

TENNESSEE BUREAU OF INVESTIGATION

Forensic Services Division

Toxicology Quality Assurance and Procedures Manual

6.21 Proficiency Testing



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Proficiency testing is necessary to ensure the reliability of the testing performed and the capability of the examiner/technician conducting these tests.

Each scientist that is authorized to perform casework in both the alcohol and drug testing sub-disciplines will perform a proficiency test provided by an authorized test provider, in one of the two subdisciplines annually, resulting in each scientist participating in each sub-discipline (approximately) every-other year. Forensic Scientists that are only authorized for casework in one sub-discipline will perform the PT in that sub-discipline every year. The year that they complete training in the second sub-discipline they will complete a PT in both the alcohol and drug testing sub-disciplines. The next year, they will be added to the proficiency test rotation.

6.21.1 Alcohol

In order to successfully complete this proficiency test, ethanol shall be qualitatively and quantitatively identified. The quantitation shall fall within two standard deviations of the results reported by the proficiency test provider or within the Toxicology Unit's acceptance criteria of the target value of the test material. Samples falling outside the acceptance criteria shall be evaluated by the Quality Assurance Manager and Toxicology Unit Supervisor/Technical Leader

6.21.2 Toxicology

In order to successfully complete this proficiency test, compound(s) shall be qualitatively identified. If quantitation is required, it shall fall within two standard deviations of the results reported by the proficiency test provider or within the Toxicology Unit's acceptance criteria of the target value of the test material. The Quality Assurance Manager and Toxicology Unit Supervisor/Technical Leader shall evaluate samples falling outside the above acceptance criteria.

6.21.3 In circumstances where a test sample is reported by the test provider to contain a compound that was not identified during testing (false negative), it shall be evaluated based on current limits of detection and the scope of the method(s). The Quality Assurance Manager and Toxicology Unit Supervisor/Technical Leader shall evaluate samples falling outside the above acceptance criteria.

6.21.4 In circumstances where a compound is identified during testing that was not reported by the test provider (false positive), it shall be evaluated as unacceptable.

6.21.5 TBI proficiency test reports as provided by the Quality Assurance Manager shall be maintained. All supporting documents shall be maintained by the Toxicology Unit.