

Standard for the Minimum Content Requirements of Forensic Toxicology Procedures, First Edition, 2021



WHAT IS AN AAFS STANDARD FACTSHEET?

The AAFS produces clear, concise, and easy to understand factsheets to summarize the contents of technical and professional forensic science standards on the OSAC Registry. They are not intended to provide an interpretation for any portion of a published standard.

WHAT IS THE PURPOSE OF THIS STANDARD?

Analytical procedures provide essential direction to laboratory staff performing toxicological analyses. This standard describes requirements for the minimum content of analytical procedures in forensic toxicology.

This standard applies to laboratories performing forensic toxicological analysis in the following sub-disciplines: postmortem forensic toxicology, human performance toxicology (e.g., drug-facilitated crimes and driving-under-the-influence of alcohol or drugs), non-regulated employment drug testing, court-ordered toxicology (e.g., probation and parole, drug courts, child services, breath alcohol), and general forensic toxicology (non-lethal poisonings or intoxications).

It outlines minimum requirements for standard operating procedure (SOP) content so that they are easily understood and followed.

WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

Adherence to the standard ensures that the analytical procedures used in toxicological testing are sufficiently detailed.

Analytical procedures provide the direction necessary to generate accurate and reproducible results.

Informative, concise SOPs aid laboratory personnel in the generation of reliable results.

Forensic toxicology laboratories are encouraged to meet these minimum standards.



HOW IS THIS STANDARD USED AND WHAT ARE THE KEY ELEMENTS?

This standard defines the minimum components to be included in standard operating procedures that are used in forensic toxicology laboratories. The order of the required components is not mandated.

SOPs may contain all required components or may reference other applicable documents to meet the requirements. Components may be narrative, in list form, or be comprised of detailed step-by-step instructions for work.

Components include items such as Title, Purpose and Scope, Specimen Criteria, Safety, Equipment, Sample Preparation and Procedure, Performance Characteristics, Analytical Parameters, Data Analysis, Corrective Measures, Reporting, and References. It is important that identified limitations of the method be included. Document control requirements are defined and include, the effective date, approving authority, and pagination for each SOP.

The standard relies on the requirements detailed in other forensic toxicology standards addressing validation ([ANSI/ASB Standard 036](#), Standard Practices for Method Validation in Forensic Toxicology), quality control ([ANSI/ASB Standard 054](#), Standard for a Quality Control Program in Forensic Toxicology Laboratories), traceability ([ANSI/ASB Standard 017](#), Standard Practices for Measurement Traceability in Forensic Toxicology), and reporting ([ANSI/ASB Standard 053](#), Standard for Report Content in Forensic Toxicology).

