

CODIS EVOLUTION- REVISTING COLD CASES

Steve Renteria, Los Angeles Sheriff's Department

On December 3, 1978, a 20 year old, married mother of three, was robbed while she worked at a gas station in the city of Palmdale, California. She was then kidnapped, brutally raped by two unknown males and murdered. Her lifeless body was discovered three days later eight miles from work.

Initial serology work was performed immediately after the crime, semen was identified but with no suspect, a comparison could not be done. In 2002, DNA analysis was performed on the sexual assault samples. The results, which were mixture profiles of at least two donors, were entered into the Combined DNA Index System (CODIS). In 2003, the FBI issued new guidelines (4x4 Rule) for mixture profiles and the DNA profiles were removed due to their complexity.

The FBI CODIS Unit is constantly improving the utility of the CODIS Database, and in 2013 new guidelines were issued for partial and mixture profiles. In early 2014, one of the homicide investigators asked about this cold case and the laboratory re-examined the file. Based on the 2013 changes in the FBI guidelines, the same mixed profiles that did not qualify in 2003, now qualified for searching the CODIS database. The profile was re-entered in April 2014, and immediately hit to one convicted offender from California. Upon further investigation, the named offender was charged with the 1978 homicide. Faced with the DNA evidence, the suspect accepted a deal and pled guilty to the crimes in return for a sentence of life without the possibility of parole. The suspect named the individual who assisted him with the crimes and a second person was arrested and charged. A reference sample was obtained from the second individual and he was included as a potential contributor to the mixture profile. Suspect #2 was tried, found guilty, and was sentenced to life without parole. During the investigation, Suspect #1 volunteered information and confessed to four additional unsolved murders in the Los Angeles area.

New enhancements like the one mentioned above will now allow previously ineligible profiles to be re-evaluated and potentially solve, unresolved cases. Hopefully, by bringing closure to this 40 year old cold case, it will encourage other laboratories around the world to re-evaluate previously ineligible profiles with the latest and always evolving CODIS searching capabilities.