

DrugFacts

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Drugged Driving DrugFacts

Drugged driving is driving a vehicle while impaired due to the intoxicating effects of recent drug use. It can make driving a car unsafe—just like driving after drinking alcohol. Drugged driving puts the driver, passengers, and others who share the road at serious risk.

Why is drugged driving dangerous?

The effects of specific drugs on driving skills differ depending on how they act in the brain. For example, marijuana can slow reaction time, impair judgment of time and distance, and decrease coordination. Drivers who have used cocaine or methamphetamine can be aggressive and reckless when driving. Certain kinds of prescription medicines, including benzodiazepines and opioids, can cause drowsiness, dizziness, and impair cognitive functioning (thinking and judgment). All of these effects can lead to vehicle crashes.



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Research studies have shown negative effects of marijuana on drivers, including an increase in lane weaving, poor reaction time, and altered attention to the road. Use of alcohol with marijuana makes

drivers more impaired, causing even more lane weaving.¹⁻³ Some studies report that opioids can cause drowsiness and impair thinking and judgment.^{4,5} Other studies have found that being under the influence of opioids while driving can double your risk of having a crash.⁶

It is difficult to determine how specific drugs affect driving because people tend to mix various substances, including alcohol. But we do know that even small amounts of some drugs can have a measurable effect. As a result, some states have zero-tolerance laws for drugged driving. This means a person can face charges for driving under the influence (DUI) if there is any amount of drug in the blood or urine. Many states are waiting to develop laws until research can better define blood levels that indicate impairment, such as those they use with alcohol.

Read more about other commonly abused drugs that can affect driving, at www.drugabuse.gov/drug-topics/commonly-used-drugs-charts.

How many people take drugs and drive?

According to the 2018 National Survey on Drug Use and Health (NSDUH), in 2018, 20.5 million people aged 16 or older drove under the influence of alcohol in the past year and 12.6 million drove under the influence of illicit drugs.⁷

The survey also showed that men are more likely than women to drive under the influence of drugs or alcohol. A higher percentage of adults aged 21 to 25 drive after taking drugs or drinking than do young adults aged 16 to 20 or adults 26 or older.⁷



Which drugs are linked to drugged driving?

After alcohol, marijuana is the drug most often found in the blood of drivers involved in crashes. Tests for detecting marijuana in drivers measure the level of *delta-9-tetrahydrocannabinol* (THC), marijuana's mind-altering ingredient, in the blood. But the role that marijuana plays in crashes is often unclear. THC can be detected in body fluids for days or even weeks after use, and it is often combined with alcohol. The vehicle crash risk associated with marijuana in combination with alcohol, cocaine, or benzodiazepines appears to be greater than that for each drug by itself.^{1,8}

Several studies have shown that drivers with THC in their blood were roughly twice as likely to be responsible for a deadly crash or be killed than drivers who hadn't used drugs or alcohol.⁸⁻¹⁰ However, a large NHTSA study found no significant increased crash risk traceable to marijuana after controlling for drivers' age, gender, race, and presence of alcohol.¹¹ More research is needed.

Along with marijuana, prescription drugs are also commonly linked to drugged driving crashes. In 2016, 19.7 percent of drivers who drove while under the influence tested positive for some type of opioid.¹²

How often does drugged driving cause crashes?

It's hard to measure how many crashes are caused by drugged driving. This is because:

- a good roadside test for drug levels in the body doesn't yet exist
- some drugs can stay in your system for days or weeks after use, making it difficult to determine when the drug was used, and therefore, how and if it impaired driving
- police don't usually test for drugs if drivers have reached an illegal blood alcohol level because there's already enough evidence for a DUI charge
- many drivers who cause crashes are found to have both drugs and alcohol or more than one drug in their system, making it hard to know which substance had the greater effect

However, according to the Governors Highway Safety Association, 43.6 percent of fatally injured drivers in 2016 tested positive for drugs and over half of those drivers were positive for two or more drugs.¹³

What populations are especially affected

Teen and older adult drivers are most often affected by drug use and are more likely than other drivers to underestimate or misjudge their ability to drive. Teen drivers are also more likely to speed and allow less distance between themselves and other vehicles. When inexperience is combined with drug use, the results can be deadly. ¹⁴ death among young people aged 16 to 19 years.

A study of college students with access to a car found that 40 percent used a drug other than alcohol at least once in the past year. Marijuana was the most commonly used drug, followed by cocaine and prescription pain relievers.¹⁵

Mental decline in older adults can lead to taking a prescription drug incorrectly, either too often or in the wrong amount. Older adults also may not be able to react as quickly as younger people. These factors can lead to unintended accidents while driving a car.

What steps can people take to prevent

Because drugged driving puts people at a higher risk for crashes, public health experts urge people who use drugs and alcohol to develop social strategies to prevent them from getting behind the wheel of a car while impaired. Steps people can take include:

- offering to be a designated driver
- appointing a designated driver to take all car keys
- getting a ride to and from parties where there are alcohol and/or drugs.
- discussing the risks of drugged driving with friends in advance

Effects of Commonly Misused Drugs on Driving

Marijuana affects psychomotor skills and cognitive functions critical to driving including vigilance, drowsiness, time and distance perception, reaction time, divided attention, lane tracking, coordination, and balance.

Opioids can cause drowsiness and can impair cognitive function.

Alcohol can reduce coordination, concentration, ability to track moving objects and reduce response to emergency driving situations as well as difficulty steering and maintaining lane position. It can also cause drowsiness.

Points to Remember

- Use of illicit drugs or misuse of prescription drugs can make driving a car unsafe—just like driving after drinking alcohol.
- In 2018, 20.5 million people aged 16 or older drove under the influence of alcohol in the past year and 12.6 million drove under the influence of illicit drugs.
- It's hard to measure how many crashes are caused by drugged driving, but estimates show that almost 44 percent of drivers in fatal car crashes tested positive for drugs.
- Driving under the influence of marijuana, opioids and alcohol can have profound effects on driving.
- People who use drugs and alcohol should develop social strategies to prevent them from getting behind the wheel of a car while impaired.

Learn More

For more information about [drugged driving webpage](#).

For more information about marijuana and prescription drug misuse, visit:

- [Marijuana](#)
- [Prescription CNS Depressants DrugFacts](#)
- [Prescription Opioids DrugFacts](#)
- [Prescription Stimulants DrugFacts](#)

References

1. Hartman RL, Huestis MA. Cannabis effects on driving skills. *Clin Chem*. 2013;59(3):478-492. doi:10.1373/clinchem.2012.194381
2. Hartman RL, Brown TL, Milavetz G, et al. Cannabis effects on driving lateral control with and without alcohol. *Drug Alcohol Depend*. 2015;154:25-37. doi:10.1016/j.drugalcdep.2015.06.015

3. Lenné MG, Dietze PM, Triggs TJ, Walmsley S, Murphy B, Redman JR. The effects of cannabis and alcohol on simulated arterial driving: Influences of driving experience and task demand. *Accid Anal Prev.* 2010;42(3):859-866. doi:10.1016/j.aap.2009.04.021
4. Compton R. *Marijuana-Impaired Driving: A Report to Congress.* Washington, DC: National Highway Traffic Safety Administration; 2017.
5. Dhingra L, Ahmed E, Shin J, Scharaga E, Magun M. Cognitive Effects and Sedation. *Pain Med Malden Mass.* 2015;16 Suppl 1:S37-S43. doi:10.1111/pme.12912
6. Chihuri S, Li G. Use of prescription opioids and motor vehicle crashes: A meta analysis. *Accid Anal Prev.* 2017;109:123-131. doi:10.1016/j.aap.2017.10.004
7. Center for Behavioral Health Statistics and Quality. *Results from the 2018 National Survey on Drug Use and Health: Detailed Tables.* Rockville (MD): SAMHSA; 2019.
<https://www.samhsa.gov/data/report/2018-nsduh-detailed-tables>. Accessed December 31, 2019.
8. Wilson FA, Stimpson JP, Pagán JA. Fatal crashes from drivers testing positive for drugs in the U.S., 1993-2010. *Public Health Rep Wash DC* 1974. 2014;129(4):342-350.
9. Biecheler M-B, Peytavin J-F, Facy F, Martineau H. SAM survey on “drugs and fatal accidents”: search of substances consumed and comparison between drivers involved under the influence of alcohol or cannabis. *Traffic Inj Prev.* 2008;9(1):11-21. doi:10.1080/15389580701737561
10. Elvik R. Risk of road accident associated with the use of drugs: a systematic review and meta-analysis of evidence from epidemiological studies. *Accid Anal Prev.* 2013;60:254-267. doi:10.1016/j.aap.2012.06.017
11. Compton RP, Berning A. *Drug and Alcohol Crash Risk.* Washington, DC: National Highway Traffic Safety Administration; 2015. DOT HA 812 117.
12. *Fatality Analysis Reporting System (FARS).* Washington, DC: National Highway Traffic Safety Administration <https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>.
13. *Drug-Impaired Driving: Marijuana and Opioids Raise Critical Issues for States.* Washington DC: Governors Highway Safety Association; 2018.
14. Teen Drivers: Get the Facts | Motor Vehicle Safety | CDC Injury Center.
http://www.cdc.gov/motorvehiclesafety/teen_drivers/teendrivers_factsheet.html. Published October 14, 2015. Accessed April 7, 2016.
15. Arria AM, Caldeira KM, Vincent KB, Garnier-Dykstra LM, O’Grady KE. Substance-related traffic-risk behaviors among college students. *Drug Alcohol Depend.* 2011;118(2-3):306-312. doi:10.1016/j.drugalcdep.2011.04.012

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