

Physical Stability of Facial Features of Adults



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 proposed standard.

WHAT IS THE PURPOSE OF THIS PROPOSED STANDARD?

This proposed standard guide is intended to supplement and be used in conjunction with [ANSI/ASTM E3149-18](#) and is not a stand-alone document.

Information for interpreting perceived similarities or dissimilarities in facial images that are subjects of a comparison is provided. The information concerning adult facial feature stability is intended to inform facial image comparisons and reinforce reliability of analysis.

This document refers only to the stability of facial features in adults (post-pubescent) and does not address the stability of facial features in children due to the rapid changes associated with growth and development.

WHY IS THIS PROPOSED STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

Over time, a person's image may appear different because of anticipated changes (e.g., aging, expression), unanticipated changes (e.g., fluctuations in weight or health), or intentional alterations (e.g., piercings). When conducting a forensic image-to-image comparison of the same individual at different times, a practitioner must consider these potential variances when forming an opinion.

Knowledge of the stability of facial features through various changes in condition can strengthen opinions formed by practitioners when comparing facial images.

This OSAC Proposed Standard has been sent to [ASTM International \(ASTM\)](#) for further development and publication. Get involved as a member or by providing public comment.

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

This standard will be used by facial image comparison practitioners when they consider potential variances in images taken of the same person over time.

Facial components (eyes, ears, nose, mouth) are presented in tables that include a description of how this component may be affected and a list of individual component characteristics that are compared. Each individual characteristic is ranked "High (H)," "Medium (M)," or "Low (L)" stability, describing the potential for change in the respective characteristic. Factors that can impact the physical stability of facial features include expression, time-related changes (short- and long-term), marked weight changes, changes in health, and intentional alterations. Assessments of stability for each facial component are discussed individually (e.g., stability of a feature over time) and do not simultaneously consider other changes (e.g., changes in weight or expression).

The stability assessments presented in this standard are primarily a consensus opinion of practitioners informed by discussion with medical and other experts, as well as the limited scientific literature available. As more research is published, the stability assessments may be updated.

