# Best Practice Recommendation for Mass Fatality Incident Management





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# 410 North 21st Street Colorado Springs, CO 80904

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#### Foreword

Mass fatality incidents (MFIs) are complex and may present commingled biological remains, personal effects, and other probative-items distributed widely across the scene. The information presented herein is compatible with many of the standard principles used in crime scene and medicolegal death investigation; however, these practices are specifically designed to address the unique challenges faced by the high-volume victim identification operations commonly associated with MFIs. It is possible that the magnitude of the incident, the high numbers of fatalities, and the size of the scene may exceed local capabilities and resources for conducting an efficient, effective, and timely recovery and identification efforts. Such challenges demand a coordinated multidisciplinary response including law enforcement, fire-rescue, medicolegal and forensic practitioners, and other investigative assets.

Disaster victim identification (DVI) practitioners are encouraged to develop, implement, exercise, and review their MFI response operating procedures considering these recommendations, and to update their procedures as needed. It is anticipated that these recommendations will evolve as future technologies emerge.

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This document was revised, prepared, and finalized as a standard by the Mass Fatality Management and Disaster Victim Identification (MFM-DVI) Consensus Body of the AAFS Standards Board. The draft of this standard was developed by the Disaster Victim Identification (DVI) Task Group within OSAC Medicolegal Death Investigation (MDI) Subcommittee of the Organization of Scientific Area Committees (OSAC) for Forensic Science.

Questions, comments, and suggestions for the improvement of this document can be sent to AAFS-ASB Secretariat, <a href="mailto:asb@aafs.org">asb@aafs.org</a> or 410 N 21st Street, Colorado Springs, CO 80904.

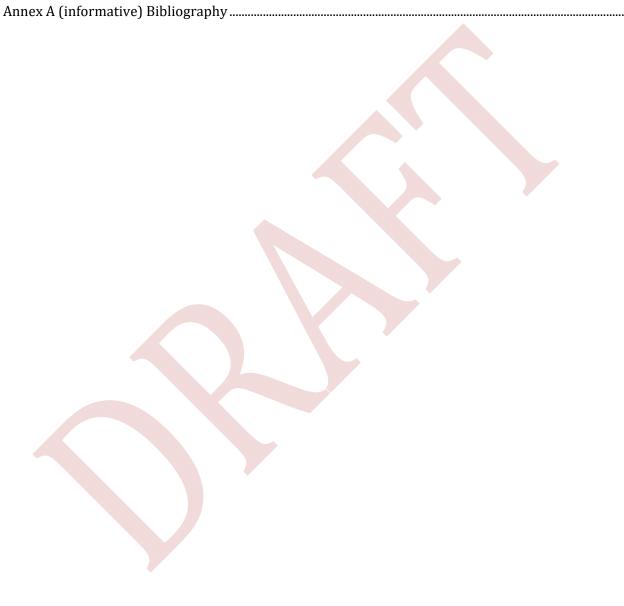
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# 1 Best Practice Recommendation for Mass Fatality Incident Management

## 2 **1 Scope**

- 3 This document provides best practice recommendations on the fundamental management
- 4 considerations to be addressed in planning for and implementing a comprehensive disaster victim
- 5 identification (DVI) operation.

## **6 2 Normative References**

- 7 There are no normative reference documents, Annex B, Bibliography, contains informative
- 8 references.

#### 9 **3 Terms and Definitions**

- For purposes of this document, the following definitions and acronyms apply.
- 11 **3.1**
- 12 body collection point
- 13 **BCP**
- 14 A temporary location providing refrigerated storage of whole or fragmentary remains and related
- items until transport to a morgue or other facility.
- 16 3.2
- 17 disaster victim identification
- 18 **DVI**
- 19 Processes and procedures for identifying and re-associating human remains via the application of
- 20 scientific methods.
- 21 3.3
- 22 family assistance
- The provision of services and information to the family members of those killed and to those
- injured or otherwise impacted by the incident.
- 25 **3.4**
- 26 Family Assistance Center
- 27 **FAC**
- A secure, safe, and centralized facility that provides ongoing support services, information and
- resources to survivors and family members of the deceased following a mass fatality incident.
- 30 3.5
- 31 grouped remains
- 32 Biological tissue that is either not identifiable with current technology, or because of other
- constraints is not associated with a particular decedent (also referred to as common tissue).
- **34 3.6**
- 35 incident characterization
- Provides an initial assessment of the incident, allowing leadership to make appropriate decisions
- 37 regarding operational decisions.

- 38 **3.7**
- 39 Incident Command System
- 40 ICS
- 41 A management system designed to enable effective and efficient domestic incident management by
- 42 integrating a combination of facilities, equipment, personnel, procedures and communications
- 43 operating within a common organizational structure.
- 44 3.8
- 45 **Joint Information Center**
- 46 **JIC**
- 47 A location, serving as the central point of contact for all media inquiries, in which personnel
- 48 coordinate incident-related public information activities.
- **49 3.9**
- 50 manifest of unaccounted for persons
- Working list of persons potentially involved in an incident which may include deceased, injured,
- and otherwise unaccounted for persons.
- 53 **3.10**
- 54 mass fatality incident
- 55 **MFI**
- Any incident which produces fatalities of a complexity that special operations and organizations are
- 57 required.
- 58 **3.11**
- mass fatality management
- The overarching operation involving processing an MFI including communicating with victim
- families; search and recovery, processing and identification of the dead, and returning them to their
- 62 families.
- 63 **3.12**
- 64 medicolegal authority
- A person or agency charged by law with conducting death investigations for the purpose of
- 66 certifying deaths.
- 67 3.13
- 68 Victim Information Center
- 69 **VIC**
- 70 The VIC is a controlled area within the FAC where the acquisition of antemortem data occurs to
- enable the identification of victims of an MFI.
- 72 4 Recommendations
- **73 4.1 General**
- Medicolegal authorities should establish an organizational response framework to include an
- operational definition of an mass fatality incident (MFI) and should define objectives for successful
- operations. This framework should include a plan for collaborating with local, state, and federal
- 77 government entities in addition to non-government organizations and private industries.

#### 4.2 Operational Definition of MFIs

78

- 79 Local jurisdictions should develop criteria of an MFI which serves as an operational trigger,
- allowing for rapid and effective decision-making when minimal information is available. These
- 81 criteria should consider number of fatalities, complexity, incident characterization, analysis of
- 82 hazards, and assessment of capacities (e.g., human, equipment, structural and financial resources).
- Factors for classifying an incident as an MFI should include the following.
- 84 a) Potential number of fatalities based upon preliminary incident characterization.
- b) Protracted or complex victim recovery operations.
- 86 c) Complicating circumstances include:
- 1) scene hazards (e.g., contamination by chemical, biological, radiological, nuclear or explosive agents or materials);
- 2) challenges in recovering remains (e.g., fragmentation, fire damage, land vs. water recovery);
- 90 3) limited scene access and other physical/environmental obstacles;
- 91 4) multi-agency response or cross-border political and diplomatic considerations.

## 92 4.3 Operational Objectives of MFI Management

- Incident-specific objectives should be established and allow for adaptation. Objectives should
- 94 include the following.
- 95 a) The jurisdictional authority for conducting disaster victim recovery and identifications resides solely with the medicolegal authority in the jurisdiction where the disaster incident occurred.
- 97 b) Articulate roles and responsibilities in a multi-agency, collaborative response.
- 98 c) Establish a system for documentation of operations and accountability of resources.
- 99 d) Develop a health and safety plan that supports/promotes operations being conducted in a safe manner and addresses responder critical incident stress management, self-care, and situational awareness.
- e) Establish a strategy for victim accounting which includes a centralized mechanism for collecting and sharing data on those missing and potentially involved in the incident.
- 104 f) Document and preserve all remains, personal effects, and other physical items germane to DVI operations.
- 106 g) Recover, transport, and process remains and personal effects in a dignified manner.
- 107 h) Follow established protocols and recommendations for DVI.
- 108 i) Certify cause and manner of death.

109	j)	Coordinate with local authorities to integrate into Family Assistance Center (FAC) operations.
110 111	k)	The medicolegal authority is responsible for providing guidance on the Victim Information Center (VIC) in the FAC.
112 113	l)	Exchange factual and timely information with families in a compassionate manner and, where possible, in advance of public release of information.
114 115	m)	Coordinate the release of the victims' remains to their legal representative, accounting for fragmentation and protracted identifications.
116	n)	Demobilize operations and prepare an after-action report.
117	o)	Incorporate lessons learned in future responses.
118	4.4	Policy Decisions and Considerations Prior to Commencing Operations
119	4.4	.1 General
120 121 122	aut	licy decisions may be the sole responsibility of the medicolegal authority, or in part under the chority of the presiding jurisdiction(s) which may include stakeholders with overlapping ponsibilities or functions within the incident operation.
123	4.4	2.2 Scene Operations
124	The	e medicolegal authority should develop strategies to address scene operations <sup>[4]</sup> .
125	a)	Assert jurisdiction for human remains management in scene operations.
126 127 128	b)	Integrate a representative with decision—making authority in the on-scene command structure to ensure top-down integration is acknowledged, and MFI operational goals are considered in incident planning.
129	c)	Assess the incident characteristics through early on-scene presence with consideration of:
130		1) site ingress and egress,
131		2) hazmat and safety concerns,
132		3) body collection points and transportation of remains,
133		4) equipment and personnel needs,
134		5) factors complicating remains recovery.
135 136	d)	Develop a scene processing and victim recovery plan in coordination with other responding agencies.

# 137 4.4.3 Disaster Morgue

- The medicolegal authority should develop strategies to address disaster morgue operations<sup>[5]</sup>.
- a) Separate day-to-day operations from DVI operation, where necessary.
- b) Establish the location of a disaster morgue.
- 141 c) Establish the workflow for disaster morgue operations.
- d) Establish a morgue reference numbering system that is simple, intuitive and scalable.
- e) Establish morgue protocols for processing and analyzing human remains.
- 144 f) Determine criteria for analyzing fragmented human remains.
- 145 g) Establish a data management system and document retention plan for all postmortem data collected.

#### 147 4.4.4 Family Assistance

- The medicolegal authority should develop strategies with other local agencies to address family
- engagement and VIC operations.
- a) Participate in establishing the location of the VIC.
- b) Consider separate staging areas for the media, access points for families, and rest areas for staff.
- 152 c) Initiate family communications via briefings and outreach.
- d) Coordinate the collection of available antemortem data such as biological DNA samples, dental records with imaging, and medical records with imaging.
- e) Establish a data management system and document retention plan for all antemortem data collected.
- 157 f) Coordinate services with other response agencies within the FAC.

#### 158 4.4.5 Victim Accounting

- The medicolegal authority should develop strategies to address victim accounting.
- a) Develop a centralized reporting process of unaccounted for persons.
- b) Develop a manifest of unaccounted for persons potentially involved in the incident.
- 162 c) Coordinate with the Joint Information Center (JIC) to provide media with current, accurate
- information regarding the numbers of missing persons, recovered human remains, and
- identified decedents.

#### 165 4.4.6 Disaster Victim Identification

- The medicolegal authority should develop strategies to address disaster victim identification.
- 167 a) Conduct a deliberate process of comparing antemortem data with postmortem data to yield tentative identifications for reconciliation.
- b) Establish a reconciliation process to determine the criteria for an identification threshold in order to review and confirm or reject tentative identifications presented.
- 171 c) Establish a policy for re-associating and releasing all fragmentary remains associated with a single individual.

# 173 **4.4.7 Storage**

- The presiding jurisdiction should develop strategies to address storage of remains and personal
- 175 effects.
- a) Establish a transportation plan for movement of remains and personal effects.
- b) Establish storage of remains.
- 1) A body collection point for on-scene collection of remains and items.
- 179 2) Temporary storage for all remains undergoing processing at the morgue.
- 180 3) Long term temporary storage of unclaimed and unidentified remains.
- c) Establish policy regarding future access to the remains for additional analysis or release to the legal representative.
- d) Establish a procedure for preservation, chain of custody, storage and release of personal effects.

#### 184 4.4.8 Release of Remains and Personal Effects

- The presiding jurisdiction should develop strategies to address communication with families and
- release of remains and personal effects.
- a) Consider applicable state law governing data privacy.
- b) Consider applicable state law governing the right to control final disposition and release of personnel effects.
- 190 c) Consider expressed religious/cultural perspectives.
- d) Be forthcoming and transparent regarding the condition of remains and the potential for fragmented remains to be identified over an extended period of time.
- e) Establish a system to facilitate the wishes of the legal representative authorized to direct disposition regarding subsequent notifications, allowing for future modifications.

- 195 f) Establish a consistent, direct and long-term contact for the legal representative with the medicolegal authority.
- 197 g) Consult with the organized family groups to develop a final disposition strategy for unclaimed and grouped remains.

## 199 **4.4.9 Logistical Support**

- The presiding jurisdiction should develop strategies to address logistics support for all operations (scene, morgue, and VIC).
- 202 a) Manage the overall fatality management operation regardless of current resource capabilities.
- b) Utilization of the Incident Command System (ICS) is highly recommended.
- 204 c) Identify the positions and quantities of personnel required to support mass fatality management operations.
- d) Identify the types and quantity of equipment and supplies required to support mass fatality management operations.
- 208 e) Develop site, infrastructure and security requirements for scene, morgue, VIC operations and support staff.
- f) Coordinate with local emergency management to submit and fill resource requests to support mass fatality management operations.
- 212 g) Escalate resource requests that cannot be sourced locally to partnering jurisdictions, the state and federal governments.
- h) Include all support functions required to operate the equipment (e.g., personnel, fuel, maintenance) in resource requests.

## 216 4.4.10 Quality Assurance

- The medicolegal authority should develop strategies to address quality assurance.
- 218 a) Ensure qualified personnel have been provided the training necessary to perform those tasks assigned to them.
- b) Establish a feedback mechanism between the scene, VIC and morgue operations specific to:
- 221 1) Packaging, storing, labeling and transporting remains to mitigate damage and commingling.
- 222 2) Packaging, storing, labeling and chain of custody for personal effects and evidence items collected from antemortem interviews.
- 224 c) Perform an inventory of remains at regular intervals.
- 225 d) Conduct a morgue exit review prior to placing remains in long term storage to ensure all appropriate examinations have been completed and data filed.

227 e) Audit case files at regular intervals to ensure completeness, accuracy and legibility. 228 f) Establish procedures for regularly documenting, maintaining and calibrating morgue 229 equipment. 230 g) Conduct an anthropological review when fragmentary remains are associated with the same 231 individual to ensure anatomical integrity. 232 h) Reexamine unidentified remains periodically utilizing emerging and enhanced technologies to 233 determine whether additional decedent identifications can be made. 234 i) Establish a process for reconciling the manifest of unaccounted for persons against the 235 unidentified remains inventory. 236 j) Reconcile paper files against electronic files as a final quality assurance measure. 237 4.4.11 Demobilization 238 The presiding jurisdiction should develop strategies to address demobilizing operations. 239 a) Develop a demobilization plan to include: 240 1) criteria and proposed date for ending the incident specific mass fatality management 241 operations: 242 2) communication strategies for notifying the decedent's legal representatives, local 243 government officials, emergency management, and other response agencies; 244 3) criteria for re-establishing mass fatality operations; 245 4) policy for handling remains recovered after operations have demobilized. 246 b) Allow for phased demobilization of operations. 247 c) Address inventory, maintenance, and reconstitution of the equipment and supply cache. 248 d) Establish procedures for returning acquired resources to the appropriate agency or authorized 249 representative. 250 e) Finalize documentation and distribute to authorized personnel/agencies. 251 f) Debrief personnel to gain lessons learned from the operation. 252 g) Prepare an after-action report (AAR) for mass fatality management operations and provide 253 input into the overall incident AAR.

254	Annex A				
255	(informative)				
256	Bibliography				
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