



# **TENNESSEE BUREAU OF INVESTIGATION**

## *Forensic Services Division*

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### Toxicology Quality Assurance and Procedures Manual

#### 6.21 Proficiency Testing

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#### **6.21 Proficiency Testing**

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

##### **6.21.1 Alcohol**

Each examiner performing alcohol analysis and/or a technical review shall be required to participate annually in a blood alcohol proficiency testing program furnished by an authorized test provider.

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 Assistance Manager and Toxicology Unit Supervisor/Technical Leader

##### **6.21.2 Toxicology**

Each examiner/technician performing toxicological analysis and/or a technical review shall be required to participate annually in a toxicology proficiency testing program furnished by an authorized test provider.

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 in the appropriate examiner/technician training notebook. All supporting documents shall be maintained in the Toxicology Unit.