

Standard for Analyzing Pathological Conditions and Anomalies in Forensic Anthropology



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?

An important part of forensic anthropology examinations involves identifying and describing pathological conditions and anomalies.

This standard provides forensic anthropology practitioners with guidelines and requirements for describing, documenting, interpreting, and reporting pathological conditions and anomalies in human skeletal and dental material and/or radiological images that occurred before death.

However, it does not provide guidance on distinguishing anomalies from normal skeletal variations, cause and manner of death classification, nor skeletal trauma.

WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

Pathological conditions and anomalies are useful for personal identification purposes.

This standard helps forensic anthropologists systematically and accurately visually inspect and document skeletal and dental materials for antemortem skeleton conditions, defects, or anomalies, which can aid in forensic investigations.

Forensic science service providers that implement this standard are more likely to have consistency and accuracy in anthropological examinations.



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

This standard provides direction for assessing pathological conditions and anomalies in concordance with appropriate references. While a macroscopic visual examination is often sufficient, the standard encourages radiography, microscopy, and histological analysis of skeletal and dental materials for differential diagnosis as needed. Practitioners are instructed to follow a differential diagnosis process that eliminates unlikely causes to identify the most probable explanation for the anomaly or pathological condition.

Temporal, geographic, and cultural factors can affect conclusions; therefore, the standard requires consideration of such when interpreting skeletal alterations that may be caused by diseases, habitual activities, or taphonomic changes that mimic pathology.

This standard requires the practitioner to document pathological conditions with a written description and supporting visual evidence, such as photographs, radiographs, or sketches. All findings must be documented in sufficient detail to allow independent replication of the work.

The standard also provides requirements for reporting.