



Enhancing Drugged Driving Data: State-Level Recommendations

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Title

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Foreword

Many drugs, beyond alcohol, have impact on driving safety. Recent studies note drugged driving is a growing problem in the United States. The issue is complex and our understanding of how drugs correlate to traffic crashes, injuries and fatalities remains limited due to data constraints. More state and national data on drugged driving are needed to understand the extent of the problem and the way in which it is changing. Also needed are ways to measure the effectiveness of efforts to reduce it.

In 2016, a report by AAA Foundations titled “Advancing Drugged Driving Data at the State Level: Synthesis of Barriers and Expert Panel Recommendations” documented a series of expert panel recommendations aimed at improving data and records concerning drugged driving. In 2018, another report called “Advancing Drugged Driving: Data at the State Level: State-by-State Assessment” presented state policies and practices and their alignment with the recommendations aimed at improving drugged driving data.

This report describes the state barriers to implementing these recommendations and proposes steps needed to address current laws and policies. It will be a useful reference with individual state charts and summary of state findings from 44 states and the District of Columbia.

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About the Sponsor

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Table of Contents

Table of Contents.....	4
Executive Summary	6
Background.....	8
Recent National Developments and Resources	9
Advancing State Drugged Driving Data Collection.....	14
Phase I — Synthesis of Barriers and Expert Panel Recommendations	14
Three Barriers to Drugged Driving Data	14
Phase II — State-by-State Assessment	17
Phase II Key Findings and Trends Among the States	17
Phase III — Recommendations to Improve Data on Drugged Drivers.....	18
Seven expert panel recommendations	19
Objectives	19
Methods	20
Limitations	21
How to Use This Report	22
Leveraging the Information to Improve State-Level Drugged Driving Data	23
Summary of State Findings by Recommendation	24
Recommendation 1: Implied Consent Laws	24
Recommendation 1a: Implied consent laws should extend to drugs and support the collection of blood and/or oral fluid.	27
Recommendation 1b: Implied consent laws should include the collection of a specimen or specimens for multiple tests.	30
Recommendation 1c: Implied consent laws should not permit suspects to choose the type of test(s).	30
Recommendation 2: Collection and testing of specimens for drugs.....	31
Recommendation 3: Drug testing and reporting for surviving drivers.....	33
Recommendation 3a: Authorize and encourage drug testing for all surviving drivers in fatal and serious injury crashes when there is probable cause that impairment was a factor.	34
Recommendation 3b: Report the drug test results for all surviving drivers in fatal and serious injury crashes.....	36
Recommendation 4: Drug testing and reporting for all fatally injured drivers	37
Recommendation 4a: Enact laws and/or implement policies mandating drug testing for all fatally injured drivers.	37
Recommendation 4b: Enact laws and/or implement policies mandating reporting the drug test results for all fatally injured drivers.....	38
Recommendation 5: Distinguish among impaired driving offenses in data	39
Recommendation 6: Administrative penalty for DUID test refusal	41
Recommendation 7: Electronic warrants	43
Overall Summary—Major State Trends	47

Alignment with Recommendations.....	47
Major State Trends	49
Conclusions	54
Barriers to Better Drug-Impaired Driving Data.....	54
Action Plans for Improved Drug-Impaired Driving Data	56
Other Resources to Improve Drug-Impaired Driving Data Collection	58
References.....	59
Appendix A: National-at-a-Glance Chart: Alignment with Expert Panel Recommendations	A-1
Appendix B: Individual State-by-State Alignment Lists and Charts with Barriers and Action Plans.....	B-1

Executive Summary

Introduction

AAA Foundation for Traffic Safety has sponsored three related projects over the last five years to identify and address issues linked to the quality and quantity of drugged driving data. These reports describe the complex and evolving issues related to measuring and documenting the extent of drugged driving in the United States.

- The 2016 Phase I report, “Advancing Drugged Driving Data at the State Level: Synthesis of Barriers and Expert Panel Recommendations,” detailed expert panel recommendations on advancing drugged driving data collection.
- The Phase II report in 2018, called “Advancing Drugged Driving Data at the State Level: State-by-State Assessment,” compared the Phase I state-level recommendations to policies and practices in each state and the District of Columbia.
- The current phase (Phase III) focuses on seven of the Phase I state-level recommendations, eliciting a list of specific barriers and action steps from key stakeholders to address current laws and policies that are not fully aligned with the recommendations.

This report reviews national developments on drugged driving, features individual state charts and summarizes state findings from the 45 jurisdictions (44 states and the District of Columbia) that participated in this project. It also provides background information on each of the recommendations, including relevant recent literature or resources on the topic.

Main Findings

Table 6, the Overall Summary-Major Trends section of this report, summarizes the alignment with the seven recommendations across the responding states.

Recommendations on which the most states aligned:

1. Implied consent laws should: (a) extend to drugs and support the collection of blood and/or oral fluid for drug testing; (b) include the collection of a specimen or specimens for multiple tests; and (c) should not permit suspects to choose the type of test(s).¹
2. Law enforcement officers should be authorized and encouraged to collect and test specimens for drugs on all Driving Under the Influence/Driving Under the Influence of Drugs (DUI/DUID) arrestees (with probable cause and a warrant for a blood test). Even though all LEOs are authorized to do so, they are not necessarily encouraged to pursue drug testing especially when the Blood Alcohol Concentration (BAC) is .08 g/dL or higher.
3. Drug testing should be authorized and encouraged for all surviving drivers in fatal and serious injury crashes when there is probable cause that impairment was a factor.¹

¹ However, only nine states were aligned or partially aligned with the recommendation to *report* the drug test results for all surviving drivers in fatal and serious injury crashes when there is probable cause that impairment was a factor.

4. The minimum administrative penalty (license suspension) for a refusal to provide a specimen for drug testing should be at least as severe as for a first DUID offense.

Recommendations on which the fewest number of states aligned:

1. Enact laws and/or implement policies mandating drug testing and reporting of the test results for all fatally injured drivers.
2. Update data collection and reporting systems to distinguish among impaired driving offenses (DUI, DUID and both) in all relevant data (particularly citation data).
3. LEAs should use electronic warrants to reduce delays in collecting specimens when a warrant is necessary.

The most frequent barriers to alignment across recommendations included lack of funding, needed changes to laws and policies, no mandate to drug test and report the results, and lack of stakeholder buy-in. Additionally, an overarching barrier relates to Law Enforcement Agencies (LEAs) being discouraged to drug test once a BAC of .08 is established.

Limitations

Designations by project staff of aligned, partially aligned or not aligned with the expert panel recommendations were based on the information provided by the state respondents.

The limitations of this project included a state response rate of 88% (i.e., 44 states and the District of Columbia provided information) along with two key issues:

- Variability among the state contact responses in terms of comprehensiveness and completeness;
- Variability in the number and type of contributors for each state.

Despite these limitations, states and other stakeholders can use this report and the experiences described within it to assess needs and potential steps to improve drugged driving data.

Background

The potential threat to road safety is growing as: (1) more states move to legalize the use of marijuana for recreational and medicinal purposes; and (2) the misuse of and addiction to opioids increases. Results of the most recent national survey conducted by the Center for Behavioral Health Statistics and Quality indicate that 12.6 million people (age 16 and older) admitted to driving under the influence of illicit drugs in 2018 (Substance Abuse and Mental Health Services Administration, 2019). Other recent studies provide evidence of the growing problem. A study on the effect of recreational marijuana sales on police-reported crashes in three states (Colorado, Oregon and Washington) estimated a 5.2% higher rate of police-reported crashes compared with neighboring states that did not legalize retail sales (Monfort, 2018). A National Institute on Drug Abuse (NIDA) funded survey of 790 medical cannabis users' experiences in the previous six months found that 56% reported driving within 2 hours of using marijuana, 51% said they drove while a "little high," and one in five (21%) reported driving while "very high" (Bonar et al., 2019).

Drugged driving is much more complicated to measure and document than alcohol and other drug²-impaired driving³. There are hundreds of illegal, prescription and over-the-counter drugs, and the level of driving impairment and crash risk varies considerably by type of drug, quantity used and the method by which it was taken (i.e. smoked, snorted, injected, swallowed, applied to the skin, etc.), among other factors (Governors Highway Safety Association, 2017).

Many drivers in crashes are impaired by both alcohol and other drugs, making it hard to determine which substance had the greatest effect. In addition, a reliable and valid roadside test for drug levels still does not exist (National Institute on Drug Abuse, 2019). When they are measured, wide differences exist in how drugs metabolize across individuals and in how drugs are analyzed across labs. The increasing problem of polydrug abuse among drivers adds to the dangers.

The lack of reliable state and federal data on the prevalence of drug-impaired driving related arrests and crashes prevents stakeholders from understanding the scope of the problem.

The national drugged driving data for crash-involved drivers provided by the FARS (Fatality Analysis Reporting System) indicated that 43% of fatally injured drivers with a known test result tested positive for drugs in 2015 (National Highway Traffic Safety Administration, 2019a). This finding, however, does not necessarily indicate driver impairment by the drugs because the FARS data reflects only the presence of drugs. Experts often cite FARS as the source of drugged driving data compiled from state-provided data. The many limitations of the drug data in the FARS are known (Berning & Smither,

² Hereafter for simplicity, alcohol and drugs will be referred to separately rather than "alcohol and/or other drugs."

³ For this report, "drug-impaired driving" refers specifically to driving while impaired by a drug or drugs other than or in addition to alcohol. "Drugged driving" refers to driving with any detectable amount of potentially impairing drug in one's system, legal or illegal, including prescription or over-the-counter medications. This includes driving while impaired by any of these types of drugs.

2014; Slater, Castle, Logan, & Hingson, 2016). The data are incomplete and inconsistent among states and often among jurisdictions within a state (Governors Highway Safety Association, 2017). Further, the National Highway Traffic Safety Administration's (NHTSA's) National Center for Statistics and Analysis (NCSA) recently reported that the rates of drug testing are low. Currently, two in three fatally injured drivers are tested for drugs, and only one in five surviving drivers are tested (Jodon, 2019). Due to incomplete data, officials are often unable to develop or evaluate effective laws, policies and other countermeasures to address the problem of drug-impaired driving.

Recent National Developments and Resources

Federal agencies such as NHTSA, the Substance Abuse and Mental Health Services Administration (SAMHSA), NIDA and the Centers for Disease Control and Prevention (CDC) are all conducting on-going research on drug-impaired driving. Many groups in addition to the AAA Foundation for Traffic Safety (AAAFTS) have also sponsored reports or presentations on the topic of drugged driving. These include the Governors Highway Safety Administration (GHSA), the National Safety Council (NSC), the National Conference of State Legislators (NCSL), and the Foundation for Advancing Alcohol Responsibility (FAAR). Detecting, documenting and reducing drug-impaired driving is a long-term continuing priority of the International Association of Chiefs of Police (IACP) as they manage the national Drug Recognition Expert (DRE) training and support program. With support from NHTSA, the IACP also manages the Drug Evaluation and Classification (DEC) Program, which compiles data from DRE roadside examinations conducted by DREs in the U.S. and Canada.

Examples of notable recent developments and resources related to drugged driving data collection issues from national agencies and organizations are highlighted below.

National Highway Traffic Safety Administration

NHTSA has identified two priority areas related to drugged driving data collection: (1) the use of oral fluid screening devices by law enforcement and (2) updating its fatality data collection system to get additional detailed data on drug use among drivers involved in fatal crashes.

Their project, "Evaluation of On-Site Oral Fluid Drug Screening Technology" (current as of the time of writing), seeks to obtain impartial data on forensic reliability by testing five currently available oral fluid drug screening devices in a laboratory setting.

NHTSA is also reviewing FARS data acquisition operations for drug data involving both fatally injured persons and surviving drivers. Although NHTSA is actively working to improve FARS, it *does not* currently report on the following data elements (Jodon, 2019):

- Specimen collection date/time.
- Vital status of person at time of specimen collection.
- Type of analysis: screening vs. confirmatory.
- Method of analysis performed.
- Quantitation values.
- Reporting limits/thresholds.
- Substances on the drug test panel.
- Negative results by specific drug.

In 2018, small improvements in the FARS, such as changes to the drug list and allowing more than three drugs to be listed when states report their data, were underway. Additional significant improvements are planned for 2019 and 2020 (e.g., distinguishing between screening tests and confirmatory tests, recording quantity of a drug detected).

As of October 2019, 19 states are participating in a NHTSA program to automatically transfer state motor vehicle crash data using an electronic data transfer method. There are more states scheduled to participate in 2020. (Personal communication, U.S. Department of Transportation staff, Oct. 29, 2019). Other states have expressed interest in participating in the program, but they face some technical and policy hurdles (Governors Highway Safety Association, 2018b).

NHTSA also recently published a report that could advance drugged driving data collection: “Law Enforcement Phlebotomy Toolkit.” It details the potential benefits of training and certifying police officers to draw blood (if allowed by state law), such as cost savings, better evidence and witness testimony, and a simplified chain of custody (National Highway Traffic Safety Administration, 2016).

Governors Highway Safety Association

GHSA’s report, “Drug-Impaired Driving: Marijuana and Opioids Raise Critical Issues for States,” (Governors Highway Safety Association, 2018a), examines the impact of marijuana and opioids on driving and provides recommendations on how to address road safety challenges, including specific recommendations on the improvement of data collection.

The report provides recommendations for state actions to address marijuana- and opioid-impaired driving within their impaired driving programs:

- Add drug-impaired driving messages, especially regarding marijuana- and prescription drug-impaired driving, to their impaired driving campaigns.
- Consider a campaign with physicians and pharmacists on prescription opioid warnings.
- Train at least a majority of patrol officers in Advanced Roadside Impaired Driving Enforcement (ARIDE).
- Seriously consider at least a pilot test of oral fluid devices.
- Closely follow the development of marijuana breath test instruments and seriously consider a pilot test, if they become available.
- Train an adequate number of DREs to address the DUID problem, consistent with law enforcement resources.
- Encourage prosecutors and judges assigned to DUID cases to participate in appropriate training.
- Encourage officers to investigate drug impairment even when alcohol is suspected.
- Encourage prosecutors to pursue DUID charges when evidence supports it.
- Authorize electronic search warrants for drug tests.
- Provide appropriate penalties for drug test refusal.
- Require blood testing for drugs rather than urine testing.
- Invest in forensic laboratory capabilities to provide adequate testing for drivers arrested for DUID.
- Test all fatally injured drivers, and all surviving drivers in a fatal crash who may be at fault, for drugs and alcohol.

- Establish a separate DUID offense equivalent to DUI.
- Record suspected and confirmed DUID drivers in arrest and crash records (Governors Highway Safety Association, 2018a).

The GHSA report also includes three research recommendations to support state drug-impaired driving programs:

- Develop a consistent marijuana message based on research, such as “Don’t drive within XX hours of using marijuana,” where XX is a number supported by research.
- NHTSA should publish its evaluation of oral fluid devices promptly. If some devices are acceptable, NHTSA should publish a list of approved devices. States conducting oral fluid field tests should publish the results.
- Agree on national recommended standards for laboratory test procedures (Governors Highway Safety Association, 2018a).

GHSA’s report, “Drug-Impaired Driving: A Guide for the States,” was originally released in September 2015 and then updated in 2017. This update examines the impact of marijuana and opioids on driving and provides recommendations on how to address these challenges, including specific recommendations on the improvement of data collection. The report was guided by an advisory panel of experts from the states, the research community and several organizations concerned with impaired driving. It provides references to research and position papers, especially papers that summarize the research on drugs and driving that have appeared in the last 20 years. It includes information obtained by GHSA from a survey of state highway safety offices (Governors Highway Safety Association, 2017).

National Safety Council

Recognizing that the foundation for data collection is the availability of specific fields and codes on police crash report forms, the National Safety Council (NSC) published “Undercounted Is Underinvested: How Incomplete Crash Reports Impact Efforts to Save Lives.” The report reviewed one sample crash report from each of 50 states. Among other factors reviewed, the report found that only 17 crash reports provided field codes listing specific types of drugs identified by drug tests. Not surprisingly, only two states provided a space specifically for oral fluid test under drug test type. Many other crash reports do, however, provide a general “Other” field. Another key piece of information often not recorded in crash reports is the time the specimen was collected — a key piece of information, especially if there is a long delay between arrest and the time the specimen is taken (National Safety Council, 2017).

A 2018 article published in the *Journal of Analytical Toxicology*, “Recommendations for Toxicological Investigation of Drug-Impaired Driving and Motor Vehicle Fatalities-2017 Update,” describes an update to the NSC’s Alcohol, Drugs and Impairment Division’s 2013 recommendations for the toxicological investigation of suspected alcohol- and drug-impaired driving cases and motor vehicle fatalities. The article by Logan et al. updates the 2013 recommendations based on a survey of practices in laboratories in the United States and Canada using existing epidemiological crash and arrest data, current drug use patterns, and practical considerations of widely available technology platforms in laboratories performing this work. The final recommendation updates are derived from a consensus meeting of experts recruited from survey respondents and the membership of the NSC’s

Alcohol, Drug and Impairment Division. The principal changes in this round of recommendations include removal of butalbital, phenobarbital and phencyclidine from Tier I (mandatory) to Tier II (optional) due to changes in prevalence. In addition, buprenorphine, fentanyl, tramadol and their metabolites were moved from Tier II to Tier I due to increased prevalence and concerns about their potential for causing impairment. In addition, screening and confirmatory cutoffs for the oral fluid scope were further refined. Other additions were made to the list of Tier II compounds including fentanyl analogs (e.g., acetylfentanyl, butyrylfentanyl, furanylfentanyl, etc.), mitragynine, novel opioids (e.g., MT-45, U-47700), atypical antipsychotics and novel benzodiazepines (e.g., clonazepam, flubromazepam, etc.).

The authors conclude that efforts to promote standardization of the scope of analysis and cutoffs for drug testing have shown progress in terms of the increased numbers of laboratories either now meeting the recommended cutoffs and scope or working toward implementing the 2013 recommendations. The benefits of greater standardization include greater likelihood of detection of drugs in impaired drivers, better support for the IACP DRE program, and higher quality consolidated data for epidemiological and public health studies. The biggest challenges the laboratories face with implementation of the recommendations are limited staffing, instrument resources, analytical sensitivity and time (Logan et al., 2018).

National Conference of State Legislatures

In their report, “Traffic Safety Trends, State Legislative Action,” the NCSL describes a 2017 Colorado legislative bill that created a requirement for an annual report on substance-affected driving to the Colorado General Assembly to try to understand the breadth of the problem. They note that the report must include information on the number of citations for substance-affected driving violations and the number that result in a charge being filed, including how many involve one or more drugs or a combination of alcohol and drugs, and other information. The new law also created a \$2 data-analysis surcharge for persons convicted of substance-affected driving that will go into a data-analysis cash fund. Those funds can be used to reimburse state, municipal and private agencies and labs for payment of costs they incur in complying with the law (Essex, Shinkle, Miller, & Pula, 2018).

Foundation for the Advancement of Alcohol Responsibility

FAAR (also known as Responsibility.org) publishes biannual state legislative activity summaries that highlight changes to state laws related to alcohol and drug-impaired driving. Recent drugged driving topics included testing provisions, per se laws for drugs, drug definitions, marijuana and driving/open container laws, and marijuana legalization studies. Their 2019 mid-year legislative update⁴ describes FAAR’s support for several “commonsense measures to combat DUID” (Foundation for Advancing Alcohol Responsibility, 2019). These include:

- Increased testing for drug impairment including mandatory testing for drugs and alcohol in all fatal and serious injury crashes.
- Improved drug testing protocols.

⁴ <https://www.responsibility.org/wp-content/uploads/2019/07/2019-Mid-Year-Legislative-Report-Final-w-Cover1.pdf>

- Improved data and record systems which differentiate between arrests for alcohol-impaired and drug-impaired driving.
- State laws that provide separate and distinct sanctions for DUI and DUID.
- Enhanced penalties for polysubstance impaired driving.
- Zero tolerance per se laws for people under 21 for marijuana and other drugs
- Increased education and training for criminal justice practitioners.

AAA Foundation for Traffic Safety

The AAAFTS publication “Countermeasures Against Prescription and Over-the-Counter Drug-Impaired Driving” (Smith, Turturici, & Camden, 2018) describes how state differences in drugged driving laws will likely influence the type of data recorded by police officers. States with per se laws have specified limits, so the quantitative data on drugs will be important. States with zero tolerance laws, however, may only record whether test results are positive or negative. The type of data available on drugged driving is further greatly affected by the fact that police officers in many states routinely do not test for drugs when the BAC is over 0.08 g/dL and/or the toxicology lab does not perform drug tests under the same scenario.

The AAAFTS research brief “Detection Windows for Drugs in Oral Fluid: Cannabinoids, Stimulants, and Opioids” (Arnold, Chen, Kelley-Baker, & Horrey, 2019) assesses the literature on oral fluid detection times to address how long after a person uses a drug it can be detected in oral fluid, and what factors may influence detection times. As drug use does not necessarily imply impairment, efforts to understand the proximity of drivers’ drug use in time may assist in better understanding and properly enforcing drug-impaired driving laws. Key information from 29 selected articles were distilled and entered into Detection Window Summary Tables by drug class. This information includes drug type; route of administration; dose; analyte(s) and limit(s) of detection; collection device; analysis method; duration of oral fluid collection; minimum last detection time; median last detection time; maximum last detection time; participants’ frequency of use inclusion criteria; number of participants; and publication citation.

Advancing State Drugged Driving Data Collection

In order for states to design effective drug-impaired driving prevention and intervention efforts, and to make the best use of their resources, they must have access to data that are complete and accurate. AAAFTS has sponsored three interrelated studies over the last 5 years to identify and address issues related to the quality and quantity of drugged driving data. These three reports describe the complex and evolving issues related to measuring and documenting the extent of drugged driving in the United States.

- The Phase I report details expert panel recommendations on the topic.
- The Phase II report compares the Phase I state-level recommendations to policies and practices in each state and the District of Columbia.
- Using information collected in Phases I and II, this report (Phase III) focuses on seven of the Phase I state-level recommendations, eliciting a list of specific barriers and action steps from the states to address current laws and policies that are not fully aligned with the recommendations.

A description and key findings of the Phase I and Phase II studies are provided below, followed by a full report on the current work.

Phase I — Synthesis of Barriers and Expert Panel Recommendations⁵

In 2016, the AAAFTS published a Phase I report — “Advancing Drugged Driving Data at the State Level: Synthesis of Barriers and Expert Panel Recommendations” — that synthesized the published scientific literature on the barriers that impede state efforts to collect and compile drugged driving data. The report detailed the three major barriers to getting good quality and quantity data on drugged driving.

Three Barriers to Drugged Driving Data

1. Barriers to toxicological data on the presence and amount of drugs in drivers arrested for driving under the influence of alcohol and/or other drugs (DUI) and/or involved in crashes:
 - The cost of drug testing as well as state laws, policies or protocols may limit specimen collection and testing.
 - Law enforcement may not accurately identify drug impairment in drivers due to insufficient training.
 - More sensitive field tests are needed for law enforcement to assess impairment by drugs.
 - State DEC programs may not be implemented as effectively as possible.
 - Specimen collection may be excessively delayed.
 - Toxicology laboratories may be limited in their capacity to provide accurate test results in a timely fashion.
 - Toxicology results may not be comparable due to inconsistencies in toxicology practices, the frequent failure to test for the amount of drugs present and the lack of agreement on the thresholds for impairment for many drugs.

⁵ <https://aaaafoundation.org/wp-content/uploads/2017/12/AdvancingDruggedDrivingData.pdf>

2. Barriers to drugged driving arrest, adjudication and crash outcome data:

- Most states do not distinguish in their databases among driving under the influence (DUI) of alcohol, driving under the influence of drugs (DUID) or DUI alcohol and drug offenses.
- DUID in addition to alcohol may be underreported in arrest and citation data.
- Most states do not have a system sufficient for tracking statewide impaired driving arrests through adjudication and disposition.
- Crash databases may have limited capacity for capturing toxicology test results.

3. Barriers to data on the prevalence of drugged driving:

- Roadside toxicology surveys are costly and challenging to implement.⁶

The report also provided 19 specific prioritized recommendations from an expert panel on how to improve the collection of drugged driving data via national- or state-level laws, policies and practices (Arnold & Scopatz, 2016). Table 1 lists these expert panel recommendations by priority level.

⁶ The U.S. Congress currently bans the use of federal funds for roadside surveys.

Table 1: Expert panel recommendations to address the data barriers (2016)

High-priority	Medium-priority	Low-priority
<ol style="list-style-type: none"> 1. All law enforcement officers should be trained in administering the Standardized Field Sobriety Tests (SFST) and should be trained in NHTSA's "Drugs that Impair Driving" curriculum. (This was later amended to recommend the NHTSA Advanced Roadside Impaired Driving Enforcement — ARIDE — curriculum.) 2. States should authorize and encourage law enforcement to collect and test samples for drugs and alcohol for all (DUI) arrestees. 3. National model specifications should be developed for oral fluid drug test devices. 4. Law enforcement use of point-of-contact oral fluid drug test technology should be optimized. 5. States should update their data collection and reporting systems to distinguish among impaired driving offenses in all relevant data. 6. Implied consent laws should extend to drugs other than alcohol and support collection of blood or oral fluid for drug testing. Law enforcement should be authorized to collect multiple tests from suspected impaired drivers and suspects should not be permitted to choose the test(s). 	<ol style="list-style-type: none"> 1. Congress should reauthorize use of federal funds for roadside surveys. 2. NHTSA should endorse and encourage the use of the National Safety Council's recommendations for toxicology testing in drug-impaired driving and crash investigations. 3. Research to develop additional, more sensitive behavioral tests for identifying drug-impaired drivers should be supported and conducted. 4. States should authorize and encourage alcohol and drug testing for all surviving drivers involved in fatal and serious-injury crashes. 5. States should enact laws and/or the appropriate agencies should implement policies mandating alcohol and other drug testing and reporting of the results for all fatally injured drivers. 6. Model Minimum Uniform Crash Criteria Guideline (MMUCC) and FARS (National Highway Traffic Safety Administration, 2019a) data elements pertaining to drug tests should be revised to indicate each specific drug for which a test was performed and the result of each test, including quantitative results and the type of specimen tested. 7. Improve implementation and utilization of Drug Evaluation and Classification programs, including testing surviving drivers in fatal crash investigations. 8. Sanctions for refusing to provide a sample for alcohol and/or drug testing, whether criminal or administrative, should be at least as severe as those for testing positive. 	<ol style="list-style-type: none"> 1. States should amend their insurance laws to prohibit denial of insurance payment on the basis of alcohol or drug use. 2. Electronic warrants should be used to reduce delays in collecting specimens when a warrant is necessary. 3. Enhance reporting of observed behavioral impairment among surviving drivers in fatal crashes. 4. DREs should be encouraged to utilize the National DRE Tracking System. 5. The federal government should support and incentivize implementation of state-automated DUI information systems that are consistent with the Model Impaired Driver Records Information System (MIDRIS) guidelines to the maximum extent possible.

Phase II — State-by-State Assessment⁷

In 2018, AAAFTS released the follow-up Phase II report — “Advancing Drugged Driving Data at the State Level: State-by-State Assessment” — that compared 12 of the state-level recommendations from the Phase I report to the current policies and practices in the states and the District of Columbia. The report did not address the remaining seven national-level recommendations. Researchers collected this information in 2017.

The critical output from this project was a series of summary tables — one for each state plus D.C. — that highlight key information regarding state laws, policies and practices as they relate to the recommendations from Phase I.

Phase II Key Findings and Trends Among the States⁸

As noted in the report (Fell, Kubelka, & Treffers, 2018):

- While a majority of law enforcement officers (LEOs) have been trained in the SFST, much fewer have been trained in the ARIDE course which was developed for drug impairment. At the time of data collection in 2017, 17 states reported that 20% or more of their law enforcement officers were trained in ARIDE. Thirteen states indicated that more than 20% of their LEOs had been trained in the “Drugs That Impair Driving” curriculum.⁹
- Forty-seven states reported having between seven and 1,699 LEOs actively practicing as DREs.
- All but four states extend their implied consent laws to drug impairment.
- Forty-one states indicated that LEOs report observed behavioral impairment among surviving drivers in fatal crashes.
- Fifteen states reported that their laws authorize the collection and testing of oral fluid for alcohol and/or other drugs; however, in practice, the vast majority of states did not actually collect oral fluid. Ten states reported having oral fluid pilot test programs.
- Blood may be collected for testing for suspected drug impairment in 49 states, while 39 states allow urine testing.
- The majority of states do not expressly authorize electronic warrants, which reduce delays in collecting specimens from drivers arrested for DUI. The use of electronic warrants is often dependent on regional law enforcement practices and judicial acceptance of the use of electronic warrants.
- Even though only two states had separate laws for DUI-alcohol and DUID, 34 states reported that DUI-alcohol and DUID arrests were reported separately. It was not determined, however, if offenses could be easily distinguished in databases.
- Thirty-seven states’ laws permitted or mandated the testing of surviving drivers in fatal and serious injury crashes, but only when there is probable cause to suspect impairment.
- Thirty-nine states reported a legal mandate to test fatally injured drivers.

⁷ https://aaaafoundation.org/wp-content/uploads/2018/05/NORC-FINAL-REPORT_State-Recommendations-to-Improve-Data-on-Drugged-Driving....pdf

⁸ Although all states participated in the survey, some states did not respond to all questions.

⁹ NHTSA’s “Drugs that Impair Driving” curriculum is no longer supported by the agency. The Advanced Roadside Impaired Driving Enforcement (ARIDE) program developed by NHTSA is intended to replace it.

- Twenty-five states had a law explicitly permitting the denial of insurance payments on the basis of alcohol or drug use, while 10 states had laws prohibiting this practice.

Phase III — Recommendations to Improve Data on Drugged Drivers

The third and current phase of this effort, “Enhancing Drugged Driving Data: State-Level Recommendations,” highlights seven of the 12 Phase I expert panel state-level recommendations. These seven recommendations were selected for the following desired outcomes of the study:

1. Encourage more drug testing on suspected drugged drivers and encourage more reporting of the drug test results to a central state database(s).
2. Could be used by stakeholders to improve state data on drugged driving.
3. Information that could be best derived from state-level contacts.

These seven recommendations generally focus on improving drugged driving data via suggested changes, including:

- Implied consent laws;
- LEO drug specimen collection and testing practices;
- Laws and policies regarding specimen collection and reporting of test results for surviving and fatally injured drivers;
- Penalties for drug test refusal; and
- The use of electronic warrants.

Importantly, specific barriers and action steps were identified by key traffic safety stakeholders in each state for this study to address each of the expert panel recommendations.¹⁰ This report is expected to be used to advocate for new or enhanced state laws, policies and practices that improve the quantity and quality of drugged driving data.

There were some adjustments made to the original Phase I expert panel recommendations for purposes of this project, including a change to focus on drug-testing suspected impaired drivers, rather than on alcohol and drug-testing. This change allowed a more focused review of specific drugged driving data collection challenges. Caveats were added to some of the recommendations to recognize the need for probable cause to suspect drug impairment and the need for a warrant to collect a blood sample, absent exigent circumstances allowed by some state laws.

Since the time that the expert panel recommendations were compiled in 2015, the U.S. Supreme Court case *Birchfield v North Dakota* ("Birchfield v North Dakota," 2016) affirmed the requirement for a warrant for a blood draw and disallowed criminal sanctions for blood test refusals. Consequently, the recommendation that criminal and administrative penalties for drug test refusals should be as severe as for a DUID conviction was altered to focus on just the administrative penalties.

¹⁰ The study results from the Phase II and Phase III studies cannot be directly compared because Phase III focused just on drug-impaired driving versus alcohol-and-drug impaired driving in Phase II. In addition, only 45 jurisdictions participated in Phase III versus 51 jurisdictions in Phase II.

Seven expert panel recommendations

The seven¹¹ adjusted state-level expert panel recommendations featured in this study include:

1. Implied consent laws should: (a) extend to drugs and support the collection of blood and/or oral fluid for drug testing; (b) include the collection of a specimen or specimens for multiple tests; and (c) should not permit suspects to choose the type of test(s).
2. Authorize and encourage LEOs to collect and test specimens for drugs on all DUI/DUID arrestees (with probable cause and a warrant for a blood test). Because almost all LEOs are authorized by law to collect and test specimens for drugs with probable cause and a warrant for a blood test, we asked respondents to identify barriers to encourage drug testing suspects more often, even when the BAC is 0.08 g/dL and above.
3. Authorize and encourage drug testing for all surviving drivers in fatal and serious injury crashes (and report results)¹² when there is probable cause that impairment was a factor.
4. Enact laws and/or implement policies mandating drug testing and reporting of the test results for all fatally injured drivers.
5. Update data collection and reporting systems to distinguish among impaired driving offenses (DUI, DUID, and both) in all relevant data (particularly citation data).
6. At a minimum, the administrative penalty (license suspension) for a refusal to provide a specimen for drug testing should be at least as severe as for a first DUID offense.
7. Electronic warrants should be used to reduce delays in collecting specimens when a warrant is necessary.

Objectives

The main Phase III study objectives include:

1. Conducting a state-by-state analysis identifying the specific legislative, regulatory and/or resource changes required to bring state laws, policies and practices into alignment with selected recommendations from the AAAFTS Phase I Report: “Advancing Drugged Driving Data at the State Level: Synthesis of Barriers and Expert Panel Recommendations.”
2. Identifying barriers and action steps to improve drugged driving data collection in each state.
3. Displaying the findings in a straightforward manner for each state to enable traffic safety stakeholders to leverage the information to affect policies and practices as needed. Further, develop an at-a-glance chart showing the status of these recommendations across the nation.

¹¹ Please note that while this report investigates state laws, policies and practices regarding these seven expert recommendations, three are further broken out into sub-recommendations.

¹² “and report results” was added to the original recommendation.

Methods

These activities were employed to accomplish the study objectives:

1. Using the state tables in the Phase II report (compiled in 2017) on the status of each state's laws and policies related to the expert panel recommendations, individual draft state charts were tailored to display the known status of each of the seven recommendations selected for this project. This included determining whether and how each state was in alignment with the recommendations based on the Phase II report. This chart served as a starting point for the outreach to states.
2. For the recommendations that referred to a specific state statute, the current relevant statute as of Sept. 1, 2018, was identified via legal coding and included in the draft charts. The primary tool used for conducting the legal research was Westlaw, an online legal research service that provides searchable databases for each state's statutes and regulations.
3. The Governors Highway Safety Representatives and State Highway Safety Coordinators in each state were contacted by phone and email (with draft chart attached) to describe the study and to request recommendations about who would be the best person(s) to fill-in and update their state draft chart as needed.
4. For the vast majority of states, individuals were then designated by the GHSR or by the Highway Safety Coordinator to complete the draft chart. Generally, designees included Traffic Safety Resource Prosecutors (TSRP); the Highway Safety Coordinator himself or herself, impaired driving specialists, DREs, and toxicology lab professionals. For ten states, one person completed the chart, 17 states had two individuals who contributed to the chart and 18 states had three or more respondents. When multiple contributors were involved, the responses were coordinated by a designated stakeholder.
5. The designated stakeholders were asked to fill in the draft chart by identifying specific barriers (legislation, legal, policy, protocol, traditional practices, attitudes, resources, training, technology, cost, political, procedural, etc.) to align with the recommendations, and to provide specific action steps needed to overcome those barriers. A comments section under each recommendation could be used to add caveats or additional important information about the circumstances in each state.
 - If, based on the Phase II 2017 survey and/or legal coding of the applicable laws, the state appeared to be already in alignment with the recommendation, they were not asked to identify barriers or action steps.
 - If the drug test results for surviving drivers and fatalities were mandated to be reported by a law or policy, respondents were asked to identify the state database(s) where the results were maintained.
 - If impaired driving offenses (DUI, DUID, and both) were reported to be distinguishable in a state database, respondents were asked to identify that database(s).
6. The draft charts were returned by the designated stakeholder to project staff who then reviewed the responses and followed up with questions by email and phone, if clarifications were needed.
7. A revised chart was sent to each state for final approval. This usually required additional contacts to clarify information provided in the chart.
8. Based on the final approved chart, a separate alignment list was created by project staff as a companion piece to each chart. The list includes three categories of alignment with the seven recommendations in terms of laws and policies: aligned,

partially aligned and not aligned. Each list also has a notable findings section, which provides some highlights from the state chart related to unique circumstances or issues, laws, barriers, or action plans.

9. A state-by state spreadsheet was created to compile and summarize the most frequently cited barriers, actions steps, and other unique issues for each recommendation.
10. A national overview chart was filled in, indicating the states' alignment or partial alignment with each recommendation.

Limitations

Ultimately, 44 states and the District of Columbia¹³ participated in this study and are included in this report. Three states declined to participate. Three additional states simply did not respond to multiple requests for follow-up on their draft charts.

Besides the 88% response rate from states, the results of this effort are accompanied by two key limitations: variability among the state contact responses in terms of comprehensiveness and completeness; and variability in the number and type of contributors for each state. The shorthand nature of the design of the chart contributed to this limitation.

A majority of the charts provide great informative detail regarding the barriers to alignment and the related complications of the state's impaired driving laws and policies. Less detail was generally provided for the possible action steps needed to become more aligned with the recommendations. Although a small number of jurisdictions chose not to list barriers and/or action steps, most respondents appear to have been forthcoming in providing practical critiques of their current state laws, policies, and practices related to needed drugged driving data improvements.

The number of key stakeholders who contributed to the completion of charts generally ranged between one and three respondents. The different types of respondents included state TSRPs who were best able to answer the questions related to specific laws, state impaired driving coordinators or impaired driving specialists, DREs, GHSRs and toxicology professionals. Naturally, each type of respondent provided answers in their charts that featured more detail related to their own areas of expertise.

Given the variances in the comprehensiveness of the charts and the differences in the types and number of respondents, these charts cannot be directly compared across states. Further, the various respondents may have had somewhat different interpretations of the goal of each recommendation. Consequently, the designations by project staff of aligned, partially aligned or not aligned with the expert panel recommendations were based on the variable information provided by the respondents. They are used to illustrate the status of drugged driving data across the nation at a high level.

¹³ For simplicity, hereafter, referred to as 45 jurisdictions or 45 states.

How to Use This Report

Each of the recommendations have been assigned a number/letter, **1a** through **7** in **bold red text** as indicated in the table below.¹⁴

1a/1b/1.	2	3a/3b	4a/4b	5	6	7
Implied Consent for Drugs: Oral Fluid and/or Blood; Multiple Tests; Prohibit Suspect Choice of Test(s)	Authorize & Encourage Testing of all DUID Arrestees	Test/Report on Surviving Drivers in Fatal/Serious Crashes	Mandate Test/Report on Fatally Injured Drivers	Distinguish Alcohol & Drug Offenses Separately in Data	Refusal Sanctions as Severe as First Offense	Usage of Electronic Warrants to Collect Specimens

The **numbers/letters in bold red text** are used to facilitate cross-referencing of the seven recommendations in four major sections of this report:

1. **Summary of State Findings by Recommendation:** Provides background information on each of the recommendations, recent literature or reports (if any) on the topic, and the compiled trend information among the states in terms of alignment with the recommendations, and barriers and action steps to alignment.
2. **Overall Summary — Major State Trends**
3. **Appendix A: National Overview Chart** (page A-1): Provides a one-page chart, listing 44 states and the District of Columbia, and indicates the states' alignment or partial alignment with each of the seven recommendations.
4. **Appendix B: State-by-State Alignment Lists and Charts with Barriers and Action Plans** (page B-1): Provides a separate alignment list for each of the 45 jurisdictions along with some notable findings. A detailed individual state chart follows each alignment list. These details were used to develop the ratings for the alignment list. Each state chart features:
 - o Current status of each recommendation and provides the legal citations for applicable laws.
 - o List of identified barriers to becoming aligned (if applicable) or improving alignment with each recommendation.
 - o Action steps needed to address the barriers.
 - o Comment section for additional details or further clarifications, if needed by respondents.

¹⁴ As indicated in the table, three of these seven expert recommendations are further broken out into sub-recommendations.

Leveraging the Information to Improve State-Level Drugged Driving Data

States can use this report to assess their drugged data needs and potential action plans for improvement by:

1. Utilizing the resources provided in two sub-sections:
 - Recent National Developments and Resources; and
 - Recent Literature/Resources on the Topic listed under the section on State Findings by Recommendation.
2. Learning from the experiences of other states by reviewing the sections on Summary of State Findings by Recommendation and Overall Summary-Major State Trends.
3. Reviewing Appendix A, National Overview Chart to see how states generally align on the recommendations overall among the 45 participating jurisdictions, keeping in mind the noted study limitations.
4. Reviewing Appendix B, Individual State-by-State Alignment Lists and Charts with Barriers and Actions Plans for details cited by key stakeholders for each of the expert panel recommendations.

Summary of State Findings by Recommendation

Forty-five jurisdictions (44 states and the District of Columbia) participated in this study. As previously described, six states¹⁵ opted not participate.

For each of the seven expert panel recommendations studied in this report, this section provides:

- Brief background information from the Phase I study regarding the reasons the expert panel made the recommendation.
- A summary of recent literature, resources or developments (if any) on the topic.
- A summary of the major findings and trends compiled from the individual state charts including commonly listed barriers and action plans to become better aligned with the recommendations.

Recommendation 1: Implied Consent Laws

Implied consent laws should extend to drugs and support the collection of blood and/or oral fluid for drug testing. Law enforcement should be authorized to collect a specimen or specimens for multiple tests and impaired driving suspects should not be permitted to choose the type of test(s).

Expert Panel Reasons for the Recommendation

The expert panel recognized the difficulty in making changes to a state's implied consent law if drugs are not included, but they noted the value in at least encouraging as much specimen collection as possible from drugged driving suspects. Multiple specimens are important to provide confirmatory tests or additional drug tests if needed. Multiple specimens are not needed if a large enough single specimen is available on which multiple tests can be performed (for example, collecting two vials of blood). Prohibiting suspects from choosing the type of test prevents the subject's avoidance of blood or oral fluid collection by submitting to breath alcohol testing only (Arnold & Scopatz, 2016).

The expert panel also suggested that law enforcement should optimize the use of point-of-contact (roadside) oral fluid drug test technology (if allowed by law or policy) to avoid the inevitable delay in getting blood samples that most often require a warrant if the blood sample is not provided voluntarily. Devices that provide preliminary results at the roadside may improve identification of drug-impaired drivers as well as help target toxicology testing, potentially reducing sample collection and testing costs, more efficiently using the officers' time, and reducing the cost of litigating the cases (Arnold & Scopatz, 2016).

In a related federal-level recommendation, the expert panel recommended the development of model specifications for oral fluid drug test devices. It is noted that NHTSA is currently conducting laboratory tests on five oral fluid devices.

Recent Literature/Resources on the Topic

The IACP "Police Chief" magazine published "Oral Fluid Testing for Impaired Driving Enforcement" (Flannigan, Talpins, & Moore, 2017), which recommends that officers screen all suspected impaired drivers for drugs using on-site oral fluid devices for more than just reasons of cost-effectiveness. The authors believe that oral fluid test results could pass

¹⁵ Alaska, Kentucky, New Hampshire, New York, South Carolina, South Dakota

evidentiary standards in court when applying the Frye¹⁶ and Daubert Standards.¹⁷ They go further and recommend replacing blood and urine testing with oral fluid lab tests for four reasons: (1) Two Supreme Court cases, *Missouri v McNeely* (2012) and *Birchfield v North Dakota* (2016), make it difficult to obtain blood (and possibly urine) samples without a warrant—legal challenges that oral fluid would likely not face. (2) Officers can collect evidentiary samples at the roadside for submission to the laboratory, which minimizes delay and the possibility that drugs will dissipate in the bodily fluids from DUI subjects. (3) Positive oral fluid test results of a parent drug at normal lab cut-off concentration levels can indicate recent usage,¹⁸ potentially correlating to the duration of drug effects, and do not indicate use from days ago. (4) It appears that states may criminalize oral fluid test refusals, unlike blood tests,¹⁹ thus increasing test compliance rates.

A 2019 presentation at the Institute of Police Technology and Management's (IPTM's) annual Symposium on Traffic Safety provides a table on the advantages and disadvantages of the various DUID testing methods including oral fluid (screening and evidentiary), blood and urine, shown below.

Table 2: DUID Testing Methods (Holmes & Talpins, 2019, June 3-6)

Testing Method	Location	Advantages	Disadvantages
Oral Fluid/saliva	Roadside (Screening)	<ul style="list-style-type: none"> - Identifies presence of recent use - Easy to administer - Relatively inexpensive; costs likely to go down - Results in less than five minutes - Short window of detection captures recent use - Currently no warrant requirement - Identifies more drug-impaired driving and drugs plus alcohol on board - Helps establish possible need to call in DRE officer - Onsite screening creates option for administrative license suspension/revocation (ALS/ALR) for drug-impaired drivers 	<ul style="list-style-type: none"> - Quality of kits/devices varies - Sensitivity concerns for some drugs - Tests for a limited number of drugs (often six or seven substances or drug classes) - Practitioners not as familiar with this method as it is a newer drug detection technology - Used in a screening capacity not for evidential purposes; only indicates whether an individual is positive or negative for drugs above set cut-off levels - Testing methods may be subject to Frye/Daubert hearings in some states
Blood	Laboratory (Evidentiary)	<ul style="list-style-type: none"> - 'Gold standard' - Reflects recent drug use and indicates drugs circulating in the body - Conclusive, sensitive, specific - Relatively short window of detection - Can test for an extensive number of substances 	<ul style="list-style-type: none"> - Expensive (e.g., \$300 in Colorado) - Intrusive procedure that requires police officers to handle biological samples. - Requires trained individual to conduct blood draw - Warrant required in DUI cases if suspect refuses to voluntarily provide a sample - Rapid metabolization of some drugs and delays in obtaining the blood draw can lead to loss of chemical evidence

¹⁶ A test to determine the admissibility of scientific evidence in court. It provides that an expert opinion based on a scientific technique is admissible only where the technique is generally accepted as reliable in the relevant scientific community.

¹⁷ A set of five criteria used to determine the admissibility of expert witness testimony in federal court. The trial judge serves as the gatekeeper who determines whether an expert's evidence is deemed reputable and relevant.

¹⁸ The window of detection depends on the drug cutoff concentration levels used in the lab.

¹⁹ U.S Supreme Court, *Birchfield v North Dakota* (2016) prevents criminal penalties for blood test refusals.

Testing Method	Location	Advantages	Disadvantages
			<ul style="list-style-type: none"> - Delay can be 1.5 to 2 hours between the time of the stop and sample collection; as drugs metabolize and dissipate over time, test results can make cases difficult to adjudicate, particularly in states with per se laws for drugs. - Prosecutors have difficulty proving chain of custody, and labs might not be able to provide a witness for trial. - Many states struggle with backlog in processing blood samples in DUI cases which can lead to a case proceeding to trial without chemical evidence.
Urine	Laboratory (Evidentiary)	<ul style="list-style-type: none"> - Conclusive, sensitive, specific 	<ul style="list-style-type: none"> - Officers must observe suspects provide the sample; same sex collection required - Requires officers to handle biological samples - Can take hours to provide a sample - Expensive - Long window of detection that identifies drug metabolites; problematic in DUI cases as it is more difficult to establish recent vs. historical use
Oral fluid/saliva	Laboratory (Evidentiary)	<ul style="list-style-type: none"> - Collected by officer closer to the time of traffic stop, reducing time, expense, and preserving timely chemical evidence - Minimally invasive, easy to use - No warrant requirement - Screens for most common types of drugs - Conclusive, sensitive, specific - Lower likelihood of specimen contamination - Short window of detection captures recent use (at normal lab cut off levels) - Strong correlation between drug profiles in blood and oral fluid 	<ul style="list-style-type: none"> - Very expensive - Few qualified labs due to need for specialized instrumentation - Testing methods will be subject to Frye/Daubert hearings in some states

Concerns and Barriers to Oral Fluid Use

There are some particular concerns about moving to the regular use of oral fluid devices (Holmes & Talpins, 2019, June 3-6):

- Lack of guidelines or minimum standards for oral fluid devices – NHTSA has yet to create standards or a conforming products list similar to those that exist for breath testing devices and ignition interlocks.²⁰

²⁰ In October 2019, the Department of Health and Human Services established scientific and technical guidelines for the inclusion of oral fluid specimens for use in the Mandatory Guidelines for Federal Workplace Drug Testing Programs. They are now authorized for use in testing truck drivers and other DOT employees: <https://www.ttnews.com/articles/hhs-establishes-guidelines-oral-fluid-specimen-drug-testing>. (Transport Topics, 2019)

- Not authorized for use in statute – many states do not have language in implied consent or testing statutes that would allow for the collection of oral fluid.
- Lack of agency buy-in – some law enforcement agencies are resistant to change although many are fine relying on blood testing, so they do not see the need for oral fluid testing.
- False negatives – a person may have a drug in their system that is below the cutoff level. There is concern about letting impaired drivers go if officers rely solely on the findings of devices.
- Limited testing panel – concern that devices do not test for enough substances; not possible to develop a panel that will capture everything.
- Authorized users – debate among law enforcement about who should be permitted to use oral fluid testing devices (i.e., limited to Drug Recognition Experts (DREs), officers who have completed Advanced Roadside Impaired Driving Enforcement (ARIDE) training, or officers who are trained to administer the SFSTs?).
- Officer safety – there must be protocols established for the collection of oral fluid samples that take officer safety into account (e.g., when, where, and how should the sample be collected from the suspect?)

The IPTM conference presentation (Holmes & Talpins, 2019, June 3-6) also highlighted the fact that the use of oral fluid to detect drug-impaired driving is not a silver bullet and should be viewed as another investigative tool:

- Oral fluid results in and of themselves cannot determine whether a driver is impaired.
- The best use of oral fluid is as a corroborative test for drug ingestion in situations where a trained LEO has observed signs and symptoms of impairment.
- Officers must rely on observations and information obtained from SFSTs, ARIDE training or DRE evaluations when making determinations about impairment. A positive result can assist in confirming suspicions.

Recommendation 1a: Implied consent laws should extend to drugs and support the collection of blood and/or oral fluid.

State Findings and Trends

- A total of five states (11%) are not aligned with this recommendation.
 - The implied consent law extends to drugs in all but three states (MA, NJ, WA).
 - The implied consent law extends to drugs, but it does not allow for the collection of blood in two states (AR, OR).
- The implied consent laws extend to drugs and authorizes the collection of blood in 40 of the 45 jurisdictions (89%). As described below, eight of these states (18%), have exceptions that limit full enforcement of the law. In these cases, the implied consent law extends to:
 - Only serious injury and fatal crashes and only for certain drugs (AL).
 - Drugs, only upon conviction (WY).

- Drugs, only if a chemical test is refused (LA).
- Drugs, but first offenders are allowed to refuse a blood test (MT).
- Drugs and the collection of blood, but the law specifically states that only a DRE may request a blood test (MD).
- Drugs, but search warrants for blood are not allowed for misdemeanor cases of DUI/DUID (FL, NM, RI); in one of these states (FL), blood can only be collected if it is not practical to collect breath and urine.

Oral Fluid Specimen Collection

The implied consent law extends to oral fluid (or saliva or other bodily fluids) in 13 of the participating jurisdictions (29%) (AR, AZ, CO, GA, IL, KS, LA, MO, NC, ND, NV, OK, UT). Wyoming's DUI/DUID law allows the collection of saliva or other bodily fluids. In all of these states however, oral fluid specimens are not regularly collected in practice.

Three states (7%) are currently collecting oral fluid (IN, MI, AL) on a regular basis.

- The implied consent law extends to oral fluid in Indiana. Some law enforcement agencies (LEAs) regularly use quick screen oral fluid devices at the roadside. The results are used in determining whether to call in a DRE and/or they may be used to help establish probable cause.
- The implied consent law does not extend to oral fluid in Michigan, but special legislation allowed for a five-county roadside oral fluid pilot test and the current statewide roadside oral fluid collection program. Only DREs collect oral fluid specimens. (See Appendix B: Michigan, for more details.)
- Although not included in their implied consent law, Alabama's DUI/DUID law allows for the collection of oral fluid. This program now offers statewide oral fluid drug screening at the roadside and evidentiary confirmation testing in the lab. In the current phase of the program, law enforcement collects oral fluid and blood (with a warrant) for confirmation tests. (See Appendix B: Alabama, and for more information: <https://ads.alabama.gov/services/tox/toxicology-oral-testing-program>)

At least six additional states have conducted roadside pilot tests (CA, CO, KS, MA, VT, WI). The links and/or references for some of the published pilot study reports are provided within each state chart in Appendix B.

Two states report that they are conducting non-roadside oral fluid pilot studies:

- Wyoming is conducting a voluntary oral fluid pilot study on DUI arrestees at some of their jails.
- Montgomery County, MD, is conducting a lab-based oral fluid pilot study.

Barriers to the Collection of Oral Fluid Specimens

As indicated above, 13 states are authorized to collect oral fluid and multiple states have conducted roadside oral fluid pilot tests, but only Alabama and Michigan are currently conducting statewide operations.

Alabama is the only known state that has developed evidentiary confirmation of specimens with validated lab methods. In fact, several states in this study mentioned that they are waiting to see what other states are doing on this topic, naming Alabama in particular.

The most common types of barriers to the collection of oral fluid specimens listed by the study respondents were:

- No current law to authorize the collection of oral fluid.
- No administrative rules and regulations for approved oral fluid specimen collection procedures.
- Costs related to program implementation, devices, collection kits, lab equipment and lab personnel.
- Lack of a validated lab methodology for analyzing oral fluid specimens, which would be needed for certification.
- Training for and acceptance from law enforcement, prosecutors and judges.
- Scientific uncertainty and reliability of oral fluid devices and their admissibility in court.
- Lack of case law related to the admissibility of oral fluid specimen results for DUI/DUID.

A Frye standard or Daubert standard hearing is needed in some states to determine the admissibility of scientific evidence in court.²¹ The Frye standard provides that expert opinion based on a scientific technique is admissible only where the technique is generally accepted as reliable in the relevant scientific community. A Daubert standard applies a set of five criteria used to determine the admissibility of expert witness testimony. The trial judge serves as the gatekeeper who determines whether an expert's evidence is deemed reputable and relevant.

Barriers will differ depending on whether oral fluid is to be used for roadside screening purposes and/or for evidentiary purposes. A respondent from Arizona mentioned that their strong law enforcement phlebotomy program negates the need for oral fluid collection.

Action Steps for the Collection of Oral Fluid Specimens

The most frequently cited action steps for the collection of oral fluid specimens generally corresponded to the identified barriers listed above:

- Create new legislation or amend existing law.
- Develop administrative rules and regulations.
- Conduct/compile research on the accuracy of oral fluid, including looking at what other states have done.
- Identify a pilot study jurisdiction and funding.
- Conduct Frye or Daubert hearing.
- Identify funding for crime/toxicology lab.

²¹ People of the State of California v. Junior Salas (Kern County Superior Court, December 2015), the court ruled in what may be a landmark case, that the results from the Drager Drug Test 5000 (administered in October 2013) were scientifically reliable and could be presented to the jury in a vehicular manslaughter case. (CISION PRWeb, 2016).

- Develop validated lab methods for specimen analysis.
- Develop stakeholder buy-in and training.

As Alabama is starting to collect oral fluid statewide, their potential action plans included educational programs for decision makers and the public, including a Public Service Announcement (PSA) on their oral fluid program. A publication on the results of the Alabama oral fluid program is expected in 2020 from their Chief Toxicologist.

The Society of Forensic Toxicologists (SOFT) Oral Fluid Committee (chaired by the Chief Toxicologist from Alabama), compiled a useful Frequently Asked Questions document about Developing an Oral Fluid Pilot Program: http://soft-tox.org/files/2018%20OF_FAQ_FINAL.pdf.

Recommendation 1b: Implied consent laws should include the collection of a specimen or specimens for multiple tests.

This recommendation involves the collection of more than one specimen and/or the collection of a large enough specimen for confirmatory drug tests or additional testing beyond the standard protocol.

State Findings and Trends

- The laws in four states (9%) (MA, MS, NJ, ND) do not allow for the collection of a specimen or specimens for multiple tests.
- Thirty-nine of the responding jurisdictions (87%) do allow for the collection of a specimen or specimens for multiple tests.
- Two states (4%) have extenuating circumstances for partial alignment with the recommendation.
 - In Oregon, they are restricted to the collection of one sample. This prevents the use of a Preliminary Breath Tester (PBT), because use of the PBT plus an evidentiary breath test would violate the one-sample rule. Under Oregon's implied consent law, they are not allowed to collect blood samples, but could perform multiple tests on one urine sample.
 - The implied consent law in Washington allows for the collection of breath only, but the DUI/DUID statute allows for the collection of blood with probable cause and a warrant.

Barriers to the Collection of a Specimen or Specimens for Multiple Tests

- The implied consent laws restrict specimen collection practices.

Action Steps to the Collection of a Specimen or Specimens for Multiple Tests

- Legislation to change the implied consent laws to allow the collection of a specimen or specimens for multiple tests.

Recommendation 1c: Implied consent laws should not permit suspects to choose the type of test(s).

State Findings and Trends

- In 82 percent of responding states (n=37), suspects are either prohibited from choosing the type of test or the law indicates that the LEO chooses the type of test

when drug impairment is suspected. There are a couple variations related to the circumstances under which suspects are prohibited from choosing the type of test:

- In the District of Columbia, suspects are prohibited from choosing the type of test, except if there are valid religious or medical grounds; then only breath or urine may be collected.
- Three states allow the suspect to choose the type of test, except when drugs are suspected; then a blood test is required (CA, CO, NV).
- The laws in four states *do allow* the suspect a choice of tests (HI, IA, MA, MS).
- In Montana, the implied consent law does not permit suspects to choose the type of test, but because first DUID offenders are allowed to refuse a blood test (and a warrant is prohibited), they do have some choice.
- In three additional states, suspects cannot choose the type of test under their DUI/DUID laws (NJ, OR, WA).

Barriers to Prohibiting Suspects from Choosing the Type of Test(s):

- Current laws that allow suspects to choose the type of test.
- Legislator and court opinions that allow blood test refusal when DUID is suspected.

Action Steps for Prohibiting Suspects from Choosing the Type of Test(s):

- Establish a state forensic toxicology lab.
- Legislative change regarding blood test refusals.
- New legislative is already pending.

Recommendation 2: Collection and testing of specimens for drugs

Authorize and encourage LEOs to collect and test specimens for drugs for all DUI/DUID arrestees with probable cause and a warrant for a blood test.

Expert Panel Reasons for Recommendation

Given the goal to get improved prevalence data on drugged driving, the expert panel recommended that all DUI cases undergo drug testing. They noted the difficulty in achieving this recommendation due to increased related costs. An additional benefit to drug testing all DUI cases is getting data for better targeted treatment of drug users (Arnold & Scopatz, 2016).

Recent Literature/Resources on the Topic

Responding to a 2013 recommendation by the National Safety Council to drug test all DUI cases, a recent cost benefit study (Tiscione, Miller, Shan, & Tate Yeatman, 2017) of case management policies in a DUI lab concluded that the cost is not worth the benefit. Using lab data from 576 cases in Palm Beach County, Florida, the authors found that in the vast majority of cases with a BAC ≥ 0.08 g/dL, the drugs detected were not significant enough to support a DUI case and therefore didn't warrant the substantial increase in analysis cost and time required for comprehensive testing.

The "2018 IACP Drug Evaluation & Classification Program" report provides a state-by-state update of the current number of DREs by police agency, the number of enforcement

and training DRE evaluations conducted in 2018, a breakdown of the DREs evaluation opinion by drug category and polydrug use test results from DRE evaluations. This report can provide some indication of the major drugs “on board” drivers detected by DREs in each state. This annual publication also provides a state-by-state accounting of police officer trainings conducted, including DRE, ARIDE, Drug Impairment Training for Education Professionals (DITEP), phlebotomy training and Standard Field Sobriety Testing. (International Association of Chiefs of Police, 2018).

State Findings and Trends

- Forty of the participating jurisdictions (89%) are authorized to collect blood but the need for probable cause to specifically suspect drug impairment was often cited as a barrier to preventing the testing of *all* DUI cases.
- The long list of barriers to more drug testing suggests that most LEAs are not encouraged to test for drugs.
- These five states (11%) (FL, MD, MT, NM, and RI) are considered to be only partially aligned with this recommendation because even though they are authorized to test for drugs, they are hampered by the caveats in their implied consent laws that prevent the collection of blood from *all* DUID suspects (as detailed under recommendation 1a). It is noted that Rhode Island is the only state among these five states that is authorized to collect urine to test for drugs.

Barriers to Increased Specimen Collection and Testing for Drugs

A majority of states (n=31, 69%) listed cost and resources (including staff time) for both the toxicology labs and/or police agencies as barriers that prevented better alignment with this recommendation. The time and logistics needed to obtain a warrant for blood testing was a significant barrier as well.

In order of frequency, respondents listed these barriers to increasing specimen collection and testing for drugs, even when the driver’s BAC is .08 g/dL or higher:

- Limits of staff time and resources, primarily those of toxicology labs but also of LEAs.
- A policy that determination of DUI-alcohol (at .08 g/dL or higher) is sufficient for arrest and conviction, such that further testing for drugs is unnecessary.
- Difficulties created by the need for warrants, including the effort necessary to obtain warrants and the inaccessibility of e-warrants.
- Inaccessibility of medical staff willing and/or able to take samples, including geographic issues, unwillingness of medical staff to take samples
- Laws and policies that prevent LEAs from pursuing the collection of samples.
- Need for more training for LEOs, including recognizing signs of drug impairment.
- Lack of accessibility to the necessary technology and the costs of improved technology.
- State laws that either don’t require testing or create barriers to it.

- Concerns that the length of time needed to get test results back from the lab can create a speedy trial time limit problem.²²
- Lack of confidence in drug test results.
- Lack of per se limits for drugs.
- Ability of suspects to refuse test(s).

Action Steps to Increased Specimen Collection and Testing for Drugs

In order of frequency, respondents listed these action steps to increasing specimen collection and testing for drugs, even when the driver's BAC is 0.08 g/dL or higher:

- Develop new legislation, including changes to some implied consent laws that restrict testing and the ability to get warrants in all cases.
- Secure more training of LEOs, including more ARIDE and DRE.
- Secure more resources (money, staffing and equipment) for toxicology labs.
- Allow or facilitate electronic warrants (see Recommendation 7).
- Authorize and train LEOs as phlebotomists.
- Change policies regarding drug testing for DUID suspects over 0.08 BAC.
- Require and/or facilitate blood draws by medical staff.
- Train judges, magistrates to facilitate search warrants for DUID samples.

Recommendation 3: Drug testing and reporting for surviving drivers

Authorize and encourage drug testing for all surviving drivers in fatal and serious injury crashes (and report results) when there is probable cause that impairment was a factor.

Expert Panel Reasons for the Recommendation

States should strive to test as many surviving drivers involved in fatal and serious injury crashes as possible and ensure tests are performed and results reported. The expert panel acknowledged that state laws create a disincentive to test for drugs, the lack of laws requiring testing, funding constraints, and limited laboratory capacity may limit some states or agencies from testing all drivers in serious and fatal injury crashes, and agreed that such testing should not be required, but rather authorized and encouraged. The panel also noted that most states have a strong tradition of requiring probable cause for drug or alcohol testing crash-involved drivers (Arnold & Scopatz, 2016).

Recent Literature/Resources on the Topic

A 2016 study examined the differences in state drug testing and reporting rates by driver type in fatal crashes. The authors saw one of the lowest testing rates among surviving drivers who were not transported to a hospital. Also, of particular concern was the low testing rate for surviving drivers who were at fault in the crash. The authors suggested that

²² A defendant in a criminal case has a right to a speedy trial under the Sixth Amendment to the U.S. Constitution. In many jurisdictions, the prosecution generally has 60 to 120 days to bring an imprisoned defendant to trial unless the defendant waives the right to a speedy trial. The time period is generally longer for a defendant out of custody.

testing rates might be increased through standardization and mandatory testing policies (Slater et al., 2016).

Recommendation 3a: Authorize and encourage drug testing for all surviving drivers in fatal and serious injury crashes when there is probable cause that impairment was a factor.

State Findings and Trends

- All states are allowed to test suspected drug-impaired drivers with probable cause and a warrant for a blood draw under either their implied consent law and/or their DUI/DUID law.
- There are 7 states (16%) (AL, FL, HI, IA, MD, MS, ND) for which some elements of their implied consent laws discourage drug testing all suspected drug-impaired drivers, regardless of whether the crash involved a serious injury or a fatality. Plus, there are at least two additional states (IL, ME) that have features of their laws that discourage drug testing surviving drivers. Further, as described under Recommendation 2, there are policies and practices, and budget constraints in many police departments and toxicology labs that discourage drug testing after a BAC of 0.08 has been established.

At least one state's case law ruled that the automatic testing of a surviving driver involved in a fatality was unconstitutional. *McDuff v State of Mississippi* (2000) requires the suspect's consent for testing, a warrant (or a showing of exigent circumstances as to why a warrant was not obtained), and probable cause.

This study did not review laws that define exigent circumstances that allow involuntary blood testing of suspected drug-impaired drivers. Nor was there a review of laws that specifically discourage or encourage drug testing surviving drivers involved in a serious injury or fatal crash; however, a few states provided examples in their response to this recommendation.

Examples of laws that might discourage drug testing surviving drivers:

- In Maine, drug testing surviving drivers is required for fatalities but not for serious injury cases.
- In Illinois, the law mandates testing surviving drivers in cases of great bodily harm and/or death but only if there is an at-fault arrest.

Examples of laws that might encourage drug testing surviving drivers:

- Colorado's implied consent law (referred to as "expressed" consent) specifically allows an involuntary blood draw with a search warrant when there is probable cause to suspect drug impairment for certain listed crimes (criminally negligent homicide, vehicular homicide-DUI, 3rd degree assault or vehicular assault-DUI).
- The state law in Montana appears to be unique in that it specifically allows drug testing surviving drivers involved in crashes resulting in death or serious injury, even when no one was suspected to be impaired.

The topic of getting a blood sample from an unconscious surviving driver transported to a hospital is an issue that garnered national attention in 2018. A police officer in Utah who

was a trained phlebotomist wanted to take a blood sample from an unconscious person who was a suspect in a hit-and-run case. A hospital nurse refused to allow the blood draw stating that it was against hospital policy to draw blood from an unconscious patient, unless the patient is under an active arrest or a warrant is present. The nurse explained that the hospital developed this policy in conjunction with the police department (although the officer was from a neighboring jurisdiction). The police officer proceeded to arrest the nurse, all of which was captured on video and widely viewed on the internet. The police officer was ultimately terminated from his job and the nurse won a \$500,000 settlement from the hospital (Brusie, 2018). Since that time, however, a 2019 U.S. Supreme Court ruling, *Mitchell v Wisconsin* (2019), upheld a warrantless blood draw of an unconscious impaired-driving suspect. The Court concluded that the exigent-circumstances doctrine generally permits a blood test without a warrant when the driver is unconscious and cannot be given a breath test.

Barriers to Increasing the Rate of Drug Testing Surviving Drivers in Fatal and Serious Injury Crashes

In order of frequency, respondents listed these barriers to more drug testing of surviving drivers:

- Costs.
- Constitutional issues/case law that dictate the need to establish probable cause for signs of drug impairment.
- Lack of training for LEOs to recognize subtle signs of drug impairment.
- Lack of people or entities to draw blood and uncooperative medical personnel.
- Time constraints in the statute.
- Establishing probable cause if suspect is transported to a hospital when there are no witnesses or a police interview within an appropriate time frame.
- Reluctance of some LEOs and prosecutors to pursue a case if drug impairment is not immediately obvious.
- Other roadside priorities for LEOs in crash situations.

Action Steps to Increasing the Rate of Drug Testing Surviving Drivers in Fatal and Serious Injury Crashes

In order of frequency, respondents listed these action steps to more drug testing of surviving drivers:

- Change the law to mandate testing surviving drivers.
- Secure more funding for staffing and for labs to be equipped to test for cannabis and other drugs.
- Find people and places willing to draw blood.
- Train LEOs to recognize signs of drug impairment (ARIDE and DRE).
- Encourage LEOs to take SFST refresher training every four years.
- Consider ways to train officers in forensic phlebotomy.
- Educate medical facilities regarding no civil liability for conducting blood draws at the request of law enforcement officer on individuals charged with DUI and Aggravated DUI.

- Educate medical facilities regarding no civil liability for the truthful reporting of blood and urine tests performed on individuals charged with DUI and aggravated DUI and encourage reporting of those tests.

Recommendation 3b: Report the drug test results for all surviving drivers in fatal and serious injury crashes.

State Findings and Trends

- A majority of states, (n=36, 80%) do not report the drug test results on surviving drivers to a central state database.
- Only six states (13%) indicate that their drug test results on surviving drivers are reported to a central state database. Four of these states (AR, MD, NE, NV) report having a requirement to report the test results. Two of these states (MT, VT) regularly report their test results.
- Seven percent of states (IL, MN, WA) report that their drug test results sometimes get reported to their state crash database.

Test results from investigations on surviving drivers involved in fatal and serious injury crashes conducted by DRE officers are reported to the national DEC database for which annual reports are published by the IACP.

Barriers to Reporting the Drug Test Results for Surviving Drivers in Fatal and Serious Injury Crashes

In order of frequency, respondents listed these barriers to reporting the drug test results of surviving drivers:

- Funding and staffing for a central database.
- No law or requirement to set up a central data repository.
- Data sharing and access to personal identifying information; HIPPA challenge.
- Agency cooperation and communication with toxicology labs.
- Dependence on police departments to update crash reports with toxicology data
- No standard protocol.
- Multiple toxicology labs, rather than a single source.
- No research to support the need to reporting drug levels.

Action Steps to Reporting the Drug Test Results for Surviving Drivers in Fatal and Serious Injury Crashes

In order of frequency, respondents listed these action steps to reporting the drug test results of surviving drivers:

- Secure funding.
- Develop legislative mandate.
- Develop policies and procedures to require reporting.
- Create user friendly, easily accessible central database; flag missing results with triggered reminders.
- Create technology to make it easier to share data; integrate with existing technology.
- Meet with FARS and traffic coordinating committee and designate a point person.

- Appoint a dedicated analyst to update crash reports with toxicology results.
- Meet with various toxicology labs to determine an easy way to report BAC and toxicology results to FARS.
- Create a link to crash reports for Emergency Medical Services (EMS) and hospital records; link to driver records as well.

Recommendation 4: Drug testing and reporting for all fatally injured drivers

Enact laws and/or implement policies mandating drug testing and reporting of the results for all fatally injured drivers.

Expert Panel Reasons for the Recommendation

This recommendation aimed to increase rates of alcohol and drug testing and reporting to state databases and FARS for fatally injured drivers. States have a variety of policies and practices regarding testing fatally injured drivers, some of which mandate testing by law. Rates of testing vary, with some states already achieving high testing rates, even for drugs. A law is not necessary to increase testing, nor is it a means by itself, and is likely to be much more difficult to implement or change than a policy or practice (Arnold & Scopatz, 2016).

Recent Literature/Resources on the Topic

One study examined the differences in state drug testing and reporting rates by driver type in fatal crashes. Keeping in mind the limitations of FARS data used for this study, the authors determined that state drug testing rates were highest among drivers who died at the scene of the crash and drivers who died and were at fault in the crash. In general, states that tested a higher percentage of drivers for alcohol had higher drug testing rates. The authors suggested that testing rates might be increased through standardization and mandatory testing policies (Slater et al., 2016).

Recommendation 4a: Enact laws and/or implement policies mandating drug testing for all fatally injured drivers.

State Findings and Trends

The fatality testing rates for each state were not reviewed for this study. A state that has a mandate to test fatally injured drivers may or may not have a higher testing rate compared to those that don't have a mandate. Further, mandate or not, multiple states mentioned the need for probable cause to suspect drug impairment and/or a requirement that the deceased person contributed to the crash. Some states are required to secure a warrant for drug testing on a deceased person as well.

Because this recommendation involved a "mandate," partial alignment designations were not made; only aligned or not aligned.

- Twenty-six responding states (58%) have a mandate or requirement to drug test all fatally injured drivers.
- Nineteen responding states (42%) do not have a mandate or requirement to drug test all fatally injured drivers.

Barriers to Drug Testing All or More Fatally Injured Drivers

In order of frequency, respondents listed these barriers to increasing the rate of drug testing on fatally injured drivers:

- Cost of testing and who pays for testing.
- No mandate or requirement to test fatalities.
- Constitutional issues/case law—need for probable cause.
- Lack of a standard protocol, including types of drugs and timeline for testing.
- Education and training.
- For single-vehicle crashes, embarrassment of families of the fatality.
- For single-vehicle crashes, justifying the cost of testing.
- Communication between the police and medical examiner/coroner.
- Prolonged survivals — lost chance for timely specimen collection.
- Creates a heavier workload.
- Focus of the testing law is on alcohol rather than drugs.
- Local issue that is left to the counties to decide about testing policies.

Action Steps to Improve Drug Testing Rate on Fatally Injured Drivers

In order of frequency, respondents listed these potential action steps to increasing the drug testing rate on fatally injured drivers:

- Create a legislative mandate to test fatalities.
- Develop a standard protocol for police and medical examiners, including timeline for testing and types of drugs.
- Develop better training, policies, and procedures for police.
- Address manpower burden for police and lab staff.
- Develop stronger relationship with the medical examiner/coroner community:
 - Reintegrate the Coroner Association with the Traffic Records Coordinating Committee.
- Develop funding sources:
 - Develop options for low-cost or no-cost testing to the jurisdiction or to the death investigator.
- Overturn case law that limits testing.
- Research legal precedents on the rights of the decedents, lawsuits, next of kin.
- Test fatalities by overruling family objection.
- Use more e-warrants.
- Use oral fluid testing to avoid the need for a warrant.

Recommendation 4b: Enact laws and/or implement policies mandating reporting the drug test results for all fatally injured drivers.

State Trends and Findings

Because this recommendation involved a “mandate,” partial alignment designations were not made; only aligned or not aligned.

- Twenty-one responding states (47%) have a mandate or policy requirement to report drug test results from fatally injured drivers.

- Twenty-four responding states (53%) do not have a mandate or policy requirement to report the drug test results from fatally injured drivers. Despite not having a mandate to do so, seven states (AL, MD, RI, VT, WA, MS, ME), reported that they regularly do report the results to FARS. There may be other states in this category as well.

Barriers to Mandating Reporting the Drug Test Results for all Fatally Injured Drivers

- Costs, including technology resources and staffing.
- No mandate or policy.
- No central database.
- Can get the needed data from the toxicology lab or the medical examiner.
- Investigating officers do not follow up to add toxicology results to reports.
- No standard protocol for reporting.
- Toxicology lab or coroner may not report the results even though required to do so.
- There is no penalty for not reporting.

Action Steps to Improved Reporting of Drug Test Results for All Fatally Injured Drivers

- Develop legislative or policy mandate for reporting:
 - Demonstrate the need for the data to legislators.
- Make plans for a central database.
- Create a process to flag missing test results with email reminders to police officers.
- Work with labs and coroner to address the issue.
- Work with stakeholders to determine gaps in the DUI citation flow.
- Develop a link for lab results directly with crash records database.
- Require Highway Safety Office subgrantees to have zero unreported results as a condition for subsequent year funding.

Recommendation 5: Distinguish among impaired driving offenses in data

Update data collection and reporting systems to distinguish among impaired driving offenses (DUI, DUID, and both) in all relevant data (particularly citation data).

Expert Panel Reasons for the Recommendation

This recommendation would allow for distinct reporting and tracking of DUI-alcohol, DUID, or DUI-alcohol *and* drugs, which are combined in most state citation, adjudication, driver, and crash data systems. Updates should allow for recording which drug or drugs are detected in toxicology testing and the concentrations. Separate offense statutes are neither sufficient nor necessary to separate the offenses in data, and as the panel acknowledged, changing DUI statutes is extraordinarily difficult. Even without changing statutes, it will be time-consuming and challenging for states to ramp up collection of this new data, which depends largely on testing many more suspected impaired drivers for drugs (Arnold & Scopatz, 2016).

Recent Literature/Resources on the Topic

In their 2017 report to Congress, NHTSA recommended that state statutes should be amended to provide separate and distinct offenses and sanctions for alcohol- and drug-impaired driving that could be applied individually or in combination to a single case. This

would provide an incentive for law enforcement officers to pursue a possible drug-impaired driving charge even when a BAC equal to or above the limit of 0.08 g/dL has already been established (Compton, 2017).

State Findings and Trends

The vast majority of responding states (96%) have an “umbrella” or general impaired driving statute that covers both alcohol- and drug-impaired driving. Only two states in this study, California and Oklahoma, have distinct statutes in their laws that apply specifically to drugs, separate from alcohol. California can distinguish their alcohol and drug offenses in their crash database and in their Department of Justice database. In Oklahoma, they are in the process of upgrading their mainframe computer system, which will make it easier to pull DUI/DUID offense data separately.

Other states may have the option to use sub-statutes or other ways to distinguish DUI and DUID offenses separately in data. Based on the list of barriers provided for this study, some states do have separate sub-statutes, but the more general impaired driving statute is often used by law enforcement when preparing citations or used by data entry staff when recording citation or court data.

Even though states like Michigan and Maryland don’t have separate DUI and DUID statutes, they have separate sub-statutes and offense codes that law enforcement and the courts use to identify drug-impaired driving. In Michigan, these are separate from the alcohol convictions and are distinguishable offenses in the State Police database. In Maryland, state data collection and reporting systems distinguish among DUI and DUID offenses in their Automated Crash Reporting System.

Washington state is planning to incorporate their toxicology results from the lab directly into an electronic DUI packet that will distinguish drug-impaired offenses from alcohol-impaired offenses. Washington notes that this is the ideal pathway because toxicology results will become part of the complete DUI arrest information, applying to both crash-involved DUI and roadside DUI cases.

Many states pointed to the records of their toxicology lab(s) or medical examiner/coroner records as data that could distinguish DUI cases for alcohol, drugs, and both. However, this was not considered to be aligned with the recommendation for the data to be distinguishable in a central state database such as citation, adjudication, driver, or crash records. A states’ department of forensic science/toxicology lab(s), office of the medical examiner/coroner, or division of emergency medicine may publish traffic fatality data that separately identifies the presence of alcohol, drugs, and both; these could be potential resources for datasets that can distinguish among types of DUI offenses.

- Nineteen of the responding states (42%) indicated that one or more of their central databases had data recorded in a way that could distinguish among impaired driving offenses. Two of the 19 states (AZ, WV) indicated that their Governor’s Highway Safety Office (GHSO) collected the needed data and was able to distinguish among offenses in special databases they created.
- Eight states (18%) indicated that they had some capacity to distinguish among offenses in a central database, but not in a comprehensive way.
- Eighteen states (40%) are unable to distinguish among impaired driving offenses in any central database.

- Not all states identified the specific database that distinguishes offenses separately, but the most frequently cited location was the state crash database, which only provides part of drug-impaired driving picture. Albeit very few, E-citation or arrest databases were the second most frequently identified database.

Table 3: Ability to Distinguish DUI/DUID/Both in a Central State Database

Status of Distinguishable Offenses in Data	Number of States (N=45)	States
Can distinguish offenses in one or more central database(s)	19 States (42%)	AZ, AR, CA, DC, IN, IA, KS, MD, MA, MI, MN, MO, MT, NV, OK, PA, RI, VA, WV
Some capacity to distinguish offenses, but not comprehensively	8 States (18%)	AL, IL, ME, MS, OH, TN, VT, WY
Unable to distinguish offenses in a central state database	18 States (40%)	CO, CT, DE, FL, GA, HI, ID, LA, NE, NJ, NM, NC, MD, OR, TX, UT, WA, WI

Barriers to the Distinguishing DUI, DUID and Both in a Central State Database

Respondents did not list many barriers to aligning with this recommendation, but those listed include:

- There is no separate offense for DUI and DUID, which makes it impossible to separate them in databases.
- LEOs do not correctly enter offense data on arrest forms.
- Generic offense codes, rather than specific ones, are often entered in citation and court data.
- Even if LEOs recorded DUI and DUID offenses separately, because LEOs and toxicology labs stop testing after 0.08 g/dL BAC and above is established, the data on drugged driving would not be accurate.

Action Steps for Distinguishing DUI, DUID and Both in a Central State Database

Respondents did not list many actions steps, but they include:

- Provide better training for data entry clerks.
- Mandate the use of the state data collection system.
- Get local LEAs to report offenses separately, rather than using the umbrella DUI offense code.
- Work with toxicology labs to have DUI/DUID test results uploaded to the driver license system.
- Create separate legislation for drug-impaired driving offenses.

Recommendation 6: Administrative penalty for DUID test refusal

At a minimum, the administrative penalty (license suspension) for a first DUID refusal to provide a specimen for drug testing should be at least as severe as for a first DUID offense.

Expert Panel Reasons for the Recommendation

To discourage suspected impaired drivers from refusing to submit a specimen for toxicology testing, states should apply sanctions for test refusals that are at least equivalent, if not more severe, than those for a positive test result. Most states apply license revocation or suspension for refusals. Since the expert panel report was written in 2016, U.S. Supreme Court *Birchfield v North Dakota* (2016) affirmed the need for a warrant for a blood draw and disallowed criminal sanctions for blood test refusals. Consequently, for this expert panel recommendation, we have focused on comparing the administrative license suspension penalties for test refusers versus suspects who take a chemical test.

State Findings and Trends

- For 26 responding states (58%), the administrative license suspension penalty for first DUID test refusers is longer, or *more severe*, than for first DUID offenders who take the drug test. For five of these states, it is noted that first DUID offenders receive zero days of license suspension.
- In 12 responding states (27%), the license penalty is the same length for refusers and offenders.
- In one state (OR), the license penalty is the same length for those who refuse a urine test, but there is no license penalty for a blood test refusal.
- For three states, the penalty is not as severe; test refusers receive fewer months of license suspension than those who take the test.
- For three states, there is no refusal penalty because their implied consent law does not extend to drugs.

Table 4. Severity of License Suspension Penalty for DUID Test Refusers vs. DUID Offenders Who Take the Drug Test (First Offense)

Severity Level of Penalty	Number of States (N=45)	States
More severe	21 states (47%)	CA, CO, DC, FL, GA, IA, ID, IL, IN, KS, LA, ME, MI, MN, MO, NV, OH, RI, UT, VT, WI
More severe, but zero days suspension for offenders	5 states (11%)	MD, MT, ND, NM, TX
Same license suspension penalty	12 states (27%)	AK, AZ, CT, DE, HI, NC, NE, NJ*, OK, PA, TN, VA
As severe for urine test refusal, but no penalty for blood test refusal	1 state	OR
Not as severe	3 states	MS, WV, WY
No license suspension penalty. Implied consent law does not extend to drugs, so there is no administrative penalty for drug test refusal	3 states	AL, MA, WA

*Although the implied consent law does not apply to drugs in New Jersey, test refusers receive the same penalty as those who take the test under their DUI/DUID law.

In two states, some exceptions were described that might change the suspension periods intended by the law; these might apply to other states as well. For example, in one state if the suspension is done via the Department of Motor Vehicles alone, the arresting officer is required to appear for the license suspension hearing; they rarely appear however, thus cancelling any potential license suspension period. In another state, first DUID offenders, but not test refusers, are eligible to apply for a shorter suspension period.

Barriers to Making the License Suspension Penalty as Severe for Test Refusers:

Only two states in which the license penalty is not as severe for a test refusal listed barriers to an improved license sanction.

- Many of the legislators are practicing defense attorneys, so they do not like to see any new DUI penalty-related legislation.
- Two legislative changes would be required to current DUI-related laws in order to add a penalty for drug test refusals.

Action Steps for Making the License Suspension Penalty as Severe for Test Refusers:

- Legislative changes to the implied consent statute.
- Legislative change to the mandatory suspension statute.

Recommendation 7: Electronic warrants

Electronic warrants should be used to reduce delays in collecting specimens when a warrant is necessary.

Expert Panel Reasons for the Recommendation

Electronic warrants (e-warrants) eliminate the logistical hurdles to obtaining a paper search warrant, greatly reducing the time between a traffic incident and sample collection in cases when a warrant is necessary, reducing the chances that drugs will be metabolized and levels will drop, possibly below detectable levels (Arnold & Scopatz, 2016).

The automated nature of the content of most e-warrants also results in fewer mistakes and errors in the request, which in turns means that fewer warrants are rejected by judges (Borakove & Banks, 2018).

Recent Literature/Resources on the Topic

The Justice Management Institute (JMI) and the Foundation for the Advancement of Alcohol Responsibility (FAAR) recently published “Improving DUI System Efficiency: A Guide to Implementing Electronic Warrants” (Borakove & Banks, 2018)²³. This implementation guide is for practitioners and policymakers, and provides a menu of options that can be tailored to agency size, with differing resources and technological capacity. It covers stakeholder engagement, planning and designing, pilot testing, training, funding, measuring effectiveness, five case studies (state and county) and unintended consequences such as increased turn-around time for lab results and decreased use of DRE evaluations. A legislative framework is provided as well. Other resources include appendices with sample

²³ https://www.responsibility.org/wp-content/uploads/2018/04/FAAR_3715-eWarrants-Interactive-PDF_V-4.pdf?pdf=eWarrants_Implementation_Guide

materials and a state-by-state list of the court rules or statutes that authorize the use of search warrants that may be issued on the basis of telephonic, video or electronic affidavits.

This guidebook compiles information that is applicable for the simple automation of search warrants or for an integrated local or state system. Suggested best practices for implementing or expanding a user-friendly e-warrant system include (Borakove & Banks, 2018):

- Identify a lead agency to coordinate and communicate with stakeholders.
- Develop early and consistent stakeholder involvement to include key people from all parts of the DUI system.
- Identify system needs with a series of goals and objectives.
- Identify funding sources with cost-sharing plans if possible.
- Solicit regular feedback from frontline users to address needs, expectations, challenges, and resistance to change.
- Conduct a pilot test with one agency to build support and address user or technology issues before they create frustration.
- Develop comprehensive and consistent training, using methods tailored to the target audience.
- Utilize flexible device technology that allows access on different types of operating systems and hardware.

The report also recommends specific e-warrant system design features and procedures that others have used for successful law enforcement and adjudication outcomes (Borakove & Banks, 2018):

- Checkboxes or prompts for completeness and accuracy.
- Pre-populated information for such items as officer hero statements (summarizing qualifications and training), driver's information, etc.
- Open text fields to allow officers to add a narrative or observations.
- Automated judicial assignment based on the location (alternatively, several jurisdictions use a pull-down menu that shows available judges).
- A penalty of perjury statement to allow for swearing in, electronically or digitally.
- A pull-down menu of reasons for rejection if the warrant is denied, with the option for text input. This allows the officer to see the reason for denial and to potentially correct it.
- Real-time tracking and data analytics that allow officers and judges to see the warrant status and allow system administrators to run reports on system use and outcomes.
- Ongoing review and updates to capture system analytics and track change over time.

NHTSA's "No Refusal Weekend Toolkit"²⁴ describes an enforcement strategy that allows jurisdictions to more easily obtain search warrants for blood samples from suspected

²⁴ NHTSA No Refusal Weekend Toolkit:

<https://www.nhtsa.gov/staticfiles/planners/NoRefusalWeekend/index.htm>

impaired drivers who refuse breath tests. For these special enforcement efforts, prosecutors and judges make themselves available to streamline the warrant process and help build more solid cases that can lead to impaired driving convictions. The report recommends highly publicizing No Refusal Weekends to let the public know that their chances of being caught, arrested and convicted increase during these efforts. The toolkit includes several sample documents that can be tailored to specific jurisdictions: press releases, fact sheets, talking points, stakeholder letter, search warrant and blood withdrawal form (National Highway Traffic Safety Administration, 2019b).

State Findings and Trends

E-warrants are authorized by legislation and/or court rule/order. The language of the legislation or court rule may limit some aspects of utilizing e-warrants.

- Five states (11%) (AZ, DE, MN, UT, WY) report the regular statewide use of e-warrants for DUI cases. All but Wyoming report the use of standardized statewide e-warrant systems.
- Twenty-six responding states (58%) report partial use of e-warrants in varying degrees. Their level of use is dependent on the willingness of police, judges, and prosecutors to use them as well as some other barriers listed below. At least two states have significant restrictions on the use of e-warrants; Florida uses them for 3rd DUI felonies only and Maryland uses them only in fatal and life-threatening situations.
- Fourteen responding states (31%) do not use e-warrants. Two of these states, Iowa and North Carolina, are authorized to use e-warrants, but they are currently not in use due to the lack of approved administrative rules and the lack of a computer system that can accommodate their use, respectively.

Table 5. Level of E-Search Warrant Use by State

Level of E-Warrant Use	Number of States (N=45)	States
Regularly use e-warrants statewide	5 states (11%)	AZ, DE, MN, UT, WY
Some use of e-warrants	26 states (58%)	AR, CA, CO, DC, FL, IL, IN, KS, LA, MD, MI, MO, MT, NE, NV, NJ, ND, OH, OK, OR, PA, TN, TX, VT, WA, WI
Do not use e-warrants	14 states (31%)	AL, CT, GA, HI, ID, IA*, ME, MA, MS, NM, NC*, RI, VA, WV

*Authorized to use, but currently not in use.

Barriers to the Use or Increased Use of E-Search Warrants to Avoid Delay

In order of frequency, respondents listed these barriers to the use or increased use of e-warrants:

- Lack of stakeholder buy-in, in large part from judges, but from prosecutors/state attorneys and LEAs as well.
- Lack of funding, including the cost for staff, equipment, software, and developing a secure system.
- Lack of an authorizing law/policy
- A law or policy that limits the use of e-warrants.
- Need for education and training for judges, court staff, and law enforcement.

- Low level of willingness by judges to make themselves available 24/7.
- Lack of infrastructure for a statewide system.
- Lack of internet and/or information technology (IT) infrastructure in rural areas
- Forms need to be more flexible and have more fields.
- Unlikely to be used for over 0.08 g/dL BAC.

Action Steps to the Use or Increased Use of E-Warrants

In order of frequency, respondents listed these action steps to use or increase the use of e-warrants:

- Develop education and training for judges, including a suggested task force to increase judicial buy-in.
- Develop new legislation or amend current laws/policies to allow e-warrants, including 24/7 access to judges.
- Develop training for police and prosecutors/state attorneys, including the development of standard curriculum and materials.
- Secure funding for training, updated computer systems with secure log-in, software, and labs for quantitative testing.
- Leverage other counties or states that already have successful e-warrant systems.
- Create a streamlined e-warrant system, including a suggested regional system to assist rural areas and areas where judges refuse to issue warrants for DUI.
- Develop a pilot program, including use of No-Refusal Weekends (National Highway Traffic Safety Administration, 2019b).
- Conduct a statewide survey and offer grant support to jurisdictions that want to implement an e-warrant system.
- Educate medical facilities regarding no civil liability for cooperating with search warrants for blood draw and/or blood test results.
- Consider implementing a law enforcement phlebotomy program (National Highway Traffic Safety Administration, 2016).²⁵

²⁵ NHTSA Law Enforcement Phlebotomy Toolkit:

https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/14222-phlebotomy_toolkit_final-032819-v1a_tag_0.pdf

Overall Summary—Major State Trends

Alignment with Recommendations

As indicated in Table 6, the highest levels of alignment are seen in four expert panel recommendations:

- #1 on implied consent laws.
- #2 on authorizing LEOs to collect and test specimens for drugs.
- #3a on drug-testing surviving drivers involved in serious injury and fatal crashes.²⁶
- #6 on the severity of license penalties for DUID test refusers.

The high percentage of aligned states listed for recommendations #2 and #3a are somewhat misleading, however. All LEOs are authorized to collect and test specimens from DUID suspects but they must have probable cause to specifically suspect drug impairment. Many, if not most, LEOs are discouraged for a variety of reasons (mainly lack of funding), from pursuing drug testing once a BAC of .08 or higher has been established. The difficulty in obtaining a search warrant for a blood draw and obstacles to finding certified phlebotomists or other medical personnel adds to the discouragement. Further, the restrictions in the implied consent laws in 18 states hamper the ability to fully pursue a suspected DUID. A need for LEO training to recognize the subtle signs of drug impairment was cited under both recommendations as well.

Recommendation #4 on drug testing fatalities and reporting results falls in a middle range in terms of alignment; 58% of states are aligned with the testing mandate recommendation and 47% states are aligned with the reporting mandate. Because this recommendation involves a “mandate,” the partial alignment category was not used. As previously noted however, additional states do drug test fatalities and report the results to a state database and/or FARS without a mandate.

In Table 6, the lowest levels of alignment are seen in three expert panel recommendations: #5 on being able to distinguish among impaired driving offenses DUI, DUID, and both in a central state database and #7 on the regular use of e-warrants.

²⁶ However, only nine states were aligned or partially aligned with the recommendation to *report* the drug test results for all surviving drivers in fatal and serious injury crashes when there is probable cause that impairment was a factor (3b).

Table 6: Expert Panel Recommendation by Alignment Status (N=45)

Recommendation	Responding States in Alignment	Responding States in Partial Alignment	Responding States Not Aligned
1a. Implied consent laws should: extend to drugs and support the collection of blood and/or oral fluid for drug testing;	32 (71%)	8 (18%)	5 (11%)
1b. Implied consent laws should include the collection of a specimen or specimens for multiple tests;	39 (87%)	2 (4%)	4 (9%)
1c. Implied consent laws should not permit suspects to choose the type of test(s)	37 (82%)	4 (9%)	4 (9%)
2. Authorize and encourage LEOs to collect and test specimens for drugs on all DUI/DUID arrestees (with probable cause and a warrant for a blood test)	39 (87%)	6 (13%)	0 (0%)
3a. Authorize and encourage drug testing for all surviving drivers in fatal and serious injury crashes when there is probable cause that impairment was a factor.	35 (78%)	9 (20%)	1 (.02%)*
3b. Authorize and encourage reporting the drug test results for all surviving drivers in fatal and serious crashes.	6 (13%)	3 (7%)	36 (80%)
4a. Enact laws and/or implement policies mandating drug testing all fatally injured drivers.	26 (58%)	--- ²⁷	19 (42%)
4b. Enact laws and/or implement policies mandating reporting of drug test results for all fatally injured drivers.	21 (47%)	--- ²⁷	24 (53%)
5. Update data collection and reporting systems to distinguish among impaired driving offenses (DUI, DUID and both) in all relevant data (particularly citation data)	19 (42%)	8 (18%)	18 (40%)
6. At a minimum, the administrative penalty (license suspension) for a refusal to provide a specimen for drug testing should be at least as severe as for a first DUID offense	38 (84%)	1 (.02%)*	6 (13%)
7. Electronic warrants should be used to reduce delays in collecting specimens when a warrant is necessary	5 (11%)	26 (58%)	14 (31%)

*These rows don't equal 100% due to rounding.

²⁷ Since this recommendation involved a "mandate," the partially aligned category was not used. Some states do in fact test and report the drug test results from fatalities without a mandate.

Major State Trends

1. Implied consent laws should: (a) extend to drugs and support the collection of blood and/or oral fluid for drug testing; (b) include the collection of a specimen or specimens for multiple tests; and (c) should not permit suspects to choose the type of test(s).

The implied consent laws extend to drugs and authorize the collection of blood in 40 (89%) of the 45 jurisdictions in this study, although eight of these states (18%) have exceptions that prevent the full application of the law. The implied consent laws in 13 states (29%) allow for the collection of oral fluid (saliva or other bodily substances), but in practice, specimens are not collected in those states. Only Alabama and Michigan are currently conducting statewide oral fluid collection operations.

Thirty-nine states (87%) allow for the collection of a specimen or specimens for multiple tests, while four states do not.

Drug-impaired driving suspects are prohibited from choosing the type of test in 37 states (82%) under their implied consent laws; in four additional states, suspects cannot choose the type of test under their DUI/DUID laws. Four states do allow the suspect a choice of tests.

Common barriers listed to the collection of oral fluid specimens:

- Lack of an authorizing law or approved administrative rules and regulations
- The high costs of program implementation
- The lack of a validated lab methodology for oral fluid.

Frequently cited actions steps for the collection of oral fluid specimens:

- Create new legislation or amend existing law
- Develop administrative rules
- Conduct/compile research on the accuracy of oral fluid test results.

2. Authorize and encourage LEOs to collect and test specimens for drugs on all DUI/DUID arrestees (with probable cause and a warrant for a blood test).

Thirty-nine states (87%) are authorized to collect blood, but the need for probable cause to specifically suspect drug impairment was often cited as a barrier to preventing the testing of all DUI cases. Six states (13%) have caveats in their implied consent laws that further prevent blood collection from all DUID suspects. The long list of barriers provided by respondents to conducting more drug testing even when a BAC of .08 or higher has been established suggests that most LEAs are not encouraged to test for drugs.

Common barriers listed to drug testing more or all DUI/DUID suspects

- Limits on resources and staff time for toxicology labs and LEAs
- A policy that drug testing is not needed once DUI-alcohol is established
- The level of effort needed to get a warrant/inaccessibility of e-warrants

Frequently cited action steps to drug testing more or all DUI/DUID suspects:

- Develop new legislation to change implied consent laws and ability to get warrants in all cases
- Secure more training for LEOs
- Secure more resources for lab tests
- Allow or facilitate e-warrants

3. Authorize and encourage drug testing for all surviving drivers in fatal and serious injury crashes (and report results) when there is probable cause that impairment was a factor.

a. Testing

All states are allowed to test suspected drug-impaired drivers with probable cause and a warrant for a blood draw under either their implied consent law and/or their DUI/DUID law. There are a total of 10 states (22%) for which some elements of their laws discourage drug testing for all suspected drug-impaired surviving drivers regardless of whether the crash involved a serious injury or a fatality. Although not fully examined for this study, some states have elements of their laws that specifically encourage or discourage testing surviving drivers involved in serious injury or fatal crashes.

Common barriers listed to more drug testing of surviving drivers:

- Costs
- Constitutional issues/case law that dictate the need to establish probable cause for specific signs of drug impairment
- Lack of training for LEOs to recognize subtle signs of drug impairment
- Lack of people or entities to draw blood and uncooperative medical personnel

Frequently cited action steps for more drug testing of surviving drivers:

- Mandate testing surviving drivers
- Secure funding for more testing capacity for toxicology labs
- Find people and places willing to draw blood
- Train LEOs to recognize signs of drug impairment (ARIDE and DRE)

b. Reporting

Only six states (13%) indicated that their drug test results on surviving drivers are reported to a central state database.

Common barriers listed to improved reporting of the drug test results on surviving drivers:

- Funding and staffing for a central database
- No law or requirement to set up a central data repository
- Data sharing and access to personal identifying information
- Agency cooperation and communication with labs
- Dependence on police departments to update crash reports with toxicology data

Frequently cited action steps listed for improved reporting of the drug test results of surviving drivers:

- Secure funding

- Develop legislative mandate/policies and procedures to require reporting;
- Create easily accessible central database/flag missing drug test results
- Create/integrate technology to more easily share data

4. Enact laws and/or implement policies mandating drug testing and reporting of the test results for all fatally injured drivers.

a. Testing

Twenty-six states (58%) have a mandate or requirement to drug test all fatally injured drivers.

Commonly listed barriers to increase the rate of drug testing on fatally injured drivers:

- Cost of testing and who pays for testing
- No mandate or requirement
- Constitutional issues/case law—need for probable cause
- Lack of a standard protocol
- Education and training for LEOs

Frequently cited action steps listed to increase the rate of drug testing on fatally injured drivers:

- Create a legislative mandate
- Develop a standard protocol for police and medical examiners
- Develop better training, policies, and procedures for police
- Address manpower burden for police and lab staff

b. Reporting

Twenty-one states (47%) have a mandate to report the drug test results on fatally injured drivers. Seven additional states regularly report the results to FARS.

Common barriers listed to increase the drug test reporting rate on fatally injured drivers:

- Costs (technology and staffing)
- No mandate or policy
- No central database
- Investigating officers do not follow up to add toxicology results to reports
- No standard protocol for reporting

Frequently cited action steps listed to increase the drug testing reporting rate on fatally injured drivers:

- Develop legislative or policy mandate for reporting
- Make plans for a central database
- Create a process to flag missing test results for police officers
- Work with the labs and coroner
- Work with stakeholders to determine gaps in the DUI citation flow
- Develop a link for lab results directly with crash records database

5. Update data collection and reporting systems to distinguish among impaired driving offenses (DUI, DUID, and both) in all relevant data (particularly citation data).

The vast majority of responding states (n=43, 96%) have an “umbrella” or general impaired driving statute that covers both alcohol- and drug-impaired driving. Only 19 states (42%) indicated that one or more of their central databases (most commonly, the crash database) had data recorded in a way that could distinguish among impaired driving offenses.

Common barriers listed to being able to distinguish among impaired driving offenses in central databases:

- No separate statute
- Incorrect data entry on arrest forms
- Generic offense codes used rather than specific ones
- It does not matter because LEOs stop collecting specimens and toxicology labs stop testing samples after 0.08 g/dL BAC and above is established.

Frequently cited actions steps listed for being able to distinguish among impaired driving offenses in state data:

- Provide better training for data entry clerks
- Mandate the use of the state data collection system
- Get local LEAs to report offenses separately
- Work with toxicology labs to have DUI/DUID test results uploaded to the driver license system
- Create separate legislation for drug-impaired driving offenses

6. At a minimum, the administrative penalty (license suspension) for a refusal to provide a specimen for drug testing should be at least as severe as for a first DUID offense.

In the vast majority of states (n=38, 84%), the administrative license suspension penalty for first DUID test refusers is either more severe or the same than the penalty for first DUID offenders who take a drug test.

Barriers listed for an administrative penalty as severe for drug test refusal:

- Legislators who are also practicing defense attorneys don’t like to see any new DUI penalty-related legislation
- Two legislative changes would be required

Action steps for an administrative penalty as severe for drug test refusal:

- Legislative changes to the implied consent statutes
- Legislative change to the mandatory suspension statute

7. Electronic warrants should be used to reduce delays in collecting specimens when a warrant is necessary.

Five states (11%) report the regular statewide use of e-warrants for DUI cases. Twenty-six states (58%) report varying degrees of e-warrant use depending on the jurisdiction

and the willingness of police, judges, and prosecutors to use them. Fourteen states (31%) don't use e-warrants for a variety of reasons.

Common barriers listed to the use or increased use of e-warrants:

- Lack of stakeholder buy-in and funding
- Lack of authorizing law/policy
- Need for education and training for judges, court staff, and law enforcement

Frequently cited action steps listed for the use or increased use of e-warrants:

- Develop education and training for judges
- New legislation that includes 24/7 availability of judges
- Training for police and prosecutors/state attorneys
- Secure funding for training, updated computer systems with secure log-in, software, and labs for quantitative testing

Conclusions

The Barriers to Better Drug-Impaired Driving Data

The multiple barriers throughout the DUI system to collecting more reliable drugged driving data appear arduous, but fully understanding the obstacles allows for many opportunities to make improvements.

The barriers listed by the participating states in this study coincide with the barriers to better drug-impaired driving data as identified in the Phase I expert panel report (Arnold & Scopatz, 2016). These included:

- Underreporting of drug-impaired driving in police and court records.
- Prohibitive cost of drug testing as well as laws, policies, or protocols that limit specimen collection and drug testing for both LEAs and toxicology labs.
- Need for more law enforcement training (ARIDE, DRE) to be able to identify the subtle signs of drug impairment.
- Field tests lack sensitivity for law enforcement to assess impairment by drugs.
- Delays in specimen collection created by the time and logistics needed to get a search warrant for blood collection and the lack of available individuals who are certified and willing to draw blood from a suspected impaired driver.
- Resource limits on toxicology labs, including staffing level and equipment.
- Toxicology laboratories may be limited in their capacity to provide accurate test results in a timely fashion due to backlog.
- Inability to distinguish DUI, DUID or both in arrest, citation, and crash data.
- Toxicology results are not consistently reported to state crash databases.
- Insufficient system for tracking statewide impaired driving arrests through adjudication.

The overall goal of the Phase III effort is to help individual states identify specific barriers to and action plans for improved data on drug-impaired driving.

An overriding barrier that affects several of the recommendations is policies that discourage the collection and analysis of specimens for drug testing, once a BAC of .08 or higher has been established. The costs and time involved for police agencies to collect specimens and for toxicology labs to process them are major obstacles to an alternative policy that encourages more drug testing.

There are also disincentives to more drug testing and reporting within DUI/DUID-related laws themselves. The implied consent laws in 18 states have specific provisions as described in this report that restrict the ability of LEOs to fully pursue a DUID case. The ban on securing search warrants for the collection of a blood specimen in misdemeanor cases in three states creates a significant problem. Many states have general DUI statutes that cover alcohol *and/or* drugs, so there is no separate statute or a sub-statute to distinguish DUID, and the penalties for DUI and DUID cases are often identical. Seven of the responding states have no administrative license penalty or the suspension penalty is not as severe (i.e., not as long) as for a first DUID offense. Further, the 2016 U.S. Supreme Court decision *Birchfield v North Dakota* disallowed criminal penalties for refusing a blood test for impaired driving, with or without a search warrant.

If LEOs still want to legally pursue a DUID case, despite the barriers described above, there are other impediments. The lack of a standard testing protocol can create doubt about when and how to proceed with an arrest. LEOs require adequate training to identify the sometimes-subtle signs of drug impairment in order to establish probable cause specifically for drug impairment. Calling in a DRE to conduct an evaluation of an impaired suspect is ideal, but there is a limited number of certified DREs in each state and even then, the cost of testing is still an issue.

The time and logistics required to get a search warrant for a non-voluntary blood draw can seem formidable because most LEAs don't use an e-warrant system. Only five states in this study report the regular use of e-warrants statewide. Twenty-six states report some use of e-warrants depending on the jurisdiction, while fourteen states currently don't use e-warrants for a variety of reasons. Some states don't have the legislative or court authority to use e-warrants, but others struggle with getting stakeholder buy-in, lack of funding and technology, and establishing policies and procedures. Once a search warrant is secured, locating someone willing and certified to draw blood can be another major roadblock in some jurisdictions.

The delays caused by the need to identify a trained officer, secure a search warrant, and find someone to draw blood, ensures that the level of drugs in the suspect's system have dissipated since the time the arrest was made, thus weakening the case. Subsequently, a court case requires proving chain of custody for the blood sample so a toxicologist must be available to testify along with the arresting officer. Finally, the science behind proving drug impairment is difficult and open to defense challenges given the number of drugs potentially used and the differences in how drugs metabolize across individuals.

If a conviction is ultimately accomplished, even if there is a sub-statute or offense code for DUID, it may not be used to cite or convict in favor of using a more general statute that covers alcohol and/or drugs. Consequently, the offense may get recorded in state databases as a general DUI offense. A state database may only have the documentation that the offense involved drugged driving if the arresting police officer follows up and later adds the toxicology results to the crash report. Missing toxicology results from state crash databases was a frequently cited barrier by respondents in this study.

Only 19 states in this project indicated that they could distinguish between DUI, DUID, and/or both in their state databases, usually in their crash database. If the toxicology results are routinely added to the crash database, this provides a good source of data but unfortunately will not provide the full DUID picture if offenses cannot also be distinguished in arrest/citation and conviction data for offenses that did not result in a crash. Few states have a statewide DUI tracking system, and some states in this study cited the lack of any central state database to which they could report the test results.

Only six states indicated that their drug test results on surviving drivers are reported to a central state database. It was noted by respondents that even if there is a requirement to report the test results, if there is no consequence for not reporting, better compliance is unlikely.

For fatalities, with or without a drug testing mandate, officers in some jurisdictions still must provide probable cause to suspect drug impairment and secure a warrant for testing deceased persons. A few states also reported a reluctance to override the wishes of the next of kin not to test fatally injured drivers (to avoid potential shame and embarrassment),

especially in single vehicle accidents. The cost of testing and who pays for it remains an issue for testing fatalities as well.

Despite these barriers, how can stakeholders plan to improve drug-impaired driving data in order to better understand the scope of the problem in their states?

Action Plans for Improved Drug-Impaired Driving Data

Drug-impaired driving data can be improved in both quantity and quality in several ways. Although the need for more funding is a perennial issue for drug testing, establishing multi-agency collaborative protocols that maximize collection, testing and reporting of results seems to be a more achievable short-term solution than trying to secure more funding and/or to introduce or amend legislation.

Laws or lack of laws and policies that discourage DUID testing. As indicated in this report, there are laws or a lack of laws and policies that significantly discourage DUID testing and reporting which require changes. These include states with:

- Prohibitive caveats in implied consent laws;
- No mandates or policies to test or report on surviving drivers involved in serious injury or fatal crashes;
- No mandates or policies to test or report on fatally injured drivers;
- DUID license sanction penalties that are less punitive for test refusal; and/or
- Laws or court rules that prohibit or limit the use of e-warrants.

Encourage more drug testing. Aside from the need for more funding and legislative changes, action plans suggested by study respondents to encourage more drug testing include:

- Change in policies regarding testing for DUID suspects over .08 BAC;
- More ARIDE and DRE training;
- Securing more resources for toxicology labs;
- Allowing or facilitating e-warrants; and
- Training LEOs as phlebotomists.

Increase testing on fatally injured drivers. Suggested efforts to increase drug testing specifically for fatally injured drivers include:

- Development of a standard protocol for police and coroners/medical examiners;
- Better training for LEOs and coroners/medical examiners to understand the importance of coordinating their efforts to document drug-impaired driving; and
- Addressing the staffing burden for police and toxicology lab staff.

Increase testing on surviving drivers. The action plans listed for testing more surviving drivers involved in serious injury and fatal crashes are the same as suggested plans for testing fatally injured drivers, but also include finding people and places willing to draw blood and educating them regarding civil liability. Further, one state suggested that if

the DRE program could pay for lab tests, then there would be more DRE evaluations and drug testing because the question of who pays for the testing would be resolved ahead of time.

Improve reporting of drug test results for surviving and fatally injured drivers.

Action plans for improved reporting of test results include:

- Policies and procedures that require reporting;
- An easily accessible central database that flags missing drug test results and prompt LEOs to follow up;
- Creation or integration of technology to more easily share data between agencies. The protection of personally identifying information would have to be incorporated into action plans that involve sharing data between agencies.
- For better fatality reporting, work with the coroner/medical examiner and the toxicology labs to develop a link to import lab results directly to the crash records database. This would prevent having to rely on police officers to amend their crash reports with toxicology results.

Improve data collection and reporting systems to distinguish among impaired driving offenses²⁸. The most frequently cited action plans to being able to distinguish DUI, DUID, and/or both in a central state database include:

- Better training for data entry clerks so that the correct offense codes for drug-impaired driving get recorded;
- Getting LEAs to report offenses separately (possibly via sub-statutes or offense codes if available);
- Mandating the use of the state data collection system; and
- Working with the toxicology labs to have test results uploaded to a central state database.

Washington State's plan to incorporate toxicology results from the lab directly into an electronic DUI packet to include both crash-involved DUI and roadside DUI offenses is an ideal scenario.

Colorado has a solution to help pay for improved data collection, although it is part of a legislative requirement for an annual report on "substance-affected" driving to include how many arrests and charges were filed that involved one or more drugs or a combination of alcohol and drugs. The law also created a \$2 data analysis surcharge for persons convicted of substance-affected driving that will go into a data analysis cash fund that can be used to reimburse the costs of reporting.

Increase use of electronic warrants. Frequently cited action plans to address the barriers to more e-warrant use include:

- Education and training for judges, prosecutors and police to dispel any misunderstandings surrounding e-warrant use legality and how to use the technology to facilitate them in a secure way;

²⁸ Section 405 is the Federal National Priority Safety Program that provides grant funding to states to address selected national priorities for reducing highway deaths and injuries. Section 405c funds are earmarked for traffic record incentive grants. Eligible states have to have a Traffic Records Coordinating Committee, a designated traffic records coordinator, an assessment within the last five years and a traffic records strategic plan. States would also have to show quantifiable progress in improving their traffic records systems according to six specific measures. <https://www.ghsa.org/about/federal-grant-programs/405>

- Development of a rotating schedule that provides the 24/7 availability of judges to approve e-warrants; and
- Funding for secure e-warrant sign-in technology.

The related need for more lab funding for staff and equipment was acknowledged as the use of e-warrants will facilitate more drug testing.

Other Resources to Improve Drug-Impaired Driving Data Collection

In addition to learning from the barriers and action plans identified by other states, there are multiple other resources described in this report to potentially help to improve the quantity and quality of drug-impaired driving data.

The advantages and disadvantages for the various DUID testing methods (blood, urine and oral fluid) are outlined in Table 2 of this report. The value of oral fluid collection for DUID detection is still being debated and pilot tested in multiple states. Although oral fluid testing is not a definitive solution, some states are conducting their own pilot tests while others are looking forward to seeing the results of the statewide efforts in Alabama and Michigan. Alabama has established procedures for the collection of oral fluid specimens both at roadside for screening purposes and for confirmation testing in their lab. LEOs in Alabama will collect blood samples as well for at least the next year to compare the results with oral fluid. The link for an Oral Fluid Pilot Program FAQ, compiled by the Society of Forensic Toxicologists' Oral Fluid Committee, is provided in this report.

Three implementation guides are described in this report that cover law enforcement phlebotomy training (NHTSA), the implementation of a local or statewide e-warrant system (JMI and FAAR), and conducting *No-Refusal Weekends* (NHTSA).

There are other useful resources described and referenced in this report from GHSA (drug-impaired driving guides for states), FAAR (impaired driving legislative changes), NCSL (traffic safety legislative trends), NSC (a report on incomplete crash reports and an article on toxicology testing recommendations), IACP (DEC annual DRE evaluations report with state details) and AAFTS publications (prescription and OTC drugs; detection windows for drugs in oral fluid).

NHTSA is actively working toward improving their data on drugged driving in FARS. They have recently expanded their drug list to allow more than three drugs to be listed when states report their data to FARS. NHTSA is also in the process of improving the utility of their data, including automatic electronic transfer of crash data from the states. In future years, NHTSA ultimately wants to add more detailed drugged driving data elements to FARS, reporting on both fatally injured persons and surviving drivers, to include the identification of substances on the drug test panel, negative results by specific drug, reporting cut-offs/thresholds, type of analysis (screening vs. confirmatory), type of lab method analyses performed, quantitative values and specimen collection date and time.

Moving Forward

The costs of collecting and testing specimens, as well as other barriers noted above, have led to the widespread practice of not testing for drugs once .08 BAC is established, which compromises the accuracy and utility of impaired driving data. States can and must consider creative solutions to the barriers and carefully weigh the impact of their laws and policies on our long-term understanding of drugged driving.

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