

Standard Practice for Training in the Forensic Examination of Hair by Microscopy



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?

This practice covers training guidelines for use by those responsible for training forensic examiners who will perform hair examinations, including microscopical comparisons of human hair.

Training of forensic hair examiners is to encompass [ANSI/ASTM E2917-19a](#), [ANSI/ASTM E3316-22](#), and this standard.

This practice does not address training for the examination of chemical alterations (for example, hair dye) or trace materials on the surface of hairs (for example, hair care products).

This practice addresses the benefit of following microscopical examinations with DNA analysis.

WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

This practice provides the theoretical foundation and practical skills necessary for a trainee to become a qualified forensic hair examiner.

This practice recommends that a training program include different types of instruction and learning (for example, classroom-like instruction, practical exercises, self-study of relevant literature) with progress continually assessed through oral and written evaluations, including pass/fail criteria and provisions for remedial training. This practice supports the use of additional training beyond what is required in the practice. In addition, continuing education will provide opportunities to remain current in the field.



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

This training program is designed to be incorporated into an overall forensic science service provider's training program. The responsibilities of both the technically competent trainer and the trainee are delineated.

This practice lists topics (e.g., evidence recovery and identification and classification of hairs) to be covered in a 6-12 months training program through instruction and observation, practical exercises, supervised casework, tests, and competency evaluations.

Sections of the standard include Casework Familiarization, Search, and Recovery of Hair Evidence, Microscopy, Introduction to Hairs – Human and Animal Hairs, Animal Hairs – Introduction to the Recognition of Animal Hairs, Characterization and Assessment of Human Hairs, Hair Examinations – Comparison Microscopy, Hair and DNA, Interpretation and Reporting, and Moot Court and Competency Examination.

At the end of the training program, a successful trainee is capable of forming opinions, presenting and explaining evidence, and understanding the limitations of analytical results and interpretations based upon sound scientific knowledge, validated procedures, and practical experience.

