

Forensic Odontology in Disaster Victim Identification: Best Practice Recommendations for the Medicolegal Authority



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 standard advances the scientific application of disaster victim identification (DVI) through dental analysis in a mass fatality incident (MFI) by providing best practice recommendations for scientific analysis methods, protocols, training, and research.

Guidance is provided for the deployment of a forensic odontology team following an MFI. The standard delineates proper protocols, equipment, hardware, and software requirements, as well as command structure for the deployment of this team as part of the entire DVI operation.

This best practice recommendation is one in a collection of standards developed by the primary forensic disciplines engaged in DVI.

WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

Adherence to this standard will provide quality assurance to the overall DVI process and ensures that the forensic odontologist employs the most appropriate techniques in a reliable, objective, and timely manner.

This best practice recommendation provides direction to the dental team for efficient and effective collection and management of antemortem (AM) and postmortem (PM) data and analysis.

Forensic odontology DVI teams are encouraged to meet these best practice recommendations.



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

This standard provides guidance and a framework for the procedural implementation of forensic odontology into the DVI process. Best practices recommend that a thorough and comprehensive odontological examination - both clinical and radiographic of recovered oral maxillofacial structures - is accurately documented. Processes must be established to ensure quality control over data management in order to maintain the integrity of the DVI process.

The personnel responsible for the identification of human remains by dental means following an MFI, shall include forensic odontologists who are specially trained and experienced in dealing with fragmentary, commingled, and taphonomically-altered dental remains. The roles of these personnel are clearly delineated in this standard.

The importance of comparison of antemortem and postmortem dental records to establish a putative identification of victims in an MFI is discussed. To ensure accuracy and quality assurance, a reconciliation process is outlined, which should involve all identification disciplines and contextual information, preferably with oversight by an identification board.

Demobilization at the conclusion of operations emphasizes appropriate after-action reporting and monitoring of the psychological health of team members.