

OSAC REVIEW / SPRING 2025 (OSAC = Organization of Scientific Area Committees)

NAME OSAC UPDATE #14: ANSI/ASB Best Practice Recommendation 108, 1st Edition, 2021

Forensic Odontology in Disaster Victim Identification: Best Practice Recommendations for the Medicolegal Authority, 2021, 1st ed

This best practice recommendation originated from the Scientific Working Group on Disaster Victim Identification (SWGDIV). It was put forward by the Disaster Victim Identification task group subcommittee of OSAC. It completed the standards development process in the Disaster Victim Identification Consensus body of the AAFS Standards Board (ASB).

This is a brief summary of *ANSI/ASB Forensic Odontology in Disaster Victim Identification: Best Practice Recommendation for the Medicolegal Authority*, and as such may leave out or misinterpret important details. **See link to full document (below)**. Also the AAFS has developed checklists to supplement ASB documents. A link to the checklist for this document is copied below. (This particular checklist is a rehash of the document in a spreadsheet format.)

Value: Useful as a best practice reference to provide to Forensic Odontologists when developing a mass fatality plan, or when reviewing or updating an existing plan. Annex A is a helpful list of required dental equipment.

BACKGROUND: Forensic odontologists employ forensic odontology techniques in mass fatality incidents for efficient and effective collection and comparison of antemortem and postmortem data. Forensic odontologists work with forensic pathologists, anthropologists, fingerprint and DNA analysts, and other disciplines to reconcile data in order to achieve accurate and efficient identifications.

General: Document uses the universal numbering system for mass fatality events within the US, and the ISO numbering system internationally. Forensic odontologists working in a mass fatality setting shall have training in fragmentary, commingled, and taphonomically-altered dental remains.

Scribes utilized in a MFI should have familiarity with forensic odontology procedures and terminology.

Team Composition: Three teams, each staffed by a minimum of two forensically trained dentists: antemortem team, postmortem team, comparison team.

Planning and Training: Planning should reflect an assessment of existing forensic odontology personnel and equipment. Personnel should be trained in the Incident Command System, and in DVI software.

Disaster Operations:

- **Disaster Site Assessment**—emphasizes the importance of dental team members in recognizing natural, prosthetic, and restorative dental structures
- **Antemortem Scene Procedures**—emphasizes the use of *ANSI-ADA Technical Report No. 1085 Implementation Guidelines for the Secure Transmission of Protected Health Information in Dentistry* and *ADA Technical Report No 1060 The Secure Exchange and Utilization of Digital Images in Dentistry: 2011*
- **Postmortem Section Procedures**—Has sections on Visual Examination and Charting, Radiographic Examination, Photographic Examination, Craniofacial Dissection, Dental Casts, Dental DNA, Age Assessment, and Scientific Tools to Aid in Victim Identification (studies have demonstrated that the microstructure and composition of dental restorative materials are distinctive and specific to a manufacturer)

Data Management: Includes sections on Computer Hardware, Computer Software (numerous forensic odontology identification software exists and proper training as to the specific software is important), Data Archiving, Antemortem Data Collection, and Postmortem Data Collection.

Dental Identification: Guidelines are referenced—*DA Technical Report No 1088, Human Identification by Comparative Dental Analysis: 2017*

- Dental recommendations shall be reviewed and approved by a dental identification panel composed of a least 2 forensically trained dentists.

- Accepted determinations are: Identification, Exclusion, or Insufficient Information
- Reconciliation is the quality assurance mechanism. This is a consensus process for identification involving representatives of the scientific identification disciplines (pathology, odontology, friction ridge analysis, DNA, anthropology, etc.)

The final category of these best practice recommendations is **Demobilization** with two sections: After-action Reports, and Psychological Health.

Full Document:

<https://www.aafs.org/asb-standard/forensic-odontology-disaster-victim-identification-best-practice-recommendations>

Checklist:

<https://www.aafs.org/research-resources-featured-standards-resources-and-training/checklists>