



# Drug-Impaired Driving: What Insurers Need To Know

## Executive Summary

Many substances can impair driving, including alcohol, prescription drugs, over-the-counter (OTC) drugs, and illegal drugs. Driving under the influence of drugs is becoming a significant threat to public safety.

This paper explores the extent and impact of drug-impaired driving, along with current law and recent advancements in prevention and enforcement, so that insurance companies can understand their potential exposure.

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## Drugged Behind the Wheel

Driving under the influence of alcohol has long been recognized as a problem, but in recent years, driving under the influence of drugs – whether they are prescription, over-the-counter, or illegal drugs – is also becoming a significant threat to public safety.

In the 2017 National Survey on Drug Use and Health, 21.4 million people aged 16 or older admitted to driving under the influence of alcohol in the previous year. Likewise, 12.8 million admitted driving under the influence of illicit drugs.<sup>1</sup>

With statistics such as these, it is important for those in the insurance industry to understand the trends, impacts, laws, and enforcement challenges associated with drug-impaired driving.

### The Effects of Drugs on Drivers

There are a wide array of drugs, both legal and illegal, on the market for an average consumer to access. When a person consumes an unhealthy quantity of many of these drugs and then decides to continue on with normal daily functions, serious issues can arise.

“Drugged driving” is defined as driving a vehicle while impaired due to the intoxication effects of recent drug use, and it can be very deadly.<sup>2</sup>

Research shows that three of the most common categories of drugs used aside from alcohol are marijuana, illegal stimulants, and prescription drugs such as opioids.<sup>3</sup> In one study, 38% of fatally injured drivers who tested positive for drugs had marijuana in their system.<sup>4</sup>

Marijuana can have a wide variety of effects on drivers, but primarily it greatly increases the

driver’s reaction time and hinders coordination skills and decision-making. It also impairs the ability to multi-task, which is a vital skill when driving. Finally, marijuana can increase the likelihood that the driver will involuntarily weave out of the lane and have his or her attention drawn away from the road. These effects produce dangerous consequences when someone decides to get behind the wheel.

Stimulants such as cocaine and methamphetamine have also been researched with regard to their impact on driving. These drugs speed up the activity of the central nervous system, leading to attention difficulties, increased risk taking, over-confidence in driving skills, tendency to fidget, and reckless or aggressive driving. Psychedelics – including LSD, magic mushrooms, PCP, and ketamine – also dramatically distort users’ perception of reality.

Prescription medications (including benzodiazepines and opioids), can cause drowsiness and dizziness and decrease cognitive functions, including thinking and judgment. One study concluded that the use of prescription opioids while driving doubles the chances of being involved in a crash.<sup>5</sup> Another report noted that 16% of drivers who tested positive for drugs had opioids in their system and 4% had both marijuana and opioids.<sup>6</sup>

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While impaired driving has long been a concern in our country, impairment specifically by drugs deserves special attention.

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## Why it's so Hard to Detect Drug Impairment

The simple act of detecting drug impairment can present several unique challenges. With thousands of types of drugs circulating – including over 400 drugs that are tracked by the National Highway Traffic Safety Administration (NHTSA) for their ability to cause impairment<sup>7</sup> – it has been virtually impossible to design a nationally accepted, one-size-fits-all testing system.

Each individual driver's level of impairment can vary dramatically. What may have a catastrophic effect on one person may have an average or minimal effect on another person. Drug potency, the individual's weight and size, their tolerance, and long term use are just a few of the factors that can make effects inconsistent. This range of inconsistencies makes it difficult to impose universal laws and consequences across the board.

In the case of marijuana – the number one substance most often found in the blood of drivers in crashes, next to alcohol<sup>8</sup> – tests measure the level of delta-9-tetrahydrocannabinol (THC), marijuana's "mind-altering" ingredient, in the blood. While the functionality to test for THC in a body is available, the timing can be harder to prove, as THC can be detected in bodily fluids for days or even weeks after consumed, thus leading to difficult standards for measuring a current state of impairment.

Another difficulty is that the full scope of the drugged driving problem is not understood. Many drivers who are involved, arrested, or even killed in crashes are not tested for drugs. Often times, alcohol impairment is the only measure tested at the scene. Also, those drivers who are tested and found to be drug-

positive may not necessarily be impaired. This is often the case with prescription drugs.

An additional concern is the common occurrence of poly-drug use, which is the simultaneous use of multiple potentially impairing substances. This is a more common practice than one would think – in one study, 49% of drug-positive, fatally injured drivers were found positive for two or more drugs.<sup>9</sup> Alcohol is often in the mix as well.

## Who is Commonly Affected?

While every age is prone to the potential dangers of drugged driving, the two most commonly impacted age groups are 1) teenagers and 2) older adult drivers.<sup>10</sup>

Teens are less experienced and more likely than other drivers to ignore or underestimate situations that require critical thinking and decision-making skills. Teens also typically drive faster and allow less distance between themselves and the vehicles around them. According to the Centers for Disease Control & Prevention (CDC), the lack of driving experience combined with drug use can lead to tragic results, with vehicle crashes being the leading cause of death among young people 16-19 years old.<sup>11</sup>

Older adults can struggle with mental decline, which consequently can lead to dangerous consumption amounts – too much or not enough of a drug to effectively treat a condition. Additionally, older adults can also have a more difficult time breaking down the drug in their system compared to younger people, which can cause technical intoxication when driving a vehicle.

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## The Law

Overall, there is a lack of uniformity or consistency in the way states approach drugged drivers.

The current Driving Under the Influence of Drugs (DUID) statutes in many states do not support or encourage enforcement and prosecution of driving under the influence of drugs other than alcohol. To address the problem of impaired driving from drugs, many state legislatures have adopted statutory language defining the operation of motor vehicles “under the influence” or “while impaired” by illegal drugs, or impairing substances. These substances often reference the Federal controlled substances list, or specific drug classes (e.g. amphetamines, central nervous system depressants).

### There are three principal types of drugged-driving laws throughout the states:

1. Statutes that require drugs to render a driver “incapable” of driving safely;
2. Statutes that require that the drug impair the driver’s ability to operate safely or require a driver to be “under the influence or affected by an intoxicating drug”; and
3. “Per se” statutes that make it a criminal offense to have a drug or metabolite in one’s body/body fluids while operating a motor vehicle (often referred to as a “zero tolerance” law)

In the first two types of statutes, which are the most prevalent in the US, the state must prove that “the drug” caused the impaired driving. This is a technically complicated and difficult task.

Per se drugged driving statutes vary by state. (See table on the following page.)

## Marijuana related Laws<sup>12</sup>

Marijuana use legalization				Marijuana and driving	
State	Decriminalized	Medical	Recreational	Zero tolerance law	Per se law
Alabama	no	no	no	no	no
Alaska	yes	yes	yes	no	no
Arizona	no	yes	no	THC and metabolites	no
Arkansas	no	yes	no	no	no
California	yes	yes	yes	no	no
Colorado	yes	yes	yes	yes*	reasonable inference 5ng
Connecticut	yes	yes	no	no	no
Delaware	yes	yes	no	THC and metabolites	no
D.C.	yes	yes	yes	no	no
Florida	no	yes	no	no	no
Georgia	no	no	no	THC and metabolites	no
Hawaii	no	yes	no	no	no
Idaho	no	no	no	no	no
Illinois	yes	yes	yes	THC and metabolites	5ng
Indiana	no	no	no	THC and metabolites	no
Iowa	no	no	no	THC	no
Kansas	no	no	no	no	no
Kentucky	no	no	no	no	no
Louisiana	no	no	no	no	no
Maine	yes	yes	yes	no	no
Maryland	yes	yes	no	no	no
Massachusetts	yes	yes	yes	no	no
Michigan	no	yes	yes	THC	no
Minnesota	yes	yes	no	no	no
Mississippi	yes	no	no	no	no
Missouri	yes	no	no	no	no
Montana	no	yes	no	no	5ng
Nebraska	yes	no	no	no	no
Nevada	yes	yes	yes	no	2ng
New Hampshire	no	yes	no	no	no
New Jersey	no	yes	no	no	no
New Mexico	no	yes	no	no	no
New York	yes	yes	no	no	no

\*Colorado has reasonable inference law with a limit >0 for THC

### Marijuana use legalization

### Marijuana and driving

State	Decriminalized	Medical	Recreational	Zero tolerance law	Per se law
North Carolina	yes	no	no	no	no
North Dakota	no	yes	no	no	no
Ohio	yes	yes	no	no	2ng
Oklahoma	no	no	no	THC and metabolites	no
Oregon	yes	yes	yes	no	no
Pennsylvania	no	yes	no	no	1ng
Rhode Island	yes	yes	no	THC and metabolites	no
South Carolina	no	no	no	no	no
South Dakota	no	no	no	THC and metabolites	no
Tennessee	no	no	no	no	no
Texas	no	no	no	no	no
Utah	no	yes	no	THC and metabolites	no
Vermont	yes	yes	no	no	no
Virginia	no	no	no	no	no
Washington	yes	yes	yes	no	5ng
West Virginia	no	yes	no	no	no
Wisconsin	no	no	no	THC	no
Wyoming	no	no	no	no	no



## Potential Advancements We Should Look For

Technology is evolving, and more sophisticated methods to test for drugs are in research and development.

With state legalization of marijuana increasing throughout the United States, one of the foremost efforts is to develop measures to test for and enforce laws relative to its use.

The University of California San Francisco recently conducted a study on the measurement of THC in human breath. One difficulty the study has highlighted is that THC has such a low concentration in human breath that very sensitive analytical methods are required to thoroughly evaluate its presence.<sup>13</sup>

A company called Hound Labs announced it developed a breathalyzer with the capability to measure both alcohol and the level of THC in a person's system. This device can purportedly measure THC throughout a three-hour window after a person has either smoked or eaten any amount of marijuana, the time frame during which a person is most impaired. Other companies are also studying and developing similar devices that will have the capability to test drug levels and impairment.

Additionally, organizations are teaming up to provide advanced training for law enforcement officers to identify drivers impaired by marijuana and other drugs. In 2019, \$80,000 in grant programs were provided to offer training programs that support the arrest and prosecution of drug-impaired drivers in Massachusetts, Michigan, Nevada, and South Dakota.

### What Can Be Done?

Some of the same strategies that have been used to address alcohol-impaired driving can also be utilized to decrease drug-impaired driving. Encouraging a designated sober driver, designating a person to take all the car keys, encouraging ride sharing or cab usage, and discussing the risks of drugged driving are all effective strategies that can reduce the accidents and fatalities resulting from such usage.

Campaigns are another way of getting the information out and bringing attention to the issue. In 2018, NHTSA launched its "If You Feel Different, You Drive Different" campaign in an attempt to educate American drivers about the dangers of driving while impaired by drugs. The campaign emphasized that anytime a user consumes a substance that alters the way he or she feels, it is not safe to drive. It also reiterated that impaired driving isn't a mistake but a crime.

## Conclusion

As the risk of impaired driving continues to evolve, it is important for insurance companies to stay educated on the applicable laws and enforcement measures being developed. This will provide insights about how to identify at-risk drivers in your book of business and develop guidelines and endorsements to properly address your exposures.

**If you have any questions, please contact Sarah Kuhn, Research & Product Development Analyst, at [skuhn@aaic.com](mailto:skuhn@aaic.com) or (847) 651-0889.**

## End Notes

- <sup>1</sup>Results from the 2017 National Survey on Drug Use and Health: Detailed Tables. Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, <https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHDetailedTabs2017/NSDUHDetailedTabs2017.pdf>.
- <sup>2</sup>“Drugged Driving.” National Institute on Drug Abuse, December 2019, <https://www.drugabuse.gov/publications/drugfacts/drugged-driving>.
- <sup>3</sup>“Detailing the Factors behind Traffic Fatalities on our Roads”, accessed March 2020. Fatality Analysis Reporting System (FARS) <https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>
- <sup>4</sup>“Drug-Impaired Driving: Marijuana and Opioids Raise Critical Issues for States,” Governors Highway Safety Association (GHSA), May 2018, [https://www.ghsa.org/sites/default/files/2018-05/GHSA\\_DrugImpairedDriving\\_FINAL.pdf](https://www.ghsa.org/sites/default/files/2018-05/GHSA_DrugImpairedDriving_FINAL.pdf).
- <sup>5</sup>Chihuri S, Li G. “Use of prescription opioids and motor vehicle crashes: A meta analysis,” Accident; Analysis and Prevention, 109, 123-131, December 2017, Doi: 10.1016/j.aap.2017.10.007.
- <sup>6</sup>Chihuri S, Li G, “Use of prescription opioids and motor vehicle crashes: A meta analysis.”
- <sup>7</sup>“Drug-Impaired Driving”, National Highway Traffic Safety Administration, accessed March 2020 <https://www.nhtsa.gov/risky-driving/drug-impaired-driving>
- <sup>8</sup>“Drugged Driving,” National Institute on Drug Abuse, accessed February 2020, <https://www.drugabuse.gov/publications/drugfacts/drugged-driving>
- <sup>9</sup>“Marijuana, Opioids Found in High Percentage of Drivers Killed in Car Crashes,” Insurance Journal, May 31, 2018, <https://www.insurancejournal.com/news/national/2018/05/31/490734.htm>.
- <sup>10</sup>“Drugged Driving.”
- <sup>11</sup>“Teen Drivers: Get the Facts,” Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, October 30, 2019, [https://www.cdc.gov/motorvehiclesafety/teen\\_drivers/teendrivers\\_factsheet.html](https://www.cdc.gov/motorvehiclesafety/teen_drivers/teendrivers_factsheet.html)
- <sup>12</sup>“Drug Impaired Driving.” Governors Highway Safety Association (GHSA). January 3, 2020. <https://www.ghsa.org/state-laws/issues/drug%20impaired%20driving>
- <sup>13</sup>Luo TY, Yun C., Lynch KL, “Quantification of Cannabinoids in Breath Samples Using a Novel Derivatization LC-MS/MS Assay with Ultra-High Sensitivity,” Journal of Analytical Toxicology, June 2019, <https://www.ncbi.nlm.nih.gov/pubmed/30951168>.



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