

TENNESSEE BUREAU OF INVESTIGATION
Forensic Services Division

Violent Crime Response Team Standard Operating Procedures
Documentation of Blood Stain Evidence



10. VCRT Procedures

10.16 Documentation of Bloodstain Pattern Evidence

10.16.1 Scope

Although the TBI Crime Laboratory does not perform bloodstain pattern interpretations, the documentation of bloodstain pattern evidence at a crime scene may yield useful information about the scene.

10.16.2 Definitions

Refer to VCRT 11.0 Definitions and Abbreviations

10.16.3 Chemicals and Reagents

Phenolphthalein
Ethyl alcohol
Tetramethylbenzadine
3% hydrogen peroxide solution (for presumptive testing of suspected bloodstains).

Refer to VCRT Procedures 10.3 Phenolphthalein and 10.4 Tetramethylbenzadine for testing protocols.

10.16.4 Equipment and Supplies

Photography equipment
Note taking supplies
Ruler

10.16.5 Procedure

Documentation of bloodstain evidence must provide orientation, location, size and position of the bloodstain evidence with respect to the overall crime scene. This must be accomplished through a combination of note-taking, diagrams, and photographs. The proper, complete documentation of bloodstain evidence is vital for later interpretation of bloodstain patterns at the crime scene.

Notes

Descriptions of the bloodstain patterns, its size, and location may later assist with bloodstain pattern interpretation. Areas void of bloodstain patterns should be

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clearly described in the notes. The notes are also the primary method to record stains that are still wet. Environmental factors should be carefully recorded.

Diagrams

Crime scene diagrams should include the location of bloodstain patterns and the appropriate measurements to accurately locate these stains within the overall scene. Separate diagrams can be used to document the complex bloodstain patterns.

Photography

The photographic documentation of bloodstain patterns relies upon both the context and the content of the photograph. Many bloodstain patterns of interest will be small in size and consequently difficult to photograph. After the initial photography of the scene, marking the bloodstains of particular interest with an identifier that will be observable in the overall photographs will assist in placing that stain in its proper context. A close up photograph showing the necessary detail of the pattern and associating the identifier will capture the required content of the bloodstain pattern. The close-up photographs should be taken such that the captured images are parallel to the surface of the pattern. A scale shall also be in the images to allow for production of 1:1 photographs. A scale may also be included in medium range photographs to demonstrate overall pattern size and distance from reference objects, e.g. floor, ceiling, etc.

10.16.6 Results and Conclusions

Any photography or notes may be forwarded to a recognized expert in bloodstain pattern analysis for subsequent interpretations and opinions by that individual.

10.16.7 Reporting

The TBI does not issue reports on bloodstain pattern analysis.