NATIONAL LAW ENFORCEMENT AND CORRECTIONS TECHNOLOGY CENTER A program of the National Institute of Justice

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## TECH b.e.a.t

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## You Don't Have Mail

L SD dropped onto an envelope and covered with a stamp. Cocaine injected into the thick ink of a colorful gel pen. A childlike crayon drawing covering a smear of methamphetamine. Shreds of marijuana hidden behind an address label. No matter what, a drug addict will find a way.

So says Capt. Greg Gearhart, operations manager of the New Generation Adult Detention Center in Pima County, Arizona. His facility's civilian mailroom staff, like other correctional facility mailroom employees across the country, know firsthand about the daily struggle to locate contraband drugs hidden in inmate mail by their outside suppliers.

According to Gearhart, in Pima County, legal mail mail from an inmate's lawyer—is not opened and searched in the mailroom. Instead, it is taken into the detention pods and opened in front of the inmate. The contents are given to the inmate immediately. However, an informant told facility personnel that marijuana, cocaine, and heroin were getting into the detention center via this allegedly legal mail. A tip last summer led detention center staff to the perpetrators of a scam involving legal mail and marijuana.

"We knew what was coming in, we knew who it was coming to, and we knew the name of the fictitious attorney," Gearhart says. "We had a trained dog smell those pieces of mail, and he reacted positively. That gave us probable cause to search it thoroughly, and we found marijuana behind the attorney's address label. Another letter had drugs hidden between two pieces of paper that were glued together."

Gearhart says the Pima County detention center houses around 1,500 inmates. It has one full-time mailroom officer and another who helps part-time—a staffing setup fairly similar to those used in many other smaller facilities. This small mailroom staff opens and hand inspects several hundred pieces of inmate mail daily, except around holidays when the amount may reach 1,000 pieces per day. Staff use ultraviolet light to illuminate suspicious areas or marks. Suspicious mail may be taken outside and sprayed with a chemical testing spray, and/or eventually sent to a lab for analysis. However, Gearhart says, his facility recently received an alert from another State saying that drug smugglers are getting ahead of mailroom staff and getting around the ultraviolet light check by soaking entire letters in methamphetamine.

It was clear that mailroom staff needed help, but using a dog to sniff each of the hundreds of pieces of mail coming into the center daily was not practical. In searching for a viable solution to the problem, the detention facility contacted the Border Research and Technology Center (BRTC), part of the National Institute of Justice's National Law Enforcement and Corrections Technology Center system. "We asked what can you do to help us?" Gearhart recalls. "Is there any new technology out there, or is there any old technology that we don't know about that we should?"

An answer came through BRTC's host organization and technology partner, Sandia National Laboratories (SNL). A team from SNL's Entry Control and Contraband Detection Department helped jail officials conduct a mailroom residual background contamination evaluation and incoming mail contamination evaluation to determine the feasibility of using available trace drug detection equipment. "The Pima County folks weren't looking for bulk narcotics such as might come into the country at a port," notes Chris Aldridge, BRTC director. "They were looking for very small amounts."

According to the SNL team, drug detection systems fall into two categories: bulk detectors and trace detectors. Both systems can be used for nonintrusive drug testing of packages and containers.

**Bulk Detectors.** Bulk detectors use x rays, computed tomography (CT) scans, and similar imaging techniques to detect a pound or more of contraband substances. These bulk systems usually do not produce automated alarms and require a human operator to examine the resulting image and then decide whether to examine the item further.

**Trace Detectors.** Trace detectors operate in two sample collection modes: vapor or swipe. They detect drug residue on the exterior of an item or vapors emanating from inside. Portable "sniffers" are available for detecting drug vapors. However, when vapors from several ounces of drugs are not present, as was the case at the Pima County facility, surface particle detectors can be used in the "swipe" mode. Using a cloth-like medium, the operator swipes the surface of an item. The sample is then inserted into the detector so collected particles can be extracted, analyzed, and identified. If drugs are present, the detector alerts the operator.

SNL proposed two contraband detection systems for evaluation by Pima County. One is a hand-portable system offering both swipe and vapor collection capabilities. When combined with a commercial chemical detector, the system is capable of detecting substances at parts per trillion. The other is a highly sensitive stationary device with swipe capability only. SNL's testing covered methamphetamines, LSD, cocaine, and marijuana—often drugs of choice among inmates. Both systems are capable of testing for other substances as well, including explosives.

"Both machines were very effective in finding all types of substances in the mail," says Lt. Dan Brown, who is in charge of the facility's security services, including the mailroom. "They tested some pieces we were suspicious of, including what was supposed to be a child's crayon drawing that didn't look like it was done by a child. It tested positive. In another case, they found drugs under a stamp."

Pima County sent the tested samples to its drug laboratory for confirmation, and criminal charges are pending in one case. Although both systems performed well, the detention facility prefers the hand-portable system with both vapor and swipe detection capabilities.

"[The hand-portable system] will allow us to go into other areas of the facility as well and test papers and even cells," Gearhart adds. "This would help control other ways that drugs might get in, such as being smuggled in by work furlough crew members or by visitors. If we've received any type of confidential information as to where drugs might be, we can follow up on the tip with testing."

The National Law Enforcement and Corrections Technology Center System Your Technology Partner www.justnet.org 800-248-2742 Training needs for the new equipment should be minimal, Brown says, because it is easy to learn to use. Staff will need to work the swipe testing into their normal routine, but it should eventually eliminate the need to look at items under ultraviolet light and save time.

While training should not present any problems, funding may. Gearhart says that like many correctional facilities across the country, Pima County faces budget restrictions, and the detention center administrator plans to look into alternative funding sources, such as a Federal grant, for the \$70,000 to \$100,000 project. "To me, stopping the introduction of drugs into the jail is worth any cost."

Pima County has found ways to use SNL's evaluation results to improve procedures even before the equipment purchase takes place. For example, Gearhart says his facility no longer accepts mail with postage stamps. Even personal letters must be mailed in prepaid postage envelopes or taken to the post office and metered. This eliminates the possibility of hiding drugs behind the stamps. In addition, staff now destroy the original envelopes containing legal mail and replace them with clean blank manila envelopes. Finally, all letters written in ink gel are returned.

This combination of procedural changes should help stop some inmates from receiving contraband. When the new equipment is in place, Gearhart and Brown hope that even more inmates will have to learn to get along without illicit drugs.

For additional information about the Pima County, Arizona, contraband detection initiative, contact Capt. Greg Gearhart at 520–547–8391, e-mail ggearhar@pimasheriff.net; or Chris Aldridge, Border Research and Technology Center, 888–656–2782, e-mail cdaldri@brtc.nlectc.org.



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