

## Required Components for a Proficiency Testing Program in Bloodstain Pattern Analysis



### 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?

The purpose of this standard is to assist forensic science service providers (FSSPs) that provide bloodstain pattern analysis services in the development and adoption of a proficiency testing program. This standard will provide refinement to an already existing proficiency testing program.

This standard does not include specific proficiency test content.

### WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

This standard establishes the required components of a proficiency testing program for forensic science practitioners conducting bloodstain pattern analysis. Components covered in this standard include the testing scheme, general test design, and evaluation of results.

This standard provides flexibility to the FSSP to develop proficiency tests either internally or to acquire them externally but recommends the use of an accredited external provider whenever possible. Flexibility is also provided to conduct proficiency testing in an informed or blinded format.

This standard requires an FSSP to determine the cause and level of any inconsistent proficiency test result.



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

This standard is intended to be used by FSSPs that provide bloodstain pattern analysis services and requires the FSSP to retain all documentation related to proficiency testing for a prescribed period of time.

The FSSP is required to detail the components and extent of a proficiency program that includes who will be tested, the scope of duties generally performed, and the knowledge, skills, and abilities necessary for a bloodstain pattern analyst to fulfill their responsibilities. The established program must require proficiency testing on an annual basis and the FSSP to document that the bloodstain pattern analyst followed its procedures when completing a bloodstain pattern analysis proficiency test.

Recommendations for evaluating an external proficiency test or developing an internal proficiency test include that the test should mimic casework as closely as possible, include supporting information when applicable, and be created using mechanisms similar to those that are encountered in casework. Proficiency test design, construction, and test validation are required to be documented.

Requirements related to the evaluation of proficiency test results cover the following topics: establishment of procedures for an evaluation, who can perform an evaluation, the determination of cause and level of any inconsistency as well as corrective action procedures, and feedback to the bloodstain pattern analyst who completed the proficiency test.

