

Ethical, Legal, and Social Concerns about DNA Databanking

The primary concern is privacy. DNA profiles are different from fingerprints, which are useful only for identification. DNA can provide insights into many intimate aspects of people and their families including susceptibility to particular diseases, legitimacy of birth, and perhaps predispositions to certain behaviors and sexual orientation. This information increases the potential for genetic discrimination by government, insurers, employers, schools, banks, and others.

Collected samples are stored, and many state laws do not require the destruction of a DNA record or sample after a conviction has been overturned. So there is a chance that a person's entire genome may be available—regardless of whether they were convicted or not. Although the DNA used is considered "junk DNA", single tandem repeated DNA bases (STRs), which are not known to code for proteins, in the future this information may be found to reveal personal information such as susceptibilities to disease and certain behaviors.

Practicality is a concern for DNA sampling and storage. An enormous backlog of over half a million DNA samples waits to be entered into the CODIS system. The statute of limitations has expired in many cases in which the evidence would have been useful for conviction.

Who is chosen for sampling also is a concern. In the United Kingdom, for example, all suspects can be forced to provide a DNA sample. Likewise, all arrestees—regardless of the degree of the charge and the possibility that they may not be convicted—can be compelled to comply. This empowers police officers, rather than judges and juries, to provide the state with intimate evidence that could lead to "investigative arrests."

In the United States each state legislature independently decides whether DNA can be sampled from arrestees or convicts. In 2006, the New Mexico state legislature passed Katie's Bill, a law that requires the police to take DNA samples from suspects in most felony arrests. Previous New Mexico laws required DNA to be sampled only from convicted felons. The bill is named for Katie Sepich, whose 2003 murder went unsolved until her killer's DNA entered the database in 2005 when he was convicted of another felony. Her killer had been arrested, but not convicted, for burglary prior to 2005.

Opponents of the law assert that it infringes on the privacy and rights of the innocent. While Katie's Law does allow cleared suspects to petition to have their DNA samples purged from the state database, the purging happens only after the arrest. Civil liberties advocates say that Katie's Bill still raises the question of Fourth Amendment violations against unreasonable search and seizure and stress that the law could be abused to justify arrests made on less than probable cause just to obtain DNA evidence.

As of September 2007, all 50 states have laws that require convicted sex offenders to submit DNA, 44 states have laws that require convicted felons to submit DNA, 9 states require DNA samples from those convicted of certain misdemeanors, and 11 states—including Alaska, Arizona, California, Kansas, Louisiana, Minnesota, New Mexico, North Dakota, Tennessee, Texas, and Virginia—have laws authorizing arrestee DNA sampling.

Potential Advantages and Disadvantages of Banking Arrestee DNA

Advantages

- Major crimes often involve people who also have committed other offenses. Having DNA banked potentially could make it easier to identify suspects, just as fingerprint databases do.
- Innocent people currently are incarcerated for crimes they did not commit; if DNA samples had been taken at the time of arrest, these individuals could have been proven innocent and thereby avoided incarceration..
- Banking arrestees' DNA instead of banking only that of convicted criminals could result in financial savings in investigation, prosecution, and incarceration.

Disadvantages

- Arrestees often are found innocent of crimes. The retention of innocent people's DNA raises significant ethical and social issues.
- Sensitive genetic information, such as family relationships and disease susceptibility, can be obtained from DNA samples. Police, forensic science services, and researchers using the database have access to people's DNA without their consent. This can be seen as an intrusion of personal privacy and a violation of civil liberties.
- Studies of the United Kingdom's criminal database, which retains the DNA samples of all suspects, show that ethnic minorities are over represented in the population of arrestees and are, therefore, overrepresented in the criminal DNA database. This raises the concern of an institutionalized ethnic bias in the criminal justice system.
- Even the most secure database has a chance of being compromised.