The use of codis in sexual assault investigations essay sample



INTRODUCTION

CODIS or Combined DNA Index System commenced as a pilot project in the year 1990 serving 14 state and local laboratories. The DNA Identification Act of 1994 (Public Law 103 322) formalized the FBI's authority to launch a national DNA index for law enforcement purposes. In October 1998, the FBI's National DNA Index System (NDIS) turned into operational. CODIS, an electronic database of DNA profiles that can recognize suspects, is similar to the AFIS or Automated Fingerprint Identification System database (Loftus, 1999). CODIS is implemented as a distributed database with three hierarchical levels; local, state, and national. NDIS is the uppermost level in the CODIS hierarchy, and facilitates the laboratories participating in the CODIS Program to exchange and match up to DNA profiles on a national level. All DNA profiles begin at the local level (LDIS), then flow to the state (SDIS) and national levels. SDIS permits laboratories within states to exchange DNA profiles. The tiered approach permits state and local agencies to operate their databases according to their particular legislative or legal requirements.

GENERAL DISCUSSION

When investigating rape cases, it may be required to collect and analyze the DNA of the victim's recent consensual partners, if any, to remove them as probable contributors of DNA suspected to be from the perpetrator. If this is essential, it is significant to approach the victim with severe sensitivity and provide a full explanation of why the request is being made. When probable, the help of a qualified victim advocate should be enlisted for assistance. The analysis or testing of DNA obtained from a crime scene or a convicted offender's DNA sample will create a DNA profile a series of numbers, each of which signifies the result from the analysis of a particular location on the chromosome called a locus. Commonly, DNA profiles submitted for searching at the national level must contain information on 13 Short Tandem Repeat (STR) loci. The STR loci approved for use in Combined DNA Index System were distinctively selected as law enforcement identification markers for the reason that they were not directly linked to any genetic code or medical condition.

CODIS or Combined DNA Index System, an electronic database of DNA profiles that can recognize suspects, is similar to the AFIS or Automated Fingerprint Identification System database. The acronym " CODIS" is used to illustrate not only the software used to maintain and run these DNA databases but also the whole program of software support for Federal, state and local forensic laboratories as well as the a variety of indices (Forensic, Offender and Missing Person) at all three levels – national, state and local. The acronym " NDIS" stands for the National DNA Index System, one component, albeit an integral one, of the CODIS program. Every State in the Nation is in the procedure of implementing a DNA index of individuals convicted of certain crimes, such as rape, murder, and child abuse. Upon conviction and sample analysis, perpetrators' DNA profiles are entered into the DNA database.

Just as fingerprints found at a crime scene can be run through AFIS in search of a suspect or link to another crime scene, DNA profiles from a crime scene can be entered into CODIS. Consequently, law enforcement officers have the https://assignbuster.com/the-use-of-codis-in-sexual-assault-investigationsessay-sample/ ability to recognize probable suspects when no prior suspect existed. CODIS create investigative leads in crimes where biological evidence is recovered from the crime scene using two indexes: the forensic and offender indexes. The Forensic Index contains DNA profiles from crime scene evidence. The Offender Index contains DNA profiles of individuals convicted of sex offenses and other violent crimes with various states now expanding legislation to include other felonies. Matches made among profiles in the Forensic Index can link crime scenes together; probably identifying serial offenders. Based on a match, police in multiple jurisdictions can coordinate their respective investigations, and share the leads they developed independently. Matches made between the Forensic and Offender indexes provide investigators with the personality of the perpetrator. After Combined DNA Index System identifies a potential match, qualified DNA analysts in the laboratories contact each other to validate or refute the match.

One of the underlying concepts behind the development of CODIS was to generate a database of a state's convicted offender profiles and use it to solve crimes for which there are no suspects. Previously, forensic examinations were performed by laboratories if evidence was obtainable and there was a suspect in the case. By creating a database of the DNA profiles of convicted sex offenders and other violent criminals, forensic laboratories would be able to analyze those cases without suspects and search those DNA profiles against the database of convicted offenders and other crime scenes and determine if a serial or recidivist rapist or murderer was involved. It was expected that this new tool would enable forensic laboratories to generate investigative leads or identify suspects in cases, such as stranger

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sexual assaults where there may not be any suspects. The CODIS software is used to maintain these DNA databases and search the DNA profile against the DNA profiles of convicted offenders and other crime scenes.

For example, a DNA profile of a suspected perpetrator is developed from the sexual assault evidence kit. If there is no suspect in the case or if the suspect's DNA profile does not match that of the evidence, the laboratory will search the DNA profile against the Convicted Offender Index. If there is a match in the Convicted Offender Index, the laboratory will obtain the identity of the suspected perpetrator. If there is no match in the Convicted Offender Index, the DNA profile is searched against the crime scene DNA profiles contained in the Forensic Index. If there is a match in the Forensic Index. If there is a match in the Forensic Index, the laboratory has linked two or more crimes together and the law enforcement agencies involved in the cases are able to pool the information obtained on each of the cases. Matches made by Combined DNA Index System and confirmed by the participating laboratories are often referred to as CODIS " hits."

CONCLUSION

An identification tool that was primarily thought to benefit the investigation of sexual assault cases has proven to have much broader application in the investigation and prosecution of crimes. States have observed this first hand with their Combined DNA Index System hits and sought to increase coverage of their databases beyond sexual offenses first to more grave violent felonies and then all felony offenses. The states are learning rapidly that, the larger the size of the database, the more crimes that are solved. Virginia, for

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instance, has long authorized the collection of DNA samples from all felons, and has achieved significant results in solving rapes, murders, and other crimes with Combined DNA Index System. A study of the Virginia system has shown that a large proportion of its matches in sex offense cases would not have been obtained if the state had only collected DNA samples from violent offenders. Rather, the DNA sample which results in the solution of a rape is frequently collected on the basis of the offender's conviction for a nonviolent offense, such as a burglary, a drug offense, or a theft.

REFERENCE

Patricia Loftus. (1999). *M. S. N., M. S. F., CODIS: The Combined Deoxyribonucleic Acid Index System for DNA Typing*, The Crime Victims Report.