Postmortem Impression Recovery: Guidance and Best Practices for Disaster Victim Identification, First Edition, 2021

WHAT IS AN AAFS STANDARD FACTSHEET?

The AAFS produces clear, concise, and easy-to-understand factsheets to summarize the contents of technical and professional forensic science standards on the OSAC Registry. They are not intended to provide an interpretation for any portion of a published standard.

WHAT IS THE PURPOSE OF THIS STANDARD?

This document provides guidance on obtaining postmortem prints from decedents and/or human remains in morgue operations associated with mass fatality incidents (MFI) after different types of postmortem changes or trauma.

Friction ridge impressions obtained from a decedent are generally termed postmortem prints and can be difficult to obtain due to circumstances surrounding the condition of the decedent/remains resulting from an MFI. Postmortem impressions can be used to verify or establish the identity of a decedent by comparing them to a known antemortem fingerprint, palm print, or footprint records or by searching them through automated fingerprint identification systems.

WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

It is imperative that the practitioner have the appropriate tools, knowledge, and resources available to complete friction ridge identifications after an MFI.

Due to national fingerprint repositories in local, state, and federal databases, postmortem friction ridge prints may be the only way to account for and identify casualties in an open population incident, therein limiting the use of DNA or dental comparisons.

A friction ridge print identification can also allow fragmented remains to be positively identified to each other through DNA by using the friction ridge print identification as the DNA reference for other unassociated remains.

HOW IS THIS STANDARD USED AND, WHAT ARE THE KEY ELEMENTS?

- This document provides a systematic approach to fingerprint recovery. It includes a flowchart and guidance on cleaning, inspecting, and rehydrating remains that have damage or postmortem changes to ensure the best possible outcome for obtaining the best-quality postmortem friction ridge impressions.
- Processes are described to protect the integrity of the friction ridge impression and to safeguard against loss, deterioration, or destruction of the impression.
- The objective of Disaster Victim Identification (DVI) is to match acquired postmortem data from the recovered remains with antemortem data obtained from the victim's next of kin or other external sources to help establish a positive forensic identification. Friction ridge analysis is the fastest and cheapest modality of forensic identification.
- Fingerprint databases are vast and one of the only places to search true unknown individuals with a high success rate of identification due to people being printed for a variety of reasons, both criminal and civil.
- Not all remains are printable at the time of intake. Many decedents will require additional processing to obtain an identifiable print. These best practices outline the methodologies to achieve these results.
- The end goal of recording postmortem impressions from disaster victims is to help establish the scientific identity of those victims. This standard ensures that it can be done if it is possible.
- The standard is intended to be used in conjunction with Postmortem Impression Submission Strategy for Comprehensive Searches of Essential Automated Fingerprint Identification System Databases - ANSI/ASB Best Practice Recommendation 007, 1st Ed., 2018

American Academy of Forensic Sciences
aafs.org

This factsheet is made possible through the following financial assistance award 70NANB21H097 awarded to AAFS from U.S. Department of Commerce, National Institute of Standards and Technology