

Human Identification By Comparative Dental Analysis



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?

The positive identification of an individual is important for multiple reasons, whether that be to reunite an unidentified living individual with their family or to help family members progress through the grieving process. ADA 1088-2017D recommends guidelines for identifying individuals using dental records. In addition, it includes information about the forensic odontological identification process and what may be requested from law enforcement agencies and medical examiners' or coroners' offices.

This standard is relevant to practicing dentists, forensic odontologists, forensic pathologists, medical examiners, coroners, law enforcement personnel, dental school personnel, emergency planners, and others who are called upon to identify an individual by comparative dental analysis.

WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

This technical report contains the most current guidelines and recommendations from the forensic odontology community on identifying human remains and living amnesiacs utilizing comparative forensic dental data. It highlights the recommended methodology for collecting historic (antemortem) and current (or postmortem) data, adding reconciliation methods to establish identification with the goal that it is used as a tool in the development of local, state, or federal jurisdictional guidelines for the identification of unknown human individuals by comparative dental analysis.

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

Dentists often play a crucial role in identifying human remains and living individuals who cannot identify themselves. Dental identification is the most common method of identifying human remains that are decomposed, burned, fragmented, or skeletonized. The comparison of a missing person's antemortem dental records/evidence (i.e., written records, study casts, photographs/digital images, diagnostic medical imaging, and radiographs) with the postmortem dental evidence from unknown human remains is a primary function of a forensic odontologist.

Practitioners may be called upon by law enforcement, medical examiners, and coroners to supply dental records. Therefore, understanding the types of dental information that may be required and the forensic odontological identification process is essential to assist these agencies and reunite families with their loved ones.

The technical report covers the collection and preservation of antemortem and postmortem dental evidence; the factors that are useful for comparison purposes; forensic odontology software applications; and the transfer, storage, and disposition of data.

