

Standard Practice for Crime Scene Investigator Training, Continuing Education, Professional Development, Certification, and Accreditation

*Crime Scene Investigation Subcommittee
Crime Scene/Death Investigation Scientific Area Committee
Organization of Scientific Area Committees (OSAC) for Forensic Science*



OSAC Proposed Standard

Standard Practice for Crime Scene Investigator Training, Continuing Education, Professional Development, Certification, and Accreditation

Prepared by
Crime Scene Investigation Subcommittee
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Standard Practice for Crime Scene Investigator Training, Continuing Education, Professional Development, Certification, and Accreditation

1. Scope

1.1 This standard provides foundational requirements for the training, continuing education, professional development, certification, and accreditation of crime scene investigators/unit(s) to include training criteria to competency, documentation and implementation of training, and continuous development. This information is intended for crime scene investigators to help establish a training framework with program structure and content; for crime scene investigators as they acquire and maintain their knowledge, skills, and abilities; and for forensic science service providers to manage and support the continuous professional development of their employees.

1.2 This document outlines minimum training criteria and provides general information, approaches, and resources for crime scene investigators. This standard does not address proficiency testing programs or specific requirements of professional certification and licensure bodies, although the foundational requirements may be essential elements for such programs.

2. Referenced Documents

2.1 ASTM WK40039 Standard for Training, Continuing Education and Professional Development for Forensic Science Practitioners (editorial note: this working standard number will be replaced with the actual ASTM number once adopted)

2.2 Some material in this standard is based on the Technical Working Group for Education and Training in Forensic Science, National Institute of Justice (TWGED, NIJ) Special Report, Education and Training in Forensic Science: A Guide for Forensic Science Laboratories, Educational Institutions, and Students. Developed and Approved by TWGED. Washington, DC: US Dept. of Justice, Office of Justice Programs, National Institute of Justice, 2004. (Available from www.ojp.usdoj.gov/nij)

3. Terminology

3.1 Crime Scene - An area, object or person from which evidence is identified, documented, collected, and/or interpreted. **OSAC Lexicon**

3.2 Crime Scene Investigator - a forensic science practitioner whose responsibility is to use the appropriate combination of knowledge, skills, and experience to undertake one or more of the following tasks in relation to a crime scene investigation: documentation, search for or identify evidence, evidence collection, and preservation of evidence. **OSAC Lexicon**

3.3 Crime Scene Unit - a specialized unit, team, or otherwise designated group whose members are involved in some aspect of crime scene investigation including evaluation, documentation, searching, identification, collection, and preservation of evidence. **OSAC Lexicon**

4. Significance and Use

4.1 This standard outlines criteria and implementation approaches for the training, continuing education, professional development, and certification of crime scene investigators (or accreditation of



crime scene investigation units). The use of this standard can help establish training programs designed to achieve competency in crime scene investigation. The standard also describes measures to maintain competency through continuing education/professional development and certification and/or accreditation.

4.2 This standard can provide a framework for extending learning opportunities to promote and achieve higher standards of professional practice in crime scene investigation.

4.3 Certifying bodies in crime scene investigation impose continuing education and professional development requirements on their license or certificate holders. Such requirements are intended to encourage professionals to expand their knowledge base and keep abreast of new developments. For crime scene investigation certification these requirements might be satisfied through completion of internal training, completion of college, university, or extension coursework or through attendance at conferences and seminars. Individuals in such positions should obtain and document their on-going training and development as required by their certifying body.

5. Documentation

5.1 Training, Education, and Development Record - Documentation is mandatory for the recognition of any claimed training or continuing professional development. The employer shall maintain an official training record for each employee and provide the trainee with a copy of or access to the records. The trainee is encouraged to keep a personal copy of the training record and should do so if not employed by a forensic science service provider. At a minimum, the record shall contain:

5.1.1 Documentation that any position requirements have been satisfied (such as a transcript, if a degree or specific coursework is a prerequisite for the job),

5.1.2 A certificate or statement of successful completion of the initial training, with documentation that all required knowledge, skills, and abilities (KSA's) have been acquired relative to the stated objectives.

5.1.3 Documentation of education, subsequent training, or professional development. This might include any earned academic, continuing education credits, or certificates.

5.2 Documentation clearly showing total number of hours or days involved shall be maintained to achieve or maintain professional development.

6. Training to Competency Programs

6.1 This section applies to the initial training to competency in the field. This standard provides a common framework that shall be used for crime scene investigators to help ensure that crime scene units are meeting minimum criteria.

6.2 Model training criteria are:

6.2.1 Minimum requirement is an Associate's Degree, or equivalent number of hours of post-secondary education, with at least 8 hours of physical science from a regionally accredited university or college. It is strongly recommended, since scientific testing can and does occur at

crime scenes, that the practitioner possess a Bachelor's Degree with science coursework.

6.2.2 Current practical experience and acquired knowledge, skills, and abilities may be substituted when assessing whether a current practitioner meets the minimum educational requirement.

6.2.3 Those individuals already working in crime scene investigation may not be required to complete a newly designed training program; however, it is recommended that when competencies are added to the training program, those individuals undergo competency testing.

6.3 Structure for training is defined for practitioners. In addition to the core specific elements detailed in ASTM WK40039 Standard Practice for Forensic Science Practitioner Training, Continuing Education, and Professional Development Programs, the practitioner shall meet the following training requirements, be tested on the information and demonstrate competency before beginning on-scene independent work.

6.3.1 Minimum crime scene investigation elements shall include the following:

6.3.1.1 history and basic theory of crime scene investigation (e.g. Locard's Theory, use of evidence, defining a crime scene)

6.3.1.2 relevant and current literature

6.3.1.3 nature and properties of evidence types and forms in which it may be discovered

6.3.1.4 response (e.g. safety, security, scene logs, legal considerations)

6.3.1.5 methodologies and validation studies (e.g. documentation, search, enhancement, collection, packaging, preservation)

6.3.1.6 associated tools, equipment, and instrumentation

6.3.1.7 interpretations

6.3.1.8 knowledge of related fields

6.3.1.9 reporting and Testimony

6.3.2 The trainee's progress shall be assessed at appropriate intervals (e.g. end of lectures, lessons, or exercises). Assessment mechanisms shall be chosen to reflect the job duties of the practitioner to include:

6.3.2.1 oral exams

6.3.2.2 written exams

6.3.2.3 exercises with emphasis on those that reflect actual casework situations and levels of difficulty

6.3.2.4 review of mock casework

6.3.2.5 mock trials or oral board



6.3.3 The training might also include learning opportunities such as:

- 6.3.3.1 apprenticeships
- 6.3.3.2 internships
- 6.3.3.3 professional conferences
- 6.3.3.4 instrumental or discipline-specific workshops
- 6.3.3.5 training opportunities held jointly with other agencies
- 6.3.3.6 tours of manufacturing facilities
- 6.3.3.7 research projects

6.3.4 Program structure and content shall include the following documented components:

- 6.3.4.1 learning objectives
- 6.3.4.2 instructor (however named) qualifications
- 6.3.4.3 student (however named) requirements
- 6.3.4.4 detailed syllabus
- 6.3.4.5 performance goals
- 6.3.4.6 periodic assessments
- 6.3.4.7 competency testing
- 6.3.4.8 period of supervised casework/mentorship
- 6.3.4.9 program assessment mechanisms (e.g., instructor and student feedback)
- 6.3.4.10 documentation clearly showing total number of hours or days involved for each subject matter assessed

7 Continuing Education and Professional Development

7.1 All practitioners shall remain current in crime scene investigation through relevant continuing education and professional development activities. Crime scene management and its parent agency shall provide support and opportunities for this continuing professional development. ^{1 2 3}

¹ Education and Training in Forensic Science: A Guide for Forensic Science Laboratories, Educational Institutions, and Students, National Institute of Justice, Office of Justice Programs, Washington, DC, June 2004.

² Strengthening Forensic Science in the United States: A Path Forward, National Academy of Sciences Press, Washington, DC, 2009

³ Continuing education encompasses a broad spectrum of post-secondary learning activities and programs that include: degree credit courses, non-degree career training, workforce training, and formal personal enrichment courses (both on campus and online). The specific learning activities or programs usually issue a certificate, continuing education units (CEUs), or international learning units (ILUs) for the purpose of documenting attendance at a seminar or course of instruction.



7.1.1 A minimum of 48 hours, over the course of two years, of continuing education and professional development shall be obtained by all crime scene investigators. At least 24 hours must be continuing education in crime scene topics.

7.2 Crime scene investigators shall maintain, improve, and broaden their KSA's through facilitated learning opportunities, including college degrees and coursework, conferences, and informal learning opportunities situated in practical exercises.

7.3 Continuing education and professional development shall be structured, measurable, and documented.

7.3.1 Structure—Continuing education and professional development shall include one or more of the following documented components:

7.3.1.1 written goals and objectives

7.3.1.2 subject matter expert instructor(s) in the subject area

7.3.1.3 written syllabus or program description

7.3.1.4 quantifiable elements, such as CEUs, academic credits, number of hours, or points.

7.3.2 Measurement—Assessment mechanisms shall include one or more of the following:

7.3.2.1 oral exams or reports

7.3.2.2 written exams or reports

7.3.2.3 amount of time performing the training activity

7.3.2.4 instructor or presenter evaluations

7.3.2.5 practical exercises with emphasis on those that reflect real casework situations

7.3.2.6 observation of technical performance

7.3.2.7 criteria for passing competency tests.

7.3.3 Documentation—Documentation mechanisms shall include one or more of the following:

7.3.3.1 a procedure (however named) for the documented review of scientific literature to satisfy continuing education and professional development requirements

7.3.3.2 issuance of a certificate of completion or diploma,

7.3.3.3 publishing a paper

7.3.3.4 verifying attendance using an attendance log, or

7.3.3.5 recording of presentation or exercise.

7.4 Implementation—Training and continuing professional development can be implemented in a



variety of ways to maximize opportunities, minimize costs, and ensure high standards of professional practice. Implementation shall include one or more of the following:

7.4.1 Seminars, lectures, professional meetings, and in-service classes also add to the professional development of forensic science practitioners. Content and attendance shall be documented.

7.4.2 Continuing education and professional development shall include external training.

7.4.3 Continuing education and professional development can be delivered in-person, online, self-directed or computer-based, including, but not limited to the following:

7.4.3.1 courses taught at the post-secondary educational level

7.4.3.2 equipment operation or maintenance courses taught by vendors

7.4.3.3 in-service classes conducted by the employer

7.4.3.4 in-service training taught by external providers

7.4.3.5 participation in relevant scientific meetings or conferences (e.g., delivering an oral or poster presentation, attending a workshop, providing reports on conferences)

8 Certification and Accreditation

8.1 All crime scene units shall either have all crime scene investigation personnel certified or the crime scene unit shall be accredited. Ideally, all personnel will be certified and the crime scene unit will be accredited.

8.1.1 Certification

8.1.1.1 An individual's certification shall be completed within 2 years of becoming eligible for certification by a crime scene investigation certifying body. The certifying body shall be accredited to ISO 17024 or accredited by a qualifying ISO 17011 body or equivalent.

8.1.2 Accreditation

8.1.2.1 A crime scene unit's accreditation shall be to the ISO 17020 or ISO 17025 standards or equivalent, recognized standard from a Standards Development Organization (SDO).

8.2 This requirement shall be met no later than 5 years after the adoption of this standard.

8.3 Crime scene management and its parent agency shall provide funding, support, and opportunities for certification and/or accreditation.

9 Administration

9.1 The forensic science service providers, crime scene units, and their parent agencies shall establish a process to oversee, coordinate, and document all training, testing to competency, and continuing



professional development of forensic science practitioners. Competency testing should be used as a measure of assessing the necessary KSA's of a forensic science practitioner. Forensic science service providers and their agencies may be better equipped to implement continuing professional development to access opportunities and programs at no or reasonable cost, where permitted by agency policy or law.

9.2 Forensic science practitioners and their supervisors should be allocated time and funding for continuing education, professional development, and mentorship. Management may need to adjust resources and staffing to maintain casework loads.

10 Keywords

10.1 Continuing Education, Professional Development, Competency, Training, Forensic Science, Certification, Accreditation, Crime Scene Investigation, Crime Scene, CSI