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 April 27, 2023 @ 2:00 p.m.-3:00 p.m. (ET)

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Technology in DWI Cases: A Brief Look at Where We Are Today and Where We Are Headed

By Erin Inman, NTLC Staff Attorney

Alcohol-impaired driving killed 11,654 people on America's roadways in 2020.¹ Prosecutors play an important role in minimizing the number of lives lost each year by pursuing impaired driving (*i.e.*, DWI or DUI) charges and ensuring offenders are properly sentenced.² "DWI cases," however,

¹ National Center for Statistics and Analysis. (2022, May). *Early estimates of motor vehicle traffic fatalities and fatality rate by sub-categories in 2021* (Crash Stats Brief Statistical Summary. Report No. DOT HS 813 298). National Highway Traffic Safety Administration.

² See Venkatraman, V., Richard, C. M., Magee, K., & Johnson, K. (2021, July). *Countermeasures that work: A highway safety countermeasures guide for State Highway Safety Offices*, 10th edition, 2020 (Report No. DOT HS 813 097). National Highway Traffic Safety Administration.

“can be highly complex and difficult to prosecute. . . .”³ Part of what makes an impaired driving case complex requires a prosecutor to not only master the courtroom, but to also master the modern-day technology available to detect and secure evidence of impairment as well as assist with the creation of appropriate sentencing recommendations. Technology of the future may also hinder or prevent an impaired motorist from being able to drive in the first place thereby making impaired driving prosecutions a thing of the past. This article highlights some of the tools used to secure evidence in an impaired driving investigation; to craft sentencing recommendations to rehabilitate offenders/reduce recidivism; and to prevent impaired driving from happening at all.

Proving the DWI

Technology in modern policing includes the use of body-worn cameras,⁴ car dash cameras, cell phone data,⁵ and even drones⁶ (e.g., for use in collision reconstruction and crash scene mapping) in investigating impaired driving and other traffic offenses. Each of these tools aid in gathering evidence that previously was not captured for trial. They also present new challenges for both law enforcement and prosecutors. Footage from cameras, for example, requires storage equipment and must be logged and retained by law enforcement agencies, requiring additional resources to do. Prosecutors must review the camera footage, redact certain sensitive information from it, and provide the means to transfer the video to defendants in discovery. A prosecutor’s review of the video footage includes properly assessing it and ultimately presenting it in court. Thus, while advancements in technology help cases, it also means there are often unintended financial costs and employee burdens that complicate matters. Furthermore, it is the prosecutor’s job to not only properly introduce this evidence at trial, but to also explain its significance and meaning to the judge and jury. In this way, a prosecutor must have both a mastery of the courtroom and a mastery of the technology used by law enforcement to ultimately prove the impaired driving case.

Law enforcement technology is not the only kind to complicate matters for a prosecutor. Technology used by toxicologists and other scientists also adds to the complexity of impaired driving cases. For instance, breath or blood test results are one of the most compelling pieces of evidence in a DWI case. The presence of alcohol and or drugs in a person’s breath or blood provides a degree of certainty that the defendant consumed alcohol and/or drugs. For that reason, much of the developing DWI technology is aimed at securing this evidence. Roadside oral fluid testing,⁷ for example, has become increasingly integrated into law enforcement investigations.

Roadside oral fluid testing is used to screen suspects for recent use of commonly consumed drugs or drug classes, such as tetrahydrocannabinol (THC), cocaine, methamphetamine, amphetamine, opioids, and benzodiazepines.⁸ Officers collect oral fluid from a suspect using a collection device, then insert the samples into a handheld analyzer.⁹ Results are available within minutes.¹⁰ Officers for decades have been able to screen roadside for alcohol using preliminary breath test (PBT) devices, but screening for drugs roadside is relatively new in the United States. The American Automobile Association (AAA) recognized its growing

³ *Id.* at 1-39.

⁴ “Gaining Trust Through Cameras,” Product Feature, *Police Chief* 90, no. 4 (2023): 100-102.

⁵ See e.g., *Carpenter v. U.S.*, 585 U.S. ___ (2018).

⁶ “The Evolution of Drones in Law Enforcement,” Product Feature, *Police Chief*, www.policemagazine.org/product-feature-the-evolution-of-drones-in-law-enforcement/, accessed April 14, 2023.

⁷ Moore, C., Lindsey, B., Harper, C., & Knudsen, J. “Use of Oral Fluid to Detect Drugged Drivers,” National Traffic Law Center, *Between the Lines*, Vol. 28 Issue 10 (October 2020); Indiana Criminal Justice Institute, Roadside Oral Fluid Program, www.in.gov/cji/traffic-safety/impaired-driving/roadside-oral-fluid-program/, accessed April 14, 2023.

⁸ Foundation for Advancing Alcohol Responsibility, *Oral Fluid Screening for Impaired Drivers*, www.responsibility.org/wp-content/uploads/2020/07/Oral-Fluid-Screening.pdf, accessed April 18, 2023.

⁹ *Id.*

¹⁰ *Id.*; Indiana Criminal Justice Institute, Roadside Oral Fluid Program, www.in.gov/cji/traffic-safety/impaired-driving/roadside-oral-fluid-program/, accessed April 18, 2023.

popularity and created a 76-page resource, *Use of Oral Fluids to Detect Drugged Drivers: A Toolkit*,¹¹ for those jurisdictions interested in implementing its own oral fluid program. AAA's Foundation for Traffic Safety (FTS) conducts research aimed at preventing traffic injuries and death and recently studied how long after a person uses certain drugs it can be detected in an oral fluid test and what factors may influence that.¹² "Efforts to understand the proximity of drivers' drug use in time may assist in better understanding and properly enforcing drug-impaired driving laws."¹³ A roadside oral fluid test is akin to a PBT in that it is not admissible as evidence of impairment at trial, but it is typically admissible for determination of probable cause for both the arrest decision and to obtain a search warrant for blood. This is where electronic warrants (e-warrants) come into play.

Search warrants for blood are used by law enforcement in DWI cases for a variety of reasons including when the driver does not voluntarily consent to a blood draw (*i.e.*, refuses to submit to chemical testing), the law enforcement officer suspects the driver of drug-impaired driving, or the driver is taken to the hospital or is otherwise unable to provide a breath sample. These are just a few of the circumstances that may lead to an officer to seek a warrant for blood. The need for this evidence combined with recent United States Supreme Court decisions amplifies the need for e-warrants.¹⁴ Also, warrants for blood in DWI cases are positively linked to an increase in the collection of this type of evidence.¹⁵ Those jurisdictions that implemented a practice of seeking warrants for blood in DWI cases saw fewer instances of refusals to submit to testing and, for cases containing a defendant's blood alcohol content (BAC), saw swifter resolution of DWI cases.¹⁶ This means offenders needing intervention and/or treatment received the help they needed faster thereby leading to greater public safety.

E-warrants are significant largely because of the time saved in obtaining the warrant.

E-warrants are significant largely because of the time saved in obtaining the warrant. The traditional warrant process "can take an officer an extra 90 to 120 minutes or more to complete the warrant forms, transmit the information to a judge for signature, transport the suspect to a medical facility or call a phlebotomist to the station, and obtain the blood sample."¹⁷ Thus, evidence of alcohol and/or drugs in the suspect's blood will change and, in the case of some drugs, may entirely dissipate by the time blood is drawn. For example, evidence of recent marijuana use can disappear from the blood in 30 minutes.¹⁸ The 90 to 120 minutes it takes to obtain a warrant and have the blood drawn can, therefore, mean the evidence of recent marijuana uses is gone. E-warrants streamline the entire warrant process, thereby enabling officers to gather the evidence before it diminishes or is eliminated from the driver's blood.¹⁹ With the e-warrant system, officers no longer have to drive to the judge's location to obtain a signature before proceeding to the hospital or station where

¹¹ Moore, C., Lindsey, B., Harper, C., & Knudsen, J. *Use of Oral Fluid to Detect Drugged Drivers: A Toolkit*. (2022). American Automobile Association.

¹² Arnold, L.S., Benson, A., Chen, K.T., Kelley-Baker, T. & Horrey, W.J. (2019). *Detection Windows for Drugs in Oral Fluid: Cannabinoids, Stimulants, and Opioids* (Research Brief). Washington, D.C.: AAA Foundation for Traffic Safety.

¹³ *Id.* at 1.

¹⁴ Holmes, E. & Talpins, S. "Supreme Court Decisions and Upcoming Cases Reflect the Growing Need for Electronic Search Warrants in Impaired Driving Cases," National Traffic Law Center, *Between the Lines*, Vol. 27 Issue 7 (September, 2019).

¹⁵ Hedlund, J.H. & Beirness, D.J. (October 2007). *Use of Warrants for Breath Test Refusal: Case Studies*. (Report No. DOT HS 810 852), National Highway Traffic Safety Administration.

¹⁶ *Id.* at vi.

¹⁷ *Id.* at vii.

¹⁸ See Mayo Clinic Laboratories, Test Catalog, Marijuana Δ9-Tetrahydrocannabinol (THC), stating "The parent drug, Δ9-tetrahydrocannabinol (THC), has a clearance half-life of less than 30 minutes and is not detectable in urine." www.mayocliniclabs.com/test-catalog/drug-book/specific-drug-groups/marijuana, accessed April 17, 2023.

¹⁹ International Association of Chiefs of Police, Resolution in Support of Electronic Warrants in the Fight Against Impaired Driving, HSC.20.t2018, November 1, 2018, www.theiacp.org/resources/resolution/support-of-electronic-warrants-in-the-fight-against-impaired-driving, accessed April 14, 2023.

the blood draw then occurs.²⁰ Because of the value of e-warrants, several resource guides have been made available for state and local agencies wanting to implement an e-warrant system. For example, NHTSA published *Practices for Implementing Expedited Search Warrant Programs for Obtaining Evidence From Impaired Drivers*,²¹ and the Foundation for Advancing Alcohol Responsibility offers the *e-warrant Implementation Guide* and supporting documents.²²

Sentencing DWI Offenders

Technology also plays an important role in sentencing, in terms of rehabilitating offenders and reducing DWI recidivism. Not all offenders are the same, and not all technology is equal. Prosecutors must understand what technology is available and most effective in order to make meaningful sentencing recommendations.

Many repeat offenders have underlying mental health disorders co-occurring with substance use disorders. The Foundation for Advancing Alcohol Responsibility (FAAR) recognized the need for assessing and treating mental health disorders in DUI offenders, in order to decrease recidivism and supported the development of the Computerized Assessment and Referral System²³ (CARS). The CARS tool assists mental health professionals in screening and assessing individuals in crisis and connecting them with the services needed. In 2016, FAAR supported implementing CARS in several sites throughout the United States and evaluated the results.²⁴ By assessing the need for mental health treatment, and requiring that treatment as a condition of sentencing, offenders can benefit from establishing care with a treatment provider who is available to them even after the sentence is served. Ideally, an offender is either introduced to mental health treatment or reminded of the need for it to prevent future mental health crises and, thus, prevent DUI recidivism.

The country's current appetite for less incarceration and more community-based sentencing²⁵ necessitates alternative means of ensuring public safety. Colorado embraced technology and adopted a law last year mandating continuous alcohol monitoring, such as *SCRAM Continuous Alcohol Monitoring* (SCRAM CAM), for some convicted repeat and felony DWI offenders.²⁶ Continuous alcohol monitoring devices are typically worn on ankles and transdermally detect alcohol.²⁷ Thus, if an offender consumes alcohol at any time during a day, that information will be captured and ultimately reported to the supervising court or agency. This technology has proven to be a reliable means of monitoring alcohol consumption.²⁸ The information gives the supervising court or agency the ability to either confirm sobriety or hold the offender accountable for having consumed alcohol. Services can then be decreased or increased as needed to treat the offender's condition. Rehabilitation and ensuring defendants do not reoffend have long been aspects of the sentencing landscape, and judges look to prosecutors for recommendations that ensure the safety of the motoring public from convicted DWI

²⁰ Minnesota Law Enforcement and Courts Transition to Electronic Search Warrants—New eSearch Warrants Streamline Warrant Processing, Improve Public Safety, Minnesota Dept. of Pub. Safety, Office of Communications, News Release (May 8, 2017), dps.mn.gov/divisions/oc/news-releases/Pages/Minnesota-Law-Enforcement-and-Courts-Transition-to-Electronic-Search-Warrants.aspx, accessed April 14, 2023. But see also Miller, J. & Wieber, A. "Warrants approved in just minutes; Are Utah judges really reading them before signing off?," *Salt Lake Tribune* (Jan. 14, 2018), www.sltrib.com/news/2018/01/14/warrants-approved-in-just-minutes-are-utah-judges-really-reading-them-before-signing-off/, accessed April 14, 2023.

²¹ Symoun, J., Kehoe, N., Carlson, L., & Marose, D. (2021, April). *Practices for implementing expedited search warrant programs for obtaining evidence from impaired drivers* (Report No. DOT HS 812 949). National Highway Traffic Safety Administration.

²² Foundation for Advancing Alcohol Responsibility, *eWarrants Report—A Guide to Implementing Electronic Warrants*, www.responsibility.org/end-drunk-driving/initiatives/e-warrants/, accessed April 14, 2023.

²³ See www.responsibility.org/end-drunk-driving/initiatives/cars-dui-assessment-project/, accessed April 21, 2023; see also www.carstrainingcenter.org/, accessed April 21, 2023.

²⁴ Holmes E. & Dalbec M. (2017). *CARS Implementation Process Evaluation*, Foundation for Advancing Alcohol Responsibility.

²⁵ Eisen, L-B. & Oliva, C. (April 2020). "Reimagining a Prosecutor's Role in Sentencing," *Fed. Sentencing Reporter*, Vol. 32, No. 4, pp. 195–201.

²⁶ "New Colorado SB22-055 Requires Continuous Alcohol Monitoring for Repeat DUI Offenders," (August 1, 2022) Offender Management Services, offender-management.com/2022/08/01/new-colorado-sb22-055-requires-continuous-alcohol-monitoring-for-repeat-dui-offenders/, accessed April 14, 2023.

²⁷ Responsibility.org Policy Position (2020) on *Continuous Alcohol Monitoring*, accessed April 18, 2023.

²⁸ *Id.*

offenders. In fact, if the desired outcome is to reduce recidivism, incarceration alone is ineffective.²⁹ “[P]unishment does not ameliorate substance use disorders or related problems.”³⁰ Hence, Colorado’s SB22-055. While judges throughout the United States have had the ability to require continuous alcohol monitoring for DWI offenders, Colorado’s SB22-055 “is the nation’s first law mandating the use of the technology.”³¹

The new Colorado law also allows offenders to apply for a restricted license so long as an ignition interlock device is used.³² Ignition interlock systems are designed to be installed in vehicles near the driver.³³ Before the car can start, the driver must provide a breath sample with an alcohol concentration below a given threshold, typically 0.02%.³⁴ Retests are also required by the driver throughout a trip to ensure alcohol levels are not increasing and exceeding the set threshold.³⁵ These devices are designed to prevent a driver from driving while impaired by alcohol. Ignition interlock technology was first developed in 1969 and became more widely accepted as the technology evolved in the 1980s and 90s.³⁶

Ignition interlock devices have been advocated by Mothers Against Drunk Driving (MADD) as a necessary component of all DWI offender sentencing.³⁷ MADD’s advocacy for every state to have laws requiring ignition interlock is based on a series of studies regarding the effectiveness of ignition interlock devices in preventing offenders from driving while under the influence.³⁸ Because of the technology’s effectiveness, MADD continues its efforts to enact legislation in all 50 states requiring all alcohol-impaired driving offenders install the device.³⁹ NHTSA offers a toolkit for interested jurisdictions to design and implement an ignition interlock program.⁴⁰

DWI Prevention

Perhaps the most heartening technology prospect for impaired driving is its role in prevention. DWI deaths may become a distant memory with the advent of DWI prevention-minded technology. This ideal future is envisioned by NHTSA and its traffic safety partners wherein technology is used to prevent DWIs.

The [Driver Alcohol Detection System for Safety \(DADSS\)](#) Program’s goal is to implement breath and/or touch testing technology into new cars with the aim of preventing DWIs.⁴¹ The program began in 2008 and is a partnership between NHTSA and the [Automotive Coalition for Traffic Safety \(ACTS\)](#). “The technology will automatically detect when a driver is intoxicated with a blood alcohol concentration (BAC) at or above 0.08%—the legal limit in all 50 states except Utah—and prevent the car from moving.”⁴²

²⁹ PEW Charitable Trusts, “More Imprisonment Does Not Reduce State Drug Problems,” (March 2018), www.pewtrusts.org/-/media/assets/2018/03/pspp_more_imprisonment_does_not_reduce_state_drug_problems.pdf, accessed April 14, 2023.

³⁰ Volkow, N. (April 27, 2021). “Addiction Should Be Treated, Not Penalized,” Health Affairs Forefront, www.healthaffairs.org/doi/10.1377/forefront.20210421.168499/full/, accessed April 14, 2023.

³¹ Kenney, A., Birkeland, B., & Verlee, M. (December 30, 2022). “[Disposable bag fees, higher minimum wage and cage-free eggs: Colorado laws going into effect for 2023](#),” *Colorado Public Radio News* (accessed April 14, 2023).

³² *Id.*

³³ Centers for Disease Control and Prevention, Transportation Safety, Alcohol Ignition Interlocks, www.cdc.gov/transportationsafety/calculator/factsheet/interlocks.html#History, accessed April 18, 2023.

³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.*

³⁷ Mothers Against Drunk Driving, Sober to Start—Ignition Interlock, madd.org/ignition-interlocks/, accessed April 14, 2023.

³⁸ Mothers Against Drunk Driving, *Ignition Interlock Report 2017*, (March 14, 2017), pp. 6–7.

³⁹ Mothers Against Drunk Driving, Sober to Start—Ignition Interlock, madd.org/ignition-interlocks/, accessed April 18, 2023.

⁴⁰ See also Mayer, R. (2019, November). *Ignition interlocks—A toolkit for program administrators, policymakers, and stakeholders*. 2nd Edition. (Report No. DOT HS 811 883). Washington, DC: National Highway Traffic Safety Administration.

⁴¹ The Driver Alcohol Detection Safety System Research Program, Breath Technology, dadss.org/breath-technology/, accessed April 14, 2023.

⁴² *Id.*

The breath detecting technology measures the driver's breath alcohol content through a sensor installed near the driver.⁴³ Unlike ignition interlock, the DADDS program technology passively measures alcohol, rather than requiring the driver blow into a device.⁴⁴ This means the sensor will monitor the driver's alcohol levels throughout the driving experience. Touch-based technology will monitor and detect alcohol levels of the driver through the skin, "or more specifically, the blood alcohol content detected in the capillaries."⁴⁵

Real world deployment of the technology was introduced in Virginia in 2018 when "the . . . DMV announced a collaboration with the DADSS Program and James River Transportation (JRT) to conduct in-vehicle, on-road test trials."⁴⁶ Implementation into American automobiles is years away but promises to be attainable sooner rather than later.⁴⁷ In fact, the 2021 Infrastructure Investment and Jobs Act requires NHTSA to create a new standard for implementing impaired driving prevention technology in new vehicles by 2024.⁴⁸ Indeed, thousands of lives will be saved each year once this technology is mastered and fully implemented throughout America.

Conclusion

Prosecutors must continue to do their part in reducing impaired driving deaths by effectively pursuing DWI cases. They can do so by understanding the role of technology in detecting DWI as well as the role of technology in reducing recidivism. Most notably, they can look forward to the day DWI trials are a thing of the past.

About the Author

Erin Inman is a Staff Attorney for the National Traffic Law Center with the National District Attorneys Association. Prior to joining the NTLC, Erin practiced law in Montana for over 15 years. She was elected to serve as the Prairie County Attorney, launched Montana's Traffic Safety Resource Prosecutor program, taught at the Montana Law Enforcement Academy, and has participated in the design of several criminal justice publications and curricula.



⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ The Driver Alcohol Detection Safety System Research Program, Touch Technology, dadss.org/touch-technology, accessed April 14, 2023.

⁴⁶ The Driver Alcohol Detection Safety System Research Program, Virginia: the First State Partnership, dadss.org/driven-to-protect/virginia, accessed April 14, 2023.

⁴⁷ The Driver Alcohol Detection Safety System Research Program, When might the DADSS technology be in U.S. cars and trucks?, dadss.org/news/updates/when-might-the-dadss-technology-be-in-u-s-cars-and-trucks/, accessed April 14, 2023.

⁴⁸ U.S. Department of Transportation, Fact Sheet: Safety in the Bipartisan Infrastructure Law, www.transportation.gov/bipartisan-infrastructure-law/fact-sheet-safety-bipartisan-infrastructure-law, accessed April 20, 2023; *See also* Reklaitis, V. "Infrastructure law mandates new technology to prevent drunk driving—here's how it would work," *MarketWatch*, September 2, 2021, www.marketwatch.com/story/infrastructure-bill-mandates-new-technology-to-prevent-drunk-driving-heres-how-it-would-work-11630607081, accessed April 18, 2023.

Technology, Tools, and Resources to Combat Impaired Driving Cases



**Live Webinar, April 27, 2023
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Impaired driving is a dangerous criminal offense. A consistent and effective approach when prosecuting these cases will help reduce traffic crashes, injuries, and death on our roadways. This webinar is dedicated to providing prosecutors and law enforcement officers with the most recent technology, tools, and resources to help combat impaired driving around the country.

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