

Standard for Resolving Commingled Remains 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?

In cases involving mass disasters, mass graves, or other situations where remains from multiple individuals are intermixed, the identification and resolution of commingling is a fundamental and challenging task.

This standard provides requirements for forensic science service providers (FSSPs) and field practitioners to aid in resolving commingled remains. It includes procedures for sorting and analyzing skeletal remains to assist in the individualization and eventual identification of decedents.

In addition, procedures and calculations for estimating the number of individuals involved are addressed.

This standard is used in conjunction with ANSI/ASB [008, 1st Ed., 2021](#) and [135, 1st Ed., 2023](#).

WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

This standard's approach to resolving commingled remains promotes consistency and accuracy in forensic anthropology cases. It enhances the potential for identifying individuals, allows remains to be returned to next of kin, and assists with investigations when implemented by FSSPs and field practitioners.

Additionally, this standard emphasizes the importance of documenting spatial relationships of remains and specimens at the recovery site and using a field labeling and collection strategy to prevent further commingling and add information to the sorting techniques used by the FSSP.



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

This standard is used by FSSPs to resolve cases involving commingled remains. Following a systematic and well-documented recovery, sorting the recovered remains is an important step in identifying individuals. The anthropological sorting techniques presented in this standard include visual pair matching, articulation, osteometric comparison, assessing taphonomic patterning, and the process of elimination. These techniques are not intended to be stand-alone methods and should be used in conjunction with each other and with relevant spatial data from the initial recovery.

Before performing the entire sorting process, Minimum Number of Individuals (MNI), Lincoln Index (LI), and Most Likely Number of Individuals (MLNI) methods may be used to estimate the number of individuals that may be commingled.

Various challenges that may be encountered are also discussed, such as large-scale commingling or when segregation of the remains isn't possible. It includes requirements and recommendations for specific situations, including when DNA and chemical analysis may be necessary. The standard recognizes that every technique used to identify commingled remains carries some uncertainty, and method error rates and subjectivity should be considered.

This standard is not intended to support conformity assessment.