

NEW ORLEANS SEXUAL ASSAULT EVIDENCE PROJECT: RESULTS AND RECOMMENDATIONS

BY **NANCY RITTER**

NIJ-sponsored project contributes to the growing body of evidence on how to handle untested sexual assault kits.

In a one-year project that tested 1,000 sexual assault kits (SAKs) in New Orleans, there were hits against the FBI's Combined DNA Index System (CODIS) that aided police investigations in 13 percent of the cases. The NIJ-sponsored project grew out of a request from the U.S. Department of Justice to provide assistance to the city after it initiated an investigation of the New Orleans Police Department (NOPD) in 2010.

Mark Nelson, a physical scientist who managed the project at NIJ, said that the results offer one more piece in the growing body of evidence regarding the controversial issue of how to handle untested SAKs.

"Of the 1,008 SAKs tested, 256 male DNA profiles were uploaded to CODIS — and this resulted in 139 CODIS hits," said Nelson, who wrote the final report on the project, *Analysis of Untested Sexual Assault Kits in New Orleans*, available at NCJRS.gov, keyword: 242312.

In response to the Department of Justice's call for assistance, NIJ leveraged existing partnerships, cooperative agreements and congressionally designated funding to assist NOPD in performing DNA testing on 830 SAKs that were in NOPD custody when the project began and 178 SAKs that were collected during the project's duration (January 1, 2011, to January 1, 2012).

"It's important to note that problems with the untested kits — and with police follow-up on CODIS hits for kits that had already been tested — were exacerbated by the loss of the NOPD Crime Laboratory and its DNA functionality as a result of Hurricane Katrina," Nelson said.

NIJ's SAK project in New Orleans took place over a short (one-year) period and required a quick and clear delineation of the participating partners' responsibilities (see sidebar, "The Partners in the Sexual Assault Kit Project"). Within two months of the first planning meeting, the partners signed a memorandum of understanding, and DNA analysis of SAKs began.

Results of DNA Testing

There are two types of CODIS matches (referred to as “hits”): offender hits and forensic hits. An offender hit occurs when a DNA profile developed from evidence in an alleged crime matches an offender whose DNA profile is already in CODIS. A forensic hit (sometimes called a case-to-case hit) occurs when a DNA profile developed from evidence in an alleged crime matches a DNA profile from another crime. Both types of hits can offer police a new lead or, in cases in which a particular individual is not identified through a DNA profile, at least *link* cases in which the suspect’s identity is unknown.¹

What Do the CODIS Hit Results Mean?

There were essentially two groups of untested SAKs in the project: 830 kits that were already in NOPD custody when the project began and 178 kits that were collected in sexual assaults that occurred during the project (“current cases”). Among the cases that existed before the project began, 10 percent yielded a CODIS hit: 9 percent were hits to an individual who

had not previously been identified as a suspect in the case, 0.5 percent were forensic hits in which the offender was unknown, and 0.5 percent were offender hits between an offender (either known or named by the victim) and the evidence.

Among the current cases, 31.5 percent yielded a CODIS hit: 21.4 percent were hits to an offender who had not previously been identified as a suspect, 1.7 percent were forensic hits in which the offender was unknown, and 8.4 percent were offender hits between an offender (either known or named by the victim) and the evidence.

“I was not surprised that there was a much higher percentage of hits from the current cases, because after Katrina and before the NIJ project began, they already had tested some of the potentially most probative kits,” Nelson said.

It is important to keep in mind that there are extremely limited published data to inform our understanding of the effectiveness of testing every SAK in law

Table 1 summarizes CODIS hits in the New Orleans project as of September 1, 2012 (when data were last reported to NIJ).

Table 1. CODIS Hits		
Type of Hit	Cases in Custody pre-1/1/11 N = 830	Current Cases (1/1/11-1/1/12) N = 178
Forensic hit to another case in which the identity of the male donor was known	0	0
Forensic hit to another case in which the identity of the male donor was unknown	4	3
Offender hit to an individual who was not previously a suspect	75	38
Offender hit to a known or named suspect	4	15
Total Hits	83	56

enforcement custody. NIJ continues to support research on testing priorities and strategies that can improve judicial outcomes in cases of sexual assault; results are expected in 2014 from an ongoing action-research project in Houston, Texas, and Wayne County (Detroit), Mich.^{2,3}

When jurisdictions use very different criteria for testing large numbers of previously untested SAKs, outcomes — including CODIS hit rates — are simply not going to be comparable. In his full report on the New Orleans project, for example, Nelson discusses CODIS hit rates in an NIJ-supported project in Los Angeles a few years ago; in that sample of just under 2,000 SAKs, the percentage of CODIS hits that provided new investigative leads was significantly smaller than that in the New Orleans project.^{4,5} However, the New Orleans project did *not* include DNA testing of kits in cases that had already been adjudicated or in which the statute of limitations had run; in the Los Angeles project, those kits were included.

Judicial and Other Outcomes

During the New Orleans project, 40 sex crime cases were closed after investigation by NOPD's Cold Case Sex Crimes unit: 16 by warrant and 24 by arrest. As of September 1, 2012, six cases had been adjudicated. In two, the suspects were convicted and sentenced to life imprisonment. In another, the suspect was convicted and sentenced to 40 years. In the remaining three, the suspects pled guilty and were sentenced to 20 to 22 years.

"The success of this project, however, went beyond these impressive judicial outcomes," said Nelson. One such success is the CODIS Hit Outcome Project (CHOP), software that tracks CODIS hits, helping identify bottlenecks in evidence submission, processing and results reporting. Using an existing cooperative agreement to install and test CHOP in several jurisdictions, NIJ arranged for CHOP to be installed on Louisiana State Police Crime Laboratory servers with connections to both NOPD and the New Orleans District Attorney's Office.

"Our partners in New Orleans reported that having instant access to CODIS hits was very beneficial, allowing them to deal with hits in real time," said Nelson.

Two versions of CHOP software are currently available. A stand-alone version (such as the one used in the New Orleans project) can be purchased from a software vendor. Another version — upgraded from the California Department of Justice, which developed the original software — is available to state DNA database laboratories at no charge.

As a result of the New Orleans partners' success with CHOP, the Louisiana State Police Crime Laboratory was planning to upgrade its CHOP network by establishing links with the Baton Rouge Police Department, the East Baton Rouge Sheriff's Office, the Ascension Parish Sheriff's Office and other organizations throughout the state.

In another initiative that stemmed from the SAK project — particularly the successful follow-up of CODIS hits — the Louisiana State Police launched a pilot project in which detectives were paid \$5,000 in overtime to follow up on CODIS hits, including collecting reference samples from suspects who had been identified through CODIS. During that pilot project, 90 CODIS hits were resolved — and since then, the Louisiana State Police applied for and was awarded a Justice Assistance Grant from the Bureau of Justice Assistance⁶; the grant provides overtime for detectives, CODIS analysts and other law enforcement professionals who follow up on CODIS hits.

Recommendations Going Forward

In his final report on the SAK project in New Orleans, Nelson states that justice is not served — including the possibility of more sexual assaults by the same perpetrator — unless scientific results from DNA testing and CODIS hits are investigated promptly and thoroughly by law enforcement agencies.

“Deployment of CHOP nationwide would benefit the criminal justice system and decrease victimization.”

“In that regard,” he said, “I believe that our New Orleans project was unprecedented in its scope and that it should inspire other states to make similar efforts.”

Nelson makes two specific recommendations:

(1) Expand a software system like CHOP to more jurisdictions nationwide.

The NOPD project demonstrated the success of CHOP software in managing and providing accountability for following up on CODIS hits.

“I would like to see this expanded to more jurisdictions nationwide,” Nelson said, noting that a state laboratory database seems to be the logical place to put CHOP software, because CODIS hits can then be disseminated to client government crime labs and police departments throughout a state.

“Deployment of CHOP nationwide — in concert with efforts similar to those undertaken by the NOPD and Louisiana State Police to conduct timely and complete investigations of all CODIS hits — would benefit the criminal justice system and decrease victimization through faster identification and apprehension of repeat offenders,” he added.

(2) Install evidence-tracking systems.

As Nelson notes in the final report, electronic evidence-tracking systems that allow police agencies to communicate directly with their crime laboratory’s Laboratory Information Management System would

help eliminate the situation faced by New Orleans and other jurisdictions around the country with large numbers of untested SAKs.

“Computerized evidence-tracking systems create a permanent record of decisions by investigators about whether to submit an SAK to a crime laboratory for analysis,” Nelson said. “This, in turn, would allow subsequent review by management and oversight boards and increase transparency and accountability to the public.”

For more information regarding the need to develop and install computerized evidence-tracking systems, see recommendations in the NIJ-funded evaluation of testing SAKs in the Los Angeles Police Department and the Los Angeles Sheriff’s Department.^{7,8}

Finally, Nelson said, the success of the SAK project in New Orleans was achieved through a shared commitment by stakeholders from the federal, state, city and university arenas. He also noted that the Louisiana State Police Crime Laboratory was able to provide significant assistance to NOPD because the lab had recently implemented new processes and procedures to increase its DNA unit efficiency.⁹

“Although we will continue to learn from different approaches employed in other jurisdictions,” Nelson said, “the success in the NOPD project offers invaluable knowledge that adds to the growing body of research on how to deal with the issue of large numbers of untested SAKs.”

About the Author

Nancy Ritter is a writer and editor at NIJ.

For More Information

- Learn more about the issue of untested evidence in sexual assault cases in *The Road Ahead: Unanalyzed Evidence in Sexual Assault Cases*, an NIJ special report, at NIJ.gov, keywords: road ahead.

The Partners in the Sexual Assault Kit Project

Several partners worked together on the New Orleans sexual assault kit (SAK) project:

- The Marshall University Forensic Science Center (MUFSC) agreed to:
 - Test 720 SAKs that had been collected prior to January 1, 2011.
 - Assist the Louisiana State Police Crime Laboratory in validating a new DNA testing procedure.
 - Provide specialized DNA training to New Orleans Police Department (NOPD) and Louisiana State Police Crime Laboratory personnel.
- The Louisiana State Police Crime Laboratory served as the conduit for transferring SAKs between NOPD and MUFSC, and the lab:
 - Analyzed (either in-house or through a contract vendor lab) all SAKs from New Orleans that were collected after January 1, 2011.
 - Reviewed DNA profiles generated by MUFSC and uploaded eligible DNA profiles to CODIS.
 - Searched CODIS for hits and provided investigative leads to the police department's Sex Crimes Unit.
 - Trained two DNA analysts.
- NOPD established a system to ensure that all evidence from each case was present at the time of submission, that the case had not been previously adjudicated, that the statute of limitations had not expired, and that the evidence was not from a case that the victim did not want law enforcement to pursue. NOPD also performed follow-up police investigations after CODIS hits.
- NIJ provided:
 - Overall project management.
 - Additional assistance through its own technical expertise or through existing partnerships and cooperative agreements, including training NOPD and Louisiana State Police Crime Laboratory staff and assisting in managing the CODIS hits with a software application called CHOP (CODIS Hit Outcome Project).

- Learn more about why backlogs of DNA evidence awaiting testing persist, despite federal funding dedicated to testing SAKs, in *Making Sense of DNA Backlogs, 2010 — Myths vs. Reality*, an NIJ special report, at NIJ.gov, keywords: myths and realities 2010.

2. To learn more, visit NIJ's page on untested evidence in sexual assault cases at <http://www.nij.gov/nij/topics/law-enforcement/investigations/handling-evidence/untested-sexual-assault.htm>.
3. Ritter, Nancy, *The Road Ahead: Unanalyzed Evidence in Sexual Assault Cases*, Special Report, Washington, D.C.: U.S. Department of Justice, National Institute of Justice, 2011, NCJ 233279, available at <https://www.ncjrs.gov/pdffiles1/nij/233279.pdf>.
4. Peterson, Joseph, Donald Johnson, Denise Herz, Lisa Graziano, and Taly Oehler, "Sexual Assault Kit Backlog Study," Final report to the National Institute of Justice, grant number 2006-DN-BX-0094, June 2012, NCJ 238500, available at <http://www.ncjrs.gov/pdffiles1/nij/grants/238500.pdf>.

Notes

1. Learn more about CODIS at the FBI's website at <http://www.fbi.gov/about-us/lab/codis>.

5. Ritter, Nancy, "Solving Sexual Assaults: Finding Answers Through Research," *NIJ Journal* 270 (2012): 4-17, available at <http://www.nij.gov/journals/270/answers-through-research.htm>.
6. For more information on the Justice Assistance Grant program, visit https://www.bja.gov/ProgramDetails.aspx?Program_ID=59.
7. Peterson, "Sexual Assault Kit Backlog Study," 105-106.
8. Ritter, "Solving Sexual Assaults: Finding Answers Through Research," 14-16.
9. See the final report of the Louisiana State Police's Forensic DNA Unit Efficiency Improvement project at <http://www.ncjrs.gov/pdffiles1/nij/grants/235190.pdf>.

NCJ 241926