



April 2019

Study: Marijuana Use & Driving

**BASED ON A SURVEY OF 811 DRIVERS WHO USE MARIJUANA
IN 10 RECREATIONAL STATES + WASHINGTON, DC**

About the Report

The Zebra is the nation's leading insurance comparison site and an independent source for auto insurance quotes, consumer education, and original research about the insurance industry and forces impacting it — including potential risks such as marijuana use.

At the time of publication, 10 states and Washington, D.C., have legalized the recreational use of marijuana, which in many ways has normalized the practice and given way to a robust industry for all things cannabis. Despite its increasing prevalence, however, there's still a lot of uncertainty regarding acceptable and safe practices for using marijuana — especially when it comes to driving.

So, how are drivers in recreational states navigating these choices?

This report explores:

- The habits of drivers who use marijuana
- How drivers decide when and if they're OK to drive after using marijuana
- What impairments drivers experience while driving under the influence of marijuana
- What drivers think of the impact of marijuana on driving safety and regulation

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ABOUT THE SURVEY

About the Survey

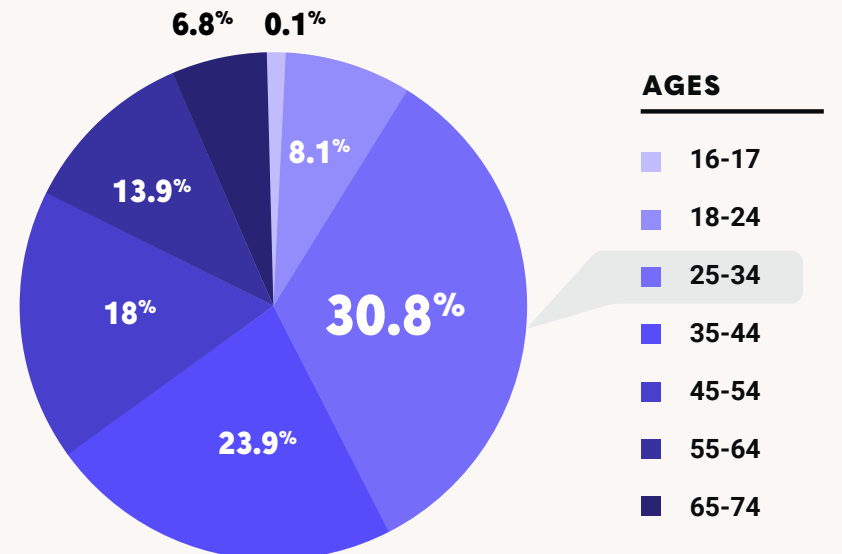
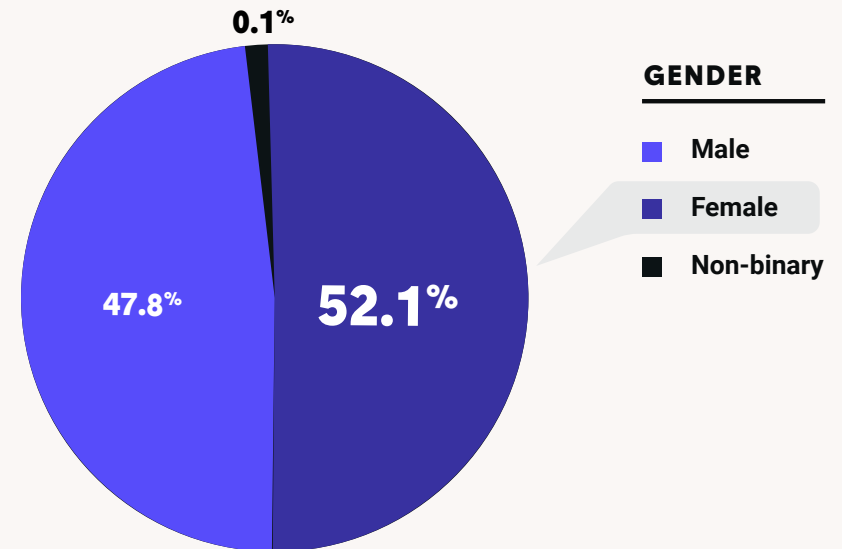
Methodology

The Zebra's report presents the findings of an anonymous online survey of 811 drivers ages 16-74, residing in states where recreational use of marijuana is legal (AK, CA, CO, ME, MA, MI, NV, OR, VT, WA, and Washington, D.C.). All respondents self-identify as consumers of marijuana and/or marijuana-based THC or CBD products on at least an occasional basis. The survey was conducted by independent research firm SurveyGizmo from March 20-25, 2019.

Survey respondents:

- All drivers (at least monthly)
- All reside in states where recreational marijuana use has been legalized
- All use marijuana at least occasionally

SURVEY RESPONDENTS



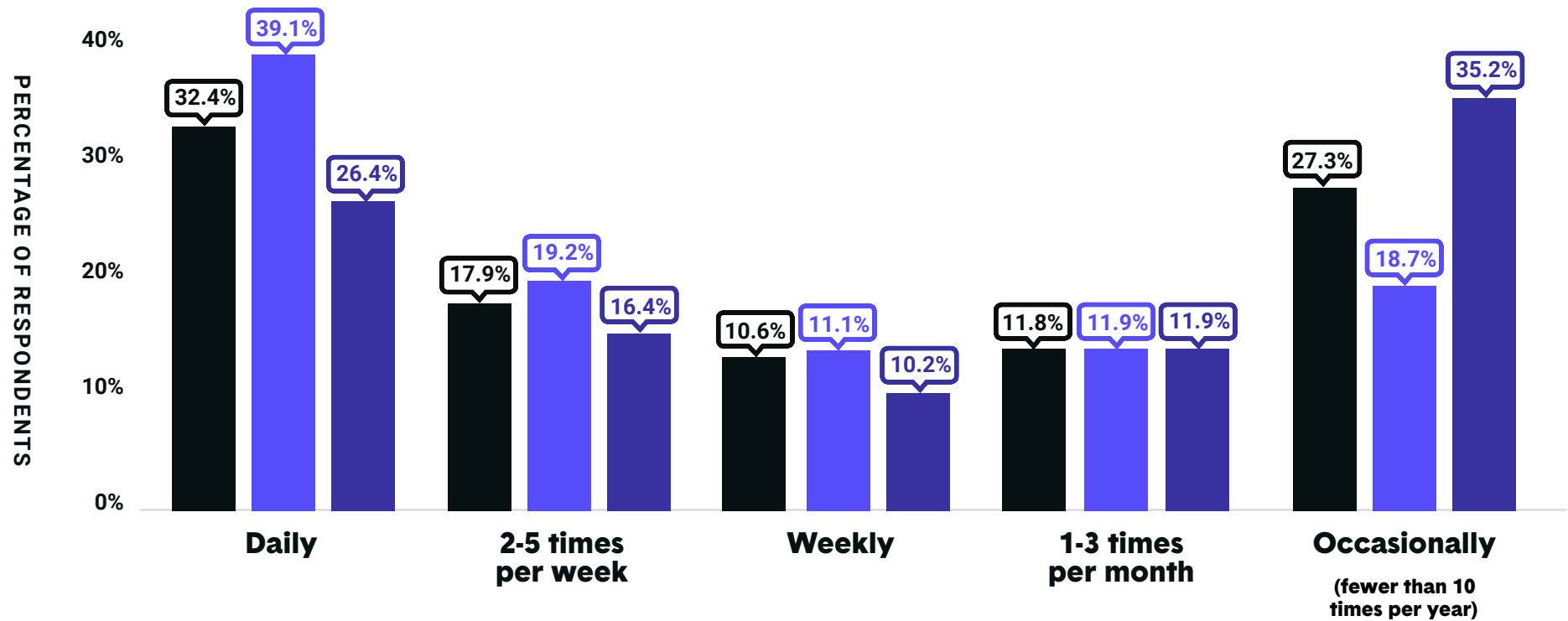
Marijuana Use & Habits

The following questions were designed to explore the current habits and preferences of people using marijuana in states where it is legal for them to do so recreationally. Responses by gender were included for this section as they indicated some notable distinctions in habits and preferences.

Frequency



How often do you consume marijuana (including any marijuana-based THC or CBD products)?



Timing



When do you typically consume marijuana? *

	Total	Men	Women
First thing when I wake up	13.2%	14.5%	12.1%
Primarily in the morning	11.5%	15.3%	8.1%
Primarily in the afternoon	16.4%	19.9%	13.3%
Primarily in the evening/before bed	52.3%	51.3%	53.2%
In multiple doses throughout the day	20.8%	25.1%	17.1%
Primarily on weekends	24.4%	25.6%	23.5%
Primarily on weekdays	7.8%	8.5%	7.1%
I don't have consistent habits regarding my marijuana use	18.2%	13.7%	22.1%
Other — Write In	1.2%	1.0%	1.4%



When do you typically consume marijuana? *

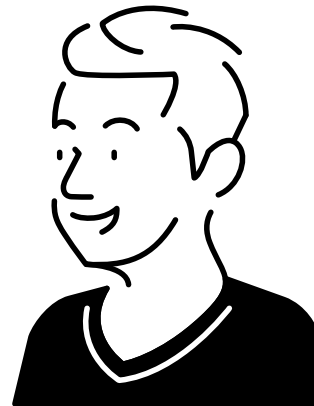
"Everyday"



**"At events that
allow me"**



**"Every week
day after work,
weekends
throughout the
whole day"**



**"I am in pain,
I smoke"**



Quantity



When you consume marijuana, how much do you typically consume?

	Total	Men	Women
A tiny amount (microdosing)	22.6%	17.9%	26.8%
1/3-1/2 gram of bud/flower (about the size of one joint)	30.8%	30.8%	30.6%
1/2-1 gram bud/flower (2-3 joints)	11.5%	15.8%	7.6%
More than 1 gram bud/flower	8.3%	13.2%	3.8%
10 mg THC or less (as indicated by product packaging)	5.3%	4.4%	5.9%
10-30 mg THC (as indicated by product packaging)	4.1%	2.8%	5.2%
More than 30 mg THC (as indicated by product packaging)	1.2%	0.8%	1.7%
Until I feel high	9.4%	9.3%	9.5%
I don't know	4.6%	3.4%	5.7%
Other	2.3%	1.6%	3.1%

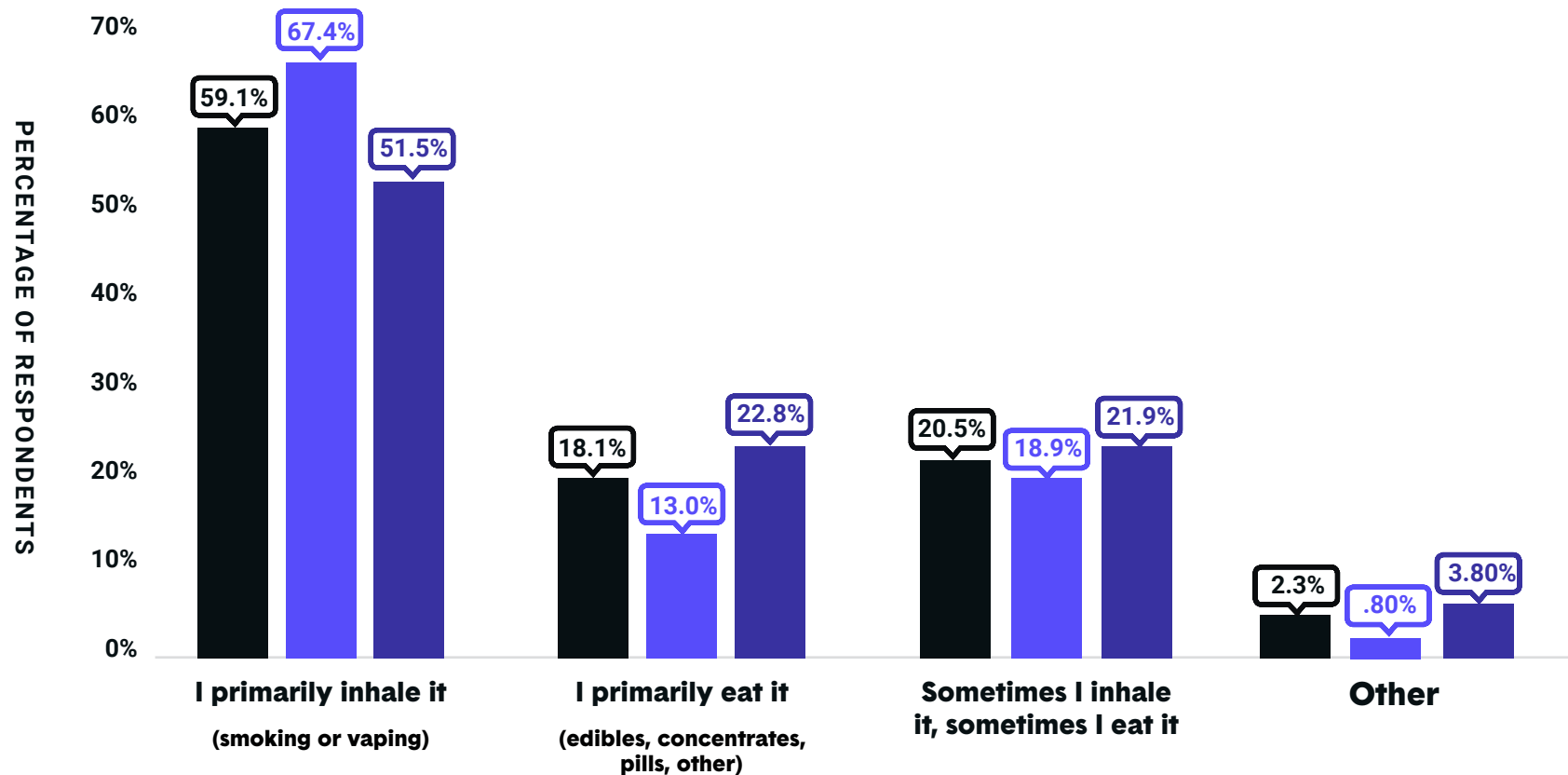
Preferred Method



Inhaled marijuana affects users quickly. Edibles may take 30-60 minutes.



When you consume marijuana, what is your typical method?

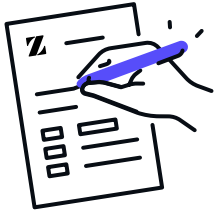


Purpose



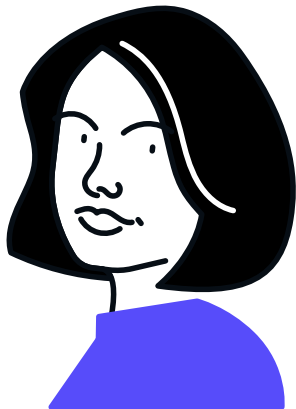
I use marijuana... *

	Total	Men	Women
For fun	37.1%	39.9%	34.4%
To relax or destress	66.2%	68.1%	64.6%
To help me sleep	45.3%	46.1%	44.7%
For religious or spiritual purposes	4.1%	4.9%	3.3%
For medical reasons (prescribed by medical professional)	20.0%	22.5%	17.8%
For medical reasons (self-prescribed to cope with a physical or mental condition)	37.9%	35.5%	40.1%
In social settings because others are using it or offer it to me	27.5%	28.2%	26.6%
To alter or enhance my creativity or energy	20.8%	25.4%	16.9%
To alter or enhance how I experience music, video games, movies, food, or other entertainment	20.3%	26.9%	14.5%
Other — Write In	2.6%	1.6%	3.6%

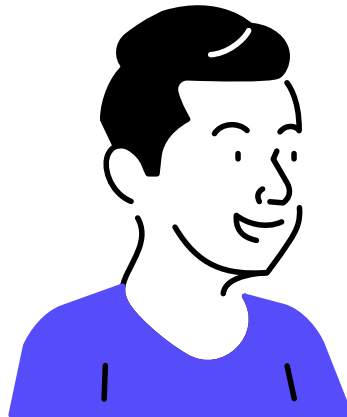


I use marijuana...*

**"To be able
to handle the
people in my
family and their
problems"**



**"To be more
productive"**



**"To help me
with my pain"**



**"To mellow
out after a
stressful day"**



Familiarity

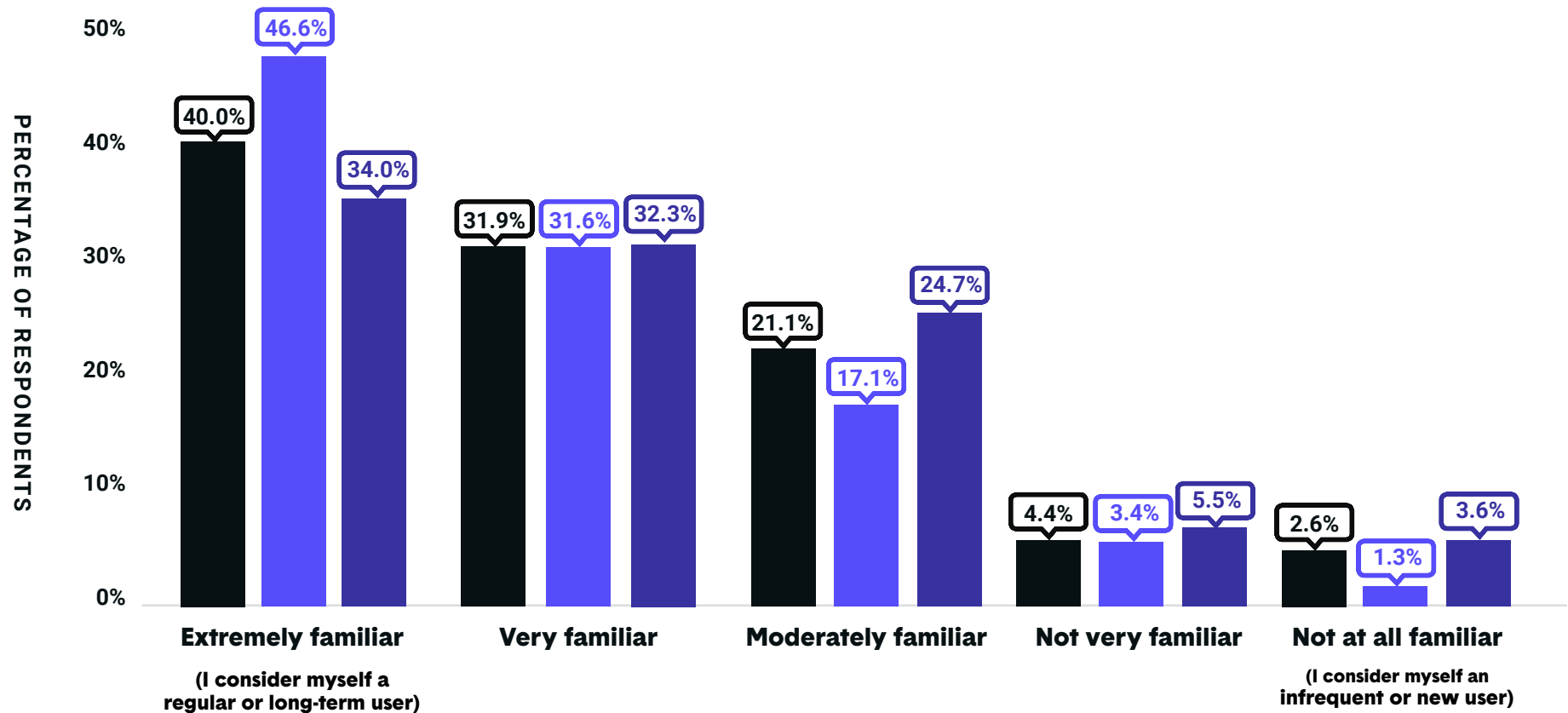


felt very or extremely familiar with marijuana

72%



How familiar are you with marijuana and how it affects you?



Activities



What activities do you engage in while under the influence of marijuana? *

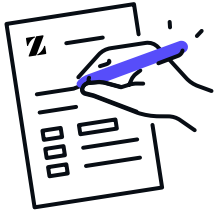
	Total	Men	Women
Work at my job	11.7%	14.8%	8.8%
Do chores/housework	42.7%	42.5%	43.2%
Shop/run errands	21.1%	25.9%	16.9%
Entertainment outside my home (concerts, movie theaters, events, etc.)	32.2%	35.8%	29.2%
Entertainment at home (TV, video games, music, reading, etc.)	58.0%	61.1%	54.9%
Socialize with friends	55.0%	56.5%	53.7%
Eat	59.7%	60.1%	58.9%
Sleep	66.6%	65.0%	68.6%

	Total	Men	Women
Cook	42.7%	46.9%	38.7%
Ride a bicycle	10.4%	15.3%	5.9%
Exercise	21.2%	27.5%	15.4%
Take care of a child or adult in need of supervised care	8.6%	8.3%	9.0%
Pay bills	21.2%	25.4%	17.6%
Surf the internet/social media on your phone/computer	47.6%	49.2%	46.1%
Other — Write In	2.7%	2.6%	2.6%
Not applicable / None of the above	4.4%	3.9%	5.0%



16%

of respondents said they **regularly** go to work or school while under the influence of marijuana.



What activities do you engage in while under the influence of marijuana?*

"Do absolutely nothing but think through my life"



"Intimate activities"



"Relaxing, recovering from workouts"



"Go to the movies"



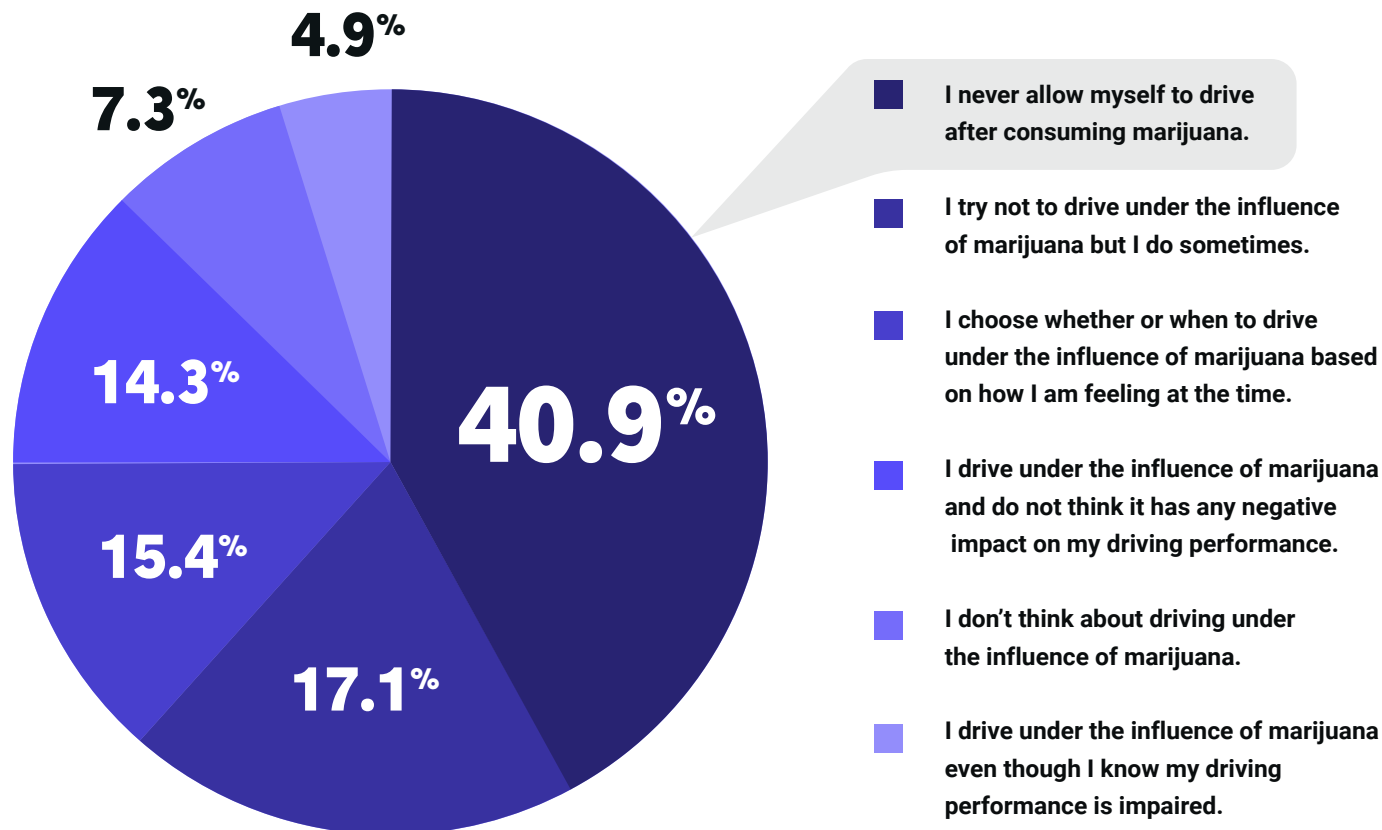
Marijuana & Driving

The following questions were designed to understand whether, when, and how users of marijuana opt to drive, and what kind of impact marijuana products might have on their driving abilities.

Driving Under The Influence



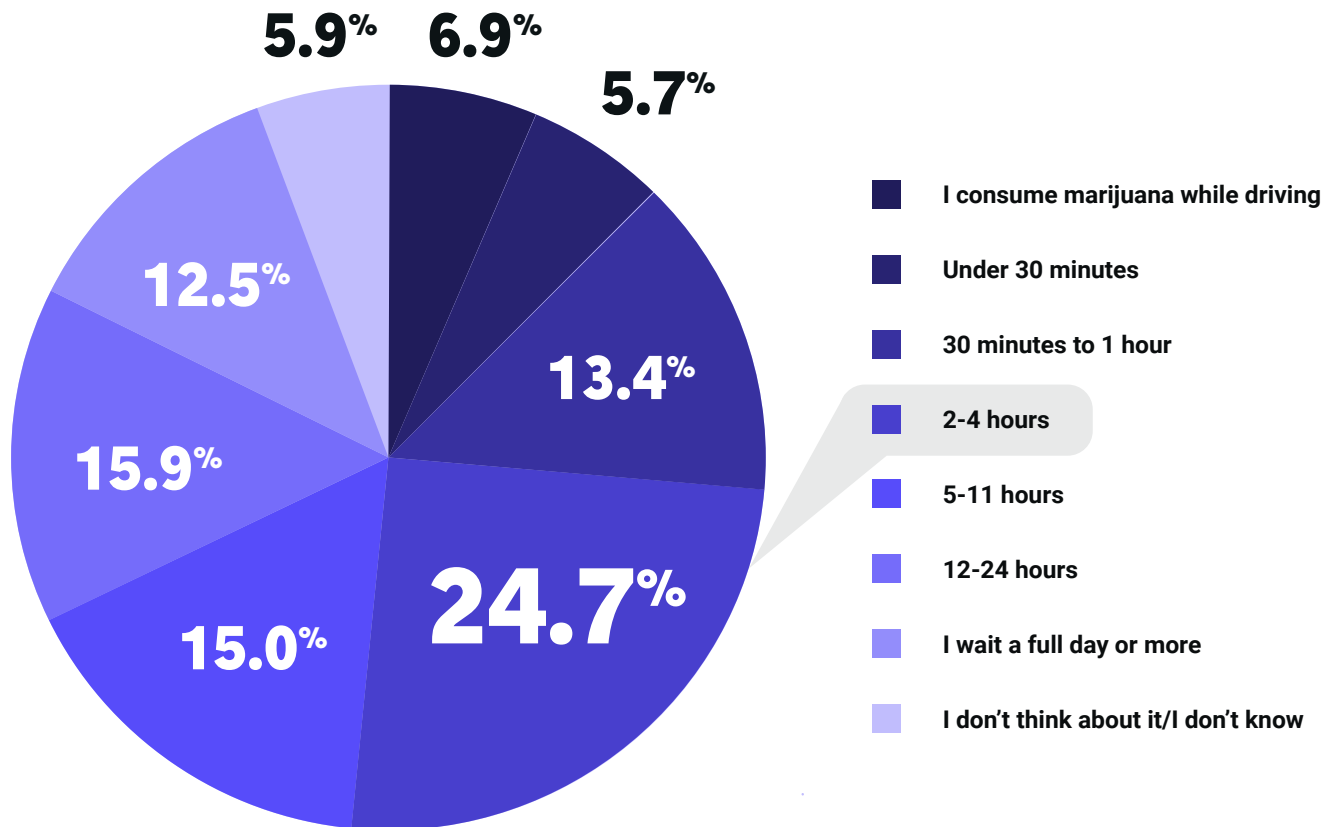
Which of the following best describes whether or how you currently opt to drive after using marijuana?



Wait Time



After you consume marijuana, how long do you **typically** wait to drive a car?





Within the last year, what is the shortest amount of time you have waited to drive after consuming marijuana?

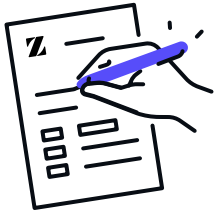
I have consumed marijuana while driving	10.9%
Under 30 minutes	11.0%
30 minutes to 1 hour	19.6%
2-4 hours	19.0%
5-11 hours	13.8%
12-24 hours	12.3%
I always wait a full day or more	9.4%
I don't think about it/I don't know	4.1%

Impairment & Penalties



Which of the following do you recall experiencing when driving after consuming marijuana?*

Slowed reaction time	21.0%
Greater difficulty staying in my lane	7.1%
Greater difficulty planning or sticking to my route	10.0%
Greater difficulty tracking the road ahead	7.1%
Greater difficulty concentrating or paying attention while driving	14.5%
Greater difficulty with decision making or judgment while driving	11.9%
Greater difficulty driving the speed limit	9.0%
Other — Write In	1.7%
None — I don't recall experiencing any changes to my driving abilities.	53.1%



Which of the following do you recall experiencing
when driving after consuming marijuana?*

"Less road
rage"



"Increased
paranoia about
police or other
drivers"



"I've been using
for years and
I'm very used to
driving around"



"I have a harder
time following
directions, I have
to turn up the
volume on my
GPS so it reminds
me when to turn
so I don't miss it."





In the past year, have you been cited or received a traffic ticket for: *

Speeding	8.6%
Driving too slowly	3.3%
Running a red light or stop sign	2.6%
Failing to wear a seat belt	1.8%
Driving the wrong way	1.6%
Aggressive driving	2.6%
Failure to stay in your lane/Crossing the center lane	2.1%
Hitting a parked car	1.6%
Failure to stop for a pedestrian crossing or school bus	1.7%
Driving under the influence of drugs or alcohol	2.3%
Being involved in a car accident	2.2%
None – I have not been cited for a traffic violation in the past year	82.5%
Other – Write In	0.6%



In the past year, have you been cited or received a traffic ticket for: *

**"Didn't have
proof of
insurance"**



**"I haven't
been cited for
a violation in
over 10 years"**



"Failure to stop"





“[For those cited for violations within the past year], were you under the influence of marijuana at the time you received this violation?”

Yes	28.4%
No	61.9%
Unsure	8.2%
Prefer not to answer	1.5%



Driving too slowly was the #1 violation among drivers who were ticketed while under the influence of marijuana.

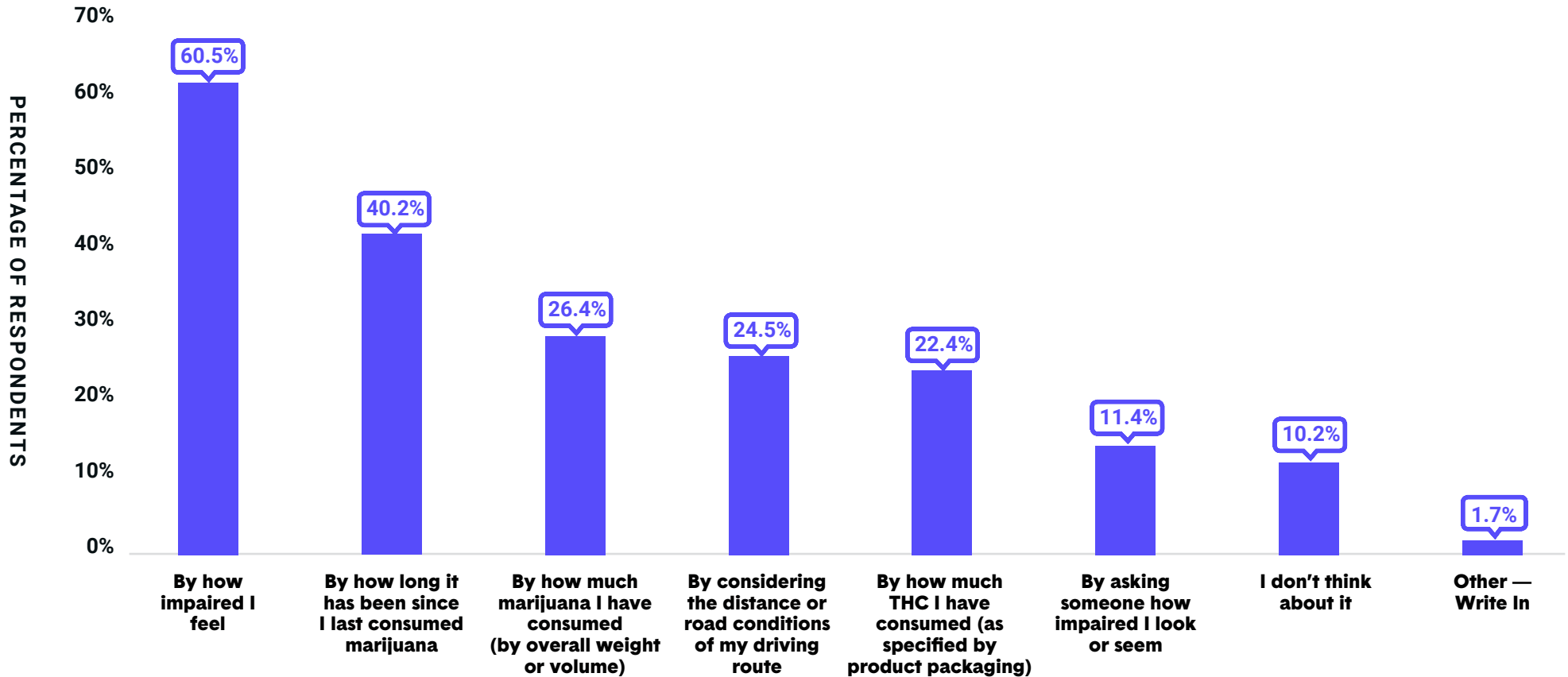
Risk Assessment & Decision-Making

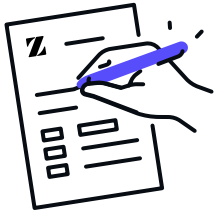
As researchers continue to explore whether and how marijuana affects a person's cognitive, visual, and physical responses (particularly while driving), marijuana consumers lack defined methods of determining whether or when it's safe for them to get behind the wheel.

Self-Assessment



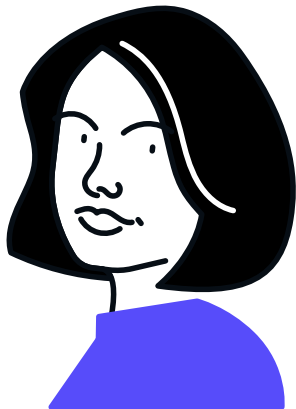
How do you decide whether or not you're OK to drive after consuming marijuana? *





How do you decide whether or not you're OK to drive after consuming marijuana? *

"I am a professional driver and it does not affect me at all."



"It depends on the situation"



"If I do anything that's concentrated I won't drive for about 30 mins."



"I plan ahead, my driving is done before getting high. I try to be a responsible stoner."



Comparing Risks: Marijuana vs. Alcohol

Considering MARIJUANA, how likely are you to...	Very likely	Somewhat likely	Neutral	Somewhat unlikely	Very unlikely
Plan for a ride before consuming MARIJUANA?	25.0%	21.5%	20.3%	10.5%	22.7%
Get in a car with a driver who is under the influence of MARIJUANA?	13.2%	12.7%	19.5%	18.2%	36.4%
Offer a ride to or drive another ADULT while you are under the influence of MARIJUANA?	11.0%	9.5%	14.7%	14.4%	50.4%
Offer a ride to or drive a CHILD while you are under the influence of MARIJUANA?	6.8%	5.1%	7.2%	9.4%	71.6%
Considering ALCOHOL, how likely are you to...					
Plan for a ride before consuming ALCOHOL?	40.3%	16.5%	12.9%	6.2%	24.0%
Get in a car with a driver who is under the influence of ALCOHOL?	4.9%	4.3%	8.3%	17.5%	65.0%
Offer a ride to or drive another ADULT while you are under the influence of ALCOHOL?	6.0%	5.2%	7.9%	12.2%	68.7%
Offer a ride to or drive a CHILD while you are under the influence of ALCOHOL?	4.2%	3.8%	6.3%	4.6%	81.1%

Best Practices & Influences



As a “rule of thumb,” how long do you think the average driver should wait to drive after consuming marijuana?*

It's OK to consume marijuana while driving	7.0%
Under 30 minutes	4.2%
30 minutes to 1 hour	15.9%
2-4 hours	35.8%
5-11 hours	18.6%
12-24 hours	12.0%
A full day or more	6.5%



In the future, would you drive while under the influence of marijuana if:

	Yes	Maybe/ Don't Know	No
A friend or loved one asked you not to	28.1%	14.0%	57.9%
You saw a scientific study indicating it's more dangerous than sober driving	28.1%	19.0%	52.9%
You saw a scientific study indicating it's less dangerous than driving under the influence of alcohol	36.9%	22.1%	41.0%
Your government issued a public service announcement warning against it	32.1%	18.3%	49.5%
Your insurance company warned you not to	31.4%	18.3%	50.2%
Your doctor or medical professional warned you not to	31.7%	15.2%	53.1%

	Yes	Maybe/ Don't Know	No
Your "budtender" or marijuana provider warned you not to	29.5%	18.8%	51.7%
You noticed your driving is worse while under the influence of marijuana	21.7%	8.1%	70.2%
You were in a crash or were cited for a driving violation while under the influence of marijuana	19.0%	8.6%	72.4%
You thought you could compensate by driving extra carefully	36.4%	18.6%	45.0%
There were a reliable way for you to judge or estimate your level of impairment	47.4%	16.7%	36.0%
You had another reliable/affordable form of transportation	36.0%	11.0%	53.1%

General Positions & Opinions

The following questions are intended to gauge how marijuana users feel about their own behaviors as well as the current state of legislation and law enforcement around marijuana consumption.

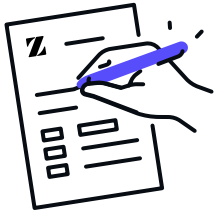


Do you agree or disagree with the following?

	Agree	Neutral / Unsure	Disagree
Texting and driving is MORE dangerous than driving under the influence of marijuana.	54.0%	32.9%	13.1%
Driving under the influence of alcohol is MORE dangerous than driving under the influence of marijuana.	60.3%	25.4%	14.3%
Marijuana makes me a better driver.	12.5%	25.5%	62.0%
Marijuana can sober me up after drinking alcohol.	9.1%	22.2%	68.7%
I know the marijuana-related driving laws in my state.	48.1%	36.0%	15.9%
I abide by the marijuana-related driving laws in my state.	64.4%	26.5%	9.1%

GENERAL POSITIONS & OPINIONS

	Agree	Neutral / Unsure	Disagree
I believe police officers in my state can accurately determine if a driver is impaired by marijuana.	32.7%	39.0%	28.4%
In the past year, I have driven while under the influence of both alcohol AND marijuana at the same time.	12.6%	10.4%	77.1%
I drink less alcohol because I choose to use marijuana instead.	37.2%	27.5%	35.3%
I regularly go to work or school while under the influence of marijuana.	15.9%	13.2%	70.9%
I trust other drivers to know when they're too impaired to drive after using marijuana.	27.3%	31.8%	40.9%
I believe my state's marijuana-related driving laws are effective.	34.3%	49.7%	16.0%
I believe my state's marijuana-related driving laws are inadequate and need improvement.	30.3%	51.4%	18.2%
If my doctor prescribes me marijuana, I can do all of my regular activities while using it.	25.6%	31.7%	42.7%
I understand how a violation for driving under the influence of marijuana would affect me financially and legally.	75.6%	18.1%	6.3%
I understand how a violation for driving under the influence of alcohol would affect me financially and legally.	84.2%	11.7%	4.1%



Do you have concerns about recreational marijuana legalization and driving? If yes, what concerns you most?

"Some people consume pot for different reasons. Peoples tolerance levels are also just as different. I don't think it would be wise to have anyone driving under the influence of any kind substance."

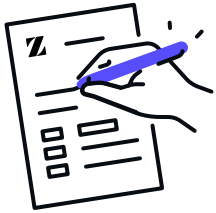
"Buzzed driving is still driving under the influence"

"I do not drive and hope others will not, you are impaired when driving under the influence of marijuana, and legalizing it makes for more poor decisions"

"Some new smokers are not skilled enough to drive under the influence"

"No concern. Everyone just needs to be informed and be respectful of the laws in their area"

"Should not be done what so ever. You are not a child. Don't drive high or drunk."



How should law enforcement monitor drivers who might be impaired by use of marijuana? Is there an acceptable amount of a drug a driver can have in his/her system while driving?

"There's no way to test how much is in their system but I believe someone could come up with something that tells how high a person is/ isn't. Maybe a device that scans brain activity."

"No amount should be allowed when driving"

"If someone broke some kind of law, running a red light or stop sign, and they also we're impaired. But if they are driving well and the police just smell weed that is a whole other story."

"Leave potheads alone, worry about the meth heads"

"You can tell when something is up. I would say a 8th or more should not be driving"

"Take away the driver licence"

About The Zebra

The Zebra is the nation's leading insurance comparison site. With its dynamic, real-time comparison tool, drivers can identify insurance companies with the coverage, service level, and pricing to suit their unique needs. The Zebra compares over 200 car insurance companies and provides agent support and educational resources to ensure drivers are equipped to make the most informed decisions about their car insurance. Headquartered in Austin, Texas, The Zebra has sought to bring transparency and simplicity to insurance shopping since 2012 — it's "insurance in black and white."

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