Mass Fatality Planning
Regional and State Resources

Do you have a plan?
When was your plan last reviewed?
What is in your plan?
Sources for Fatality guidance used in guidance/template:

Kansas City Region Mass Fatality Incident Annex
Federal (DMORT) Disaster Mortuary Operational Response Team
FEMORS – Florida Emergency Mortuary Operations Response System
Feedback from MOMORT leadership team, SEMA and Coroners
PAST and POTENTIAL DISASTERS

- Natural disasters: Hurricane Katrina (1,464 deaths), Hyatt Regency walkway collapse on July 17, 1981 (114 deaths), Joplin MO Tornado (161 deaths), September 11, 2001 tragic events (nearly 3,000 deaths) and the bombing in Oklahoma City (169 deaths) have demonstrated that the fatality management infrastructure is vulnerable to overwhelming events.

- New Madrid Seismic Zone, Region VII plan estimate for 6.5/7 would result in 686 deaths and 14,434 injuries.

- Be prepared for the possibility of an influenza pandemic.
Primary Objectives of a Mass Fatality PLAN

- Ready the jurisdiction for managing a mass fatality event
- Identify roles of key organizations/individuals in Operations
- Determine command/control, activation of the plan
- Provide logistics info on supplies, equipment and facility requirements
- Provide information on infection control and health/safety hazards
Create a Planning Team

- Identify those that will serve on a planning team (Coroner/Medical Examiner, EMD, hospital, public health department, volunteer organizations)
- Coroner is the legal authority, defer to the coroner as the expert
- ESF-8 Public Health and Medical, some county health departments have selected Capability 5 (Mass Fatality Planning) as one of their focus capabilities.
Review your current Mass Fatality Annex

- County EMD/Coroner will have the most recent Mass Fatality Annex
- Identify strengths of the plan
- Identify areas for improvement
- Refer to planning tools
- County/Region Mass Fatality Plan/Annex Template - MO
Mass Fatality GIS Resource MAP

http://arcg.is/1Sh4YRB

Use as a planning tool to identify:

- **Fatality trailers**
  
  20 body refrigerated trailer (7 in State)
  24 body MERC cooling system, (3 in State, 2 warehoused/1 trailered, 1 in Ill)

- **Recovery Caches (7)**

- **Funeral Directors**

- **Embalmers**
STRUCTURE of the PLAN Template

- Purpose, Scope, Situation, Assumptions, Local/Region/State Resources

- Concept of Operations
  - Activation
  - Resource Request Process and Coroner Mutual Aid
  - Setting up a Temporary Morgue
  - Setting up a Victim Information Center
  - Guidelines for Recovery and Transportation, Reunification/Notification of Next of Kin
  - Responder Safety/Well Being
  - Plan De-Activation

- Organization/Assignment of Responsibilities
  - Coroner/Medical Examiner
  - Emergency Management Director (EMD)
  - MO MORT and State Emergency Management Agency (SEMA)
Appendices to the Fatality Plan

- Appendix A - Capacity of Local and Regional Resources
- Appendix B - Regional/State Fatality Resource Map
- Appendix C - Site Recovery From
- Appendix D - Checklist for Temporary Morgue Facility
- Appendix E - Checklist for Victim Information Center
- Appendix F - OSHA Safety Recommendations for Workers who Handle Human Remains
## Appendix A: First Call Coroner/ME Office, Morgue, Funeral Home, Crematory

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility</td>
<td>Morgue</td>
<td>Address/phone</td>
</tr>
<tr>
<td>(Coroner/Medical Examiner Office, Morgue, Funeral Home, Crematory)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Counties Served</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Storage capacity</td>
<td># of bodies</td>
</tr>
<tr>
<td></td>
<td>Examination capacity</td>
<td># of bodies</td>
</tr>
<tr>
<td></td>
<td>Supplies/ HRP’s</td>
<td>Qty.</td>
</tr>
<tr>
<td></td>
<td>Power</td>
<td>Electric Generator, Natural gas/propane, Supply agreement</td>
</tr>
<tr>
<td>Transport</td>
<td>Vehicles</td>
<td>#/Type</td>
</tr>
<tr>
<td>Personnel</td>
<td>Staff</td>
<td># of primary/# additional</td>
</tr>
<tr>
<td>Communications</td>
<td>Common</td>
<td>Telephone line</td>
</tr>
<tr>
<td></td>
<td>Network</td>
<td>Internet access</td>
</tr>
<tr>
<td></td>
<td>Radio</td>
<td>Police/Fire dispatch, VHF, HAM</td>
</tr>
<tr>
<td>Documents</td>
<td>EOP</td>
<td>Maintained by each county</td>
</tr>
<tr>
<td></td>
<td>Agreements</td>
<td>MOU’s or informal agreements, With whom?</td>
</tr>
<tr>
<td>Additional Resources</td>
<td>Equipment</td>
<td>Morgue trailers, generators</td>
</tr>
<tr>
<td>Other Items</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1990, Missouri General Assembly established statewide fire mutual aid system for major emergencies/disasters.

2012 Mutual Aid plan was revised to include law enforcement and Emergency Medical Services (EMS).

Sept. 2015, the plan added mutual aid assistance for coroners outlining the organizations responsible for coordinating mutual aid.

2 primary provisions: 1. Authority/Ability to request mutual aid without written agreement 2. Coroner/ME to appoint special duty coroner/ME for a period not to exceed 30 days.
Resource Requests
Coroner Mutual Aid

Incident – Impacted Jurisdiction

PROCESS FOR REQUEST:
County Coroner, in conjunction with the EMD, determines resources needed and makes request through the EOC to the SEOC

CORONER MUTUAL AID is requested by contacting MO Coroner’s and Medical Examiners’ Association, the Troop Coroner and/or MO Disaster Response System (MoDRS)

Dispatch and Deploy resources to the staging area in impacted/supporting jurisdictions

Resource Requests include:
Coroner Mutual Aid (Coroner assistance), trailers, recovery caches, recovery teams and MOMORT assets (DPMU and VIC)
### Site Recovery Form

**Site Recovery #**

**Victim**

**Classification of Remains:**

**Recovery Date:**

**Time:**

24 hour (24:00)

**Recovery Grid #:**

**Place / Address of Recovery:**

**Condition:** select all that apply

- Autopsied Previously
- Decomposed
- Burned-Partial Thickness
- Cremains
- Mummified
- Embalmed
- Saponited
- Skeletonized-Partial
- Skeletonized-Full
- Fresh
- Scavenged
- Skin Slippage
- Viewable
- Non-Viewable

**Description of Remains:**

**Position Remains Found In:**

**Estimated Age:**

- Baby/Child
- Adolescent
- Young Adult
- Middle Aged
- Elderly
- No Estimate

**Estimated Gender:**

- Female
- Male
- Unknown

**Clothing on Remains:**

- Yes
- No

**Personal Effects on Remains:**

- Yes
- No

**Recovery Comments:**

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**Presumptive FIELD ID:**

<table>
<thead>
<tr>
<th>Last</th>
<th>First</th>
<th>Middle</th>
</tr>
</thead>
</table>

**ID Based On:**

- DOB (MM/DD/YYYY)
- SSN
- ID# / Driver's license # / State

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**Recovered By:**

Name and Agency (if applies)  | Phone #  | Date Recovered | Time Recovered

**Delivered to:**

**Transport Staging:**

Name and Agency (if applies)  | Phone #  | Date Delivered | Time Delivered

**Site Recovery Report Completed by:**

Name and Agency (if applies)  | Phone #

**Delivered to Morgue by:**

Agency  | Date Delivered  | Time Delivered
Appendix D: CHECKLIST for Temporary Morgue Facility

A possible facility must meet certain requirements for size, layout, and support infrastructure.
✓ Airplane hangars and abandoned warehouses have served well as incident morgues.
✓ Other facilities such as National Guard Armories, reception halls and fairground facilities may be options.
✓ Do NOT use school gymnasiums, public auditoriums, or similar facilities used by the general public.
✓ Facility should NOT have adjacent occupied office or work space.

Structure Type
✓ Hard, weather-tight roofed structure
✓ Separate accessible office space for Information Resource Center/Investigations
✓ Separate space for administrative needs/personnel
✓ Non-porous floors, preferably concrete
✓ Floors capable of being decontaminated (hardwood and tile floors are porous and not usable)

Size
✓ Minimal size of 10,000 – 12,000 square feet

Accessibility
✓ Tractor trailer accessible
✓ 10 ft. x 10 ft. door opening (loading dock access preferable or ground level access)
✓ Convenient to the scene
✓ Completely secure (away from families)
✓ Easy access for vehicles & equipment
✓ Limited Ingress/Egress to improve security

Electrical
✓ Electrical equipment using 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

Water Supply
✓ Single source of cold and hot water with standard hose big connection
✓ Water hoses, hot water heaters, sink and connector

Communications Access
✓ Existing telephone lines for telephone/fax capabilities
✓ Expansion of telephone lines may occur as the mission dictates
✓ Broadband Internet connectivity

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

Adapted from DMORT standards at http://www.dmort8.org/DMORT%20NTSB%20SOP%20Nov%202006.pdf
## Adding Site(s) to the Plan

<table>
<thead>
<tr>
<th>Temporary Morgue Site(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility (Name/Address</td>
</tr>
<tr>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
</tr>
</tbody>
</table>

List facility name, address, individual who serves as the point of contact and telephone numbers.
Appendix E
CHECKLIST for Victim Information Center (VIC) Facility
A possible facility must meet certain requirements for size, layout, and support infrastructure.
✓ Community centers, reception halls or hotels are preferred or similar facility used by the general public.

Structure Type
✓ Hard, weather-tight roofed structure
✓ Separate space for administrative needs/personnel

Size
✓ The amount of square footage depends on the size of the fatality incident.
✓ Approximately 10,000 – 12,000 square feet is needed.
✓ Physical space and layout should accommodate a large number of visitors. For every 1 missing person, there may be 8-12 family members arriving at the VIC.
✓ Designated areas are needed for specialized personnel as listed above.

Accessibility
✓ Handicap accessible
✓ Men and women restroom facilities
✓ Limited access/entrances, ability to conduct security operations
✓ Located miles away from the temporary morgue facility

Electrical/Communications Access
✓ Heating and cooling
✓ Electrical equipment using standard household current (110-120 volts)
✓ Power obtained from accessible on site distribution panel (200 amp service)
✓ Existing telephone lines for telephone/fax capabilities
✓ Expansion of telephone lines may occur as the mission dictates
✓ Broadband Internet connectivity
Adding Site(s) to the Plan

<table>
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Health and Safety Recommendations for Workers Who Handle Human Remains

Employers and workers face a variety of health hazards when handling, or working near, human remains. Workers directly involved in recovery or other efforts that require the handling of human remains are susceptible to bloodborne viruses such as hepatitis and HIV, and bacteria that cause diarrheal diseases, such as shigella and salmonella.

General Precautions
The following precautionary measures can help employers and employees remain safe and healthy while handling human remains.

Personal Protective Equipment
- **Hand Protection.** When handling potentially infectious materials, use appropriate barrier protection including latex and nitrile gloves (powder-free latex gloves with reduced latex protein content can help avoid reaction to latex allergies). These gloves can be worn under heavy-duty gloves which will, in turn, protect the wearer from cuts, puncture wounds, or other injuries that break the skin (caused by sharp environmental debris or bone fragments). A combination of a cut-proof inner layer glove and a latex or similar outer layer is preferable.
- **Foot Protection.** Footwear should similarly protect against sharp debris.
- **Eye and Face Protection.** To protect your face from splashes of body fluids and fecal material, use a plastic face shield or a combination of eye protection (indirectly vented safety goggles are a good choice if available; safety glasses will only provide limited protection) and a surgical mask.

Hygiene
- **Maintain hand hygiene to prevent transmission of diarrheal and other diseases from fecal materials on your hands.** Wash your hands with soap and water or with an alcohol-based hand rub, and avoid touching your face.

- **Give prompt care to any wounds sustained during work with human remains, including immediate cleansing with soap and clean water.** Workers should also be vaccinated against hepatitis B, and get a tetanus booster if indicated.
- **Never wear PPE and underlying clothing if it is damaged or penetrated by body fluids.**
- **Ensure disinfection of vehicles and equipment.**

Ergonomic Considerations
- **Lifting or moving heavy objects, particularly when done repetitively, can result in injuries to the workers involved.** Human remains that have been in water for some time are likely to be even heavier than normal. Having more than one person involved in lifting the human remains will help to reduce the potential for injury. Following appropriate lifting techniques will also help to protect people, as will the use of mechanical lifts or other devices when available.

Myths
- **There is no direct risk of contagion or infectious disease from being near human remains for those who are not directly involved in recovery or other efforts that require handling the remains.**
- **Viruses associated with human remains (e.g., hepatitis B and C, HIV, various bacteria, etc.) do not pose a risk to someone walking nearby, nor do they cause significant environmental harm.**
Missouri Mortuary Operations Response Team (MO MORT)

Statewide Team with Partnerships between the State Emergency Management Agency, Missouri Disaster Response System, local coroner’s and medical examiner’s, Missouri State Highway Patrol, Department of Mental Health, Show-Me Response and Community Mental Health Centers.
Team began in 2012
May 2014 Exercise, Kansas City, MO
Resources within MO MORT

- Forward Assessment Team
- Morgue Operations (DPMU)
- Victim Information Center (VIC)
15 Capabilities, Capability 5 is Fatality Management

**Definition:** 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.

**Functions and Associated Performance Measures:**

- 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 ante mortem data
- Function 4: Participate in survivor mental/behavioral health services
- Function 5: Participate in fatality processing and storage operations
Continuing to Build the Team

- Depth of Expertise on the Team: Coroner’s, investigators, mental health professionals and chaplains
- Planning and Coordination with STARR’s Mass Fatality Subcommittee and Kansas City Mortuary Operational Response Group (KCR MORG)
Contact Information

- Mark Pethan, Preparedness Planner/SEMA, (573) 526-3644

- Kevin Tweedy, Commander/MODRS, MOMORT (417) 353-0501