



A true difference maker in combating illegal narcotics

For drug enforcement authorities, proper identification of the controlled substances they confiscate is essential. Rapid and accurate determination of suspected narcotics can make the difference between a successful operation and a bust gone bad. Detective Chris Kieland of the King County Sheriff's Office in Washington State highlights the advantages the Thermo Scientific™ TruNarc™ Delta Handheld Narcotics Analyzer provides his narcotics enforcement team, as demonstrated during a recent seizure.

Introduction

The battle to stem the flow of dangerous, addictive drugs into American cities and towns requires preparedness, perseverance and the proper tools. Since the late 1970s, "proper tools" has meant chemical test supplies in packages called "NIK kits." These Narcotics Identification Kits require officials to handle unknown, possibly dangerous drugs and perform rudimentary color-coded chemical tests on them. In ensuing years, spectroscopy-based narcotics analyzers have been developed, but early models were not portable and were not always able to identify substances. Any tool that can provide faster, more detailed information while increasing safety and lowering chances for contamination would be a boon to officers. A field-ready portable spectrometer in the form of the TruNarc Delta handheld narcotics analyzer meets this need.

Challenges

Keeping up with the ever-shifting illicit narcotics trade is incredibly challenging: Distribution patterns change. Chemical formulas get altered. Novel drug variations, often distributed as white powders that are visually indistinguishable from one another, sometimes aren't identified by older test methods. And despite all efforts to the contrary, the volume of illegal substances on the streets remains significant. This means speed and adaptability are of the essence for anti-drug police units.

For over a decade, Detective Chris Kieland has been working on narcotics enforcement with the King County Sheriff's Office in the greater Seattle region. He has been around long enough to use the NIK kits and other presumptive tests, and to know their benefits and shortcomings. He was eager to experience how the TruNarc Delta analyzer's rapid scanning ability and extensive on-board library could help detectives get ahead in this race. Kieland recalled, "[The field test kits] required you to interact with the substances. You had to dispose of them. They were time consuming. So when I first saw the TruNarc [analyzer]...I was pretty excited about it."



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Detective Chris Kieland
of the King County Sheriff’s Office

Solution

The King County Sheriff’s Office was one of the region’s early adopters of the original TruNarc handheld narcotics analyzer. The latest version of the instrument, TruNarc Delta, provides faster results with greater confidence than the original.

With a form that resembles a supermarket product scanner, the TruNarc Delta analyzer is easily wielded with one hand. The device’s infrared laser and proven Raman technology performs non-contact, non-destructive analysis. It can analyze substances through transparent packaging like the small plastic baggies often used for drugs. Most importantly, TruNarc Delta delivers much more detailed data about the narcotics being examined than the old color-based chemical kits can, and it does so quickly.

“With the TruNarc Delta, testing’s way faster,” Kieland gushed. “Less than 5 seconds for methamphetamine or cocaine!”

Advantages

Kieland asserted that the improved scanning and expanded library is one of the biggest advantages he’s seen regarding TruNarc Delta’s effectiveness. The TruNarc Delta analyzer’s on-board library is regularly updated by Thermo Fisher Scientific to include emerging narcotics threats. As of January 2026, the analyzer can recognize over 1,200 different narcotics, precursors, and cutting agents.

“We’re starting to find it’s picking up different types of fentanyl. The makeup of fentanyl has been changing, due to what we believe are some supply issues from the source countries,” said Kieland. While “M30” pills used to be more common, recently they are encountering more powdered fentanyl. These powders might be slightly different in molecular structure from one another, which could hinder their positive identification. “And so whereas before we might be getting some inconclusive results on suspected fentanyl, we’re now getting fentanyl results with the Delta, but just with a different makeup.”

The ability to differentiate between visibly similar yet chemically different substances is a big plus, too. Even a veteran of the narcotics force like Kieland appreciates this. “I myself have thought something I was pretty sure, based on my experience, was cocaine, and it was not.” He recounted a bust where his team found packages that contained multiple baggies, all filled with white powders. The TruNarc Delta handheld analyzer enabled his team to test all of those packets individually. With just a point of the scanner and a click of its trigger, they could efficiently determine which of them held cocaine and which held fentanyl or MDMA or something else.

The speed of analysis might be the instrument’s most helpful trait, Kieland asserted. “One of the biggest things, I would say, is that the TruNarc Delta just saves us so much time when we’re involved in these large-scale investigations, these large-scale seizures like was the case for Operation Eastbound and Down.” That particular operation was executed across western Washington in late 2025. Over several months, the investigative team found hundreds of pounds of cocaine, methamphetamine, and fentanyl powder. With a need to test each little plastic baggie or vacuum-sealed brick for evidence, the TruNarc Delta’s ability to perform that analysis quickly and accurately helped immensely.





“You’re able to test those [packages] individually and see which one of those is cocaine and which one of those is fentanyl or something else.”

Additional benefits

Thanks to their compact size, TruNarc Delta analyzers can be easily carried along by King County patrol deputies when they go out to serve warrants. The officers usually scan any suspected narcotics on site, and then export the scan results to a nearby laptop or printer. Complete scan reports include time-and-date stamps, which helps expedite prosecution. According to Kieland, the officers will usually print off the actual scan report and attach it their case. That way, he said, “the prosecutor’s office can see it right there.”

The level of detail provided on the TruNarc Delta’s scan reports is also helpful. By accessing the reference library included with the instrument’s software, the analyzer can identify hundreds of specific substances. It can even determine if multiple components are present in a mixture. Whereas the chemical kits might turn a certain shade of blue to indicate the presence of either methamphetamine or MDMA, the TruNarc Delta readout can specify exact compounds, emphasizing the most dangerous chemical detected in the mixture.

“Just being able to process everything in a timely manner is a huge win for us.”

Conclusions

The Thermo Scientific TruNarc Delta Handheld Narcotics Analyzer can make a major impact on the effectiveness of anti-narcotic enforcement operations. The analyzer is portable enough to be used in the field. It is accurate and precise enough to provide detailed information about the substances it scans. Perhaps most importantly, the TruNarc Delta analyzer operates quickly, saving investigators hours of processing time that could be better used protecting their communities. Operation Eastbound and Down, executed by the King County Sheriff’s Office under Detective Chris Kieland, demonstrated all these benefits and more. “Throughout the all of the search warrants that were executed during that operation, we seized several hundred pounds of methamphetamine,” Kieland said, “and just being able to process that in a timely manner is a huge win for us.”

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