

# Publicly Available Drug-Impaired Driving **EDUCATIONAL RESOURCES**



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# Acronyms

AAA	American Automobile Association
ARIDE	Advanced Roadside Impaired Driving Enforcement
BAC	Blood Alcohol Concentration
BrAC	Breath Alcohol Concentration
CARRS-Q	Centre for Accident Research and Road Safety - Queensland
CDC	Centers for Disease Control and Prevention
DEA	Drug Enforcement Administration
DRE	Drug Recognition Expert
DUI	Driving Under the Influence
DWI	Driving While Intoxicated
EARS	Electronic Accident Reporting System
FARS	Fatality Analysis Reporting System
FAQ	Frequently Asked Questions
FDA	Food and Drug Administration
GHSA	Governors Highway Safety Association
HLDI	Highway Loss Data Institute
HVE	High-Visibility Enforcement
IIHS	Insurance Institute for Highway Safety
NCSL	National Conference of State Legislatures
NHTSA	National Highway Traffic Safety Administration
NIDA	National Institute on Drug Abuse
ONDCP	Office of National Drug Control Policy
PSA	Public Service Announcement
SFST	Standardized Field Sobriety Testing
THC	Tetrahydrocannabinol

# Introduction

This resource guide is designed to quickly summarize available drug-impaired driving resources, as well as provide quick access through a direct link. Resources were divided based on their classification (e.g., brochure, website). For resources available in multiple classifications, a note is added in the description with a link. It is important to note that brochures, fact sheets, infographics/tip cards, reports, and websites were restricted to free resources; however, papers may require institutional or paid access to databases to read the full manuscript.

The following links will take you to each section directly:

- [Brochures](#)
- [Fact Sheets](#)
- [Infographics/Tip Cards](#)
- [Papers](#)
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# Brochures

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><i>Marihuana and Driving</i></a>	N/A	Michigan Office of Highway Safety Planning	Marijuana	<ul style="list-style-type: none"> <li>• Aims to educate residents in Michigan about the Michigan Regulation and Taxation of Marihuana Act that went into effect in 2018.</li> <li>• Outlines the amount of marijuana that can be transported by adults, the illegality and penalties associated with DUI of marijuana, and Michigan's efforts to detect impaired driving through roadside testing.</li> </ul>
<a href="#"><i>Driving When You Are Taking Medications</i></a>	2004	NHTSA	Drugs General	<ul style="list-style-type: none"> <li>• Offers tips on how to discuss with a health-care professional medication that may affect a person's ability to drive.</li> <li>• Provides an overview of how medications affect driving, driving safely while taking medications, and recommendations for what to do if a person is taking medications.</li> </ul>
<a href="#"><i>Marijuana: Facts Parents Need to Know</i></a>	2016	NIDA	Marijuana	<ul style="list-style-type: none"> <li>• Serves as a guide for parents to discuss the topic of marijuana with their children.</li> <li>• Discusses marijuana's use and risk associations (i.e., driving, lower performance in academics, and mental illness), and the various ways people use marijuana.</li> </ul>

Notes:

Depressants include drugs like Ambien, Xanax, Valium, Ativan, Klonopin, and Phenobarbital.

Opioids include drugs like Codeine, Fentanyl, Hydrocodone/Vicodin, Methadone, Morphine, and Oxycodone.

Stimulants include drugs like Adderall, Benzedrine, Concerta, Dexedrine, Ritalin, and dietary/appetite suppressants.

Drugs General includes references that talked about drugs generally and did not focus on a specific drug category.

# Fact Sheets

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#">Get the Facts about Marijuana</a>	N/A	Alaska Department of Health and Social Services	Marijuana	<ul style="list-style-type: none"> <li>• Provides an overview of marijuana use and the driving task.</li> <li>• Addresses common concerns about how marijuana affects driving, factors that can affect how long someone should wait to drive after using marijuana, and teen risks associated with marijuana and driving.</li> <li>• Includes FAQs about the consequences of impaired driving in Alaska.</li> </ul>
<a href="#">Alcohol and Driving</a>	N/A	American Driver Traffic Safety Education Association	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• Provides an overview of the effects of alcohol and other impairing drugs, as well as laws concerning alcohol use. <ul style="list-style-type: none"> <li>○ Some of the effects of alcohol and other impairing drugs include reductions in judgment, vision, color distinction, and reaction time.</li> </ul> </li> <li>• Discusses the national BAC standard, implied consent, and penalties associated with DWI conviction.</li> </ul>
<a href="#">Driving Improvement in Medication Safety: Patient Safety Organization Approaches</a>	2015	Agency for Healthcare Research and Quality	Drugs General	<ul style="list-style-type: none"> <li>• Aims to help reduce patient medication errors and improve medication safety. <ul style="list-style-type: none"> <li>○ With an estimated one in three adults taking five or more medications, improving patient medication errors and medication safety is critical.</li> </ul> </li> <li>• Describes four approaches commonly used to achieve improvement: <ul style="list-style-type: none"> <li>○ Managing high-risk medications among patients.</li> <li>○ Educating medical professionals, such as pediatricians and anesthesiologists.</li> <li>○ Educating pharmacies and other businesses.</li> <li>○ Coalition-building with federal agencies, manufacturers, and other organizations to effect change.</li> </ul> </li> </ul>
<a href="#">Drug Driving</a>	2016	CARRS-Q	Alcohol, Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• Provides information about drugs and driving in Australia.</li> <li>• Provides an overview of the number of drivers killed in crashes who tested positive for drugs (other than alcohol), how drugs affect the brain and body, how drugs affect the driving task, penalties for driving with drugs, and recommendations for preventing drugged driving.</li> <li>• Provides additional information about CARRS-Q drugged-driving safety work.</li> </ul>
<a href="#">An Evaluation of Data from Drivers Arrested for Driving under the Influence in Relation to Per Se Limits for Cannabis</a>	2016	AAA Foundation for Traffic Safety	Marijuana	<ul style="list-style-type: none"> <li>• Provides an overview of a study conducted by the AAA Foundation for Traffic Safety, which sought to determine if a quantitative THC limit could be supported by data of suspected drivers under the influence—similar to BAC limits for alcohol. <ul style="list-style-type: none"> <li>○ A large number of drivers who did not show signs of impairment and passed SFST, and a large number of drivers who showed signs of impairment and did not pass SFSTs, would have been incorrectly classified had a THC limit of 5 ng/mL been set.</li> </ul> </li> <li>• The study’s results do not support setting a quantitative threshold for THC.</li> </ul>
<a href="#">What You Need to Know about Marijuana Use and Driving</a>	2017	CDC	Marijuana	<ul style="list-style-type: none"> <li>• Provides an overview of how marijuana affects the driving task and the challenges associated with establishing whether marijuana use increases the risk of being involved in a crash.</li> <li>• Links to additional resources.</li> <li>• Cites sources for each area discussed.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><u>Medicines Risk Fact Sheet</u></a>	2019	CDC	Depressants, Drugs General, Opioids	<ul style="list-style-type: none"> <li>• Describes the increased risks older adults (65 years or older) have for falling or being involved in a car crash.</li> <li>• Provides a list of questions that older adults can use to start a discussion with their doctor or pharmacist about medications they are taking.</li> <li>• Provides a checklist of various side effects for older adults</li> </ul>
<a href="#"><u>You Can Protect Your Employees and Others on the Road from Being Hurt or Killed in Motor Vehicle Crashes</u></a>	2015	CDC	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• Provides a checklist that employers can use in developing a motor vehicle safety program for their company.</li> <li>• One way that employers can help protect their workers is by prohibiting the use of alcohol or drugs that affect the ability to drive.</li> </ul>
<a href="#"><u>Older Drivers in the Workplace: How Employers and Workers Can Prevent Crashes</u></a>	2016	CDC	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• Provides a checklist that employers and workers can use to prevent work-related crashes among older drivers.</li> <li>• Encourages employers to prohibit employees from DUI of alcohol and/or drugs.</li> <li>• Provides a myriad of other traffic safety links, such as the IIHS, AARP, and the CarFit Program.</li> </ul>
<a href="#"><u>Keeping Older Drivers Safe on the Road</u></a>	N/A	CDC	Drugs General	<ul style="list-style-type: none"> <li>• Encourages older drivers to keep safe driving habits. <ul style="list-style-type: none"> <li>○ Drivers who are 65 years or older should discuss with a pharmacist or doctor medications they are taking that may impact the ability to drive.</li> </ul> </li> <li>• Other tips include being aware of slower reflexes (i.e., it may take longer to brake), avoiding distractions in the car, and considering alternate ways to get around town.</li> </ul>
<a href="#"><u>Drug and Alcohol Crash Risk</u></a>	2015	Compton, Berning (NHTSA)	Alcohol, Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• Describes the drug and alcohol impaired-driving problem in the United States.</li> <li>• Provides an overview of types of epidemiological studies that attempt to estimate crash risk, challenges in estimating crash risk from drug and alcohol use, and meta-analysis of recent studies in the literature.</li> <li>• Describes a NHTSA case-control study conducted in Virginia Beach, VA, for 20 months, with information collected from drivers both involved and not involved in crashes.</li> <li>• There was statistical significance in unadjusted crash risk among drivers who tested positive for illegal drugs (1.21 times) and THC (1.25 times). After adjustment for other variables such as age, gender, ethnicity, and alcohol concentration level, there was no significant increase in crash risk. However, a statistically significant association did exist between alcohol level and crash risk, even after adjustment for the other demographic variables.</li> </ul>
<a href="#"><u>Fact Sheet: National Roadside Survey of Alcohol and Drug Use by Drivers</u></a>	N/A	NHTSA	Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• Compares and contrasts the 2014 results of the survey with those of previous years.</li> </ul>
<a href="#"><u>Fact Sheet: NHTSA Drug and Alcohol Crash Risk Study</u></a>	N/A	NHTSA	Alcohol, Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• Summarizes a study conducted in Virginia Beach, VA, that assessed the comparative risk of drunk and drugged driving. <ul style="list-style-type: none"> <li>○ The study collected data from 3,000 drivers involved in a crash and 6,000 drivers not involved in a crash.</li> </ul> </li> <li>• Drivers with higher BAC's were more likely to be involved in a crash.</li> <li>• Marijuana users were more likely to be involved in a crash than non-users.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><u>Drug Evaluation and Classification Program</u></a>	N/A	NHTSA	Drugs General	<ul style="list-style-type: none"> <li>The target audience is law enforcement officers.</li> <li>Provides an overview of the Drug Evaluation and Classification Program, which was developed to help officers identify and arrest drivers who are impaired by drugs.</li> <li>Provides basic information on the number of DREs trained in the country, as well as snapshots of the DRE evaluations in Arizona, Colorado, New York, and Minnesota.</li> </ul>
<a href="#"><u>Presence of Drugs in Drivers</u></a>	N/A	NHTSA	Drugs General	<ul style="list-style-type: none"> <li>Provides a snapshot of the presence of drugs among fatally injured drivers from 2007 to 2016. <ul style="list-style-type: none"> <li>In 2016, 42% of drivers who were fatally injured and tested were drug positive, compared to 25% in 2007.</li> <li>In 2017, the most common drug reported through the DRE evaluations was cannabis, at 38%.</li> </ul> </li> <li>Reminds the public about the illegality of impaired driving, explains the difficulties in collecting drug-impaired driving data, and discusses some of the strategies and practices for reducing impaired driving.</li> </ul>
<a href="#"><u>Summer Driving Tips</u></a>	N/A	NHTSA	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>Includes vehicle and occupant safety checklists, and responsible driving tips in preparation for summer road trips, including avoiding driving impaired.</li> </ul>
<a href="#"><u>What Is National Drug and Alcohol Facts Week?</u></a>	N/A	NIDA	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>NIDA launched the National Drug and Alcohol Facts Week to raise awareness and education about drug use and addiction.</li> <li>Discusses partner agencies and how to participate in the week-long event.</li> </ul>
<a href="#"><u>New Drug Driving Rules</u></a>	N/A	Safer Scotland	Drugs General, Marijuana, Opioids, Stimulants	<ul style="list-style-type: none"> <li>Provides an overview of a new law that went into effect on October 21, 2019, in Scotland concerning driving after taking certain drugs. <ul style="list-style-type: none"> <li>The law establishes a zero-tolerance approach for drugged driving.</li> </ul> </li> <li>Provides information about interacting with law enforcement after being stopped by police, as well as advice for those who need to take one of the specified drugs mentioned in the law.</li> </ul>

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# Infographics/Tip Cards

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><u>Parents' Guide to Safe Teen Driving</u></a>	N/A	CDC	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• Aims to help parents talk to their teens about safe driving habits.</li> <li>• Provides a Parent-Teen Driving Agreement, which signifies—in writing—the teen's responsibility to drive safely, including sober driving.</li> <li>• Includes a section for parents and teenagers to discuss, agree, and write down penalties for violating safe driving rules.</li> </ul>
<a href="#"><u>Drugged Driving</u></a>	N/A	CDC	Alcohol, Drugs General, Marijuana, Opioids	<ul style="list-style-type: none"> <li>• The infographic provides a visual representation of the number of Americans driving under the influence of various substances during the last 12 months.</li> </ul>
<a href="#"><u>Education &amp; Outreach Media</u></a>	N/A	DEA	Depressants, Drugs General, Marijuana, Opioids, Stimulants	<ul style="list-style-type: none"> <li>• A series of 8 factsheets discussing various drugs, as well as one focused on drug-impaired driving.</li> <li>• One infographic focuses on the consequences of marijuana and prescription use in college students.</li> </ul>
<a href="#"><u>Drug-Impaired Driving: Marijuana and Opioids Raise Critical Issues for States</u></a>	N/A	GHSA	Drugs General, Marijuana Opioids	<ul style="list-style-type: none"> <li>• Provides a series of four infographics focused on drug-impaired driving trends and comparing alcohol-impaired driving with marijuana and opioids.</li> </ul>
<a href="#"><u>Drugged Driving</u></a>	2018	NIDA	Alcohol, Depressants, Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• Provides a series of four infographics:               <ul style="list-style-type: none"> <li>○ Defines drugged driving.</li> <li>○ Provides statistics concerning how common drugged driving is.</li> <li>○ Discusses effects of drugs on the driving task.</li> <li>○ Provides strategies to prevent drugged driving.</li> </ul> </li> </ul>
<a href="#"><u>Marijuana</u></a>	N/A	NIDA	Marijuana	<ul style="list-style-type: none"> <li>• Discusses the risks of marijuana use and addiction, lower school performance, and driving.</li> </ul>
<a href="#"><u>Drugged Driving-A New Twist on a Deadly Decision</u></a>	N/A	NIDA	Drugs General	<ul style="list-style-type: none"> <li>• An infographic that discusses facts on drug-impaired driving among high school and college students.</li> </ul>
<a href="#"><u>About Impaired Driving</u></a>	2017	TxIDTF	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• The factsheets describe three common sources of impaired driving, including fatigue, alcohol, and drugs.</li> </ul>
<a href="#"><u>Gender and Impaired Driving Infographic</u></a>	2016	TxIDTF	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• The infographic provides Texas specific statistics on impaired driving by gender.</li> </ul>

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# Papers

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><u><i>Driving under the Influence of Alcohol and Marijuana: Beliefs and Behaviors, United States, 2013–2015</i></u></a>	2016	Arnold, Tefft	Alcohol, Marijuana	<ul style="list-style-type: none"> <li>• Surveys 6,612 drivers over the age of 18 on their attitudes/behaviors toward DUI of alcohol and/or marijuana.</li> <li>• Describes results for:               <ul style="list-style-type: none"> <li>○ Use of alcohol and marijuana.</li> <li>○ Use prior to driving.</li> <li>○ Knowledge of per se laws.</li> <li>○ Perceived risks of DWI of marijuana.</li> <li>○ Acceptance of DUI of alcohol or marijuana.</li> <li>○ Support for per se limits for both substances.</li> </ul> </li> </ul>
<a href="#"><u><i>Empirical Profiles of Alcohol and Marijuana Use, Drugged Driving, and Risk Perceptions</i></u></a>	2017	Arteberry, Treloar, McCarthy	Alcohol, Marijuana	<ul style="list-style-type: none"> <li>• Surveys 897 college students to identify their use of alcohol and marijuana and whether they drove impaired.               <ul style="list-style-type: none"> <li>○ Identifies four substance use profiles:                   <ul style="list-style-type: none"> <li>○ No/low alcohol or marijuana use.</li> <li>○ Predominately alcohol users.</li> <li>○ Alcohol and marijuana users.</li> <li>○ Predominantly marijuana users.</li> </ul> </li> </ul> </li> <li>• Students who perceived driving while high to have a greater chance for consequences were in group 1.</li> <li>• Students who perceived driving while high to have a greater chance to be dangerous were in groups 1, 2, and 3.</li> <li>• Recommends that outreach to young adults focuses on the dangers of driving high.</li> </ul>
<a href="#"><u><i>Driving under the Influence of Alcohol, Marijuana, and Alcohol and Marijuana Combined among Persons Aged 16–25 Years—United States, 2002–2014</i></u></a>	2015	Azofeifa, Mattson, Lyerla	Alcohol, Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• Estimates the prevalence of DUI due to alcohol, marijuana, or both, as reported by individuals between 16 and 25 years old.               <ul style="list-style-type: none"> <li>○ Uses data derived from the Substance Abuse and Mental Health Services Administration National Survey on Drug Use and Health from 2002 to 2014.</li> </ul> </li> <li>• DUI of alcohol was more common than DUI of marijuana or both alcohol and marijuana among the age group, which was true when sex, race/ethnicity, and age groups were accounted for.</li> <li>• DUI of alcohol and alcohol with marijuana declined among two age groups: 16–20 and 21–25. DUI of marijuana did not appear to change significantly.</li> </ul>
<a href="#"><u><i>Driving under the Influence of Marijuana and Illicit Drugs among Persons Aged ≥16 Years—United States, 2018</i></u></a>	2019	Azofeifa, Guzman, Hagemeyer, Rudd, Sauber-Schatz	Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• Estimates marijuana and illicit drug use by individuals 16 years old and younger.               <ul style="list-style-type: none"> <li>○ Uses data derived from 2018 self-reported behavior from the Substance Abuse and Mental Health Services Administration’s National Survey on Drug Use and Health.</li> </ul> </li> <li>• DUI of marijuana was more common than DUI of illicit drugs other than marijuana, which was true even when sex, age, and race/ethnicity were accounted for.</li> <li>• DUI of marijuana was more common among males and more common among non-Hispanic individuals.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><i>Understanding Links among Opioid Use, Overdose, and Suicide</i></a>	2019	Bohnert, Ilgen	Opioids	<ul style="list-style-type: none"> <li>• Links the growing use (licit and illicit) of opioids with the increasing number of suicides and overdose deaths in the United States.</li> <li>• Reviews several factors, including over-prescription of opioids, supply and demand of opioids, and risk patterns.</li> <li>• Discusses prevention approaches.</li> </ul>
<a href="#"><i>Prevalence and Motives for Drugged Driving among Emerging Adults Presenting to an Emergency Department</i></a>	2018	Bonar, Arterberry, Davis, Cunningham, Blow, Collins, Walton	Drugs General	<ul style="list-style-type: none"> <li>• Examines the prevalence and factors associated with drugged driving among 18- to 25-year-olds from the Flint, MI area. <ul style="list-style-type: none"> <li>○ Recruits 586 participants from the Hurley Medical Center. Of these participants, 24% reports drugged driving, with 96% reporting using cannabis.</li> </ul> </li> <li>• Participants reported factors surrounding why they engage in drugged driving: <ul style="list-style-type: none"> <li>○ Needing to go home.</li> <li>○ Not thinking drugs could impair the ability to drive.</li> <li>○ Needing to drive only a short distance.</li> <li>○ Not feeling impaired.</li> </ul> </li> </ul>
<a href="#"><i>Interaction of Marijuana and Alcohol on Fatal Motor Vehicle Crash Risk: A Case-Control Study</i></a>	2017	Chihuri, Li, Chen	Alcohol, Marijuana	<ul style="list-style-type: none"> <li>• Aims to examine the individual and combined effects of marijuana and alcohol in traffic crash risk. <ul style="list-style-type: none"> <li>○ Uses data derived from FARS from 2006 to 2008, as well as results from the 2007 National Roadside Survey of Alcohol and Drug Use by Drivers.</li> </ul> </li> <li>• Both alcohol and marijuana use were associated with a significant increase in being involved in a fatal crash.</li> <li>• Combining alcohol and marijuana produced a synergistic effect.</li> </ul>
<a href="#"><i>Zolpidem and Driving Impairment—Identifying Persons at Risk</i></a>	2013	Farkas, Unger, Temple	Depressants	<ul style="list-style-type: none"> <li>• Describes zolpidem (Ambien and Sanofi), including the history of its use in the United States and recommends dosage amounts over the years and for different disorders.</li> <li>• There appears to be a link in the use of zolpidem and driving impairment. Still, more study is needed to understand better how gender, dosage, time since consumption, and other factors relate to impairment.</li> </ul>
<a href="#"><i>More than Just a 'City Problem': Drugs and Alcohol (Mis)use in Rural and Regional Australia</i></a>	2019	Groves	Drugs General, Opioids	<ul style="list-style-type: none"> <li>• Describes the use of opioids in rural Australia, including the types of drugs used and factors in rural society that lead to drug use or do not prevent it, such as lack of services.</li> <li>• Discusses the links of crime and rural drug use, and potential countermeasures.</li> </ul>
<a href="#"><i>Cannabis Effects on Driving Longitudinal Control with and Without Alcohol</i></a>	2016	Hartman, Brown, Milavetz, Spurgin, Pierce, Forelick, Gaffney, Huestis	Alcohol, Marijuana	<ul style="list-style-type: none"> <li>• Aims to determine the effects of cannabis on driving performance. <ul style="list-style-type: none"> <li>○ Cannabis is commonly used in tandem with alcohol, which was a variable also included in the study.</li> </ul> </li> <li>• Study participants drank alcoholic and placebo drinks, and inhaled THC at various doses and placebo. Participants then drove in a simulated environment after dosing. Researchers took blood and breath samples at various intervals.</li> <li>• Results indicate that THC is associated with a decrease in speed and increase in following distance, whereas BrACs are associated with increased speed.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><u>Controlled Cannabis Vaporizer Administration: Blood and Plasma Cannabinoids with and without Alcohol</u></a>	2015	Hartman, Brown, Milavetz, Spurgin, Gorelick, Gaffney, Huestis	Alcohol, Marijuana	<ul style="list-style-type: none"> <li>• Gave participants either a placebo or alcohol with the target BAC of 0.065. Then gave participants a placebo, low-dose THC, or high-dose THC from vaporized cannabis.</li> <li>• Those who received both alcohol and a dose of THC had higher concentrations of blood THC than those who received the placebo and THC.</li> <li>• Results may help explain increased impairment in drivers under the influence of both alcohol and marijuana.</li> </ul>
<a href="#"><u>Cannabis Effects on Driving Skills</u></a>	2013	Hartman, Huestis	Alcohol, Marijuana	<ul style="list-style-type: none"> <li>• Provides a literature review that attempts to reconcile the differences observed in epidemiological and experimental studies concerning the effect of cannabis and crash risk. <ul style="list-style-type: none"> <li>○ Epidemiological data demonstrates a two-fold increase in crash risk after cannabis use, while experimental data demonstrates that cannabis users drive more slowly in an attempt to control their driving ability.</li> </ul> </li> <li>• More research is needed to involve drivers completing complex tasks because experimental data indicates that cannabis users' driving control deteriorates as they complete more complex tasks.</li> <li>• The use of cannabis and alcohol enhances impairment.</li> </ul>
<a href="#"><u>Depression, Antidepressants and Driving Safety</u></a>	2017	Hill, Lauzon, Winbrock, Li, Chihuri, Lee	Drugs General	<ul style="list-style-type: none"> <li>• Provides a literature review to determine the association between depression and antidepressants with traffic crash risk.</li> <li>• Depression, antidepressants, and the combination of both correlates to potentially hazardous driving. Depression is associated with double the crash risk, while antidepressants are associated with a 40% increase in crash risk.</li> </ul>
<a href="#"><u>Exploring Substance Use and Impaired Driving among Adults Aged 21 Years and Older in the United States, 2015</u></a>	2018	Jewett, Peterson, Sauber-Schatz	Alcohol, Drugs General, Marijuana, Opioids	<ul style="list-style-type: none"> <li>• Examines impaired driving and the use of alcohol, marijuana, and opioids among individuals 21 years old and older. <ul style="list-style-type: none"> <li>○ Uses data derived from the 2015 fall ConsumerStyles survey, which is based on self-reported behavior of 3,383 adults.</li> </ul> </li> <li>• About half of participants report using alcohol in the past 30 days, and of those, almost 5% admitted to DUI of alcohol.</li> <li>• In terms of marijuana, 5.5% of participants report use, and of those, almost 32% admit to DUI of marijuana.</li> <li>• About 9% of survey participants report using prescription opioids, and of those, about 3% admit to DUI of prescription opioids.</li> </ul>
<a href="#"><u>Medication Use and the Risk of Motor Vehicle Collisions among Licensed Drivers: A Systematic Review</u></a>	2016	Rudisill, Zhu, Kelley, Pilkerton, Rudisill	Drugs General	<ul style="list-style-type: none"> <li>• Provides a literature review that examines whether certain medications are associated with an increase in traffic crashes.</li> <li>• Of the 53 medications included in the research, 15 (or 28.3%) are associated with an increase in risk of a traffic crash.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><i>The Characterization of Drug and Alcohol Use among Senior Drivers Fatally Injured in U.S. Motor Vehicle Collisions, 2008–2012</i></a>	2016	Rudisill, Zhu, Abate, Davidov, Delagarza, Long, Sambamoorthi, Thornton	Alcohol, Depressants, Drugs General	<ul style="list-style-type: none"> <li>Examines alcohol and drug use among fatally injured drivers. <ul style="list-style-type: none"> <li>Uses data from the FARS.</li> <li>Compares fatally injured senior drivers (65 years old and older) to fatally injured middle-aged drivers (30–50 years old).</li> </ul> </li> <li>Fatally injured senior drivers tested positive for drugs in about 20% of cases, with narcotic drugs and depressant drugs occurring the most frequently.</li> <li>Fatally injured senior drivers are less likely than fatally injured middle-aged drivers to test positive for drugs, multiple drugs, drugs and alcohol, or alcohol.</li> </ul>
<a href="#"><i>The Effect of Cannabis Compared with Alcohol on Driving</i></a>	2010	Sewell, Poling, Sofuoglu	Alcohol, Marijuana	<ul style="list-style-type: none"> <li>Provides a review of literature that attempts to ascertain the effect of marijuana and alcohol on driving performance. Includes cognitive, experimental, and epidemiological studies.</li> <li>In general, cognitive studies result in association between cannabis and decreased driving performance. Experimental studies show the opposite.</li> <li>Epidemiological studies are inconclusive about the role of cannabis and crash risk.</li> <li>In all types of studies, alcohol is associated with greater crash risk. One cause seems to be that the effects of THC are more varied and less predictable than alcohol.</li> <li>Future studies should resolve discrepancies in methodologies; specifically: <ul style="list-style-type: none"> <li>Experimental studies should concentrate on developing ways to consistently measure blood levels, THC levels, and effects after more than one hour has passed since dosing.</li> <li>Epidemiological studies should concentrate on THC levels instead of metabolites found in urine, develop a method to compensate for the delay between when a traffic crash occurs and when a blood test is taken, and use non-fatally injured driver data as a comparison group.</li> </ul> </li> </ul>
<a href="#"><i>Alcohol and Marijuana Use Among Young Injured Drivers in Arizona, 2008–2014</i></a>	2019	Shults, Jones, Komatsu, Sauber-Schatz	Alcohol, Marijuana	<ul style="list-style-type: none"> <li>Examines alcohol and marijuana use among young drivers who were injured in traffic crashes.</li> <li>About one in four injured drivers had alcohol in their system at the time of the crash, and most of those drivers had a BAC of 0.08 g/dL or more.</li> </ul>
<a href="#"><i>The Impact of Medicinal Drugs on Traffic Safety: A Systematic Review of Epidemiological Studies</i></a>	2009	Orriols, Salmi, Philip, Moore, Delorme, Castot, Lagarde	Depressants, Drugs General, Opioids, Stimulants	<ul style="list-style-type: none"> <li>Reviews epidemiological studies on prescription drugs and traffic safety. <ul style="list-style-type: none"> <li>Reviews 1,141 studies, limiting the final review to 22 studies that examine the causal relationship between prescription drugs and traffic safety.</li> </ul> </li> <li>The effects of benzodiazepines on traffic safety has been thoroughly studied, but all other drug categories deserve further attention.</li> </ul>
<a href="#"><i>An Assessment of Traffic Safety Culture Related to Driving After Cannabis Use</i></a>	2016	Otto, Finley, Ward	Marijuana	<ul style="list-style-type: none"> <li>Surveys drivers about their attitudes toward DUI of marijuana.</li> <li>Attitudes vary greatly between those who do and do not use marijuana.</li> <li>Attitudes do not differ between those that lived in states with legalized marijuana and those who do not.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><i>Ability to Monitor Driving under the Influence of Marijuana among Non-fatal Motor-Vehicle Crashes: An Evaluation of the Colorado Electronic Accident Reporting System</i></a>	2018	Peterson, Sauber-Schatz, Mack	Marijuana	<ul style="list-style-type: none"> <li>Aims to assess the ability of Colorado’s Department of Revenue motor-vehicle crash system known as EARS to monitor non-fatal marijuana-impaired driving crashes. <ul style="list-style-type: none"> <li>Uses the CDC surveillance system and evaluation guidelines and examines 2014 Colorado crash data.</li> </ul> </li> <li>EARS contains data that is timely and complete, but in its current state, it is not an effective system to monitor and track incidences of marijuana-impaired driving in non-fatal crashes. This is namely because chemical testing results are not recorded in EARS.</li> <li>Because EARS is a flexible system, it is possible to include chemical sample information without putting an undue burden on the existing system.</li> </ul>
<a href="#"><i>Psychoactive Medication and Traffic Safety</i></a>	2009	Verster, Mets	Depressants, Drugs General, Opioids, Stimulants	<ul style="list-style-type: none"> <li>Reviews studies that looked into the effects of psychoactive prescription drugs and various drug categories on traffic safety.</li> <li>Psychoactive prescription drugs do negatively impact traffic safety.</li> <li>Notes several limitations in the current literature: lack of study on patients who are chronic/long-term users, and differences in patients (gender, age, and size).</li> </ul>
<a href="#"><i>Delays in DUI Blood Testing: Impact on Cannabis DUI Assessments</i></a>	2016	Wood, Brooks, Brooks-Russel, Drum	Marijuana	<ul style="list-style-type: none"> <li>Examines the time between a crash and a blood draw for DUI vehicular homicide and assault cases in Colorado. <ul style="list-style-type: none"> <li>The average time is 2.32 hours, and the median is 2 hours.</li> </ul> </li> <li>Delays in blood testing may result in lower THC levels at the time of testing than at the time of the crash. This is relevant for states with a per se limit.</li> </ul>
<a href="#"><i>Establishing Legal Limits for Driving under the Influence of Marijuana</i></a>	2014	Wong, Brady, Li	Marijuana	<ul style="list-style-type: none"> <li>Reviews issues states should consider when adopting a per se limit for marijuana: <ul style="list-style-type: none"> <li>How the marijuana was consumed.</li> <li>How often the user uses marijuana.</li> <li>How concentrated the consumed marijuana was.</li> <li>The use of any other drugs or substances.</li> </ul> </li> <li>Recommends further research, including understanding the relationship between THC levels and impairment, and the development of more rapid testing.</li> </ul>

Notes:

Depressants include drugs like Ambien, Xanax, Valium, Ativan, Klonopin, and Phenobarbital.

Opioids include drugs like Codeine, Fentanyl, Hydrocodone/Vicodin, Methadone, Morphine, and Oxycodone.

Stimulants include drugs like Adderall, Benzedrine, Concerta, Dexedrine, Ritalin, and dietary/appetite suppressants

Drugs General includes references that talked about drugs generally and did not focus on a specific drug category.

# Reports

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><i>2013–2014 National Roadside Study of Alcohol and Drug Use by Drivers</i></a>	2017	Baker, Berning, Ramirez, Lacey, Carr, Waehrer, Compton	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• Aims to estimate the number of drivers who have alcohol and other drugs in their systems at any given moment in time. Collects data from observational studies, self-reported information, and results from breath alcohol tests from 300 locations in the United States. <ul style="list-style-type: none"> <li>○ Results indicate that 22.3% of daytime and 22.5% of nighttime drivers tested positive for drugs.</li> <li>○ Of these drivers, THC is the most common drug, with 8.7% of daytime and 12.7% of nighttime drivers testing positive.</li> </ul> </li> <li>• Data from the 2013–2014 roadside testing was compared with data from the 2007 roadside testing. Nighttime drug prevalence increases from 16.3% to 20.1%, which is statistically significant.</li> </ul>
<a href="#"><i>2016 Digest of State Laws: Driving under the Influence of Drugs, First Edition</i></a>	2018	Boddie, O'Brien	Drugs General	<ul style="list-style-type: none"> <li>• Provides an overview of state laws as they pertain to drug-impaired driving (current as of 2016).</li> <li>• Includes information for all 50 states, Washington, DC, and Puerto Rico.</li> <li>• Summarizes drugged-driving statutes, information about chemical testing, and provisions about marijuana possession and use.</li> </ul>
<a href="#"><i>Impaired-Driving Leadership Model—Findings Based on Three State Case Studies</i></a>	2018	Coleman, Mizenko	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• Chronicles the journeys of three states—New Mexico, Washington, and Oklahoma—where an Impaired Driving Leadership Model was implemented.</li> <li>• Provides assessment of key steps in the implementation process: <ul style="list-style-type: none"> <li>○ Holding an impaired-driving program assessment.</li> <li>○ Developing an impaired-driving plan.</li> <li>○ Creating a leadership team that will oversee the plan's implementation.</li> <li>○ Receiving support from the state governor.</li> </ul> </li> </ul>
<a href="#"><i>Drug-Impaired Driving: Understanding the Problem and Ways to Reduce It: A Report to Congress</i></a>	2009	Compton, Vegega, Smither	Drugs General	<ul style="list-style-type: none"> <li>• Provides an overview of the challenges associated with preventing, detecting, enforcing, and prosecuting drug-impaired driving.</li> <li>• Some of the specific challenges include: <ul style="list-style-type: none"> <li>○ No quantitative threshold for drug-impairment like there is for alcohol.</li> <li>○ Lack of comprehensive drug crash data.</li> <li>○ Lack of an understanding of which drugs increase crash risk.</li> <li>○ Difficulties in training law enforcement to detect drug impairment.</li> </ul> </li> <li>• Further research is needed to better address the drug-impaired driving problem.</li> </ul>
<a href="#"><i>Marijuana-Impaired Driving—A Report to Congress</i></a>	2017	Compton	Marijuana	<ul style="list-style-type: none"> <li>• Reports to Congress about marijuana use and driving.</li> <li>• Describes the psychoactive component in marijuana, known as THC, and the differences in the way the body absorbs, distributes, and eliminates it compared to alcohol.</li> <li>• Details the challenges associated with detecting marijuana impairment, including that per se level thresholds are not scientifically proven.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
				<ul style="list-style-type: none"> <li>Provides information about state laws, crash risk, and recommendations for improving data collection associated with marijuana's effects on the driving task.</li> </ul>
<a href="#"><i>Medical Conditions and Driving: A Review of the Scientific Literature (1960–2000)</i></a>	2005	Dobbs	Depressants, Drugs General, Opioids, Stimulants	<ul style="list-style-type: none"> <li>Provides a literature review of research from 1960 to 2000 on medical conditions that affect the driving task.</li> <li>Discusses topics on older drivers and drugs.</li> <li>Includes a summary table of guidelines for drivers who are taking medications; a discussion of antidepressants, antihistamines, and benzodiazepines; and a list of references.</li> <li>Discusses various physical and cognitive declines that can impact driving performance and provides a list of references.</li> </ul>
<a href="#"><i>Increasing Impaired-Driving Enforcement Visibility: Six Case Studies</i></a>	2013	Fell, McKnight, Auld-Owens	Drugs General	<ul style="list-style-type: none"> <li>Follows HVE efforts using case studies in six locales: <ul style="list-style-type: none"> <li>Anoka County, MN.</li> <li>Charles County, MD.</li> <li>Pasco County, FL.</li> <li>Escondido, CA.</li> <li>Southeast Wisconsin.</li> <li>A six-state operation in Delaware, Kentucky, North Carolina, Maryland, Virginia, and West Virginia.</li> </ul> </li> <li>Aims to educate cities, counties, regions, and states about effective enforcement initiatives that deter impaired driving.</li> <li>Discusses various aspects of implementing HVE such as sobriety checkpoints and saturation patrols, including funding and support, operation and logistics, and challenges that impact implementation.</li> </ul>
<a href="#"><i>Marijuana Use, Alcohol Use, and Driving in Washington State</i></a>	2018	Grondel, Hoff, Doane	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>Summarizes what is known about impaired driving in Washington State. <ul style="list-style-type: none"> <li>At the time of the report's publication, impaired driving is the top contributing factor in fatal crashes.</li> <li>Poly-drug users (those combining two or more substances—most frequently alcohol and THC) are the most common type of impaired drivers involved in fatal crashes, which has increased every year by 15% since 2012.</li> <li>According to previous state roadside testing, one in five daytime drivers could be under the influence of marijuana.</li> </ul> </li> <li>Summarizes additional data from Washington: <ul style="list-style-type: none"> <li>Roadside Self-Report Marijuana Survey.</li> <li>Behavioral Risk Factor Surveillance Survey.</li> <li>Healthy Youth Survey.</li> </ul> </li> <li>Provides a literature review of studies that examine marijuana- and alcohol-impaired driving.</li> <li>Examines Washington State crash and toxicology data, roadside survey data, and self-report health survey data.</li> </ul>

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				<ul style="list-style-type: none"> <li>○ Poly-drug use (combining two or more substances—most frequently alcohol and THC) is now the most common type of impairment of drivers involved in fatal crashes.</li> <li>○ Drivers, especially young drivers, do not believe marijuana causes impaired driving.</li> <li>● Recommends increased resources for impaired drugged driving.</li> </ul>
<a href="#"><u>Drug-Impaired Driving: A Guide for States</u></a>	2017	GHSA	Alcohol, Depressants, Drugs General, Marijuana, Opioids, Stimulants	<ul style="list-style-type: none"> <li>● Provides an overview of the drug-impaired driving problem, summarizes recent drug-impaired driving research from the past 20 years, and provides information about drug-impaired driving laws in each state.</li> <li>● Discusses the challenges associated with drug-impaired driving detection, enforcement, prosecution, and conviction.</li> <li>● Includes recommendations for states to implement to make programmatic improvements.</li> </ul>
<a href="#"><u>Legalizing Recreational Marijuana Is Linked to Increased Crashes</u></a>	2017	IIHS-HLDI	Marijuana	<ul style="list-style-type: none"> <li>● Reviews insurance claim data from states that legalized recreational marijuana (Colorado, Washington, and Oregon) and compares them to other western U.S. states that have not legalized recreational marijuana.</li> <li>● Legalized marijuana causes a 3% increase in the number of collision claims compared to if recreational marijuana has not been legalized.</li> </ul>
<a href="#"><u>Recreational Marijuana and Collision Claim Frequencies</u></a>	2018	IIHS-HLDI	Marijuana	<ul style="list-style-type: none"> <li>● Updates HLDI's 2017 report.</li> <li>● Uses insurance claim data to compare states that have legalized recreational marijuana (Colorado, Washington, and Oregon) with other western U.S. states that have not legalized recreational marijuana. Uses additional data and took into account legalized retail marijuana in Nevada.</li> <li>● Legalized recreational marijuana increases collision claims by 6%.</li> </ul>
<a href="#"><u>Drugged Driving Expert Panel Report: A Consensus Protocol for Assessing the Potential of Drugs to Impair Driving</u></a>	2011	Kay, Logan	Drugs General	<ul style="list-style-type: none"> <li>● Describes a panel of traffic safety and medical professionals NHTSA convened in 2008 and 2009 to identifying drugs—both illegal and legal—that may impair the ability to drive.</li> <li>● The panel was tasked with developing a list of “safe” drugs that are not known to impair. There was wide agreement among the panel that part of the difficulty in establishing these lists is that there is no common protocol or standard for assessing an individual drug’s impairing potential.</li> <li>● Development of such a protocol could lead to better classification of impairing or non-impairing drug lists.</li> </ul>
<a href="#"><u>Drug and Alcohol Crash Risk: A Case-Control Study</u></a>	2016	Lacey, Kelley-Baker, Berning, Romano, Ramirez, Yao, Compton	Alcohol, Drugs General, Marijuana	<ul style="list-style-type: none"> <li>● The study was conducted for 20 months in Virginia Beach, VA to estimate the risk of crashes involving drivers using drugs, alcohol or both, using data samples from 3,000 drivers involved in crashes and 6,000 drivers not involved in crashes (control group). The data samples consist of BAC, BrAC, and oral fluid swabs.</li> <li>● Of the three variables, the greatest contributor to crash risk was alcohol. Drivers with a BrAC of 0.08 g/210 L were 3.98 times more likely to be involved in a crash than sober drivers. Even when adjusted for demographics like age and gender, drivers with some BrAC had a higher crash risk than sober drivers.</li> </ul>

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				<ul style="list-style-type: none"> <li>For THC in marijuana, there was a slight increase in crash risk, but once adjusted for other demographics like age, gender, and race/ethnicity, there was no indication that THC use was associated with a greater crash risk than sober drivers.</li> </ul>
<a href="#"><i>Pilot Test of New Roadside Survey Methodology for Impaired Driving</i></a>	2007	Lacey, Kelley-Baker, Furr-Holden, Brainard, Moore	Drugs General	<ul style="list-style-type: none"> <li>Aims to develop and test roadside testing procedures that would allow for the expanded collection and measurement of drugs (other than alcohol).</li> <li>The expanded tested procedures included oral fluid and blood sample collection for analysis.</li> <li>Pilot testing was successful and deemed appropriate for full-scale national roadside testing.</li> </ul>
<a href="#"><i>Multiple Medications and Vehicle Crashes: Analysis of Databases</i></a>	2008	LeRoy, Morse	Drugs General	<ul style="list-style-type: none"> <li>Investigates associations between drivers who are 50 years old or older who take medications and traffic crash risk, as well as drug interactions and crash risk.</li> <li>Analyzes data from two databases: <ul style="list-style-type: none"> <li>The National Ambulatory Medical Care Survey.</li> <li>PharMetrics.</li> </ul> </li> <li>There is an association between traffic crash risk and the kinds and types of medications taken.</li> <li>Older drivers taking one or more medications were 1.43 times more likely to be involved in a traffic crash than those drivers not taking medications.</li> <li>Concerning potentially impairing medications, crash risk increased to 1.87 among drivers who were taking three or more potentially impairing medications.</li> </ul>
<a href="#"><i>Literature Review of Polypharmacy and Older Drivers: Identifying Strategies to Collect Drug Usage and Driving Functioning Among Older Drivers</i></a>	2006	Lococo, Staplin	Depressants, Drugs General, Opioids	<ul style="list-style-type: none"> <li>Discusses the factors that affect NHTSA's ability to investigate the effects of various medications among the older driving population.</li> <li>Provides information about the prevalence of drug use among older adults, including prescriptions, over-the-counter medications, and mixing of alcohol and other medications.</li> <li>Discusses the physiological effects of various medications, the effects various medications have on the driving task, methods for monitoring the use of medications, and methods for measuring driving performance among the older driving population.</li> </ul>
<a href="#"><i>It's High Time: A Common Sense Approach to Marijuana-Impaired Driving</i></a>	2019	Moore, Moore	Marijuana	<ul style="list-style-type: none"> <li>Summarizes the challenges associated with detecting and measuring impairment caused by cannabis.</li> <li>As more states have moved to legalize recreational or medicinal marijuana, they must be prepared to detect and enforce drug-impaired driving laws. Because there is no associated per se level of cannabis impairment, states must rely upon law enforcement to assess impairment.</li> <li>Emphasizes the need for states to invest in DRE and ARIDE, as well as body/dash cams for law enforcement.</li> <li>Describes the need for states to invest in toxicology testing to ensure that evidence of impairment or unimpairment is swiftly processed and to prevent backlogs.</li> <li>Recommends that—on the federal level—cannabis be descheduled so that cannabis-related research can be conducted more easily, and states can better understand how cannabis affects driving performance.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><u><i>Driving under the Influence of Cannabis and Alcohol: Key Findings Report from 2018 Survey</i></u></a>	2018	Montana State University Western Transportation Institute	Alcohol, Marijuana	<ul style="list-style-type: none"> <li>• Discusses the attitudes, beliefs, and behaviors of adults in Washington State as they relate to cannabis, alcohol, and impaired driving.</li> <li>• Surveys 133 participants via AmeriSpeak’s panel and 737 participants from an online Toluna panel. <ul style="list-style-type: none"> <li>○ Males, residents in the eastern part of the state, and chronic cannabis users were more likely to engage in DUI of cannabis and alcohol.</li> <li>○ Although it varied, at least 75% of survey respondents did not drive within two hours of consuming alcohol, cannabis, or both; however, those individuals who did drive after consuming both alcohol and cannabis were more likely to drive after consuming cannabis alone or alcohol alone.</li> </ul> </li> <li>• Describes in detail behaviors, willingness to engage, perceptions, and other issues related to traffic safety culture.</li> </ul>
<a href="#"><u><i>Antihistamines and Drug-Related Behavior: A Review of the Evidence for Impairment</i></u></a>	2004	Moskowitz, Wilkinson	Drugs General	<ul style="list-style-type: none"> <li>• Provides a literature review of 130 publications from 1998 and before concerning the effects of antihistamines on the driving task. <ul style="list-style-type: none"> <li>○ There was a slight association between antihistamine use and motor vehicle crashes when first-generation antihistamines were present.</li> <li>○ Substantial evidence points to first-generation antihistamines and objective signs of impairment and also subjective signs of sedation.</li> <li>○ Second-generation antihistamines appear to reduce the potential for side effects, but even they can cause sedation and impairment.</li> <li>○ Within both first- and second-generation antihistamines, some drugs should be avoided because of associations with impairment and sedation.</li> </ul> </li> <li>• It is critical to use methodologies that are sound and valid to better understand differences in drug effects.</li> </ul>
<a href="#"><u><i>Impact of the Legalization and Decriminalization of Marijuana on the DWI System: Highlights from the Expert Panel Meeting</i></u></a>	2017	NHTSA	Marijuana	<ul style="list-style-type: none"> <li>• Describes a one-day panel with NHTSA and GHSA that included impaired-driving safety experts from states where marijuana had been legalized for recreational or medicinal purposes or decriminalized: Arizona, California, Colorado, Montana, Oregon, Vermont, and Washington.</li> <li>• The purpose of the panel was to identify: <ul style="list-style-type: none"> <li>○ Changes within the DWI system that have occurred as a result of marijuana legalization or decriminalization.</li> <li>○ Lessons learned.</li> <li>○ Data points that can be used to understand the effects of marijuana legalization or decriminalization.</li> </ul> </li> </ul>
<a href="#"><u><i>Clinician’s Guide to Assessing and Counseling Older Drivers</i></u></a>	2015	NHTSA	Drugs General	<ul style="list-style-type: none"> <li>• Was developed to reflect the nature of caring for older drivers and preventing motor vehicle crashes among this population.</li> <li>• Provides an overview of the older adult driver population, crash risk, screening and assessment, and clinical interventions.</li> <li>• Describes medical conditions and medications that could affect the ability to drive safely and lists specific medication classes and their symptoms.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><u>Marijuana</u></a>	2020	NIDA	Marijuana	<ul style="list-style-type: none"> <li>• Provides a comprehensive overview of marijuana. <ul style="list-style-type: none"> <li>○ Includes an overview of the drug, its prevalence in the United States, its effects on the brain and body, its effects on driving performance, long-term health consequences such as potential for addiction and effects on the lungs, treatment options, and a list of references.</li> </ul> </li> </ul>
<a href="#"><u>Marijuana, Other Drugs, and Alcohol Use by Drivers in Washington State</u></a>	2016	Ramirez, Berning, Carr, Scherer, Lacey, Kelley-Baker, Fisher	Alcohol, Marijuana	<ul style="list-style-type: none"> <li>• Describes roadside testing conducted in Washington State after the legalization of marijuana in 2014 to estimate the prevalence of marijuana, alcohol, and both in drivers' systems. Collects data in three waves: <ul style="list-style-type: none"> <li>○ Before legalization.</li> <li>○ Six months after legalization.</li> <li>○ One year after legalization.</li> </ul> </li> <li>• There was no statistically significant difference in the prevalence of THC-positive drivers between each wave; however, there was a small increase in THC-positive drivers at nighttime between each wave.</li> </ul>
<a href="#"><u>Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices</u></a>	2018	Richard, Magee, Bacon-Abdelmoteleb, Brown	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• Serves as an impaired driving safety resource guide intended for use by State Highway Safety Offices.</li> <li>• Summarizes impaired driving safety—and other traffic safety—countermeasures and strategies that have demonstrated a proven effect in reducing impaired-driving crashes, injuries, and fatalities.</li> </ul>
<a href="#"><u>A Pilot Study to Test Multiple Medication Usage and Driving Functioning</u></a>	2008	Staplin, Lococo, Gish, Martell	Drugs General	<ul style="list-style-type: none"> <li>• Aims to better understand how potentially impairing prescription medications affect the older driving population.</li> <li>• Conducts a literature review, performs data analysis from a prescription claims database, prioritizes other potential databases for future data analysis, and performs an on-road study of older drivers who take multiple potentially impairing medications.</li> <li>• Examines the question of whether the medications taken to mitigate the risk of falling could be associated with the same risk of being involved in a motor vehicle crash. The literature indicates that chronic medical conditions were more associated with fall risk than type of medications taken.</li> <li>• Analyzes data using the Parmetrics database, which includes the types of potentially impairing medications drivers were taking and codes that indicate whether they sustained injuries from a traffic crash. Analysis indicates that the number of potentially impairing medications a crash-involved driver is taking steadily increases from age 50 to the 65–69 age range. That said, almost one-half to one-third of crash-involved drivers at these age ranges were not taking potentially impairing medications. <ul style="list-style-type: none"> <li>○ For the on-road evaluation, drivers who failed this assessment were some of the oldest participants. However, the study indicated that due to the small sample size and the number of drugs and drug classes that exist, the study was unable to determine any association between medication usage and driving performance.</li> </ul> </li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><i>Drug-Impaired Driving—Additional Support Needed for Public Awareness Initiatives</i></a>	2015	United States Government Accountability Office	Drugs General	<ul style="list-style-type: none"> <li>• Provides an overview of the drugged- and drug-impaired driving problem in the United States.</li> <li>• Although there are various sources of national-level data available—such as surveys, arrests, toxicology, and crashes—these provide a limited snapshot of the larger problem.</li> <li>• The 2013–2014 National Roadside Survey of Alcohol and Drug Use by Drivers found that about 20% of drivers tested positive for one or more drugs, but the survey data cannot indicate the extent to which these drivers were impaired. Drug impairment is difficult to identify because its effects vary from individual to individual more than alcohol does.</li> <li>• Complicated to detect, prosecute, and convict drug-impaired drivers because of issues of defining and articulating what drug impairment is.</li> <li>• Drug-impaired driving has not been explicitly incorporated into NHTSA’s national impaired-driving safety campaigns in part because the available data are so varied and complex.</li> <li>• Representatives from various states indicated that greater emphasis should be placed on marijuana-impaired driving and impairment due to over-the-counter and prescription medications.</li> <li>• NHTSA plans to improve education and public awareness through surveys, additional training for medical professionals, and explicit messaging, but these efforts can take years to put in place.</li> </ul>
<a href="#"><i>Drugs and Driving</i></a>	2017	Utah Department of Public Safety Highway Safety Office	Drugs General, Marijuana, Opioids	<ul style="list-style-type: none"> <li>• Provides drugs and driving data information.</li> <li>• Discusses how drugs affect the brain and body and can impair the ability to drive.</li> <li>• Highlights the number and percentage of drug-positive crashes, drugs most commonly found in drivers’ systems, the role of prescription drugs, and characteristics of drug-positive drivers. <ul style="list-style-type: none"> <li>○ Emphasizes that a drug-positive is not indicative of impairment.</li> </ul> </li> </ul>
<a href="#"><i>A State-by-State Analysis of Laws Dealing with Driving under the Influence of Drugs</i></a>	2009	Walsh	Drugs General	<ul style="list-style-type: none"> <li>• Provides a review of drug-impaired driving laws in each state (current as of 2008).</li> <li>• Findings indicate that the degree of drug-impaired driving offenses vary substantially from state to state.</li> </ul>

Notes:

Depressants include drugs like Ambien, Xanax, Valium, Ativan, Klonopin, and Phenobarbital.

Opioids include drugs like Codeine, Fentanyl, Hydrocodone/Vicodin, Methadone, Morphine, and Oxycodone.

Stimulants include drugs like Adderall, Benzedrine, Concerta, Dexedrine, Ritalin, and dietary/appetite suppressants.

Drugs General includes references that talked about drugs generally and did not focus on a specific drug category.

# Websites

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><i>Substance Impaired Driving</i></a>	N/A	AAA Exchange	Alcohol, Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• Provides information related to substance-impaired driving, which includes impairment caused by alcohol, prescription and over-the-counter medications, and other drugs.</li> <li>• Discusses the types of side effects of prescription and over-the-counter medications that can affect the driving task.</li> <li>• Includes an interactive tool called Roadwise Rx, where the user can enter specific medications and learn more about how those medications may affect driving. The list can be printed and discussed with doctors or pharmacists.</li> <li>• Provides several fact sheets and infographics about medications and driving.</li> <li>• Also discusses alcohol and cannabis.</li> </ul>
<a href="#"><i>Get the Facts about Marijuana</i></a>	N/A	Alaska Department of Health and Social Services	Marijuana	<ul style="list-style-type: none"> <li>• Provides a comprehensive overview of using marijuana in Alaska.</li> <li>• Provides a brief overview of what marijuana is, how it is used, and its effects on various groups, such as those who are young, pregnant, and adults.</li> <li>• Provides safety tips for responsible use and talking points for caregivers to have conversations with their children.</li> <li>• Provides an overview of the laws in Alaska, signs of marijuana overuse, and survey data concerning the public's use of marijuana.</li> <li>• Includes colorful infographics, links to research studies, tip cards, and links to additional resources.</li> </ul>
<a href="#"><i>Drugs and Driving</i></a>	2017	Alcohol and Drug Foundation	Alcohol, Drugs General, Marijuana, Opioids, Stimulants	<ul style="list-style-type: none"> <li>• Describes how drugs affect the driving task, the effects of mixing drugs with similar and different effects, and tips for safe driving such as planning ahead.</li> <li>• Provides information about discussing drugs with a person's family and teens, reducing risk concerning alcohol, pharmaceuticals, and poly-drug use.</li> <li>• Provides an interactive drug search tool that offers additional information about individual drugs.</li> <li>• Links to various literature, PSAs, and social media platforms.</li> </ul>
<a href="#"><i>Driving under the Influence (DUI)</i></a>	N/A	Arizona Department of Transportation	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• Discusses DUI laws and penalties in Arizona, including first and subsequent offenses, DUI with a BAC greater than 0.15, and aggravated DUI.</li> <li>• Briefly describes the use of ignition interlock devices, which are installed in certain offenders' vehicles.</li> <li>• Provides additional links about the devices.</li> </ul>
<a href="#"><i>Driver Advice: Drink and Drug-Driving</i></a>	2015	Brake (United Kingdom)	Drugs General	<ul style="list-style-type: none"> <li>• Urges the public to drive sober.</li> <li>• Provides a sober pledge that drivers can take.</li> <li>• Provides safe driving tips (e.g., planning safe ways to get home in advance if you are going to be drinking, preventing others from driving impaired, and making sure that alcohol and other drugs are completely removed from an individual's system the next morning before driving).</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
				<ul style="list-style-type: none"> <li>Includes a PSA video, fact sheets about impaired driving, and information about messaging campaigns.</li> </ul>
<a href="#"><i>Drug-Impaired Driving</i></a>	N/A	California Office of Traffic Safety	Alcohol, Depressants, Drugs General, Marijuana, Opioids, Stimulants	<ul style="list-style-type: none"> <li>Reminds the California public that impaired driving is not just drunk driving—it is also drugged driving.</li> <li>Urges the public only to take medications as prescribed and talk to a pharmacist or doctor about prescription labels.</li> <li>Emphasizes that over-the-counter prescriptions can also be impairing.</li> <li>Briefly discusses California Proposition 64, legalizing marijuana for adults, and details how marijuana affects driving.</li> <li>Discusses the risks associated with mixing alcohol with medications or marijuana.</li> </ul>
<a href="#"><i>Drive Safe Temecula</i></a>	N/A	City of Temecula, CA	Drugs General	<ul style="list-style-type: none"> <li>Promotes safe driving habits during the summer by focusing on a specific safety topic each month. Drunk driving and drug-impaired driving are the topics focused on in August.</li> <li>Reminds the public that drunk, and drug-impaired driving is illegal for everyone in the country.</li> <li>Links to NHTSA.</li> </ul>
<a href="#"><i>Impaired Driving: Get the Facts</i></a>	2019	CDC	Alcohol, Drugs General, Marijuana	<ul style="list-style-type: none"> <li>Provides an overview of impaired-driving crash data, including both alcohol- and marijuana-related.</li> <li>Provides information about those people who are most at risk for being involved in an impaired-driving crash, the effects of BAC on the driving task, recommendations for states and individuals to prevent impaired driving, and links to additional resources.</li> </ul>
<a href="#"><i>Impaired Driving</i></a>	2019	CDC	Alcohol, Drugs General, Marijuana	<ul style="list-style-type: none"> <li>Provides information about impaired driving: <ul style="list-style-type: none"> <li>Information about impairment and risky groups.</li> <li>Alcohol's effect on the driving task.</li> <li>Fact sheets for all 50 states.</li> <li>Information specific to teens.</li> <li>Impaired-driving-related publications and research literature.</li> <li>Other interactive tools, such as drunk-driving state maps.</li> </ul> </li> </ul>
<a href="#"><i>Older Driver Safety Awareness Week</i></a>	2017	CDC	Drugs General	<ul style="list-style-type: none"> <li>Provides an overview of Older Driver Safety Awareness Week. <ul style="list-style-type: none"> <li>Older drivers are those individuals 65 years old or older.</li> </ul> </li> <li>Discusses the increased risk of being involved in a motor vehicle crash because of physical changes that occur, such as increasing frailty or underlying health conditions.</li> <li>Warns about the risks associated with the driving task when people take over-the-counter and prescription medications.</li> <li>Provides some tips older drivers can take to mitigate crash risk.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><u>Older Adult Drivers</u></a>	2020	CDC	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• Describes the older adult crash risk and discusses steps to mitigate crashes and injuries among this population.</li> <li>• Links to additional resources and publications.</li> <li>• Very briefly mentions that alcohol and driving are a dangerous combination, and if older adults are taking any medicines, they should discuss them with their doctor or pharmacist.</li> </ul>
<a href="#"><u>Older Drivers: Stay Safe Behind the Wheel</u></a>	2019	CDC	Drugs General	<ul style="list-style-type: none"> <li>• Discusses crash risk injury that older adults face.</li> <li>• Provides an overview of crash data involving older drivers.</li> <li>• Discusses steps older adults can take to encourage safe driving, including talking to pharmacists and doctors any time there is a change in medication because stopping or adding medications may affect one's driving ability.</li> </ul>
<a href="#"><u>What You Need to Know about Marijuana Use in Teens</u></a>	2017	CDC	Marijuana	<ul style="list-style-type: none"> <li>• Discusses marijuana use among teenagers, including negative effects on the brain and on school and social life.</li> <li>• Links to additional resources.</li> <li>• Is also available in Spanish.</li> </ul>
<a href="#"><u>Five Minutes or Less for Health Weekly Tip: Limit Alcohol and Prevent Prescription Drug Overdose</u></a>	2015	CDC	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• Part of CDC's "Five Minutes or Less" weekly health series.</li> <li>• Divided into two sections: <ul style="list-style-type: none"> <li>○ The effects of alcohol on the body.</li> <li>○ The frequency and misuse of prescription drugs.</li> </ul> </li> <li>• Each section contains recommendations and precautions individuals should take concerning alcohol consumption and prescription drug use.</li> </ul>
<a href="#"><u>Linking Information for Nonfatal Crash Surveillance (LINCS)</u></a>	2020	CDC	Drugs General	<ul style="list-style-type: none"> <li>• Discusses the importance of linking various data sets in order to better understand traffic crashes and consequences.</li> <li>• Assists states in developing data linkage programs or modifying existing programs.</li> </ul>
<a href="#"><u>Before Taking Hits, Remember the Tips</u></a>	N/A	Colorado Department of Public Health and Environment	Marijuana	<ul style="list-style-type: none"> <li>• Reminds the public about responsible marijuana use in Colorado.</li> <li>• Responsible use tips include: <ul style="list-style-type: none"> <li>○ Being courteous to others' right to fresh air.</li> <li>○ Recognizing that the effects of edibles can be delayed.</li> <li>○ Storing marijuana in a safe and locked area.</li> <li>○ Avoiding mixing alcohol and marijuana.</li> <li>○ Understanding how marijuana affects you and knowing your limits.</li> <li>○ Avoiding driving while high.</li> <li>○ Refraining from transporting marijuana out of state.</li> <li>○ Not sharing marijuana with minors.</li> </ul> </li> <li>• Describes marijuana and its effects on health.</li> <li>• Provides information for users from out of state.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><i>Drugged Driving Colorado</i></a>	N/A	Colorado Department of Transportation	Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• Provides information about cannabis use and driving in Colorado.</li> <li>• Provides FAQs concerning cannabis use and driving, data from self-reported marijuana use surveys, and additional state resources.</li> <li>• Provides an overview of Colorado’s efforts in anti-impaired-driving messaging campaigns, and how the state is working to enforce drugged driving laws.</li> </ul>
<a href="#"><i>Getting High and Driving</i></a>	N/A	DEA	Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• Reminds the public that drugged driving includes being under the influence of alcohol, prescription or over-the-counter medications, and/or illicit drugs.</li> <li>• References the 2017 National Survey on Drug Use and Health and a GHSA Drug-Impaired Driving Survey, which help illustrate the frequency of marijuana use among young people and the driving public.</li> <li>• Includes a drug index, examples of drug paraphernalia, links to various videos and publications, and personal stories from drug users.</li> </ul>
<a href="#"><i>Drugged Driving—What You Should Know</i></a>	2019	DEA	Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• The target audience is parents, educators, and other caregivers.</li> <li>• Provides FAQs concerning drugged driving, including drug-impaired driving’s definition, frequency, risks associated with drugged driving, and (briefly) the legality of marijuana.</li> <li>• Includes a drug index, examples of drug paraphernalia, emerging drug trends, consequences of drugged driving, and how to get involved with DEA-affiliated events.</li> </ul>
<a href="#"><i>Drugs and Driving Don’t Mix</i></a>	N/A	Drug Aware (western Australia)	Alcohol, Depressants, Drugs General, Marijuana, Stimulants	<ul style="list-style-type: none"> <li>• Aims to educate young people and the greater driving community of the dangers of using drugs and driving.</li> <li>• Includes a booklet, tip card, press ad, and PSA video that discuss the dangers of driving and using drugs.</li> <li>• Specifically, the booklet goes into great detail about common drugs—such as ecstasy, cocaine, LSD, heroin, cannabis, and alcohol—and their effects on the body and the driving task. The booklet also provides safe driving tips to avoid drugged driving.</li> <li>• Provides information about previous campaigns on amphetamines, ecstasy, cannabis, and meth; and current efforts that look at reducing illicit drug use at major events and dispelling the notion that most young people use drugs.</li> </ul>
<a href="#"><i>Some Medicines and Driving Don’t Mix</i></a>	2019	FDA	Depressants, Drugs General, Opioids, Stimulants	<ul style="list-style-type: none"> <li>• Provides an overview of side effects associated with prescription and over-the-counter medications, types of medications that may affect an individual’s ability to drive (e.g., sleep and allergy medicines), and the risks of using cannabidiol and driving.</li> <li>• Provides recommendations for preventing driving impaired.</li> </ul>
<a href="#"><i>Driving When You Are Taking Medications</i></a>	2013	FDA	Drugs General	<ul style="list-style-type: none"> <li>• Discusses the various reasons individuals may take medications, how medications and supplements can affect the driving task, and whether it is safe to drive while taking medications.</li> <li>• Suggests talking with doctors and pharmacists about all medications, self-monitoring, and following up with health care professionals about the medicine’s effects.</li> <li>• Provides alternate solutions for getting around town in case the individual decides to reduce driving frequency.</li> <li>• PDF with material available at: <a href="https://www.fda.gov/media/76863/download">https://www.fda.gov/media/76863/download</a></li> </ul>

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<a href="#"><u>Drugs and Driving</u></a>	N/A	Florida Highway Safety and Motor Vehicles	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>Reminds the public that drugged driving will result in the same consequences as alcohol-impaired driving.</li> <li>Urges the public to consult doctors and pharmacists if they are uncertain how prescriptions and over-the-counter medications affect their ability to drive.</li> <li>Reminds the public of the dangers of mixing alcohol and drugs.</li> <li>Links to other impaired-driving-related topics, such as ignition interlocks, administrative suspension laws, and young risky drivers.</li> <li>Is also available in Spanish.</li> </ul>
<a href="#"><u>Prescription Drugs</u></a>	2018	Government of New South Wales	Alcohol, Drugs General, Marijuana, Opioids, Stimulants	<ul style="list-style-type: none"> <li>Provides safe-driving tips for using prescription medications in Australia.</li> <li>Provides a list of commonly asked questions and answers concerning prescription medications and driving.</li> <li>Discusses alcohol and illegal drugs, the negative effects of use, and how they can impact driving safely.</li> </ul>
<a href="#"><u>Cannabis Legalization: What the New Laws Mean for Drivers</u></a>	N/A	Insurance Corporation of British Columbia	Marijuana	<ul style="list-style-type: none"> <li>Provides an overview of new drug-impaired driving laws.</li> <li>Discusses the recently passed legislation and the penalties associated with driving impaired.</li> <li>Provides an FAQ page concerning cannabis and driving, a reminder about zero-tolerance laws when it comes to minors/new drivers, and links to additional information concerning alcohol and drug-impaired driving and changes to the Criminal Code concerning alcohol- and drug-impaired driving.</li> </ul>
<a href="#"><u>What Is Drugged Driving</u></a>	N/A	Montana Department of Transportation	Drugs General	<ul style="list-style-type: none"> <li>Defines drugged driving in Montana.</li> <li>Briefly discusses the drugged driving problem in Montana.</li> <li>Provides dozens of links to other state and national resources.</li> </ul>
<a href="#"><u>Special Feature: Impaired Driving</u></a>	N/A	National Criminal Justice Reference Service	Alcohol, Drugs General, Marijuana	<ul style="list-style-type: none"> <li>Provides a broad overview of the impaired-driving problem nationally.</li> <li>Discusses how alcohol and other drugs impair the brain and ability to drive safely.</li> <li>Touches upon the 2016 National Survey on Drug Use and Health, which provides data on alcohol and drug usage among young adults and while driving.</li> <li>Links to a PSA video produced by the National Sheriffs' Association and a few other webpages produced by the Office of Justice Programs.</li> </ul>
<a href="#"><u>Teen Driving</u></a>	N/A	NHTSA	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>Provides a general overview of licensing requirements and common safety problems associated with teen driving, including the dangers of driving impaired—whether due to alcohol and/or drugs.</li> <li>Provides talking points about impairment and links to various impaired driving fact sheets and reports.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><u>Drugged Driving / Marijuana-Impaired Driving</u></a>	2019	NCSL	Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• Discusses the challenges in detecting and testing for marijuana-impaired driving.</li> <li>• Provides a few national statistics concerning marijuana use and driving, and an overview of state marijuana-impaired driving laws.</li> <li>• Links to other NCSL publications and federal organizations such as ONDCP, DEA, and GHSA.</li> </ul>
<a href="#"><u>The Impaired Driver Program—Alcohol and Drug Rehabilitation Program</u></a>	N/A	New York State Department of Motor Vehicles	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• Provides an overview of the Impaired Driver Program (formerly known as the Drinking Driver Program) in New York.</li> <li>• Individuals who are convicted of an alcohol or drug-related driving offense will have their driving license revoked. But through the Impaired Driver Program, these individuals may be eligible for a conditional driver license.</li> <li>• Discusses how this process works and provides links for getting relicensed after the program.</li> </ul>
<a href="#"><u>Alcohol and Drug Crashes</u></a>	2018	New Zealand Ministry of Transport	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• Provides various 2018 alcohol and drugs crash data for New Zealand.</li> <li>• Offers a different crash data dashboard. The user can view alcohol and drug crash data by the number of causalities and demographics of casualties, license status, and gender.</li> </ul>
<a href="#"><u>Drug-Impaired Driving</u></a>	N/A	NHTSA	Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• Provides an overview of drug-impairing substances, common marijuana use misconceptions, the illegality of driving impaired, and responsible behavior.</li> <li>• Links to various drug-impaired driving research reports and case studies, traffic safety fact sheets, presentations and speeches, press releases, and national campaigns.</li> </ul>
<a href="#"><u>A Call to Action to Prevent Drug-Impaired Driving</u></a>	N/A	NHTSA	Drugs General	<ul style="list-style-type: none"> <li>• Gives a call to action to educate the public about NHTSA’s drug-impaired driving initiative.</li> <li>• Provides several tips to share with family and friends concerning drug-impaired driving.</li> <li>• Advises the public to visit <a href="https://nhtsa.gov/drugimpaireddriving">nhtsa.gov/drugimpaireddriving</a> to learn more about the issue.</li> </ul>
<a href="#"><u>Understanding How Marijuana Affects Driving</u></a>	N/A	NHTSA	Marijuana	<ul style="list-style-type: none"> <li>• Introduces NHTSA’s “If You Feel Different, You Drive Different” drug-impaired driving prevention campaign.</li> <li>• Links to a 2007–2013 NHTSA study that demonstrated a 48% increase in roadside drivers with THC in their systems.</li> <li>• The campaign urges the public to hand car keys over to someone else if they have been using marijuana or another impairing substance and to take the car keys from friends who are about to drive if they have been using impairing substances.</li> </ul>
<a href="#"><u>Dangers of Driving After Taking Prescription Drugs or Over-the-Counter Medicines</u></a>	N/A	NHTSA	Depressants, Drugs General, Opioids	<ul style="list-style-type: none"> <li>• Describes the dangers of DUI of drugs, including prescription and over-the-counter medications.</li> <li>• Many people are not aware that they can become impaired due to these kinds of drugs.</li> <li>• NHTSA has launched the “There’s More than One Way to Be Under the Influence” message to help educate the public.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><i>There's More than One Way to Be under the Influence</i></a>	N/A	NHTSA	Drugs General	<ul style="list-style-type: none"> <li>Introduces NHTSA's "There's More than One Way to Be Under the Influence" messaging campaign.</li> <li>Links to the 2013–2014 National Roadside Survey, which demonstrated that 10% of weekday, daytime drivers tested positive for a prescription and/or over-the-counter drugs.</li> <li>Provides tips for acting responsibly—whether you are the would-be driver or a bystander.</li> </ul>
<a href="#"><i>Drug-Impaired Driving Is Impaired Driving</i></a>	N/A	NHTSA	Drugs General	<ul style="list-style-type: none"> <li>Describes the "Drive Sober or Get Pulled Over" messaging campaign, which has been expanded to include impairment due to drugs—whether legal or illegal.</li> <li>Reminds the public that impaired driving is a choice. With the advent of ridesharing apps, there is no excuse to drive impaired.</li> </ul>
<a href="#"><i>Drug-Impaired Driving Awareness: Changing Behavior, Saving Lives</i></a>	N/A	NHTSA	Drugs General	<ul style="list-style-type: none"> <li>Provides an overview of recent initiatives NHTSA has taken to combat drug-impaired driving: <ul style="list-style-type: none"> <li>Establishing a call to action to encourage impaired driving safety stakeholders at all levels to educate the public about the dangers of drug-impaired driving.</li> <li>Developing the "If You Feel Different, You Drive Different" and "Drive High, Get a DUI" messaging campaigns.</li> <li>Coordinating listening sessions with safety stakeholders from across multiple states.</li> <li>Awarding various states with funding for drug-impaired driving training.</li> <li>Creating subject matter expert working groups.</li> </ul> </li> </ul>
<a href="#"><i>This July 4th, Celebrate America Safely</i></a>	N/A	NHTSA	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>Focuses on the July 4th holiday weekend, urging the public to celebrate responsibly.</li> <li>Partying responsibly means designating a sober driver—even if you have only had one drink—and if you are the host, making arrangements for your guests to get home safely.</li> <li>This effort is part of the "Buzzed Driving Is Drunk Driving" and "If You Feel Different, You Drive Different" messaging campaigns.</li> </ul>
<a href="#"><i>If You Feel Different, You Drive Different—Drive High, Get a DUI</i></a>	N/A	NHTSA	Drugs General, Marijuana	<ul style="list-style-type: none"> <li>Reminds the public that drug-impaired driving is just as illegal and risky as drunk driving.</li> <li>Includes a PSA video, two social media graphics on marijuana presence in drivers killed in crashes from 2007 to 2016, and tips for being a responsible driver and host.</li> </ul>
<a href="#"><i>Summer Driving Tips 2019</i></a>	N/A	NHTSA	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>Provides general safety tips before gearing up for a summer road trip, such as vehicle and occupant safety checklists, and responsible driving tips.</li> <li>One driving tip includes avoiding impaired driving, which puts all road users at risk.</li> <li>PDF with material available at: <a href="https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/14645-summer_driving_tips_2020_052020_v2_tag_0.pdf">https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/14645-summer_driving_tips_2020_052020_v2_tag_0.pdf</a></li> </ul>
<a href="#"><i>Impaired Driving (Drug-Related) Reports</i></a>	N/A	NHTSA	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>Links to drug-impaired driving reports developed by NHTSA.</li> <li>Selected titles include: <ul style="list-style-type: none"> <li>Drug and Alcohol Crash Risk.</li> <li>Understanding the Limitations of Drug Test Information, Reporting, and Testing Practices in Fatal Crashes.</li> <li>Drug Per Se Laws: A Review of Their Use in States.</li> </ul> </li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
				<ul style="list-style-type: none"> <li>Allows a user to download a PDF of each report.</li> </ul>
<a href="#"><i>Guidance Documents</i></a>	N/A	NHTSA	Alcohol, Drugs General, Marijuana	<ul style="list-style-type: none"> <li>Links to various guiding documents that can help states and the public identify best practices and/or better understand the challenges that are associated with impaired driving and other traffic safety issues.</li> <li>Some of these guiding documents include an ignition interlock toolkit, an evaluation of DUI courts in Georgia, drug and alcohol crash risk studies, a marijuana-impaired driving report to Congress, and an overview of the DWI arrest process.</li> </ul>
<a href="#"><i>Drug-Impaired Driving</i></a>	N/A	NHTSA	Drugs General	<ul style="list-style-type: none"> <li>Links to traffic safety marketing campaigns concerning drug-impaired driving.</li> <li>The various national campaigns include: <ul style="list-style-type: none"> <li>“Drive High—Get a DUI.”</li> <li>“If You Feel Different, You Drive Different.”</li> <li>“OTC—Rx.”</li> </ul> </li> <li>Includes downloadable banner ads, fact sheets, media buy summaries, links to research reports, and PSAs.</li> </ul>
<a href="#"><i>DrugFacts: Drugged Driving</i></a>	2019	NIDA	Drugs General, Marijuana	<ul style="list-style-type: none"> <li>Describes why drug-impaired driving is dangerous.</li> <li>Provides estimates of the number of people who take drugs and drive.</li> <li>Discusses the role that marijuana plays in crashes and how often drug-impaired driving crashes occur.</li> <li>Emphasizes that teens and older adult drivers are especially affected by drugged driving.</li> <li>Cites references for each topic.</li> <li>PDF with material available at: <a href="https://www.drugabuse.gov/sites/default/files/drugfacts-drugged-driving.pdf">https://www.drugabuse.gov/sites/default/files/drugfacts-drugged-driving.pdf</a></li> </ul>
<a href="#"><i>Effects of Marijuana—with and without Alcohol—on Driving Performance</i></a>	2015	NIDA	Alcohol, Marijuana	<ul style="list-style-type: none"> <li>Provides a synopsis of a study funded by NIDA, ONDCP, and NHTSA.</li> <li>Marijuana use impaired the driving performance measure of weaving within a lane.</li> <li>Drinking and smoking have an additive effect so that drivers who used both substances weaved within their lane even if the impairment threshold for each substance alone was not met.</li> <li>Provides a video and links to the full journal article.</li> </ul>
<a href="#"><i>2019 Chat Day Fast Facts</i></a>	2019	NIDA	Alcohol, Drugs General, Marijuana, Opioids, Stimulants	<ul style="list-style-type: none"> <li>Provides facts about the effects of various drugs on the body.</li> <li>This effort is part of NIDA’s 2019 National Drug and Alcohol Facts Week.</li> <li>Links to additional information, studies, and resources.</li> </ul>
<a href="#"><i>Read This If You Know People Who Smoke Weed and Then Drive (Part 1)</i></a>	2015	NIDA	Marijuana	<ul style="list-style-type: none"> <li>Details a three-year study conducted by NIDA, ONDCP, and NHTSA.</li> <li>Studies the effect of marijuana on the driving task both with and without drinking alcohol.</li> <li>Part 1 discusses the technology that was used in the study called the National Advanced Driving Simulator, which is a driving simulator designed to understand how driving conditions affect safe driving.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><u>Read This If You Know People Who Smoke Weed and Then Drive (Part 2)</u></a>	2015	NIDA	Marijuana	<ul style="list-style-type: none"> <li>• Details a three-year study conducted by NIDA, ONDCP, and NHTSA.</li> <li>• Part 2 discusses the effects of marijuana (with and without alcohol) on driving.</li> <li>• Provides an overview of the study’s methodology and key results.</li> <li>• One marijuana cigarette was impairing and was associated with increased weaving within a car lane, which is akin to the same level of impairment as someone who has a BAC of 0.08.</li> </ul>
<a href="#"><u>Driving While Impaired</u></a>	N/A	North Carolina Department of Health and Human Services	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• Provides an overview of the DWI conviction process in North Carolina.</li> <li>• Anyone who has been convicted of a DWI in the state must complete a substance use assessment and complete an education or treatment program.</li> <li>• Provides additional information about finding programs that meet this requirement.</li> </ul>
<a href="#"><u>Marijuana-Impaired Driving</u></a>	N/A	Oklahoma State Highway Safety Office	Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• Provides tips for preventing drugged driving.</li> <li>• Emphasizes that DUI in Oklahoma is not just drunk driving—it also includes drugged driving.</li> <li>• Discusses how drunk and drugged driving have similar negative effects on the driving task.</li> <li>• Provides brief points on how long marijuana can stay in an individual’s body.</li> </ul>
<a href="#"><u>Impaired Driving</u></a>	N/A	Pennsylvania Department of Transportation	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>• Includes information about the financial costs associated with a DUI, zero-tolerance laws pertaining to minors, drug-impaired driving enforcement, and ignition interlocks.</li> <li>• Links to an alcohol impairment chart, tip cards, and the Pennsylvania DUI Association and State Department of Drug Alcohol Programs.</li> </ul>
<a href="#"><u>Antidepressants</u></a>	N/A	Rethink Mental Illness (United Kingdom)	Depressants	<ul style="list-style-type: none"> <li>• Provides information about various types of medications that can be used to treat mental health, including antidepressants.</li> <li>• Provides an overview of what antidepressants are and various examples, possible side effects on the body, possible effects with other medications, effects with alcohol, and effects when driving.</li> <li>• Discusses how medications may specifically affect driving and urges the public to talk to their doctors or pharmacists for more information.</li> </ul>
<a href="#"><u>Drug Driving</u></a>	N/A	Road Safety Commission (western Australia)	Drugs General	<ul style="list-style-type: none"> <li>• Provides information about the penalties associated with impaired driving, and the responsibility of drivers who do use prescription medications to be aware of possible side effects that affect the driving task and to refrain from driving if impaired.</li> <li>• Includes a downloadable FAQ page and fact sheets.</li> <li>• Provides information specific to medicines and driving, including possible reactions to medicines, the risks associated with taking medicines and driving, and how users can take active steps to prevent impaired drivers.</li> </ul>
<a href="#"><u>Brochure: The Truth—Youth and Drug-Impaired Driving</u></a>	2019	Royal Canadian Mounted Police	Alcohol, Drugs General, Marijuana	<ul style="list-style-type: none"> <li>• Provides information about how drugs affect the driving task, examples of the seven categories of drugs, the illegality of impaired driving in Canada, and recommendations for preventing drug-impaired driving.</li> <li>• Links to additional information.</li> </ul>

Resource Title	Year	Authors or Agency	Drug Category	Description
<a href="#"><u>Driving and Traveling</u></a>	N/A	State of Colorado	Alcohol, Marijuana	<ul style="list-style-type: none"> <li>Reminds the public that DUI in Colorado is an arrestable offense, including marijuana use.</li> <li>Discusses specific allowable and prohibited actions associated with using marijuana in Colorado, such as the prohibition of opening marijuana packaging and using it while in car, and the illegality of departing the state with marijuana.</li> </ul>
<a href="#"><u>Know the Risks of Marijuana</u></a>	2020	Substance Abuse and Mental Health Services Administration	Marijuana	<ul style="list-style-type: none"> <li>Describes the risks associated with using marijuana, research concerning marijuana addiction, and general background information on marijuana and its rise in use.</li> <li>Links to additional resources by Technology Transfer Centers and NIDA.</li> <li>Includes several PSA videos, fact sheets, and an interactive marijuana IQ quiz.</li> </ul>
<a href="#"><u>Impaired Driving (Alcohol and Drugs)</u></a>	N/A	Vermont State Highway Safety Office	Alcohol, Drugs General	<ul style="list-style-type: none"> <li>Reminds the public that alcohol and drug impairment offenses are actively enforced in Vermont. Drug impairment can include those caused by prescription and over-the-counter medications, illicit drugs, and/or cannabis.</li> <li>Discusses some of the strategies Vermont uses to create awareness and conduct impaired-driving enforcement, such as launching sobriety checkpoints, installing ignition interlocks for offenders, and using DREs.</li> <li>Highlights impaired driving laws in Vermont, consequences for driving impaired, and impaired-driving crash data. Links to additional state resources.</li> </ul>
<a href="#"><u>Medicinal Cannabis and Driving</u></a>	N/A	VicRoads (Australia)	Marijuana	<ul style="list-style-type: none"> <li>Provides information related to prescription cannabis and driving in Victoria, Australia. It is illegal to drive with any amount of THC in a person's system in Victoria, including from a medicinal prescription.</li> <li>Explains how medicinal THC can impair the ability to drive, how long THC can remain detected in an individual's body, and roadside testing efforts in place to prevent impaired driving.</li> </ul>

Notes:

Depressants include drugs like Ambien, Xanax, Valium, Ativan, Klonopin, and Phenobarbital.

Opioids include drugs like Codeine, Fentanyl, Hydrocodone/Vicodin, Methadone, Morphine, and Oxycodone.

Stimulants include drugs like Adderall, Benzedrine, Concerta, Dexedrine, Ritalin, and dietary/appetite suppressants.

Drugs General includes references that talked about drugs generally and did not focus on a specific drug category.