

Convicted by Juries, Exonerated by Science, Page 19-20
(Connors, Lundregan, Miller and McEwen, U.S. Dept of Justice, June 1996).

DNA testing. The DNA testing phase of these cases also has common characteristics. Nearly all the defendants had their tests performed by private laboratories. The tests were conducted using blood from defendants, blood or blood-related evidence from victims, and semen stains on articles of the victims' clothing or on nearby items (a blanket was tested in one case). In over half the cases, the prosecution either conducted a DNA test totally independent of that of the defense or sent test results obtained by the defendant's laboratory to a different one to determine whether the laboratory used by the defense interpreted test results properly.

Eight laboratories used Restriction Fragment Length Polymorphism (RFLP) DNA testing, 17 conducted Polymerase Chain Reaction (PCR) testing, and 2 used both tests. For one case, the type of DNA test conducted is unknown.

Preservation of evidence. In some cases, evidence samples had deteriorated to the point where DNA testing could not be performed. In Brison, the laboratory could not test cotton swabs from the rape kit but, instead, tested a semen stain from the victim's underwear. In Daye, after the appellate court affirmed the defendant's conviction and the State Supreme Court denied certification, the evidence was about to be destroyed when Daye's attorney filed to stay the destruction in order to conduct DNA testing.

The chain of custody in some of the cases also demonstrated a lack of adherence to proper procedures. Authorities on the subject note that the "mishandling of real evidence affects the integrity of the factfinding process."⁴ In Dabbs, the defendant's attorneys reported that the defense was initially advised by the prosecution that the evidence (victim's underwear that contained a semen stain) had been destroyed (a conclusion based on failure of authorities to find the evidence in police or court custody). Eventually, the defense found the evidence at the county crime laboratory.

Results of DNA Laboratory Survey

Conducted in June 1995, the nationwide telephone survey of 40 public and private laboratories that performed DNA tests sought answers to such questions as: From the time the laboratories began DNA testing, how many cases have they handled? Of that number, what percentage yielded results that excluded defendants as sources of the DNA evidence or were inconclusive?

The 40 surveyed laboratories yielded 19 whose available data were sufficient for the purposes of this study. The 19 included 13 at the State/local level, 4 in the private sector, an armed forces laboratory, and the FBI's laboratory.

Most of the laboratories had initiated DNA testing only within the previous few years. Twelve began testing between 1990 and 1992. Three of the four private laboratories began in 1986 or 1987, while the FBI started DNA testing in 1988.

Seven of the laboratories reported using RFLP testing; four, PCR testing; and eight, both types of tests.

The 19 laboratories reported that, since they began testing, they had received evidence in 21,621 cases for DNA analysis, with the FBI accounting for 10,060 cases. Three of the 4 private laboratories averaged 2,400 each; the State and local laboratories averaged 331 each.

In about 23 percent of the 21,621 cases, DNA test results excluded suspects, according to respondents. An additional 16 percent of the cases, approximately, yielded inconclusive results, often because the test samples had deteriorated or were too small. Inconclusive results aside, test results in the balance of the cases did not exclude the suspect.

The FBI reported that, in the 10,060 cases it received, DNA testing results were about 20 percent inconclusive and 20 percent exclusion; the other 18 laboratories (11,561 cases) reported about 13 percent and 26 percent, respectively.*

*If inconclusive cases were omitted, the exclusion rate for the FBI would be approximately 25 percent, and the average exclusion rate for the other 18 laboratories would be about 30 percent.