

Overview of the FBI's CODIS Program

Thomas Callaghan, Federal Bureau of Investigation

The Combined DNA Index System or CODIS as it is known, has matured into a program supporting DNA databases in law enforcement laboratories in the all 50 States and the US Military. Internationally, there are over 40 CODIS sites in 28 countries. An export tool has been added to CODIS software allowing direct import into Interpol's International DNA Database (Interpol DNA Gateway). As DNA database programs evolve, CODIS software has and will continue to accommodate the changing needs of the DNA community.

A major component of the CODIS program is operation of the National DNA Index System or NDIS. NDIS is the National DNA Database. This National Index is made up of over 175 DNA Laboratories from all 50 States as well as the FBI Laboratory and United States Army Crime Laboratory. Currently there are over 6 million Convicted Offender DNA profiles and over 225,000 Crime Scene DNA profiles.

Recent CODIS software development has concentrated on support of Missing Person and Disaster Victim Identification (DVI). CODIS Version 6.0 (CODIS 6.0) is a standalone software package that can also function as a module within the current baseline version of CODIS (CODIS 5.7.3). CODIS 6.0 has the capability to use reference samples from relatives of missing persons and/or disaster victims to create pedigrees in order to more efficiently search unidentified remain datasets. The software also has the capability to handle mtDNA and Y-STR data with pedigree searches. Additionally, metadata (scars, marks, tattoos, GPS coordinates) and comments can be associated with Unidentified Human Remain profiles in order to make identifications easier. A live demonstration of CODIS 6.0 DVI capabilities will be presented along with User Acceptance Testing results from six laboratories.