

Mass Fatality Management Armed Forces Medical Examiner System Response

Arizona Mass Casualty Meeting
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National Response Plan

- Department of Defense is not a Signatory
- 15 Emergency Support Functions Annexes

National Response Plan

- 426 pages
- Little on fatality management
- Written in 2004
- Updated in 2006
- Signatories include 32 separate federal agencies
 - Department of Agriculture
 - NASA
 - Treasury
 - Small Business Administration
 - Department of Education

NRP Purpose

- The purpose of the NRP is to establish a comprehensive, national, all-hazards approach to domestic incident management across a spectrum of activities including prevention, preparedness, response, and recovery.

Support Annexes

- Worker Safety and Health
- Tribal Relations
- Science and Technology

National Response Plan

- Emergency Support Functions for Medical Examiners
 - #4 firefighting
 - #8 Public Health and Medical Services
 - #9 Urban Search and Rescue
 - #10 Oil and Hazardous Material Response
 - #13 Public Safety and Security
 - #14 Long-Term Community Recovery and Mitigation

Incident Annexes

- Biological
- Catastrophic
- Cyber
- Food and Agriculture
- Nuclear/Radiological
- Oil and HazMats
- Terrorism

Annexes

- No one dies
- No provisions for handling the dead
- Resources focused on the injured
- Resources focused on restoration of facilities and services
- Resources focused on animal health
- Resources focused on government
- Resources focused on criminal investigations

Nuclear/Radiological Incident

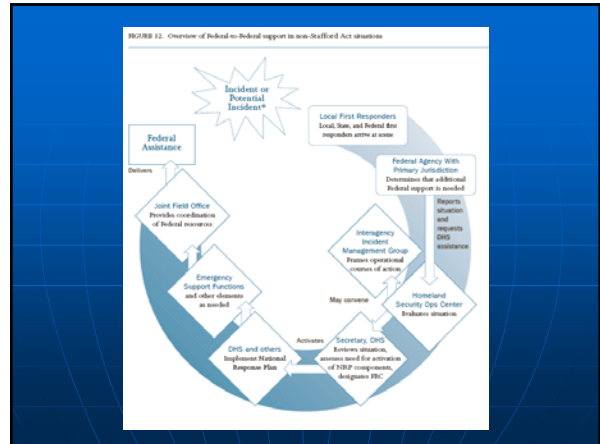
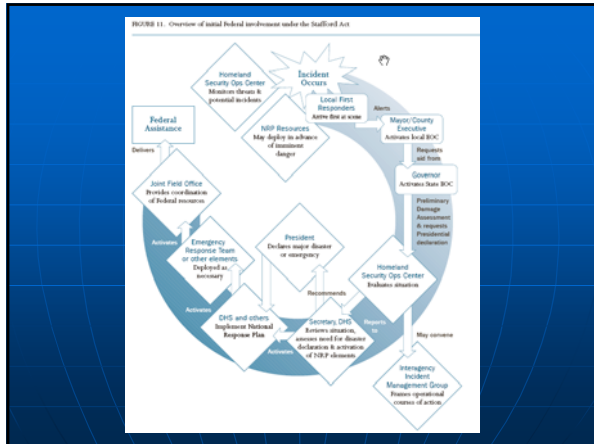
- Department of Defense
 - Save lives
 - Prevent human suffering??????
 - Mitigate property damage

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Victim Identification/Mortuary Services:
HHS may request DHS and DOD to assist in providing victim identification and mortuary services; establishing temporary morgue facilities; performing victim identification by fingerprint, forensic dental, and/or forensic pathology/anthropology methods; and processing, preparation, and disposition of remains.

Provisions

- No provision for transportation
- No provision for logistic support
- No provision for communication support
- No provision for security
- No provision for life support



- ## NRP Update May 2006
- 51 pages
 - Someone didn't like the term mitigations
 - Homeland Security marginalized
 - Also didn't like "Incidents of National Significance" and "Catastrophic Incident"
 - ME's not mentioned

- ## Federal Plans
- Health and Human Services (HHS)
 - 28 pages of metrics
 - Plan to handle 219,000 fatalities
 - Developed through multiple meetings
 - How was the number developed?

- ## Department of Defense
- DOD has significant resources that may be available to support the Federal response to an Incident of National Significance.

- ## Armed Forces Medical Examiner
- Federal Law
 - Jurisdiction
 - Medical Examiner Services
 - Operational Cell
 - DNA
 - Toxicology
 - Mortality Registry
 - Psychological Investigations
 - Mass Fatalities

Armed Forces Medical Examiner

- History at the AFIP
 - Aerospace pathology
 - Forensic Science Division
 - First recognized in 1988
 - 1999 Federal Law

DoDI 5154.30 - March 2003

- Expands the responsibilities of the Medical Examiner System
 - Mortality Registry
 - Psychological Investigations
- Defines the role of the Medical Examiner



Mission of the AFMES

- Per DoD Instruction 5154.30 (March 2003) ...
*The AFMES shall **conduct forensic investigations for determining the cause and manner of death under applicable circumstances: perform forensic toxicology services** (including drug testing quality control programs, proficiency testing programs, and consultation services to the DoD for the Military Drug Testing program); **perform or review psychological autopsies in cases of equivocal manner of death; perform other forensic services, including epidemiologic analysis of military deaths; and provide consultation and support to other governmental agencies on a reimbursable basis.***



Federal Law 10 USC 1471

- Authority for Autopsies
- Explains jurisdiction
- Expands previous jurisdiction

Basis for Investigation

- If decedent was killed
- If the cause of death was unnatural
- If cause / manner of death is unknown
- If cause appears to be by unlawful means
- If cause is from infectious disease or hazardous material that may have an adverse effect on installation or community
- If the identity of decedent is unknown

Circumstances of Concern

- Decedent was found dead on installation
- Was a member of Armed Forces on active duty or inactive duty for training
- Recently retired as a result injury/illness while on active duty
- Civilian dependent found dead or died outside USA
- Matters where a factual determination of death is warranted (e.g., NTSB, FBI, DOJ directed)

Jurisdiction on Base

- Types
 - Exclusive Federal
 - Concurrent
 - Local
 - Mixed
 - Overseas
- Can Change
- Rely on local JAG for determination

Medical Examiner
or Coroner Retains
Jurisdiction

1

Controls entirety of
postmortem
examination

2

Allows military
pathologist
to act as agent

Medical Examiner
or Coroner Waives
Jurisdiction

3

Military
pathologist
conducts
postmortem
examination

The State of Death Investigations

The use of medical examiners or coroners varies not only among states, but even within states. Twenty-two (including the District of Columbia) use some type of medical examiner system, 11 use some type of coroner system, and 18 use a mix.



Mixed Jurisdiction

- May have more than one type on a post or base.
- Andrews AFB – tarmac and hospital are Federal, the road connecting the two is not.

Jurisdiction off Base

- No primary military jurisdiction
- Local Authorities may waive jurisdiction
- Stafford Act/Patriot Act
- Armed Forces Medical Examiner must rely on secondary jurisdiction
- 10th Amendment to the US Constitution

“The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.”

Overseas Jurisdiction

- Defined by SOFA agreements for deaths on and off post
- Local law and customs
 - Italy
 - Japan
 - Germany
 - Iraq
- Often requires direct negotiations with the local authorities

Secondary Jurisdiction

- Applies where local authorities have primary jurisdiction
- Stateside and overseas
- Discretion of the Armed Forces Medical Examiner
- Incomplete or external examinations

External Examination Only

- ♦ Local or overseas medical examiner or coroner can retain jurisdiction, but elect not to perform an autopsy
 - ♦ AFME can authorize an autopsy if it finds that an investigation by another sovereign (e.g., a local or state government) was inadequate, using 10 U.S. Code

Scope of autopsy

- Forensic case: NO LIMITATIONS
 - Complete exam every time, to include brain
- Family may restrict exam on "hospital" autopsies

Category of decedent: military

- Includes AD, ADT and recently includes expeditiously retired for medical reasons
- Independent Federal interest exists in the death of any military member
- All services have regulations requiring the investigation of death of military members
- Can be investigated anywhere: civilian or military morgue
- Accommodations made when joint jurisdiction exists

Category of decedent: civilian

- Can be dependents, DoD employees, or those without any connection to the military
- Special considerations overseas

Religious Objection

- 10 USC 1471 requires that OAFME give "due regard to any applicable law protecting religious beliefs."
- OAFME will consider a family's wishes

Viewing of remains

- Viewing remains under Jurisdiction of the Medical Examiner
 - Touching is forbidden until case complete
 - Viewing is highly discouraged and depending on the circumstances may be forbidden
 - Viewing is forbidden at the Dover facility

Next of kin consent for Forensic cases

- Consent of NOK will **not be sought** for forensic cases
 - NOK will be informed (if they can be located) that autopsy is necessary, in their best interest & authorized by Federal law
 - Religious concerns are addressed
 - Requesting consent of NOK in forensic cases may result in a conflict if the NOK declines autopsy
 - Utmost empathy required in explaining circumstances. Use your resources.

■ Scene

Jurisdiction

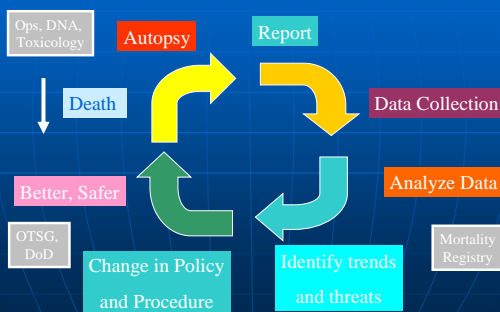
- ◆ Safety officials
- ◆ Law enforcement agencies
- Bodies
 - ◆ Medical examiners
 - ◆ Coroners
 - ◆ Military officials
 - ◆ Other federal agencies



Death Certificates

- There is an overseas military death certificate (DD2064)
- There is no CONUS military death certificate
- Most states permit military physicians to sign local D/C in forensic cases under federal jurisdiction

Completing the Cycle



Principal Functions

- Operational Safety Investigations
- Medicolegal Death Investigations
- Consultation
- Operational Research
- DoD-wide Autopsy Quality Assurance
- Federal Agency Support



Missions

- Pre-mishap/Planning
 - Training and education
 - Resources
 - Disaster plans
 - Public relations

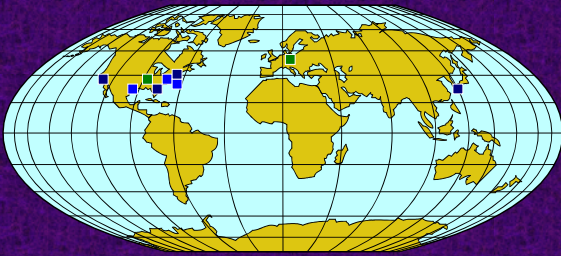


Operations Cell

- Diplomatic status
- Security clearances
- Weapons qualified
- Four hour deployment window
- Air Crew Status



Armed Forces Medical Examiners



Regional Medical Examiners

- Locations
 - Naval Medical Center Portsmouth, VA
 - Blanchfield Army Hospital, Fort Campbell, KY
 - Wilford Hall Medical Center, TX
 - Naval Medical Center San Diego, CA
 - Landstuhl Army Medical Center, Germany
 - Naval Hospital Okinawa, Japan



Regional Medical Examiners

- Conduct Investigations under the authority of the Armed Forces Medical Examiner
- Assigned to the respective MTF
- Chain of command
- Funding
- Deployments

Forensic DNA Division

- Armed Forces DNA Identification Laboratory (AFDIL)
- Armed Forces Repository of Specimen Samples for the Identification of Remains (AFRSSIR)



AFDIL/AFRSSIR



- Contaminated remains procedure
- Extensive work with FBI and other agencies
- Formalized specimen collection inspection process
- Five million blood stain cards
- Y-Plex validation

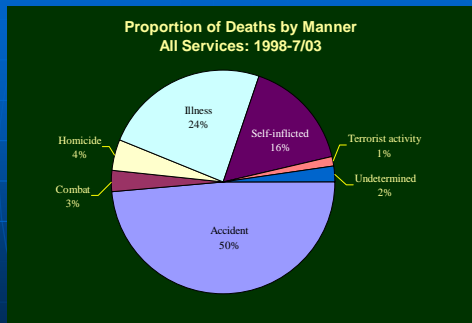


Mortality Registry

- Weekly reports to the SG's
- Tracking and analyzing of all cases
- Ephedrine cases
- Exertion deaths
- Sickle cell testing
- Emerging infectious disease threats



Proportion of Deaths by Manner
All Services: 1998-7/03



Non Combat Deaths

- Cot deaths
- Pneumonia deaths
- "Mysterious blood clots"
- Suicides



Tourniquets

- 5 Army deaths from extremity injuries:
- 1. Femoral vein laceration, surgical attempt to tie off the vein (OEF)
 - 2. Femoral artery disruption, MAST trousers in place (OIF)
 - 3. Femoral artery + vein, no evidence of medical intervention (OIF)
 - 4. Femoral artery + vein, no evidence of medical intervention (OIF)
 - 5. Distal axillary artery, no evidence of medical intervention (OIF)

Drowning in the Desert

- 26 deaths with "Drowning" as cause of death in 2003
- 14 Army, 12 USMC
 - 10 before 1 May, 16 after 1 May
 - 12 associated with ground vehicles, 6 associated with helicopter mishaps, 4 from swimming and 2 during operations
 - The 4 swimming incidents were all in Army personnel, and all after 1 May

Forensic Toxicology

- ABFT accreditation
- Russian theater case
- Counter narcotics work
- Oversight of all DoD drug testing labs
- Monitoring for WMD
- DC ME toxicology



Toxicology

- DoD medical/legal casework
- Other federal agency work
- Develops new protocols for emerging drug threats
 - Ketamine
 - LSD
 - GHB
 - Psilocybin (mushrooms)



Post-Mortem and Human Performance Testing Laboratory

Special/Non-Standard Analyses/Method Development

Individual military cases with suspected non-standard analytes in determination of criminal/abuse/cause of death investigations

Special Testing Examples

- Space Shuttle Columbia
- Iraq: Acetylcholinesterase
- State Department Cases
- Pharmaceutical Investigations

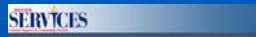


Behavioral Division

- Established by DoDI 5154.30
 - Establishing requirements
 - Staffing needs
 - Standardizing investigations
 - Dialogue with NCIS, CID, OSI

Mass Casualties & the Dover AFB Port Mortuary

- World class facility
- Facility of choice
 - Space Shuttle Challenger
 - Space Shuttle Columbia
 - Jonestown, Guyana
 - Kenya Embassy bombing
 - Osprey crashes
 - Gander
 - Multiple air mishaps crashes
 - Operation Desert Storm & Vietnam War
 - Interagency agreements: NASA, FBI, FEMA, NTSB, DoD



Dover Port Mortuary

- Operation Iraqi Freedom
- Operation Enduring Freedom
 - 100% autopsy
 - Complete investigations
 - Body Armor evaluations
 - +2000 reports to families
 - Rule out other causes/circumstances of death

Mass Casualties & the Dover AFB Port Mortuary

- Reasons for sending human remains to Dover
 - Multiple casualties
 - Commingling of body parts
 - Major conflicts

Mass Casualties & the Dover AFB Port Mortuary

- DNA repository nearby
 - Almost all active duty members' DNA on file
- AFDIL nearby
 - Armed Forces DNA Identification Lab
- Courier service: Dover AFB – Rockville, MD

Mass Casualties & the Dover AFB Port Mortuary

- Multiple casualties
 - Exams completed much more rapidly
 - Avoids unwelcome postmortem changes
 - Families get their loved ones back more quickly

Mass Casualties & the Dover AFB Port Mortuary

- Commingling of body parts
 - Explosions
 - High speed crashes (aircraft)
 - Mass graves
- Experts available
 - Anthropologists
 - Odontologists
 - AFDIL & the DNA repository
- Families get *their* loved ones back

Administrative Procedures at Dover

- Reports concerning identification are released once per day – usually 10 a.m.
- AFMETS
- “Visitors” are not permitted in work areas
- All public information is released through the AFIP public Affairs Officer
- Information for involved commands is only released through a single designated point of contact

Conclusion

- Death investigation in the military is complex and often confusing
- Cases require objective standards in an emotional situation
- The Armed Forces Medical Examiner System is available 24/7 to assist
- (301) 319-0000/DSN 285-0000