

YUMA COUNTY

MEDICAL EXAMINER

GENERAL

MASS FATALITY

PLAN

November 2008

GENERAL MASS FATALITY

OVERVIEW

The Medical Examiner's office has legal jurisdiction and responsibility to examine human remains from deaths known or suspected to be due to unnatural causes, homicides, and known or suspected contagious diseases that constitutes a public health hazard. Deaths due to bioterrorism are homicides.

OBJECTIVE

1. Provide public health and medical advice to County Health Department concerning the spread of disease from corpses.
2. Assist in identifying and inspecting sites where bodies can be temporarily stored.
3. Support recovery of human remains.
4. Establish N.I.M.S. and work with Federal, State, and Local authorities.

AUTHORITY FOR ACTION

Arizona law **A.R.S. 11.593** states the Medical Examiner shall investigate and certify the cause and manner of all human deaths that fall under the jurisdiction of the Medical Examiner.

1. Apparent homicide, suicide, or occurring under suspicious or unknown circumstances.
2. Resulting from the unlawful use of controlled substances or the abuse of chemicals or toxic agents.
3. Occurring while incarcerated in any jail or in police custody.
4. Any apparent accident or following an injury.
5. By disease, injury, or toxic agent during employment.
6. While not under the care of a primary physician during the period immediately previous to death.
7. Related to a disease which might constitute a threat to the public health.
8. In which a human body has been disposed of in an offensive manner.
9. Unidentified bodies.

AVIATION INCIDENT

SCOPE OF INCIDENT

Size of incident based on NTSB regulation:

1. Crash Scale 1

This involves an aviation crash that involves 100 or fewer passengers and crew who are either fatalities or require medical assistance.

2. Crash Scale 2

This involves an aviation crash that involves 101-200 passengers and crew who are either fatalities or require medical assistance.

3. Crash Scale 3

This involves an aviation crash that involves 201 or more passengers and crew who are either fatalities or require medical attention.

* Number of ground fatalities and/or injuries is additional to the scale as of above.

OPERATIONAL PLAN

A mass fatality incident is defined as an occurrence of multiple deaths that overwhelm the usual routine capacity of the Medical Examiner.

EVALUATION TEAM

An evaluation team consisting of a Medical Examiner Pathologist, a Medical Examiner Investigator will go to the site of the mass fatality incident to evaluate the following: All findings will be reported to the Yuma County Sheriff's Office Major Leon Wilmot.

1. Number of fatalities involved.
2. Condition of the bodies, i.e.: burned, dismembered.
3. Difficulty anticipated in the recovery of the bodies and the types of personnel and equipment needed.
4. Location of the incident as far as accessibility and the difficulty that may be involved in transporting bodies from the scene.
5. From the information gathered at the scene, try and begin a plan for documentation, gridding, body recovery, and transportation.
6. The types and numbers of personnel needed to staff refrigerated trailers, recovery efforts, transportation needs, examination procedures, and clerical needs.
7. Anticipate what type of facility would be most helpful for the families of the victims as far as a Family Assistance Center (F.A.C.), are most of the deceased local as the families would also be local and housing would not be of critical issue, is the incident where bodies are mostly from out of this area and families would be in need of housing.
8. Evaluate the scene for types of hazards, chemical, radiological, or biological hazards.
9. Due to our local environment, weather conditions during the summer months will play a role.

NOTE:

If the incident is large and overwhelming and personnel and equipment from outside the Medical Examiner's office may be needed, the following should be considered.

United States Public Health Services - DMORT Team

This team provided through U.S.P.H.S. will send an evaluation team to the location to help evaluate the personnel and equipment needed. They can activate an experienced team on site within 12-18 hours. U.S.P.H.S. has two portable morgue units available. They are housed under U.S.P.H.S. jurisdiction in Sacramento, California and Rockville, Maryland.

Three Major Operations:

1. Scene – body recovery

2. Examination Center – body identification and processing
 3. Family Assistance Center (F.A.C.) – Ante mortem information and care of families.
- Someone must be in charge of each operation and they must be set up at the same time.

PLAN OF OPERATION

A. Things To Get In Place Early:

1. Communications – hard lines, cell phones, two way radio, and fax machines.
2. Body bags – Medical Examiner to have 30 at all times.
3. Refrigerated trailers – Have enough for incident. Cover all outside wall wording.
4. Transportation – for workers and for human remains.
5. Security – scene, examination center, trailers, and Family Assistant Center (F.A.C.).

B. Select Examination Site:

1. Medical Examiner's office, Y.R.M.C. Morgue.
2. Yuma County Fairground Community building.
3. M.C.A.S. Hanger

C. Location for Family Assistance Center (F.A.C.):

1. Yuma Convention Center (Central)
2. San Luis Community Center (South)
3. Dateland School (East)
4. Churches (Central) (South) (East)

D. Scene:

1. Equipment and supplies - Someone in charge and record everything.
2. P.P.E. – gowns, disposable jumpsuits, gloves, boots, coats, hats, etc.
3. Body bags – heavy duty, 6 handled.
4. Refrigerated trailers – Metal walls and floor. Cover all wording on outside walls. Schedule an on call company for repairs to motor if needed. Record temperature every four hours in log book. Secure trailers at all times. Place a number on rear door of refrigerated trailers for identifying trailers.
5. Vehicles to move bodies – no names of businesses or business symbols on vans or hearses.

6. Tents and trucks – for storage and weather conditions.
7. Paint – white spray paint for numbering body bags.
8. Flags & Stakes – for marking location of body or body parts. Put location on flag and descriptions. Use of different color flags for human remains, personal effects, and wreckage or evidence.
9. Identification tags – waterproof and Permanent markers.
10. Biohazard bags – for safe disposal of biohazard debris.
11. Documentation – document body location and body parts, photograph, and record GPS location.
12. Food & water – for Medical Examiner staff.
13. Numbering system – All numbers will be assigned at the temporary receiving area. Numbers will start with ME 1, ME 2, Etc. All numbers will have ME before it as that will keep it known as a disaster case not a regular “C” Medical Examiner case.
14. Personnel organization – schedule and complete a chain of command structure diagram.
15. N.I.M.S. – with Medical Examiner Staff, Y.R.M.C., Federal, State, and Local agencies.
16. Worker safety – ensure all concerns are in place for the health of the scene workers.

E. On Scene Body Recovery Procedures:

Personnel required: Medical Examiner Investigator and Law Enforcement Officer.

1. Stake, document, photograph each finding of human remains.
2. If aviation accident, notify N.T.S.B. of any flight or cabin crew members found.
3. Do not remove anything until steps above are followed.

F. Temporary Receiving Area:

1. Establish a covered area by tent or canopy.
2. All remains are to be brought to this location for numbering, logging information, and transportation to examination center.
3. Have personal protection equipment for workers.
4. Log book for numbers and description where found.
5. Have containers available for wreckage, evidence, and personal effects that might be associated with remains.

G. Local Mortuary Assistance:

1. Will stage at an assigned location designated by the Medical Examiner’s office and will provide transportation from the temporary receiving area to examination site. If a crime scene incident, check with Law Enforcement agency in charge if they may do so due to evidence and chain of custody issues.

2. Mortuary staff is not permitted in morgue examination site, refrigerated trailers, and at the incident location site.
3. At no time are any cameras allowed for photographs during the incident involvement.
4. No private business names or symbols may be on the vehicles used for the transportation of the human remains.
5. Stacking of human remains is not to be permitted.

INCIDENT FLOW CHART

INCIDENT RECOVERY

TEMPORARY RECEIVING

TEMPORARY REFRIGERATION

TRANSPORTATION

**NON EXAMINED
REFRIGERATION TRAILER**

MORGUE EXAMINATION

**COMPLETED
MAIN REFRIGERATION TRAILER**

RELEASE OF REMAINS

H. Examination Center:

Get personnel and equipment in place before sending remains to location.

1. Security – Identification badges for access.
2. Refrigerated trailers – ramps into trailer and security present. No access other than authorized staff. Everything logged in and out of trailers. Arrange a local refrigeration company to be on call 24 hours a day to repair refrigeration motor if needed. Record temperature of trailer every 4 hours. Complete a diagram of where numbered ME cases are located in trailer. This will be a major help when remains are needed for re-examination.
3. Protective clothing – gloves, scrubs, shoe covers, masks, eye protection, coveralls, hats, etc.
4. Cleaning disinfectant.
5. Communication – hard lines, cell phones, two way radios, and fax machine.
6. Computer
7. Records – post mortem and ante mortem case information.
8. Office equipment.
9. Receiving – record all remains in and out of the facility.
10. Body handlers – to escort human remains and paperwork from station to station.
11. Numbering of bodies – same numbers used on body as marked on body bag as used at the temporary receiving area. Same number throughout incident.
12. Log book – record all numbers, descriptions, and times.
13. Case file – start with body number. File must stay with body during entire process of examination. Place case number on each form used. Complete a form to record the folder was taken out of the filing system for tracking purposes.
14. No unauthorized admittance into the examination center.

I. Examination Center Stations:

If U.S.P.H.S. provided, team is under direction of a Team Commander and Deputy Commander. They will assist the County Medical Examiner who is in charge of the incident.

A. Admitting:

Personnel – Pathologist, Pathologist Assistant, and a Scribe.

1. To record and exam all remains brought into center and assign stations to be examined at.
2. If evidence is collected, a Law Enforcement Officer or N.T.S.B. officer may also be present to record findings.

B. Photography:

Personnel – Photographer and Scribe.

1. All remains are to be photographed with time, date, and case number in each picture. Log all photos into a log book.

C. Pathology:

Personnel – Pathologist, Pathologist Assistant, and Scribe.

1. Perform complete autopsy.
2. Recover a DNA sample for testing.

D. X-Ray:

Personnel – X-Ray technician and Assistant.

1. Portable X-Ray equipment, film developers, or transporters to the nearest facility.
2. Place case number on all film and if available provide X-Ray for pathology examination.

E. Personal Effects:

Personnel – Law Enforcement Officer and Scribe

1. The personal effects and clothing should be collected, inventoried, and bagged with the case number. All personal effects and clothing should be placed in a secure area.
2. No release of personal effects or clothing until investigation by Law Enforcement is completed and authorization for release is granted. Get signed release of any personal effects or clothing.

F. Anthropology:

Personnel – Anthropologist and Scribe.

1. Review of human remains if requested by Pathology section Pathologist.

G. Fingerprinting:

Personnel – Fingerprint specialist and Assistant.

1. Should attempt to fingerprint each body. Fingers should only be removed on non-viewable bodies at the discretion of the County Medical Examiner.

H. Dental:

Personnel – Odontologist and a Dental Assistant.

1. Jaws are only removed on non-viewable bodies at the discretion of the County Medical Examiner.
2. All records become part of the case file.

I. Exit:

Personnel – Scriber.

1. Record time of completion, and log where remains are to be located at.
2. All confirmation of identification and notification to family is to be done by a Law Enforcement agency.

EXAMINATION CENTER FLOW CHART

**NON EXAMINED
REFRIGERATED TRAILER**

ADMITTING

PHOTOGRAPHY

X-RAY

PATHOLOGY – DNA

PERSONAL EFFECTS

ANTHROPOLOGY

FINGERPRINT

DENTAL

EXIT

**COMPLETED EXAMINATION
REFRIGERATED TRAILER**

VIP Personal Information

Page 1 of 8

Name _____ / _____ / _____ <div style="display: flex; justify-content: space-around; font-size: small;"> Last First Middle </div>			<input type="radio"/> Male <input type="radio"/> Female		
Address _____ City _____ State _____ Zip _____			Phone (H) _____ Phone (W) _____		
Res County _____ Res Country _____			Phone _____		
Live Inside City Limits <input type="radio"/> Yes <input type="radio"/> No			Race: <input type="radio"/> African American <input type="radio"/> Hispanic <input type="radio"/> Asian/Pacific Islander <input type="radio"/> Caucasian <input type="radio"/> Native American <input type="radio"/> Other		
Social Security # _____ Age _____ Date of Birth _____ <div style="text-align: right; font-size: x-small;">(MM/DD/YYYY)</div>			Group Status: If family unit, please list other family members on Pg. 8 <input type="radio"/> Single <input type="radio"/> Family unit <input type="radio"/> Group		
Citizenship (1 or more) _____ Religious Orientation _____					
Alias 1 _____ <div style="display: flex; justify-content: space-around; font-size: x-small;"> Last First Middle </div>			Group Type _____ Fam/Grp Name _____		
Alias 2 _____ <div style="display: flex; justify-content: space-around; font-size: x-small;"> Last First Middle </div>					
Birth Hospital _____ Birth City _____ State/Country _____					
<input type="checkbox"/> Married <input type="checkbox"/> Never Married <input type="checkbox"/> Widowed <input type="checkbox"/> Divorced <input type="checkbox"/> Separated <input type="checkbox"/> Unk					Wedding Date _____ <div style="text-align: right; font-size: x-small;">(MM/DD/YYYY)</div>
Spouse _____ <div style="display: flex; justify-content: space-around; font-size: x-small;"> Last First Middle </div>					
Spouses Birth Name _____ <div style="display: flex; justify-content: space-around; font-size: x-small;"> Last First Middle </div>					
Father _____ <div style="display: flex; justify-content: space-around; font-size: x-small;"> Last First Middle </div>					
Mother _____ <div style="display: flex; justify-content: space-around; font-size: x-small;"> Last First Middle </div>					
Mother's Birth Name _____ <div style="display: flex; justify-content: space-around; font-size: x-small;"> Last First Middle </div>					
Informant: Name _____ <div style="display: flex; justify-content: space-around; font-size: x-small;"> Last First </div>			Phone _____		
Address _____ City _____ State _____ Zip _____			On Site Phone _____		
Relationship <input type="radio"/> Wife <input type="radio"/> Father <input type="radio"/> Brother <input type="radio"/> Son <input type="radio"/> Employer <input type="radio"/> Other <input type="radio"/> Husband <input type="radio"/> Mother <input type="radio"/> Sister <input type="radio"/> Daughter <input type="radio"/> Friend					
Please place other here _____					
Informant 2: Name _____ <div style="display: flex; justify-content: space-around; font-size: x-small;"> Last First </div>					
Address _____ City _____ State _____ Zip _____			Phone _____		
Relationship <input type="radio"/> Wife <input type="radio"/> Father <input type="radio"/> Brother <input type="radio"/> Son <input type="radio"/> Employer <input type="radio"/> Other <input type="radio"/> Husband <input type="radio"/> Mother <input type="radio"/> Sister <input type="radio"/> Daughter <input type="radio"/> Friend			On Site Phone _____		
Please place other here _____					
Legal Next of Kin _____ <div style="display: flex; justify-content: space-around; font-size: x-small;"> Last First Middle </div>			Phone _____		
Address: _____			Relationship: _____		
Related to case # _____					
Notes/Comments (Interviewers please place any additional comments on page 6)					

VIP Personal Information

Page 2 of 8

Name _____ / _____ / _____
Last First Middle

☐ Male
☐ Female

Dentist Name _____

Address _____

City _____ State _____ Zip _____

Phone _____

- | | |
|--|---|
| <input type="checkbox"/> Extensive Dental Work | <input type="checkbox"/> Most/all teeth |
| <input type="checkbox"/> Lower dentures | <input type="checkbox"/> Dental Films |
| <input type="checkbox"/> Upper dentures | <input type="checkbox"/> Bridge |
| <input type="checkbox"/> Upper & Lower | <input type="checkbox"/> Other |
| <input type="checkbox"/> Partial Plate | |
| <input type="checkbox"/> Braces | |
| <input type="checkbox"/> No teeth | |

Dentist 2 _____

Address _____

City _____ State _____ Zip _____

Phone _____

Attending Physician _____

Address _____

Medical X Rays ?

☐ Yes ☐ Unknown
☐ No

Medical X Ray Location

Medical X Ray Description

Objects in body: ☐ Pacemaker ☐ Steel plate ☐ Shrapnel
☐ Bullets ☐ Needles ☐ Other

_____ Please place other here

Old Fractures: ☐ Yes ☐ No
Descriptions

Surgery ☐ Gall Bladder ☐ Laparotomy ☐ Breast Implants
☐ Appendectomy ☐ Caesarean ☐ Open heart
☐ Tracheotomy ☐ Mastectomy ☐ Other

_____ Please place other here

Scars Scar Description: Operations, birthmarks, missing organs, amputations, deformities

☐ Yes
☐ No

Prosthetic (Prosthetic Location)

☐ yes
☐ no

Prints on File: ☐ Fingerprints ☐ Footprints Prints Located

Employer & Address

Occupation