

FBI Approved Standards for Scientific Testimony and Report Language for Forensic Anthropology

Table of Contents

1	PURPOSE	2
2	SCOPE	2
3	STATEMENTS APPROVED FOR FBI ANTHROPOLOGY EXAMINATION TESTIMONY AND/OR LABORATORY REPORTS	2
3.1	Osseous or Dental (Skeletal) Origin	2
3.2	Human or Non-human Origin.....	2
3.3	Biological Profile.....	2
3.4	Identification Comparison.....	3
3.4.1	<i>Inclusion (i.e., included)</i>	3
3.4.2	<i>Exclusion (i.e., excluded)</i>	3
3.4.3	<i>Inconclusive</i>	3
3.5	Trauma Analysis	4
4	STATEMENTS NOT APPROVED FOR FBI ANTHROPOLOGY EXAMINATION TESTIMONY AND/OR LABORATORY REPORTS	4
4.1	Skeletal or Non-skeletal origin	4
4.2	Human or Non-human origin	4
4.3	Biological Profile.....	4
4.4	Identification Comparison.....	4
4.5	Trauma Analysis	4
4.6	Zero Error Rate	4
4.7	Statistics or Probability.....	4
4.8	Experience	5
4.9	Scientific Certainty	5
5	LABORATORY REPORT REVIEWS	5
6	TESTIMONY REVIEWS	5
7	REFERENCE	5
8	REVISION HISTORY	6

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1 PURPOSE

This document provides examples of the scientifically supported conclusions and opinions approved for reporting examination conclusions and offering expert opinion statements during testimony by Anthropology Examiners within the Trace Evidence Unit. It is noted that these examples are not intended to be all inclusive and may be dependent upon the precedent set by the judge or locality in which a testimony is provided. Further, these examples are not intended to serve as precedent for other forensic laboratories and do not imply that statements by other forensic laboratories are incorrect, indefensible, or erroneous.

2 SCOPE

This document applies to Trace Evidence Unit employees who prepare an FBI *Laboratory Report* (7-1 or 7-1 LIMS) and/or provide testimony in the anthropology discipline.

3 STATEMENTS APPROVED FOR FBI ANTHROPOLOGY EXAMINATION TESTIMONY AND/OR LABORATORY REPORTS

For additional guidance on report writing, see the Trace Evidence General Approach to Report Writing.

3.1 Osseous or Dental (Skeletal) Origin

The Examiner may assert that a material is *skeletal in origin, consistent with osseous or dental tissue*, or that a material may be *excluded as being skeletal (osseous or dental) in origin*. An Examiner may also state or imply that an *inconclusive* result is the determination that there is insufficient quality or quantity of material such that the Examiner is unable to determine the material's skeletal or non-skeletal origin.

3.2 Human or Non-human Origin

The Examiner may assert that skeletal material is *human in origin, consistent with human origin*, or that a material may be *excluded as being human in origin*. An Examiner may also state or imply that an *inconclusive* result is the determination that there is insufficient quality or quantity of skeletal material such that the Examiner is unable to determine the material's human or nonhuman origin.

3.3 Biological Profile

- A. Sex: The Examiner may assert that skeletal material likely originated from a male or female source. Such statements may include probabilities based on appropriate reference data.
- B. Population affinity: The Examiner may assert that skeletal material exhibits a measure of similarity to reference groups. Such statements may include probabilities based on appropriate reference data.

- C. Age: The Examiner may assert that skeletal material likely originated from an individual within a certain biological age interval. Such statements may include probabilities based on appropriate reference data.
- D. Stature: An Examiner may assert that skeletal material likely originated from an individual within a certain stature interval, which may include both a point estimate and the 95% prediction interval.

3.4 Identification Comparison

3.4.1 Inclusion (i.e., included)

- A. 'Inclusion' is an Examiner's conclusion that the questioned skeletal information could have originated from the same source as the known skeletal information, or from another source with the same skeletal features.
- B. The basis for an 'inclusion' conclusion is an Examiner's opinion that there is sufficient agreement between the features of the questioned and known skeletal information, with no unexplainable differences, to conclude that the skeletal information could have originated from the same source or from another source with the same skeletal features.
- C. The strength of the agreement, based on relevant databases or published frequencies of shared skeletal feature(s), shall be reported, if known. If the frequency of the shared feature(s) is not known, the Examiner shall disclose that the number of sources who may also share the feature(s) is unknown.

3.4.2 Exclusion (i.e., excluded)

- A. 'Exclusion' is an Examiner's conclusion that the questioned and known skeletal information could not have originated from the same source.
- B. The basis for an 'exclusion' conclusion is an Examiner's opinion that the questioned and known skeletal information exhibit sufficient differences in skeletal features such that the questioned skeletal information could not have originated from the same source as the known skeletal information.

3.4.3 Inconclusive

- A. 'Inconclusive' is an Examiner's conclusion that no determination can be reached as to whether the questioned and known skeletal information could have originated from the same source.
- B. The basis for an 'inconclusive' conclusion is an Examiner's opinion that there is insufficient quantity and/or quality of skeletal features in the known and/or questioned skeletal information to determine whether the skeletal information could have originated from the same source or from another source with the same skeletal features.

3.5 Trauma Analysis

The Examiner may assert that a skeletal alteration occurred in the antemortem, perimortem, or postmortem period. The Examiner may state or imply that a skeletal alteration is consistent with originating from a blunt force, a sharp force, a high-velocity projectile, or thermal exposure.

4 STATEMENTS NOT APPROVED FOR FBI ANTHROPOLOGY EXAMINATION TESTIMONY AND/OR LABORATORY REPORTS

4.1 Skeletal or Non-skeletal origin

When material is non-skeletal in origin, an Examiner shall not assert the origin of the material other than descriptive observations or, in certain cases, the elemental constituents of the material.

4.2 Human or Non-human origin

When skeletal material is non-human in origin, an Examiner shall not assert the non-human animal origin or species beyond general categories (e.g., mammal, bird).

4.3 Biological Profile

An Examiner shall not assert that skeletal material could not have originated from a source with biological characteristics outside of the estimated parameters.

4.4 Identification Comparison

An Examiner shall not offer an 'inclusion' conclusion unless he or she explains that the skeletal information could also have originated from another source who exhibits the same skeletal features.

4.5 Trauma Analysis

- A. An Examiner shall not assert that a particular implement was the source of a skeletal alteration.
- B. An Examiner shall not assert the cause or manner of death based on skeletal alterations and/or trauma.

4.6 Zero Error Rate

An Examiner shall not assert that forensic anthropological examinations are infallible or have a zero error rate.

4.7 Statistics or Probability

An Examiner shall not provide a conclusion that includes a statistic or numerical degree of probability except when based on relevant and appropriate data.

4.8 Experience

An Examiner shall not cite the number of forensic anthropological examinations performed in his or her career as a direct measure for the accuracy of a proffered conclusion. An Examiner may cite the number of forensic anthropological examinations performed in his or her career for the purpose of establishing, defending, or describing his or her qualifications or experience.

4.9 Scientific Certainty

An Examiner shall not use the expressions 'absolute certainty,' '100% certainty,' 'reasonable degree of scientific certainty,' 'reasonable scientific certainty,' or similar assertions of reasonable certainty in reports or testimony unless required to do so by a judge or applicable law.

5 LABORATORY REPORT REVIEWS

The content of a Trace Evidence Unit Laboratory Report will be reviewed per the appropriate [LAB-200: Operations Manual](#) practices and the [TRACE-100: Quality Manual](#) to ensure compliance with the approved statements in this document.

6 TESTIMONY REVIEWS

Anthropology testimonies will be reviewed following [LAB-100: Quality Assurance Manual](#). This review will assess the testimony for compliance with the statements in this document.

7 REFERENCE

Department of Justice Uniform Language for Testimony and Reports for the Forensic Anthropology Discipline (current version)

LAB-100: Quality Assurance Manual, FBI Laboratory (current version)

LAB-200: Operations Manual, FBI Laboratory (current version)

TRACE-100: Quality Manual, Trace Evidence Unit, FBI Laboratory (current version)

8 REVISION HISTORY

Revision	Issue Date	Changes
03	3/01/2021	Section 2 changed category of testing to discipline. Updated language in 3.4 and 4.4 to be consistent with Department of Justice Uniform Language for Testimony and Reports for the Forensic Anthropology Discipline (current version) to include changing 'individual' to 'source' and changing 'decision' to 'opinion.' Updated References
04	1/28/2022	Reformatted document. Updated referenced document names.
05	03/15/2024	Language revised to reflect language in ANSI-ASB Standard 132 (Population Affinity Estimation). Minor administrative edits.