Disaster Mortuary Operational Response Team (DMORT)

Standard Operating Procedures

2008
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Acronym Reference List
DMORT Standard Operating Procedures for Mass Fatality Incidents

Purpose
The DMORT SOPs were developed in order to provide a comprehensive reference that describes the standard approach to mass fatality management by members of the National Disaster Medical System’s (NDMS) Disaster Mortuary Operational Response Teams (DMORTs). The SOPs will outline authority, scope, standards and processes to facilitate the execution of approved policy level recommendations by NDMS Headquarters, by the DMORT teams, and by individual members operating in the field on any non-transportation related mass fatality incident involving Federal government assets and resources. These SOPs will provide a standard approach regardless of causative force, geographic location or specific team(s) deployed. Additionally, these serve as a significant reference in the development of field training programs and exercises for DMORT teams and personnel.

Scope
The DMORT SOPs are the approved procedures that will be utilized by all NDMS and DMORT teams members at the disaster site(s), incident examination center(s), incident morgue(s), fatality collection center(s), fatality transfer center(s), and all other facilities established on a specific incident or mission for the purpose of mass fatality management, support, or coordination.

Intended Audience
The intended audience comprises NDMS personnel, DMORT personnel, Medical Examiner/Coroner (ME/C) personnel, and local officials involved in disaster planning and emergency/disaster response.

Executive Summary
These SOPs delineate the general procedures used for DMORT operations when activated under NDMS. They are designed to provide public safety, public health, medical examiners, coroners, and other emergency management, medicolegal and emergency response stakeholders with accurate information in reference to how the NDMS DMORT system operates in the response to mass fatality incidents involving a number of fatalities exceeding the resources available to a local jurisdiction.

These SOPs were created to give structure to the well-established team of victim identification experts known as the Disaster Mortuary Operational Response Team or DMORT. The legal responsibility of the ME/C to identify disaster victims is well established in the United States, and it is maintained when a mass fatality incident occurs. The ME/C systems in the U. S. range from the professionally trained forensic pathologist to the rural county elected coroner with little medical background. Given this disparity, when a disaster occurs, the ability of the jurisdiction to respond effectively is a sometimes a concern. The DMORT system allows for disaster victim identification to be managed at a consistent level anywhere in the U.S., thus eliminating the specter of poorly equipped morgues, random procedures, and poor management. DMORT teams
have extensive experience in managing victim identification and family assistance following mass fatality incidents.

While no set of SOPs can address every and all contingencies, this set of comprehensive procedures has been created and designed to provide standardized and approved strategies, approaches, and processes to manage the unidentified deceased with dignity and respect. Certain modifications might be required based on extenuating circumstances that cannot be foreseen. In those cases, key stakeholders should confer and develop the approach to these circumstances that best meets the mission requirements. In all other circumstances, implementing these procedures will serve as the reasonable and prudent approach to managing an incident or event in which mass fatalities require retrieval, identification, and processing.
For Medical Examiners and Coroners: Summary of Procedures

The process of managing the deceased at a mass fatality incident must start long before the incident occurs with comprehensive planning, and training and the development of processes and procedures to guide the activities of individuals and response teams. A Unified Command organization will be in place in most circumstances. The objectives developed for the fatality management portion of the event must include the location, collection, documentation and retrieval of the deceased, transportation of human remains to the examination center or incident morgue, processing for identification of the dead, final disposition, and release or remains and family assistance activities.

The locating, documenting, collection, and retrieval of remains and other pertinent materials from incident sites requires a standardized approach to ensure that the location of materials within the scene is documented. These activities will directly affect the accuracy and speed in which victims are identified. Uncoordinated removal and transportation of the deceased to the incident morgue, without processing the scene in a deliberate, methodical manner, will have negative consequences in the loss of data that might have resulted in a positive identification.

Working at a mass disaster site is hazardous and site workers must be briefed on the hazards and take steps for the care of their health and safety. Local HAZMAT teams may also be involved in this briefing. Specialized DMORT teams such as DMORT-WMD are also available to participate.

Human remains in a WMD environment should be handled in a safe and consistent manner. Standard regional DMORT teams are not equipped or trained to process chemically or radiologically contaminated remains. Contaminated remains are unsafe to process in the incident morgue and must be decontaminated before removal from the incident site to avoid cross contamination of other areas and people.

If the threat of contaminated remains, personnel effects, and other items exists, the ME/C and supporting agencies must determine the best approach for mitigating the hazardous material agent while preserving all items of interest during the decontamination process. If necessary, mass fatality decontamination procedures should be established using a variety of resources to complete the mission.

The incident morgue is the location where the remains are processed by forensic specialists to confirm identification and to conduct a medicolegal exam for determination of cause and manner of death. Transportation of remains from the incident site or temporary morgue to the morgue site will be professional and dignified. Care should be taken to ensure that all remains are properly bagged, tagged, inventoried and placed in a refrigeration trailer or other appropriate vehicle for transportation to the morgue. Transportations logs will be maintained to ensure accountability of all remains in this process.

Exact placement of the morgue within the facility is determined by electrical source location, water source location, morgue accessibility by personnel, placement of refrigerated trailers, the
morgue flow plan, and security concerns. The DMORT Commander and DMORT DPMU Commander determine morgue placement within the facility. The ME/C may be included when making this decision.

Important safety considerations dictate that the off-loading of the DPMU be completed using the proper forklift or other necessary equipment under the direction of the DMORT DPMU team. Pallets on the flatbed will not be broken down and off-loaded by hand. The DMORT DPMU team will remove the pallet tarps and cargo netting after staging and securing the pallets adjacent to the morgue area.

The morgue flow plan and any specific needs of the ME/C will determine the basic floor plan of the morgue. Morgue sections, or workstations, may include:

- Admitting
- Personal Effects
- Photography
- Pathology
- Anthropology
- Dental
- Fingerprints
- DNA
- Embalming
- Radiology
- Casketing and Release
- Personal Protection Equipment (PPE)/de-gown and disposal PPE

Flexibility allows for variably sized work stations/areas. The morgue floor plan can be modified to support the specific needs of the workstation.

The DPMU is Federal property. For liability, safety, and security concerns, access to the morgue is controlled by the NDMS through the IRCT. The IRCT and DMORT Commander will work with the ME/C to ensure ready access of appropriate personnel from the ME/C office.

For security and privacy, taking photographs within the morgue is restricted. For historical and training purposes, certain candid photographs will be allowed. A candid photograph is any photograph taken within the morgue/storage secured area for any purpose other than being a part of the identification process.

The flow of remains and personnel through the incident morgue is dictated by the physical structure of the facility, the number of morgue personnel, the condition of the remains, and medicolegal considerations. Typical DMORT incident morgue operations comprise one twelve-hour shift per day. The number of remains will dictate whether a second shift is warranted.

In certain situations, particularly those involving fragmentary remains, it may be necessary to radiograph the bag or container holding the remains before the triage process. The resulting radiographs are used to assess the contents of the bag so that more effective sorting can be
completed at triage and any associated hazardous materials (knives, guns, bomb parts, etc.), collected with the remains can be safely managed.

Triage is an interdisciplinary section consisting of a pathologist, anthropologist, and an odontologist. The role of triage is to sort materials brought from the site in order to:

- Separate human tissues from other material evidence.
- Identify associated remains from non-associated remains.
- Assign probative value to fragmented remains in order to first process those remains most likely to provide evidence of personal identity.
- Separate tissues that are less likely to provide evidence of personal identity and place those remains in a common tissue container for later analysis or disposition.
- Enter remains into admitting for assignment of a morgue number.

Establishing and maintaining a chain-of-custody for personal effects and other pertinent materials verifies the integrity of the evidence. Remains/evidence processing teams will maintain the chain-of-custody throughout the recovery and morgue processes. As with human remains, personal effects must be handled with the care and consideration. Typically, personal effects removed from remains will be managed by the local jurisdiction under their procedures.

The system used to number remains entering the morgue process should be simple and use whole numbers. Experience has shown that complex numbering systems lead to confusion and errors. Following identification, the ME/C will be able to use their office case number to account for decedent remains.

Escorts accompany human remains through the mortuary process and ensure proper documentation is complete and attached at each morgue station. Escorts are responsible for the collection and safe keeping of all papers and examination records kept in the VPR. (Note: Staffing for escorts may vary according to the particular disaster.)

Photography of remains is an essential and standard process for forensic examination. Each body or numbered fragment will be photographed. DMORT typically relies on the local jurisdiction or law enforcement personnel to take photographs. DMORT personnel can take human remains or scene photographs if required.

The radiologist/x-ray technologist conducts radiographic examinations to detect evidence, provides postmortem radiographs for comparison with antemortem clinical radiographs, and assists pathologists, anthropologists, and odontologists in the interpretation of radiographs. It is recommended that ALL remains have radiographs completed to ensure physical items (personal effects, evidence, etc.) are not missed in the processing of remains.

The Dental Section Leader is responsible for the dental team. The Section Leader or other team members may provide support to other agencies (e.g., FBI) and other forensic identification disciplines (e.g., forensic anthropology, fingerprints, radiology). The odontology section comprises the antemortem section, the postmortem section, and the comparison section. Dental personnel may also be asked to support the retrieval of dental remains at the incident site.
The Dental Antemortem Section procures, analyzes, and consolidates dental information into a single, standardized, comprehensive antemortem dental record. A team of no fewer than two trained and qualified individuals will perform all recording and transcription of information.

The Dental Postmortem Section performs the dental autopsy including postmortem dental radiography and photography, and records the results in a standardized format. The postmortem section examinations and data entry will be performed by teams of no fewer than two trained and qualified individuals.

The Dental Comparison Section compares antemortem and postmortem dental information. Comparisons resulting in positive identifications are reported to the Identification Documentation Team and then to the ME/C via the means established for the event.

The examination and documentation of remains in the Pathology Section can provide detailed information assisting in identification, defining injury patterns and determining cause and possibly manner of death. DMORT forensic pathologists are available to assist the ME/C as needed.

The Anthropology Section should consist of at least two forensic anthropologists (one of whom is designated as Section Leader) and one assistant to serve as scribe. Staffing and equipment needs may vary according to disaster-specific needs and the functional assignment of the section.

All records and data are kept secure and confidential. Only authorized personnel are permitted inside the Information Resource Center (IRC) area. At the conclusion of the mission, all records and data collected become the property of the ME/C. No information will be released to any person(s) without proper authorization. The DMORT Family Assistance Center Team (FACT) supports the ME/C and the local or Federal law enforcement agency conducting missing persons reporting in the collection of antemortem data, including DNA reference samples.

DMORT personnel handling data management will be trained in standardized formats such as VIP, WinID3, and Office Suite. The File Section Leader will maintain a records library in the IRC. Records are evidence and property of the ME/C. No records or information be distributed to unauthorized personnel. Because DMORT works under the jurisdictional requirements of the ME/C, original records produced by DMORT will be provided to that office. Records and/or information collected and/or generated by DMORT will be copied for long-term archival storage at NDMS Headquarters. In the event of a legal challenge or other requirement, these records should be made accessible to DMORT forensic scientists for a period of time after the deployment.

The DMORT FACT interviews the NOK, collects antemortem information, and transfers this information to the IRC. If requested, the team will also provide information to the NOK and assist the ME/C with death notifications.

The FACT supports the family assistance process by procedures including:

1. Establishing a command structure to manage FAC staff.
2. Providing trained interviewers for the family interview process.
3. Establishing antemortem data acquisition and entry plan.
4. Coordinating operation with IRC Section Leader.
5. Establishing and supervising death notification procedures with ME/C, and securing psychological, and religious personnel if requested.
6. Serving as a member of the death notification team.
7. Coordinating FAC transportation and security plans for FACT personnel.
8. Working with Federal partners assigned to the FAC and ensuring proper support for them.

Proper positive identification is necessary for notification of the NOK, resolving estate issues and criminal/civil litigation, and the issuance of death certificates. A team chaired by a designated pathologist from DMORT will meet daily to review and confirm identifications. The team will consist of representatives from the forensic science disciplines and the ME/C office. The documentation of the identification, the cause and manner of death, and final disposition are required by law and used for vital statistics and the initiation of probate. The death certificate is the legal instrument for this documentation. The ME/C is responsible for all legal documentation pertaining to death certification.

Remains of decedents must be handled with the utmost respect and care. DMORT team members will ensure that all human remains (identified, unidentified, common tissue, or any other types of remains) are stored with dignity, prepared with professionalism, and transported with consideration. Once remains have been identified, they are securely stored in an environment that retards decomposition and maintains the chain-of-custody. In situations where remains are fragmented and commingled, identified remains may be re-associated so that remains belonging to individuals are returned together to the NOK. Often, because DNA analysis is the method used to conduct these identifications, the physical re-association of remains take place weeks or months after an incident.

The integrity of the identification process and morgue operations demands that remains be reviewed before release from the morgue. This review should include an examination of the identification methods used, a physical examination of the remains, and the proper re-association of remains for each decedent.

Via embalming, thorough disinfection, preparation, and minor reconstructive surgery procedures are accomplished on each decedent or part of decedent when authorized by the appropriate NOK. NOK may contract with a funeral home to perform this function. NOK or legal authority may authorize cremation as the final means of disposition.

Decedents and human remains will be placed in a casket, dressed when appropriate, and relocated to the morgue shipping point. If chosen by the NOK, cremation is an acceptable form of final disposition. NOK or legal authority may contract with a funeral home/crematory for cremation services.

To coordinate the shipping of remains and any NOK considerations, the receiving funeral home must be contacted and information exchanged. There will be coordination for the transport of released human remains from the incident morgue to a designated location, such as an airport for transport to the receiving funeral home.
Once incident morgue operations have ceased, all remains have been released, or there is a requirement to close the morgue operation, a standard process will be used to ensure the morgue site is cleaned, the DPMU is packed, and that all remains have been accounted for. The incident morgue facility must be turned back to the owner or agent of the owner without biological contamination. The facility must be restored back to its condition prior to morgue operations. Arrangements will be made through the IRCT to provide a walk-through with the owner to ensure that the cleanliness and condition of the facility is satisfactory.

An after action report (AAR) will be completed within a month after the deployment ends. AARs are critical for documenting the deployment, and help in future planning and response, indicate lessons learned, and may be relevant in legal challenges to the identification process.
DMORT Standard Operating Procedures

1.0 Introduction and Overview

All local authorities and officials, including medical examiners and coroners should be aware that expectations of family members of victims (and by extension the general public, politicians, and the media) concerning identification and morgue operations are high. Non-scientific identifications, which can lead to misidentification, are not acceptable practices. Funding alone should not pose an obstacle to accurate and timely identification. Medical examiner and coroner officials are expected to rely upon acceptable forensic techniques (fingerprinting, dental, radiological, DNA, etc.) for positive identification.

The victim identification process is thorough, efficient, and devised to minimize errors. These procedures are based on years of experience by the members of the NDMS DMORT system. Slight variance from the procedures in morgue organization may be expected based on the particulars of the event (e.g., condition of remains and availability of antemortem information). However, since the ultimate goal of the process is the accurate identification of the victim, the standards for the processes of forensic identification must be maintained.

All mass fatality events are local. They remain under the authority of the ME/C for the duration of the event. Federal disaster mortuary teams and specialists may be requested by the local or State authority for fatality management in any and all jurisdictions. As DMORT teams and specialists arrive at the site of the incident, these professionals have no jurisdiction apart from the delegated authority that resides in the office of the ME/C. DMORT teams work as the ME/C’s representative at the incident, which is managed at the local level for the duration of the event.

A local mass fatality event requesting Federal assistance exemplifies a true collaborative partnership.

1.1 Victim Identification in Mass Disasters

For the family and friends of those killed in mass disasters, an important measure of dignity awarded them is the process of identifying the remains of the deceased. Because this process happens without their direct involvement, the forensic and mortuary responders are granted a fragile trust. Families demand that remains be identified and returned to them quickly, and that they be kept informed throughout the process. They also believe that responders share their desire to quickly and accurately identify the dead. Forensic science, as a profession, must provide accurate information to families and explain discrepancies when they occur. Forensic standards must be adhered to in order to prevent errors, ultimately giving families and society the trust they need during their recovery from loss.
1.2 **National Response Plan**

**Emergency Support Functions**

- Federal support coordinated through **ESFs** (which group agency capabilities into functions most likely to be needed during an incident)
- Provide resources and program implementation
- **Proposed ESFs:**

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1.3 Jurisdictional Responsibility and Federal Support

The ME/C is the legal authority for conducting victim identification (or assisting the lead investigative agency to complete victim identification), determining cause and manner of death, and managing death certification. In the event of a mass disaster, the ME/C retains these responsibilities. In mass fatality disasters, no Federal agency can appropriate these responsibilities. Although DMORT provides support to the ME/C to accomplish decedent identification, it cannot speak for the local jurisdiction, nor assume the legal responsibilities of the ME/C. The ME/C retains jurisdictional authority and the DMORT teams work as a representative of the local ME/C having legal jurisdiction.

1.4 Using DMORT and Local Response Teams

DMORT supports local victim identification teams that work under the authority of the ME/C. These teams should have current SOPs consistent with those of DMORT to ensure that DMORT and the local team can work effectively together. Prior to the commencement of morgue operations, a pre-operational meeting will occur including the ME/C, local response team leader, and the DMORT Commander, and member of the Federal Emergency Support Function 8 (ESF-8) staff or IRCT, as appropriate.

Since the focus for all involved is the efficient, accurate, and timely identification of the deceased, the highest standards for morgue operations, decedent identification, and data management will be implemented.

1.5 Initial Meetings with Local and Federal Response Agencies

It is critical that the ME/C meet with representatives of DMORT shortly following the disaster. This meeting focuses on several important topics including the following:

- Ensure that the ME/C jurisdictional responsibility is understood and maintained.
- Assess ME/C needs for completing the victim identification process.
- Review the role of DMORT and other Federal agencies in supporting ME/C.
- Present an overview of the DMORT SOPs.
- Ensure that the ME/C understands complexities of victim identification process.
- Assess facilities for the incident morgue.
- Discuss ME/C role in family briefings.
- Examine potential costs and reimbursement issues.

This meeting must take place soon (within a day) following the disaster. Ideally, it should be done on-site, but it can be done via telephone. A copy of this SOP will be provided to the ME/C.
1.6 **DMORT Role in Family Briefings**

DMORT will be available to assist the ME/C in briefings that the ME/C holds for family members. Typically, the ME/C role at these briefings entails providing information about the following questions:

- Why is recovery taking so long?
- How will families be notified if their loved ones are recovered and identified?
- When will the personal effects be returned to the family?
- What method is used to identify the families’ loved ones?
- Will DNA be used in identification?
- What is the condition of the body?
- Will an autopsy be performed?
- How do families know that the information they receive is accurate?
- May families obtain copies of the ME/C report?
- Why are the identifications taking so long?

DMORT staff can provide assistance by working with the ME/C in briefings. The ME/C remains the legal authority in interactions with the NOK. Although DMORT provides support to the ME/C to accomplish victim identification, it cannot speak for the local jurisdiction, nor assume the legal responsibilities of the ME/C.

1.7 **Fatality Management Considerations**

Four factors impact the processing of remains and identification of decedents:

- Number of fatalities
- Decedent population (open or closed)
- Availability of antemortem information
- Condition of remains (complete or fragmentary)

These factors drive the personnel needed, how long identification will take, and the methods used to make identifications.

**Number of fatalities**
The number of deceased in a disaster is a significant driver in the amount of resources needed to search, retrieve and identify the dead. In general terms, as the number of decedents increases, the resources needed to manage and process them increases.

**Antemortem information**
Identification requires comparing postmortem information and antemortem data. Collecting the postmortem information is relatively simple and rapid, as the remains themselves are analyzed when they become available from the scene. However, locating and obtaining accurate and current antemortem data is more time-consuming and complex. For families that are familiar with the dentist and doctor of the decedent, these records can be obtained quickly. However,
factors such as the age, socioeconomic status, cultural practices, and religious beliefs of the decedent and the family will impact antemortem record availability.

**Condition of remains**

Whole bodies are much easier to process and, with adequate antemortem information, can be identified quickly. In the case of an intact body the unique physical identifiers needed to identify the individual are on the body, and when an identification is completed the person is identified. Fragmented remains present a set of more complex issues. Certain body parts may contain unique identifiers (e.g., dental work or fingers) and these parts can be identified. DNA analysis can be used to identify body parts that have no unique physical identifier. However, DNA analysis does have limitations--not all DNA analyses result in a DNA profile.

The decision about what to analyze for identification is done at the morgue triage station. Forensic personnel staffing the triage station devise criteria for making this decision based upon the degree of fragmentation and burning of the remains, the availability of antemortem information, and other particulars of the disaster. Remains that have a high potential for identification are put through the morgue process, while those with a low or no potential are held as common tissue.

**1.8 Family/Next of Kin Considerations for Decedent Information**

The nature of the victim identification process requires the involvement of the NOK in decisions about certain issues regarding decedent remains. The ME/C is responsible for raising these questions, documenting the answers, and following up on the requests. Nearly all States or U.S. Territories have legislative codes that define NOK. The ME/C will have access to this information and should ensure that DMORT personnel are aware of the legal definitions in their locality.

**1.9 Death Notification/Notification of Identification**

The ME/C or their will notify the NOK when the decedent has been identified. This notification can be done via telephone (if the NOK have not traveled to the incident locale), at the FAC, or at another location as agreed between the NOK and the ME/C. In the case of complete or nearly complete remains, the decedent is often identified in a relatively short time using conventional identification methods (dental, fingerprints, medical devices, etc.). For such remains, notification of identification should be followed fairly quickly by release to the designated funeral home.

In the event of larger pieces of remains, families should be asked if they wish to receive the existing remains (e.g., 80% complete) and forgo the receipt of more remains in the future, or if they want DNA to be used to reassociate any additional remains. The latter choice will delay the release of remains until the DNA testing is completed and any additional remains are identified.
In the case of fragmented remains, identifications usually take more time to complete. DNA will be the primary method for identification, and remains will need to be reassociated based on the DNA analyses. Families should be notified the first time remains from the decedent are identified. At this point, the NOK choose whether they are to be notified of additional identifications. They may be notified each time remains are identified, once all identifications are complete, or choose to receive no further notification of identification. The preference of the forensic team doing the identification work is that the remains stay in the morgue until all remains have been identified. This reduces error and can allow for more remains to be reassociated.

The ME/C will brief families about the condition of the decedent remains. When all remains are fragmented, the families should understand that identification will take more time. DMORT staff will assist the ME/C in composing the appropriate language for providing this information.

Because not all fragmented remains are identifiable, the ME/C must decide, in conjunction with the families, about the final disposition of these remains, often referred to as common tissue. Families will preferably work as a group to decide upon the final disposition. If families cannot decide, the ME/C may take action under the jurisdiction’s laws to dispose of the remains. If this occurs, families will be notified of the process and timing for final disposition.

1.10 Identification of Decedents vs. Identification of Remains
The ME/C is responsible deciding upon the primary goal for the identification efforts: whether to identify each decedent or to identify all remains. This decision will have a significant impact on the scope of the identification process. In the case of an incident where not all decedents are known (open population) and remains are fragmented, all remains must be analyzed for DNA so that profiles on all decedents can be obtained. DNA testing may not result in positive results for all remains tested. In a closed population where the decedent information is known (such as an aviation accident with a flight manifest), focus can be placed on identifying the maximum number of remains for each decedent. Each disaster poses unique concerns and the circumstances should be thoroughly considered before identification efforts begin.

1.11 Use of DNA
In mass fatalities and/or in cases of highly fragmented remains, DNA analysis is an essential component of the identification process. Like any forensic technique, DNA analysis has benefits and limitations. The ME/C should be aware of how these factors impact issues related to identification and working with family members.

DNA analysis has many benefits and can (1) identify the victims, (2) associate fragmented remains, and (3) assist in ongoing medical and legal investigations. However, there are limits to DNA technology. DNA analysis takes time. Antemortem reference samples from certain family members is required and may not be immediately available. Very small remains may be
destroyed in the process, thus leaving nothing to return to the NOK. Finally, DNA analysis may yield no useful information.

At some point, the ME/C must decide to conclude further testing of remains for DNA. This decision may carry particular significance if additional remains from the accident site are anticipated to be recovered after the formal retrieval period has ended.

1.12 Records Management and Long-Term Support

The ME/C is provided all original records of the DMORT process, including postmortem forms, antemortem records, and any associated documentation. They are also provided a copy of the data entered into the Victim Identification Program (VIP) or similar database. Designated, qualified DMORT personnel will keep copies of the database, which will be secured to protect the data. Should questions arise in the future, the ME/C should contact the DMORT Commander for assistance.

1.13 NDMS/DMORT Information

Within the NDMS, there are ten regional DMORT teams positioned across the United States. Each team has a Team Commander, a Deputy Team Commander, a command staff, and a compliment of personnel with a wide variety of specialized forensic and mortuary skills and expertise. DMORT also maintains three specialty teams: a Disaster Portable Morgue Unit Team (DMORT-DPMU), a Family Assistance Center Team (FACT), and a Weapons of Mass Destruction team (DMORT-WMD).

Each DMORT team is staffed with the various specialists necessary to support the mission tasking. This includes all standard forensic and morgue operations involving the handling of remains, the management of data pertaining to decedents, cause and manner of death determinations, antemortem data collection, embalming and release of remains, and the completion of identification reports.

In general, disaster fatalities are, by State law, under the jurisdiction of the local county or State Medical Examiner. Jurisdictional responsibilities at each disaster should be known to NDMS leadership since State and local laws vary from state to state and in U.S. Territories. Circumstances of the disaster may alter normal jurisdictional responsibilities. It is not the intent of NDMS to supersede the jurisdictional authority of local or State agencies that have, by law, the responsibility to care for the dead in mass fatality incidents.

The NDMS Section has three fully equipped DPMUs located regionally and designated East, Central, and West. DPMUs stock the equipment necessary for use by the DMORT specialists. Disaster-specific needs dictate how and where the morgue will be set up to best accomplish the DMORT mission. DPMUs are deployed rapidly, along with logistical specialists to establish and manage the DPMU.
DMORT also has specialized teams trained for specific tasks. The FACT comprises DMORT members who assist in the antemortem data collection by interviewing and interfacing with the victims’ families in the Family Assistance Center. Regional DMORT members can augment the FACT when the staffing need arises. The FACT can act as a liaison for the ME/C to the families affected by the event. For contaminated remains, the Weapons of Mass Destruction Team (DMORT-WMD) can retrieve contaminated remains, collect and document personal effects, and decontaminate the remains and effects to make them safe for processing in the incident morgue.

All NDMS field response operations are established using the National Incident Management System (NIMS) and Incident Command System (ICS). The IRCT Commander will establish a DMORT Liaison Officer within the IRCT Command Staff or a Mass Fatality or DMORT Branch within the IRCT Operations Section, and all DMORT operations will be coordinated through this structure.

IRCT and DMORT personnel will interface with local, State, and Federal agencies and volunteer organizations as deemed necessary and appropriate by the State Medical Examiner or Health Officer and the local ME/C.

1.13.1 NDMS/DMORT Rapid Needs Assessment Team
Once activated by the NDMS, a rapid needs assessment team from DMORT will arrive on scene. This team consists of:

- DMORT Regional Commander or their appointee
- DMORT DPMU Commander or their appointee
- DMORT FACT representative
- HHS Regional Emergency Coordinator
- IRCT Operations representative

The NDMS assessment team will meet with the ME/C to agree upon the level of support needed by the local medicolegal authority.

Upon receiving the assessment team’s recommendations, the NDMS Operation Support Center (OSC) or HHS Secretary’s Operation Center (SOC) will deploy the appropriate DMORT and NDMS response team assets to include: DMORT specialists, IRCT personnel, and Disaster Medical Assistance Team (DMAT) medical specialists to support the specific requirements of the disaster, which include the health and well-being of DMORT personnel. DMORT teams should be deployed as entire teams, strike teams, or sections of teams. The deployment of individual DMORT team members as single resources should be avoided except in special circumstances. This ensures the integrity of the team structure, chain of command, span of control, and the administrative and logistical support necessary to effectively conduct the mass fatality operations assigned. It also promotes the highest levels of safety and accountability of deployed DMORT personnel.
1.13.2 DMORT Personnel Code of Conduct
All NDMS personnel are guided by the HHS/NDMS Standards of Conduct originally composed in 1993. When activated into Federal service, DMORT personnel are Federal employees representing the U.S. Government. Conduct while on active duty should always be professional and with the best interest of the United States government in mind. Each NDMS employee must be familiar with and adhere to the Standards of Conduct outlined in the Code of Federal Regulations, 5 C.F.R. Part 2635. NDMS team members who are special government employees may also be subject to Federal criminal conflict of interest status at Title 18, U.S. Code Section 201-208 and the Hatch Act, at Title 5, U.S. Code Sections 7321-7326.

The IRCT Commander and DMORT Commander will address each case of misconduct and take appropriate action. Prohibited actions include:

- Acceptance of any bribe of money, goods or services in exchange for information.
- Entering into unauthorized contracts for goods or services in the name of any agency or organization, or misuse of identification cards.
- Any team member who willfully takes unauthorized photographs, audio or videotapes at a disaster site and/or morgue operation will be removed from the disaster operations site.
- Unprofessional conduct such as disrespect of the deceased, their personal effects or families will not be tolerated and shall be considered gross misconduct.
- Team members are responsible for their actions and activities in the non-duty times and are responsible for reporting to their disaster duty assignment at the time and place scheduled. Tardiness will be considered misconduct.

1.13.3 DMORT Professional Standards Compliance
ME/C jurisdictions can expect that DMORT team members will be trained and in compliance with professional standards. Initial and continuing DMORT training will be tailored to meet the standards established by NDMS. This training will enhance all the specialty positions within DMORT and provide the needed updates to the procedures and guidelines used during DMORT missions. DMORT personnel who are likely to encounter blood-borne pathogens or hazardous chemicals will be provided OSHA-mandated training under the auspices of NDMS/HHS. Forensic specialists that require continuing education to maintain their professional licensure are required to do so outside of the NDMS system.
2.0 Incident Site Operations

2.1 Human Remains Retrieval
The locating, collection, and recovery of remains and other pertinent materials from the incident sites requires a standardized approach to ensure that the location and condition of materials within the scene are documented. DMORT personnel can conduct and/or assist in the numbering and protection of remains, and additional scene activities that could impact morgue operations. These individuals should include a forensic anthropologist, a forensic dentist, a forensic pathologist, a medicolegal investigator, or other suitably qualified specialist.

2.2 Field Safety Briefing
Working at a mass disaster site is hazardous and site workers must be briefed to understand the hazards and take steps to take care of their health and safety. Local HAZMAT teams may be involved in this briefing. Specialized DMORT teams such as DMORT-WMD are also available to participate.

2.3 Decontamination of Remains
Human remains in a WMD environment should be handled in a safe and consistent manner. Standard regional DMORT teams are not equipped or trained to process chemically or radiologically contaminated remains. Contaminated remains are unsafe to process in the incident morgue and must be decontaminated before removal from the incident site to avoid cross contamination of other areas and people.

If the threat of contaminated remains, personal effects, and other items exists, the ME/C will assess the nature of the hazardous material and the options for timely, safe, and effective decontamination. The DMORT-WMD may be activated and deployed to clean and decontaminate human remains, in accordance with the DMORT-WMD Manual of Operations.

During the initial planning phase, the Incident Command/Unified Command representative, ME/C, DMORT-WMD Commander, and regional DMORT Commander, will address the sequence of operations for the decontamination process. Considerations may include:
- Determining whether decontamination of remains is indicated for the incident.
- Determination of the level of personal protective equipment (PPE) necessary.
- Verification that all participating personnel have been trained to minimum HAZMAT operations levels.
• The nature and extent of forensic examination of the remains on the decontamination line.
• Determination of the most suitable cleaning compounds for the particular agent.
• The monitoring of remains to determine whether they are “clean.”
• The storage and transport of the decontaminated remains to the incident morgue.

2.4 Temporary/Holding Morgue
In some incidents, an area must be designated as the temporary or holding morgue. This location is where remains are held until they are transported to the incident morgue. Some preliminary examination and inventory of remains may take place at this morgue.

When the remains are collected from the incident site, they will be placed in body bags or a similar appropriate container/bag. This container/bag will be marked with the associated site recovery number. The container/bag will be placed in the temporary morgue and will be logged into the inventory system in the morgue. Once removed from the morgue, the remains will be logged as such.

2.5 Transportation of Remains to Incident Morgue
The incident morgue is the location where the remains are processed by forensic specialists to confirm identification and to conduct a medicolegal exam for determination of cause and manner of death. Transportation of remains from the incident site or temporary morgue to the morgue site will be professional and dignified. Care should be taken to ensure that all remains are properly bagged, tagged, inventoried and placed in a refrigeration trailer or other appropriate vehicle for transportation to the morgue. Transportation logs will be maintained to ensure accountability of all remains in this process.

• A log sheet will be maintained indicating the following:
  o Assigned body number for remains being transported
  o Number of remains being transported in the vehicle
  o License number of the transporting vehicle
  o Name of the driver of the vehicle
  o Signature of the driver accepting responsibility for remains
  o Date and time vehicle leaves incident site for morgue
• Enclosed professional funeral vehicles or refrigerated trailers should be used.
• Remains will not be stacked.
• The number of refrigerated trailers needed for transport will be determined (approximately 20 adult whole bodies per 40-foot trailer).
• Vehilces will be placed in a secure area near accident site with easy access for loading remains.
• Once bagged, tagged and placed on a litter, the remains will be carried to the vehicle and loaded.
• Sufficient personnel will be utilized to carry each litter to reduce lifting injuries.
• Trailer doors will be locked and remain locked while human remains are inside.
• Vehicle driver will deliver the door key to morgue refrigerator storage Section Leader.
• Vehicle driver will be provided the route and will proceed directly to the morgue with no deviations.
• Police escort may be arranged with the local or State law enforcement.
• DMORT may request security to be present at the entrance to the incident site.
3.0 Incident Morgue Operations

3.1 Site Selection and Requirements

The DPMU is a packaged system containing all forensic equipment, instrumentation, support equipment, and administrative supplies required to operate an incident morgue facility under field conditions or support an existing morgue facility. The DPMU carries computers and related equipment to support the FAC, IRC, and morgue operations in the management of postmortem and antemortem information.

The DPMU is packaged in two different ways. The DPMU East and Central Caches are loaded into two 53’ refrigerated trailers per cache. The DPMU West Cache is palletized on seven military type aluminum pallets, measuring 9’6” by 7’4”. Cargo is netted and individually tarped, pallets are transportable via standard flat bed trailer, military cargo air transport, or commercial cargo air transport. Pallet size and weight mandates specific site selection requirements for safe off-loading, proper staging, and assembly of the morgue.

Site Selection
The incident morgue facility must meet certain requirements for size, layout, and support infrastructure. These requirements are listed below. In general, places such as airplane hangars and abandoned warehouses have served well as incident morgues. Facilities such as school gymnasiums, public auditorium, or similar facilities used by the general public will not be used. The facility should not have adjacent occupied office or work space. If needed, a large banquet style tent may be used, but it will require configuration for sufficient flooring, HVAC, electrical, and water requirements.

Site Requirements

• Structure Type
  o Hard, weather-tight roofed structure
  o Separate accessible office space for IRC
  o Separate space for administrative needs/personnel
  o DPMU re-supply and staging area, minimum of 5,000 square feet
  o Non-porous floors, preferably concrete
  o Floors capable of being decontaminated (hardwood and tile floors are porous and not usable)

• Size
  o Minimal size of 10,000 - 12,000 square feet
  o More square footage may be necessary for casket storage or other mission-specific needs

• Accessibility
  o Tractor trailer accessible
• 10-foot by 10-foot door (loading dock access (preferable) or ground level)

• Electrical
  - Electrical equipment utilizes standard household current (110-120 volts)
  - Power obtained from accessible on-site distribution panel (200-amp service)
  - Electrical connections to distribution panels made by local licensed electricians
  - Two diesel generators carried in DPMU cache
  - DPMU may need 125K generator and a separate 70K generator for Administrative and IR Sections

• Water
  - Single source of cold water with standard hose bib connection
  - Water hoses, hot water heaters, sinks, and connectors in the DPMU

• Communications Access
  - Existing telephone lines for telephone/fax capabilities
  - Expansion of telephone lines may occur as the mission dictates
  - Broadband internet connectivity
  - If additional telephone lines are needed, authorized personnel will complete any expansion and/or connections

Sanitation/Drainage
• Pre-existing rest rooms within the facility are preferable
• Gray water will be disposed of utilizing existing drainage
• Biological hazardous waste, liquid or dry, produced as a result of morgue operations, will be disposed of according to local/state requirements

Special Equipment Needs
• A forklift must be provided that is capable of lifting eight thousand pounds, with six-foot forks, or fork extensions and possibly all terrain to safely off-load the DPMU pallets
• A smaller forklift, of two to four thousand pound lifting capacity, is needed to move heavy equipment within the morgue during set-up

Miscellaneous Requirements
• Placement of 53’ refrigerated trailers for morgue personnel access.
• Number of decedents will dictate the number of refrigerated trailers needed.
• Separate refrigerated trailers will be designated for processed vs. unprocessed remains
3.2 Establishing the DPMU

Exact placement of the morgue within the facility is determined by electrical source location, water source location, morgue accessibility by personnel, placement of refrigerated trailers, the morgue flow plan, and security concerns. The DMORT Commander and DMORT DPMU Commander determine morgue placement within the facility. The ME/C may be included when making this decision.

Important safety considerations dictate the off-loading of the DPMU be completed using the proper forklift under the direction of the DMORT DPMU team. Pallets on the flatbed will not be broken down and off-loaded by hand. The DMORT DPMU team will remove the pallet tarps and cargo netting after staging and securing the pallets adjacent to the morgue area.

The morgue flow plan and any specific needs of the ME/C will determine the basic floor plan of the morgue. Morgue sections, or workstations, may include:

- Admitting
- Personal Effects
- Photography
- Pathology
- Anthropology
- Dental
- Fingerprints
- DNA
- Embalming
- Radiology
- Casketing and Release
- PPE/de-gown and disposal

Proximity to electrical and water sources reduces the necessary hose and power cord size. Flexibility allows for variably sized work stations/areas. The morgue floor plan can be modified to support the specific needs of the workstation.

Morgue floor space can be added or deleted, as the needs of the mission change, or the specific needs or requirements of the ME/C change. Consideration must be given to the additional floor space required for the radiology (x-ray) section.

Supervision/Guidance

The set up procedure will normally be under the direction of the DMORT DPMU team with assistance of the on-site regional DMORT members.

Staging

The DPMU containers are brought into the facility and staged. If on 463L pallets, they are brought into the facility, staged on appropriate 4x4’ cribbing, tarps are removed, and
the top net is disconnected from the bottom net. The top nets are totally removed and appropriately stored, the bottom nets stays connected to the pallet, but are pushed up tight to the pallet to eliminate trip hazard. Extreme caution must be exercised during the removal of containers from the pallets. All containers are marked with the weight, and assisting members are reminded not to exceed their lifting capacity. Support belts are available upon request, and carried on the DPMU.

**Floor Preparation**
The DPMU carries 6 ml plastic sheeting (20’ X 100’) in sufficient quantity to initially protect all flooring that the morgue will cover. A basic floor plan will consist of two rolls of 6 ml plastic secured to each other side by side with duct tape. Care must be taken to minimize the overlap of the two pieces to eliminate plastic on plastic “slippage.” All leading edges of the plastic will also be taped to prevent tripping and maintain integrity of the floor. This provides an approximate 40’ X 100’ footprint (4,000 square feet). Additional floor coverage may extend beyond this basic floor plan to accommodate radiology.

**Basic Layout**
Once the floor is covered and secured, the basic layout out of the morgue commences. Assisting members may break out and assemble the partitioning poles and bases. All of the PVC poles, with attached threaded tailpieces, are of the same size and length to facilitate the layout. Once the bases and poles are placed appropriately creating the basic layout, the horizontal top rail is assembled from one starting point utilizing PVC poles and appropriate connector pieces (90 degree elbows, tees, straight connectors, etc.), and attached to the upright poles and bases. This will create the sectioning of the individual workstations, and the basic structure to which the partitioning drop curtains will be attached. The drop curtains are not attached at this time in order to facilitate the movement of equipment from the staged pallets into the individual workstations.

**Electrical and Water Distribution Systems**
After electrical and water sources have been determined, appropriate water hose and power cords are laid out. The water distribution system includes sinks & hot water heaters. The electrical distribution system includes power distribution boxes, quad boxes, extension cords and lighting in sufficient quantity to supply each workstation. It is preferred to have all water hose and power cords to run on the outside perimeter of the morgue. If crossing the morgue floor with water hose and/or power cords are necessary, cable protectors, which are carried by the DPMU, will be used.

**Drainage and Liquid Waste Disposal**
Prior to the commencement of morgue operations, the disposal of liquid waste generated by the morgue needs to be determined in accordance with local and/or State laws. Some local regulations allow direct disposal into existing sewer systems. If this practice is not permitted, the DPMU Logistics Chief will make arrangements with the IRCT to have bulk disposal tanks delivered to the incident morgue site facility.

**Equipment Dispersal**
Simultaneous with the set up of the electrical and water distributions systems, the equipment on the DPMU pallets, under supervision of a DPMU team member, can be removed and placed into the respective morgue workstations. Each equipment container is labeled to identify the appropriate forensic principle to which it is assigned. (PAT/pathology; ANT/anthropology; DEN/dental; ADM/admitting; FPT/fingerprinting; XR/x-ray; EMB/embalming; etc). The individual workstations are identified with placards attached to the horizontal top rail to facilitate identification of the workstation to which equipment will be placed. Additionally, arrangements will be made to transport the necessary computers and support equipment to the FAC, as well as the IRC.

**Work Station Set-Up**

Once equipment is placed into a workstation, and prior to morgue operations commencing, each Section Leader will be given an inventory list of the equipment in their section. They should inventory their equipment and supplies, making sure that all is in good working order. Once completed, the DMORT DPMU Logistics Chief will ensure that the Hand Receipt form is signed, acknowledging that the Section Leader has taken possession of and is now responsible for the equipment and supplies in their section. The Section Leader will have the opportunity to arrange his or her assigned workstation for specific needs. It is also at this time that the drop curtains are attached to the PVC poles/top rail to further define individual workstations. Any additional equipment needs not already provided can be requested through the DPMU team, with approval of the DMORT Commander.

**Safety Briefing**

Prior to the commencement of morgue operations, the DMORT Commander or designee, and the DMORT DPMU Commander or designee will identify a Safety Officer and conduct a safety and operational briefing. The safety briefing will consist of instruction in the use of fire extinguishers and the eyewash station. The operational briefing will entail whatever the DMORT Commander considers essential and consistent with the mission.

**Staged DPMU Pallets**

Upon completion of the morgue set up, and at the safety and operational briefing, DMORT team members will be advised that the area adjacent to the morgue containing the staged DPMU containers and equipment will now be off limits to team members. This will allow an accurate re-supply of inventory by the DMORT DPMU team that will be on-going through out the mission.

**Inventory and Re-Supply**

By the end of the first day of morgue operations, inventory and re-supply issues must be addressed to ensure adequate supply of any given item is available for the next operational period. All items within the DPMU’s inventory has been identified with standard item nomenclature, categorized, and assigned a part number. Some items have received bar code numbers for property accountability purposes. Inventory lists are supplied to each Section Leader and it becomes his or her responsibility to continually track that particular section’s inventory and anticipate future requirements to ensure a
timely re-supply. Re-supply requests will go directly to the DMORT DPMU logistics section. Any request for procurement of a non-standard item must be approved by the DMORT Commander, and be accompanied with a justification for the request. Upon conclusion of morgue operations at the end of the mission, and upon completion of an inventory of the DPMU by the DMORT DPMU team, a re-supply list will be given to the DMORT DPMU Logistics Chief for that mission for appropriate review and action.

3.3 Morgue Security
The DPMU is Federal property. For liability, safety, and security concerns, access to the morgue is controlled by the NDMS through the IRCT. The IRCT and DMORT Commander will work with the ME/C to ensure ready access of appropriate personnel from the ME/C office.

A list of authorized DMORT personnel will be provided to the IRCT. The IRCT will arrange with local, State, and/or Federal law enforcement agencies to provide 24-hour security in and around the facility. Law enforcement personnel will check credentials to ensure that authorized personnel only are allowed in or around the incident morgue. Unique identification badges may be issued to ensure access to authorized personnel. Each person entering the area of the morgue will sign in and will sign out.

3.4 Personal Protective Equipment
All individuals directly involved with human remains need protection from blood-borne and aerosol-transmissible pathogens. To protect the eyes, skin, and mucous membranes, all individuals present during body handling and examination should wear appropriate protective equipment.

Minimum protection includes:
- Impervious gown or long-sleeved Tyvek suit with impervious apron
- Disposable surgical cap
- Disposable surgical mask
- Eye protection (goggles or face shield)
- Disposable shoe covers
- Disposable surgical gloves (double gloves)

PPE must be worn at all times when examining a decedent. NO food, drink or chewing gum is allowed in the morgue at any time. Eye wash stations will be readily accessible in the morgue. DMORT personnel who are likely to encounter blood-borne pathogens or hazardous chemicals will be provided OSHA-mandated training under the auspices of NDMS/HHS.

3.5 Photography Policy

For security and privacy, taking photographs within the morgue is restricted. For historical and training purposes, certain candid photographs may be allowed. A candid photograph is any photograph taken within the morgue/storage secured area for a purpose other than being a part of the identification process.

- No candid photographs may be taken in the morgue between the time that the first remains enter and the last remains exit.
- The single exception is a designated photographer(s) who may take photographs for historical documentation or training purposes. These photographer(s) will wear a distinctive and conspicuous means of identification. This photographer(s) will be named by the DMORT Commander with the consent of the ME/C.
- Photographs will be sequestered under the auspices of the DMORT Commander and ME/C. Following review, distribution will be coordinated and will be limited to certain individuals/organizations including DMORT team members.
- The ME/C representative and DMORT Commander will decide on the disposition of any photographs that are not authorized for distribution.
- Cellular phone use in the morgue is prohibited. No cell phone may be removed from its holder while in the morgue. The only exception is the use of NDMS issued cellular telephones, which do not contain cameras.
4.0  Documentation and Analysis of Remains

4.1  Morgue Flow Chart
The flow of remains and personnel through the incident morgue is dictated by the physical structure of the facility, the number of morgue personnel, the condition of the remains, and medicolegal considerations. In general, the flow of remains through the morgue is done according the diagram below. Typical DMORT incident morgue operations comprise one twelve-hour shift per day. The number of remains will dictate whether a second shift is warranted. The nature of the event may result in modifications to the flow, and such changes should be documented in the morgue records for the specific event and also in the AAR.
Mass Fatality Morgue Operational Plan

Unprocessed remains storage
Refrigerated truck

Radiograph remains container

Triage
Sort remains, personal effects, and evidence
Select remains with potential for ID

Common Tissue
Remains with no/tin potential for ID

Evidence
Law Enforcement/NTSB

Personal Effects
Law Enforcement/Contractor

Family Assistance Center
Antemortem data collection

ID Station
Dental
Radiography
DNA
Prints
Medical devices

Forensic Examination
Pathology
Anthropology
Dental
Fingerprint
DNA

Remains for Examination

Initial Documentation
Numbering
Photography
Radiography

Fatality Management Considerations
- Open or closed population
- Fragmented or complete remains
- Antemortem data availability
- Role of DNA
- ID of remains or decedents
- Triage probative value
- Family decisions on notification and reassociation

Notification to Next of Kin
Decision on future notification
Decision on reassociation

Processed Remains Storage
Refrigerated truck or cold storage

Reassociation of fragmented remains

Release of remains to Funeral Home

Embalming and Casketing
(if required)

Final ID Check
4.2 Radiography of Remains Container

In certain situations, particularly those involving fragmentary remains, it may be necessary to radiograph the bag or container holding the remains before the triage process. The resulting radiographs are used to assess the contents of the bag so that more effective sorting can be completed at triage and any associated hazardous materials (knives, guns, bomb parts, etc.) collected with the remains can be safely managed.

The entire, unopened container will be radiographed and the film read by a pathologist or anthropologist (with augmentation from other appropriate staff such as bomb team members) prior to proceeding to the triage. The digital radiograph should be labeled with the field number that has been assigned by the retrieval team. Care should be taken to make certain that the container is not opened at this point as morgue numbers have not yet been assigned. These radiographs will be stored electronically on storage devices put in place by the DMORT DPMU Information Technology (IT) personnel.

4.3 Triage of Remains and Evidence

Triage is an interdisciplinary section consisting of a pathologist, anthropologist, and an odontologist. The role of triage is to sort materials brought from the site in order to:

- Separate human tissue from other material evidence.
- Identify associated remains from non-associated remains.
- Assign probative value to fragmented remains in order to first process those remains most likely to provide evidence of personal identity.
- Separate tissues that are less likely to provide evidence of personal identity and place those remains in a common tissue container for later analysis or disposition.
- Enter remains into admitting for assignment of a morgue number.

The triage team members will:

- Open bags delivered from scene.
- Utilizing radiographs of bags taken prior to triage, sort through bags to separate diagnostic human tissue from material evidence and debris.
- The triage section may apply appropriate protection to oral, facial, skeletal or other structures to insure integrity of those structures.
- Route material evidence to the appropriate law enforcement agency if warranted.
- Isolated personal effects are routed to the local jurisdiction.
- Log bag number and other information into triage log sheet.
- Bag remains with a high probative index (i.e., those remains with the highest likelihood for identification) and attach a Victim Processing Record (VPR).
- Identify the stations where the specimen should be routed and make that notation on the VPR (all specimens go to photography, radiography and DNA).
- The triage scribe signs and dates the VPR, and then the specimen is routed to Admitting.
In the Pathology Section, when human remains are associated with personal effects, the personal effects are removed from the human remains as long as removal will not damage or compromise the remains. Notation about clothing is entered into the comments section of the VPR. If the human remains are suitable for further analysis, processing through the morgue stations continues.

For remains in which the personal effect cannot be removed without possible damage, the ME/C will be notified, and effects will be left associated with tissue. “ME/C” will be marked in red marker on the VPR, and specimens processed according to the procedures described above. The ME/C receives the specimen after all other relevant stations have signed off. These specimens may be expedited through the systems at the request of the ME/C.

4.3.1 Chain-of-Custody
Establishing and maintaining a chain-of-custody for personal effects and other pertinent materials verifies the integrity of the evidence. Remains/evidence processing teams should maintain the chain-of-custody throughout the recovery and morgue processes.

Throughout the investigation, those responsible for preserving the chain-of-custody should adhere to the following:

- During the processing of human remains and removal of personal effects, care should be given to fully documenting and describing those removed personal effects. Once removed, there should be full documentation showing the morgue reference number (MRN) referring to the case.
- During the processing of human remains, anything suspected of having evidentiary nature should be fully documented, photographed, and turned over to the appropriate law enforcement agency using the chain of custody forms. Documentation should include the date and time of location as well as the name of the person making the discovery.
- Sign chain-of-custody forms whenever evidence or personal effects are released from one individual or section. This form should include the signature of the person relinquishing control as well as the signature of the person receiving control. Additionally, the chain-of-custody form should contain documentation as to the date and time that the transfer of custody was made.

4.3.2 Personal Effects
As with human remains, personal effects must be handled with care and consideration. Typically, personal effects removed from remains will be managed by the local jurisdiction under their procedures.
The Section Leader shall assure that the Personal Effects procedures are adhered to and personal effects are tagged and a log maintained.

The Section Leader shall be responsible for the custody and security of all items and for obtaining signatures on the proper release or chain-of-custody forms when transferring personal effects within the morgue sections.

Under certain conditions, this section will be responsible for cleaning and sanitizing the personal effects before release.

Clothing or jewelry found on a victim will be photographed and documented. Designated personnel in the morgue will handle removal of these personal effects.

Removed items will be given to the ME/C or designated personal effects contractor for processing.

No attempt will be made to repair any associated or unassociated jewelry that is found.

If personal effects are found on a decedent after being processed, the items will be returned to the admitting station, logged in, and released to the ME/C or personal effects contractor.

### 4.4 Admitting and Numbering of Remains

The system used to number remains entering the morgue process should be simple and use whole numbers. Experience has shown that complex numbering systems lead to confusion and errors. Following identification, the ME/C may use their office case number to account for decedent remains.

After triage, the individual remains or fragments shall proceed to admission where they will be assigned a MRN and Escort (or tracker). Every body or fragment thereof will be assigned a simple, ascending number. The first body or fragment thereof will be assigned “1,” and the numbers will ascend accordingly until the last set of remains is processed. As individual bodies are identified the ME/C can now incorporate his/her internal tracking number and the release can be made using this number. VPRs are assigned at this time.

Ideally DMORT will institute a bar code system that will allow for the tracking of bodies or fragments through the morgue stations. When instituted, this system will allow for numbering of bodies, as detailed above. At the admitting station the body will be assigned a number and given a bar code with a corresponding number. The admitting station will print corresponding sheets of bar code stickers to be included in the VPR. As the body proceeds through the stations the Escort will be responsible for attaching a unique bar code to that body and to all x-rays and papers generated through the process.
4.5 Escorts

Escorts accompany human remains through the mortuary process and ensure proper documentation is complete and attached at each morgue station. Escorts are responsible for the collection and safe-keeping of all papers and examination records kept in the VPR.

- The Escort Section Leader assures that each Escort is briefed concerning his or her duties and maintains a log of the Escort names, date and time of duty.
- The Escort Section Leader shall assign at least one Escort to each container, pouch or evidence bag containing human remains before it begins processing through the morgue system. When the human remains have been processed through all appropriate morgue sections, the Escort shall return the VPR to the Section Leader. The Escort Section Leader shall assure that all forms in the VPR have been accurately completed before releasing or reassigning the Escort.
- The Escort transfers the remains through the various morgue sections and stays with the body until all processing aspects are completed.
- Escorts will ensure section personnel complete, sign, and insert completed forms in the VPR.
- The Escort Section Leader is responsible for returning the VPR to the Admitting Section Leader.
- Escorts must stay with assigned remains at all times.
- Religious customs, if known, concerning the handling of remains will be considered and every effort will be made to comply with these customs. The ME/C will make the final determination on how religious and cultural issues are addressed.

4.6 Photography of Remains

Photography of remains is an essential and standard process for forensic examination. Each body or numbered fragment will be photographed. DMORT typically relies on the local jurisdiction or law enforcement personnel to take photographs. DMORT personnel can take human remains or scene photographs if required.

- For complete bodies, standard autopsy-type photographs will be taken (anatomical position).
- Where possible, full-face identification photographs will be taken.
- All photographs will contain the morgue reference number as well as a reference scale where applicable.
- The entire human remains will be captured in the photograph.
- Photography station personnel will maintain a photo log.
- Photographs of all personal effects will be taken prior to removal.
- Digital image files will be provided to the IRC for inclusion into VIP.
- Hard copies of digital photographs will be placed in the VPR when available if desired by the local ME/C.
4.7  **Radiology**

The radiologist/x-ray technologist conducts radiographic examinations to detect evidence, provides postmortem radiographs for comparison with antemortem clinical radiographs; and assists pathologists, anthropologists, and odontologists in the interpretation of radiographs. It is recommended that ALL remains have radiographs completed to ensure physical items (personal effects, evidence, etc.) are not missed in the processing of remains.

The radiology section shall be established in an area of the morgue that is secluded from the other processing sections. The section shall contain the digital portable x-ray unit and processor.

The radiology Section Leader will:
- Address radiation safety issues such as shielding.
- Monitor radiation dosage of team members via dosimeters and assign dosimeters to other morgue personnel as appropriate considering location and shielding of the x-ray unit.
- Identify sources of equipment or additional facilities as needed.
- Maintain control and accountability of all individual radiographs.

The radiology team will:
- Radiograph all remains entering the morgue unit.
- Keep a log of all radiographs taken, including:
  - Morgue reference number (MRN)
  - Date/time remain received
  - Radiograph number
  - Number of radiographs taken
  - Initials of X-ray technician
- Mark each radiograph with the corresponding MRN.
- Conduct additional radiographs as requested by forensic specialists.
- Evaluate circumstances in which additional images may be required as they relate to the incident.
- Assist other forensic specialists with the comparison of antemortem and postmortem radiographs.
- Radiographs will become the property of the local ME/C and will be a permanent record of the decedent.

4.7.1  **Additional Procedures for Radiology**
- Whenever possible the remains should be positioned so that standard and conventional views are obtained for ease of comparison with antemortem films. When dealing with fragmented remains, this may require the assistance of an anthropologist or pathologist.
- Complete radiographs of the abdomen and chest region will be taken.
• Anterior Position (AP) and lateral radiographs of the skull must include a clear view of the sinuses.
• Radiographs of the extremities will be taken as needed.
• If digital radiographs are being taken, the image files will be provided to the IR section for inclusion into VIP or similar database.

4.7.2 Radiographic Identification
  o Radiographs should be examined for pathological and medical conditions by an anthropologist or pathologist experienced in radiographic interpretations for identification purposes.
  o A written description of the points of similarity leading to the identification will be provided to the identification documentation team for review. The identification documentation team may review the radiographs to assist in understanding the identification.

4.8 Odontology
The designated Dental Section Leader is responsible for the dental team. The odontology section comprises the antemortem section, the postmortem section, and the dental comparison section. Dental personnel may also be asked to support retrieval of dental remains at the incident site.

4.8.1 Scene Dental Remains Collection
The dental team may provide remains retrieval assistance to the ME/C or other agencies. At the scene, the dental team can recognize craniofacial structures and dental prosthetic devices, and may recommend procedures for the protection and preservation of dental remains prior to transporting decedents to the incident morgue from the disaster site. Tasks may include:

• Identify, collect, and preserve dental remains.
• Protect craniofacial remains by wrapping.
• Assist with site searching for dental remains.

4.8.2 Dental Antemortem Section
The Dental Antemortem Section procures, analyzes, and consolidates dental information into a single, standardized, comprehensive antemortem dental record. A team of no fewer than two trained and qualified individuals will perform all accessions, recording, and transcription of information, including:

Procedure:
• Assisting in procurement of dental records at the FAC, via telephone, or visits to dental offices.
• Transcribing dental information from dental records into standard format and nomenclature.
• Recording antemortem dental information into standard format and nomenclature.
• Scanning non-digital image information (radiographs and photographs) and enter into standard format.
• Entering digital image information into standard format.

4.8.3 Dental Postmortem Section
The Dental Postmortem Section performs the dental autopsy including postmortem dental radiography and photography, and records the results in a standardized format. The postmortem section examinations and data entry will be performed by teams of no fewer than two trained and qualified individuals.

Dental Autopsy
• Craniofacial Dissection: Any facial or dental dissection required for a complete and accurate dental examination must be approved in advance by the ME/C. No craniofacial dissection will be performed if adequate information can be obtained without dissection.
• Visual Examination and Charting: When practical, all dental autopsy information will be recorded directly into standard format and nomenclature. If computer use in the autopsy area is not practical, information will be recorded onto standard forms and transferred to the appropriate area for data entry.
• Radiographic Examination: A complete radiographic survey of the available craniofacial remains should be recorded using digital intraoral sensors. Extraoral radiography may be employed when available and practical if it assists identification.
• Dental Models: Impressions for dental models may be made if they will assist in identification of a decedent. Standard dental impression materials should be used following manufacturer instructions.

4.8.4 Dental Comparison Section
The Dental Comparison Section compares antemortem and postmortem dental information. Comparisons resulting in positive identifications are reported to the Identification Documentation Team and then to the ME/C via the means established for the event.

• Dental Comparison team members must be familiar with standard data format and nomenclature including advanced search and comparison functions.
• Teams will work in pairs, when possible, to facilitate the comparison process and prevent errors.
Positive dental identification recommendations are agreed upon by two qualified individuals and confirmed by the Dental Section Leader before submission to the Identification Documentation Team.

4.9 Pathology

The examination and documentation of remains in the Pathology Section can provide detailed information assisting in identification, defining injury patterns, and determining cause and possibly manner of death. DMORT forensic pathologists are available to assist the ME/C as needed.

An autopsy assistant should support each forensic pathologist. A forensic photographer should be available when needed.

At the triage station, the pathologist should:
- Assess the remains using an event-specific probative index to identify remains (such as dental fragments or orthopedic appliances) that will lead to identification.
- Document, remove and save non-human and/or non-biological materials for proper disposal.

The forensic pathologist should, on each decedent:
- Review radiographs.
- Document general physical characteristics.
- Document specific scars, tattoos, and other unique identifying features.
- Document injuries and trauma with special attention to direction given by ME/C personnel.
- Document and recover, when appropriate, internally implanted medical devices for identification.
- Recover evidence as indicated or requested.
- Take DNA tissue samples.
- Collect appropriate toxicology samples if warranted.
- Conduct a complete autopsy, if indicated.
  - The autopsy can be performed by either the Virchow or Rokitanski method, according to the judgment of the forensic pathologist.
  - Representative samples of all organs will be retained in formalin.
  - All tissues and organs will be returned to the body
  - Autopsy findings will be recorded at the end of the autopsy (preferred) but no later than the end of the shift.

Document all findings completely in VIP or similar format and on body diagrams.
Document salient findings by photography.

4.10 Anthropology

The Anthropology Section should consist of at least two forensic anthropologists (one of whom is designated as Section Leader) and one assistant to serve as scribe. Staffing and equipment needs may vary according to disaster-specific needs and the functional assignment of the section.
In a mass disaster, the Anthropology Section assists in two functional areas of the DMORT operation: (1) assisting with the initial evaluation, documentation, and sorting of human remains in the morgue triage, and (2) providing comprehensive forensic anthropological documentation of human remains in the morgue. The anthropologist may also be asked to provide additional types of analyses and support within the morgue.

In the triage area, the anthropologist will:
Assess the remains using an event-specific probative index to identify remains such as dental fragments or orthopedic appliances that are more likely to lead to identification.

In the anthropology station, the anthropologist will:
Log in and document remains as they are processed at the anthropology station.
Complete a standardized VIP forensic anthropology report form.
Compile a logbook to document the specimens examined at the station.
Evaluate and document the condition of the remains.
If the remains are fragmented, describe the anatomical structure(s) present.

Provide a biological profile of the decedent or remains, including:
Ancestry
Trauma (antemortem)
& Pathology (antemortem)
Document sex
Assess forensic stature
Record perimortem trauma
Year/age at death
Locate anomalies and idiosyncratic variation (e.g., surgical hardware, prosthetic devices).

The forensic anthropologist can also be expected to:
Document, remove and save non-human and/or non-biological materials for proper disposal.
Obtain DNA samples from bone.
Assist in taking radiographs (to ensure proper alignment of the specimen).
Interpret trauma in consultation with the pathologist.
Obtain and isolate dental evidence in consultation with the odontologists.
Interpret and compare antemortem and postmortem records and radiographs.
Assist the pathologists and odontologists in establishing identity via antemortem and postmortem radiographic comparison.
Examine identified remains prior to release to confirm that the biological evidence used for identification matches the biological parameters of the remains.

4.11 DNA Specimen Collection
DMORT has personnel to conduct DNA collection, but does not currently have DNA analysis capabilities. Historically, DMORT missions have utilized both the Armed Forces DNA Identification Laboratory (AFDIL) or a private contractor to conduct DNA identification efforts.

Interagency Coordination:
The deployed DNA contractor or representative (DNA Rep) works in the DNA Section of the Morgue and reports to the Morgue Operations Branch Director or Section Leader. The DNA representative coordinates and controls the DNA specimen collection process. The lead agency or official with authority for the investigation (typically the ME/C) maintains control of remains recovery and processing. The DNA Section coordinates pertinent aspects of remains recovery, storage, and processing with the designated authority. In addition, the DNA Section informs and educates this authority on DNA identification technology including the capabilities of DNA identification and reassociation, the limitations of DNA identification, and to convey the needs of the DNA laboratory to achieve successful results. The authority having jurisdiction and the DNA Section must agree to the DNA specimen collection process. Discord in this arrangement must be coordinated through the DMORT Commander or the IRCT.

DNA Specimen Collection Equipment
The DNA Rep(s) will hand-carry enough DNA specimen collection supplies and personal protection equipment to meet mission requirements. Additional supplies are coordinated through the DPMU Logistics Section or from the appropriate vendor. Digital photography is used to document the DNA specimen collection effort.

DNA Specimen Selection Criteria
Selection criteria are dictated by completeness and condition of the remains. Biological material sampled for DNA will be photographed prior to sampling. Since DNA sampling of human remains is a destructive process, the DNA Section ensures the sample being collected does not destroy or alter the characteristics of the evidence critical for identification by another scientific means such as dental or fingerprint identification. DNA specimen collection is typically the last step in the identification examination sequence.

DNA Specimen Collection
Collecting DNA samples is the responsibility of the DNA Section. The sample selection is based upon obtaining the best biological specimen presenting the highest degree of potential success for the laboratory with the least amount of challenge for DNA extraction. In order of general preference sample selection choices are:
Whole blood
Tissue
Bone
Teeth
Hair

Other specimen collection guidelines:
Less preferable samples may be selected when the sample is more likely to produce successful laboratory results. For example, bone may be selected over tissue if the tissue exhibits signs of advanced stages of decomposition or contamination. Remains identified by other conventional means of identification should be sampled for DNA identification.

DNA samples obtained from intact remains during autopsy are collected by the pathologist performing the autopsy. The pathologist should be encouraged to consult the DNA Section to identify the most appropriate material for DNA sampling. The pathologist may assign responsibility for sampling the remains to the DNA representative and oversee the process. DNA samples obtained from fragmented and disassociated remains may be collected by the DNA Section.

Whole blood should be collected in a purple top tube and refrigerated. When possible, the blood should be spotted onto a DNA specimen collection card (preferably untreated filter paper), air-dried, and individually packaged for shipment. The remaining blood from the purple top tube should be left in the custody of the local medical authority or discarded. Tissue, bone, teeth, and hair should be collected in a 50ml conical tube. Each item collected must be placed in a separate container and each container must be marked with an evidence label.

The DNA sample should not normally be obtained from human remains fragments if the sample will consume the entire remains. Further, an item too small to sample safely should not be sampled for DNA analysis. In circumstances where it is deemed necessary and appropriate to collect the entire sample for DNA analysis the proper responsible authority (ME/C) must be informed that the entire remains was collected for DNA analysis and the contents will be consumed in analysis. This circumstance may lead to a positive DNA identification with no remains available for return to surviving family members. When entire fragmented remains are collected for a DNA sample the tracking record for recovered remains must be annotated to reflect the entire sample was collected for DNA analysis.

Family Reference Specimens
Family reference specimen collection is not typically the responsibility of the Morgue DNA Section. The ME/C should take responsibility for the collection of these samples, and may work with local law enforcement, DMORT, or other responders groups to collect reference samples. The FAC may become the focus for sample collection. The DNA representative can inform local authorities about appropriate family references and proper sample collection. The DNA representative can make family reference collection kits or DNA bloodstain cards available to the responsible authorities. Family reference specimen collection equipment includes donor consent forms for use by medical authorities for execution by the appropriate family member authorizing the AFDIL or contract laboratory to perform DNA analysis of the donor samples. Family reference specimens collected by appropriate medical authorities should be released to the on-site DNA representative for submission to the laboratory. The donor consent forms should accompany the associated family reference.

Direct Reference Specimens
Typically, under a mass fatality response, family reference samples will be the primary source of DNA for victim identification. If required, direct reference samples (samples containing the
DNA of the victim) will be used. Examples of direct reference samples include but are not limited to clothing, toothbrushes, used razors, combs, cigarette butts, biopsy slides, Pap smears, extracted teeth, and hair.

Obtaining these materials normally requires interaction with surviving family members. As such, the ME/C takes responsibility for this activity. When provided by surviving family members, the ME/C or the assigned agency should account for the samples. Samples should then be submitted directly to the contract laboratory or AFDIL or released to DNA representatives on site.

Custody of Evidence
As the samples are collected, evidence custody of DNA specimens is established. Each item of evidence sampled for DNA is entered separately onto the chain-of-custody. The description of the item should include:
Morgue reference number (or similar unique specimen identifier)
Other available agency identifying number
Specimen type (i.e., bone, soft tissue, tooth, etc.)
Specific body part if identifiable (e.g., left femur, psoas muscle, tooth #15)
Name or initials of the person collecting the sample

If more than one sample is collected from the same set of remains (i.e., bone and soft tissue from different locations) the samples should be assigned the same evidence number with alphabetic identifiers A and B rather than distinct and separate evidence numbers.

Each DNA sample collected should be segregated into a separate evidence container, labeled with an evidence label, placed in a clear plastic bag, sealed, and labeled with an evidence label identical to the label on the evidence container. Evidence items should be grouped into large self-sealing bags, sealed, and protected with evidence tape.

Temporary Storage and Transfer of DNA Evidence to the DNA Lab
A single chain of custody document is usually prepared for each day of specimen collection. The duration of the document may be continued for consecutive days to group samples for submission to the laboratory. The DNA representative safeguards the collected samples on site until they are released for submission to the laboratory. The local authorities may be required to provide temporary, lockable storage containers or facilities. The DMORT DNA equipment includes a lockable electric freezer dedicated for temporary storage and security of DNA evidence. The evidence chain should begin with the medical authority responsible for identification releasing the DNA samples to the DNA representative on site. The DNA Rep subsequently releases the DNA samples to the person hand-carrying the items to AFDIL or the contract laboratory, releases the samples to the mail service being used to ship specimens.

Each time an evidence shipment departs the collection site the DNA Section should fax a copy of the completed evidence voucher to the laboratory evidence custodian or other designated point of contact. Details of the method of transport and estimated arrival date and time should be reported.
4.12 Data Management

A central repository, known as the Information Resource Center (IRC), will be created for the collection, recording, and storage of antemortem and postmortem information. The VIP or similar database manages this information. The IRC procedures include a record library, antemortem records tracking procedures, database management system, and management of mission records.

All records and data are kept secure and confidential. Only authorized personnel are permitted inside the IRC area. At the conclusion of the mission, all records and data collected become the property of the local ME/C. No information will be released to any person(s) without proper authorization. Network support and troubleshooting may be performed by the DPMU team or other qualified personnel as designated and approved by the DMORT Commander.

Information Resource Center (IRC) Security

· All information received in the IRC is confidential.
· Medical, dental, and other records are covered per 45 CFR 164.512(g) “HIPAA Exemption for Medical Examiners and Coroners.”
· Access will be limited to authorized personnel.
· Authorization from the IRC Section Leader is required for information to leave the IRC.
· No information is to be released by telephone.
· No information should be transmitted via e-mail without prior authorization from the IRC Section Leader.
· Information is only to be faxed to approved fax numbers.
· Antemortem information for each decedent is entered into that decedent’s unique record.
· Individual computer records are required even if multiple members of the same family are decedents.
· No antemortem or post-mortem computer record may be deleted. If an antemortem record needs to be removed from the active system, consult with the IRC Section Leader for assistance in exporting records to a backup file.
· All antemortem records (X-rays, photographs, etc.) must be labeled with the decedent’s name.
· Do NOT place a permanent label directly on antemortem records. Place the records into separate envelopes that are labeled with the decedent’s name and place them in the designated file folder.
· Prior to any computer entry, the database is queried by name and/or unique number to prevent creating duplicate records. This procedure should be done regardless of whether a completely new entry is being made or whether additional information is being added to a current record.
· Backups are performed at least twice a day using a basic file copy command. Both antemortem and postmortem files are copied on CD or other removable media and stored away from the server.
· Certain antemortem records may be scanned for the VIP database. These include dental and medical X-rays, dental charts, photographs, fingerprints, footprints, and palm prints.
· Disaster-specific forms may be created by the IRC Section Leader (or designee) in the database.
· After initial data entry, records will be printed and edited for accuracy. When completed, the date and the editing person’s initials should be noted.
The IRC Section Leader or their designee will initiate the preliminary antemortem/post-mortem record comparisons based on a variety of possible match points (e.g., scars, tattoos, surgical procedures, unique clothing or other unique personal effects such as a ring with a specific engraving). The IRC Section Leader will review these preliminary comparisons before they are passed on to the Identification Documentation Team.

DMORT personnel should inform the IRC Section Leader of all computer problems. The IRC Section Leader will notify the DMORT DPMU IT personnel immediately if maintenance or support is needed.

4.12.1 Records Library
The File Section Leader will maintain a records library in the IRC. Records are evidence and property of the ME/C. No records or information shall be distributed to unauthorized personnel.

Records Library Security
- All information is confidential.
- No information will leave the Records Library unless it is properly checked out by the File Section Leader to approved personnel.
- A hard copy antemortem file will be created for each decedent. Individual antemortem files are required even if multiple members of the same family are decedents.
- All antemortem information and records received from the FAC will be labeled, filed and logged by the File Section Leader in two places:
  - the decedent’s individual file folder.
  - the master log (maintained separately from the file folders).
- The File Section Leader will notify the appropriate sections if any relevant antemortem information becomes available for a decedent.
- The File Section Leader will maintain a log for any information that leaves the Records Library. This log will note the items taken, decedent name, date and time of removal, the person removing the items, who the items were given to, and the date, time, and person returning the items.
- The File Section Leader and IRC Section Leader (or their designees) will reconcile the hard copy files with computer files. The IRC Section Leader receives the incoming data, ensures its entry into the computer by a data entry specialist, and forwards it to the File Section Leader for logging and storage in the records library.
- All antemortem and postmortem information and records are treated as evidence. The chain-of-custody of this evidence is maintained via the logs. The File Section Leader accounts for all received information/records, whether they are in the direct possession of the File Section Leader or checked out to an authorized individual.
- For postmortem records, the number assigned to remains as they were collected at the scene is referred to as the Field Number. The Field Number is recorded on the Tracking form and the remains are assigned a MRN for use in postmortem processing.

Inventory Tracking Log
1. Each DVP contains an inventory-tracking log stapled to the interior front of the file folder.
2. The inventory tracking log documents the date, time, and identities of
   the individuals whenever a specific record was received or transferred
to another individual.
3. Items listed on the inventory tracking log include:
   a. Antemortem Interview Forms
   b. Dental Records
   c. Dental X-rays
   d. Medical Records
   e. Medical X-rays
   f. Fingerprint/Footprint Records
   g. Photographs
4. The records clerk documents the date and time of the receipt these
   items and signs for each item.

**Dental Records**
1. Log dental records into the decedent’s inventory tracking log.
2. DO NOT place dental records or x-rays in an individual victim file
   folder.
3. Dental record and x-ray information is logged into the file contents
   record. The records and x-rays are then transferred to the Odontology
   Section using the transfer log.
4. Dental data is maintained by the Odontology Section Leader. When
   items are returned to the case file, complete the “date returned” area on
   the transfer log.

**Photographs**
1. Log photographs into the decedent’s inventory tracking log.
2. If an actual photograph is received, write the decedent’s full name on
   the back and make a photocopy of the photograph.
3. Place the photograph in a legal size envelope and write the decedent’s
   name on both sides of the envelope.
4. Seal and staple the envelope to the rear interior of the decedent’s case
   file folder. DO NOT staple through the actual photograph.

**Medical Records**
1. Log medical records into the decedent’s inventory tracking log.
2. Write the decedent’s name and case number on the top of each page of
   the medical records.
3. If size permits, store the medical records in the individual case file
   folder.
4. Large records or radiographs are placed in a separate storage unit in
   the records room and their location documented within the decedent’s
   case file.
5. All medical radiographs will be labeled on both sides of the radiograph
   envelope with the decedent’s full name and assigned case number.
**Fingerprint Records**
1. Log fingerprint records into the decedent’s inventory tracking log.
2. Write the decedent’s full name and case number on the top of each fingerprint document.
3. Staple the fingerprint document to the rear interior of the case file folder.
4. Do not penetrate any portion of the fingerprint with the staple.
5. A single copy of a “thumb print” on an identification card is considered a fingerprint document.

**Out of File Card/Form**
1. An “out of file” card is available for indicating that information has been removed from a case file.
2. The out of file card is placed in the corresponding file folder to specify that documents previously contained within the file have been removed and transferred to another location.
3. The out of file card contains the following information:
   a. File/Decedent name
   b. Date removed
   c. Document removed
   d. Location of document
   e. Date returned
4. The out of file card is retained in the case file folder, even after the document has been returned to the file.

**Shredding**
1. All confidential documents no longer needed (such as duplicates) MUST be shredded.
2. Confidential documents comprise any paper containing the name or a portion of a name of a victim or any identifying information.
3. No document shall be shredded without first being reviewed and authorized for destruction by the supervisor of the IRC.

**4.12.2 Management of Mission/Deployment Records**
Because DMORT works under the jurisdictional requirements of the ME/C, original records produced by DMORT will be provided to that office. Records and/or information collected and/or generated by DMORT will be copied for long-term archival storage at NDMS Headquarters. In the event of a legal challenge or other requirement, these records should be made accessible to DMORT forensic scientists after the deployment.

**Procedure:**
- Antemortem information received in the IRC is copied and placed in an archival records storage area.
• All records will be copied and/or scanned and placed in the archival storage area as soon as practical but always before the end of the mission.
• At the end of the mission all original records are left with the local authorities.
  - All records and files should be audited and verified for completeness and correctness before relinquishing to the ME/C.
  - ME/C staff will be offered training in the use of antemortem interview forms prior to the DMORT team departure.
  - Copies of all records, using a Property Transfer Report, will be relinquished to the IRCT and returned to NDMS Headquarters for long-term archival storage.
    - Records formats will include paper and/or electronic files.
    - If reasonable, all records will be scanned and digitized to minimize paper archival issues.
5.0 Family Assistance Center

The DMORT Family Assistance Center Team (FACT) supports the ME/C and the local or Federal law enforcement agency conducting missing persons reporting in the collection of antemortem data, including DNA reference samples. Working within the FAC, the FACT interviews the NOK, collects antemortem information, and transfers this information to the IRC. If requested, the team will also provide information to the NOK and assist the ME/C with death notifications.

The FACT supports the family assistance process by:

- Coordinating with FBI (criminal acts), NTSB (aviation incidents), or the local ME/C (other disasters) to implement the appropriate system to facilitate victim identification and manage the missing persons list, as appropriate.
- Establishing a command structure to manage FAC staff.
- Providing trained interviewers for the family interview process.
- Establishing antemortem data acquisition and entry plan. (NB: Medical, dental, and other records are covered per 45 CFR 164.512(g) “HIPAA Exemption for Medical Examiners and Coroners.”)
- Coordinating operations with IRC Section Leader.
- Coordinating with the DMORT Commander and the Morgue Operations on a regular basis.
- Establishing and supervising death notification procedures with the ME/C and securing psychological and religious personnel if requested.
- Serving as a member of the death notification team.
- Coordinating FAC transportation and security plans for FACT personnel.
- Working with Federal partners assigned to the FAC and ensuring proper support for them.
- Working with the ME/C to draft a PIO statement to educate the public regarding the official antemortem data procedures and missing persons reporting process.

The following procedures are typical for most responses, but may not be required for each response:

**FACT Activation Procedures**

- Upon notification by NDMS headquarters of a DMORT FACT activation for a mass fatality incident, the following will occur:
  - A FACT member deploys with the NDMS Rapid Needs Assessment Team to the incident site.
  - The FACT Commander contacts the team members to obtain deployment availability information. Following the initial assessment, the FACT Commander determines the team size required for deployment in conjunction with the Rapid Needs Assessment Team.
The ME/C will provide an accurate listing of the accident victims and missing persons, if known, to the FACT.
FACT members must pack suitable materials for interviewing in case family interviews begin prior to the delivery of supplies.
The FACT will secure a local death certificate to identify additional information to be added to the database.

FACT Procedures

- Designated team members will schedule an interview time with the family, allowing two hours for each interview with a 30 minute period between interviews, if necessary, to input data.
- Conduct interviews in rooms that are quiet and private.
- Collect antemortem data using the VIP or similar database, implementing a prioritization system, if indicated. Once completed, the data is given to the IRC.
- Arrange for collection of DNA family reference samples.
- The DMORT forensic odontologist will call dentist and physician offices to obtain antemortem records.
- Set up an address for receipt of all antemortem records (usually the ME/C).
- Dissuade family members from acquiring or carrying the victims’ medical or dental records to the FAC.
- Only original and/or digital dental X-rays and original medical/dental records are requested and acceptable. Copies are not useful and are not evidence per 45 CFR 164.512(g) “HIPAA Exemption for Medical Examiners and Coroners.”
- If the family members do not visit the FAC, interviews can be conducted over the telephone. The same procedures apply to these interviews (i.e., scheduled, conducted in a quiet, private area, etc.).
- If necessary, the DMORT FACT may make telephone contact with the NOK before they arrive at the FAC. If this occurs, DMORT FACT personnel, working from a checklist, will request location and contact information for the following:
  - Physician
  - Dentist
  - Hospital
  - Fingerprint
  - Photographs
  - Military service records
  - Essential vital statistics
- Maintain a log of all incoming data/samples.
- Records recovery from the field is to be supervised by DMORT forensic staff to ensure proper handling and preservation.
- Maintain a log of all data files.
- Direct all data/samples to the morgue for review and analysis. Direct all data files and records to the IRC. Network support and troubleshooting may be performed by FACT IR members or other qualified personnel as designated.
and approved by the DMORT FACT Commander and/or DMORT Commander.

- Copies of pertinent forms are kept at the FAC for reference. FACT members will destroy all copies at the end of the mission, unless otherwise directed according to local/State laws and/or procedures of ME/C or law enforcement.
- Attend family briefing and Joint Family Support Operations Center meetings as necessary.
- Communicate and coordinate in an effective, regular, and systematic way with the DMORT Commander, IRCT, and other key personnel.
6.0 Identification Procedures

Proper positive identification is necessary for notification of the NOK, resolving estate issues and criminal/civil litigation, and the issuance of death certificates.

The ME/C is responsible for establishing the identity of the decedent using conventional and accepted forensic science standards. Presumptive identification is only a preliminary step. True confirmatory identification is based on standard methods including:

- Prints (including fingerprints, handprints, toe prints, and footprints, if indicated)
- Odontology
- Radiology
- DNA analysis
- Permanently installed medical devices with recorded serial numbers
- Distinctive physical characteristics (e.g., ears, scars, moles, tattoos) for which there is appropriate antemortem photographic documentation may be used in an exclusionary capacity. In very unique circumstances, such evidence may be used for positive identification.

Under a DMORT response, regularly scheduled identification meetings will allow the local ME/C to review and approve all identifications. Once positive identification is made, the name of the individual identified and the method(s) of identification will be forwarded as soon as possible to the staff at the FAC. Media releases of these positive identifications will be made by the ME/C representative after coordinating with the FACT regarding family notification and individual family needs.

6.1 Identification Documentation Team

A team chaired by a designated pathologist from DMORT will meet daily to review and confirm identifications. The team will consist of representatives from the forensic science discipline, the ME/C office, and key personnel:

- The committee meeting will be called and chaired by the designated pathologist.
- Attendees:
  - Pathology
  - Odontology
  - Anthropology
  - Prints
  - DNA
  - ME/C
  - DMORT Commander
- The committee reviews the composite morgue section identification reports and completes an Identification Summary Report.
• All committee members present sign the Identification Summary Report indicating concurrence of identification.
• Identification Summary Report is delivered to the ME/C for his/her approval and signature. A copy of the report is given to the ME/C.
• The original Report is given to the DMORT IRC for the purpose of closing out the pertinent records.
DMORT Identification Summary Report

Date: ______________________

Morgue Reference Number(s) ________________________________________

is/are identified as

Name______________________________________________________

Positive identification results from scientific analysis and comparison of antemortem and postmortem data. The specific forensic science discipline(s) involved certify the identification by signing below. Supporting identification documents accompany this form.

Print Name   Signature
Pathology___________________ _____________________________________
Odontology__________________ _____________________________________
Anthropology________________ _____________________________________
Prints _____________________ _____________________________________
DNA _____________________ _____________________________________

Was a DNA analysis requested?    □ Yes    □ No
Has DNA analysis been completed? □ Yes    □ No    □ N/A
Does DNA result concur with this identification? □ Yes    □ No    □ N/A

For Medical Examiner/Coroner only:

To the best of my knowledge and after careful review of all evidence presented, I certify the above identification.

Signed______________________________ Date____________ Time_______

Print Name:________________________________________________________________________

Jurisdiction:_______________________________________________________________________

(If necessary, narrative details regarding the basis for the identification may be continued on a separate page.)
7.0 Death Certification and Death Notification

The documentation of the identification, the cause and manner of death, and final disposition are required by law and used for vital statistics and the initiation of probate. The death certificate is the legal instrument for this documentation. The ME/C is responsible for all legal documentation pertaining to death certification.

- The ME/C will complete its portion of the certificate and transmit the document concurrent with the release of the decedent.
- When no human remains are recovered, or scientific efforts for identification prove insufficient, a court-ordered certification of death may be sought.

The nature of the victim identification process demands that the NOK be involved in certain decisions regarding the remains of their decedent. Their decisions on these matters must be documented and followed.

NOK will be notified by the ME/C when identification is made. In the case of complete remains, this notification should be followed fairly quickly by release to the designated funeral home.

Where appropriate, as in cases of fragmentation or commingling, the ME/C will explain to the families the available options for disposition of any subsequently identified remains and assist them with that process. These options include:

- Notification each time additional remains are identified.
- Notification at the end of the identification process.
- Return of the currently identified remains to the family for final disposition.
- Return of all remains at the end of the identification process.
- Other requirements the family may have will be considered if they do not impact overall identification efforts.
8.0 Final Preparation and Disposition of Remains

Remains of decedents must be handled with the utmost respect and care. DMORT team members will ensure that all human remains (identified, unidentified, common tissue, or any other types of remains) are stored with dignity, prepared with professionalism, and transported with consideration.

8.1 Post-Identification Holding in the Incident Morgue

Once remains have been identified, they are securely stored in an environment that retards decomposition and maintains the chain-of-custody.

- Following identification, remains should be stored in a designated refrigerator trailer or similar container. This container should be designated only for identified remains.
- Trailer Management Section Leader receives from driver the trailer lock key, if any
- Sufficient personnel should be used to carry the litter or move the gurney so that remains are not harmed and so that lifting injuries are reduced.
- A movement log sheet will indicate the following:
  - Number(s) of the body bag(s) comprising the decedents remains
  - Date and time in or out of storage
  - Name and signature of tracker
  - Name and signature of storage worker releasing or accepting body bag
  - If more than one refrigerator is used, record which unit the body bag is entering or leaving.

8.2 Reassociation of Remains

In situations where remains are fragmented and commingled, identified remains may be reassociated so that remains belonging to individuals are returned together to the NOK. Often, because DNA analysis is the method used to conduct these identifications, the physical reassociation of remains takes place several weeks or months after an incident.

- Remains will be reassociated one decedent at a time.
- Remains related to a particular decedent will be removed from the storage container (refrigerator trailer) and moved into an area designated for reassociation.
- The appropriate documentation (Identification Summary Report, DNA laboratory results, data forms, postmortem photographs) will be used to select the appropriately numbered remains for that decedent.
- Remains will be examined to ensure that the physical characteristics are identical to those on the associated documentation.
• After review, all remains associated with the decedent will be placed in the appropriate container, such as a casket, transfer case, body bag, etc.
• Remains will then be returned back to storage or sent to embalming if being conducted in the incident morgue.
• If remains are to be released, they should be sent to the Identification Documentation Team before release.

8.3 Identification Documentation

The integrity of the identification process and morgue operations demand that remains be reviewed before release from the morgue. This review should include an examination of the identification methods used, a physical examination of the remains, and the proper reassociation of remains for that decedent.

When remains are ready to be released, the Identification Section Leader, and the forensic specialists involved in the identification will:
• Conduct a final review of the methods of identification.
• Physically examine the remains to ensure that the remains match the biological attributes of the deceased (based on the antemortem information).
• Ensure that the numbers associated with each remains are accounted for.
• A form indicating that the remains have been reviewed for final identification will be signed, dated, and placed in the DVP.

8.4 Embalming Section

Embalming capabilities may be needed in remote areas. In more populated locations, NOK may contract with a funeral home to perform this function. In the DPMU, thorough disinfection, preparation, and minor reconstructive surgery procedures are accomplished on each decedent or part of decedent when authorized by the appropriate NOK or legal authority. NOK or legal authority may also authorize cremation as the final means of disposition.

• The volume of remains, morgue flow and number of shifts will determine the staffing level of embalmers.
• Embalming procedures shall not be performed on any decedent or remains unless appropriate approval has been granted in writing by the NOK or legal authority.
• Appropriate DMORT embalming case reports shall be completed and inserted into the DVP.
• Disaster-specific guidelines for embalming should be established by the Embalming Section Leader.
• The Embalming Section Leader shall assign two licensed embalmers (with knowledge of postmortem reconstructive surgery) to assess remains according to
the potential for viewing by NOK and any other aspects that may impact embalming.

- DMORT embalmers shall use embalming and minor re-constructive surgery techniques that will enhance the possibility of "viewability" of the deceased.

8.5 **Casketing**

Decedents and human remains will be placed in a casket, dressed when appropriate, and relocated to the morgue shipping point.

- Staffing will depend on volume of remains and morgue flow.
- Decedents will be dressed with supplied clothing, when appropriate.
- Decedent may be placed in a plastic pouch, if advisable.
- Place decedent in casket, and/or other supplied container, as necessary. Use acceptable blocking material to prevent shifting in transit.
- The outside of the casket and/or container shall bear the name of the decedent.
- Other containers can include Ziegler type cases, shipping boxes and air trays.
- Maintain a log reflecting the disposition of the body. The log shall identify the date and time the casket is relocated to the morgue shipping holding area.
- The person who is supervising the shipping holding area signs the appropriate DMORT form, and the form shall be inserted into the VPR.
- Personal effects are to be released with the remains in a separate receptacle. No personal effects, except burial clothing, should be in the casket or container.

8.6 **Cremation**

If chosen by the NOK, cremation is an acceptable form of final disposition. NOK or legal authority may contract with a funeral home/crematory for cremation services.

- The NOK or legal authority must sign cremation authorization.
- An authorization to release the decedent or remains to a specific crematory or funeral home must be signed by the NOK or legal authority.
- Upon request of the NOK, the decedent or remains may be embalmed, and then shipped to the family funeral home or local crematorium for cremation.
- Any necessary ME/C cremation authorization will be secured and released with the decedent or remains.
8.7 Funeral Home Contact Information

To coordinate the shipping of remains and any NOK considerations, the receiving funeral home must be contacted and requisite information exchanged.

- The required information should be gathered at the time the ME/C makes the positive ID notification to the NOK.
- The information required from the NOK:
  - Name of funeral home
  - Contact person at funeral home
  - Location (city, state, zip code)
  - Telephone and fax number
- Obtain from the funeral home the best airport or train station to which to ship the decedent.
- Inform the funeral home of the schedule once the transportation arrangements have been confirmed.

8.8 Transportation of Decedents from Morgue

This section coordinates the transport of released human remains from the incident morgue to a designated location, such as an airport for transport to the receiving funeral home.

- A minimum of one, and preferably two, Licensed Funeral Directors should staff this section.
- The burial-transit-cremation permit and other documentation required by the receiving funeral home will be secured from the appropriate authority (normally the vital statistics office of the local community).
- The burial-transit-cremation permit and other documentation will be placed in the “Head” envelope.
- The completed “Head” envelope will be securely affixed to the head end of the outside container.
- Hearses or other appropriate vehicles normally used to transport decedents will be used. Human remains will be properly secured in the vehicle, and no more than an appropriate number of remains will be entered into one vehicle.
- All necessary release and transfer documentation will be in order and a log reflecting the date, time, transfer vehicle identification, transfer personnel identification, and destination shall be maintained.
- Transfer personnel shall wear professional attire during the transfer.
- Movement of the hearses may be coordinated in "procession" style if appropriate. Police escorts may be used when necessary.
- An adequate number of casket bearers (team members, volunteer funeral directors, etc.) should be present for loading and off-loading so as to mitigate bearer injury or chances of mishandling the remains.
• Drivers should be instructed to travel directly to the destination and directly back to the morgue without any stops except at a designated staging area or to refuel. Security may be requested.
Post Identification Process Flow Chart

Remains Identified per SOP

- ME/C notifies NOK (using NOK decision on notification)
- NOK informs ME/C of final disposition requirements
- Final identification Check
- On-site embalming (if required)
- Casketing
- Release to funeral home

- Remains moved to designated refrigerated/other storage
- Reassociation of remains (if required)
9.0 Incident Morgue Demobilization

Demobilization planning should commence when morgue operations commence. Once incident morgue operations have ceased, and all remains have been released, or there is a requirement to close the morgue operation, a standard process will be used to ensure the morgue site is cleaned, the DPMU is packed, and all remains have been accounted for. The incident morgue facility must be turned back to the owner or agent of the owner as closely as possible to its condition prior to operations. Arrangements will be made through the NDMS IRCT to provide a walk-through with the owner or agent of the owner to ensure that the cleanliness and condition of the facility is satisfactory.

- Upon completion of morgue operations and prior to the demobilization of the DMORT members, a general clean up of the morgue will be conducted with proper disposal of any general trash, biohazard waste, both dry and liquid, and worn or discarded PPE.
- Each Section Leader should clean and decontaminate equipment and supplies. Once that is completed they need to inventory their equipment and supplies with the assistance of a DMORT DPMU team member. At that point the Hand Receipt form can show the equipment and supplies being turned back over to the DMORT DPMU Logistics Chief. The inventory sheet and/or needed supplies that should be added to that Section’s cache for future deployments should be provided to the DMORT DPMU Commander. All items damaged or not working properly should be brought to the attention of the DMORT DPMU Commander, in order that a Report of Survey form (required to replace damaged equipment) may be completed, prior to repacking the cache.
- The DMORT DPMU team will take a minimum of two operational periods to complete the decontamination process, morgue inventory, and perform any re-supply, and make arrangements for appropriate trailers for transport of the DPMU back to its appropriate logistics center or other predetermined location.
- Once the DPMU is loaded back onto appropriate trailers for transport, a thorough clean up of the area that contained the morgue will commence with the assistance of the DMORT DPMU team.
- Consideration may be given to the local hire of a cleaning company, and arrangements will be made through the IRCT.
- The plastic sheeting covering the floor shall be sprayed with a 5% hypochlorite solution, allowed to dry, and then collected and disposed of according to state and local environmental laws.
- Cleaning of the area will minimally consist of sweeping the entire area, spraying the floor that was covered by the plastic with a 5% hypochlorite solution and inspecting for any area that may require additional cleaning or treatment.
- Any area that was used for administrative purposes, such as the IRC, shall be cleaned of all trash. All floors with be swept and any carpeted areas vacuumed.
- Arrangements will be made by the DMORT DPMU Commander and the IRCT to ensure for the pick-up and disposal of any regular trash, any dry biohazard waste, and any collected liquid that is considered biohazard waste. All biohazard waste
will be in approved containers as prescribed by local laws. General trash will not be disposed of in biohazard disposal containers.

- Any refrigerated trailers, if empty, shall be decontaminated in accordance with the “Field Guidelines for Decontamination of Trailers Used for Mortuary Operations.”
- A final walk-through with the owner or agent of owner in the presence of member of the IRCT will be conducted to ensure the facility is of satisfactory cleanliness.

9.1 DMORT Team Demobilization

- The DMORT Commander and the IRCT will ensure that all personnel paperwork has been completed.
- All VIP data will be finalized, saved to CD or similar media. A copy of the VIP data will be given to the ME/C.
- All original records pertaining to identification, postmortem documentation, and antemortem records will be transferred to the ME/C.
- The DMORT Commander will ensure that all remains have been removed from the incident morgue location and have been accounted for either physically or via pertinent paperwork.
10.0 After Action Report

After action reports (AAR) are critical for documenting the course of the deployment. AAR documentation helps in future planning and response, indicates lessons learned, and may be useful in legal challenges to the identification process.

- The IRCT and DMORT Commander(s) will keep notes during the deployment indicating challenges, suggested changes to SOPs, unique circumstances, or other pertinent information.
- Section Leaders should also document relevant topics.
- The DMORT Regional Commander will compile the AAR notes and create a final AAR.
- The final AAR will be provided to the NDMS Director and IRCT.
- AAR should be completed no later than one month after the deployment ends.

Acknowledgement: The DMORT SOPs were assembled, composed, and edited through the efforts and contributions of Dr. Patricia Kauffman (DMORT III), Chief John Linstrom (DMORT IX), Dr. Corinne Stern (DMORT VI), and Mr. Shannon Dotson (DMORT DPMU).
## Appendix A

### Acronym Reference List

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AAR</td>
<td>After Action Report</td>
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<tr>
<td>ADFAA</td>
<td>Aviation Disaster Family Assistance Act of 1996</td>
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<tr>
<td>AFDIL</td>
<td>Armed Forces DNA Identification Laboratory</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
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<tr>
<td>DHS</td>
<td>Department of Homeland Security</td>
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<tr>
<td>DMORT</td>
<td>Disaster Mortuary Operational Response Team</td>
</tr>
<tr>
<td>DPMU</td>
<td>Disaster Portable Morgue Unit</td>
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<tr>
<td>DNA</td>
<td>Deoxyribonucleic Acid</td>
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<tr>
<td>FAC</td>
<td>Family Assistance Center</td>
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<tr>
<td>FACT</td>
<td>Family Assistance Center Team</td>
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<tr>
<td>HAZMAT</td>
<td>Hazardous Materials</td>
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<tr>
<td>HIPAA</td>
<td>Health Insurance Portability and Accountability Act of 1996</td>
</tr>
<tr>
<td>HHS</td>
<td>(U.S. Department of) Health and Human Services</td>
</tr>
<tr>
<td>ICS</td>
<td>Incident Command System</td>
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<tr>
<td>IR</td>
<td>Information Resources</td>
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<tr>
<td>IRC</td>
<td>Information Resource Center</td>
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<tr>
<td>IRCT</td>
<td>Incident Response Coordination Team</td>
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<tr>
<td>ISR</td>
<td>Identification Summary Report</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>ME/C</td>
<td>Medical Examiner or Coroner</td>
</tr>
<tr>
<td>MRN</td>
<td>Morgue Reference Number</td>
</tr>
<tr>
<td>NB</td>
<td><em>Nota bene, meaning “note well”</em></td>
</tr>
<tr>
<td>NDMS</td>
<td>National Disaster Medical System</td>
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<tr>
<td>NIMS</td>
<td>National Incident Management System</td>
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<tr>
<td>NTSB</td>
<td>National Transportation Safety Board</td>
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<tr>
<td>PPE</td>
<td>Personal Protective Equipment</td>
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<tr>
<td>OSC</td>
<td>Operational Support Center</td>
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<tr>
<td>SOC</td>
<td>(HHS) Secretary’s Operational Center</td>
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<tr>
<td>SOP</td>
<td>Standard Operating Procedures</td>
</tr>
<tr>
<td>VIP</td>
<td>Victim Information Profile, or Victim Identification Program</td>
</tr>
<tr>
<td>VPR</td>
<td>Victim Processing Record</td>
</tr>
<tr>
<td>WMD</td>
<td>Weapons of Mass Destruction</td>
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