

TRUNARC IN ACTION

Field-based narcotics ID enables speedy prosecution while saving valuable lab resources

Phoenix, AZ Police Department

The Controlled Substances Officer (CSO) program within the Phoenix, AZ, Police Department is an innovative, cost-effective operation that enables rapid charging of drug offenders. Officers in the program receive annual training on the field identification of narcotics, and must pass written and hands-on competency tests each year.

Originally, four drugs were designated for field identification: cocaine, cocaine base, marijuana and methamphetamine. CSOs test approximately 7,000 items of drug evidence annually. Supported by a preliminary test, the program achieves a prearrest adjudication rate of about 85 percent.

The success of the program has led to partnership with the National Forensic Science Technology Center, where the CSO program is used as the model for the Center's Field Identification Drug Officer training.

Case Profile and Problem

The Phoenix Police Department Crime Laboratory receives samples every day for in-custody narcotics cases. The lab aims to provide test results within 48 hours in order to charge suspects prior to their release from jail.

Monthly, the lab receives about 120 in-custody cases, 60 percent of which are eligible for CSO field testing. Evidence from these CSO-eligible cases does not require immediate confirmatory testing by the Crime Lab, reducing potential backlogs and freeing up resources for confirmations on pieces of evidence required for trial, as well as other high-priority cases.



“The Crime Lab expects to save \$1.3 Million over the first 5 years of use of the TruNarc.”

- Phoenix Police Department Crime Laboratory Controlled Substances Section

With the cost of testing at \$264 per sample, laboratory testing costs for CSO items alone come to about \$19,000 per month (72 x \$264). Officers spend another \$3,000 transporting these drugs to the Crime Lab, bringing the total monthly laboratory cost for CSO items to more than \$22,000.

In 2012, concerned with higher case volumes, rising costs and limited resources, the Maricopa County Attorney's Office asked the Crime Lab to find a solution for the field identification of opiates, especially heroin, which now accounted for one-third of all in-custody cases. As fortune would have it, the Phoenix PD was hosting a demonstration of the Thermo Scientific™ TruNarc™ analyzer about this same time, so the Department invited the Crime Lab to the meeting. A formal validation ensued.

Validation Leads to Pilot Program

As part of a formal validation in May 2012, the Crime Lab tested 126 items of evidence with the TruNarc analyzer. Results were then confirmed by traditional laboratory methods. The study demonstrated that TruNarc was an accurate, effective testing solution for a number of commonly encountered drugs.

Subsequently, the County Attorney's Office accepted the validation and agreed to a pilot test of TruNarc for the field identification of 21 controlled substances on a specific, approved list. (See Table 1)

The pilot program began in May 2013, with a single TruNarc device deployed at one Phoenix PD precinct. Twenty-two CSOs were trained to test drugs on the approved list. The pilot ran six months and held these objectives:

1. Utilize a field-based analytical device that was easy to use, with readily interpretable and reliable test results for an approved list of drugs.
2. Increase the number of drugs tested in the field so as to reduce the number of samples going to the Crime Lab, allowing the reallocation of resources for high priority cases.

Approved Drug List For Field Identification of Controlled Substances	
Amphetamine	Ketamine
BZP	MDA
Carisoprodol	MDEA
Clonazepam	MDMA
Cocaine base	Methadone (Amidone)
Cocaine HCl	Methamphetamine
Diazepam	Morphine
GHB	Oxycodone
Heroin (with prep)	PCP
Hydromorphone	TFMPP
	Zolpidem

Table 1.

3. Maintain a pre-arraignment adjudication rate of at least 80 percent.
4. Reduce total testing costs associated with CSO-eligible drugs, including per-item costs and transportation costs. Prove the ROI of the TruNarc analyzer.
5. Continue the leadership and innovation of the Phoenix CSO program by sharing a successful deployment of TruNarc with neighboring communities and other law enforcement agencies.



Results of the Pilot Program

At its conclusion, the pilot program met all objectives. Whether increasing the speed of prosecution, demonstrating return on investment or continuing the leadership of the Phoenix CSO program, the TruNarc pilot can be considered an overall success. Specifically:

1. From the original 22 officers trained on TruNarc in May 2013, all 134 CSOs were trained by November 2015. Officers became proficient in the use of the TruNarc handheld analyzer, and confident in interpreting and presenting test results. Previously, CSOs had used colorimetric (wet chemistry) kits to test unknown substances in the field. Use of these kits is now being discontinued for cocaine, cocaine base and methamphetamine.
2. CSOs tested more drugs in the field during the six month pilot than were tested during the previous six month period, substantially reducing the samples going to the Crime Lab.
3. The CSO program maintained an 80 percent pre-arraignment adjudication rate and, to date, no court challenges have occurred.
4. Use of TruNarc made sound financial sense. Not only did the TruNarc device reduce total police department testing and transportation costs by \$22,048 per month, but it also offered substantial savings over time. Assuming the device has a minimum expected life of five years, the Crime Lab can expect savings of \$1.3 million over these first five years (60 months x \$22,048 lab costs). In addition, the TruNarc program frees up valuable lab resources for other priority cases.

5. Based on the pilot results, 11 other agencies in Maricopa County have added TruNarc to their field testing programs. In some cases, the Phoenix PD has provided the necessary training.

Conclusion

The Phoenix Police Department Crime Lab works closely with the Department's CSO program to enable the rapid charging of drug offenders. In a field-based pilot test, the Crime Lab and the CSO program determined that the TruNarc handheld narcotics analyzer was a reliable, easy-to-use instrument for field testing of controlled substances. During the six-month pilot with TruNarc, the CSO program tested more drugs than were tested in the previous six-month period. At the same time, the program maintained an 80 percent prearrestment adjudication rate.

Purchase of the TruNarc analyzer demonstrated a strong return on investment. In addition to freeing up valuable lab time for higher-priority cases, the analyzer is expected to save the lab \$1.3 million over the first five years.

The Phoenix PD CSO program now has five TruNarc units deployed, and the Crime Lab has recommended citywide adoption by all CSOs.

Acknowledgements

We thank the Phoenix Police Department Crime Laboratory Controlled Substances Section for their contribution to this case study.

The TruNarc in-use testing a sample.



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