



Fatality management is the ability to coordinate with other organizations (e.g., law enforcement, healthcare, emergency management, and medical examiner/coroner) to ensure the proper recovery, handling, identification, transportation, tracking, storage, and disposal of human remains and personal effects; certify cause of death; and facilitate access to mental/behavioral health services to the family members, responders, and survivors of an incident.

This capability consists of the ability to perform the following functions:

- Function 1:** Determine role for public health in fatality management
- Function 2:** Activate public health fatality management operations
- Function 3:** Assist in the collection and dissemination of antemortem data
- Function 4:** Participate in survivor mental/behavioral health services
- Function 5:** Participate in fatality processing and storage operations

Function 1: Determine role for public health in fatality management

Coordinate with the lead jurisdictional authority (e.g., coroner, medical examiner, sheriff, or other agent) to identify the roles and responsibilities of jurisdictional public health entities in fatality management activities.

Tasks

This function consists of the ability to perform the following tasks:

- Task 1:** Prior to an incident, characterize potential fatalities based on jurisdictional risk assessment and the impact of these potential fatalities on jurisdictional resource needs.
- Task 2:** Prior to an incident, coordinate with subject matter experts (e.g., those with expertise in epidemiology, laboratory, surveillance; community cultural/religious beliefs or burial practices; chemical, biological, radiological and emergency operations leads; and partners from hospital, mortuary, emergency medical services) to determine public health's role in an incident that may result in fatalities. *(For additional or supporting detail, see Capability 10: Medical Surge)*
- Task 3:** Prior to an incident, coordinate with jurisdictional, private and federal Emergency Support Function #6 and Emergency Support Function #8 resources as necessary to determine their roles and requirements for the response. *(For additional or supporting detail, see Capability 10: Medical Surge)*

Performance Measure(s)

At present there are no CDC-defined performance measures for this function.

Resource Elements

*Note: Jurisdictions must have or have access to the resource elements designated as **Priority**.*

PLANNING (P)

- P1: (Priority)** Written plans should include memoranda of agreement, memoranda of understanding, mutual aid agreements, contracts, and/or letters of agreement with other agencies to support coordinated activities and with other jurisdictions to share resources, facilities, services, and other potential support required during the management of fatalities. Requests should be determined by the local authority and follow the jurisdictional escalation process (i.e., local to state to federal).
 - State and federal resources (to include Disaster Mortuary Operational Response Teams) are requested when anticipated resource needs exceed the local capacity. County/jurisdictional plans should address mass fatality planning and thresholds for requesting additional resources.
 - Federal resources should be engaged/notified through the U.S. Department of Health and Human Services (HHS) Regional Emergency Coordinators
 - Resources available through mutual aid (e.g., Emergency Management Assistance Compact (EMAC), memoranda of understanding, and/or memoranda of agreement) should be engaged/notified through appropriate channels (EMAC Coordinator, emergency management)

Function 1: Determine role for public health in fatality management

Resource Elements *(continued)*

Suggested resources

- National Response Framework: <http://www.fema.gov/emergency/nrf/>
- National Oil and Hazardous Substances Pollution Contingency Plan: <http://www.epa.gov/oem/content/lawsregs/ncpover.htm>

P2: Written plans should include documentation that identifies how the jurisdictional public health agency has participated in planning activities with the jurisdictional fatality management lead authority to identify agencies' roles and responsibilities relating to the following topics during an incident with fatalities.⁶³

- Magnitude: the estimated number of decedents and body portions
- Type of incident: natural, criminal, terrorist, or accidental
- Manifest: closed population with an existing manifest available, closed population with no manifest available, or open population
- Condition of human remains: visually identifiable, whole bodies, fragmented bodies, comingled, decomposed, charred, or mutilated
- Rate of recovery: rapid, moderate, slow
- Recovery complexity: highly complex requiring anthropological consult, shifting, extensive gridding, known or unknown recovery area boundaries
- Presence of contamination or transmissible infection: decedents contaminated with chemical, biological, or radiological agents or materials
- Disaster site location characteristics: fixed or distributive location; presence of building materials, water/tides, fire/smoldering; need to conduct excavation or debris removal
- Environmental conditions: weather conditions (e.g., heat, cold, humidity, or rain)
- Institution of public health/law enforcement community constraints: limitations placed on public gatherings or establishment of curfews
- Inherent limitation of assets or technology: present or not
- Requirement to establish formal Health and Safety Plans: required for all fixed and/or ad hoc facilities, and/or tasks involving hazardous work (e.g., recovery operations)
- Level of asset integration: requirement for a simple functional or highly matrixed response command structure
- Event occurrence: single event at one location, single event at multiple locations, reoccurring event at multiple locations
- Medical Examiner/Coroner and local jurisdiction infrastructure: operational, partially operational, or non-operational
- Decedent identification complexity: antemortem data collection complications, postmortem data collection complications, requirement to issue death certificates via judicial decree, difficulty communicating with next of kin
- Family management considerations: single or multiple family assistance centers required; establishment of virtual FACs; need for establishing a long-term family management response⁶⁴

Additional consideration should also be given to the following:

- Whether people should call 911 to report a death or whether the jurisdiction wishes to establish a separate call center to coordinate this activity
- Providing for mental/behavioral health services
- Coordination with hospitals and healthcare facilities

(For additional or supporting detail; see Capability 12: Public Health Laboratory Testing and Capability 13: Public Health Surveillance and Epidemiological Investigation)

P3: Written plans should include processes and protocols specifying how the public health agency will coordinate with medical/legal authority and subject matter experts (e.g., those with expertise in epidemiology, laboratory, surveillance; community cultural/religious beliefs or burial practices; chemical, biological, radiological and emergency operations leads; and partners from hospital, mortuary, emergency medical services⁶⁵) to make a determination on the roles and responsibilities of public health entities in the response.⁶⁶

Function 1: Determine role for public health in fatality management
Resource Elements (continued)

P4: Written plans should include processes and protocols for jurisdictional all-hazards fatality management including addressing public health roles in fatality management.^{67,68,69} The plan should address the following items:

- Coordination of facilities (e.g., morgue locations, portable and temporary morgues, decontamination, decedent storage, hospitals, and healthcare facilities)
- Coordination of family relations (e.g., notification, grief services, antemortem information, and call centers)
- Procedures to acquire death certificates or permits (including sending human remains to international destinations)
- Regulations for crematoriums and other support groups
- Antemortem data management (e.g., establish record repository, identify repository physical location, enter interview data into library, and balance victim needs with those who have lost family members)
- Personnel needs (e.g., medical and mental/behavioral, including psychological first aid)
- Frequency that critical documentation is reviewed and updated (e.g., comprehensive fatality management mission critical list, and contingency plans with local, state, and private entities regarding final disposition of human remains)

Suggested resources

- Jurisdiction's current fatality management plan
- NACCHO: Managing Mass Fatalities: A Toolkit for Planning: <http://www.naccho.org/toolbox/tool.cfm?id=1595%20>
- National Mass Fatalities Institute: Mass Fatalities Institute Planners Course
- Mass fatalities courses offered by the state and local agencies
- Radiation Emergency Medical Management: Management of the Deceased: <http://www.remm.nlm.gov/deceased.htm>
- Pan American Health Organization: Management of Dead Bodies in Disaster Situations: <http://www.paho.org/English/DD/PED/ManejoCadaveres.htm>
- Pan American Health Organization: Management of Dead Bodies After Disasters – A Field Manual for First Responders: <http://www.paho.org/English/DD/PED/DeadBodiesFieldManual.htm>
- Department of Justice: Mass Fatality Incidents: A Guide for Human Forensic Identification: <http://www.ojp.usdoj.gov/nij/pubs-sum/199758.htm>
- Morgan OW, Sribanditmongkol P, Perera C., Sulasmi Y, Van Alphen D, et al. (2006) Mass Fatality Management Following the South Asian Tsunami Disaster: Case studies in Thailand, Indonesia, and Sri Lanka. PLoS Med 3(6): e195. DOI: 10.1371/journal.pmed.0030195: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1472696/pdf/pmed.0030195.pdf>
- U.S. Army Soldier and Biological Chemical Command (SBCCOM): Guidelines for Mass Fatality Management During Terrorist Incidents Involving Chemical Agents: http://www.ecbc.army.mil/downloads/cwirp/ECBC_guidelines_mass_fatality_mgmt.pdf
- Disaster Mortuary Operational Response Team: <http://www.dmort.org/FilesforDownload/MassFatalityResources2007.pdf>

S1: Public Health staff participating in fatality management activities should be trained on the jurisdiction's fatality management plans and procedures and understand their role(s), if any, during a public health response that includes fatalities.

Recommended trainings include the following:

- Federal Emergency Management Agency (FEMA) Mass Fatalities Incident Response (G-386) – Emergency Management Institute – current version available but under review
- FEMA Emergency Support Function #8 – Public Health and Medical Services (IS-808)
- Mass fatalities courses offered by the jurisdiction
- National Mass Fatalities Institute:
 - Family Assistance and Behavioral Health Course, Responding to Active Shooter Incidents-Fatality Management (MFI 100,200,300 and 400)

PLANNING (P)

SKILLS AND TRAINING (S)

Function 1: Determine role for public health in fatality management

Resource Elements *(continued)*

SKILLS AND TRAINING (S)	<ul style="list-style-type: none"> - Suggested training primarily for medical examiners, coroners and morticians: <ul style="list-style-type: none"> □ Radiological Terrorism: A Tool Kit for Public Health Officials: http://emergency.cdc.gov/radiation/publichealthtoolkit.asp <ul style="list-style-type: none"> ○ Guidelines for Handling Decedents Contaminated with Radioactive Materials (document and video): http://emergency.cdc.gov/radiation/pdf/radiation-decedent-guidelines.pdf ○ Satellite Broadcast: Preparing for Radiological Population Monitoring & Decontamination: http://www.phppo.cdc.gov/PHTN/Radiological2006/default.asp □ The Medical Examiner and Coroner's Guide for Contaminated Deceased Body Management: http://thename.org/index.php?option=com_docman&task=doc_download&gid=13&Itemid=26
EQUIPMENT AND TECHNOLOGY (E)	<p>E1: Have or have access to personal protective equipment to support designated public health roles (e.g., blood-borne pathogen protection, laboratory safety equipment). Suggested personal protective equipment can include the following items:</p> <ul style="list-style-type: none"> - Protective clothing (e.g., suit, coveralls, hoods, gloves, and boots) - Respiratory equipment - Air purifying respirators (e.g., N95) - Cooling system (e.g., ice vest, air circulation, and water circulation) - Head protection - Eye protection - Ear protection - Inner garment - Outer protection (e.g., over gloves, over boots, and flash cover) <p><i>(For additional or supporting detail, see Capability 14: Responder Safety and Health)</i></p>

Function 2: Activate public health fatality management operations

Facilitate access to resources (e.g., human, record keeping, and physical space) to address the fatalities from an incident in accordance with public health jurisdictional standards and practices and as requested by lead jurisdictional authority.

Tasks

This function consists of the ability to perform the following tasks:

- Task 1:** Assess data from the incident to inform and guide the public health resources needed for the response.
- Task 2:** Identify and coordinate with jurisdictional, regional, private, and federal Emergency Support Function #8 resources with expertise in the potential cause(s) of fatalities to make recommendations regarding all phases of human remains disposition: recovery, processing (e.g., decontamination, infection control, and other mitigation measures), storing, and disposing.
- Task 3:** Coordinate with partners to initiate pre-determined (e.g., local, regional, state, federal, and private sector) processes for all phases of human remains disposition.
- Task 4:** Coordinate incident details among members of the public health and medical health systems by sharing information between programs and linking information databases, based on the scope of the incident. *(For additional or supporting detail, see Capability 6: Information Sharing)*

Performance Measure(s)

At present there are no CDC-defined performance measures for this function.

Function 2: Activate public health fatality management operations

Resource Elements

Note: Jurisdictions must have or have access to the resource elements designated as **Priority**.

PLANNING (P)

P1: Written plans should include a list of potential fatality management advisory roles that public health may need to fill to support a response per the jurisdiction's plan.⁷⁰ Consideration should be given to the inclusion of these elements:

- Search and recovery of human remains
- Removal, transfer/transportation, storage, and temporary burial of human remains
- Identification and re-burial of human remains where grave sites have been disrupted by the incident
- Assessment of morgue/examination center capacities
- Morgue/examination site staff
- Disposal of human remains
- Mental/behavioral health services
- Public affairs/communications

(For additional or supporting detail, see *Capability 4: Emergency Public Information and Warning* and *Capability 15: Volunteer Management*)

SKILLS AND TRAINING (S)

S1: Public health staff participating in fatality management operations should be trained on plans and procedures (i.e., standard operating procedures) and the jurisdictional fatality management plan and understand their role(s), if any, during a public health response with fatalities.

EQUIPMENT AND TECHNOLOGY (E)

E1: Have or have access to material required to manage fatality operations as required by the incident:

- Protective clothing (e.g., gloves, boots, coats, hard hats, rain suits, respirators)
- Body bags (appropriate number and type)
- Refrigerated storage
- Tents
- Storage for equipment/supplies and bodies
- Paint for numbering
- Flags for marking locations
- Plastic toe tags
- Biohazard bags and boxes
- Photography equipment
- Gridding, laser survey, and global positioning systems
- Communication devices: radio and cell phones
- Equipment for scene documentation
- Decontamination unit
- Radiation survey equipment

E2: Have or have access to systems to record and track fatalities under the leadership of the coroner/medical examiner.

- Database for the centralization of information. Consideration should be given to the inclusion of these elements:
 - A centralized information clearinghouse for reporting deaths
 - A centralized information clearinghouse for collating data. Either a software program or a series of pre-printed forms should be designed to accurately track refrigerated storage, funeral home capacity, and the whereabouts and status of the deceased
- Death reporting system that can demonstrate cross-agency collaboration and information sharing of mortality data (e.g., transmit death certificate data including cause of death data to appropriate federal agencies)

Function 2: Activate public health fatality management operations

Resource Elements *(continued)*

EQUIPMENT AND TECHNOLOGY (E)

- Tracking system for recovery activities. Consideration for the data gathering system should be given to the inclusion of these elements:
 - Where human remains are found
 - How fragmented portions are tracked
 - How case numbers are correlated
 - How antemortem data (obtained from family members) can be cross-referenced with other case numbers assigned to recovered human remains
 - How to distinguish disaster cases from other caseloads
- System should enable the cross-leveling of data between several operational areas, such as the morgue, the family assistance centers, and the incident site, or any location where case data is entered
- System should have redundant backup capabilities to ensure that information is not lost due to unexpected system failure or other type of event/incident

Function 3: Assist in the collection and dissemination of antemortem data

Assist, if requested, the lead jurisdictional authority and jurisdictional and regional partners to gather and disseminate antemortem data⁷¹ through a Family Assistance Center Model⁷² or other mechanism.

Tasks

This function consists of the ability to perform the following tasks:

Task 1: Coordinate with partners for the establishment of a mechanism (e.g., Family Assistance Center) to collect antemortem data.

Task 2: Coordinate with partners to identify and assemble the resources required to collect and communicate antemortem data.

Task 3: Coordinate with partners and assist, if needed, in the collection and dissemination of antemortem data to families of the deceased and law enforcement officials. *(For additional or supporting detail, see Capability 6: Information Sharing)*

Task 4: Coordinate with partners to support electronic recording and reporting of antemortem data through electronic systems and/or other information sharing platforms. *(For additional or supporting detail, see Capability 6: Information Sharing)*

Performance Measure(s)

At present there are no CDC-defined performance measures for this function.

Resource Elements

*Note: Jurisdictions must have or have access to the resource elements designated as **Priority**.*

PLANNING (P)

- P1: (Priority)** Written plans should include a procedure for the collection of antemortem data. Consideration should be given to the inclusion of these elements:
- Data collection/dissemination methods
 - Call Center or 1-800 number
 - Family Reception Center
 - Family Assistance Center
 - Staff who can perform the following functions:
 - Administrative activities
 - Interviews of families in order to acquire antemortem data
 - System data entry of antemortem data

Function 3: Assist in the collection and dissemination of antemortem data

Resource Elements *(continued)*

PLANNING (P)	<p>P2: Written plans should include family notification procedures and protocols in the event that public health has a lead role in the incident. Consideration should be given to the inclusion of the following elements:</p> <ul style="list-style-type: none"> - Where the notification occurs - Which family members are notified and how they are contacted - Assurance that the spokesperson is releasing accurate information that was officially issued by the coroner's/ medical examiner's office - Informing families about identification methods being used for the incident including what they involve and their reliability (e.g., fingerprints and DNA) - Handling and release of decedent's personal effects
SKILLS AND TRAINING (S)	<p>S1: Public health staff participating in fatality management activities should be trained on plans and procedures and jurisdictional fatality management plans and understand their role(s), if any, during a public health response with fatalities.</p> <p>Recommended trainings include the following:</p> <ul style="list-style-type: none"> - Providing Relief to Families after a Mass Fatality: Roles of the Medical Examiner's Office and the Family Assistance Center, Department of Justice's Office of Justice Programs, the Office for Victims of Crime: http://www.ojp.usdoj.gov/ovc - Creating and Operating A Family Assistance Center: A Toolkit for Public Health: http://www.apctoolkits.com/family-assistance-center/ - National Transportation Safety Board Training Center: http://www.nts.gov/tc/sched_courses.htm <ul style="list-style-type: none"> <input type="checkbox"/> Family Assistance (TDA301) <input type="checkbox"/> Advanced Skills in Disaster Family Assistance (TDA405) <input type="checkbox"/> Mass Fatality Incidents for Medicolegal Professionals (TDA403)
EQUIPMENT AND TECHNOLOGY (E)	<p>E1: Have or have access to a central repository/database for the collection, recording, and storage of antemortem and postmortem data.</p>

Function 4: Participate in survivor mental/behavioral health services

Coordinate with the lead jurisdictional authority and jurisdictional and regional partners to support the provision of non-intrusive, culturally sensitive mental/behavioral health support services to family members of the deceased, incident survivors, and responders, if requested.

Function 4: Participate in survivor mental/behavioral health services

Tasks

This function consists of the ability to perform the following tasks:

- Task 1:** Coordinate with partners to assemble the required staff and resources to provide non-intrusive mental/behavioral health services to responders.
- Task 2:** Coordinate with partners to facilitate availability of culturally appropriate assistance (e.g., addressing language barriers and religious or cultural practices).
- Task 3:** Coordinate with Emergency Support Function 8 partners to support the provision of mental/behavioral health services to family members of the deceased and incident survivors as needed.

Performance Measure(s)

At present there are no CDC-defined performance measures for this function.

Resource Elements

*Note: Jurisdictions must have or have access to the resource elements designated as **Priority**.*

PLANNING (P)	<p>P1: (Priority) Written plans should include processes and protocols developed in conjunction with jurisdictional mental/behavioral health partners to identify services to provide to survivors after an incident involving fatalities. Written plans should include a contact list of pre-identified resources that could provide mental/behavioral health support to responders and families according to the incident.^{73,74} Consideration should be given to the inclusion of the following elements:</p> <ul style="list-style-type: none"> - Mental/behavioral health professionals - Spiritual care providers - Hospices - Translators - Embassy and Consulate representatives when international victims are involved <p>P2: (Priority) Written plans should include list of staff selected in advance of an incident that could potentially fill the fatality management roles adequate to a given response.⁷⁵</p> <p>P3: Written plans should include processes and protocols to identify services to provide to responders and family members of the deceased after an incident involving fatalities. Consideration should be given to the inclusion of the following elements:</p> <ul style="list-style-type: none"> - Determining who and what agencies/businesses (among the local county/jurisdiction) may be available to assist with the organization and operation of services following an incident resulting in fatalities <ul style="list-style-type: none"> <input type="checkbox"/> Providing medical and mental/behavioral assistance to responders <input type="checkbox"/> Providing medical and mental/behavioral assistance to families - Determining what cultural, religious and family practices are prominent (among the local jurisdiction) and may require additional consideration/accommodation when managing fatalities
SKILLS AND TRAINING (S)	<p>S1: Public health staff participating in fatality management should be trained on jurisdictional fatality management plans and procedures, and understand their role(s), if any, during a public health response that includes fatalities.</p> <p>Recommended trainings include the following:</p> <ul style="list-style-type: none"> - Trauma, Death, and Death Notification: A Seminar for Professional Counselors and Victim Advocates (1996): http://www.ojp.usdoj.gov/ovc/publications/infores/death.htm - Providing Relief to Families After a Mass Fatality: Roles of the Medical Examiner’s Office and the Family Assistance Center, Department of Justice’s Office of Justice Programs, the Office for Victims of Crime: http://www.ojp.usdoj.gov/ovc - Light Our Way: A Guide for Spiritual Care in Times of Disaster for Disaster Response Volunteers, First Responders and Disaster Planners, Emotional and Spiritual Care Committee and the Light Our Way Task Force of National Voluntary Organizations Active in Disaster: http://www.ldr.org/care/Light_Our_Way.pdf

Function 5: Participate in fatality processing and storage operations

Assist the lead jurisdictional authority and partners in ensuring that human remains and associated personal effects are safely recovered, processed, transported, tracked, stored, and disposed of or released to authorized person(s), if requested.

Tasks

This function consists of the ability to perform the following tasks:

- Task 1:** Make recommendations to incident management/jurisdictional lead agency on procedures for the safe recovery, receipt, identification, decontamination, transportation, storage, and disposal of human remains. Recommendations can also include an assessment of the need for temporary burial, procurement of public property for temporary burial, and security/privacy requirements of the processing facility.
- Task 2:** Assist, if needed or requested, in multi-specialty forensic analysis to identify human remains and determine the cause and manner of death. *(For additional or supporting detail, see Capability 12: Public Health Laboratory Testing, and Capability 13: Public Health Surveillance and Epidemiological Investigation)*
- Task 3:** Coordinate with partners to support electronic death reporting. *(For additional or supporting detail, see Capability 6: Information Sharing)*
- Task 4:** Coordinate with partners to facilitate the collection and reporting of mortality information (e.g., vital records). *(For additional or supporting detail, see Capability 6: Information Sharing)*

Performance Measure(s)

At present there are no CDC-defined performance measures for this function.

Resource Elements

*Note: Jurisdictions must have or have access to the resource elements designated as **Priority**.*

P1: (Priority) Written plans should include protocols that ensure that the health department, through healthcare coalitions or other mechanisms, supports the coordination of healthcare organization fatality management plans with the jurisdictional fatality management plan.

Suggested resources

- FY10 Hospital Preparedness Funding Opportunity Announcement, Section 1.5.6 Fatality Management: http://www.phe.gov/Preparedness/planning/hpp/Documents/fy10_hpp_guidance.pdf
- Joint Commission Emergency Management Standard EM.02.02.11.7

P2: Written plans should include a protocol for identifying required data elements for electronic death reporting according to requirements of state death certificates and coroner/medical examiner. Consideration should be given to the following elements:

- Incident details (e.g., date, time, location, and situation)
- Victim identification (e.g., name, date of birth, gender, ethnicity, height, weight, address, and medical history)
- Social security number verification
- Other people involved (e.g., names of family members and friends)
- Location/types of injuries
- Cause of death (e.g., presumed/actual or underlying)
- Death details (e.g., date, time, location, and manner)
- Human remains processing details
- Human remains storage location
- Health provider/responder details
- Survivor interview details
- Human remains disposal procedures

(For additional or supporting detail, see Capability 6: Information Sharing)



CAPABILITY 5: Fatality Management

Function 5: Participate in fatality processing and storage operations

Resource Elements *(continued)*

SKILLS AND TRAINING (S)

S1: Public health staff participating in fatality management should be trained on fatality management plans and procedures (e.g., Standard Operating Procedures), and understand their role(s), if any, during a public health response that includes fatalities.

Recommended trainings (primarily for medical examiners and morticians) include the following:

- Radiological Terrorism: A Tool Kit for Public Health Officials:
<http://emergency.cdc.gov/radiation/publichealthtoolkit.asp>
 - Guidelines for Handling Decedents Contaminated with Radioactive Materials (document and video)
 - Satellite Broadcast: Preparing for Radiological Population Monitoring and Decontamination
- The Medical Examiner and Coroner's Guide for Contaminated Deceased Body Management:
http://thename.org/index.php?option=com_docman&task=doc_download&gid=13&Itemid=26

EQUIPMENT AND TECHNOLOGY (E)

E1: Have or have access to material and equipment required to process, store, and/or dispose of human remains. Consideration should be given to the following equipment:

- Portable x-ray unit
- Morgue equipment
- Medical instruments for autopsies
- Radiation survey equipment
- Portable autoclave
- Gloves, gowns, personal protective equipment
- Digital cameras
- Specimen containers and preservatives
- Refrigerated storage
- Computers/printers
- Death certificates