Disaster Mortuary Operational Response Teams

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Former Team Leader, Region III DMORT
Mass Fatality Expectations

- Quick and effective response
- Use of standards and proven protocols for ID
- Timely identification
- Accurate information
Response Capabilities

Most jurisdictions in the United States have a limited capability to respond effectively to an MFI event

- Personnel
- Supplies/equipment
- Standards/protocols
- Experience
Federal Government Role

When should the federal government respond?

- When capabilities of local resources are exceeded
  - size of jurisdiction (urban vs. rural)
  - type of event
- Terrorism assumption
  - Federal law enforcement investigation
- Most disasters can use federal funds
U.S. Disaster Response Mechanisms

Aircraft Accident ➔ NTSB coordination

Natural/Technological Disaster ➔ DHS: FEMA and federal disaster declaration

Terrorist event ➔ DHS: FBI and local law enforcement
Disaster Mortuary Operational Response Teams
DMORT

- Provides consistent approach to victim identification and family assistance
- Provides experienced MFI responders in forensic and mortuary fields
- Portable morgue and computerized morgue management
- Experience in responding to various types of disasters
DMORT Governance

- Department of Homeland Security
  - March 1, 2003, transfer
  - Division of Emergency Preparedness and Response
    - Office of Emergency Response/National Disaster Medical System
    - Formerly under Dept Health & Human Services
  - DHS rewriting Federal Response Plan
    - Health and Medical Services: ESF #8
      - Victim identification and mortuary services
Department of Homeland Security

Emergency Preparedness and Response

Consolidates:
- Federal Response Plan
- National Contingency Plan
- Interagency Domestic Terrorism Concept of Operations Plan
- Federal Radiological Emergency Response Plan

DHS manages and coordinated federal agencies that support state/local response efforts

Would develop and manage national training and evaluation systems for curricula
DMORT

- DMORT
  - Disaster Mortuary Team (1992)
  - Disaster Mortuary Operational Response Team (1998)
- Ten teams by FEMA regions
  - Team commander in each region
- Teams composed of private citizens with expertise in victim ID and mortuary response
- Team members activated/federalized when disaster occurs
DMORT Activation Mechanisms

- Aviation Disaster Family Assistance Act (NTSB)
  - federal funds

- Federal disaster declaration (FRP)
  - federal funds

- MOU with federal agency (e.g. FBI)
  - federal funds

- Under Public Health Act
  - state funds

*Federal government does not pay for all MFI events!*
DMORT teams work under the jurisdiction and guidance of the local authorities or federal agency.

Typically:
- Medical examiner/coroner

Occasionally:
- State/Federal Law enforcement
- State Emergency Management Agency
DMORT team positions

Team Management
- Team Commander
- Deputy Team Commander
- Administrative Officer

Forensic Personnel
- Pathologist
- Odontologist
- Dental Assistant
- Anthropologist
- Medicolegal Investigator
- Fingerprint specialist

Morgue Personnel
- Mortuary Officer
- Xray technician
- Medical records technician
- Supply officer

Family Assistance Center
- Mortuary officer

Support Personnel
- Mental Health/CISD Specialist
- Communications manager
- Safety Officer
- Equipment operator
- Team Physician/PA/Nurse
- Security officer
DMORT Activations

1993
Cemetery flood, Hardin, Missouri

1994
Cemetery flood, Albany, Georgia

1995
Murrah building bombing, Oklahoma City
Hurricane Marilyn, US Virgin Islands

1996
Olympic Games, Atlanta*
United Express 5925, Quincy, Illinois

1997
Comair 3272, Monroe, Michigan
Korean Air 801, Guam

1998
Floods, Del Rio, Texas

1999
State of the Union, Washington, DC*
Papal visit, St. Louis*
Amtrak crash, Bourbonnais, Illinois
NATO 50th anniv, Washington, DC*
Tornadoes, Oklahoma City
Cemetery floods, Tarboro/Princeville, NC
Egyptair 990, Quonset Point/Providence, RI

2000
State of the Union, Washington, DC*
Alaska Air 261, Ventura County, CA
Executive Air, Wilkes-Barre, Pennsylvania
OPSAIL, New York/Boston*

2001
Presidential Inauguration*
State of the Union*
September 11 terrorist events
New York City
Somerset, PA
American 587, New York

2002
State of the Union*
Winter Olympics*
Noble, Georgia, crematorium
Middle East rally, DC*

2003
USAirways 5481, Charlotte, NC**
Shuttle Columbia, TX/LA***
Nightclub fire, RI

*Predeployed    **FAC response    ***Search/Recovery
<table>
<thead>
<tr>
<th>Event</th>
<th>Fatalities</th>
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<tbody>
<tr>
<td>Cemetery flood, MO</td>
<td>769</td>
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<tr>
<td>Cemetery flood, GA</td>
<td>405</td>
</tr>
<tr>
<td>Murrah building bombing, OK</td>
<td>168</td>
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<tr>
<td>Hurricane Marilyn, USVI</td>
<td>11</td>
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<tr>
<td>United Express 5925, IL</td>
<td>14</td>
</tr>
<tr>
<td>Comair 3272, MI</td>
<td>29</td>
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<tr>
<td>Korean Air 801, Guam</td>
<td>225</td>
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<tr>
<td>Floods, TX</td>
<td>12</td>
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<tr>
<td>Amtrak crash, IL</td>
<td>11</td>
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<tr>
<td>Tornadoes, OK</td>
<td>47</td>
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<tr>
<td>Cemetery flood, NC</td>
<td>230</td>
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<tr>
<td>Egyptair 990, RI</td>
<td>219</td>
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<tr>
<td>Alaska Air 261, CA</td>
<td>88</td>
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<tr>
<td>Executive Air, PA</td>
<td>19</td>
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<tr>
<td>World Trade Center, NY</td>
<td>~2800</td>
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<td>United 93, PA</td>
<td>44</td>
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<tr>
<td>American 587</td>
<td>265</td>
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<tr>
<td>Noble, GA, crematory event</td>
<td>339</td>
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<tr>
<td>USAirways 5481</td>
<td>21</td>
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<tr>
<td>Shuttle Columbia</td>
<td>7</td>
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<tr>
<td>Nightclub fire, RI</td>
<td>97</td>
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</table>
DMORT Specialty Teams

- DPMU (Portable Morgue)
- Family Assistance Center
- Weapons of Mass Destruction
- DNA Team
DMORT Forensic Issues

- Role in DHS untested
  - Support for legal proceedings untested
- Does DMORT provide forensic pathological support?
- What if local and DMORT standards for ID differ?
  - National standard?
  - Event-specific?
- What is focus of ID effort?
  - All victims or all remains?
  - Common tissue always a factor
DMORT Forensic Issues

- How should DMORT interact with medical examiner/coroner who does not need “total” DMORT response?
- What if forensic specialist is asked to do less than they typically do?
- Lack of official post-deployment support
- Interaction with state/local teams
<table>
<thead>
<tr>
<th>Fragmentary remains</th>
<th>Complete remains</th>
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<tbody>
<tr>
<td>- Sort reported missing for actual missing (FAC)</td>
<td>- Sort reported missing for actual missing (FAC)</td>
</tr>
<tr>
<td>- DNA main ID method</td>
<td>- Rapid IDs using conventional methods</td>
</tr>
<tr>
<td>- Lesser role for conventional ID</td>
<td>- Some DNA may be required</td>
</tr>
<tr>
<td>- Reassociation required (DNA)</td>
<td>- No reassociation needed</td>
</tr>
<tr>
<td>- Longer response</td>
<td>- Longer or shorter response</td>
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<tr>
<td>- Example: WTC disaster</td>
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<table>
<thead>
<tr>
<th>Victim list known</th>
<th>Victim list known</th>
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<tr>
<td>- Family contact simple</td>
<td>- Family contact simple</td>
</tr>
<tr>
<td>- DNA main ID method</td>
<td>- Rapid IDs using conventional methods</td>
</tr>
<tr>
<td>- Reassociation required (DNA)</td>
<td>- Less role for DNA</td>
</tr>
<tr>
<td>- Lesser role for conventional ID</td>
<td>- Reassociation not required</td>
</tr>
<tr>
<td>- Longer response</td>
<td>- Shorter response</td>
</tr>
<tr>
<td>- Example: United 93; Egyptair 990 (aircraft accident</td>
<td>- Example: RI nightclub fire; small aircraft accident with no fragmentation</td>
</tr>
<tr>
<td></td>
<td>with extreme fragmentation)</td>
</tr>
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MFI Response Guides

MFI guides
- National Center for Forensic Science/NIJ guide
- Improved Response Plan
  - US Soldier Biological Chemical Command
- US Army JP 4-06 (Joint mortuary operations)
- Interpol Disaster Victim ID guide
Political/Societal Impact of MFIs

Triangle Shirtwaist fire: New York City, March 25, 1911
- Leads to passage of New Deal legislation, esp. worker safety laws

Treatment of families by airlines after early 1990s aircraft accidents
- Leads to passage of Aviation Disaster Family Assistance Act

September 11 events
- Department of Homeland Security
- Transportation Safety Administration
- Patriot Act
- Iraq war
What do you do with 500,000 dead?