Human Age Assessment by 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 <u>not</u> intended to provide an interpretation for any portion of a published standard.

WHAT IS THE PURPOSE OF THIS STANDARD?

This technical report provides the most current recommendations and guidance for estimating an individual's dental age range based on tooth development. It includes guidelines on how to obtain forensic dental data and the selection of recommended methodologies to establish accurate assessments of human chronologic age. It is intended for practitioners performing dental age assessments and for individuals, groups, or agencies utilizing the age assessment information.

WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

Dental age assessment is highly technical and requires skill, training, education, and experience to execute correctly. The complexity of the age assessment process requires forensic dental practitioners to follow these guidelines to the fullest applicable, practical, and appropriate extent to ensure scientific integrity.

The consequences of inappropriate age assessment can have emotional and legal ramifications.

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

Forensic dental age assessment produces an estimate of chronologic age through scientific evaluation of the dentition and maxillofacial structures. The results of an age assessment can be used to estimate a person's age at death, assist in the identification of missing and unidentified individuals or answer questions related to immigration or legal age.

This technical report provides a guideline to generate an estimated dental age interval utilizing databases and scientifically reviewed algorithms. Dental age assessment is based on large identifiable human group populations and has an associated level of uncertainty.

This technical report describes the methodologies and best practices for estimating the chronologic age of a living or deceased individual. Age assessment methods vary in their advantages and disadvantages and depend upon suitable population-specific reference data availability. The specific circumstances of each individual case will determine the dental age assessment method(s) to be employed. Forensic dental age assessment methods for estimating age are dependent upon the specified developmental growth interval of the individual and the availability of specific teeth for the precise technique.

Qualified practitioners should perform multiple independent dental and non-dental methodologies whenever possible. This report gives guidance on the estimated age interval and how it relates to any specific individual's chronological age.



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

🏏 @The_AAFS