

The Implementation of the SoToxa Oral Fluid Program in Missouri

A Detailed Overview

The implementation of the Sotoxa oral fluid screening program commenced with discussions about a drug PBT during a grant meeting with the Missouri Department of Transportation's Highway Safety and Traffic Division. It was noted that some Sotoxa units had been acquired for distribution to various agencies. Initially, 18 units were allocated to the Missouri State Highway Patrol, and 12 units were distributed to local law enforcement agencies.

When the Program Began

For the Missouri State Highway Patrol, the program was introduced without a pilot phase, directly rolling out in November 2023 with the deployment of 18 Sotoxa instruments.

Determining the Device Selection

The device used in the program was selected from those purchased and provided by MoDOT's Highway Safety and Traffic Division. MoDOT chose the Sotoxa device because a contract was already in place with Intoximeters, and the Sotoxa unit was best equipped for roadside testing.

Procurement of Devices

Highway Safety supplied the initial 18 units, while additional instruments were procured using Highway Safety grants.

Selection of Officers and Distribution of Devices

Two units were distributed to each troop, with troop commanders responsible for selecting the officers who would receive them.

Training for Officers

Abbott, the manufacturer, provided online training sessions, which took about 15-20 minutes to complete. The officers assigned to the units were required to complete the training and document it in the Acadis training system. In addition, Intoximeters offered training to any agency who requested it.

Standard Operating Procedures (SOPs)

The policy was updated to include the Oral Fluid Mobile Analyzer, similar to the existing section on PBTs.

Number of Officers Equipped with Analyzers

A total of 35 officers were equipped with the analyzers at the Missouri State Highway Patrol. Statewide, 108 devices have been distributed to law enforcement agencies and one analyzer was provided to the Boone County Treatment Court.

Approximate Number of Tests Conducted

To date, approximately 121 tests have been conducted using the analyzers by the Missouri State Highway Patrol.

Future of the Program

Highway Safety continues to oversee the program, providing the instruments and funding for the cartridges. Data is being collected and shared with Highway Safety for ongoing evaluation and improvements.

Success Stories:

1. During a recent crash investigation on Interstate 55, law enforcement assisted a fellow zone officer in responding to a non-injury motor vehicle crash. Upon arrival, officers made contact with the driver involved, who exhibited multiple signs of impairment, including slurred speech, incoherent responses, and watery, bloodshot eyes. Notably, there was no detectable odor of intoxicants.

Standardized field sobriety tests were conducted, which the driver failed, indicating impairment and an inability to safely operate a motor vehicle. The driver was subsequently arrested for Driving While Intoxicated – Drug Intoxication.

Despite the observable signs, the driver adamantly denied any drug use, including marijuana. LE requested driver's consent for an oral fluid test using the SoToxa device, to which she agreed. The test returned a positive result for cannabis. A blood sample was then obtained and submitted to the laboratory for analysis. The results confirmed the presence of THC, consistent with cannabis use.

This incident underscores the value of oral fluid testing in impaired driving investigations. Utilizing the SoToxa oral fluid test was paramount, especially when the driver denied drug use. It provided immediate, actionable evidence. Blood sample and lab confirmation ensured the integrity of the investigation and reinforced the initial findings.

2. On August 13, 2024, LE was advised of a wrong way driver on U.S. 54, near Lake Land Road, in Miller County. LE located the wrong way vehicle and initiated a stop. LE obtained a SoToxa sample, which indicated positive for Amphetamine, Methamphetamine, and Cannabis. The results were used as leverage to gain the truth on the suspects drug consumption. It is also always nice to have the confirmation/clarity of what their oral fluid is positive for. The blood results supported all of the SoToxa positives.

3. On July 31, 2025, LE was almost struck by a wrong way driver on Midway Road, near U.S. 54, in Miller County. LE stopped the vehicle, and obtained a SoToxa sample, which indicated positive for Amphetamine, Methamphetamine, and Cannabis. The results helped guide LE sobriety testing and were used as leverage to gain the truth on the suspects drug consumption. The blood results are not back yet. It is worth noting that so far, the SoToxa samples I have obtained (8 different positives) are batting 100 percent accuracy. This tool is excellent for drug intoxication enforcement!

4. Being a DRE, I use it in my evaluations and most DWI drug arrests. By the time I use it, I already know what I'm looking at for the most part. That being said, it's a good confirmation tool for the PA because blood-drug results take so long at the lab. The SoToxa also comes in handy to call people out on their story, just like a PBT is. I've had several instances where I (and the subject) knew they had used meth recently, but there was no admission. However, once the idea of an oral fluid test was put on the table, people generally confess and consent to the test. All in all, it is a useful tool for establishing probable cause and gives the PA some extra confidence while waiting on lab results.

5. On April 14, 2024, LE responded to a serious motor vehicle crash on US-160, near Egypt Grove. One driver was transported to the hospital with serious injuries. The other driver involved was clearly impaired on drugs but denied consuming any. He consented to an oral swab, which was positive for cannabis and depressants. Up to this point, he denied everything but slowly began to admit to cannabis usage only. LE believes the positive

results from the SoToxa helped obtain a warrant for the driver's blood (along with his field sobriety tests). The driver ultimately pled guilty to felony DWI – Persistent Offender after the victim stopped responding to subpoenas.

6. The only Sotoxa incident I can recall was when I assisted with a motor vehicle crash that occurred on Interstate 70 in Blue Springs, Missouri. To summarize the incident, the driver crashed her vehicle into the cable barrier while having her friend and two small children in the back seat. After speaking with the driver, she told another trooper and me that she was “tired” but insisted she was not under the influence of alcohol or drugs. The driver was arrested, and I conducted a Drug Recognition Expert (DRE) evaluation. I determined that the driver was under the influence of a Central Nervous System Depressant. I used my Sotoxa device, which tested positive for the same substance. At the conclusion of my DRE evaluation and Sotoxa results, I confronted the driver. She acknowledged she was using Xanax but believed it wasn't necessary for us to know.

7. Since implementing the Sotoxa into the Boone County Treatment Court, we have been able to hold our participants more accountable to sobriety and recovery. As of January 26, 2026, the court has administered 62 oral fluid tests with 49 being positive. Sobriety is a critical measure of success in Treatment and DWI Courts. Participants are in the program because they have committed a felony offense that involved the use of drugs or alcohol. When our participants are sober, they are much less likely to pose a risk to public safety.

Boone County Treatment Court has approximately 200 participants that are diagnosed with a substance use disorder. Part of their regular requirements are to submit to regular and random urine drug tests. Although urine drug screens are considered the gold standard for Treatment Court best practices, they are not a perfect tool to verify sobriety. For example, sometimes participants do not report for collection or provide adulterated samples. The collection has to be gender specific, which can sometimes limit the ability to collect a sample. Some participants have a history of trauma and experience a mental block when asked to provide observed urine tests.

One example of how the Sotoxa has benefitted Court practices involves a client with a history of sexual trauma. This participant would report for her urine test and the effects of her trauma interfered with her body's ability to produce an observed urine sample. As a result, the Court was unable to verify sobriety. Many in active addiction also struggle with honesty, and this participant would verbally report that she was sober to the Court, but we had no verification. This is a client where we utilized the Sotoxa. This participant started providing oral fluid samples weekly. When this participant screened positive for methamphetamine, her probation officer and counselor were able to confront her about the result. The participant then told the truth that she was still struggling with addiction. This participant was able to be connected with a treatment plan and honestly address her addiction. Through sobriety, this participant was also able to start providing

urine samples and comply with her other requirements. This participant reported to court yesterday and is now methamphetamine free!

Another example of how the Sotoxa has been helpful in Treatment Court was with a participant who repeatedly submitted adulterated samples. This participant would use a device commonly known as a "whizzinator." This device would be strapped to his body and contain a urine sample stored in the device that he had either purchased or collected from another person, in an attempt to deceive or manipulate the Court. The device mimics human anatomy and even on an observed urine collection, can be difficult to detect. This participant's urine would test negative for drugs, but his behavior did not indicate sobriety. In this case, we implemented the Sotoxa. Once the oral fluid was tested, this participant screened positive for methamphetamine. When confronted by his probation officer, he admitted to use of methamphetamine.

There are many other times we find the Sotoxa beneficial in Court. A few other examples include: if a participant is unable to provide a urine sample due to just having emptied their bladder, not having a gender specific collector available, the device's ability to showing a shorter window of detection so the treatment provider can determine if residential treatment is needed, the rapid, onsite results and noninvasive collection.

The Treatment Court of Boone County will continue to utilize the Sotoxa and we appreciate the partnership with Missouri's Highway Safety Office to offer this innovative tool.