

## J18 Decision Making When Dealing With Blood Soaked Documents

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The goal of this presentation is to present for discussion the decision-making process involved in the forensic document examinations of blood soaked documents.

This presentation will impact the forensic science community by reinforcing the knowledge that critical thinking is necessary in dealing with blood soaked documents, particularly in how those decisions may affect the presentation of the documents within the judicial system.

Death investigations may involve document evidence which is obscured by products of decay, blood and bodily fluids, and other environmental substrates. The forensic document examiner (FDE) is faced with a decision-making process which must take into consideration the items which comprise the documents, and what role these items may play in the future of the case at hand, biological safety factors, and the limitations of the laboratory equipment available. Investigators who submit items to a crime laboratory are asked only for brief information about the items and requested examinations. When dealing with deteriorating documents, more information is necessary, and typically involves discussions with the investigator. The final product of the FDE work will likely be hardcopy prints made from digital images from cameras, video images, or scanners. The use of these products in a courtroom, or in discussions with those involved in the investigation, may be a factor in deciding what examinations will be conducted. Blood and body fluids present a potential safety risk, but, their removal allows for future viewing and presentation of the original exhibits. A complicating factor is that removal of contaminants may be deleterious to the items which comprise the exhibits. It is therefore necessary to gather as much information about the documents as is feasible before proceeding with examinations beyond nondestructive imaging.

The case presented for discussion involved a two-page document which was handwritten, and for which no pen was available as the likely source of the ink. The color of the ink was important. The documents were heavily stained with body fluids which obscured roughly two-thirds of the information. Infrared imaging yielded good results, but not the critical words and phrases that mattered to the investigator and the decedent's family. Microscopic examinations provided only limited information about the pen ink. A careful evaluation of the effects of the body fluids allowed decisions to be made about subsequent limited testing of the ink-blood-paper composite. Limited testing and infrared imaging followed, and allowed for a decision to remove the blood and still retain readable original documents. The resultant images and documents allowed for every word on the two pages to be read. Images of the original documents as the examinations proceeded were also kept in file. Black and white composite infrared fluorescence images, and grayscale images of the resultant documents, were provided to the investigator for his information and for discussions with the decedent's family.

Document Examination, Death Investigation, Obscured Writing