



C31 On-Camera vs. Off-Camera Flash

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Learning Overview: After attending this presentation, attendees will have a better understanding of the utility of both the on-camera (pop-up) flash and off-camera flash to properly photograph postmortem examinations.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by detailing various scenarios in which the on-camera flash can provide a suitable alternative to an off-camera flash.

With insufficient ambient light and no external flash unit available, a forensic photographer will need to understand the on-camera flash's function and limitations when utilizing it as a primary light source. This presentation will discuss the appropriate usage of a camera's pop-up flash. Referencing the camera's owner's manual will indicate the maximum illumination distance for the built-in flash for any particular camera model. While this distance may minimize the on-camera flash's utility for crime scene photographs where wide-angle photographs are necessary, autopsy photography operates at much closer distances, typically within the range of the on-camera flash. For many years, professional forensic photographers have relied upon an off-camera flash connected with a flash cord to produce superior lighting compared to the camera's built-in flash. In most cases, newer camera models have an on-camera flash that is powerful enough to accommodate many autopsy photography scenarios. The majority of autopsy findings are photographed at close range and well within the maximum range of the pop-up flash and do not require the extra power provided by an external flash unit. By using the camera's on-camera flash, the photographer's other hand is free to stabilize the camera or position the scale and labels used for photographic documentation.

While many autopsy examination findings can be effectively photographed with the camera's on-camera flash, some scenarios will still benefit from an off-camera flash and flash cord. Glare remains a challenge for wet and reflective surfaces. In these instances, an off-camera flash allows for oblique lighting that will control the direction of reflected light. By placing the flash at a 45-degree angle from the subject matter, the strobe's light will bounce past the lens instead of directly in it. Without oblique lighting, the photographer may be forced to shoot at undesirable angles to allow the light to bounce past the lens, which may result in perspective distortion. Having a better understanding of these lighting factors can equip forensic photographers to effectively and efficiently provide photographic documentation during forensic examinations.

Flash, Photography, Pop-Up