

## **OSAC REVIEW SPRING 2025 (OSAC = Organization of Scientific Area Committees)**

**NAME OSAC UPDATE #11: ASTM E3148-18** (Reapproved 2023)

### **Standard Guide for Postmortem Facial Image Capture**

This Guide was developed in part by the OSAC subcommittee Facial and Iris Identification. It subsequently completed the ASTM (American Society for Testing and Materials) consensus-based standards development process and was placed on the OSAC Registry. As a guide, many components of this standard are recommendations, and best practices, but not required.

*This is a brief summary of ASTM E3148-18, and as such may leave out or misinterpret important details. **See link to full document (below).***

AAFS developed checklists to assist in adoption of many standards. The checklist for this document is a rehash of the document in spreadsheet form but may be useful to some offices (**see link to checklist below**).

**Value:** Highly recommended given the potential future importance of facial recognition systems. Suggested as required reading for all staff who photograph decedents in the morgue or at the investigative scene. Could also be linked to office policies regarding photography and used as part of training new investigators or autopsy assistants. The standard guide includes excellent diagrams that could be displayed in the autopsy room.

**SCOPE:** Facial recognition systems can provide potential candidates for unidentified decedents. For facial recognition systems to operate properly, facial images must be optimally oriented and meet certain quality criteria.

Postmortem conditions that limit the useability of facial images: Extensive trauma, obscuring matter such as blood and dirt, decomposition.

## **IMAGE CAPTURE HIGHLIGHTS IN CONTROLLED ENVIRONMENT SUCH AS A MORGUE:**

- It is advised to postpone removing vitreous humor until after facial photography, as removal can distort the shape of the eye globe.
- Facial coverings, debris, and blood should be removed. Any trauma should be minimized (for example reapposing edges of lacerations.)
- If a prosthetic such as a denture was likely used during life, keep it in place for facial photographs. If eyeglasses were typically worn, photograph with and without.
- The camera should be positioned directly over the face, centered on the nose, at a distance of 4-8 feet from the body, to minimize distortion. A fixed camera mount is suggested, as is a means of elevating the photographer above the decedent, such as a step ladder. “Standing beside the gurney and reaching over the decedent’s face is not recommended”. The width of the face should fill about 50% of the image width.
- Decedent’s head should be in a vertical position with the jaw closed, and the eyelids parted. Chin position should not be elevated or dropped. A body block can be used to adjust the position of the head. The top of the shoulders and neck should be visible in images.
- Lighting should be uniform without shadows or washouts.
- Capture non-frontal images at 90° and 45° angles

**The document also has sections for facial image capture in a semi-controlled environment such as disaster recovery, and for using video imaging to supplement still photos.**

### **Full Document:**

<https://www.nist.gov/astm-connect?id=CE3148-18>

### **Checklist**

[https://www.aafs.org/sites/default/files/media/documents/Facial%20ID\\_ANSIASTM%20E3148\\_Checklist%20V1.3.xlsx](https://www.aafs.org/sites/default/files/media/documents/Facial%20ID_ANSIASTM%20E3148_Checklist%20V1.3.xlsx)