

# CANNABIS-IMPAIRED DRIVING

## LESSONS FROM THE US

Robert L. DuPont, MD

President, Institute for Behavior and Health, Inc.

First Director, U.S. National Institute on Drug Abuse (NIDA)

Second U.S. White House Drug Chief

[www.IBHinc.org](http://www.IBHinc.org)

# DEFINING THE PROBLEM OF DRUGGED DRIVING

- Drugs are chemicals that super-stimulate the brain's vital reward system
- Both legal and illegal substances alter brain function, including impairing skills needed to drive safely
- Drugged driving contributes to motor vehicle crashes resulting in injuries and deaths, as well as economic costs

# CANNABIS IMPAIRS PSYCHOMOTOR SKILLS AND COGNITIVE FUNCTIONS

- Vigilance
- Drowsiness
- Perception of time and distance
- Reaction time
- Divided attention
- Lane tracking
- Coordination
- Balance
- Risk-taking



# PREVALENCE OF DRUGGED DRIVING IN THE US

- In 2019, an estimated 13.6 million Americans reported driving under the influence of illicit drugs
  - 12.8 million specifically drove under the influence of cannabis
- Young drivers were most likely to report drugged driving:
  - 12.7% of drivers aged 21-25
  - 9.4% of drivers aged 16-20
- The latest National Roadside Survey (2013-2014) showed **22.5%** of weekend nighttime drivers were positive for drugs other than alcohol

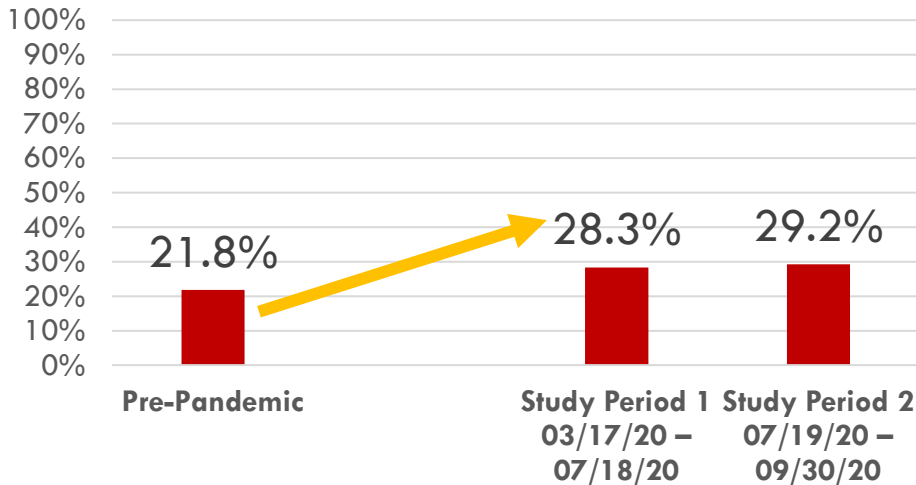
# IMPACT OF COVID-19

- During the pandemic, Americans made drove less but engaged in riskier behaviors, including impaired driving
- Total number of crash fatalities declined but the FATALITY RATES INCREASED
- A 2019-2020 study found a significant increase in the prevalence of drugs detected in blood among seriously and fatally injured drivers, compared to before the pandemic

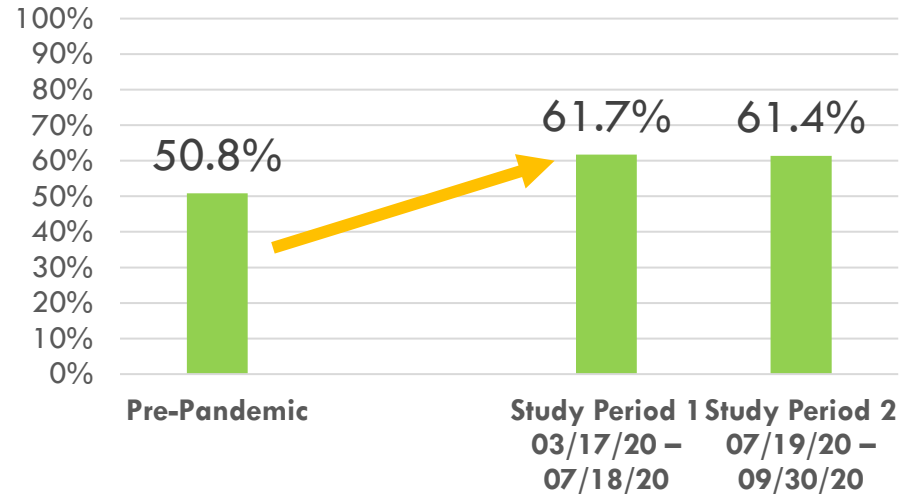
National Center for Statistics and Analysis. (2020, October). Early estimate of motor vehicle traffic fatalities for the first half (Jan-Jun) of 2020 (Crash Stats Brief Statistical Summary. Report No. DOT HS 813 004). Washington, DC: National Highway Traffic Safety Administration. <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813004>;  
Thomas, et al. (2020, October). *Drug and alcohol prevalence in seriously and fatally injured road users before and during the COVID-19 public health emergency* (Report No. DOT HS 813 018). National Highway Traffic Safety Administration; Office of Behavioral Safety Research. (2021, January). Update to special reports on traffic safety During the COVID-19 public health emergency: Third quarter data. (Report No. DOT HS 813 069). National Highway Traffic Safety Administration.

# SERIOUSLY AND FATALLY INJURED DRIVERS

## Alcohol-Positive



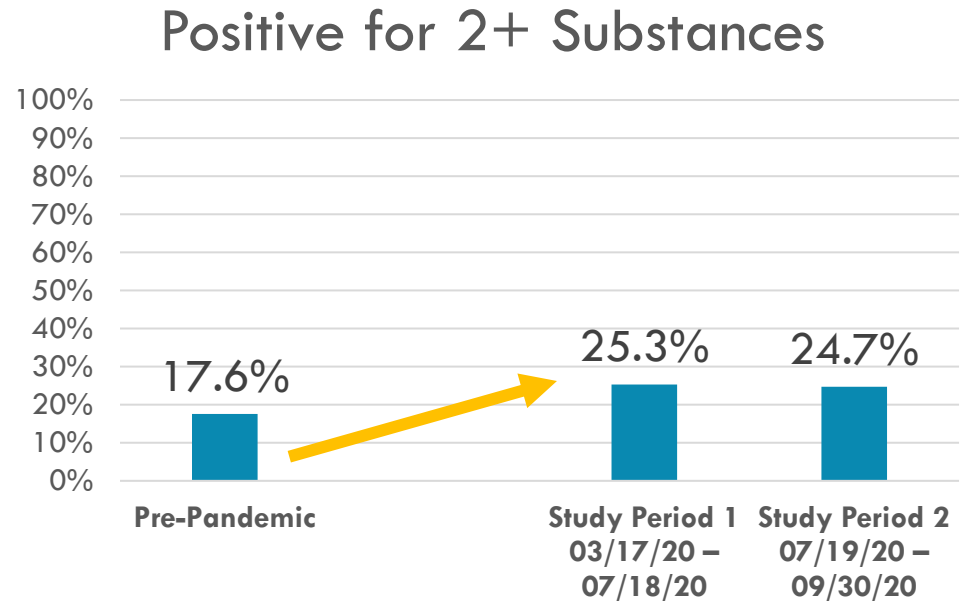
## Drug-Positive



Thomas, et al. (2020, October). *Drug and alcohol prevalence in seriously and fatally injured road users before and during the COVID-19 public health emergency* (Report No. DOT HS 813 018). National Highway Traffic Safety Administration; Office of Behavioral Safety Research. (2021, January). Update to special reports on traffic safety During the COVID-19 public health emergency: Third quarter data. (Report No. DOT HS 813 069). National Highway Traffic Safety Administration.

# SERIOUSLY AND FATALY INJURED DRIVERS

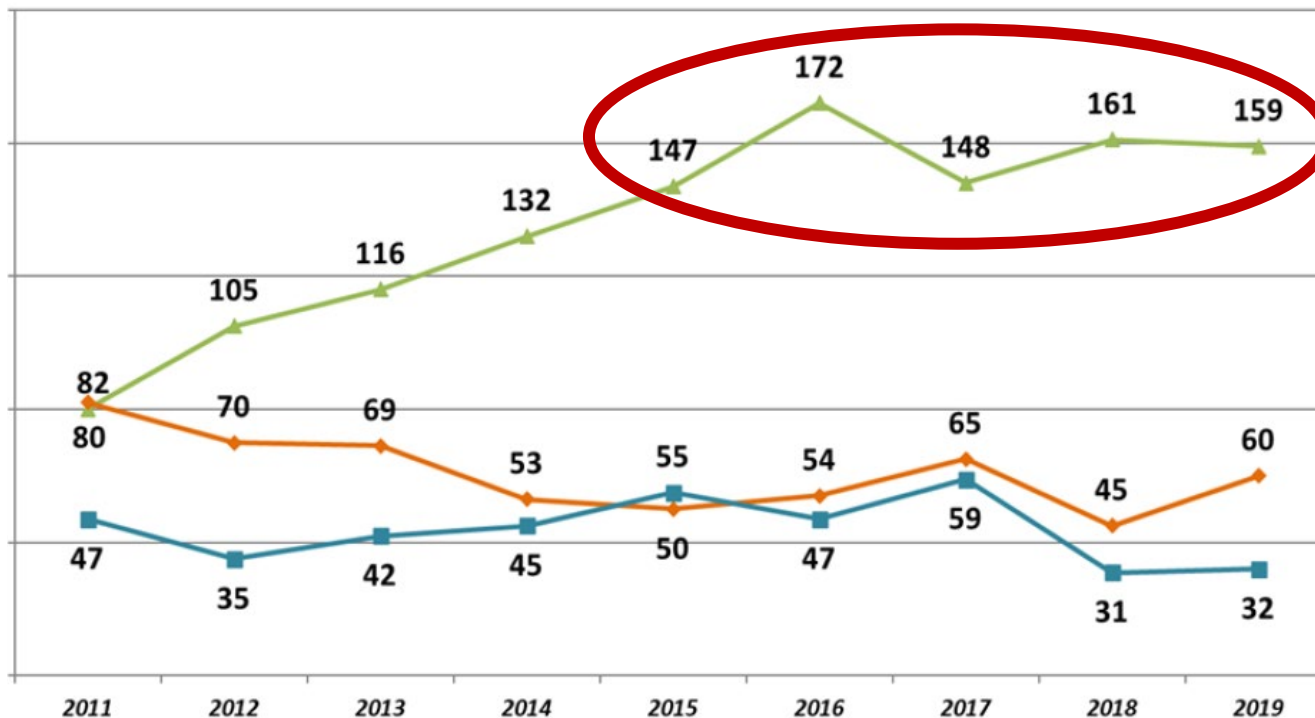
- During COVID-19, polysubstance use also increased



Thomas, et al. (2020, October). *Drug and alcohol prevalence in seriously and fatally injured road users before and during the COVID-19 public health emergency* (Report No. DOT HS 813 018). National Highway Traffic Safety Administration; Office of Behavioral Safety Research. (2021, January). Update to special reports on traffic safety During the COVID-19 public health emergency: Third quarter data. (Report No. DOT HS 813 069). National Highway Traffic Safety Administration.

# POLYDRUG USE IS NOT NEW

NUMBER OF DRIVERS IN FATAL CRASHES UNDER THE INFLUENCE OF ALCOHOL AND/OR DRUGS **IN WASHINGTON STATE**



## Polydrug Use

(drug positive for two or more drugs OR any alcohol and drugs)

## BAC > .08 ONLY

(illegal limit in the US)

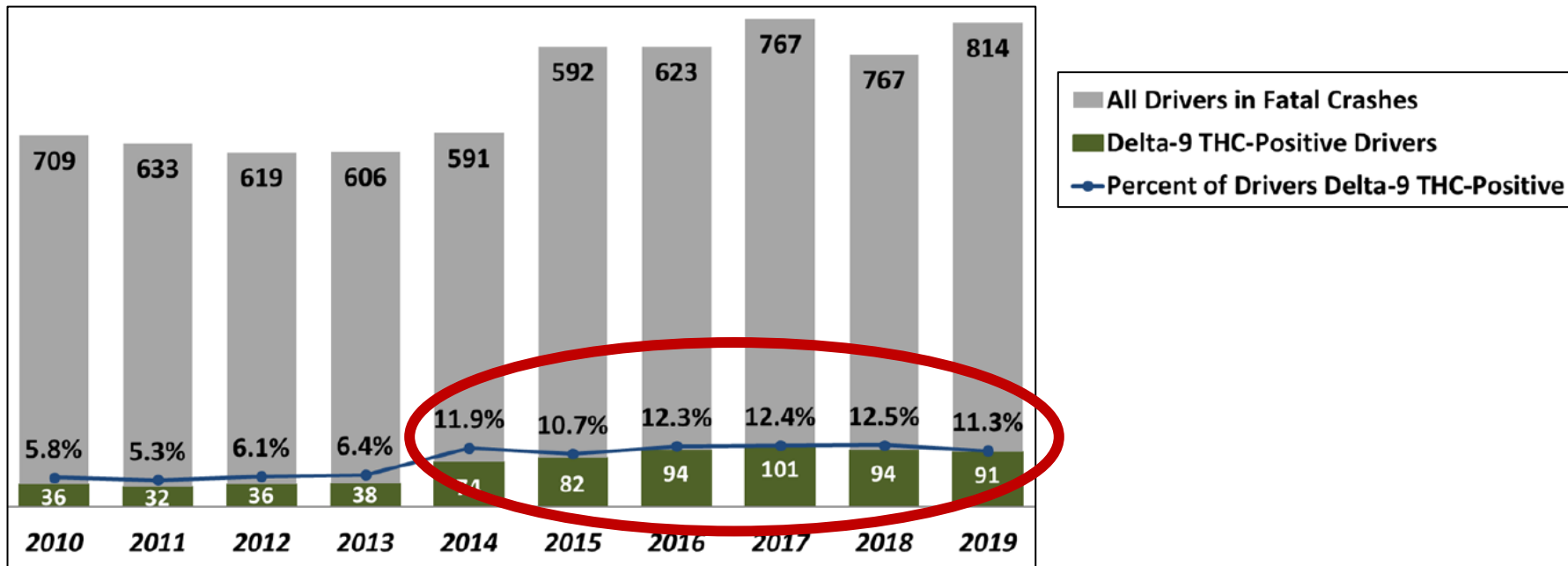
## ONE Substance

(one drug or alcohol less than .08)



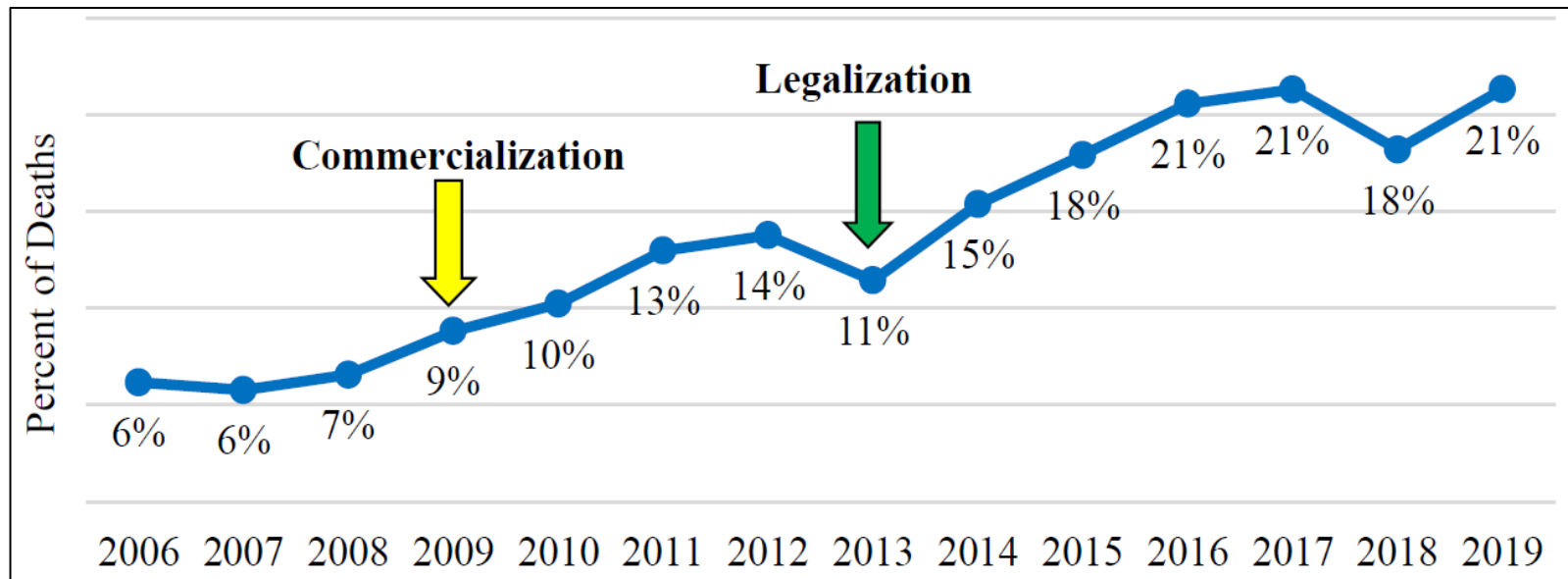
# CANNABIS CONSISTENTLY FOUND AMONG DRIVERS IN FATAL CRASHES

DRIVERS POSITIVE FOR DELTA-9-THC IN FATAL CRASHES IN WASHINGTON STATE



# CANNABIS CONSISTENTLY FOUND AMONG DRIVERS IN FATAL CRASHES

PERCENT OF ALL TRAFFIC DEATHS WHERE A DRIVER TESTED POSITIVE FOR THC IN COLORADO



# THE US HAS HAD SUCCESS IN REDUCING ALCOHOL-IMPAIRED DRIVING

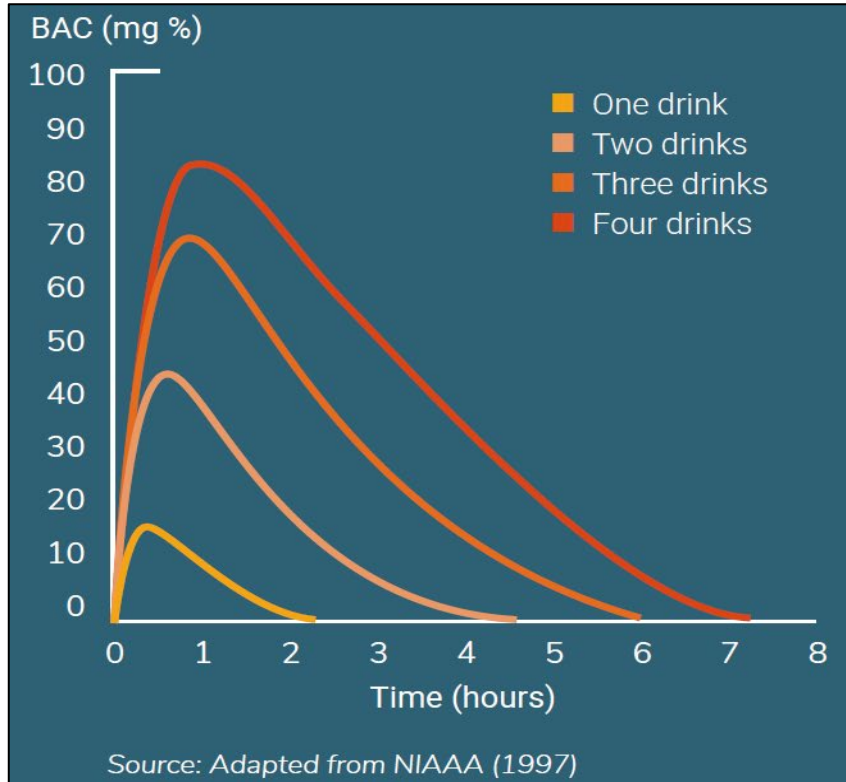
## TOTAL ALCOHOL-IMPAIRED DRIVING FATALITIES IN THE US



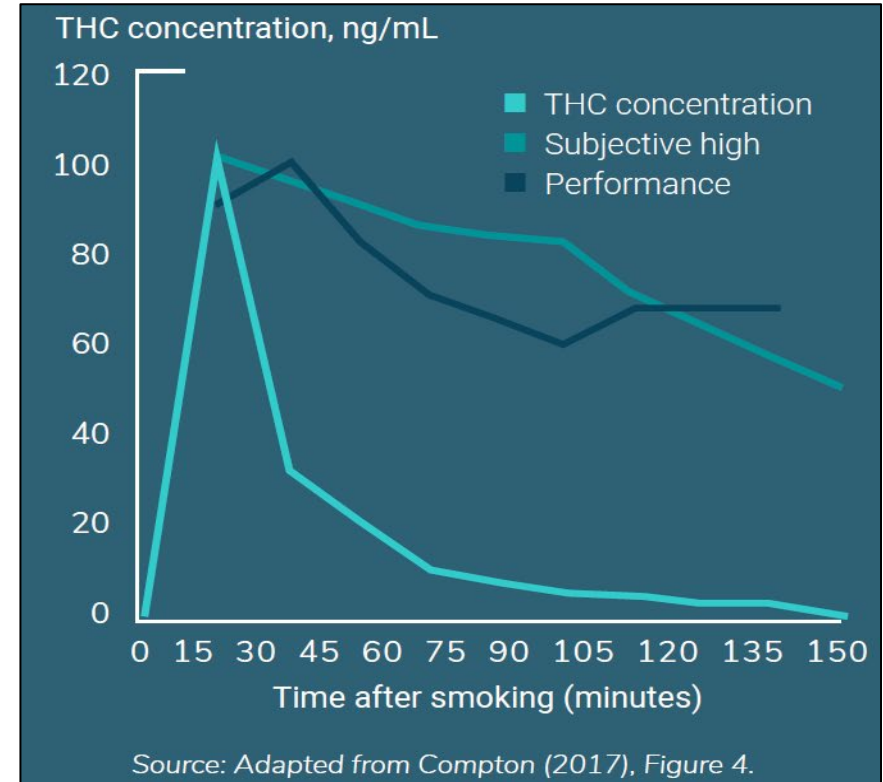
Source: NHTSA/FARS, 10/19

**WHY DO WE HAVE TO THINK ABOUT  
CANNABIS DIFFERENTLY THAN ALCOHOL?**

## BLOOD ALCOHOL CONCENTRATION (BAC) OVER TIME AFTER DRINKING



## CANNABIS (THC) CONCENTRATION, SUBJECTIVE HIGH, AND IMPAIRMENT OVER TIME AFTER SMOKING



## LAWS ON TESTING AND ENFORCEMENT MAY DIFFER AMONG COUNTRIES, BUT TECHNOLOGY IS AVAILABLE FOR DETECTION OF RECENT USE

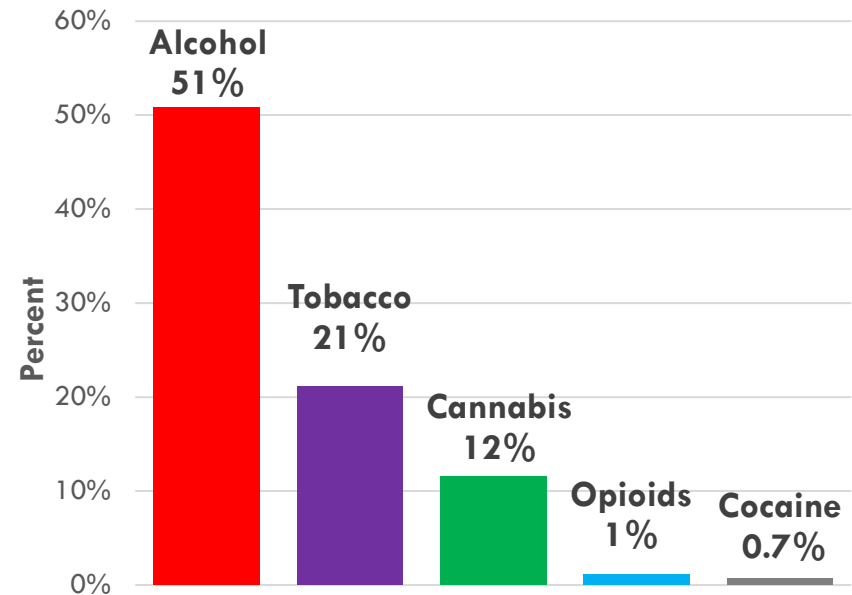
- Oral fluid screening technology can be used at the roadside
- Second oral fluid sample can be collected for evidentiary purposes (submitted to a forensic laboratory for confirmation testing)
- Detection of polysubstance use is essential to understanding the impaired driving problem
- Testing drivers arrested for impaired driving but also fatally- and seriously-injured drivers

# THE LARGER CONTEXT OF COMMERCIALIZED RECREATIONAL PHARMACOLOGY

- Super-stimulation of brain reward, promoted by a for-profit industry
- Driven by the exploitation of people who use both illegal and legal drugs
- Alcohol, nicotine, and cannabis dominate substance use in the US

## Past Month Substance Use

By Americans Age 12+ in 2019 — National Survey on Drug Use and Health



DuPont, R. L. (2019, April 16). Drug Crises on the Horizon. *Backgrounder*, 3400. Washington, DC: The Heritage Foundation; DuPont, R. L., & Levy, S. (2020). The nation's drug problem is commercial recreational pharmacology [From the Field]. *Alcoholism & Drug Abuse Weekly*, 32(35), 3-7; Center for Behavioral Health Statistics and Quality. (2020). Results from the 2019 National Survey on Drug Use and Health: Detailed tables. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>

## KEY LESSONS

- All efforts to reduce drug-impaired driving support – and do not compete with – efforts to reduce alcohol-impaired driving
- The global shift toward commercializing cannabis makes identifying and addressing cannabis-impaired driving a priority
- Although cannabis is the most widely used drug (other than alcohol) among drivers, we cannot focus exclusively on cannabis-impaired driving
- Use available technology to identify prevalence of drugs among impaired and injured drivers
- Mobilize prevention efforts for widespread public health education on drug-impaired driving: “Don’t Use Drugs and Drive”



# INSTITUTE FOR BEHAVIOR AND HEALTH

- IBH is a 501(c)3 non-profit organization that develops strategies to reduce drug use


**stop**  
**Drugged Driving**

[www.IBHinc.org](http://www.IBHinc.org)

[www.StopDruggedDriving.org](http://www.StopDruggedDriving.org)

[www.OneChoicePrevention.org](http://www.OneChoicePrevention.org)

*Institute For Behavior and Health*



**FACT: Research shows that HALF of "medical marijuana" users drive under the influence**

**DRUGGED DRIVING IS A NATIONAL THREAT**

LEARN ABOUT THE IBH STOP DRUGGED DRIVING INITIATIVE

The future belongs to new ideas and the new policies they inspire.

Founded in 1978, the Institute for Behavior and Health, Inc. is a 501(c)3 non-profit organization that develops new ideas to reduce illegal drug use. Non-partisan and non-political, IBH serves as a catalyst for change. IBH facilitates creative public and private sector collaboration to achieve this important public health goal.

**THANK YOU!**

**Questions?**