldn't have happened.

A lot has changed in the 20 years since the day Helen Marie died. MADD succeeded in our push for every state to enact a .08 BAC limit, passed laws requiring ignition interlocks for all drunk driving offenders in 34 states, and D.C., and educated over 1.1 million youth and parents about the dangers of underage drinking.

Tragically, a lot has not changed. Each year, more than 10,500 people are killed and 300,000 are injured in drunk driving crashes. And, the evidence is mounting that drivers are increasingly impaired by drugs other than alcohol, including marijuana. We have so much Helen Witty, MADD National President more work to do.

hen Helen Marie entered the world screaming, I felt In 2015, MADD expanded our mission to include fighting drugimpaired driving, reflecting our commitment and long history of serving victims of both drunk and drugged driving. MADD created a Drugged Driving Task Force with key law enforcement, traffic safety, and research experts to study the potential effects of marijuana legalization, the national opioid crisis, and the prevalence of prescription drugs could have on impaired driving. The task force learned from these experts that proven tools to combat drunk driving, such as high-visibility law enforcement by specially trained officers, will prevent tragedies caused by drug-impaired driving.

> We also learned that there is so much more to learn. We need more research, more data, and better testing to fully understand how the increased use of marijuana and other drugs will impact traffic safety and the under 21 population.

> Four decades after MADD first challenged the nation to dramatically change lax attitudes and laws toward drunk driving, we are rolling up our sleeves again to stop the tragedies caused by marijuana impaired driving and under 21 consumption. This survey is a critical step toward understanding Americans' behaviors and attitudes toward marijuana use, impairment, and driving. The results are both informative and incredibly alarming. My sincere hope is the findings will serve as a guide toward solutions that will honor those we could not save and lead us to a nation of **NO MORE VICTIMS** ®.

Best Wishes and Please Stay Safe,

Sheen With







### MORE RESEARCH, LESS FICTION.



since MADD's founding in 1980, we have advocated for stronger laws and policies based on proven research and data. With a growing number of states allowing legal use of marijuana, our nation must understand its impairing effects on our drivers and implement policies that improve the safety of our nation's roadways.

That is why more research and data for drugged driving is needed to help define and identify the impairing effects of legal and illegal drugs, and to better understand the number of drivers involved in drug-impaired driving crashes. It is critical that we have research and data to better understand the problem of drugged driving. While there is a lot we don't know as it relates to marijuana-impaired driving, we do know that the fictions and myths surrounding the drug are growing. Like the idea that it makes you a better driver or that it's "natural" and therefore safe. Or that "it isn't addictive."

We know that driving while under the influence of marijuana does not make you a better driver. According to the Centers for Disease Control and Prevention, THC, the main active ingredient in marijuana, affects areas of the brain that control the body's movements, balance, coordination, memory and judgment — skills needed to drive safely <sup>1</sup>. Studies have shown that, of seriously injured drivers admitted to trauma centers, more than 1 out of 4 tested positive for marijuana <sup>2</sup>. In addition, it is known that marijuana is the most frequently detected drug (other than alcohol) in crash-involved drivers as well as the general driving population <sup>3</sup>.

We know that the dangers become even greater when marijuana is combined with alcohol, which is still the deadliest threat on our roadways. Yet as more states legalize marijuana, more young people are using the drug along with alcohol. Research also tells us that 1 in 3 young people who drink alcohol have also combined it with marijuana.

Research has also shown that marijuana is not safe for the developing brain. Outside of alcohol, marijuana is the leading cause of addiction and the drug of choice for youth <sup>4</sup>. According to the National Institute on Drug Abuse, about 1 in 5 young people reported using marijuana just in the last month <sup>5</sup>. By age 20, about half of young people had used it. According to new research, approximately 1 in 7 middle school 8th graders have used marijuana in their lifetime. That number doubles to 1 in 3 by the time these children complete middle school <sup>5</sup>.

As we celebrate MADD's 40<sup>th</sup> Anniversary this year, it's important to remember that alcohol is a drug. It took decades to learn that the level for illegal alcohol impairment is .08 BAC, and to establish routine tests for blood alcohol concentration in drivers involved in fatal crashes. The tools for measuring alcohol impairment are well established. The same cannot be said for drug impairment, but that doesn't diminish the seriousness of drug-impaired driving.

MADD will continue to press for research, new laws, and development of tools to eliminate — once and for all — the senseless, dangerous and completely preventable crime of driving while impaired by any drug. Sadly, MADD serves drunk and drugged driving victims and survivors every day. We want these victims and survivors to know that we are working hard to stop these senseless and 100 percent preventable crimes.

Without a doubt, MADD has made measurable impact on the safety of our roadways and saved hundreds of thousands of lives over the last 40 years. We remain steadfast in our commitment to a future of **NO MORE VICTIMS**°.

MADD will continue to press for research, new laws and development of tools to eliminate - once and for all - the senseless, dangerous and completely preventable crime of driving while impaired by any drug.

<sup>1.</sup> https://www.cdc.gov/marijuana/pdf/Marijuana-Driving-508.pdf

<sup>2.</sup> Walsh JM, Flegel R, Atkins R, et al. Drug and alcohol use among drivers admitted to a Level-1 trauma center. Accid Anal Prev. 2005;37(5):894-901. doi:10.1016/j.aap.2005.04.013

<sup>3.</sup> Compton, R. (2017, July). Marijuana-Impaired Driving - A Report to Congress. (DOT HS 812 440). Washington, DC: National Highway Traffic Safety Administration.

<sup>4.</sup> Curran, H. V., Hindocha, C., Morgan, C. J., Shaban, N., Das, R. K., & Freeman, T. P. (2019). Which biological and self-report measures of cannabis use predict cannabis dependency and acute psychotic-like effects?. Psychological medicine, 49(9), 1574-1580.

<sup>5.</sup> https://www.drugabuse.gov/drugs-abuse/marijuana

## THE BEST WAY TO FIGHT DRUGGED DRIVING IS TO DO MORE DRUNK DRIVING ENFORCEMENT

aw enforcement officers are our best allies in the effort to reduce drugged driving and are the heroes who make our roads safe. Much like with drunk driving, the best way to deter and detect would-be drugged drivers is through the use of high-visibility enforcement tactics. These include sobriety checkpoints and saturation patrols.

Because of the wide array of drugs and their varying levels of impairment, training is key to ridding our roadways of drugged drivers. That's why MADD supports the full implementation of specialized training programs to assist law enforcement officers in detecting drugged drivers.

#### **DRUG RECOGNITION EXPERTS (DRE)**

The Drug Evaluation and Classification (DEC) program was created through a collaboration between the National Highway Traffic Safety Administration (NHTSA) and the International Association of Chiefs of Police (IACP).

The DEC program, also referred to as the Drug Recognition Expert (DRE) program, was developed to help officers identify drug-impaired drivers. To become a DRE, officers must follow a rigorous three-phase training curriculum and learn to conduct a standardized and systematic 12-step evaluation consisting of physical, mental, and medical components.

## ADVANCED ROADSIDE IMPAIRED DRIVING ENFORCEMENT (ARIDE)

For those agencies that lack the funding to employ a full time DRE, an alternative training has been established – the Advanced Roadside Impaired Driving Enforcement (ARIDE) program.

ARIDE was created by NHTSA to address the gap between the traditional Standard Field Sobriety Test training given to officers to assist in detecting impaired drivers and the DEC/DRE program. The course requires 16 hours of classroom training versus the three-phase curriculum required to become a certified DRE.

## STANDARDIZED FIELD SOBRIETY TESTING (SFST)

Standardized Field Sobriety Testing (SFST) remains the foundation of impaired driving detection and enforcement for some 800,000 officers across the country. Some states, however, do not require SFST training for officers assigned to patrol functions. MADD expects all officers to have the basic SFST skills to detect an impaired driver on the road. In addition, MADD strongly encourages law enforcement agencies to conduct periodic refresher courses in the basic use of SEST skills.



#### BACKGROUND & METHODS

iven the broad variation in state marijuana laws – and the rate at which these laws are changing – there is a large amount of public confusion and misinformation on the effects of driving under the influence of THC. The Report set out to better understand public attitudes and awareness when it comes to marijuana-impaired driving. In addition, the report will provide a foundation on which to base outreach and education aimed at reducing crashes and fatalities on the roads due to impaired driving from the use of THC.

The MADD Cannibas Report was conducted by Ipsos Public Affairs using the KnowledgePanel—the only large-scale representative panel of the adult population in the U.S. for which members are recruited using a probability-based and address-based sampling methodology. In order to maintain full representation of all adults, households without internet access are provided internet-enabled devices and an internet service provider (ISP) as well.

From February 14, 2020 - February 18, 2020, a random sample of 1,020 adults, 18 years of age and older from across the United States were interviewed, including:

#### N=270

interviews in states where marijuana is fully legal

#### N=427

interviews in states where marijuana is legal for medicinal purposes, only

#### N=323

interviews in states where marijuana is fully illegal

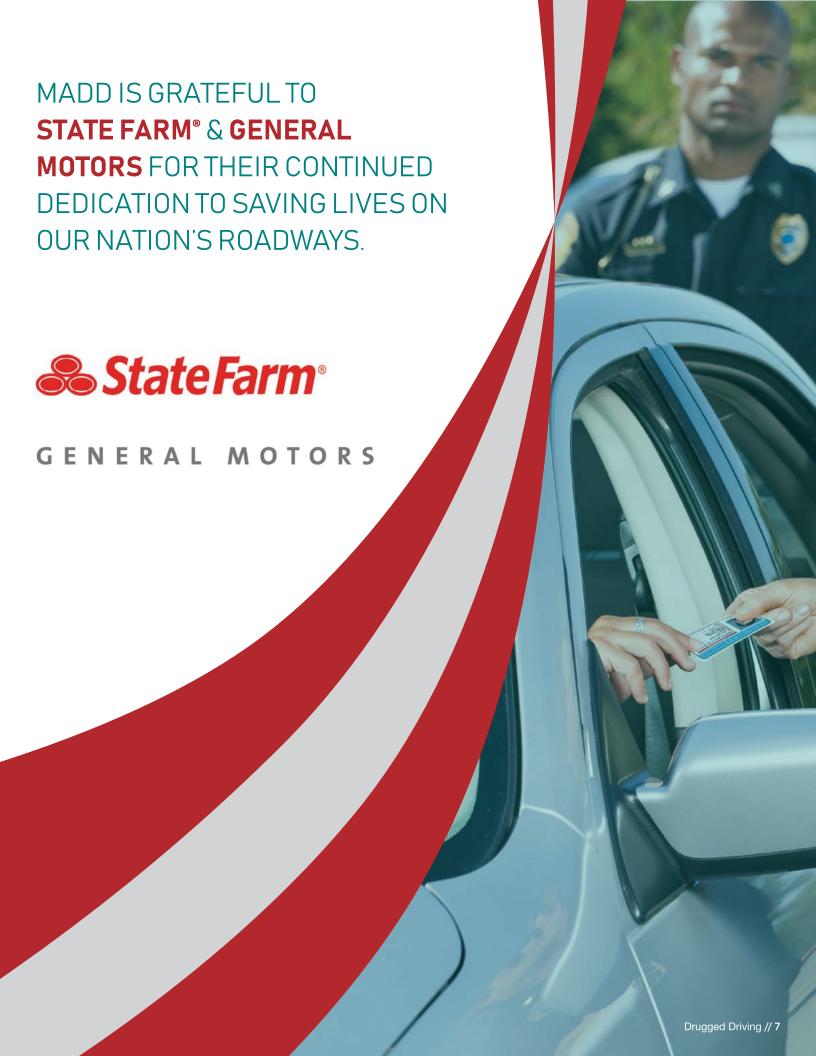
In addition to the national sample, another 765 interviews were conducted to achieve a minimum of 150 responses in 6 key states, including Colorado.

#### **KFY FINDINGS**

- Driving after recently consuming marijuana is seen as less of a public safety concern (46% rate as "very concerning") than alcohol (54%) <sup>1</sup>.
- 12% admit to personally driving within two hours of consuming marijuana.
- Many (41%) believe that driving under the influence of marijuana is safer than driving under the influence of alcohol.
- 27% recall a friend or family member driving within two hours of consuming alcohol sometime during the past three months.
- 13% recall someone close to them driving within two hours of consuming marijuana in the past three months.
- More than 6 in 10 answer incorrectly or are unsure whether a person's frequency (67%) and method (62%) of consuming marijuana will impact how long it stays in one's system.
- 41% are unsure or incorrectly believe that people who regularly use marijuana are generally not impaired, making it safe to drive.
- There is also uncertainty in whether it is legal to drive impaired by marijuana: 40% view this as a serious crime, 27% say it is only a minor traffic offense, 4% think it is legal, and 27% are unsure.
- 79% agree they don't hear much about driving high <sup>1</sup> in the news today, though another 76% believe it will only increase as more states legalize marijuana use.
- 83% believe that additional research needs to be done about the effects of driving high, with close to half (47%) "strongly" agreeing with this statement.
- Colorado residents stand out as being significantly more knowledgeable about the effects of driving under the influence of marijuana. Other states, including those where marijuana has been legalized, tend to have attitudes and behaviors that are more similar to U.S. adults nationwide.

<sup>1. &</sup>quot;driving within two hours of consuming marijuana/cannabis/THC" and "driving within two hours of consuming alcohol"

This survey was conducted February 14 – 18, 2020, before widespread impacts of the coronavirus pandemic in the US. It is viewed as a baseline of perceptions and attitudes.



## 1 IN 8 NATIONALLY ADMIT TO DRIVING UNDER THE INFLUENCE OF MARIJUANA

welve percent of adults across the United States admit to driving within two hours of consuming marijuana (Figure 1.1). This figure rises to 16% among U.S. adults ages 50-64, while men are more than twice as likely as women to report driving under the influence of marijuana (17% vs. 7%). Additionally, those who report having driven under the influence of marijuana tend to believe it is safer than alcohol (70% vs. 37% among those who have not driven under the influence of marijuana) and less of a public safety concern (25% vs. 50%) (Figure 1.2 and 1.3).

At the other end of the spectrum, young adults across the United States – those ages 18-24 – tend to be somewhat more cautious than those ages 25-34, when it comes to driving under the influence of marijuana. For instance, 18-24 year-olds are half as likely as those ages 25-34 to report driving within two hours of consuming marijuana (6% vs. 13%). They are also less likely to believe that driving under the influence of marijuana is safer than alcohol (37% vs. 57%). And lastly, they are more likely to view driving high as a "very concerning" public safety issue (52% vs. 29%).



Figure 1.3

**DRIVING UNDER THE** 

**INFLUENCE OF MARIJUANA** 

IS A VERY CONCERNING PUBLIC SAFETY ISSUE

Figure 1.1
EVER DRIVEN WITHIN 2 HOURS
OF CONSUMING MARIJUANA

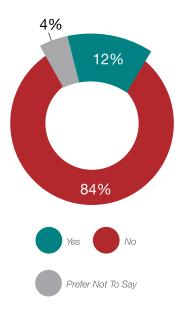
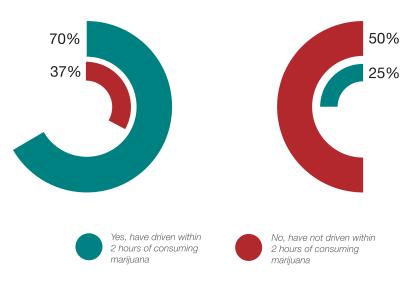
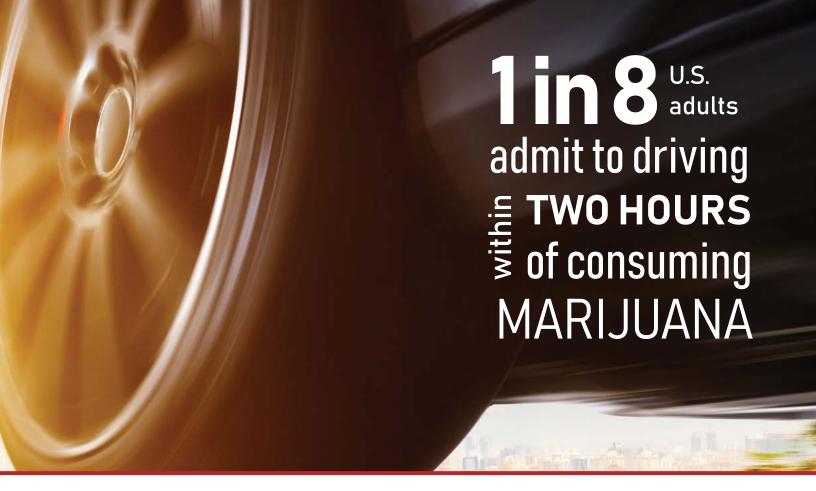


Figure 1.2
DRIVING UNDER THE
INFLUENCE OF MARIJUANA
IS SAFER THAN ALCOHOL





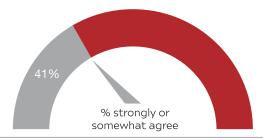
# DRIVING HIGH SEEN AS LESS CONCERNING - AND SAFER-THAN DRIVING DRUNK

S. adults ages 18 and over were asked to assess the level of public safety concern that driving within two hours of consuming alcohol and within two hours of consuming marijuana poses to their communities. More than half (54%) rate driving after recent consumption of alcohol as "very concerning," while fewer than half (46%) are "very concerned" when it comes to marijuana. Moreover, a sizable one in four (26%) see driving after recent consumption of marijuana to be "a little" or "not at all concerning" (Figure 1.4).

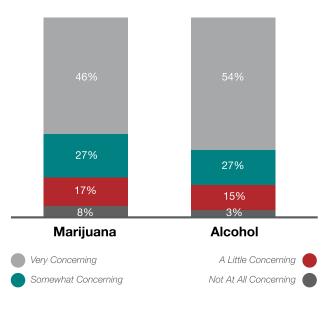
Not only is driving under the influence of marijuana seen as less of a public safety concern than alcohol, but many U.S. adults believe it is safer as well. 4 in 10 (41%) agree either strongly or somewhat that driving under the influence of marijuana is safer than driving under the influence of alcohol (Figure 1.5).

Figure 1.5

DRIVING UNDER THE
INFLUENCE OF MARIJUANA
IS SAFER THAN DRIVING
UNDER THE INFLUENCE
OF ALCOHOL



## Figure 1.4 DEGREE OF PUBLIC SAFETY CONCERN (DRIVING WITHIN 2 HOURS OF CONSUMING...)



# OPPORTUNITIES FOR COMMUNICATION EXIST AROUND BOTH DRUNK DRIVING AND DRIVING HIGH

ore than 1 in 4 (27%) U.S. adults recall a friend or family member driving within two hours of consuming alcohol sometime within the past three months. About half as many (13%) say the same of marijuana. These figures are largely consistent among both men and women, and across most age groups. Adults ages 65-plus are the exception, where recall is lower for marijuana (5%).

43% of parents and grandparents report "never" broaching the subject of driving high with the next generation.

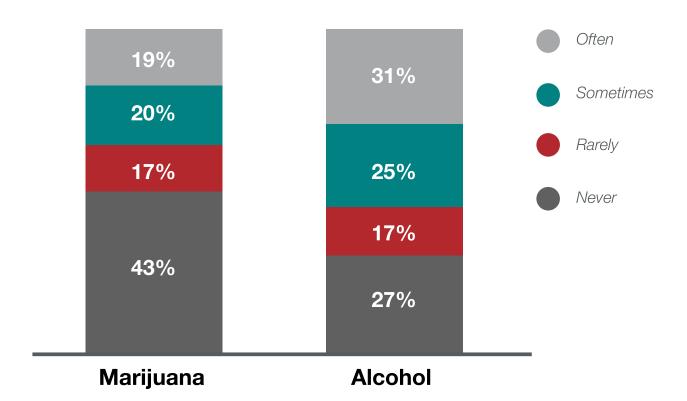
Given that U.S. adults are more likely to recall someone close to them driving under the influence of alcohol than of marijuana, it comes as little surprise that conversations about drunk driving are happening more often as well.

Parents and grandparents were asked how frequently they discuss the potential consequences of driving after recently consuming both alcohol and marijuana. Three in 10 (31%) report discussing the consequences of driving under the influence of alcohol "often." Fewer – just 1 in 5 (19%) – say the same of marijuana. In fact, more than 4 in 10 (43%) parents and grandparents report "never" broaching the subject of driving high with the next generation (Figure 1.6).

Figure 1.6

FREQUENCY OF DISCUSSING WITH CHILDREN / GRANDCHILDREN

(DRIVING WITHIN 2 HOURS OF CONSUMING...)



# MUCH CONFUSION EXISTS AROUND HOW LONG MARIJUANA STAYS IN A PERSON'S SYSTEM AND THE EFFECTS OF DRIVING AFTER CONSUMING MARIJUANA

here is a good deal of confusion when it comes to the length of time that marijuana stays in a person's system. For instance, two-in-three (67%) U.S. adults are unsure or answer incorrectly on the notion that a person's tolerance level, or how often it is used, will impact how long marijuana stays in one's system (Figure 1.7).

Nearly as many (62%) are unsure or answer incorrectly on the method of consumption – smoking, vaping, edibles, topical creams/oils, etc. – playing a role in how long marijuana stays in a person's system (Figure 1.7). Moreover, 4 in 10 (41%) U.S. adults are unsure or incorrectly believe that people who regularly use marijuana are generally not impaired, making it safe to drive (Figure 1.7).

## Figure 1.7 KNOWLEDGE OF EFFECTS OF DRIVING AFTER CONSUMING MARIJUANA



Incorrect/Not Sure

Correct



The length of time that marijuana will stay in a person's system depends on how often he/she uses it.

67%

33%

The length of time that marijuana will stay in a person's system depends on how it is taken.

**62**%

37%

People who regularly use marijuana are generally not impaired after using, allowing them to drive safely.

41%

59%





## MUCH CONFUSION EXISTS AROUND THE LEGAL IMPLICATIONS OF DRIVING AFTER CONSUMING MARIJUANA

here is also a general lack of knowledge on the laws surrounding the use of marijuana. 4 in 10 (40%) U.S. adults view driving while impaired by marijuana as a serious crime (Figure 1.8). Yet, this leaves nearly 3 in 10 U.S. adults under the impression that driving while impaired by marijuana is only a minor traffic offense (27%) or unsure of the legal implications (27%) (Figure 1.8). Additionally, 1 in 25 (4%) U.S. adults believe it is legal to drive while impaired by marijuana.

This lack of clarity may be giving U.S. adults a false sense of confidence that driving high is generally without consequence. In fact, 3 in 10 (31%) believe that driving within two hours of consuming marijuana "hardly ever" results in consequences like a crash, getting a ticket, or getting arrested (Figure 1.9). Another 44% believe that consequences from driving under the influence of marijuana occur "only sometimes," (Figure 1.9). These figures register at 12% and 47%, respectively, when it comes to driving within two hours of consuming alcohol (Figure 1.9).

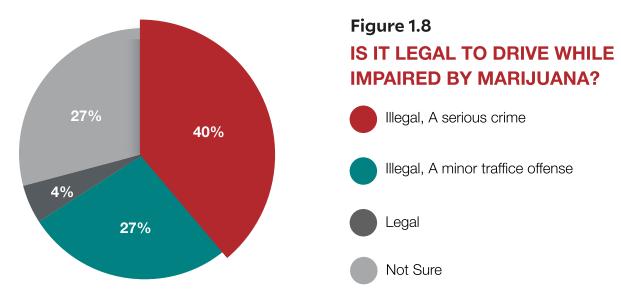
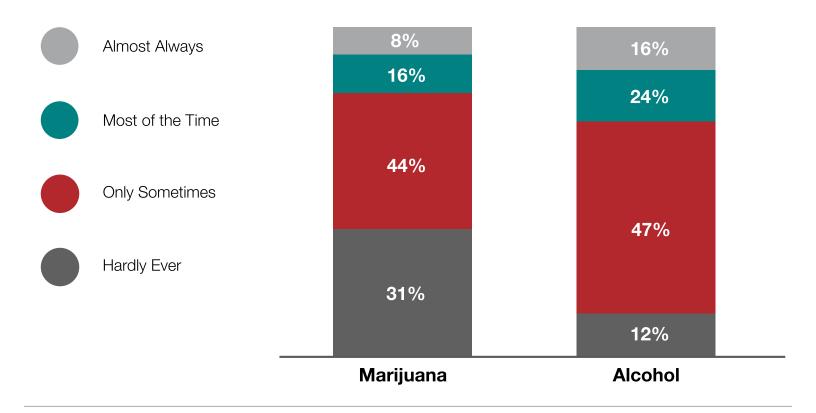




Figure 1.9
FREQUENCY OF CONSEQUENCES FROM DRIVING WITHIN 2 HOURS OF CONSUMING MARIJUANA VERSUS ALCOHOL

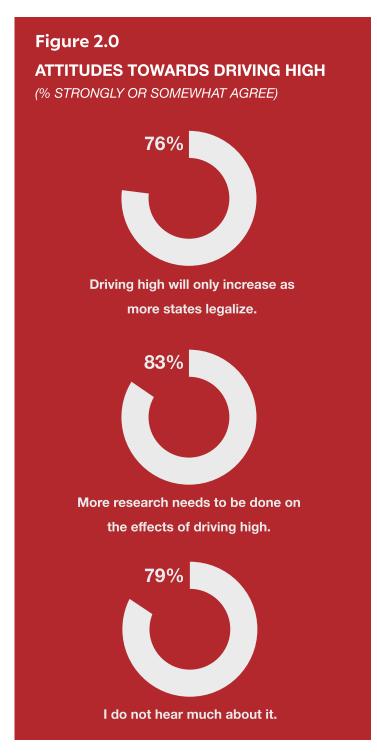


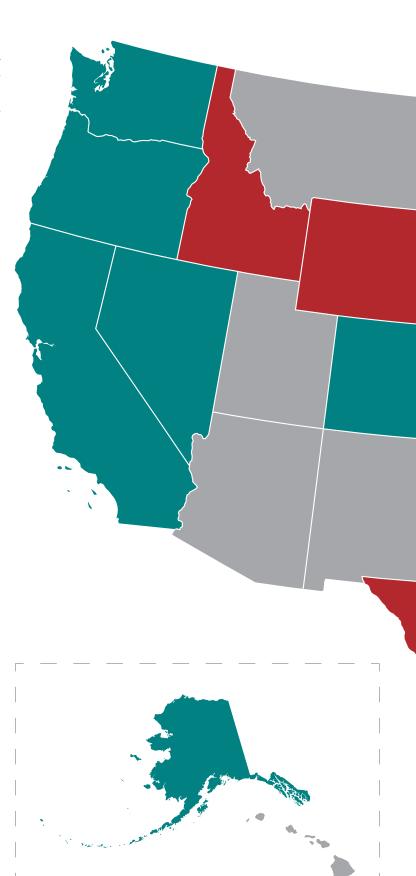




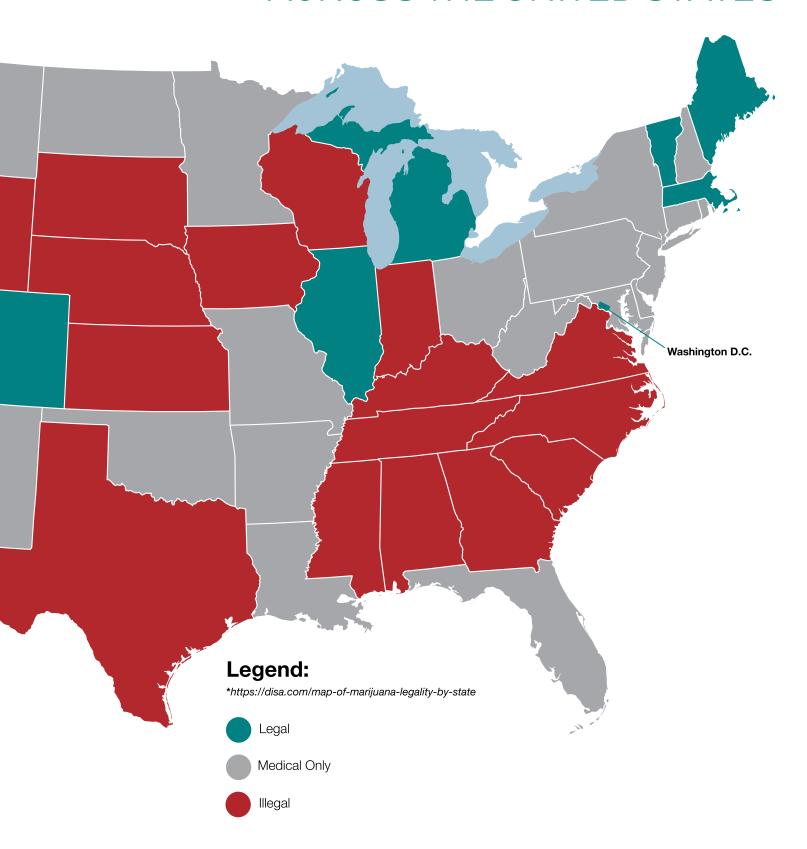
## U.S. ADULTS WANT ACTION ON DRIVING HIGH

hile the issue of driving high may not be top-of-mind for many U.S. adults, there is a sense that things could worsen – and that more information and research is needed. While 8 in 10 (79%) agree they don't hear much about driving high in the news today, nearly as many (76%) agree that we will see an uptick in driving high as more states legalize marijuana use (Figure 2.0). And more than 8 in 10 (83%) believe that additional research needs to be done about the effects of driving high; nearly half (47%) "strongly agree" with this statement (Figure 2.0).





# MARIJUANA LEGALIZATION ACROSS THE UNITED STATES



#### STATE FINDINGS

n addition to analyzing national results, the MADD Cannabis Report also sought to understand the extent to which attitudes and behaviors differ based on the states in which survey participants reside. Colorado – one of the earliest states to legalize marijuana for both recreational and medicinal purposes – stands out as having residents who are significantly more knowledgeable about the effects of driving under the influence of marijuana.

Half (52%) of Colorado residents view driving high as a "very concerning" public safety issue. Yet, these individuals are significantly more likely than U.S. adults overall to view driving while impaired by marijuana as a minor traffic offense (37% vs. 27%), driving home the need for clearer information on the laws surrounding driving under the influence of marijuana. Other states, including those where marijuana has been fully legalized, tend to have attitudes and behaviors that are more similar to the general public overall **(Figure 2.1)**.

	COLORADO	NATIONAL	FULLY LEGAL	MEDICINAL ONLY	ILLEGAL
Figure 2.1	n=156	n=1,020	270	427	323
Driving within 2 hours of consuming marijuana is a "very concerning" public safety issue.	52	46	46	47	45
Answer correctly that					
"People who regularly use marijuana are generally not imapired after using, allowing them to drive safely" is a MYTH.	73	59	61	59	56
"The length of time that marijuana will stay in a person's system depends on how it is taken" is a REALITY.	50	37	43	35	36
"It is safe to drive after consuming marijuana if it has been purchased in a state where it is sold legally, in a store or dispensary" is a MYTH.	86	64	67	65	63
Have driven within 2 hours of consuming marijuana.					
Yes.	18	12	12	10	14
No.	78	84	79	87	84
Prefer not to say.	4	3	7	2	2
View driving while impaired by marijuana as					
Illegal – serious crime.	39	40	39	36	46
Illegal – a minor traffic offense.	37	27	32	30	21
Legal.	3	4	4	3	4
Not sure.	20	27	24	30	26

<sup>\*</sup>Figure represents percent of respondents
Underlined figure (X) represents a significantly higher score vs. the national sample at the 95% confidence interval

#### A MOTHER'S PLEA

riving under the influence of any drug, including marijuana, all too often has tragic consequences. Combining both marijuana and alcohol is even more dangerous than using either substance alone, leading to greater impairment and a greater risk of getting into a crash. I know this all too well. The sudden loss of my beautiful daughter left me broken and barely functioning. It left me uncertain of my own survival; surely, the grief would kill me.

Over time – thanks to MADD, thanks to my faith and my family and friends who propped me up – I learned that I could survive. I learned, as a dear friend and fellow victim often reminds me, to incorporate the sadness into my life without letting it become my life. I learned to remember my daughter without constant pain. I learned to remember with joy.

Helen Marie is with me wherever I go. She is with me as I travel across the country as MADD National President. She is with me as i meet the law enforcement officers who work every day to fight this crime. She is with me as i listen to the stories of victims and survivors and recognize in their faces the crushing pain of loss. And she is with me when I greet volunteers, MADD chapter founders and staff members dedicated to our cause.

She is at the heart of my plea when I say just because you drive somewhere, doesn't mean you have to drive home. We live in a world with so many options available today, there is never any excuse to drive impaired. Please, designate a non-drinking, non-consuming driver, use public transportation, call a taxi or use a ride share app.

Drunk and drugged driving is a danger to everyone on the road. As more states legalize marijuana, we need to work even harder to make sure everyone makes it home safe. It's up to all of us. Plan ahead for a safe ride home, don't drive under the influence of drugs or alcohol.



Helen Witty, MADD National President



THE MISSION OF MOTHERS AGAINST DRUNK DRIVING® IS

TO END DRUNK DRIVING, HELP FIGHT DRUGGED DRIVING.

SUPPORT THE VICTIMS OF THESE VIOLENT CRIMES AND

PREVENT UNDERAGED DRINKING.



#### **MADD National Office**

511 E. John Carpenter Freeway Suite 700 Irving, TX 75062 877.ASK.MADD (877.275.6233) madd.org

## **SPECIAL THANK YOU TO**



GENERAL MOTORS



© 2020 Mothers Against Drunk Driving

State Farm and the State Farm logo are registered trademarks of State Farm Mutual Automobile Insurance Company.