

Improving your Drug Impaired Driving Data with Roadside Oral Fluid Testing

A Step Towards Safer Roads and Efficient Policing

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Roadside oral fluid testing has emerged as a revolutionary tool in the realm of road safety and law enforcement. By providing quick and reliable results, this methodology has contributed to reducing impaired driving incidents while also safeguarding public welfare. Its implementation underscores a proactive approach to deterring substance abuse and improving the efficiency of roadside police operations. Below, we explore the various benefits associated with this innovative practice.

ENHANCING ROAD SAFETY

Impaired driving remains one of the leading causes of crashes worldwide, often resulting in devastating consequences for individuals and families. By identifying impaired drivers before they can cause harm, roadside oral fluid testing plays a pivotal role in reducing the incidence of traffic collisions. Safer roads mean fewer injuries, fatalities, and property damage, ultimately benefiting society.

DETERRENCE OF IMPAIRED DRIVING

Increased State Highway Safety Office (SHSO) messaging to the public on the State's implementation of roadside oral fluid testing will foster a culture of motorists, especially our youngest and most inexperienced drivers, that detection methods are available to law enforcement. This preventative measure not only can reduce the number of dangerous drivers on the road but also fosters a culture of accountability and responsibility among motorists. The visible presence of roadside oral fluid testing initiatives acts as a powerful deterrent against impaired driving.

REDUCING RECIDIVISM

When an individual is arrested for impaired driving and we don't capture all the substances that may be causing the impairment, we do a disservice to the individual and the community. Stop limit testing protocols prevent treatment providers from knowing a complete picture of the offender, thereby making it more difficult to treat the underlying substance abuse

disorder and increasing the likelihood of recidivism. Roadside oral fluid testing will capture the substances recently used and will better inform treatment providers, thereby making our roadways safer.

IMPROVING DATA COLLECTION

Increased roadside oral fluid testing will also greatly improve state drugged driving data. While we have decades of research and data on alcohol impaired driving, the accuracy and completeness in reporting of drugged driving remains poor. First, law enforcement and toxicology stop limit testing policies prevent the collection of data that would help paint a clearer picture of the scope of the drugged driving problem on our roadways. Secondly, many state impaired driving statutes do not differentiate alcohol from drug impaired driving, so policymakers don't always know if the impairment was caused by alcohol, drugs, or both. In 2024, NHTSA stated that reporting the testing of fatally injured drivers remains challenged and significantly varied by state. Citing 2019 FARS (Fatality Analysis Reporting System) Data, the completeness of reporting by states varies from above 90% to below 10%, with the average for all states near 60%.³ Multiple agencies, including the U.S. Government Accountability Office (GAO) and the National Transportation Safety Board (NTSB), have stated the lack of data as a problem, with NTSB stating: "We confirmed that drug data in national-level databases continue to be unreliable and cannot be used to estimate drug prevalence among drivers."⁴ Uniform and consistent testing of drivers would greatly improve the accuracy and completeness of drugged driving data, thereby providing policymakers with reliable drug prevalence data.

ACCURACY AND RELIABILITY

One of the foremost advantages of roadside oral fluid testing is its high degree of accuracy in detecting the presence of drugs. Current testing technologies are designed to identify a wide array of substances, including cannabis, cocaine, opiates, amphetamine, methamphetamine, and benzodiazepines. The use of roadside oral fluid testing enables law enforcement agencies to detect the presence of substances from recent use in an individual's system and thereby assists with the development of probable cause for an arrest combined with the totality of the circumstances.

SPEED AND EFFICIENCY

Roadside oral fluid testing is characterized by its rapid turnaround time. Compared to traditional blood or urine tests, which often require laboratory analysis and can take several hours or even days, oral fluid testing yields results in mere minutes. This expedited process

allows police officers to make swift decisions to remove the impaired driver from the road, thereby enhancing public safety. In addition, testing at the roadside allows recent use detection proximate to the stop or crash before the drug is metabolized out of the body. For example, the active substance in cannabis, delta-9 tetrahydrocannabinol (THC), drops by over 80% within 90 minutes of smoking marijuana^{1,2} creating an urgency to close the gap between the time of incident and time of collection.

NON-INVASIVE AND USER-FRIENDLY

The collection of oral fluid samples is far less invasive than other testing methods. A simple swab of the inside of the mouth is all that is required, making the process quick, painless, and comfortable for the individual being tested. The ease of use also facilitates broader implementation, allowing law enforcement personnel to conduct tests in various settings without requiring specialized equipment or training.

ADAPTABILITY TO EMERGING TRENDS

As the landscape of substance use evolves, roadside oral fluid testing can be adapted to detect newly emerging drugs and allow policymakers to identify drug trend hotspots within their state. This flexibility ensures that law enforcement stays ahead of the curve, addressing public safety concerns related to novel substances. Moreover, advancements in testing technology continue to improve the accuracy and scope of detection, making this method an invaluable asset for the future.

PUBLIC HEALTH IMPLICATIONS

Beyond its role in road safety, roadside oral fluid testing contributes to broader public health objectives. By identifying substance use patterns, data from testing initiatives can inform policy decisions and intervention programs aimed at reducing drug abuse. These insights allow governments and organizations to allocate resources more effectively, addressing both prevention and treatment needs.

PRIVACY AND ETHICAL CONSIDERATIONS

The non-invasive nature of oral fluid testing minimizes concerns related to privacy and ethics. Unlike urine or blood tests, which can feel intrusive and stigmatizing, oral fluid collection is discreet and respectful. This ensures cooperation from individuals while maintaining their dignity throughout the process.

CONCLUSION

Roadside oral fluid testing represents a monumental step forward in the fight against impaired driving. Its accuracy, efficiency, and adaptability make it an indispensable tool for law enforcement agencies worldwide. By enhancing road safety, deterring substance abuse, and contributing to public health initiatives, this practice holds immense potential for creating safer and healthier communities. As technology continues to advance, the possibilities for further improvement are limitless, ensuring that roadside oral fluid testing remains at the forefront of modern policing and road safety efforts.

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¹ National Highway Traffic Safety Administration. (2024, April). Drug-impaired driving data collection: Report to Congress (Report No. DOT HS 813 574).

² National Transportation Research Board. (2022, December) Alcohol, Other Drug, and Multiple Drug Use Among Drivers: Alcohol (Safety Research Report SRR-22-02).

³ Lee, D., Vandrey, R., Milman, G., Bergamaschi, M., Mendu, D. R., Murray, J. A., Barnes, A. J., & Huestis, M. A. (2013). Oral fluid/plasma cannabinoid ratios following controlled oral THC and smoked cannabis administration. *Analytical and bioanalytical chemistry*, 405(23), 7269–7279. <https://doi.org/10.1007/s00216-013-7159-8>

⁴ Compton, R., Vegega, M., & Smither, D. (2009, December). *Drug-impaired driving: Understanding the problem and ways to reduce it; A report to Congress* (Report No. DOT HS 811 268). National Highway Traffic Safety Administration. <https://rosap.nhtl.bts.gov/view/dot/1949>