

Fulfilling the Requirements: Quality Assurance Standards for Forensic DNA Testing Laboratories

The Forensic Assurance Team is dedicated to providing the highest quality proficiency tests for your laboratory system. The Forensic Biology, Forensic DNA, Probabilistic Genotyping Software (PGS) and DNA Database proficiency tests have been designed to meet both your laboratory's quality assurance needs and the standards required in the Quality Assurance Standards for Forensic DNA Testing Laboratories (Standard 13). Forensic Assurance provides biological proficiency tests (Forensic Biology, Forensic DNA and PGS) four times a year (Winter, Spring, Summer, and Fall) and the DNA Database test two times a year (Winter and Summer). It is required that forensic practitioners take two tests per year (Standard 13.1); one in the first six months of the year and the second test in the second six months of the year (no less than four months apart, and no more than eight months apart). Forensic Assurance produces both a Winter/Summer and Spring/Fall distribution cycles to meet this standard (13.1). Both female and male DNA profiles will be provided on each test so that both STR and Y-STR technologies may be tested (Standard 13.1.1). The Forensic Biology and Forensic DNA tests are designed to include two known (suspect/victim) blood samples prepared on bloodstain cards (swabs can be requested) and two questioned stains prepared on swabs or evidentiary items such as clothing items, cloth swatches, or weapons. In addition to the samples included in the Forensic Biology and Forensic DNA tests, the PGS tests include a complex mixture sample on swabs. The DNA Database test is designed to include two blood samples on bloodstain cards (swabs can be requested). Each annual cycle (Winter/Summer or Spring/Fall), the Forensic Biology and Forensic DNA tests will contain at least one semen sample as an evidentiary sample to compare to the known samples. Samples may be processed manually and/or robotically to ensure that all of your procedures and methods are tested annually (Standard 13.1.1, 13.1.4.1, and 13.1.3). Forensic Assurance Proficiency Tests fulfill the ISO/IEC 17025 and ISO/IEC 17020 external proficiency testing requirements for laboratories accredited by the ANSI National Accreditation Board (ANAB) and the American Association for Laboratory Accreditation (A2LA) (Standard 13.2).