

THE STATE OF FLORIDA

MASS FATALITY RESPONSE PLAN FLORIDA MEDICAL EXAMINER COMMISSION

(To the Catastrophic Incident Response Plan of the
State Comprehensive Emergency Management Plan)

TABLE OF CONTENTS

- I. Introduction
- II. Concept of Operations
 - A. General
 - B. Organization
 - C. Notifications
 - D. Actions
 - E. Direction and Control
- III. Responsibilities - Medical Examiner
 - A. Tracking System
 - B. Remains Recovery
 - C. Holding Morgue Operations
 - D. Pre Processing Transportation and Storage
 - E. Morgue Operations
 - F. Post Processing Transportation and Storage
 - G. Body Release for Final Disposition
 - H. Family Assistance Support
 - I. Records Management (Victim Processing),
 - J. Records Management (Accounting and Finance), and
 - K. Progress Reports and Public Information.
- IV. Mass Disposition of Human Remains (Rational for Identification Before Disposition)
 - A. Governmental Authority
 - B. Epidemic Outbreak Myth
 - C. Identification of Victims Before Disposition
- V. References
- VI. Statutory Citations
- VII. Medical Examiner Districts

PRIMARY AGENCY: Florida Department of Health
SUPPORT AGENCIES: Florida Department of Law Enforcement (FDLE)
Florida Medical Examiners Commission (MEC)
Florida Emergency Mortuary Operations Response System
(FEMORS)
Florida Funeral Director Associations
Florida Dental Societies

FEDERAL AGENCIES: Department of Homeland Security, Emergency Preparedness and Response (EP&R) Directorate
Federal Emergency Management Agency (FEMA),
National Disaster Medical System (NDMS)-Disaster Mortuary
Operational Response Team (DMORT) and Weapons of
Mass Destruction (WMD) Team

I Introduction

The purpose of Emergency Support Function 8 is to coordinate the State's health, medical and limited social service assets in case of an emergency or disaster situation. This includes adoption of a Catastrophic Incident Response Plan for response to events that create excessive surge capacity issues for pre-hospital, hospital, outpatient, and mortuary services. The Mass Fatality Response Plan addresses mortuary surge capacity issues and methods to respond to and mitigate such issues.

The focus of this plan is to identify methods through which Medical Examiners may obtain support assets to accomplish the goals of identifying the deceased and arranging proper final disposition. No attempt is made here to create a one-size-fits-all operational set of procedures, as the variability of each district is unique. Rather, it presents major categories of service response that must be adapted to the nature of disasters ranging from naturally occurring events (hurricanes, floods, fires, etc) to manmade events including delivery of weapons of mass destruction (bomb/blast, chemical, nuclear, or biological).

II Concept of Operations

A. General

1. Mass fatality disasters have the potential to quickly overwhelm the resources of a Medical Examiner's operation depending on the capacity of the facility and the number of fatalities. Offices that are overwhelmed may seek assistance at local, state and federal levels.
2. Disaster situations may range from just a few victims to very high numbers. Additionally, the event may involve one or more of the following complications:
 - a. Biological agent exposure events resulting in infectious- or toxic agent-contaminated victims,
 - b. Bomb/Blast events resulting in burned and fragmented human remains,
 - c. Chemical exposure events resulting in hazardous material-contaminated victims,
 - d. Radiological exposure events resulting in radiation material-contaminated victims.

- e. Transportation accidents resulting in fragmented human remains, or
 - f. Weather events resulting in drowning and blunt trauma victims,
3. These complications can arise regardless of whether the event was an act of nature, a minor or catastrophic accident, a terrorist act, an outbreak of infectious disease, or the intentional release of a weapon of mass destruction.
 4. Deaths resulting from acts of homicide, suicide, or accident, and those constituting a threat to public health, fall under the jurisdiction of the Medical Examiner (Chapter 406.11, Florida Statutes). For this reason, the Medical Examiner assumes custody of any such death to determine the cause of death, document identity, and initiate the death certificate.
 5. Management of the overall disaster is accomplished using the Incident Command System (ICS) as codified by the National Incident Management System (NIMS). The primary functions of command, operations, planning, logistics, and administration/finance are the foundation of a scalable platform that can expand or contract as the scope of the disaster dictates. The Medical Examiner's role under the operations function may have its own set of command, operations, planning, logistics, and administration/finance functions to manage in concert with the overall Incident Commander.
 6. The Medical Examiner may obtain additional resources by identifying equipment and personnel assets needed to manage the victims and channeling those requests through the local Emergency Operations Center. This would include specialized assets to assist with decontamination of victims of exposure to chemical, radiological, or biological agents.
 7. Normally the local or State Emergency Operations Center processes such requests through its Emergency Support Function 8 desk. Except in rare circumstances involving military or certain federal employees, the Medical Examiner retains control of, and responsibility for, handling the deceased. All assets activated to assist with fatality management operate under the direction of the Medical Examiner. Once requested assets arrive, the Medical Examiner has the responsibility to coordinate, integrate, and manage those assets. (Capstone)
 8. Resources available for activation may provide personnel experienced in Incident Command System operations capable of augmenting the Medical Examiner's staff in certain management functions and providing valuable liaison services to Incident Command and the Emergency Support Function 8 desk.

B. Organization

1. Health Departments and local Emergency Operations Centers operate at the county level in each of Florida's 67 counties.
2. Medical Examiners operate under a district system whereby they exercise authority for a single county or multiple counties. The 24 districts are covered by 22 medical examiner offices because District 4 (Duval, Nassau and Clay Counties) covers District 3 (Columbia, Dixie, Hamilton, Lafayette, Madison, and Suwannee Counties) and District 7 (Volusia County) covers District 24 (Seminole County). (See Section VI – Medical Examiner Districts)
3. The Florida Medical Examiners Commission provides oversight for districts throughout the state. In the absence of other reporting procedures, the Commission serves as the information clearinghouse on the status of reported fatalities due to a disaster.
4. Regional Domestic Security Task Forces (RDSTF) operate at a regional level with the State divided into 7 regions covering multiple counties each. Each RDSTF Region covers several medical examiner offices (while 5 medical examiner districts are covered by more than one RDSTF Region). RDSTFs provide the law enforcement oversight for disasters and incorporate both local and state law enforcement agencies as well as ancillary agencies including fire service, search and rescue, health and medical services, and others. RDSTFs support the emergency management structure established for the disaster. This may be a single county Emergency Operation Center or, in the case of a multi-jurisdictional event, a Joint Emergency Operation Center as well as the State Emergency Operation Center. Close coordination of the Medical Examiner's role of processing human remains with law enforcement's role of investigating the event and tracking missing person reports is essential throughout the response effort.
5. Florida's Department of Health is designated as the lead agency for providing health and medical services under Emergency Support Function 8. Various state agencies and organizations may be contacted for coordination of services including
 - a. Florida Emergency Mortuary Operations Response System (FEMORS)
 - b. Department of Law Enforcement
 - c. Department of the Environmental Protection
 - d. Department of Corrections
 - e. Attorney General
 - f. Bureau of Vital Records and Statistics
 - g. Department of Transportation
 - h. National Guard Assets

6. Florida Emergency Mortuary Operations Response System (FEMORS) is a team of qualified “reserve” forensic professionals who can be deployed by Emergency Support Function 8 to supplement the needs of the Medical Examiner(s) affected by a mass fatality event. FEMORS is a sponsored activity of the University of Florida in collaboration with the Maples Center for Forensic Medicine.
7. The Regional Office of the United States Public Health Service, known as Federal Regional Emergency Support Function 8, will maintain coordination with the State Emergency Support Function 8 desk and serve as liaison with the Federal Emergency Management Agency (FEMA) lead representative present at the State Emergency Operations Center.
8. FEMA is a part of the Department of Homeland Security, Emergency Preparedness and Response (EP&R) Directorate. The Federal Emergency Support Function 8 representative shall respond to requests from the State Emergency Support Function 8 desk to ensure that all requested federal assistance possible is made available to the State. Various Federal agencies and organizations may be contacted for coordination of services including:
 - a. Department of Homeland Security, National Disaster Medical System (NDMS)
 - b. Disaster Mortuary Operational Response Team (DMORT)
 - c. Weapons of Mass Destruction (WMD) Team of DMORT
 - d. Department of Justice (DOJ)
 - e. Federal Bureau of Investigation (FBI)
 - f. Department of Homeland Security, Nuclear Incident Support Teams
 - g. Department of Health & Human Services (HHS) Centers for Disease Control & Prevention (CDC)
 - h. Environmental Protection Agency (EPA)
 - i. Department of Transportation (DOT)
 - j. American Red Cross (ARC)
 - k. Agency for International Development
 - l. Office of Foreign Disaster Assistance
 - m. Urban Search & Rescue (US&R)
 - n. Department of Veteran’s Affairs (VA)
 - o. Department of Justice (DOJ), Office of Justice Programs, Office for Victims of Crime (OVC)
 - p. Department of Defense (DoD)
 - q. National Transportation Safety Board (NTSB), Office of Transportation Disaster Assistance (OTDA)
 - r. Interpol
 - s. The Salvation Army
 - t. The International Critical Incident Stress Foundation, Inc.

C. Notifications

1. Disaster notification to the Medical Examiner will normally come through routine law enforcement, emergency operations center channels, or news media broadcasts in advance of a request to respond to transport human remains. In rare cases, it is possible that the Medical Examiner would be the first to recognize a cause of death indicating a potential WMD release. In such an event, the Medical Examiner would be the one to initiate notification of appropriate authorities.
2. Medical Examiner notification to the local Emergency Operations Center is the first step in obtaining supplemental resources. If not already activated by another method of notification, this action results in contact through the State Warning Point to activate the State Emergency Operations Center.
3. During an activation of the State Emergency Operations Center, the primary and support agencies of Emergency Support Function 8 respond directly to the Emergency Services Branch Chief who reports to the Operations Section Chief
 - a. A disaster event involving the use of radioactive materials will trigger activation of THE STATE OF FLORIDA RADIOLOGICAL EMERGENCY MANAGEMENT PLAN (ANNEX A - to The State of Florida Comprehensive Emergency Management Plan).
 - b. A disaster event involving Weapons of Mass Destruction will trigger activation of THE STATE OF FLORIDA TERRORISM INCIDENT RESPONSE PLAN (ANNEX B - to The State of Florida Comprehensive Emergency Management Plan).
4. State Emergency Operations Center activation of Emergency Support Function 8 may result in immediate activation of a FEMORS (or another mass fatality support organization such as DMORT) that can initiate contact to offer assistance to the Medical Examiner in assessing the scope of the disaster and identifying assets required to process remains.
5. The Regional Office of the United States Public Health Service, known as Federal Regional Emergency Support Function 8, will be notified of the event status and briefed on any anticipated need for federal assistance. If federal assistance is anticipated, the Regional Emergency Support Function 8 representative will maintain coordination with the State Emergency Support Function 8 desk and serve as liaison with the Federal Emergency Management Agency (FEMA) lead representative present at the State Emergency Operations Center.

D. Actions

1. Once notification is made of an event with a potential for significant loss of life, a Medical Examiner should attempt to assess the scope of the event

and anticipate levels of additional resources that might be needed. This could include:

- a. modification of routine workflow within the facility to permit processing and segregation of daily casework from disaster-related victims,
 - b. possible supplemental space and equipment requirements for refrigerated storage,
 - c. temporary staff and supply increases to respond to the surge event, and
 - d. if the facility has been damaged by the event (e.g., hurricane, flood, etc.), consideration of location for placement of a temporary base of operations either adjacent to, or remote from, the damaged morgue facility.
2. Upon notification by a Medical Examiner of a request for assistance, Emergency Support Function 8 may notify and activate FEMORS (or another mass fatality support organization such as DMORT) to assist the Medical Examiner in assessing the situation.
 - a. In the event of a known impending event like a hurricane, Emergency Support Function 8 normally places their chosen mass fatality support organization on ALERT for possible activation.
 - b. FEMORS activates its internal notification system to establish a Ready List of members capable of responding if needed.
 3. FEMORS shall initiate contact with the Medical Examiner by telephone, within 4 hours if possible, to ascertain if help is needed or to arrange for an appropriate meeting location.
 4. Simultaneously, FEMORS will initiate its telephone notification of members to assemble a list of members capable of responding within 24 hours, if needed.
 5. If needed, the FEMORS will assist the Medical Examiner in planning for:
 - a. special processing complications such as protection from chemical exposure of responders and decontamination of recovered remains prior to transportation to a temporary morgue site, if applicable,
 - b. disaster site management of human remains with regard to recovery, preliminary documentation procedures, and refrigerated storage until transportation can be arranged,
 - c. supplemental or temporary morgue operations either in concert with the existing medical examiner facility or at a remote location,
 - d. supplemental refrigerated storage at the morgue both for remains received from the disaster site and for remains processed and awaiting release for disposition,
 - e. family assistance center operations at a site removed from both the disaster site and the morgue, and

- f. records management and computer networking for managing data generated about missing persons and remains processed.
6. The Medical Examiner, or designee, will report the assessment results back to Emergency Support Function 8 to specify:
 - a. estimated number of human remains to be processed if possible,
 - b. types and number of personnel and equipment that will be needed,
 - c. staging area(s) for arriving assets, and
 - d. any special safety issues to advise responding personnel.
7. Emergency Support Function 8 will confirm FEMORS the Medical Examiners' requests for equipment assets, types and numbers of support personnel, and staging area instructions.
8. FEMORS will contact and activate the types and number of personnel requested by the Medical Examiner with instructions on staging areas and planned time of arrival.
9. Emergency Support Function 8 will initiate arrangements for travel, if necessary, and accommodations for responding personnel.
10. For any equipment requested that is not part of FEMORS response, Emergency Support Function 8 will initiate contact with appropriate vendors to supply equipment such as refrigerated trucks, x-ray machines and processors, etc.
11. In the event the resources required for response to the disaster exceed the capabilities of FEMORS, or if decontamination of human remains is needed, Emergency Support Function 8 will initiate contact with Federal Emergency Management Agency (FEMA) to request the assistance of the Disaster Mortuary Operational Response Team (DMORT) and/or Weapons of Mass Destruction (WMD) Team.

E. Direction and Control

1. All management decisions regarding response are made at the State Emergency Operations Center by the Emergency Support Function 8 commander (either the Department of Health Emergency Coordination Officer, the Executive Order duty officer or the Emergency Support Function 8 desk officer).
2. In accordance with a mission assignment from Emergency Support Function 8, and further mission tasking by a Local primary agency, each support organization assisting Emergency Support Function 8 will retain administrative control over its own resources and personnel but will be under the operational control of Emergency Support Function 8.

3. Management of fatality related operations under the direction of the district Medical Examiner or designee is coordinated with the field Incident Commander. FEMORS's assets assigned to the Medical Examiner remain under the Medical Examiner's direction and may be used in any way to supplement the Medical Examiner's operations including liaison with the Incident Commander.
4. Volunteer groups and individuals may also offer services to assist the Medical Examiner. Traditionally, this includes forensic pathologists from other districts and members of various funeral associations and dental societies. Experienced forensic pathologists can be appointed as Associate Medical Examiners pursuant to Chapter 406.06(2), Florida Statutes. Funeral service personnel can be a valuable asset to provide, at a minimum, additional staff to serve as "trackers" to monitor custody and processing steps for each set of remains through the morgue process. Likewise, dental personnel, even if they possess no forensic experience, can assist forensic odontologists in a number of areas.
 - a. For such volunteers who are not already pre-registered (pre-vetted) as members of either FEMORS, the medical examiner should ensure that each volunteer acknowledges a liability waiver for work-related injury and registers in for each period of service.
 - b. Members FEMORS are provided liability coverage for worker's compensation and professional liability issues by their respective employing agencies, the Florida Department of Health or the Federal Emergency Management Agency.
5. Regardless of the source of personnel (in-house, State or Federal supplemental, or volunteer) detailed time records must be maintained to document the nature and periods of duty for each and every person assisting during the operation.

III Responsibilities - Medical Examiner

The Medical Examiner is responsible for managing several operations that target the ultimate goals of identifying the dead, determining the forensic issues related to the cause and manner of death, and returning human remains to families, if possible.

In a disaster situation, in addition to notification, evaluation, and planning, incident specific caseload management consists of coordinating multiple functional areas.

- A. Tracking System Activation
- B. Remains Recovery
- C. Holding Morgue Operations
- D. Pre-Processing Transportation and Storage
- E. Morgue Operations

- F. Post-Processing Transportation and Storage
- G. Body Release for Final Disposition
- H. Family Assistance Support
- I. Records Management (Victim Processing)
- J. Records Management (Accounting and Finance)
- K. Progress Reports and Public Information

A. Tracking System

When implementing a tracking system for recovery, the Medical Examiner should consider where remains are found, how fragmented portions are tracked, how case numbers are correlated, and how ante-mortem data (obtained from family members) can be cross referenced with other case numbers assigned to recovered remains. The tracking system should include a means for distinguishing disaster cases from other caseloads, it should also enable the cross sharing of data between several operational areas, such as, the morgue, the Family Assistance Center, and the incident site, or any location where case data is entered. (Capstone) Each set of remains processed will generate numerous items that need to be tracked by computer such as photographs, personal effects, tissue samples, etc.

Whether FEMORS, DMORT or another mass fatality support organization is activated to assist the Medical Examiner, a Victim Identification Program (VIP) or similar database can be used to track and search for potential matching indicators. VIP stores known victim information provided by families at the Family Assistance Center and data generated in processing the remains in the morgue. Likewise, both assets utilize a dental matching program called WinID to compare antemortem dental records with post mortem dental data obtained during the processing effort.

An accurate and reliable numbering system for all human remains is crucial to an effective mission. The system must conform to the needs of the local Medical Examiner as well as be sufficient for proper evidence tracking. *In the absence of an established medical examiner system* the following guidelines may be employed, in part or in whole as deemed necessary by the Medical Examiner. There are several places where the numbering system must be carefully managed.

1. Field or Disaster Site - The numbering system starts in the field.
 - a. It should always be consecutive and non-repeating. A simple system is preferred (e.g., Bag 1, Bag 2, Bag 3, etc).
 - b. Prefixes MAY be used to clarify where they were found (e.g. F-1 for floating remains in the water, S-1 for submerged remains, Grid B-3, etc.). This is particularly important when remains are recovered from multiple sites.

- c. In the field, all individual remains must be given their own number.
- d. If remains are not connected by clothing or tissue, they must get different bags and numbers.

2. Morgue Operations -

- a. If possible, the field assigned number should be used as the Morgue Reference Number (MRN) unless a different system is established by the Medical Examiner.
- b. Often it is preferable to assign the Morgue Reference Number (MRN) once remains are received at the morgue. Although tracking starts at the point of recovery, it is better if an official case number is assigned at the location where remains are actually processed rather than at the recovery point, as co-mingled remains need to be separated and treated as multiple cases, versus one case.
- c. The MRN and suffixes may be used to further identify multiple items related to the MRN (because of the way computers store and retrieve data, it is important to include the leading zero for numbers 01 through 09):
 - i. Digital media (CD, media sticks, floppy disks, etc.) with digital photos should be labeled with the MRN followed by DM01 through DM0x to designate the number of floppy disks or other media used for each case.
 - ii. Digital photographs (every one containing the MRN visible in the photo) stored in the computer server should be titled with the MRN followed by DP01 through DP0x to designate the number of digital photographs taken.
 - iii. Personal Effects collected should be labeled with the MRN followed by PE01 through PE0x to designate the number of items collected from each case.
 - iv. Post mortem digital body x-rays stored in the body x-ray computer server should be titled with the MRN followed by BX01 through BX0x to designate the number of digital body x-rays taken.
 - Antemortem body x-rays digitized would be labeled by the number assigned to the VIP (Victim Identification Program number assigned at Family Assistance Center) folder, e.g., VIP- BX01 through BX0x to designate the number of body x-rays received and digitized.
 - v. Fingerprint cards created should be labeled with the MRN followed by FP01 through FP0x to designate the number of print impression cards made for each case.
 - Antemortem fingerprint cards should be labeled by the number assigned to the VIP folder, e.g., VIP- FP01 through -FP0x to designate the number of known source fingerprint cards received.
 - vi. Post mortem digital dental x-rays stored in the dental x-ray computer server should be titled with the MRN followed by

- DX01 through DX0x to designate the number of digital dental x-rays taken.
 - Antemortem dental x-rays digitized should be labeled by the number assigned to the VIP folder, e.g., VIP- DX01 through DX0x to designate the number of dental x-rays received and digitized.
 - vii. Post mortem DNA specimens (only if multiple specimens are collected from a single MRN item) should be titled with the MRN followed by DN01 through DN0x to designate the number of specimens taken.
 - Antemortem DNA known family samples (Buccal swabs) would be labeled by the number assigned to the VIP folder, e.g., VIP- DB01 through DB0x to designate the number of samples received.
 - Antemortem DNA known reference specimens (e.g., tooth brush, clothing, razor, etc.) would be labeled by the number assigned to the VIP folder, e.g., VIP- DR01 through DR0x to designate the number of reference specimens received.
 - d. Summary of case numbering suffixes applied (including the leading zero for numbers 01 through 09):
 - DM01 Digital Media
 - DP01 Digital Photos
 - PE01 Personal Effects
 - BX01 Body X-rays
 - FP01 Finger Prints
 - DX01 Dental X-rays
 - DN01 DNA Specimens (post mortem)
 - DB01 DNA Family Samples (Buccal swabs)
 - DR01 DNA Reference Specimens (known victim DNA)
3. Identified Remains Case Number Conventions
- a. The Medical Examiner may elect to enter identified remains in the District's existing computerized case file management system for that office once MRN case files have been matched to VIP case files.
 - i. Cross reference notes should be made to indicate which VIP case and MRN case(s) are associated with the master case number.
 - ii. Multiple MRN cases may be matched by dental or DNA identification to one individual.
 - b. The Medical Examiner may elect to use the first MRN identified with a particular VIP as the PRIMARY number.
 - i. Additional MRN cases identified as the same individual may be cross-referenced to the primary MRN for tracking purposes.
 - ii. Logs of MRN numbers should be updated to reflect the primary and secondary links for tracking purposes.

B. Remains Recovery

Management of mass fatality disasters begins at the scene. The Medical Examiner's accurate determination of the cause and manner of death, documentation of a victim's identity, and return of remains to families are dependent on the quality of the recovery effort. With the exception of obvious weather caused events, disaster sites should be considered and treated as crime scenes from the outset. The nature of the disaster site will dictate how the Medical Examiner coordinates with law enforcement and fire service personnel to locate, document, store, and transport victim remains.

If the site involves any form of contamination it may be necessary to form a multidisciplinary team to evaluate the incident. The team should include:

1. HazMat, and any other relevant agencies (check required level of PPE),
2. death investigation personnel, and
3. law enforcement.

In the event of a disaster involving contaminated human remains, it may be necessary to request activation of the DMORT WMD Team or a similar asset capable of decontaminating the remains before they are admitted to the morgue for processing.

C. Holding Morgue Operations

Once remains have been recovered at the disaster site, an initial physical examination by Medical Examiner, law enforcement, or other appropriate personnel may be necessary at the scene prior to a more extensive external and internal examination at the morgue.

1. At the very least, remains must be documented for tracking purposes as they are recovered and placed in a transportation staging area.
2. In some circumstances, personnel may need to gather evidence, and remove and track personal effects before remains are transferred for autopsy or identification.
3. In other cases involving contamination, remains may need to be decontaminated before they are transported to the morgue. Because the set up for a decontamination unit may take 48-72 hours to become fully operational, refrigerated storage of remains at the incident site may become necessary.
4. The type of disaster will determine the extent of the holding/incident morgue operation.

D. Pre-Processing Transportation and Storage

The number of fatalities may necessitate the expansion of the medical examiner's transportation, storage, and morgue systems.

1. To expand their capabilities, Medical Examiners may need to incorporate the use of supplemental refrigeration (such as refrigerated trucks) as an alternative resource to accommodate cases that exceed normal storage capacity. Refrigerated trucks at the disaster site also may aid in transportation and storage. The use of refrigerated trucks for storage at the disaster site and then transportation to a high capacity Medical Examiner facility (even if outside the District) could be considered.
2. Another option is to cool a suitable storage area to below 40 °F with an industrial air conditioning unit.
3. Remains delivered from the incident site must be kept segregated from remains already processed.
4. During the transporting and storing process, remains should be stored on shelving units (if available). If shelving units are used, a means for the safe storage and removal of those remains not kept at waist level should be considered.

E. Morgue Operations

Morgue case flow during disaster operations requires planning of multiple issues including location of processing areas, flow through the morgue and tracking, initial routine processing/triage, and autopsy.

1. Location
The Medical Examiner must determine if remains should be processed at the Medical Examiner Office in the District in which the deaths occurred, within the District at another location, or at the nearest high capacity Medical Examiner facility. Such a decision is based on the magnitude of the incident, the rate of recovery of remains, the potential for the medical examiner headquarters to become a target of attack, and if the District Medical Examiner Office has enough space to accommodate the additional caseload.
2. Morgue Stations
 - a. Unlike routine casework where human remains are processed at one station, in a mass fatality incident remains are often processed in a multiple-station system. Generally, a well-organized morgue operation entails: intake/admitting, triage, photography, evidence, personal effects, pathology/ toxicology, radiology, finger printing, odontology, anthropology, and DNA sampling.
 - b. Extensive guidance on the function and operation of each morgue station is provided in "Mass Fatality Incidents: A Guide for Human Identification" developed by the National Center for Forensic Science (NCFS).
 - c. The mass fatality support organization involved in the investigation shall have developed standard operating procedures for morgue station operations.

3. Autopsy and External Evaluations
 - a. For large numbers of fatalities, it may not be feasible to consider performing a complete autopsy on all remains. Although the Medical Examiner must determine which cases require an autopsy, he/she should think about collaborating his/her intentions with the lead law enforcement agency and the Department of Health, since each of these agencies has its own specific requirements for identifying autopsies to support the overall investigation. (Capstone)
 - b. While a complete autopsy of every victim may be the desired goal, in the face of significant numbers of victims the Medical Examiner may need to seek authorization to apply professional discretion to autopsy only appropriate sample cases. Such authorization may be requested for inclusion in the disaster declaration or executive order covering the state of emergency.

4. Documentation of Processing
 - a. In addition to assessment of anatomic findings (pathology/toxicology reports) to support a determination of cause of death, processing provides the only opportunity to preserve information needed to establish positive identification of the remains.
 - b. Initial triage of each case includes photography and collection of evidence and/or personal effects. Properly documented "chain of custody" is essential for all such processing.
 - c. Personal effects may prove crucial in establishing presumptive identifications that may lead to positive identifications through accepted protocols. Even DNA may be obtained from some personal effects. For that reason, a DNA specialist should be consulted before personal effects are cleaned for photographing, cataloging, and returning to families. Personal effects should always be treated with potential identification in mind.
 - d. Standardized processing forms are available in the Victim Identification Program (VIP) may be used to create a record of all processing efforts.
 - e. Data entry of processing information is valuable for making the information searchable for clues to matching it with victim information provided by families.

5. Radiological (X-Ray) Processing
 - a. Specialists with experience in the use of x-ray should be used to process remains.
 - b. Comprehensive x-ray documentation is made of appropriate cases to identify commingled remains, artifacts (jewelry, evidence, etc.) imbedded in human tissue, and evidence of antemortem skeletal injury, surgeries, or anomalies.
 - c. Such features may aid in identification by correlation with antemortem medical records.

6. Fingerprint Processing
 - a. Specialists with experience in recognizing and preserving ridge detail for finger, palm, and footprints should be used to process remains.
 - b. Preserved ridge detail records may be compared to antemortem print records supplied by families or other agencies to establish identification of the victim.
7. Dental Processing
 - a. Specialists with experience in recognizing dental structures and recording by means of x-ray and charting should be used to process remains.
 - b. Standardized processing forms available in the dental identification program (WinID) may be used to compare with antemortem dental records supplied by families or other agencies to establish identification of the victim.
8. Anthropology Processing
 - a. Specialists with experience in recognizing skeletal structures and recording by means of x-ray and charting, should be used to process remains.
 - b. Comprehensive documentation is made of human skeletal and other fragmentary remains including assessment of bone, bone portion, side, chronological age, sex, stature, ancestral affiliation, antemortem trauma, and pathological conditions.
 - c. Such features may aid in identification by correlation with antemortem medical records
9. DNA Processing
 - a. Human remains that lack typical identifying features (fingerprint, dental, or anthropological material) can often be identified through DNA. For this reason, morgue processing should include a station to obtain and preserve a specimen for DNA testing from each case processed.
 - b. DNA specialists should be consulted or even incorporated into the morgue station to ensure proper sampling procedures, prevent cross contamination, and ensure the best possible specimen is collected.
 - c. Laboratory testing of DNA specimens will need to be coordinated taking into account the
 - i. selection of the most appropriate specimen for testing,
 - ii. number of specimens to be tested,
 - iii. capacity of the laboratory to perform the testing, and
 - iv. standardization of test results for comparison with DNA testing of antemortem reference materials collected through the Family Assistance Center or other agencies.
 - d. DNA Sections of the Florida Department of Law Enforcement's Crime Laboratory System may be called upon to assist with managing such issues.

F. Post-Processing Transportation and Storage

Until the final disposition of remains is known, the Medical Examiner cannot determine to what extent this phase of the operation must function; for instance, when remains are going to be returned to family members, personnel may only need to establish a holding area for funeral directors to retrieve remains. (Capstone) Storage areas should be segregated for coding of storage location by Unidentified remains and Identified remains. Unidentified remains may be returned to the morgue multiple times for additional processing as needed.

Law enforcement may require that the remains be retained or partially retained for evidentiary purposes, thus the Medical Examiner may need to further enhance the morgue's storage capacity.

G. Body Release for Final Disposition

When processing has been completed, final disposition normally involves burial or cremation at the family's request. Aside from the question of mass disposition (see Section IV - Mass Disposition of Human Remains) a variety of tasks must be accomplished to authorize release of the human remains to a funeral service provider of the family's choice.

1. Once remains have been identified and are ready for release, the Medical Examiner should certify the cause and manner of death on the death certificate.
2. After the Medical Examiner portion of the death certificate has been completed, Medical Examiner staff typically notifies the funeral home selected by the family. The funeral service provider responds to transport the remains and complete filing of the death certificate with the Bureau of Vital Statistics.
3. Medical Examiner staff and/or other involved agencies should confer with families and obtain documentation of the family wishes regarding notification when additional fragmentary remains are identified. Some families desire to be notified of every identified fragment while others have reached closure and do not desire to be notified at all.
4. Provision may be made for how unclaimed and unidentified remains will be memorialized or disposed of at the conclusion of the processing effort. This is often done in concert with the Incident Command management team and governmental officials.
5. Exceptions to release exist for remains that could not be decontaminated to a safe level. Emergency management powers of the Governor may need to be invoked to suspend routine regulations regarding the disposition of human remains and grant the Department of Health quarantine and human remains disposition powers including state sponsored burial or cremation in accordance with Ch. 381.0011(6) Florida Statutes.

6. In disaster situations where there are no remains to recover for identification, or where scientific efforts to establish identity fail, the appropriate legal authority in accordance with Chapter 382.012 Florida Statutes may order a presumptive death certificate.

H. Family Assistance Support

Emergency management agencies should be prepared to mobilize the appropriate resources to establish a missing persons family assistance center (FAC) in conjunction with the management of an incident with confirmed mass fatalities. This may be part of a joint family assistance center established by Incident Command for multiple service organizations. Nonetheless, staffing for the purpose of interviewing families for information essential to identification requires consultation with forensically trained specialists. The mass fatality support organization will have experience and operating procedures for establishment of a FAC. The efforts of personnel at the FAC shall be lead by the involved law enforcement agency if applicable.

1. Interviewing of family and friends of the disaster victim provides an opportunity to obtain vital information that may lead to a positive identification of the victim. In addition to basic physical description and names of treating physicians or dentists, interviews may reveal unique features such as tattoos, piercing, jewelry, etc.
 - a. Standardized questionnaire forms are available in the Victim Identification Program (VIP).
 - b. Interviewers should be limited to personnel specially trained in dealing with grieving individuals such as
 - i. law enforcement agents,
 - ii. Medical Examiner investigators,
 - iii. social workers,
 - iv. funeral service personnel, or
 - v. Family assistance center specialists who have been trained in conducting interviews and using the VIP protocols.
2. DNA Collection
 - a. Family reference samples and personal effects of the victim containing biological material may provide the only method by which processed victim remains can be identified.
 - b. DNA specialists should be incorporated into or consulted on the FAC interview process to ensure proper collection procedures, prevent cross contamination, and ensure the best possible specimens are collected for subsequent laboratory testing.

I. Records Management (Victim Processing)

1. Segregation of disaster records from the normal office records is recommended.

2. All ante and post mortem information and records should be handled as evidence. The chain of custody of records must be maintained via sign-out and sign-in logs. Records management personnel must be able to account for all received information/records, whether they are in the direct possession of the records management section or checked out to an authorized individual.
3. Four major file categories should be maintained:
 - a. Unidentified Remains case files in morgue case number order and containing:
 - i. Processing paperwork,
 - ii. Printouts of digital photos,
 - iii. CD or other storage media copy of all photos taken,
 - iv. Printouts of digital dental x-rays,
 - v. CD or other storage media copy of all digital dental x-rays taken,
 - vi. Printouts of digital body x-rays,
 - vii. CD or other storage media copy of all digital body x-rays taken,
 - viii. Personal effects inventory.
 - b. Missing Person Reports (VIP) case files in Last Name alphabetical order and containing:
 - i. Printed VIP interview form along with original hand completed forms,
 - ii. Other police missing person reports submitted,
 - iii. Medical ante mortem records or body x-rays submitted,
 - iv. Fingerprint records,
 - v. Dental ante mortem records including x-rays, and
 - vi. Notes of contacts for information gathering.
 - c. Identified Remains-Medical Examiner determines which master number to use and merges into one file all related materials:
 - i. VIP ante mortem reporting forms,
 - ii. Ante mortem medical records,
 - iii. Morgue case number folders (multiple if DNA associates parts),
 - iv. Dental records (ante and post mortem),
 - v. Morgue Photographs,
 - vi. DNA submission documents,
 - vii. Body X-Ray identification (ante and post mortem),
 - viii. Fingerprints and comparisons made, and
 - ix. Remains release and funeral home documentation.
 - d. Court Issued Presumptive Death Certificates and related documents (if applicable):
 - i. Affidavits and supporting documents,
 - ii. Court order,
 - iii. Copy of presumptive death certificate issued, and
 - iv. Record of transmittal of death certificate to Vital stats:
 - May require funeral director involvement,
 - May require family authorization for funeral home to handle,

- Vital Stats coordination required.
- v. If subsequently identified, an amended death certificate may be issued and all this material is moved to the Identified Remains file.

J. Records Management (Accounting and Finance)

1. Expenses incurred by a Medical Examiner in response to a disaster may be reimbursable depending on the nature of the disaster and whether a disaster declaration was issued at the State or Federal level.
2. Expenses may include both personnel overtime and purchases of equipment and supplies when requested through and approved by the Emergency Operations Center process.
 - a. Expenses incurred outside of the Emergency Operations Center process may not be reimbursable.
3. Extensive documentation of labor time and purchases will be needed to seek reimbursement including:
 - a. daily attendance rosters and time worked logs,
 - b. mission number assignment from Emergency Operations Center or designee,
 - c. purchasing and tracking of materials.

K. Progress Reports and Public Information

1. From the onset, demands for estimates of the number of victims, the number identified, and names of the missing arise from many sources.
2. Chief among these are the Incident Commander, the Emergency Operations Center, and the Medical Examiners Commission.
 - a. Early estimates provide a means to assess additional resources that may be needed.
 - b. Periodic and later updates allow for fine tuning the response effort and determining the eventual deactivation strategy.
 - c. Daily reporting to the Medical Examiners Commission during a disaster event involves reporting all confirmed disaster-related deaths to include name, age, race, sex, and brief synopsis. This list becomes the official list as managed by the State Emergency Operations Center.
3. Normally, the Incident Commander will arrange for an official Information Officer to provide updates to the media.
4. Medical Examiner staff should be assigned as liaison with Incident Command staff to coordinate distribution of information relating to victims and progress of the response effort. Special care is needed to inform waiting family members of developments before information is released to the general media.
5. Potential types of medical examiner information that may be requested frequently, even daily, include:
 - a. total number of victims,

- b. names of identified victims,
- c. method of identification,
- d. names and number of missing person reports,
- e. staffing levels and assistance provided, and
- f. estimate of time to complete identifications.

IV Mass Disposition of Human Remains (Rational for Identification Before Disposition)

A. Governmental Authority

Under the emergency management powers of the Governor, and pursuant to the authority vested under paragraph (a) of Chapter 252.36, Florida Statutes, the Governor may direct the Florida Department of Health to take certain actions to suspend routine regulations regarding the disposition of human remains. These actions may include directions for disposition of both identified and/or unidentified remains.

Disposition of unidentified remains would follow the collection items that are useful in the identification process: photographs, fingerprints, dental and somatic radiographs, and DNA.

B. Epidemic Outbreak Myth

Often a principle reason proffered for taking the mass disposition course of action is based upon a fear of the outbreak of disease from human remains. Well-intentioned, but scientifically uninformed, decision makers often initiate the process as a natural aversion to the physical unpleasantness of the effects of decaying human remains and a fear that an epidemic of disease will break out.

A scientific review of past catastrophic disasters (PAHO, 2004) demonstrates that the risk of epidemic disease transmission from human remains is negligible. Unless the affected population was already experiencing a disease suitable for epidemic development, the catastrophic event cannot create such a situation. Most disaster victims die from traumatic events and not from pre-existing disease.

Disease transmission requires first, a contagious agent, second, a method of transmission, and third, a susceptible population to infect.

- Typical pathogens in the human body normally die off when the host dies, although not immediately. In the absence of the first requirement, therefore, risk of transmission is no greater than that for routine handling of human remains.
- Water supplies contaminated with decaying human remains can serve as a method of transmission of illnesses, particularly gastroenteritis, but a non-breathing body presents minimal transmissibility.
- With the use of universal precautions for bloodborne pathogens, under regulations of the Occupational Safety and Health Administration (OSHA), responders so equipped do not present a susceptible population to infect. Even the local population will usually avoid a water supply contaminated

with human remains and use sheets or body bags to envelop decaying human remains.

C. Identification of Victims Before Disposition

Traditional funeral practices include a variety of procedures designed to assist survivors of all religious practices or belief systems with the grieving process. Identification of the victim, however, is the first step in that process.

Government-ordered disposition by mass burial or cremation of unidentified victims creates numerous, and often unnecessary, complications for survivors. In addition to a delay in completing of the grieving process, survivors face challenges of settling legal affairs, determining rights of property ownership, and managing the welfare of the victim's offspring.

Both the World Health Organization (WHO) and the Pan American Health Organization (PAHO) advocate for the identification of all disaster victims before final disposition, regardless of number of victims. In order to accomplish this in Florida, when faced with thousands of fatalities, extraordinary refrigeration resources will be required using the basic guidelines in Section 3(D) above. With adequate refrigeration capacity, supplemental morgue facilities, and sufficient forensic personnel to process human remains, identifying information from each set of remains can be secured before mass burial is contemplated as a last resort.

V References

1. "Mass Fatality Management for Incidents Involving Weapons of Mass Destruction" a draft capstone document (originally due for release September 2004) developed by the Department of Defense U.S. Army Soldier and Biological Chemical Command (SBCCOM), Improved Response Program (IRP), available through the reference library at www.FEMORS.org (cited throughout as "Capstone").
2. "Mass Fatality Incidents: A Guide for Human Identification" developed by the National Center for Forensic Science (NCFS) as a National Institute of Justice project (NCJ 199758, June 2005) and available through the reference library at www.FEMORS.org.
3. Morgan O. Infectious disease risks from dead bodies following natural disasters. *Rev Panam Salud Publica*. 2004;15(5):307–12. (Available through the reference library at www.FEMORS.org.)

VI Statutory Citations

1. Chapter 252.36, Florida Statutes, Emergency Management Powers of the Governor
2. Chapter 380.0011(6), Florida Statutes, Duties and Powers of the Department of Health

3. Chapter 382.012, Florida Statutes, Presumptive death certificate
4. Chapter 406., Florida Statutes, Medical Examiners; Disposition of Dead Bodies, Examinations, Investigations, and Autopsies

VII Medical Examiner Districts

<u>District</u>	<u>Address</u>	<u>City</u>	<u>Office Phone</u>
1	5151 North 9th Avenue	Pensacola 32504	(850) 416-7200
2	1899 Eider Court	Tallahassee 32308	(850) 942-7473
3	<i>[ME Services provided by Dist. 4, except Dixie County services provided by District 8]</i>		
4	2100 Jefferson Street	Jacksonville 32206	(904) 630-0977
5	809 Pine Street	Leesburg 34748	(352) 326-5961
6	10900 Ulmerton Road	Largo 33778	(727) 582-6800
7	1360 Indian Lake Road	Daytona Beach 32124	(386) 258-4060
8	606 S.W. 3rd Avenue	Gainesville 32601	(352) 338-2191
9	1401 Lucerne Terrace	Orlando 32806	(407) 836-9400
10	1021 Jim Keene Boulevard	Winter Haven 33880	(863) 298-4600
11	Number One on Bob Hope Road	Miami 33136	(305) 545-2400
12	2001 Siesta Drive, Suite 302	Sarasota 34239	(941) 361-6909
13	401 South Morgan Street	Tampa 33602	(813) 272-5342
14	3737 Frankford Avenue	Panama City 32405	(850) 747-5740
15	3126 Gun Club Road	West Palm Beach 33406	(561) 688-4575
16	11400 Overseas Highway, #211	Marathon Shores 33050	(305) 289-5410
17	5301 S.W. 31st Avenue	Ft. Lauderdale 33312	(954) 327-6500
18	1750 Cedar Street	Rockledge 32955	(321) 633-1981
19	2500 South 35th Street	Ft. Pierce 34981	(772) 464-7378
20	3838 Domestic Avenue	Naples 34104	(239) 434-5020
21	70 Danley Drive	Ft. Myers 33907	(239) 277-5020
22	18130 Paulson Drive	Pt. Charlotte 33954	(941) 625-1111
23	4075 Lewis Speedway	St. Augustine 32084	(904) 829-5736
24	<i>[ME Services provided by Dist. 7]</i>		

<u>District</u>	<u>Jurisdiction</u>
1	Escambia, Okaloosa, Santa Rosa, and Walton Counties
2	Franklin, Gadsden, Jefferson, Leon, Liberty, Taylor, and Wakulla Counties
3	Columbia, Dixie, Hamilton, Lafayette, Madison, and Suwanee Counties
4	Clay, Duval, and Nassau Counties
5	Citrus, Hernando, Lake, Marion, and Sumter Counties
6	Pasco and Pinellas Counties
7	Volusia County
8	Alachua, Baker, Bradford, Gilchrist, Levy, and Union Counties
9	Orange and Osceola Counties

<u>District</u>	<u>Jurisdiction</u>
10	Hardee, Highlands, and Polk Counties
11	Miami-Dade County
12	De Soto, Manatee, and Sarasota Counties
13	Hillsborough County
14	Bay, Calhoun, Gulf, Holmes, Jackson, and Washington Counties
15	Palm Beach County
16	Monroe County
17	Broward County
18	Brevard County
19	Indian River, Martin, Okeechobee, and St. Lucie Counties
20	Collier County
21	Glades, Hendry, and Lee Counties
22	Charlotte County
23	Flagler, Putnam, and St. Johns Counties
24	Seminole County