Subcommittee on Digital Commerce and Consumer Protection
of the
House Energy and Commerce Committee

Hearing on
"*Examining Drug-Impaired Driving*"
(July 11, 2018)

Response to additional questions submitted for the record by the Honorable Michael Burgess

Chairman Latta, again thank you for the opportunity to testify before the subcommittee on this important public safety issue. In 2016, the most recent year for which data are available, the National Highway Traffic Safety Administration (NHTSA) Fatality Analysis Reporting System (FARS) found that drugs were present in 43.6% of fatally-injured drivers with a known drug test result. We applaud your committee for taking a leadership role in identifying solutions and actions that can be taken to save lives on the nation's roadways.

Also, thank you to Representative Michael Burgess for requesting additional information on strategies that can be employed to better identify drug-impaired drivers as well as how best to translate lessons learned from decades of combatting alcohol-impaired driving. Below are my responses to Rep. Burgess' questions for the official hearing record.

1. According to the Governors Highway Safety Association, the percentage of fatal accidents involving alcohol-impaired driving has decreased, while the rate of drug use among those tested has continually increased. But we have no consistently reliable data on the combined effect of drug and alcohol use.

    a. What studies have been done or could be done to help identify these effects?

Answer: A number of studies have been done domestically and abroad that examine the combined effect that polysubstance use can have on either impairment or crash risk. In recent years, several studies have focused on the combined effects of alcohol and marijuana as this is the most common combination found in both fatally-injured and arrested drivers. Several citations are provided below.

Numerous studies have been conducted that identify the combination of multiple drugs or drugs and alcohol as greatly increasing crash risk. The results from the comprehensive DRUID study are included in the chart below. NHTSA also recently conducted a crash risk study (commonly referred to as the *Virginia Beach Study)* but there were several important limitations acknowledged by the authors.

TABLE 3. CRASH RISK ASSOCIATED WITH DRUG USE IN EUROPEAN STUDIES

Risk level	Relative risk	Drug category
Slightly increased risk	1-3	marijuana
Medium increased risk	2-10	benzodiazepines cocaine opioid
Highly increased risk	5-30	amphetamines multiple drugs
Extremely increased risk	20-200	alcohol together with drugs

Shulze et al., 2012; Griffiths, 2014

*(Image source: Hedlund, J. (2017). *Drug-Impaired Driving: A Guide for States.* Washington, DC: Governors Highway Safety Association).

With respect to impairment, it is important to be aware that the combination of various substances can greatly increase their effect. Recent simulator research conducted by the National Institute on Drug Abuse (NIDA) with support from NHTSA and the White House Office of National Drug Control Policy (ONDCP) found that the combination of alcohol and marijuana produced an additive effect (i.e., the combination of the substances produced greater impairment than either on its own) while other studies have found a multiplicative effect (i.e., 1+1=3).

Additional research is needed to add to the existing body of scientific literature. Future experimental studies using dosed subjects and the simulator at the University of Iowa as well as crash risk studies that improve upon the Virginia Beach study methodology are recommended.

Griffiths, P. (2014). An Overview of Drug Impaired Driving in the EU. 2nd International Symposium on Drugs and Driving. Wellington, NZ: New Zealand Drug Foundation. http://www.drugfoundation.org.nz/drugdriving2014/presentations

Hartman, R., Brown, T., Milavetz, G., et al. (2015). Controlled cannabis vaporizer administration: Blood and plasma cannabinoids with and without alcohol. *Clinical Chemistry,* 61, 850-869.

Ramaekers, J., Robbe, H., & O'Hanlon, J. (2000). Marijuana, alcohol and actual driving performance. *Human Psychopharmacology: Clinical and Experimental,* 15, 551-558.

Romano, E., Torres-Saavedra, P., Voas, R., et al. (2014). Drugs and alcohol: Their relative crash risk. *Journal of Studies on Alcohol and Drugs,* 75, 56-64.

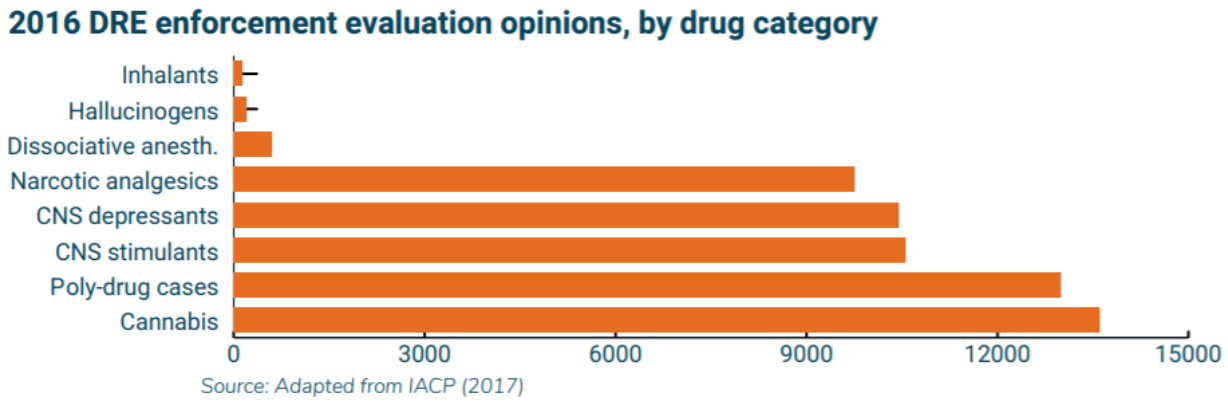
Schulze, H., Schumacher, M., Urmeew, R., et al. (2012). *DRUID Final Report: Work Performed, Main Results and Recommendations*. Bergisch Gladbach, Federal Republic of Germany: Federal Highway Research Institute (BASt). http://www.druid-project.eu/Druid/EN/ Dissemination/downloads_and_links/Final_Report.html

b. What methods are available to identify drug and drug combined with alcohol use in the field?

Answer: Well-trained law enforcement officers are the best line of defense when it comes to identifying and removing impaired drivers (whether drunk, drugged, or poly-users) from the road. A variety of different detection strategies are available to law enforcement to identify drug-impaired drivers. These methods include roadside testing, sobriety checkpoints, saturation patrols, and specialized training

programs such as the Drug Evaluation and Classification (DEC) program and Advanced Roadside Impaired Driving Enforcement (ARIDE). These programs facilitate the detection of drug-impaired drivers by providing officers with training necessary to complete a behavioral assessment of impairment. These programs go beyond the Standardized Field Sobriety Test (SFST) training that most officers receive and provide them with knowledge and training that allows them to identify and articulate the signs and symptoms of drug impairment.

Officers who complete the DEC program are required to go through three phases of training totaling more than 150 hours along with field certification before they become Drug Recognition Experts (DREs). These officers use a standardized protocol that allows them to determine whether a suspect is impaired, if that impairment is caused by drugs or can be attributed to a medical condition, and the category of drug(s) that are the cause of the impairment. In rendering their opinion, DREs can make a finding of poly-drug use. This category happened to be the second most common opinion in 2016 evaluations.



*(Image source: Hedlund, J. (2018). *Drug-Impaired Driving: Marijuana and Opioids Raise Critical Issues for States.* Washington, DC: Governors Highway Safety Association).

Unfortunately, due to the level of commitment required to complete the DEC training and the cost to train officers, it is not always a viable option for agencies that have limited staff and resources. Therefore, in an effort to increase education and training among patrol officers more broadly, the ARIDE program was created. ARIDE is designed to bridge the gap between SFST training and the DEC program in that it is 16 hours of training that educates officers on how to identify the signs and symptoms of drug impairment. The good news is that an increasing number of officers are being trained in ARIDE and certified as DREs each year; however, more resources and appropriations are needed to facilitate the training of additional officers, particularly in rural areas of the country.

In addition to specialized training, officers also rely on the collection of chemical tests to build a strong impaired driving case. For alcohol-impaired driving, this is relatively simple due to the availability of breath tests. In drug-impaired driving cases, officers typically must seek a warrant to obtain a blood draw. With many jurisdictions struggling to address increases in drug and polysubstance use and knowing that many drugs rapidly metabolize within the body, there is a pressing need to implement processes that allow officers to obtain chemical samples as efficiently as possible. Luckily, law enforcement agencies across the country have begun to implement systems that will facilitate an

expedited electronic warrant submission and approval process. The greatest advantage of e-warrant systems is that they provide a mechanism for officers to obtain accurate toxicology results quickly. These systems can significantly streamline the arrest process and reduce the amount of time that officers are off the street, and reduce the amount of time between the request, approval, and execution of the warrant. The automated nature of the content of most e-warrants also results in fewer mistakes and errors in the request, which in turn means fewer warrants are rejected by judges. Additional funding for the implementation of these systems would go a long way towards preserving chemical evidence in drug-impaired driving cases.

Finally, new tools and technology for law enforcement are on the horizon. While some are still in development, others are being piloted throughout the country and being utilized internationally. The most promising technology that can be used to detect drugs at roadside is oral fluid testing. This technology tests for the most commonly used categories of drugs. Oral fluid technology offers many advantages over blood and urine testing as it is quick and easy to use, minimally invasive, has a short detection window (i.e., positive findings are indicative of recent as opposed to historical use), and provides a sample proximate to the time of driving. It is recommended that the results from the device be utilized within the context of a broader impaired driving investigation similar to preliminary breath tests (e.g., observations while vehicle is in motion and during the traffic stop, clues on the standardized field sobriety tests, etc.).

Perhaps the greatest potential benefit of oral fluid technology is that it will allow officers to test drivers who are above the .08 illegal blood alcohol limit for drugs if they suspect that the individual has consumed substances other than alcohol; this is not standard procedure at present and, as a result, there are implications when it comes to making assessment, supervision, and treatment decisions later in the criminal justice process. Funding for research to examine the feasibility of incorporating on-site oral fluid devices in criminal justice processes and monitoring of new and emerging technologies such as marijuana breathalyzers and transdermal devices is recommended.

2. We have made great strides in addressing alcohol-impaired driving.

    a. What lessons have we learned from those efforts that we can apply to drug-impaired driving? In particular, I'm interested in hearing what can be done to address prescription-based drug-impaired driving with the work that I have led as chairman of the Health subcommittee.

Answer: Tremendous progress has been made in reducing alcohol-impaired driving fatalities as the number has been reduced by 50% since 1982. While there is a great deal of work left to be done, there are a number of strategies and lessons learned that can be employed to address the more complex problem of drug-impaired driving. By emulating the approaches taken to reduce alcohol-impaired driving, progress in eliminating drug and polysubstance-impaired driving can hopefully be achieved in a shorter timeframe. This model includes:

- Passage of laws to target multiple facets of the problem,
- Sustained and high visibility enforcement efforts,

- Identifying the countermeasures that work; evaluation and strengthening of programs,
- Targeting high-risk offenders,
- Assessment and treatment,
- Public education and awareness, and,
- Changing societal norms.

While many of the policies and countermeasures that are effective in addressing DUI such as per se legal limits, ignition interlocks, and emerging technologies like the Driver Alcohol Detection System for Safety (DADSS) will not necessarily be viable options to reduce the occurrence of driving under the influence of drugs, there are laws and approaches that can be translated such as zero tolerance laws for individuals under the age of 21; administrative license suspension/revocation (ALS/ALR); mandatory screening, assessment and (if indicated) treatment; DWI courts; offender monitoring programs; and, enhanced penalties for polysubstance users (similar to enhanced penalties for high-BAC drivers). In addition to these policies, the allocation of additional highway safety funds to improve the quality of state labs would be beneficial. States should be afforded the flexibility to use said funds to hire additional lab staff and purchase lab instrumentation. Improving the quality and abilities of laboratories has the added benefit of reducing backlog in DUI/DUID cases which is a common challenge encountered in many states.

With respect to addressing prescription drug use and driving, public education and awareness is of utmost importance. Many individuals may not realize that over-the-counter medications or medications legally prescribed by their doctor can impair their ability to drive safely. For this reason, several preventative steps can be taken:

- While prescription drugs contain labels that warn against operating heavy machinery and many physicians and pharmacists emphasize this information with patients, more can be done. Congress should encourage federal agencies including NHTSA, ONDCP, and the Federal Drug Administration (FDA) to explore opportunities to increase education about the dangers of driving after using prescription drugs. Public health officials should be encouraged to have explicit conversations with their patients.
- Labeling on prescriptions that have impairing side effects should be larger and note that heavy machinery includes motor vehicles.
- State-level and national campaigns are needed to educate patients and make them aware that they can be arrested for impaired driving even if they are legally prescribed the substance that impairs them. Some examples of prescription drug-impaired driving campaigns include California's *DUI Doesn't Just Mean Booze* and Wisconsin's *Dose of Reality.* NHTSA also launched the *If You Feel Different, You Drive Different – Drive High, Get A DUI* campaign to educate the public that they should not get behind the wheel if they feel differently after taking a drug. Congress is encouraged to monitor NHTSA's progress and provide appropriations to expand these public outreach efforts if deemed effective.

Should you require additional information or if Responsibility.org can further serve as a resource, please do not hesitate to reach out. Thank you again for your leadership and commitment to saving lives on our nation's roadways.