Forensic Science Regulator

Overseeing Quality

Code of Practice and Conduct

Bloodstain Pattern Analysis

FSR-C-102

Issue 2

1. Introduction....5
2. Scope....5
3. Implementation....5
4. Modification....5
5. Terms And Definitions....6
5.2 BPA Terminology....7
6. Personnel....7
6.1 Qualifications....7
6.2 Competency Levels....7
6.3 Training....8
6.4 Competency Assessment....11
6.5 Job Descriptions....12
7. Accommodation and Environmental Conditions....12
8. Selection of Test Methods....13
9. Validation (ISO/IEC 17025:2017 sec. 7.2.2; Codes sec.21.2) Inspection Methods and Procedures (ISO/IEC 17020:2012 sec. 7.1.1–7.1.4)....15
9.2 Verification....16
9.3 Uncertainty of Measurement....17
9.4 Equipment....17
9.5 Measurement Traceability....18
9.6 Assuring the Quality of Test and Calibration Results (ISO/IEC 17025:2017 sec. 7.7); Inspection, Methods and Procedures (ISO/IEC 17020:2012 sec. 7.1.5) Codes sec.27) 18
10. Reporting Results (ISO/IEC 17025:2017 sec. 7.8); Inspection Reports (ISO/IEC 17020:2012 sec. 7.4.2) (Codes sec.28)....19
11. Acknowledgements....20
12. Review....20

13. References 21

14. Abbreviations and Acronyms 24

15. Glossary 24

16. Further Reading 26

1. Introduction

1.1.1 This appendix provides further explanation of some of the requirements of the Forensic Science Regulator's Codes of Practice and Conduct (the Codes) specifically pertaining to bloodstain pattern analysis (BPA).

1.1.2 This appendix should be read alongside the Codes, ISO/IEC 17020:2012, ISO/IEC 17025:2017, ILAC-G19:08/2014 and UKAS LAB 13: 2019 and will generally cross reference to the Codes, ISO/IEC 17025:2017 and ISO/IEC 17020:2012 given in parentheses where appropriate.

2. Scope

2.1.1 This specifically relates to the classification, identification and/or interpretation and evaluation of bloodstain patterns, including bloodstain pattern analysis at incident scenes and in the laboratory.

2.1.2 Knowledge of searching and screening techniques for bloodstains is a prerequisite to the identification of bloodstains.

3. Implementation

3.1.1 This appendix is available for incorporation into a provider's quality management system from the date of publication.

3.1.2 The Forensic Science Regulator required that the Codes and compliance to the requirements set out in this appendix against the specified ISO/IEC 17025 / ISO/IEC 17020 clauses were included in the provider's schedule of accreditation by October 2017 as detailed in the statement of requirements in the Codes.

4. Modification

4.1.1 This is the second issue of this document. Parts of this document which have been significantly altered from the previous issue are highlighted in grey and are listed at 4.1.2. The nature of these changes is not detailed, but changes such as those required to correct spelling and grammar and to update references which are altered by the passage of time are not included.

4.1.2 The following paragraphs contain substantive changes from the previous issue of this document: Copyright; 4; 5.1.2,3; 5.2 (new), 6.1.1; 6.2.1,2; 6.3.1,2,3,4,5,6; 6.4.1,4,5,6,7,8; 6.5.2; 7.1.1; 8.1.1,3,5,6; 9.1.1,3,4,5,6,7,8; 9.2.1; 9.3.2;; 9.4.1; 9.5.1,3; 9.6.1,2,4,5,6; 10.1.1,2,3; 11.1.1; 13; 14; 15; 16

4.1.3 The Regulator uses an identification system for all documents. In the normal sequence of documents this identifier is of the form 'FSR-#-###' where (a) the '#' indicates a letter to describe the type or document and (b) '###' indicates a numerical, or alphanumerical, code to identify the document. For example, this document is FSR-C-102. Combined with the issue number this ensures each document is uniquely identified.

4.1.4 If it is necessary to publish a modified version of a document (e.g. a version in a different language), then the modified version will have an additional letter at the end of the unique identifier. The identifier thus becoming FSR-#-####.

4.1.5 In all cases the normal document bearing the identifier FSR-#-###, is to be taken as the definitive version. In the event of any discrepancy between the normal version and a modified version then the text of the original shall take precedence.

5. Terms And Definitions

5.1.1 The terms and definitions set out in the Codes apply to this appendix. The terms and definitions employed in this appendix are listed in the Glossary at section 15 of this appendix.

5.1.2 The terminology is the language used in International Standards with regards to the use and meaning of the words, 'shall', 'should' and 'may':

a. The word 'shall' has been used in this document where there is a corresponding requirement in ISO/IEC 17025, ISO/IEC 17020 or the Codes which is mandatory.
b. The word 'should' has been used to indicate generally accepted practice where the reason for not complying or any deviation shall be recorded.
c. The word 'may' has been used for recommendations in blood pattern analysis – recommendations have been used to indicate what ideal practice is when it is practicable.

5.1.3 The term ‘forensic unit’ (FU) refers to all providers of forensic science, whether commercial, public sector or internal to a police service. FUs can be small teams in larger organisations, sole practitioners or large providers and can be instructed by the prosecution or the defence.

5.2 BPA Terminology

5.2.1 It is recommended that FUs use terms and definitions defined in ASB Technical Report 033 as good practice. Any FU-specific deviations or alternative phraseology shall be defined and explained in validation reports and when reporting bloodstain pattern analysis.

6. Personnel

(ISO/IEC 17025:2017 sec. 6.2; ISO/IEC 17020:2012 sec. 6.1.1; Codes sec.18 and 19)

6.1 Qualifications

6.1.1 Minimum qualifications and experience for bloodstain pattern practitioners shall be sufficiently defined and documented by the FU. A FU may choose to align with the requirements set out in ANSI/ASB Standard 032 ‘Standards for a Bloodstain Pattern Analyst’s Training Program’.

6.2 Competency Levels

6.2.1 Competency levels shall be defined and may be based on the following levels:

a. Analyst – competency in the recognition, preservation and documentation of bloodstain pattern analysis.
b. Expert – competency of an analyst is a pre-requisite. Competency in the analysis, evaluation, interpretation and reconstruction of bloodstain pattern evidence, including the reporting of opinion.
c. Mentor/Trainer – an expert with the competency to train and mentor personnel.

6.2.2 The FU shall formally document the authorisation process for bloodstain pattern analysis (BPA) practitioners and this shall specify the competency level at which they are authorised to work.

6.3 Training

6.3.1 The training and ongoing professional development requirements for bloodstain pattern practitioners shall be documented for all competency levels as defined by the FU.

6.3.2 The training required to develop competency shall include instruction in all facets of BPA relevant to the desired level of competency. The topics of training should include the following for the competency levels defined in section 6.2.1.

Analyst

6.3.3 Analyst training should include the following:

a. Recognise and describe the elements of their quality system.
b. Understand accreditation as it relates to BPA, including validation processes and proficiency testing (PT).
c. Health and safety issues associated with BPA.
d. The history of BPA.
e. Scientific principles as they relate to BPA.
f. The scientific method and its application to BPA experimentation.
g. The principles of physics and fluid mechanics as they relate to BPA.
h. Bloodstain classification and terminology.
i. Bloodstain pattern principles and their application to BPA.
j. Blood composition and related human anatomy and physiology.
k. Injury and wounding, and their relationship to bloodstain pattern formation.
l. The effects of surface characteristics on the resulting bloodstain patterns.
m. The effect of environmental factors on the formation and/or drying time of bloodstain patterns.
n. The characteristics of blood dynamics, including drop formation, oscillation, droplet flight paths, accompanying drops and secondary spatter.

o. The relationship between the physical appearance of bloodstain patterns (size, shape, distribution, and location) and the mechanism by which they were created.
p. The potential impact of searching methods, chemical testing, and enhancement techniques on BPA and other evidence types.
q. Methods of documenting bloodstain pattern analysis, for example, video, photography, sketching and note taking.
r. Methods for the preservation, collection and representative sampling of bloodstain pattern analysis.
s. The relationship between bloodstain pattern analysis and other types of evidence.
t. Development of examination and search strategies.

6.3.4 For taking images in situ or for analytical/ interpretation use practitioners should understand:

a. Image quality and resolution and conditions required to be able to demonstrate the features of interest clearly; and
b. How any processing undertaken could affect the image.

Expert

6.3.5 In addition to the topics for the analyst, training of an expert should include the following:

a. Mathematical methods in BPA.
b. Methods for the measurement of individual bloodstains.
c. Trigonometric methods for impact spatter origin determination.
d. Bloodletting injuries and their potential effects on the potential bloodstain patterns.
e. The application of BPA to the reconstruction of bloodletting events.
f. The reporting of BPA findings, conclusions, and opinions by written and/or verbal methods including the limitations of BPA and the application of experiments and reconstruction where necessary.
g. How to review case information in order to aid BPA, understanding the limitations of that information, such that some may be missing or incorrect.

h. The legal obligations (FSR-I-400) pertaining to BPA, including court rulings that are relevant to interpretation.

i. Hypothesis testing and evaluation of hypotheses using reconstructive experiments (hypothesis testing should be unbiased and attempt to test both prosecution and any reasonable defence hypotheses, either known or unknown).

j. An awareness of cognitive effects that may influence case assessment, interpretation and opinions, see FSR-G217 and Zajac et al. (2015) and procedures available to minimise effect of contextual bias on interpretation and evaluation, for example, blind assessment.

k. Laboratory experimentation and various BPA case scenarios factoring in error rates, limitations / reliability (Laber 2014).

6.3.6 The practitioner shall be aware of the relevant texts, journals and other professional literature (for example, OSAC BPA bibliography), in order to understand and maintain relevant knowledge in BPA.

Mentor/Trainer

a. A mentor/trainer shall be an active practitioner in the field of BPA, with a minimum level of ongoing casework experience as a qualified bloodstain pattern practitioner as defined by the FU or relevant professional body, such as the International Association of Bloodstain Pattern Analysts (IABPA).

b. In addition to casework a BPA mentor/trainer shall have an awareness of research, new developments and published papers. This should be recorded as part of their continuing professional development.

6.3.7 Each area of instruction shall have documented objectives and shall have a formal assessment of the trainee's knowledge and/or competency (for example, written test, practical test, PT and/or oral test).

6.3.8 During the course of training, a BPA trainee and trainer/mentor shall document and participate in a mentorship. This mentoring programme should include, but is not limited to, the evaluation of the required objectives, the review of completed casework, supervised BPA and the observation of court testimony.

6.3.9 A training record shall be kept for each trainee.

6.4 Competency Assessment

6.4.1 The FU shall determine and document the requirements for competency and ongoing competency for each role, as set out in section 6.3.2, including those authorised to give opinions and interpretations (UKAS LAB 13). This may include using the principles set out in the ANSI/ASB Standard 032.

6.4.2 Before being authorised to undertake analysis or render any expert opinion a BPA trainee shall participate in and successfully complete an objective assessment of their competency. This assessment shall be defined within a documented competency framework (competency demonstrated through peer reviews, regular competency and PTs).

6.4.3 Records of the assessment, and subsequent authorisation, shall be maintained.

Training and Experience of Practitioners

6.4.4 The FU shall outline the training provided to practitioners, their range of experience and competency in terms of case numbers/types involving BPA. This could also include a record of participation by practitioners in conferences, CPD, membership of IABPA or equivalent body.

Casework Experience

6.4.5 The FU should outline the numbers and type of BPA cases dealt with at the site, identify any issues that may have arisen in previous years, for example, in terms of quality management system non-conformances, and use these for training, development and method/process improvements. Where case studies are deemed to be of benefit to the wider BPA community the FU should seek to publish their findings.

Continuing Education Requirements for a BPA Practitioner

6.4.6 BPA practitioners shall maintain their competency through ongoing regular casework according to the guidelines laid down by the FU, including specifying the minimum number of cases examined/reviewed per year and the period at which competency lapses, and defining what is required to regain competence. FUs may choose to base their guidelines on those published by the IABPA, the OSAC BPA sub-committee and the ANSI/ASB standards; sole providers may choose to base their guidelines based on ANSI/ASB standard 032.

6.4.7 Ongoing competence should be supported by continual professional development (CPD) and knowledge transfer including, for example, completion of PTs, review of case studies, scene debriefs, professional conferences, internal and external seminars and/or workshops.

6.4.8 It is recommended that personnel performing BPA as an expert belong to at least one professional organisation that covers BPA.

6.5 Job Descriptions

(ISO/IEC 17025:2017 sec. 6.2.4; ISO/IEC 17020:2012 sec. 5.2.7)

Scope of Work Relating to Bloodstain Pattern Analysis

6.5.1 The job description for a bloodstain pattern practitioner shall be specified. This could be covered in a wider job description or other specified documentation.

6.5.2 Duties may include:

a. An awareness of and compliance with the required quality standards and obligations under accreditation;
b. Collection and preservation of bloodstain patterns;
c. Documentation of bloodstain patterns;
d. Evaluation and interpretation of bloodstain patterns;
e. Case-specific experimentation;
f. Reconstruction;
g. Report writing; and
h. Presentation of findings in court.

7. Accommodation and Environmental Conditions

(ISO/IEC 17025:2017 sec. 6.3; ISO/IEC 17020:2012 sec. 6.2.1; Codes sec.20)

7.1.1 The FU shall:

a. Specify conditions required for the safe handling of bloodstained items;
b. Specify procedural guidelines for best practice to preserve and avoid contamination (FSR-G-206 and FSRG-208) of bloodstained items; and

c. Have access to facilities to perform fit for purpose case-specific examination and experimentation.

8. Selection of Test Methods

(ISO/IEC 17025:2017 sec. 7.2.1; ISO/IEC 17020:2012 sec. 7.1; Codes sec.21.1)

8.1.1 End-user requirements for bloodstain pattern analysis shall be described.

8.1.2 The appropriate methods and their limitations shall be specified and documented.

Examining bloodstain patterns

8.1.3 Techniques and strategies for examining BPA allow the scientist to:

a. Devise and develop the examination strategy taking into account other evidence types;
b. Preserve bloodstain evidence, for example, the management of fragile or vulnerable bloodstain patterns;
c. Accurately record any items that will not be available for future examination or be altered during testing; and
d. Complete records to enable a full independent review of the findings and to facilitate any future case review.

Documenting bloodstain patterns

8.1.4 Methods that can be used for documenting blood patterns include:

a. Photography;
b. Sketching;
c. Measurements;
d. Note-taking; and
e. Image capture (for example, video, 3D imaging).

Identification of Individual Patterns

8.1.5 Methods to identify individual patterns include:

a. Detertmining the basis for classification (OSAC Bloodstain Pattern Classification Process Map);

b. The use of recommended terminology (ASB Technical Report 033) ;
c. Determining the relationship between an individual bloodstain pattern with its causal mechanism;
d. The recognition of physical, physiological, wetting and chemical altering effects;
e. The determination of directionality;
f. The interpretation of voids, shadowing and limiting angles;
g. The determination of valid conclusions from bloodstain pattern boundaries;
h. The determination of the area of origin;
i. Calculating an area of origin of blood spatter by:
    i. string method;
    ii. tangent method;
    iii. directional analysis;
j. Consideration of the limitations of attempting to determine the sequence, aging and drying times of bloodstains;
k. Using BPA as a basis for sample selection for testing (for example, DNA profiling);
l. Use of assistive technology, such as, microscopy, specialist lighting and scanning to examine and evaluate bloodstains;
m. Securing wetted items to minimise alteration of bloodstain patterns; and
n. Awareness of the difficulties commonly encountered in the examination of bloodstain patterns (for example, bloodstains on dark surfaces, small bloodstains) and the consideration for additional searching.

Enhancing or Revealing Bloodstains

8.1.6 Enhancing or revealing bloodstaining requires:

a. An awareness of the range of techniques available to use (for example, luminol, leuco crystal violet, amido black, leucomalachite green, acid yellow);
b. An understanding of what other biological/chemical material other than blood is revealed; and

c. consideration of any specialised conditions, such as substrate, temperature or lighting required and limitations or effect when sub optimal conditions exist.

9. Validation (ISO/IEC 17025:2017 sec. 7.2.2; Codes sec.21.2) Inspection Methods and Procedures (ISO/IEC 17020:2012 sec. 7.1.1–7.1.4)

9.1.1 The Regulator's requirements for validation are set out in the Codes (FSR-C-100) and associated validation guidance (FSR-G-201). FUs may find the specific validation requirements for BPA as defined in ANSI/ASB Standard 072 to be useful in assisting them to meet the requirements in the Codes. BPA is an interpretive method; however, it is based upon well-established scientific principles, supported by scientific literature extending back over 100 years.

9.1.2 The main areas of published scientific study that form the foundation of BPA include the following:

a. Aging blood.
b. Biomechanics.
c. Clothing and fabric.
d. Environmental factors.
e. Expirated (exhaled) blood.
f. Firearms.
g. Fluid dynamics.
h. Impact patterns.
i. Maths and physics.
j. Other patterns.
k. Reconstruction.
l. Scientific theory.
m. Searching and enhancement.
n. Sequencing.
o. Software.
p. Target surface.
q. Transfer patterns.

9.1.3 Each of these areas is supported by numerous key scientific papers listed in the OSAC BPA Bibliography.

9.1.4 It is therefore considered that the principles underpinning BPA are soundly based on well-established principles and scientific peer-reviewed methodology. The FU shall document and demonstrate that it has validated its methods for providing an opinion for specified blood patterns using known source material.

9.1.5 As part of validation the FU shall identify the methods to be used in BPA and confirm that they are within the scope of the published scientific literature.

9.1.6 Any novel method used by the FU that is not referenced in the peer-reviewed scientific literature (for example, a new software method) shall require validation. Following completion of a validation study the FU should seek to publish their findings for the benefit of the wider BPA community and to allow others to verify and build on their work.

9.1.7 Computer-assisted methods (and software used) shall be validated.

9.1.8 The FU shall demonstrate that the procedures used generate consistent and valid results. This shall reflect the various aspects of BPA undertaken at the laboratory and at incident scenes. In general these should comprise:

a. Identification of assorted bloodstains on a target surface – drips, wipe, etc;
b. Identification of assorted blood patterns on a target surface – impact spatter, cast-off, etc;
c. Identification of the angle of impact of assorted blood spots on a target surface;
d. Identification of the area of convergence of an impact pattern;
e. Stringing/tangent method identification of the area of origin (if method is used); and
f. Interpretation exercise based on a case scenario and blood patterns on an item(s).

9.2 Verification

9.2.1 Verification is based on the demonstration that practitioners can provide consistent, reproducible and valid results using previously validated or verified peer reviewed methods. These results shall be comparable with the results of

other competent practitioners. For FUs with multiple sites carrying out BPA, this verification shall be carried out at each site.

9.2.2 Verification of the methods and processes shall as a minimum use known source / simulated samples and shall be sent to practitioners across the complete range of competence and experience at the site(s) to demonstrate consistency and valid outcomes. The acceptance criteria for the exercise shall be clearly defined in advance.

9.2.3 The validation document is a living document and should be reviewed annually and updated with the results for example of collaborative exercises, PTs, audits and non-conformances.

9.3 Uncertainty of Measurement

(ISO/IEC 17025:2017 sec. 7.6; ISO/IEC 17020:2012 sec. 6.2.7; Codes sec.22)

9.3.1 Those methods that require an estimation of uncertainty of measurement shall be listed. As a minimum the components that contribute to the uncertainty of measurement (Laber et al, 2014) shall be determined, for example, for a length measurement, if critical.

9.3.2 These may include:

a. Area of origin calculations;
b. Size, shape and distribution measurements of individual bloodstains;
c. Directionality measurements; and.
d. Relevant performance data from PTs.

9.4 Equipment

(ISO/IEC 17025:2017 sec.6.4; ISO/IEC 17020:2012 sec. 6.2.1, 6.2.13; Codes sec.24)

9.4.1 The types of equipment used for BPA (see, for example, OSAC Guidelines Section 3: Equipment, Materials and Reagents) and their calibration requirements shall be specified. These may include equipment for distance measuring, angle measuring, and magnification.

9.4.2 Requirements for the use and validation of software programs for BPA shall be specified. Software programs may include:

a. Directional analysis software; and
b. Image analysis software.

9.5 Measurement Traceability

(ISO/IEC 17025:2017 sec. 6.5, Annex A; ISO/IEC 17020:2012 sec. 6.2.7, 6.7.8 and Codes sec.25). Control of Data (Codes sec.23)

9.5.1 The process to create reference material comprising bloodstain patterns that are created by the FU and used as working standards for bloodstain identification shall be documented. This process shall ensure that the creation of the stain patterns are witnessed and catalogued by competent practitioners.

9.5.2 The requirements for the use of pattern exemplars for interpretation shall be specified.

9.5.3 The requirements set out in the Codes for control of data and for reference collections and databases apply. Original images shall be retained according to the FU's retention and control of data procedures and in accordance with relevant legislation.

9.6 Assuring the Quality of Test and Calibration Results (ISO/IEC 17025:2017 sec. 7.7); Inspection, Methods and Procedures (ISO/IEC 17020:2012 sec. 7.1.5) Codes sec.27)

9.6.1 A procedure for an independent assessment of any bloodstain pattern interpretation, evaluation and fulfilment of the BPA strategy by a competent practitioner shall be specified.

9.6.2 Methods used, data and records retained such as photographs should allow for retrospective full independent analysis/ review in the future (retention of serious crime related data can be required for 30 years).

9.6.3 A procedure for addressing any disagreements between the practitioner and the independent reviewer shall also be specified.

9.6.4 The FU shall have a documented audit schedule specifying the range of blood pattern activities and practitioner roles that will be audited per annum and per accreditation cycle. This may include the attendance at a specified frequency to audit the activities undertaken at the incident scene. This audit activity should be tied into the competency review for each BPA practitioner along with file audits containing good quality images so that the interpretation of the blood patterns is possible.

9.6.5 The FU shall undertake at least one BPA PT per site per year to test areas from stain measurement to interpretation and opinion as specified by the FU's PT schedule.

9.6.6 The FU shall establish and document a competency review framework that fulfils the requirements of accreditation. (see 6.4.4 and 6.4.5).

10. Reporting Results (ISO/IEC 17025:2017 sec. 7.8); Inspection Reports (ISO/IEC 17020:2012 sec. 7.4.2) (Codes sec.28)

10.1.1 Any FU-specific requirements for using standardised terminology for reporting bloodstain pattern analysis shall be defined and deviations and alternative phraseology from the terminology shall be explained in reports

10.1.2 It is recommended that a BPA results/summary report or statement includes any information that is relevant to BPA (for example, see ANSI/ASB Standard 031), such as the following:

a. Case information, including the background information as supplied during the course of the investigation and analysis, such as medical/DNA reports, environmental conditions, description of items and/or materials received.
b. The limitations of BPA from digital media.
c. Data collated in the course of the examination that provide the basis for subsequent conclusions; these could include:
    i. The location where observations are recorded;
    ii. Measurements, such as areas of origin, room size, heights of bloodstains and distribution of a bloodstain pattern.

d. Sketches, scene diagrams, scans, video and plans. If any reconstructive visual aid is used, such as 3D representation or simulation, great care shall be taken to mitigate against the potential for bias. If reconstructive visual aids are to be used, they should demonstrate both the prosecution and defence propositions.

e. Descriptors of the reported stains and patterns.

f. The results of testing conducted to identify blood.

g. The test parameters and results of any chemical enhancement of bloodstains.

h. The location of collected stain samples relevant to the BPA.

i. Conclusions and interpretations. When an opinion is reported, it shall be clearly marked as such.

j. The basis upon which the opinion has been made, along with any relevant reference(s) and detail of the independent review.

k. Any information that is relied on to form an opinion and that could alter the opinion if it were to change should be stated.

10.1.3 For England and Wales statements provided for court purposes must comply with the legal obligations as set out in the Criminal Procedure Rules and Criminal Practice Directions. Legal obligations are set out FSR-I-400 and disclosure requirements in the CPS Guidance for Experts on Disclosure, Unused Material and Case Management. Example of statement formats are set out in FSR-G-200 and FSR-G-225.

11. Acknowledgements

11.1.1 The Regulator would like to thank Cellmark Forensic Services, Eurofins Forensic Services, Forensic Science Ireland, Forensic Science Northern Ireland, Principal Forensic Services, Scottish Police Authority Forensic Services, Spattered Ltd and the Forensic Science Regulation Unit (FSRU) for the review and update of this appendix to the Codes.

12. Review

12.1.1 This document is subject to review in accordance with the Codes and other appendices.

12.1.2 Please send any comments to: www.gov.uk/government/organisations/forensic-science-regulator or email: FSREnquiries@homeoffice.gov.uk

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14. Abbreviations and Acronyms

Abbreviation	Meaning
AAFS	American Academy of Forensic Sciences
ANSI	American National Standards Institute
ASB	AAFS Standards Board
BPA	Bloodstain Pattern Analysis
FSR	Forensic Science Regulator
IABPA	International Association of Bloodstain Pattern Analysts
ISO	International Organization for Standardization
NIST	National Institute of Standards and Technology
OSAC	Organization of Scientific Area Committees
PT	Proficiency testing
PTs	Proficiency tests

15. Glossary

Active Practitioner

An individual who is actively involved in bloodstain pattern training and/or BPA casework and/or performing technical reviews of BPA casework.

Bloodstain Pattern Analysis Analyst

An individual who is an active practitioner in the field of BPA and is competent in the recognition, preservation and documentation of bloodstain pattern evidence.

Bloodstain Pattern Analysis Trainer/Mentor

An individual who is an active practitioner in the field of BPA with an appropriate level of casework experience as a qualified BPA analyst and having fulfilled all previously stated requirements for an expert BPA analyst who is competent to train and mentor other BPA practitioners.

Bloodstain Pattern Analysis Expert

An individual who has successfully completed the prescribed course of study and is competent in the analysis, evaluation, interpretation and reconstruction of bloodstain pattern evidence, including the reporting of opinion.

Competency Test

A method used to demonstrate the successful completion of a BPA trainee's course of study and for checking ongoing competence as a BPA practitioner. The competency test(s) may be administered incrementally and/or cumulatively.

Forensic Unit

A forensic unit is a legal entity or a defined part of a legal entity that performs any part of the forensic science process. [SOURCE: ILAC-G19:08/2014 Modules in a Forensic Science Process.]

Mentorship

A programme administered under the direction of a competent bloodstain pattern practitioner during the course of a BPA trainee's training.

Professional Organisations/ Bodies

Organisations recognised by the general scientific community that devote a portion of their subject matter to the science of BPA, for example, the American Academy of Forensic Sciences (AAFS), the Canadian Society of Forensic Science (CSFS), the International Association of Bloodstain Pattern Analysts (IABPA), the International Association for Identification (IAI) and the Chartered Society of Forensic Sciences (CSFS).

16. Further Reading

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