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TOWARD CRIMINAL JUSTICE SOLUTIONS

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DNA in "Minor" Crimes Yields Major Benefits in Public Safety

THE ISSUE

Property crime offenders have high recidivism rates, their crime and violence can escalate, and property crime cases often go unsolved.[1] It has been estimated that each burglar in the top 10 percent of burglars commits more than 232 burglaries per year.[2] Several police departments in the United States are finding that they may be able to change these trends. When they analyze DNA from a burglary, they get evidence that often solves several other cases as well. And they are finding that biological evidence collected from property crime scenes can prevent future property crimes and more serious offenses.

The Miami-Dade Police Department (MDPD), Palm Beach County Sheriff's Office, and New York City Police Department (NYPD) are solving high-volume property crimes (like burglary and auto theft) and violent crimes (like sexual assault and murder) using DNA funds they received from the National Institute of Justice (NIJ). They are discovering that analyzing DNA from property crimes can have major public safety benefits.

BACKGROUND

Biological evidence *can* be retrieved from property crime scenes. Burglars often cut themselves on broken glass as they enter a property—and blood is an obvious source of DNA evidence. Plus crime labs can get a profile from "invisible" DNA evidence police retrieve from the sweatband inside a cap, from the inside of a mask, on a cigarette butt, in chewing gum, on a drinking glass, or from a half-eaten sandwich. In New York, analysts have had great success processing this "invisible" burglary evidence from the skin cells deposited from perspiration or saliva.

Public Safety Impact

Mark Dale, crime lab director at the NYPD, said that in his experience, when DNA from a no-suspect murder scene is checked against records in the Combined DNA Index System (CODIS)[3], it often matches DNA from a no-suspect burglary. Review of the State's first 1,000 hits showed that the vast majority were linked to crimes like homicide and rape, but of these, 82 percent of the offenders were already in the databank as a result of a prior conviction for a "lesser" crime such as burglary or drugs.[4] According to a Florida State study, 52 percent of database hits against murder and sexual assault cases matched individuals who had prior convictions for burglary.[5]

With NIJ support, the crime labs in Miami-Dade, Palm Beach, and New York City have achieved dramatic results by analyzing biological evidence collected from property crime scenes.

The Numbers. In New York, biological evidence from 201 burglaries yielded 86 CODIS-acceptable DNA profiles. On the basis of these numbers, the lab has thus far been able to identify several "pattern" burglaries. One profile uncovered a five-burglary serial offender. Most of New York's DNA profiles resulted in forensic hits to multiple unsolved cases. Three were linked to more serious, violent crimes such as sexual assault and robbery. In all, 37 burglary profiles have been linked through CODIS to other unsolved cases; 31 of the newly analyzed cases were matched through CODIS to convicted offenders and are now being investigated; arrests are pending.

DNA in blood stains collected at the scenes of four household burglaries in Miami-Dade linked all cases to the same offender, who turned out to be a previously convicted burglar. DNA evidence also linked three different no-suspect vehicle and residential burglaries and identified the perpetrator—he, too, turned out to be a previously convicted burglar.

Overall, in Miami-Dade, 526 no-suspect DNA profiles produced 271 hits; in Palm Beach, 229 profiles produced 91 hits. Of the 362 CODIS hits, 56 percent came from evidence collected at burglary scenes.

The Cost. The cost of DNA testing depends on several factors: the number of samples tested per case, the type of DNA testing needed (nuclear or mitochondrial), and the cost to have police collect biological evidence at property crime scenes and pursue investigative leads generated by CODIS hits.

But the cost of DNA analysis must be weighed against the losses from crime incurred by the public. The Bureau of Justice Statistics estimates the average property loss from burglary is $1,500.[6] Bud Stuver, who heads the DNA testing program at the MDPD, looks at affordability from the broad perspective of the costs to the justice system as a whole. "It is much more expeditious to employ DNA testing than to pay investigators."

The Bottom Line

"We move quickly when profiles are needed for the high-priority crimes of murder and rape," says Cecilia Crouse, who supervises the DNA section of the Palm Beach County Sheriff's Office crime lab. The crime labs in New York City, Miami-Dade, and Palm Beach have shown that DNA can go a long way toward solving property crimes as well as violent crimes. Law enforcement agencies can clear even more cases when they collect biological evidence not just from the scenes of major crimes, but also from high-volume crimes, such as burglary.

Bud Stuver, who has trained many officers in the MDPD to collect DNA at property crimes, shows them "it's worth the time and effort."

Mark Dale, in the NYPD, noted his lab is "now gathering data to investigate the links between recidivism, lesser offenses, and more serious crimes." If forthcoming data can show the links, then it may be possible in some instances to prevent murder by solving burglaries.

For More Information

Visit http://www.dna.gov.

Notes

1. Langan, P.A., and D.J. Levin, *Recidivism of Prisoners Released in 1994,* Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, 2002 (NCJ 193427): 1, 8; *Crime in the United States 2002:* 221, 223. Burglary had the lowest clearance rate of any Index crime. (Violent crimes are often more rigorously investigated, which explains why their clearance rate is higher than for property crimes.)

2. Chaiken, J.M. and M.R. Chaiken, *Varieties of Criminal Behavior,* Washington, DC: U.S. Department of Justice, National Institute of Justice, 1982 (NCJ 87680): 44.

3. CODIS is an FBI-distributed database that allows Federal, State, and local crime labs to exchange and compare DNA profiles.

4. Source: http://criminaljustice.state.ny.us/forensic/dnabrochure.htm.

5. Source: Florida Department of Law Enforcement State DNA Database Statistics, Tallahassee, Florida.

6. Bureau of Justice Statistics, *Sourcebook of Criminal Justice Statistics, 2000,* Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, 2001 (NCJ 190251): 304.

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