PANDEMIC INFLUENZA

MASS FATALITY

RESPONSE PLAN

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PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

Arizona Department of Health Services

(Developed and Maintained by the Bureau of Emergency Preparedness and Response)

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PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

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1.0 GENERAL

During a pandemic, local authorities will have to be prepared to manage additional deaths due to influenza, far over and above the number of fatalities from all causes currently expected during the inter-pandemic period. Within any locality, the total number of fatalities (including influenza and all other causes) occurring during a 6-8 week pandemic wave is estimated to be similar to that which typically occurs over six months in the inter-pandemic period.

Medical examiners, funeral service personnel, cemetery and crematorium personnel, forensic dentists, forensic anthropologists, crime lab technicians, and any other person whose responsibility involves direct handling of human remains during a pandemic influenza event shall be designated as first responders.

1.1. PURPOSE

Assuming two pandemic waves of six weeks each and a five percent crude annual all causes death rate (similar to 1918 pandemic), about 10,000 deaths per week per wave would occur in Arizona (This is more than 10 times the usual rate of about 900 deaths per week). Funeral businesses in the state could not meet this demand even if they were to remain fully operational, and they would most likely lose staff to illness, family illness, death, and refusal to work. (Crude Death Rate - the annual number of deaths in a given population divided by the mid-year population and expressed per 1,000 population..)

The capacity of all morgues in the State of Arizona would be exceeded in weeks one or two of the initial wave of pandemic influenza activity. The Office of Vital Records normally requires detailed documentation and is in close coordination with the Medical Examiner and other mortuary affairs systems to close out the case. Normal activities would slow the system down as Vital Records would not be able to process the high volume of cases produced during an influenza pandemic.

This guideline aims to assist local planners and funeral directors in preparing to cope with large-scale fatalities due to an influenza pandemic. A number of issues have been identified which should be reviewed with medical examiners, local authorities, funeral directors, law enforcement, emergency managers, cemetery owners, mental health professionals, hospitals, cultural leaders, and faith-based organizations religious.

- For purposes of plan development a *mass fatality* is any number of fatalities, whatever the cause, that is greater than the local Mortuary Affairs System (MAS) effectively can handle without outside assistance from the County, State or Federal assets.

- This plan describes the Arizona State Pandemic Influenza Mass Fatality Response Plan.

- This plan also covers search, recovery, identification, preparation, and disposition of remains of persons for whom the Army is responsible by Statutes and Executive Orders.

- In addition, this plan also sets procedures and guidelines for temporary interment.

1.2 PLANNING ASSUMPTIONS

A pandemic influenza incident that produces mass fatalities will place extraordinary demands (including tremendous religious, cultural, and emotional burdens) on local jurisdictions and the families of victims. The timely, safe, and respectful disposition of the deceased is an essential component of an effective response. Accurate, sensitive, and timely public relations are crucial to this effort. Mass fatalities will require Federal assistance to transport, recover, identify, process, and store deceased victims and support final disposition and Personal Effects (PE) processing at the end of the pandemic. The actual work of search and recovery, identifying, and processing the victims can be lengthy and painstaking; often complicated by the desires of families and the needs of investigative agencies. Most local jurisdictions are not equipped to handle a mass fatality event and will experience profound difficulties managing the disaster.

During a mass fatality incident, local jurisdictions will lack sufficient personnel, equipment, and storage capacity to handle significant numbers of deceased victims, especially if remains are biologically contaminated. Assistance from Federal, public, and private agencies will be required to assist in the search and recovery, transportation, tracking, removal, processing, identification, PPE selection, and final disposition of victims and remains. Advanced methods of identification to include, but not limited to, DNA typing and information management will be essential to effectively support mass fatality disasters.

- In most cases, in the event of an influenza pandemic mutual aid resources and Federal assets will not be available.

- All potential or requested assets and resources may not be available to respond to a catastrophic incident due to competing requirements at their home institutions (e.g., DOD assets may not be available due to primary mission priorities), because of family concerns at home, and/or competition with assets required for those still living.

- There could be significant disruption of publicly and privately owned critical infrastructure.

- Implementation of social distancing measures, such as isolating the sick, screening travelers, and reducing the number of public gatherings (such as funerals), may help to slow the spread of influenza early in the pandemic period.

- Drafting, exercising, and executing this plan in collaboration with Tribal health organizations and Tribal governments will be crucial in the overall mass fatality management efforts.

- Federal and State declarations of emergency may change legal and regulatory aspects of mass fatality management during a pandemic.

- Logistics systems may be overwhelmed and unable to move, in a timely manner, the required volume of personnel, victims, and equipment.

- Protocols for processing (movement and identification) biologically contaminated remains.

- There is a lack of standards for decontaminated (how clean is clean) biologically decontaminated remains.

- Currently with there are no methods of biologically decontaminating human remains, with the exception of cremation, there are no other methods of biologically decontaminating human remains,

- A storage area where remains can be processed for family members to help identify the remains could be a large, permanent, structure but would require refrigeration. Contracted refrigeration refrigerated vans would suffice.

- A storage area will be needed for personal effects; local procedures for inventorying personal effects may be incorporated into Federal inventory procedures.

- Supplies and equipment (e.g., pouches and litters) may be needed for large numbers of deceased. In addition, limitations may include materials to build shelving units for cold storage and the expertise to establish a large, temporary interment location for contaminated remains.

- There is a lack of dedicated remains retrieval (search and recovery) team. NOTE: DMORTs do not perform search and recovery. Separate arrangements will be required to support search and recovery, to include transportation from the incident site to the DMORT facility.

- First responders are typically not trained in remains retrieval, and may not be available in a timely manner to assist in such operations.

- Refrigerated trucks will most likely not be available because many agencies are planning to use them, and the trucks will be needed to keep the infrastructure running (i.e. refrigerated food stuffs to supermarkets).

1.3 MISSION STATEMENT

The mission of mass fatality management is to (as appropriate to the incident cause) recover, transport, appropriately process, and protect all human remains;

- Establish victim identities and causes of death; preserve all property found on or adjacent to the bodies; maintain legal evidence for criminal or civil court action; release remains promptly to the next of kin, if possible.

- Prevent further risk to the health of the living for the sake of the dead (this includes staff and those coming to assist).

- Provide respect for those who have died and show compassion for their survivors.

- Provide social and psychological assistance for family members and mortuary affairs personnel.

- Pandemic influenza mass fatalities will present unique logistical challenges with cold storage space, human remains pouches, PPE, and related mortuary affairs supplies.

- Stacking or piling of remains can cause unnatural bruising, discoloration and disfiguring of the remains and also slows down the cooling process, thereby increasing decomposition. Accordingly, the ability to quickly secure long-term refrigerated storage will enable medical examiners time to identify, process, and "hold" remains until final disposition.

- Basic to a mass fatality response will be the identification and selection of a number of Casualty Collection Points (CCP), using a combination of refrigerated trucks, portable preparation and storage sites (generally tents), the use of existing facilities such as vacant or unused National Guard/Reserve facilities, Department of Veterans Affairs (VA) facilities, and/or abandoned or under utilized and convenient community structures. Collection sites will present significant challenges regarding access, traffic control, security, access to power, loading docks, air quality (related to diesel engines), and processes to handle the waste, effluent, and or contamination.

- Local medical examiners, State Funeral Director Associations, State and local Emergency Management agencies, local and interstate mutual aid, and local hospitals and clinics will immediately and actively respond to a pandemic influenza mass fatality event.

1.4 INVENTORY OF FEDERAL CAPABILITIES

***Disaster Mortuary Operational Response Teams (DMORT*).**
There are currently 10 DMORTs each comprised of funeral directors, medical examiners, coroners, forensic pathologists, forensic anthropologists, medical records technicians and transcribers, fingerprint specialists, forensic odontologists, dental assistants, x-ray technicians, computer professionals, administrative support staff, and security and investigative personnel. During an emergency response, DMORTs - working within the incident command and management structure established by local authorities - provide technical assistance and personnel to recover, identify, and process deceased victims.

- DMORT capabilities include:
  - Victim identification
  - Forensic dental pathology
  - Forensic anthropology methods
  - Processing, preparation, and disposition of remains

- DMORT support to the local Medical Examiner includes:
  - Augmenting existing local resources.
  - Providing specialized personnel.
  - Providing mobile morgue facility(ies).
  - Providing computer-based tools.
  - Providing family support.

- DMORT members are required to maintain appropriate certifications and licensure within their discipline. When members are activated, licensure and certification is recognized by all States.

- DMORTs work under the guidance of local authorities by providing technical assistance and personnel to recover, identify, and process deceased victims.

Disaster Portable Morgue Units (DPMU)
In support of the DMORT program, FEMA maintains two Disaster Portable Morgue Units (DPMUs) at FEMA Logistics Centers; one in Rockville, MD, and the other in San Jose, CA. The DPMU contains a complete morgue with designated workstations for each processing element and prepackaged equipment and supplies. The DPMU core team travels with this equipment to assist in the set up, operation, packing and restocking of all DPMU equipment.

- The DPMU requires a location that is completely secure and convenient to the incident scene with easy access for vehicles.
- The DPMU requires 8,000 square feet of operating area with ventilation, hot and cold water, adequate drainage, nonporous floors, some office space, rest and refreshment areas, and restrooms.
- Other support equipment required for mass fatality management operations includes refrigerated trucks, forklifts, fuel (diesel, propane etc.), and communications with the incident command post.

The Family Assistance Act of 1996 created the Family Affairs Division within the National Transportation Safety Board (NTSB), whose responsibility is to assist the local authorities in the coordination of victim identification and family assistance for major transportation accidents. The NTSB has agreements with FEMA and other national entities to assist them in fulfilling their duties under this law. An agreement between the NTSB and USPHS gives the NTSB the ability to request DMORT support for all transportation accidents involving multiple deaths.

DOD Mortuary Affairs Assistance **(See Appendix 6 for more detailed information)**
DOD Mortuary Affairs Units can provide the following support to domestic catastrophic incident response and recovery operations, when authorized by the Secretary of Defense:

- Search for remains. Set up appropriate search methodology and prepare the necessary documentation for later research or use.

- Recover remains. Use any means available to recover all remains and portions of remains.

- Provide tentative remains identification assistance to the local Medical Examiner or Coroner. (Note: The local Medical Examiner is the office that provides positive identification of remains. DOD can only assist in this process.).

- Set up a Personal Effects (PE) depot. A PE depot is structured into four main sections: Receiving, Administration, Processing, and Shipping. The primary functions for these sections are as follows:
    - Receiving Section: receive, account for, and store all PE.
    - Administrative Section: prepare and maintain all required reports and case files and provide administrative assistance to the civilian mortuary affairs community.
    - Processing Section: Screen, clean, inventory, and package PE.
    - Shipping Section: Initiate required shipping documents, coordinate for transportation, and prepare packages for shipment.

- Evacuate remains to a mortuary affairs collection point (MACP). Evacuate remains, portions, and PE from the recovery site to a mortuary affairs facility. Transport remains in the most expedient manner to prevent the loss of identification media due to decomposition of remains. Operational requirements may

dictate the use of all available covered transportation assets. However, use of medical and food-bearing vehicles is not encouraged.

- Perform DNA testing through the Armed Forces Medical Examiner's Office to assist civilian authorities with positive identification. During mass-fatality incidents, the Dover Air Force Base (Delaware) Military Port Mortuary can be activated to process remains. This processing can include autopsy and/or medical examination when supported by the Armed Forces Medical Examiner's Office. Both the Armed Forces Medical Examiner's Office and FBI also provide support for identification of remains, as required. The activation and use of Air Force Port Mortuary(ies) is an option available to civilian authorities. Following a CBRNE mass casualty/fatality incident, which may occur without warning and is expected to produce considerable confusion and demand for personnel, there is likely to be insufficient personnel to handle the sensitive tasks of caring for the dead. Federal, State, and local governments may request DOD assistance in a mass fatality incident that does not involve mass military fatalities.

- Mortuary affairs facilities include collection points, military mortuaries, and interment sites, and can provide the following support:
    - Collection, inventory, storage, and processing of personal effects of deceased and missing personnel.
    - Operation of permanent port-of-entry mortuary facilities in the continental U.S.
    - Preparation and coordination of shipment of remains for final disposition.
    - Response to mass-fatality incidents.
    - DOD maintains the capability to provide technical assistance to civilian agencies. This technical assistance will be provided when requested by the appropriate civil authority.
    - DOD has the capability to establish and operate a Mortuary Affairs Decontamination Collection Point (MADCP). The handling of contaminated remains at a MADCP is a three-phased process, as follows:
        - Recovery from the place of death to a MADCP, where decontamination and field verification occur.
        - Movement to a Quality Control Station, where a second verification check is made using specialized monitoring equipment.
        - Positive verification of decontamination is made prior to shipment of remains to a mortuary.
            - Handling or working around decomposing remains requires strict enforcement of health and sanitation procedures. The potential for infection and the spread of contagious disease within such an environment is high; therefore, personnel should always be conscious of sanitation hazards, and keep themselves and their work areas clean. DOD Mortuary Affairs units can assist civil authorities with proper control point set-up.

DOD Support to Civil Authorities (DSCA) in Arizona

The State of Arizona recognizes that DOD support will be limited due to the pandemic influenza reducing their overall readiness. Six areas where DSCA support to Arizona would be helpful in the event of an influenza pandemic are: human remains Search and Recovery (S&R), providing assistance to the Funeral Directors/Homes, Temporary Interment, Personal Effects Depot setup, Mortuary Affairs Control Point, and Additional Supplies and Equipment. In most cases, personnel to supervise a task or lead a team will be needed..

- **S&R -** The state has limited assets for S&R and very limited personnel trained in this field. DOD assets would be valuable in S&R of human remains, such as entering private dwellings, if no one is home, and there are suspected human remains. S&R teams would be accompanied by law enforcement if entering private residences or businesses to recover remains.

- **Funeral Directors/Homes -** Funeral Directors and their assistants are critical in managing human remains. If funeral directors cannot keep up with the increased human remains load, then storage problems will quickly arise. DOD Mortuary Affairs personnel, namely the MOS 92M, will be essential assets in lending assistance to funeral homes. The Mortuary Affairs personnel spend time at the Armed Forces Mortuary at Dover AFB and are familiar with human remains preparation. Their training in human remains handling will enable the 92M career personnel to assist with an orientation and possibly some of the training at the Funeral Home

- **Temporary Interment -**
  - Temporary interment is a way of storing remains until final disposition can be arranged. Arizona Funeral Directors and Medical Examiners are not familiar with this form of graves registration. DSCA support will be invaluable to Arizona in assisting the Medical Examiners with this task.
  - DOD under Joint Publication 4-06, Joint Mortuary Affairs Operations have the forms and the plan for temporary interment. Someone familiar with procedures to assist the Medical Examiners on this process will be requested.
  - DOD Chaplains are familiar with different religious customs and would be a tremendous asset assisting with the temporary disposition of human remains.

- **Personal Effects (PE) Depot Setup -** DOD has set up a PE Depot many times and is currently using a Personal Effects Depot at Dover AFB for returning service member remains. DOD assistance may be requested in setting up a PE Depot. The PE depot should be located as close to the MACP as possible.

- **Mortuary Affairs Control Point -** Because of the DOD expertise in this area, they may be requested to assist by providing a person to help the State in setting up a MACP.

- **Additional Supplies and Equipment** - Items that are depleted quickly are human remains pouches, caskets, embalming chemicals, and other mortuary affairs items. The Defense Logistics Command may be requested to support the State of Arizona with supplies.

1.5 MANAGEMENT OF MASS FATALITIES, REQUIREMENTS, LIMITING FACTORS, AND POSSIBLE SOLUTIONS.

In order to identify planning needs for the management of mass fatalities during a pandemic, it is important to examine each step in the management of human remains under normal circumstances and then to identify what the limiting factors will be when the number of dead increases over a short period of time. The following table identifies the usual steps. Possible solutions or planning requirements are discussed in further detail in the sections that follow this table.

Table 1. Mortuary affairs system planning guide.

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps
Search for Remains	**✓If death occurs in the home then law enforcement will need to be contacted.**	**✓Law enforcement officers' availability.** **✓Augmentation to law enforcement for handling human remains.**	**✓Consider deputization of those whose sole responsibility is to search for the dead.**

	✓**Person legally authorized to perform this task.**		
Recovering Remains	✓**Personal protection equipment such as coveralls, gloves and surgical masks.** ✓**Equipment such as stretchers and human remains pouches.**	✓**Availability of personnel to perform this task.** ✓**Availability of transportation assets.** ✓**Availability of interim storage facility.**	✓**Consider training volunteers ahead of time.** ✓**Consider refrigerated warehouses or other cold storage as an interim facility until remains can be transferred to a morgue.**
Death Pronounced	✓**If death occurs in the home then an authorized individual will need to be contacted.** ✓**Person legally authorized to perform this task.**	✓**Availability of personnel able to do this task.**	✓**Provide public education re. how to access an authorized person** ✓**Consider planning an on call system 24/7 specifically for this task.**
Death Certified	✓**Person legally authorized to perform this task.**	✓**Legally, may not be the same person that pronounced death.**	✓**Consider collecting corpses and having one authorized person perform this task en masse to improve efficiency.**
Body Preparation	✓**Person(s) trained to perform this task.**	✓**Supply of human and material resources.** ✓**Supply of human remains pouches.** ✓**If death occurs in the home: the availability of these requirements.**	✓**Consider developing a rotating 6 month inventory of body bags, given their shelf life.** ✓**Consider training or expanding the role of current staff to include this task.** ✓**Provide this service in the home in conjunction with pronouncement and transportation to morgue.**
Transportation to the morgue	✓**In hospital: trained staff (e.g. orderly) and stretcher.** ✓**Outside hospital: informed person(s), stretcher and vehicle suitable for this purpose.**	✓**Availability of human and physical resources.**	✓**In hospital: consider training additional staff working within the facility.** ✓**Consider keeping old stretchers in storage instead of discarding** ✓**Look for alternate suppliers of equipment that could be used as stretchers in an emergency e.g., trolley manufacturers.** ✓**Outside hospital: provide public education or specific instructions through a toll-free phone service on where to take remains and other MA information.**
Morgue storage	✓**Suitable facility that can be maintained at 3 to 7 degrees Celsius.**	✓**Capacity of such facilities.**	✓**Identify and plan for possible temporary morgue sites.**
Autopsy *if required or requested*	✓**Person qualified to perform autopsy and suitable facility with equipment.**	✓**Availability of human and physical resources.** ✓**May be required in some circumstances.**	✓**Ensure that physicians and families are aware that an autopsy is not required for confirmation of influenza as cause of death.**
Cremation	✓**Suitable vehicle of transportation from morgue to crematorium.** ✓**Availability of cremation service.** ✓**A cremation certificate issued.**	✓**Capacity of Crematorium and speed of process.** ✓**Availability of coroner or equivalent official to issue certificate.**	✓**Identify alternate vehicles to be used for mass transport.** ✓**Examine capacity of crematoriums within the jurisdiction.** ✓**Discuss and plan for appropriate storage options if the crematoriums are backlogged.** ✓**Discuss and plan expedited cremation certificate completion processes.**
Embalming	✓**Suitable vehicle for transportation from morgue.** ✓**Trained person to perform.**	✓**Availability of human and physical resources.** ✓**Capacity of facility and speed of process.**	✓**Consult with service provided regarding the availability of supplies and potential need to stockpile or develop a rotating 6 month inventory of essential equipment/supplies.**

	✓Embalming equipment. ✓Suitable location.		✓Discuss capacity and potential alternate sources of human resources to perform this task such as retired workers or students in training programs. ✓Consider "recruiting" workers that would be willing to provide this service in an emergency.
Funeral service	✓Appropriate location(s), casket (if not cremated). ✓Funeral director availability. ✓Clergy availability. ✓Cultural leader's availability.	✓Availability of caskets. ✓Availability of location for service and visitation.	✓Contact suppliers to determine lead time for casket manufacturing and discuss possibilities for rotating 6 month inventory. ✓Consult with the FSAC to determine surge capacity and possibly the need for additional sites (use of religious facilities, cultural centers etc.)
Transportation	✓To temporary morgue, MA holding location and/ or burial Site. ✓From hospitals to morgues, funeral homes or other locations. ✓Suitable covered refrigerated vehicle and driver.	✓Availability of human and physical resources.	✓Identify alternative vehicles that could be used for this purpose. ✓Identify ways to remove or completely cover (with a cover that won't come off) company markings of vehicles used for MA operations. ✓Consider use of volunteer drivers. ✓Consider setting up a pickup and delivery service for all the hospitals with set times, operating 24/7.
Temporary storage	✓Access to and space in a temporary vault. ✓Use of refrigerated warehouses, or other cold storage facilities.	✓Temporary vault capacity and Accessibility.	✓Expand capacity by increasing temporary vault sites.
Burial	✓Grave digger and equipment. ✓Space at cemetery.	✓Availability of grave diggers and cemetery space.	✓Identify sources of supplementary workers. ✓Identify sources of equipment such as backhoes and coffin lowering machinery. ✓Identify alternate sites for cemeteries or ways to expand cemeteries.
Temporary Interment	✓Person to authorize temporary interment. ✓Location for temporary interment. ✓Grave diggers and equipment.	✓Availability of grave diggers and temporary interment space. ✓Availability of funeral directors, clergy, and cultural leaders for guidance.	✓Identify locations that will be suitable for temporary interment space. ✓Consider using the global positioning system for individual remains location.
Behavioral Health	✓Prepare public and responders for mass fatality possibilities prior to pandemic ✓Assist responders and other MA workers during pandemic and in post pandemic periods	✓The pandemic will virtually affect the entire nation. A shortage of mental health people will complicate the ability to assist people. ✓Many people will be doing MA tasks that they are mentally unprepared for and will require assistance.	✓Train first responders and some Citizen Corps people in crisis intervention techniques to assist MA teams during the pandemic. ✓Set up clinics to assist the public separate from the MA workers and first responders.
Recovery	✓Persons to authorize reinterment. ✓Grave digger and equipment. ✓Clergy and cultural leaders.	✓Availability of funeral directors, clergy, and cultural leaders for guidance.	✓Consider that the public may want to erect a monument at the temporary interment site(s) after the pandemic is over.

1.6 SCOPE

This document is intended to provide guidance for coordination in the State of Arizona of response to mass fatalities as the result of an influenza pandemic.

1.7 DIRECTION AND CONTROL

Incident Command- ADHS will use the Incident Command System (ICS) as outlined in the National Incident Management System (NIMS) and directed by the National Response Plan (NRP) to work with other agencies and organizations in a coordinated manner based on the size and scope of the public health emergency**.**

Emergency Management- ADHS will coordinate with the State Emergency Operations Center (SEOC) and local jurisdiction EOCs.

2.0 SITUATION

Most public health and healthcare agencies have limited experience dealing with mass fatalities and likewise most Medical Examiners normally do not have experience with mass fatality events. Communities in Arizona are unaware of what is necessary in planning for the large numbers of fatalities generated during a pandemic. Two pandemic waves of six weeks each, using a five percent crude annual, all cause death rates (similar to the influenza pandemic of 1918), and will produce about 10,000 deaths per week per wave in Arizona. This is more than 10 times the usual rate of about 900 non pandemic influenza deaths per week in the State of Arizona. This mortality rate will overwhelm the local mortuary affairs system in one or two weeks, especially if the counties have not prepared for the event.

Every community must develop a system of response to deal with mass fatality management at the local level. The State normally draws from resources within the state, however, during a pandemic all counties within the state will be affected and will be unable to assist other areas. Similar to the State, the Federal Government draws on resources from other states to assist a state during a time of crisis. The influenza pandemic will affect all states at the same time and any Federal help will be extremely limited. The Department of Defense will also be stricken and most likely will not be able to provide much relief.

It is a matter of national security that local jurisdictions develop realistic plans to handle the increased number of fatalities brought on by a pandemic. The local plans should have several objectives:

- First and foremost: protect the lives and health of the MAS personnel.
- Handle the dead with dignity and respect.
- Place a high priority on burying the dead.
- Place a priority on abiding by religious and cultural requirements to the maximum extent that the situation allows.
- Develop plans that include exact requirements for a paper trail of each body, to include:
    - Vital Records forms
    - Personnel effects logging forms
    - Temporary interment logging forms with Global Positioning System (GPS) coordinates.
    - DNA specimens and data if available
- Only as a last resort, plan for temporary interment of remains until they can be properly buried:
    - Involve religious and cultural leaders in planning for temporary interment
    - Avoid the terminology of “mass grave” or “mass temporary grave”.

- Develop procedures and locations for temporary interment sites. Note: some family members may want to keep the body buried in the temporary interment site; choose a location that can be turned into a memorial if required.

In order to develop guidelines or adjust existing plans for a pandemic situation county pandemic planners should ensure that the following persons are involved in mass fatality planning as a minimum:

- The Office of the Chief Medical Examiner (OCME)
- The Chief Medical Officer
- Local and County Health Department
- The Department of Emergency Management
- Vital Records
- Public Information Officers (responsible to the Joint Information Center (JIC)).
- Local funeral directors
- Local cemetery directors
- Representatives from local health care facilities, to include clinics
- Representatives of local faith-based and ethnic groups.
- Representatives of local shelters for the homeless
- Representatives from corrections facilities
- Representatives of local law enforcement
- Other first responders or agencies as necessary

If the medical community is receiving prophylaxis and/or vaccinations, then MAS personnel should be included along with other first responders as a priority group since they will be having direct contact with bodies and bodily fluids. At this point the body fluids would be considered blood-borne pathogens and appropriate personal protection equipment must be utilized. If possible, provide prophylaxis to the MAS community workers or they may not respond when needed and for those that do, they may become ill and add to the number of incapacitated or deceased.

Existing disaster plans may include provisions for mass fatalities but should be reviewed and tested regularly to determine if these plans are appropriate for the relatively long period of increased demand which is characteristic of a pandemic, as compared to the shorter response period required for most disaster plans. There are currently no national plans to recommend mass graves or mass cremations. This would only be considered under the most extreme circumstances. The use of the term *mass grave* infers that the remains will never be re-interred or identified. Therefore, the term mass grave should never be used when describing temporary interment.

It is anticipated that most fatal influenza cases will seek medical services prior to death. However, whether or not people choose to seek medical services will partly depend on the lethality and the speed at which the pandemic flu strain kills. Under normal conditions, the majority of deaths (65.2 percent) occur in the place of residence, including nursing homes and other long-term care facilities (of the 42,736 deaths in 2004, only 34.8 percent occurred in hospitals). Hospitals, nursing homes and other institutions (including non-traditional sites) must plan for more rapid processing of human remains. These institutions should work with county pandemic planners and the OCME to ensure that they have access to the additional supplies (e.g., human remains pouches) and can expedite the steps, including the completion of required documents, necessary for efficient human remains management during a pandemic.

In order to manage the increase in fatalities, some counties will find it necessary to establish temporary morgues. Plans should be based on the capacity of existing facilities compared to the projected demand for each municipality. Local planners should make note of all available facilities including those owned by religious organizations. Access to these resources should be discussed with these groups as part of the planning process during the inter-pandemic period. In the event that local funeral directors are unable to handle the increased numbers of corpses and funerals, it will be the responsibility of county OCME to make appropriate arrangements. Individual counties should work with local funeral directors to plan for alternative arrangements.

Planning should also include a review of death documentation requirements and regulatory requirements that may affect the timely management of corpses.

Identification parameters will have to be established. In some cases, the existing parameters may be relaxed, a decision that will have to be made by the OCME with legal jurisdiction. Provisions should be made to allow the OCME to appoint additional medical examiner assistants to help with the added workload.

Funeral homes will be overwhelmed, probably within the first two weeks, if not sooner. Very quickly there may be a shortage of human remains pouches, personnel and vehicles to handle the dead and Funeral homes will run out of supplies. For example, there will be a shortage of;

- Caskets, Urns and Vaults.
- Embalming supplies and equipment.
- Headstones, or other grave markers.
- Cremation is a slow process and a backlog of remains awaiting cremation will likely require temporary storage until they can be cremated.

3.1 CONCEPT OF OPERATIONS

The following flow chart, Chart 1. Fatality Management Flow Chart, shows the two paths of identification all the way to final disposition.

Foreign, undocumented nationals, and homeless individuals will require a much greater effort and a longer time to identify and may be put into temporary interment awaiting identification at a later date. Medical Examiners may have to develop a method of separating those that will pose significant identification problems. These remains may have to be put into temporary storage awaiting identification. The fact that some remains will never be identified must be planned for.

Consideration for handling remains other than death due to pandemic influenza must be taken into account. There will still be other diseases, traffic accidents and natural cause deaths. During the 1918 influenza pandemic only 25% of the deaths were reported as influenza. This is suspected to be a low percentage as in many cases influenza may have brought on the death of a person who was ill due to another disease or injury. There may be an increase in suicides and euthanasia by family members as well.

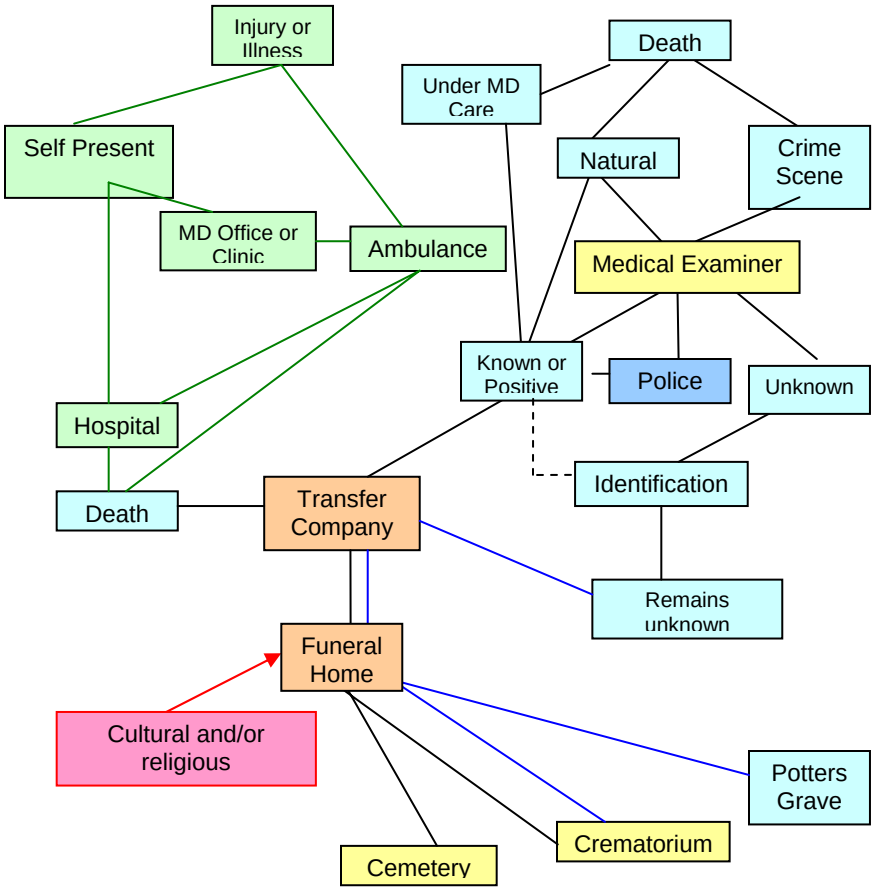


Chart 1. Fatality Management Flow Chart

3.2. AUTOPSIES

Many deaths in an influenza pandemic would not require autopsies since autopsies are not indicated for the confirmation of influenza as the cause of death. However, for the purpose of public health surveillance (e.g., confirmation of the first cases at the start of the pandemic), respiratory tract specimens or lung tissue for culture or direct antigen testing could be collected post-mortem. Serological testing is not optimal but could be performed if 8-10 ml of blood can be collected from a subclavian puncture post-mortem. Permission will be required from next-of-kin for this purpose.

Any changes to regular practices pertaining to the management of corpses and autopsy requirements during pandemic situations would require the authorization of the OCME. If a physician requires that an autopsy be performed, normal protocols will be followed including permission from the next-of-kin. In cases where the death is reportable to the OCME, the usual protocols will prevail as outlined in Arizona Law.

Autopsy Risks - Biosafety is critical for autopsy personnel who might handle human remains contaminated with a pandemic influenza virus. Infections can be transmitted during autopsies by percutaneous inoculation (i.e., injury), splashes to unprotected mucosa, and inhalation of infectious aerosols.

As with any contact involving broken skin or body fluids when caring for live patients, certain precautions must be applied to all contact with human remains, regardless of known or suspected infectivity. Even if a pathogen of concern has been ruled out, other unsuspected agents might be present. Thus, all human autopsies must be performed in an appropriate autopsy room with adequate air exchange by personnel wearing appropriate personal protective equipment (PPE). All autopsy facilities should have written biosafety policies and procedures; autopsy personnel should receive training in these policies and procedures, and the annual occurrence of training should be documented.

Standard Precautions are the combination of PPE and procedures used to reduce transmission of all pathogens from moist body substances to personnel or patients. These precautions are driven by the nature of an interaction (e.g., possibility of splashing or potential of soiling garments) rather than the nature of a pathogen. In addition, transmission-based precautions are applied for known or suspected pathogens. Precautions include the following:

- *airborne precautions* --- used for pathogens that remain suspended in the air in the form of droplet nuclei that can transmit infection if inhaled;
- *droplet precautions* --- used for pathogens that are transmitted by large droplets traveling 3-6 feet (e.g., from sneezes or coughs) and are no longer transmitted after they fall to the ground; and
- *contact precautions* --- used for pathogens that might be transmitted by contamination of environmental surfaces and equipment.

All autopsies involve exposure to blood, a risk of being splashed or splattered, and a risk of percutaneous injury. The propensity of postmortem procedures to cause gross soiling of the immediate environment also requires use of effective containment strategies. All autopsies generate aerosols. Furthermore, postmortem procedures that require using devices (e.g., oscillating saws) that generate fine aerosols can create airborne particles that contain infectious pathogens not normally transmitted by the airborne route.

Personal Protection Equipment - For autopsies, Standard Precautions can be summarized as using a surgical scrub suit, surgical cap, impervious gown or apron with full sleeve coverage, a form of eye protection (e.g., goggles or face shield), shoe covers, and double surgical gloves with an interposed layer of cut-proof synthetic mesh. Surgical masks protect the nose and mouth from splashes of body fluids (i.e., droplets >5 µm); they do not provide protection from airborne pathogens. Because of the fine aerosols generated at autopsy, autopsy workers should wear N95 respirators, at a minimum, for all autopsies regardless of suspected or known pathogens. However, because of the efficient generation of high concentration aerosols by mechanical devices in the autopsy setting, powered air-purifying respirators (PAPRs) equipped with N-95 or P100 high-efficiency particulate air (HEPA) filters should be considered. Autopsy personnel who cannot wear N-95 respirators because of facial hair or other fit limitations should wear PAPRs.

Waste Handling - Liquid waste (e.g., body fluids) can be flushed or washed down ordinary sanitary drains without special procedures. Pretreatment of liquid waste is not required and might damage sewage treatment systems. If substantial volumes are expected, the local wastewater treatment personnel should be consulted in

advance. Solid waste should be appropriately contained in biohazard or sharps containers and incinerated in a medical waste incinerator.

3.2. PREPARATIONS FOR FUNERAL HOMES AND CREMATORIA

In an influenza pandemic, each individual funeral home could expect to have to handle about six months work within a 6- 8-week period. This may not be a problem in some communities, but funeral homes in larger cities may not be able to manage the increased demand. Individual funeral homes should be encouraged to make specific plans during the inter-pandemic period regarding the need for additional human resources during a pandemic situation. For example, volunteers from local service clubs or churches or even contractors with heavy equipment may be able to take on tasks such as digging graves, under the direction of current staff. Crematoriums will also need to look at the surge capacity within their facilities. Most crematoriums can handle about one body every four hours and could probably run 24 hours to manage the increased demand. Cremations have fewer resource requirements than burials and, where acceptable, this may be an expedient and efficient way of managing large numbers of corpses during a pandemic. However, cultural and religious requirements may prohibit cremation.

3.3. PLANNING FOR TEMPORARY MORGUES

Additional temporary cold storage facilities may be required during a pandemic for the storage of corpses prior to their transfer to funeral homes. Temporary morgues require temperature and biohazard control, adequate water, lighting, rest facilities for staff, viewing areas and should be in communication with patient tracking sites and the emergency operations center. A temporary morgue must be maintained at 38 – 44^{o} F (3-7^{o} C). However, corpses will begin to decompose in a few days when stored at this temperature. If the body is not going to be cremated, plans to expedite the embalming process should be developed since, in the case of a pandemic, bodies may have to be stored for an extended period of time. In counties where a timely burial is not possible due to frozen ground or lack of facilities, corpses may need to be stored for the duration of the pandemic wave (6 to 8 weeks).

Each county should make pre-arrangements for temporary morgues based on local availability and requirements. The resource needs (e.g. human remains pouches) and supply management for temporary morgues should also be addressed. The types of temporary cold storage to be considered may include refrigerated trucks, cold storage lockers, or refrigerated warehouses. Refrigerated trucks can generally hold 25-30 bodies without additional shelving. To increase storage capacity, temporary wooden shelves can be constructed of sufficient strength to hold the bodies. Shelves should be constructed in such a way that allows for safe movement and removal of bodies (i.e., storage of bodies above waist height is not recommended). To reduce any liability for business losses, using trucks with markings of a supermarket chain or other companies should be avoided, as the use of such trucks for the storage of corpses may result in negative implications for business. If trucks with markings are used, the markings should be painted or covered over to avoid negative publicity for the business. (See Appendix 3, Arizona Department of Health Services Standard Operating Procedures for Decontamination of Aluminum Floor Refrigerated Trailers for truck cleaning and decontamination.)

Using local businesses for the storage of human remains is not recommended and should only be considered as a last resort. The post-pandemic implications of storing human remains at these sites can be very serious, and may result in negative impacts on businesses with ensuing liabilities.

There should be no media permitted on the temporary morgue site. The OCME approves requests for entry to the site. If necessary, the OCME should coordinate with local flight control or the Federal Aviation Administration to establish a "NO FLY ZONE" for non-essential aircraft.

3.4. DEATH REGISTRATION (VITAL RECORDS)

Death registration is a state/county responsibility and each county may have its own laws, regulations, and administrative practices to register a death. Moreover, there is a legal distinction between the practices of *pronouncing* a death and *certifying* a death.

In the pandemic situation, with the increased number of deaths, each county must have a body collection plan in place to ensure that there is no unnecessary delay in moving a body to the (temporary) morgue. If the person's death does not meet any of the criteria for needing to be reported to the OCME, then the person could be moved to a holding area soon after being pronounced dead. Then, presumably on a daily basis, a physician or someone with legal jurisdiction from OCME could be designated to complete the death certificate.

Funeral directors generally have standing administrative policies that prohibit them from collecting a body from the community or an institution until there is a completed Certificate of Death. In the event of a pandemic with many bodies, it seems likely that funeral directors could develop a more flexible practice if directed to do so by a central authority such as the OCME, the Arizona Attorney General, or possibly the Registrar of Vital Statistics. These special arrangements must be planned in advance of the pandemic and should include consideration of the regional differences in resources, geography, and population.

3.5. INFECTION CONTROL

The Infection Control and Occupational Health Guidelines in the Arizona Influenza Pandemic Response Plan, Supplements 4 and 5, provide general recommendations on infection control for health care facilities and non-traditional sites during a pandemic.
http://www.azdhs.gov/pandemicflu/pandemic_flu_plan.htm Special infection control measures are not required for the handling of persons who died from influenza, other than the Centers for Disease Control and Prevention (CDC) Standard Precautions. Funeral homes should use the standard precautions when handling deaths from influenza.

Visitations could be a concern in terms of influenza transmission amongst funeral attendees. It is the responsibility of Public Health to place restrictions on the type and size of public gatherings if this seems necessary to reduce the spread of disease. This may apply to funerals and religious services. Local Public Health should plan in advance for how such restrictions would be enacted, and enforced, and for consistency and equitability of the application of any measures.

3.6. HUMAN REMAINS RECOVERY

The search for, and recovery of, human remains is the first step in the care and handling of deceased personnel. This is the systematic process of searching for human remains and PE, plotting and recording their location, and moving them to an MA facility.

Performing a search and recovery (S&R) mission requires the preservation of forensic evidence to support the requirements of the OCME and law enforcement. During recovery of human remains from a private residence, business, or vehicle, it is vital to coordinate with the on-scene commander and the OCME. Unless so dictated by the State Attorney General's Office, local law enforcement shall be present with the S&R team. This will

also help to ensure that information of any potentially hazardous conditions that still exist will be relayed to the S&R team.

Once an S&R team is tasked to conduct an S&R operation, it is essential that the planning phase begin immediately. The designated team leader should gather as much information, utilizing all available sources to determine:

- Suspected number of human remains to be recovered.
- Location of S&R area.
- Number of S&R team personnel.
- Personnel with specialized skills.
- Amount and type of supplies.
- Transportation assets.
- Route to the recovery site.
- Type of terrain, roads, and buildings to be encountered en route and at recovery site.
- Special equipment required.
- Hazards and risks that may be encountered.
- Communication requirements.
- Location of nearest MAS facility.
- Weather considerations.
- Security of the search area.

Once human remains, portions, and disassociated effects have been tagged and placed in HRPs, the human remains should be evacuated to the evacuation point. Human remains should always be:

- Carried feet first (patients are carried head first)
- Treated with dignity, reverence, and respect.
- Loaded head first onto fixed-wing aircraft.
- Loaded feet first onto vehicles or rotary-wing aircraft.
- Escorted to the most convenient MA facility.

During recovery operations, the team leader should keep a detailed record of every aspect of the recovery operation in a field notebook. The last page in the notebook should include the team leader's information, dated, and signed. This notebook should be forwarded with the human remains to the MAS facility.

If possible, photographs of the recovery site should be made using negative-based film. Close-ups and overall views of each item should be taken. A description and number of each photograph taken should be recorded in the field notebook. Each roll of film should be numbered and every roll forwarded with the human remains to the OCME (Note: It is important to safeguard this photographic evidence and ensure that no unauthorized photographs are taken.)

3.7. TRANSPORTATION

No special vehicle or driver's license is needed for the transportation of a corpse. Therefore, there are no restrictions on families transporting bodies of family members *if they have a death certificate*.

Transportation of bodies from their place of death to their place of burial in Northern Arizona and isolated communities may become an issue. Local pandemic planners should consult existing plans for these

communities and determine what changes can be made to meet the increased demand during a pandemic. If vehicles are to be used for collecting remains, certain guidelines should be observed:

- The vehicle shall have all markings removed if it is normally used for commercial business.
- The vehicle shall be covered so the public cannot see into the bed of the vehicle.
- Bodies shall **not** be stacked in the vehicle under any circumstances.
- The vehicle should be refrigerated. Air conditioning will not suffice unless there are no refrigerated trucks available. If there are no refrigerated trucks available, then in hot areas, human remains should only be moved in a covered truck at night. The truck should be opened up during the day to allow it to cool as fast as the air cools at night.
- Loading and unloading of the vehicle shall be accomplished discretely. Tarps or other ways of blocking the view may be used. The top must also be covered to prevent observance from the air.
- The interior area used to store bodies should have a double plastic lining.
  - After use, or if the plastic lining is grossly contaminated and must be changed out, disposal should be in accordance with the Occupational Safety and Health Administration's Bloodborne Pathogens Standard (29 CFR 1910.1030).
  - Shelving should not be wood, or materials in which bodily fluids may be absorbed. Metal or plastic shelving that may be cleaned off is acceptable. A method of securing the body within the shelf should be required.

Persons coordinating transportation should set up a schedule with hospitals for transfer of remains to a temporary morgue or temporary interment site. Schedules should be arranged and operate on a 24 hour basis. State and Federal Department of Transportation (DOT) Requirements must be satisfied for the transportation of human remains. Death certificates will most likely be required. Transportation across state lines will require approval of receiving state(s). Transportation across international lines (Canada and Mexico) may require State Department approval and the receiving nation's approval.

Remember that other organizations will be requesting refrigerated trucks, so the vehicles may not be available when needed. Also, companies that have refrigerated trucks use them to haul critical infrastructure food and other supplies. These companies have very little or no reserve truck fleet. Using refrigerated trucks to keep the infrastructure running takes priority over the movement of human remains.

Ambulances shall not be used to carry human remains.

Quarantine measures may affect the movement of human remains. For example, can remains move into, through, or out of a quarantined area? If movement is prohibited, then temporary storage must be developed. While quarantine is designed to protect public health, plans must still be made for removing the dead.

3.8. SUPPLY MANAGEMENT

Counties should recommend to funeral directors that they not order excessive amounts of supplies such as embalming fluids, human remains pouches, etc., but that they have enough on hand in a rotating inventory to handle the first wave of the pandemic (that is enough for six months of normal operation). Fluids can be stored for years, but human remains pouches and other supplies may have a limited shelf life. Cremations generally require fewer supplies since embalming is not required.

Families having multiple deaths are unlikely to be able to afford multiple higher-end products or arrangements. Funeral homes could quickly exhaust lower-cost items (e.g. inexpensive caskets) and should be prepared to provide alternatives. The OCME should be notified for approval if alternates are used (e.g. instead of approved caskets).

3.9. SOCIAL/RELIGIOUS CONSIDERATIONS

It is extremely important to follow religious and cultural practices as much as possible during a pandemic mass fatality event. Failure to do so could have far reaching social, legal, and political after effects.

Most faith-based and ethnic groups have very specific directives about how bodies are managed after death, and such needs must be considered as a part of pandemic planning. Christians, Indian Nations, Jews, Hindus, and Muslims, all have specific directives for the treatment of bodies and for funerals. The wishes of the family will provide guidance; however, if no family is available, local religious, or ethnic communities can be contacted for information. Counties should contact the religious and cultural leaders in the pandemic planning stages and develop plans. Counties should document what is culturally and religiously acceptable, what can be compromised, and what practices are strictly forbidden.

As a result of these special requirements, some faith-based groups maintain facilities such as small morgues, crematoria, and other facilities which are generally operated by volunteers. Faith-based groups should be contacted to ensure these facilities and volunteers are prepared to deal with pandemic issues.

Religious leaders should also be involved in planning for funeral management, bereavement counseling, and communications, particularly in ethnic communities with large numbers of people who do not speak English or Spanish.

3.10. ROLE OF THE ARIZONA FUNERAL DIRECTORS ASSOCIATION (AFDA)

It is recommended that all funeral directors contact their OCME and County Health Departments to become involved in their disaster and pandemic planning activities with respect to the management of mass fatalities at the local level. Funeral directors should consider it a part of their professional standards to make contingency plans if they were incapacitated or overwhelmed.

The National Funeral Directors Association recommends that members begin thinking about state and local responses to the possible outbreak of an avian flu pandemic. Specifically, members are urged to:

- Protect yourself. Ensure that you and your staff are up to date with vaccinations against influenza, hepatitis, pneumonia and other infectious diseases.
- Consider how you can prepare for as many as two to three times the normal number of deaths over a six-month period. Do you have adequate supplies on hand or can you assure that they will be readily available if needed?
- Make contact with local medical examiners or coroners to discuss the possibility of a pandemic and how you will respond locally.

3.11. STORAGE AND DISPOSITION OF HUMAN REMAINS

Bodies can be transported and stored (refrigerated) in impermeable bags (double-bagging is preferable), after wiping visible soiling on outer bag surfaces with 0.5% hypochlorite solution. Storage areas should be negatively pressured with 9-12 air exchanges/hour.

OCME should work with local emergency management agencies, funeral directors, and the state and local health departments to determine in advance the local capacity (bodies per day) of existing crematoriums and soil and water table characteristics that might affect interment. For planning purposes, a thorough cremation produces approximately 3-6 pounds of ash and fragments. OCME should also work with local emergency management agencies to identify sources and costs of special equipment e.g. air curtain incinerators, which are capable of high-volume cremation, and the newer plasma incinerators, which are faster and more efficient than previous incineration methods. The costs of such equipment and the time required to obtain them on request should be included in county preparedness plans.

3.12. MORTUARY AFFAIRS COLLECTION POINT

The Mortuary Affairs Collection Point (MACP) is a centralized location with cold storage available where recovery people or families can bring the deceased. The workers should receive training on human remains handling prior to working at the MACP and should be supervised by either people from the OCME or by funeral home workers. Handling the remains with dignity and respect is paramount. The MACP should be the local focal point for human remains recovery and collection prior to being sent to a morgue.

Equipment should be available for local agencies to communicate with one another, especially hospitals and other locations that will be handling human remains. Dispatch service for hospitals and other locations should be available on a 24/7basis to pick up remains when hospital morgues become overloaded.

Security at the MACP should include physical security and methods to keep long-range photography from photographing remains handling procedures. Civil unrest may interfere with mortuary affairs operations. If security protection for MACP and recovery teams is not available, then teams should not go on recovery missions.

3.13. PERSONAL EFFECTS DEPOT

The high numbers of dead will require extensive control and cataloging of personal effects (PE). The PE depot should be co-located or close to the MACP. The primary mission of the PE depot is to receive, safeguard, inventory, store, process, and make final disposition of PE for the deceased. In addition, the PE depot must work closely with the OCME of jurisdiction to determine the eligible recipient.

Disposition of PE includes the collection, receipt, recording, accountability, storage, and disposal of the PE of all deceased persons for whom the county is providing mortuary affairs services. The handling of PE begins at the time of initial collection by representatives of the recovery team and extends to the time of receipt by the persons entitled to receive the PE.

All PE should be inventoried and, upon completion of the inventory; the PE shall be placed in a secure room. High dollar value items and money should be placed in a safe with the appropriate labeling to link the PE to the body. Other PE items should also be packaged and labeled to associate the PE with the body.

3.14. TEMPORARY INTERMENT (see Annex 4 to this plan for procedures)

Temporary interments are a last resort used for health, safety, sanitation, and morale reasons. The Director of the Arizona Department of Health Services and the Governor should be involved in the decision-making process to create temporary interment sites.

Clergy and/or cultural leaders' support should be used to conduct committal services at temporary interment sites. There should be a permanent record made of administration of the final religious rites. Personnel performing mortuary affairs duties at temporary interment sites should be aware of customs followed by various ethnic and religious groups in their location. Many cultures have various customs for care of the dead that should be followed. If the customs cannot be followed then guidance from the clergy or cultural leaders should be obtained.

Temporary Interment Site Selection should be done by the county Emergency Management/Planning/Zoning under the direction of the OCME. When temporary interment is necessary, the burial site should be on high ground with good drainage.

4.0 ORGANIZATIONAL ROLES AND RESPONSIBILITIES

The following table identifies roles and responsibilities of different agencies within the pre-pandemic, pandemic and post-pandemic period. The list is not all inclusive and is subject to change, based on the future planning considerations. The Planning Guide for Funeral Homes and Crematorium Services in Appendix 1 provides further planning considerations for the sector.

Table 2. Roles and responsibilities of some agencies involved with pandemic mass fatality planning and execution.

Agency	Pre-pandemic Interpandemic and Pandemic Alert period	Pandemic Period	Post-Pandemic Period
ADEM	✓Identify needs to ensure that the plan is finalized and logistical systems are in place for implementation as needed.	✓Ensure mass fatality issues are communicated to affected stakeholders through the Emergency Operations Center (EOC). ✓Maintain contact with the county Emergency Operations Centers and OCME ✓Establish if Funeral Directors Association representation is required at the state Emergency Operations Center.	✓Conduct evaluation of the response as it relates to handling mass fatalities. ✓Utilize findings to identify areas of improvement.
ADHS	✓Establish a relationship with relevant agencies, including county OCME, Arizona Funeral Directors Association, and law enforcement. ✓Develop a Planning Guide for Funeral Homes to assist in their planning on how to reduce and deal with the impact of the high number of fatalities on the sector. ✓Maintain liaison with relevant agencies and provide technical advice as to how to deal with the	✓Establish representation at the State Emergency Operations Center. ✓Ongoing communication with relevant agencies in order to address issues as they come up. ✓Ongoing monitoring of necessity of measures to protect public health (e.g. restricting attendance at funerals). ✓Ongoing communication with the general public through media and other appropriate channels to	✓Conduct evaluation of response as it relates to dealing with mass fatalities. ✓Utilize findings to identify areas of improvement.

	effects of a mass fatality event due to the pandemic.	**inform them regarding the above public health measures.** **✓Ensure provision of psychosocial support to the families of the deceased.** **✓Provide care for ownerless pets and livestock through animal shelters or other animal protection groups.** **✓Open ADHS hot line to provide information and/or referrals.** **✓Information related to fatalities is also going to be posted on ADHS's web site.**	
Law Enforcement Agencies	**✓As one of the lead agencies for dealing with mass fatalities, law enforcement at all levels should be involved in developing a pandemic mass fatality response plan as part of the State Influenza Pandemic Response Plan.** **✓Ensure systems are in place to implement the pandemic mass fatality response plan as needed.**	**✓Establish representation at the State Emergency Operations Center.** **✓Implement the Pandemic Mass Fatality response plan as outlined.** **✓Establish procedures for recovery of remains from residences with either law enforcement officers or duly appointed deputies.** **✓Establish security for short-term morgue operations and other MAS activities with either law enforcement officers or duly appointed deputies.**	**✓Conduct evaluation of the response as it relates to handling mass fatalities.** **✓Utilize findings to identify areas of improvement.**
County OCME	**✓Participate and provide expert advice to the development of the mass fatality plan and recommendations for dealing with the impact of mass fatalities due to a pandemic in the state and county.** **✓Ensure systems are in place to implement the pandemic mass fatality response plan when needed.**	**✓Ensure communication with State EOC and county EOC related to mass fatality issues.** **✓Based on the needs assessment, provide consultative advice on identification of morgue site and/or temporary short-term storage facility.** **✓Provide advice on notification of the next of kin, if required.** **✓Provide advice on temporary interment locations and procedures if needed.** **✓Coordinate with Law Enforcement on recovery teams entering private businesses and residences.**	**✓Provide input to the response evaluation and help identify "best practices" for future implementation.**
Hospitals	**✓As part of pandemic influenza planning, develop specific plans for dealing with high mortality rates in hospitals due to pandemic.**	**✓Based on need, enlarge morgue capacity or adapt alternate space to accommodate a higher than normal mortality rate.** **✓Notify County Health Department and ADHS of all deaths with influenza as the cause or contributing cause.**	**✓Provide input to the response evaluation and help identify "best practices" for future implementation.**
Funeral Homes Cemeteries and Crematoriums	**✓Develop preparedness plans to address issues such as supplies, equipment, vehicles and personnel shortages.** **✓A six months inventory of**	**✓Raise issues of concern with ADHS or through the Board of Funeral Directors and/or the office of OCME or AFDA** **✓Maintain an appropriate**	**✓Provide input to the response evaluation and help identify "best practices" for future implementation.**

	supplies in stock should be developed and maintained. **✓Implement preparedness plans.**	**inventory of supplies in stock.** **✓Develop relations with contractors to increase grave digging capacities.** **✓Develop alternate methods of conducting funerals if ADHS has put a ban on social gathering. These may include but are not limited to internet funerals, teleconferencing, and or video taping.**	

4.1 STATE GOVERNMENT

Governor's Office:

- May declare an establishment of temporary internment sites.
- May order the closing of temporary interment sites and relocation of human remains to cemeteries.
- May authorize the appointment of Emergency Medical Examiner Assistants by the county OCME..

Arizona Department of Health Services

PHIMS Command Staff and Section Chiefs:

- Meet daily or as needed to discuss situation.
- May request the establishment of temporary interment sites for public health and welfare.
- Determine mortuary affairs policy recommendations as they pertain to public health and coordinate with OCME.

Infectious Disease Epidemiology Section (IDES)/or Surveillance Group (depending on PHIMS activation):

- Provide information to key organizations regarding pandemic influenza.
  - Write an article for the Arizona Funeral Director's Association, etc. for distribution to their licensees and members via newsletters, websites, etc.
- Coordinate needs assessment of current morgue capacity across Arizona.
  - Morgue capacity at healthcare facilities.
    - Ask Arizona Hospital Association to conduct survey of morgue capacity at hospitals.
    - Ask Division of Public Health Services to conduct a survey of other healthcare facilities.
  - Assessing morgue capacity in non-healthcare facilities to be performed by OCME.
  - OCME assessment of current capacity in county morgues.
  - Surge capacity using refrigerated warehouses, trucks, and other storage methods.

Office of Vital Records:

In Arizona death registration is a process governed by it's own set of laws, regulations, and administrative practices to register a death. Moreover, there is a legal distinction between the practices of pronouncing and certifying a death.

Funeral directors generally have standing administrative policies that prohibit them from collecting a body from the community or an institution until there is a completed certificate of death. In the event of a pandemic with many bodies, it seems likely that funeral directors could develop a more flexible practice if directed to do so by a central authority such as the Arizona Funeral Director's Association, the Arizona Attorney General's Office, or possibly the Registrar of Vital Statistics. These special arrangements must be planned in advance of the pandemic and should include consideration of the regional differences in

resources, geography, and population. The Board of Medicine should support this effort by educating their members of the responsibility to complete the death certificate for their patients.

- Establish a voluntary "acute death reporting system" with sentinel county registrars.
  - Report number of influenza and pneumonia deaths as a proportion of the total number of deaths by week.
  - This system would be activated during Pandemic Phase 6 with cases within the United States.
- Mandatory pediatric influenza death reporting.
- Set up a program for establishing the reporting and tracking of human remains deposited in a temporary interment site.
- Oversee the personal effects depot record and tracking operation.

Public Information Office (PIO) or the Communications Group (depending on PHIMS activation):

- Create press releases for the media concerning mortuary affairs system goals and the implementation of temporary interment sites.
- Conduct press conferences, as appropriate, to explain the need for mass fatality procedures, delay of death certificates, funerals, and MA processes/procedures.
- Assist County PIOs and ODME to prepare to work with the media

Bureau of Emergency Preparedness and Response (BEPR):

ADHS may be providing some assistance to the County Office of Chief Medical Examiner (OCME) under ESF#8 as outlined below.

- Utilize the Health Alert Network (HAN) to communicate with county health officials, OCME, hospitals, physicians, laboratory directors, community health centers, childcare centers, schools, and the media.
- Monitor the mass fatality situation to insure that a public health hazard does not exist with body storage awaiting final disposition.
  - If it is determined that there is a public health hazard and there are too many human remains the Director of ADHS will advise the Governor.
  - If the situation warrants, and the County OCME agrees, then jointly ADHS and the County will advise the Governor that Temporary Interment is necessary to protect public health.
- Develop public guidance and materials for public release on how the Mortuary Affairs system is handling mass fatality and where the Mortuary Affairs Collection Centers are located.
  - Any guidance should be coordinated with the OCME with legal jurisdiction over the human remains prior to release.
  - Keeping the public informed is extremely important if temporary interment has been taken as a necessary precaution to ensure public health.
- Develop public health guidelines to inform the public on how to handle dead family members and what precautions must be taken.

State Board of Funeral Directors and Embalmers:

- Oversee and assist in the management of increased deaths and burial activities.

4.2 LOCAL GOVERNMENT

County Health Departments:

- Implement, isolate, and quarantine as needed and coordinate requirements for the movement of human remains inside and outside of the quarantine area.

Metropolitan Medical Response System (MMRS):

- Administer vaccine to funeral directors, funeral home workers, and MA system personnel, to include search and recovery personnel.

- Assist in providing PPE to funeral directors, funeral home workers, and MA system personnel, to include search and recovery personnel.

Office of the Chief Medical Examiner (OCME):

THE MEDICAL EXAMINER, WITH LEGAL JURISDICTION, COMMANDS AND IS ACCOUNTABLE FOR ALL ASPECTS OF THE MORTUARY AFFAIRS SYSTEM AND ITS RESPONSE WITHIN THE COUNTY OF OCME JURISDICTION.

As the pandemic develops and becomes established within the State, the OCME takes jurisdiction over the following deaths:

- Cases in which there is no attending physician, (e.g. the decedent had no physician or medical treatment facility which treated them or the decedent's physician is licensed out of state)
- The identity of the decedent is unknown and the normal investigative procedures completed by hospital, social services, police or law enforcement agencies, including fingerprinting, have not positively identified the deceased.
- Coordinating confirmation of identity with local police departments.
- The death is sudden and unexplained (e.g. does not meet the normal case definition).
- Death of an inmate or person in correctional custody.
- Assisting the interest of the State, when an individual who was sequestered into a private residence or public facility through the Isolation or Quarantine procedures and dies outside of a medical treatment facility. (This does not apply if an entire community is impacted by the public health order.)
- Normal Medical Examiner cases as defined by Arizona Code.

Additionally, the OCME may be tasked to:

- Collaborate with the County Department of Public Health Services to determine which, if any, cases will be considered medical examiner cases.
    - OCME may be required to perform autopsies early in the pandemic to establish the presence of pandemic influenza in Arizona.
- Provide subject matter expertise on planning for and handling a mass fatality situation to key partners.
    - OCME has a Mass Fatality Incident Plan in place which could be used to guide healthcare facilities in their planning and response.
- The appointment of Emergency Medical Examiner Assistants should be limited to the time of the Public Health Emergency and should be terminated when the Public Health Emergency Declaration is rescinded.

- The Medical Examiner may waive licensing requirements, permits and/or fees required by the State Code, applicable rules, and regulations for the performance of the duties of the Emergency Medical Examiner Assistant.
- The Emergency Medical Examiner Assistant, appointed and acting in the scope of their prescribed duties should be immune from civil liability suits in the performance of such duties.
- OCME may experience a backlog of DNA identification early on in the pandemic.
- OCME will NOT be responsible for contracts that may be let for companies engaging in:
  - Casket manufacturing.
  - Grave digging.
  - Funeral Home expansion.
  - Recovery of Human Remains.
  - Mortuary Affairs Service Organizations.
  - Security.
  - Tracking remains out of their jurisdiction and legal authority.
- Oversee all aspects of temporary interment, reinterment, and final disposition of human remains following a pandemic.

State/ Federal Corrections Institutions:

While the State Corrections Institutions are a state asset managed and funded through the State of Arizona, they must comply with local jurisdictions when it comes to management of fatalities. As a minimum, State Corrections Institutions must:

- Develop a MAS plan, have it reviewed, and coordinated with the OCME and County of jurisdiction.
- Prepare for holding inmate remains for extended periods until they can be picked up by the MAS.
- Train employees how to handle remains and bloodborne pathogen and/or infection control precautions as required (will be released by ADHS if different from listed below).
  - Standard Precautions
  - Contact Precautions
- Find a cold storage location for remains (remember that many agencies are planning on using refrigerated trucks so they may not be available for your facility).

4.3 Other Organizations Involved with the MAS

Hospitals and Clinics:

- Prepare for holding patient remains for extended periods until they can be picked up by the MAS.
- Train employees how to handle remains and bloodborne pathogen and/or infection control precautions as required (will be released by ADHS if different from listed below).
  - Standard Precautions
  - Contact Precautions
- Find a cold storage location for remains (remember that many agencies are planning on using refrigerated trucks so they may not be available for your facility).

Shelters:

- Prepare for holding remains for extended periods until they can be picked up by the MAS.
- Partner with a Funeral Home or the OFME to assist in planning for remains removal.

- Train employees how to handle remains and bloodborne pathogen and/or infection control precautions as required (will be released by ADHS if different from listed below).
    - Standard Precautions
    - Contact Precautions
- Find a cold storage location for remains (remember that many agencies are planning on using refrigerated trucks so they may not be available for your facility).

Arizona Funeral Directors Association (AFDA).

- Assist the OCME in the coordination of mortuary services.
    - Transportation, preparation and disposition of deceased persons.
    - Acquisition of funeral supplies.
    - Assist clergy support for funerals.
    - Provide family support.
- Assist in communication with key partners.
    - Provide education and updates on pandemic influenza to members of AFDA.
    - Serve as liaison to the National Funeral Directors Association.
    - Serve as liaison to religious and cultural leaders and provide ethnic funeral consultation.
- Serve as a clearinghouse for mortuary concerns.
- Develop alternate forms of funerals if social distancing has been declared by the county health department(s) or statewide by ADHS through the Office of the Governor. The following methods are suggestions and other methods may be also acceptable to the community as alternate forms of funerals:
    - Only immediate family members and communication to other family and friends such as:
        - Funerals released over the internet on dedicated websites.
        - Televised funerals.
        - Video taped funerals.

5.0 POST-PANDEMIC RECOVERY

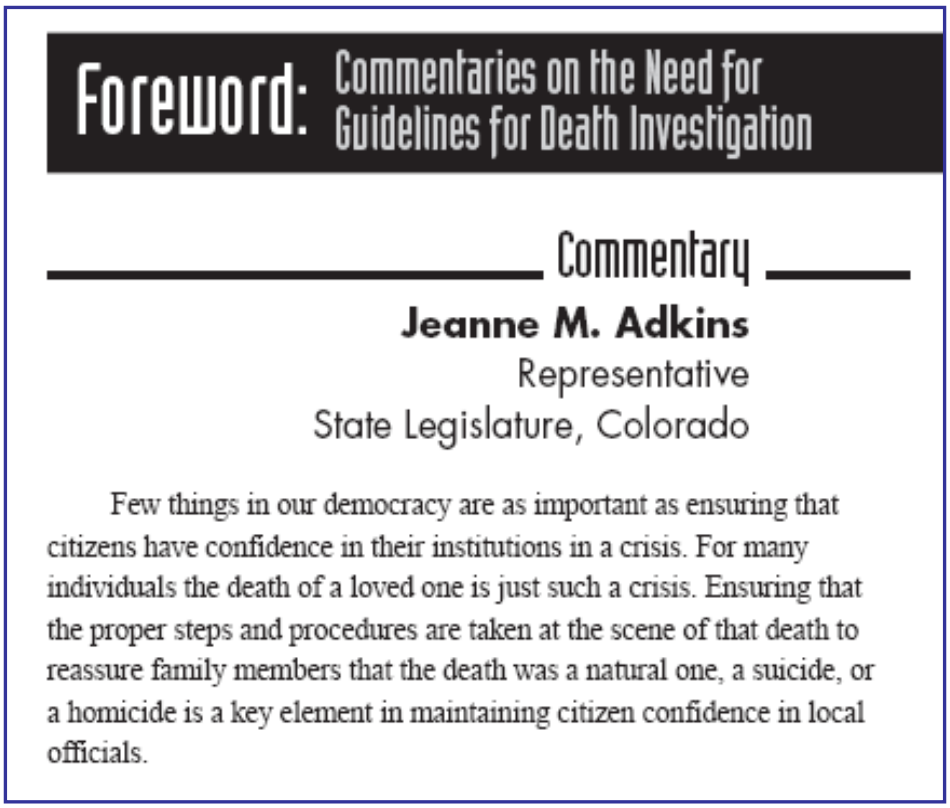
After a pandemic wave is over, it can be expected that many people will remain affected in one way or another. Many persons may have lost friends or relatives, will suffer from fatigue and psychological problems, or may have incurred severe financial losses due to interruption of business. The Federal and Arizona State Governments have the natural role to ensure that mass fatality response concerns can be addressed and to support the “rebuilding the society”.

The post-pandemic period begins when the Arizona State Public Health Official declares that the influenza pandemic is over. The primary focus of work at this time is to restore normal services, deactivate pandemic mass fatality response activities, review their impact, and use the lessons learned to guide future planning activities.

- Deactivate MA emergency plans.
- Move remains from the temporary interment location to final resting place in cemeteries.
- Religious ceremonies conducted during reinterment and at the closing of the temporary interment locations.
- Closing, cleanup, and restoration of temporary interment locations.
- Determine when mortuaries and funeral homes can resume normal operations.
- Provide grief counseling to MAS staff and public as needed.
- Re-deploy human and other resources as needed.

- Finalization of personal effects.
- Process record-keeping for financial purposes.
- Evaluate and revise the mass fatality plans as required.

In addition to the above responsibilities, an overall assessment of the mortuary affairs system, including the burden from human death, and financial costs of the pandemic, ought to be undertaken. This will be coordinated at the state and most likely at the national level.



Foreword: Commentaries on the Need for Guidelines for Death Investigation

Commentary

Jeanne M. Adkins
Representative
State Legislature, Colorado

Few things in our democracy are as important as ensuring that citizens have confidence in their institutions in a crisis. For many individuals the death of a loved one is just such a crisis. Ensuring that the proper steps and procedures are taken at the scene of that death to reassure family members that the death was a natural one, a suicide, or a homicide is a key element in maintaining citizen confidence in local officials.

WITH DIGNETY AND RESPECT,
ALWAYS

6.0 REFERENCES

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2. Care and Disposition of Remains and Disposition of Personal Effects, Army Regulation 638-2, 22 January 2002.

3. Deceased Personnel **,** Care and Disposition of Remains and Disposition of Personal Effects Army Regulation, 638-2 Unclassified) Headquarters Department of the Army Washington, DC, Effective date: 22 January 2001.

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7. Handling of Deceased Personnel in Theaters of Operation, FM 10-63/AFM 143-3/Navy Medical Manual p5016/navmc 2509-a, 26 February 1986

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9. Identification of Deceased Personnel, HQ Department of the Army, Field Manual 10-286, 30 June 1976.

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11. Kurt B. Nolte, M.D, et al, Medical Examiners, Coroners, and Biologic Terrorism, A Guidebook for Surveillance and Case Management, Weekly Morbidity and Mortality report, Centers for disease Control and Prevention, 53(RR08); 1-27June 11, 2004.

12. Mass Fatality Plan, National Association of Medical Examiners (NAME)

13. Military Assistance to Civil Authorities (MACA), DOD Directive 3025.15, February 18, 1997.

14. Military Personnel Casualty Matters, Policies, and Procedures, Department of Defense Instruction Number 1300.18, December 18, 2000.

15. NFDA Participates in Federal Mass Fatality Work Group, Recommendations Offered to NFDA Members, National Funeral directors Association For Immediate Release NFDA # 44-05, December 14, 2005

16. René Snacken, et al. The Next Influenza Pandemic: Lessons from Hong Kong, 1997 , Scientific Institute of Public Health Louis Pasteur, Brussels, Belgium 2004

17. WHO Global Influenza Preparedness Plan The Role Of WHO And Recommendations For National Measures Before And During Pandemics, Department of Communicable Disease Surveillance and Response Global Influenza Programme, The World Health Organization 2005.

6.1 STATE PANDEMIC PLANS USED AS REFERENCES:

- Arizona
- California
- Colorado
- Kansas
- North Carolina
- Main
- Oregon
- Rhode Island
- Virginia
- Washington
- Wisconsin

6.2 INTERNATIONAL PANDEMIC PLANS USED AS REFERENCES:

- Australia
- Canada
- European Union
- Toronto City
- New Zealand

APPENDIX 1 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

ARIZONA DEPARTMENT OF HEALTH SERVICES

MASS FATALITY PLANNING GUIDE

(Developed and maintained by the Bureau of Emergency Preparedness and Response)

Does your Community's Mass Fatality Plan include:	**YES**	**NO**	**Don't Know**	**Comments**
GENERAL				
All hazards approach to include a pandemic?				
Consider the types of natural and/or technological hazards that could cause a mass fatality incident in the local area?				
Sustainment of mass fatality response for 6 to 8 weeks for a pandemic?				
Normal everyday deaths from disease, injury and or other means?				
Include a listing of all of the resources that may be needed for a mass fatality incident along with:				
• Location of each resource?				
• Method of delivery to the scene or Mortuary Affairs Control Center (MCC) location?				
• Supplier Point of Contact?				
• 24-7 contact phone number?				
Include who will perform the Mortuary Affairs (MA) system tasks:				
• Search?				
• Recovery?				
• Identification?				
• Transportation?				
• Final Disposition?				
Are the appropriate agencies included as part of the planning process:				
• State Funeral Directors Association?				
• Local Funeral Homes and Cemeteries?				
• Law Enforcement?				
• Office of the Medical Examiner?				

• Emergency Management?				
• Public Health?				
• Citizens Corps (if Applicable)?				
• Healthcare Facilities				
• Emergency Response Groups				
• Vital Records?				
• Cultural Leaders?				
• Religious Leaders?				
• Other?				
MEDICAL EXAMINERS				
Include mutual aid agreements with Medical Examiners, forensic scientists, and others in surrounding states?				
Who will be in charge of the local mortuary affairs system response to a mass fatality?				
Specify how to contact specialists for assistance in a mass fatality incident?				
Specify how to and under what circumstances to publish or list names of dead?				
Have the ability to create Medical Examiner Assistants to assist during a mass fatality?				
Who will authorize Medical Examiner Assistants?				
Who will be authorized to sign death certificates?				
Who is authorized to pronounce death?				
Vaccination and/or prophylaxis for Mortuary Affairs System workers?				
FUNERAL DIRECTORS & FUNERAL HOMES				
Who will provide training for funeral Directors and to Funeral Home and Cemetery workers?				
Who will provide personal protection equipment?				
Personal shortages will further hamper Funeral Homes. Who will provide additional manpower and equipment?				
How will supplies be distributed to funeral homes?				
Mental health assistance?				
Relaxed standards of embalming and burial will be determined by?				

Vaccination and/or prophylaxis?				
PERSONAL EFFECTS				
With a backlog of remains awaiting burial who will store the bodies and personal effects (PE)?				
Who will authorize the release of PE to the person(s) authorized receive PE?				
How will personal effects be collected, logged and securely stored?				
Who will manage personal effects collection, logging and storage?				
TEMPORARY STORAGE OF REMAINS				
Temporary MACC cold storage facility type will need to be determined before hand.				
If cold storage warehouses or other fixed facilities are to be used:				
• How will security be handled?				
• Keeping the press out of the facility?				
• Keeping body transfer out of sight?				
• Transportation to and from storage facility?				
• Include a process for notifying additional personnel?				
Have the following been considered for the MACC:				
• A temporary morgue must be maintained at 38 – 44^{o} F (3-7^{o} C)				
• Convenient to scene				
• Adequate capacity				
• Completely secure				
• Easy access for vehicles				
• Ventilation				
• Hot/cold water				
• Drainage				
• Non-porous floors				
• Sufficient electrical capacity				
• Refrigerated Trucks				
• Forklift(s)				
• Fuel - diesel, propane etc.				
• Communications				
• Office Space				
• Rest/debriefing area				
• Refreshment area				

• Restrooms				
If refrigerated trucks are to be used for cold storage:				
• Truck fueling and maintenance?				
• All markings removed if it is a commercial business?				
• The vehicle covered so the people or the press cannot see into the bed of the vehicle?				
• Bodies will not be stacked in the truck?				
• The vehicle must be refrigerated. Air conditioning will not suffice?				
• Loading and unloading the vehicle accomplished away from the public eye? Tarps or other ways of blocking the view may be used. The top must also be covered to prevent observance from the air.				
• The kind of shelving to be used?				
• The interior area and shelves used to store bodies should have a double plastic lining?				
• Security for the area?				
TEMPORARY INTERMENT				
Have plans been made for a temporary interment site as a last resort?				
Who will make the determination for temporary interment?				
Are there plans for reinterment?				
Are there plans to expand cemeteries or establish new ones?				
Are there plans to augment funeral homes and assist in temporary interment?				
HOSPITALS AND FATALITY MANAGEMENT				
Who will provide fatality management training to hospitals?				
Are hospitals prepared to perform fatality management?				
Who will provide transportation from hospitals to a temporary mortuary system facility?				
Hospitals may have to provide some temporary storage for patient remains?				
TRAINING				

Who will provide training for:				
• Recovery Personnel?				
• Medical Examiner?				
• Emergency Responders?				
• Law Enforcement?				
• Funeral Directors and Funeral Home/Cemetery workers?				
• Other MACC workers?				
PERSONAL PROTECTION EQUIPMENT				
Personal protection may be needed either for a Chemical, Biological, Radioactive, Nuclear or High Yield Explosive (CBRNE) event?				
Who will determine PPE requirements?				
Training for personnel wearing PPE?				
Who will fit test respirators?				
DOCUMENTATION				
Include forms for documentation of:				
• Personal Effects?				
• Temporary interment body locations?				
• Expenses: Equipment, Supplies, Manpower?:				
• Worker exposure types and levels if appropriate?				
• Body recovery data?				
FAMILY ASSISTANCE CENTER & MENTAL HEALTH				
Who will set up Family Assistance Center (FAC)?				
What agencies should be in the FAC?				
Who will run the FAC?				
Where will the FAC be located?				
Are there provisions for mental health assistance for MA personnel to include search, recovery, and funeral home workers?				
Person authorized to direct disposition of remains?				
Person authorized to direct disposition of Personal Effects?				
Include policies on sensitive items such as cremation of remains, fragmented remains procedures, etc.?				
PUBLIC AFFAIRS				
Coordination with other PIO Personnel?				

A Mortuary Affairs System representative in the Joint Information Center (JIC)?				
A JIC representative to the Medical Examiner with Jurisdiction?				
POST-PANDEMIC PERIOD				
Who will head the post-pandemic period planning:				
• Process record keeping for financial purposes?				
• Move remains from the temporary interment location to final resting place in cemeteries?				
• Deactivate MA emergency plans?				
• Religious ceremonies conducted during reinterment and at the closing of the temporary interment locations?				
• Determine when mortuaries and funeral homes can resume normal operations?				
• Provide grief counseling to MAS staff and public as needed?				
• Redeploy human and other resources as needed?				
• Finalization of personal effects?				
• Evaluate and revise the mass fatality plans as required?				

Appendix 2 of
ARIZONA DEPARTMENT OF HEALTH SERVICES
PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

TEMPORARY MORGUE AND MORTUARY AFFAIRS COLLECTION POST (MACP) PLANNING GUIDE

Factors	Regular Warehouses	Refrigerated Warehouses	Aircraft Hangers	Govern-ment Facilities	National Guard Facilities	Trailers or Tents	Vacant Buildings	Ice Skating Rink	Sports Facilities, Gymnasiums	Community or Recreation Center	Conval-escent Care Facilities	Convention Facilities	Fair Grounds	Hotels or Motels
Infrastructure														
Doors/corridors to fit gurneys														
Non-porous floors - Stain, liquid resistant														
Floor drainage														
Loading dock														
Roof														
Toilet facilities/ showers (#)														
HVAC unit														
Ventilation														
Area Refrigeration														
Area to secure from view for remains transfer														
Storage shelves														
Windows easily covered or opaque glass														
Non-porous walls														

Waste water holding tank or system														
Total Space and Layout														
Auxiliary spaces (counselors, chapel)														
Equipment/supply storage area														
Office space														
Family area														
Rest area for workers														
Restrooms														
Locker rooms or change area														
Food supply and prep area														
DNA and specimen handling area														
Laundry														
Mortuary holding area														
A open area larger than 8,000 sq feet														
Remains decontamination area separate from other areas														
Utilities														
Air conditioning														
Electrical power (backup?)														

Heating														
Lighting														
Water (hot and cold)														
Communications														
Type of communications (# phones, local/long distance, intercom)														
Two-way radio capability to Medical Examiner, Recovery Teams, Others														
Wired for IT and internet access														
Other Requirements and Services														
Completely secure and ability to lock down facility														
Convenient to scene														
Fork Lift														
Diesel, Propane, other fuel storage														
Fire suppression and alarm system														
Adequate capacity for anticipated number of bodies														

Accessibility/ proximity to public transportation														
Easy access for vehicles														
Parking for staff and visitors														
Secure parking lot with gate guard														
Biohazard and other waste disposal														
Ownership/other uses during disaster														
Supplies storage and delivery area														
Proximity to Main hospital Operations														
Total Rating/ Ranking (Largest number indicates best site)														

RATING SYSTEM	
Rating	
5	Equal to or same as morgue
4	Similar to that of a morgue, but has SOME limitations (i.e. quantity /condition).
3	Similar to that of a morgue, but has some MAJOR limitations (i.e. quantity /condition).
2	Not similar to that of a morgue, would take modifications to provide.
1	Not similar to that of a morgue would take MAJOR modifications to provide.
0	Does not exist in this facility or is not applicable to this event.

APPENDIX 3 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

MORTUARY AFFAIRS PROCEDURES FOR SEARCH AND RECOVERY

1.0. Introduction

The search for, and recovery of, remains is the first step in the care and handling of deceased personnel. It is the systematic process of searching for remains and PE, plotting and recording their location, and moving them to a MAS facility. These actions may be conducted by First Responders as well as MAS personnel. S&R during a pandemic may also include entering private dwellings to remove human remains.

2. 0. Search and Recovery Operations

2.1. To ensure successful mission accomplishment, the Team Leader tasked to conduct the S&R must gather all information available and preserve all forensic data for the mission. The safety of the S&R team members is of the utmost importance and shall not be compromised.

2.2. Search Operations. The success of an S&R mission depends on a well-organized search pattern that fits the particular situation. Additionally, strict discipline during the search must be maintained. This means that all team members must perform their duties and follow the established plan unless the on-the-scene situation dictates otherwise. Establishment of a base camp may be necessary when there will be a lengthy S&R and the location is distance from the nearest Mortuary Affairs Collection Point .

2.2.1. Planning. Once a team is tasked to conduct a S&R operation, it is essential that the planning phase begin immediately. The designated team leader should gather as much information, utilizing all available sources to determine :

- Number of remains to be recovered.
- Location of recovery site.
- Number of recovery team personnel.
- Personnel with specialized skills.
- Amount of MA supplies.
- Transportation assets.
- Route to the recovery site.
- Type of terrain to be encountered en route and at recovery site.
- Special equipment required.
- Hazards and risks that may be encountered.
- Communication requirements.
- Location of nearest MA facility.
- Weather considerations.

2.2.2. Preparation for Movement. Upon completion of the planning phase, the team leader should assemble the S&R team members, brief them on information gathered, and prepare personnel and equipment for movement.

- Perform map or aerial reconnaissance of the search area before the mission.
- Determine appropriate PPE
- Determine start point.
- Determine dismount point.
- Determine distance and direction from dismount point to recovery site.
- Assign individual duties at recovery site.
- Prepare load plans.
- Load equipment and supplies.
- Move to dismount point.
- Team members are responsible to:
  - Understand mission requirements.
  - Question local inhabitants.
  - Search only during daylight hours.
  - Always search with other team members (use the Buddy System)
  - Search places such as ditches, riverbanks, bushes, foxholes, trees, damaged structures, and disabled vehicles.
  - Tag each remains and portion with an S&R number tag.
  - Fill out the S&R Log (Tab 1)
  - Make a sketch or photograph of the recovery site if necessary.
  - Use a GPS device.
  - Complete the required sections of the S&R log for each remains.
  - Search area around remains for PE.
  - Inventory PE.
  - Keep PE secured to the remains.
  - Keep remains shrouded (covered) except when they are being checked for identification.
  - Evacuate remains, feet first.

2.2.3. When searching for remains, follow a systematic method. This allows for team members to thoroughly cover a large area.

- Ensure each team consists of a team leader, two flankers, and enough people to adequately cover the search area.
- Equip the team with a GPS, compasses, sketch maps

2.2.4. Search Operations. Once the S&R team has arrived at the designated dismount point, the team leader should conduct a head count, conceal and secure the vehicle(s). Additional personnel may be required to stay at the dismount point for security and/or to relay communications. The team should move in a single-file, with the team leader and communications operator in the center of the formation. Once the team leader has determined that the team is within approximately 100 meters of the given recovery site location, the team will assemble into either an open search 33 formation (double-arm interval), used for open or sparsely vegetated areas, or a closed formation (single-arm or

close interval), used for densely vegetated areas or difficult terrain with limited visibility. The team should then use the "straight-line box" search method. That is, the team leader will position him/her self in the rear center of the formation. The S&R team will move in the direction of the recovery site in a slow and steady pattern, searching side-to-side for items pertaining to the operation. The team leader should ensure that the team maintains proper intervals, moves in the direction of the recovery site, and always stays online.

2.4.1. When a team member observes an item that may be relevant to the search, he/she will use a predetermined verbal or hand-and-arm signal to alert the team to halt. The team leader will examine the item(s) and determine its relevance. If the item is deemed to be human remains, portion of remains, or a disassociated PE, the team leader will mark the item with a predetermined color pin flag or other suitable marking method. The team leader will mark the pin flag using a grease pencil with the proper sequential "R" and the recovery number for remains, "E" and the recovery number for disassociated PE, or "P" and the recovery number for a portion of remains. The team leader will then annotate the number assigned to the item and a description in a field notebook. **Note:** An "R" and the recovery number will be assigned to any item found that constitutes more than 50 percent of a human body. The team leader will make this determination. If there are no items representing more than 50 percent, each portion will receive a "P" and the recovery number.

2.4.2. This search and marking method will continue until the team has reached a point of at least 100 meters past the last marked item. The team leader will then halt the team and direct the left or right flanker to perform an about-face, depending on which direction the search will proceed. The remaining team members will pivot around the flanker, remaining online until the team is facing in the opposite direction. The team leader will move to the rear-center of the formation and direct the movement of the team. This search pattern will continue until there is at least a meter buffer in each direction around the defined recovery area.

2.4.3. Team members search until they find remains or until the team leader determines there are no remains in the area. Team members must be aware of areas where remains may be located. Team members should also search unusual ground disturbances that may be due to emergency interments, collapsed bunkers, or fighting positions. unusual odors, congregation of insects, scavenger birds, or animals should be investigated as they might lead to hidden remains.

3.0. Recovery Operations

3.1. Once the entire area has been searched and all relevant items marked, the team will begin the documentation and recovery process. During combat, remains and disassociated personal effects should be considered booby-trapped. Thus, proper precautions should be taken prior to handling any remains, portions, or PE. Small portions and disassociated PE can be checked for possible booby-traps by close examination prior to handling. Remains represent a higher probability of being booby-trapped, so visual inspection may not always locate the presence of these devices.

3.2. To check remains for booby-traps, the recommended method is to use one team member, who will attach a rope or strong cord to the side of the remains opposite from the direction that he/she will pull the rope. With the remaining team members at a safe distance and behind cover, the designated personnel will pull the rope until the remains is rolled-over and moved slightly away from its original position. All team members will stay behind cover for at least one minute, after which the remains can be assumed safe to handle.

3.3. All personnel handling remains, portions, or disassociated PE should wear the proper PPE, i.e. protective gloves, coveralls and a face mask at a minimum. Pre-designated team members should complete the following tasks:

3.3.1 Recording Personal Effects

Personnel designated to document and safeguard PE should be the first personnel to come into contact with the remains after booby-trap checks are complete. These personnel must thoroughly check the entire remains including the hands, neck, pockets, boots, and load carrying equipment, etc. for PE . (**Note:** Never cut pockets or remove the identification from around the neck, if found.)

- Annotate these items on the S&R PE Log sheet (Tab 2) (No clothing is annotated on this form). Only PE found on the remains or in the remains' clothing or equipment are annotated on this form.
- Use one sheet for each body. Use more than one sheet for an individual body's PE if needed.
- Provide identification to team members completing other documentation.
- Place PE in a plastic slide-closure bag, then place in a PE bag.
- Attach the PE bag to the left wrist of the remains, if possible. If not, securely attach the PE bag to another location on the remains.
- Sign the S&R PE Log. This becomes the chain of custody document for the PE.
- Place the S&R PE Log in a slide-closure plastic bag with the PE.

3.3.2. Recording identification media

Personnel designated to locate and record items of official identification media should thoroughly check all areas of the remains' clothing and equipment. (**Note:** Do not cut pockets or clothing.) Drivers License or Social Security Card, and any other identification should be annotated on S&R PE Log in the appropriate section.

3.3.3. Obtaining statements of recognition

When there are S&R team members or other personnel in the recovery area that can visually identify the remains, a designated team member should complete a Statement of Recognition of Deceased (Tab 3).

- The S&R team member completing the form will annotate as much information as possible using information provided by the acquaintance out of sight of the remains.

- Once these blocks are completed, the team member will escort the acquaintance to the remains and determine if the remains can be visually recognized.
- Any discrepancies found during the viewing with the descriptions provided prior will be annotated in the "remarks" block of the form. (**Note:** Remains will not be washed or have clothing removed to aid the recognition process.)
- Complete all remaining blocks and have the acquaintance sign in the appropriate block.
- The team member completing the form will sign in the "witness" block.

3.4. Questioning local inhabitants

3.4.1. Completing tags for remains, portions, and disassociated PE:

- A designated team member should prepare two S&R tags for each remains, and one tag for each portion and disassociated PE.
- The S&R tags for remains should have the S&R number on one side.
- The reverse side of the S&R tag is left blank, except for remains recovered from aircraft crashes or vehicles. For remains from aircraft crashes, the reverse side of the tag would be marked "ACM" for advanced composite materials. This marking will alert receiving MA personnel that the remains may contain hazardous residue and special handling precautions may be warranted.
- S&R tags for portions and effects should have the number assigned to the item annotated on one side and the reverse side should be left blank.
- One S&R tag will be attached to each remains and the other to the zipper tab of the human remains pouch.
- The tag for each portion and disassociated PE will be placed inside a clear zip closure bag with the effect, or attached to the outside of the bag for portions. These items are then placed inside the human remains pouch containing the remains recovered nearest the item.
- The documents prepared for each remains should be put into a sealed, water tight container and placed inside the proper human remains pouch.

4.0. Evacuation Operations

Once remains, portions, and disassociated effects have been tagged and placed in human remains pouches, the remains should be evacuated to the MACP. Remains should always be:

- Carried feet-first.
- **Treated with dignity, reverence, and respect.**
- Loaded head-first onto fixed-wing aircraft.
- Loaded feet-first onto vehicles or rotary-wing aircraft.
- Escorted to the most convenient MACP facility.

5.0. Documentation of the Recovery Site

It is vital that all aspects of the recovery operation be documented. This documentation provides a spatial and contextual reference as to where remains, artifacts, and other material evidence is

found within the recovery site. The recovery operation is documented in three manners: maps, field notebooks, and photos.

5.1. Mapping the Recovery Site.

Making accurate maps of every recovery site is essential. A map of the recovery site showing the locations of remains, portions, and effects in relation to the datum can be used for future excavations and recreation of the recovery site

5.1.1. A detailed recovery site map should include:

- Codes for each remains, portion, and disassociated effect recovered.
- Quadrants for each item recovered.
- GPS coordinates and description of the location for each body.
- Team conducting recovery.
- Team leader name
- Date(s) of recovery operation.

5.1.2. Field Notebooks.

During recovery operations, the team leader should keep a detailed record of every aspect of the recovery operation in a field notebook. The last page in the notebook should include the team leader's information, dated, and signed. This notebook should be forwarded with the remains to the MACP facility.

5.1.3. Photographing the Recovery Site.

If possible, photographs of the recovery site should be made using negative-based film. Close-ups and overall views of each item should be taken. A description and number of each photograph taken should be recorded in the field notebook. Each roll of film should be numbered and every roll forwarded with the remains to the MACP (**Note:** ***It is important to safeguard this photographic evidence and ensure that no unauthorized photographs are taken***.)

5.1.4. The team leader includes as much detailed information as possible to aid any future S&R missions.

TAB 1 TO APPENDIX 3 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

SEARCH AND RECOVERY LOG				Date of LOG		Page _____ of _____ Pages	
Search Area (Attach map if required)				Team Chief Name			
Information on Deceased				GPS Location	Date/Time Recovered	Date/Time Released	Released to
Graves Registration Number	Name	SSN or Drivers License	Next of Kin or Address/Location				

TAB 2 TO APPENDIX 3 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

SEARCH & RECOVERY PERSONAL EFFECTS LOG					
Team	**Location** **Page 1 of _____**	**Name**	**Signature**	**Date**	
Graves Registration Number	Name	SSN or Drivers License	**Released to Name / Position**	**Receiving Signature (Sign for each item)**	**Date/time Released (each item)**
Item Number	**Description**		**Location**		
Item 1					
Item 2					
Item 3					
Item 4					
Item 5					
Item 6					
Item 7					
Item 8					

TAB 3 TO APPENDIX 3 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

STATEMENT OF RECOGNITION OF DECEASED

PRIVACY ACT STATEMENT
AUTHORITY: 10 USC Sections 1481 through 1488, EO 9397, Nov. 1943 (SSN).
PURPOSE AND USE: This form is used to establish initial identification of deceased personnel.
DISCLOSURE: Personal information provided on this form is given on a voluntary basis. Failure to provide this information, however, may result in improper identification of the deceased person and person making visual identification.

1. Tentative Identified Decedent

Name *(Last, First Middle Initial)*	Address

2. I have personally viewed the remains tentatively identified above. Identification is based on the following

Sex	Approximate Age	Approximate Height	Race

Hair Color *(If brown, indicate light or dark as appropriate)*		Build *(Slender, Medium, Heavy)*

Identifying marks (fully describe by type and location ALL known scars, tattoos, piercings, birthmarks, amputations or other body markings to support the identification)

Remarks

3. Details of Viewing

Date	Time	Location

4. Person making visual identification

Name (Last, First Middle Initial)	Address

Relationship to Deceased *(Relative, Friend, co-worker)*	Length of time you knew the deceased *(Months, Years)*

5. WITNESS I certify that the individual identified in Item 4 has viewed the remains in my presence, and that to the best of my knowledge and belief the above statements are true.

Name (Last, First Middle Initial)	Address		
Signature	**Phone Number**	**Date**	**Time**

ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

TENTATIVE IDENTIFICATION

MOVEMENT AND TENTATIVE IDENTIFICATION OF REMAINS

1.0. General. There are a variety of ways that remains can flow from an incident site to a mortuary. MACP provides direct support in the receipt, processing, tentative identification, and evacuation of remains and their accompanying PE, usually to a mortuary.

2.0. Movement to a Mortuary Affairs Collection Point. After recovery, remains, portions, and PE are moved to a MA facility. Remains should be transported in the most expedient manner to prevent the loss of identification media due to decomposition of remains. Operational requirements may dictate the use of all available covered transportation assets. However, use of medical and food-bearing vehicles should be avoided. All vehicles will require decontamination after the pandemic is over.

2.0.1. While waiting for transportation, remains should be kept under refrigeration (36 to 38 degrees F) until ready for movement. PE should be inventoried on a "Record of Personal Effects of Deceased Personnel" (See Tab 1) or plain bond paper. If plain bond paper is used, all entries must be legible and signed by the person performing the inventory. Move remains from refrigeration only when the transportation source is ready to move. Screen/shroud the remains to the extent possible to prevent them from being in public view. Post guards to prevent the theft of PE and equipment. Keep unauthorized persons away from the remains.

2.0.2 When transportation arrives, begin loading. Carry remains feet first at all times. While loading remains, maintain an attitude of reverence and respect. Load remains on vehicles and rotary-wing aircraft feet first. Load remains head first on fixed-wing aircraft with the head towards the front of the aircraft. Do not stack remains directly on top of each other. Secure remains in a manner that will prevent shifting during movement. Assign a team member to accompany the remains and PE during evacuation. If at all possible, the team member should be familiar with the deceased and be able to execute a statement of recognition. Evacuate remains to the nearest MACP.

2.1. Mortuary Affairs Collection Point Operations. The MACP is the basic building block for modern-day MA support. Mission planning provide for MACP to be geographically located throughout the local area. These MACPs provide receiving, refrigerating, processing, and evacuating of remains and their accompanying PE.

To accomplish their mission, MACPs are established in one of two ways: 1) MACPs are designed to provide direct support to the County OCME and 2) MACPs are also designed to provide general support to a given area as designated by the County OCME. In providing general support to the OCME, the MACP is more likely task-organized with increased receiving, processing, refrigeration, and evacuation capabilities. When serving as a transit or intermediate

point for ME the MACP provides direct support to the local area and then forwarding human remains on to the central MACP or County Morgue.

2.2. Site Selection

MACPs providing general support to a given area, should choose a site based on the following:

- Close to a road network with a designated parking area and directional signs to reduce congestion and confusion associated with heavy traffic flow. Close to communications support.
- Ability to screen area using natural screening or screening material.
- Close to the S&R area.
- A central, secure location for local residents to drop off remains.
- Erect screening material at the earliest possible moment to prevent the operations of the MACPs from being in public view.
- Construct a perimeter to prevent unauthorized personnel and the news media from entering the area.
- Tailor the facility layout to the geographic and manmade features of the area to be used.

2.3. Facility Layout

A MACP is composed of three basic sections: receiving, processing, and evacuation. The facility layout is based upon the structure and the support mission of the MACP.

2.4. Receiving Operations

2.4.1. Prepare the Collection Point Register of Deceased Personnel (CP Register) (located in Tab 2 of this Appendix). The CP Register is a daily log of all remains received by a CP. Prepare a new register each day the CP is in operation. The reporting period starts at 0001 and ends at 2400 (local time). Retain a copy of all registers at the CP for internal records.

2.4.2. Upon arrival of the remains, MACP personnel record all required information on the CP register, and confirm the actual number of remains being delivered. Remains are checked for recovery tags and any other accompanying paperwork. Recovery tags, if present, are removed and placed in the case folder file. Do not delay normal processing and evacuation for lack of information.

2.4.3. Complete two evacuation tags for each remains. Evacuation tags will have what is believed to be the last name, first name, middle initial, SSN, of the remains or "unidentified" on one side of the tag. On the reverse side, the evacuation number issued to each remains which is then recorded on the CP Register. The evacuation number consists of a sequential number given to each remains during the current calendar year, the CP number, and the number on the seal which was used to seal the human remains pouch. One tag is attached to the remains and the other to the human remains pouch.

2.4.4. When MACP personnel process body portions, the evacuation tag is completed as follows: “portions” is written on one side of the tag; beneath “portions” the sequential “P” of portions is written. The reverse side is completed the same as for “remains”. When placing several portions into one pouch, each portion must be tagged and separately bagged. The pouch must also have an evacuation tag on the front on which the word “portions” is written, and beneath it the total number of portions contained in the pouch and is then recorded. The back of the tag is completed as all others. Do not physically associate any portions with other portions or remains.

2.4.5. Based on the current workload, move the remains to the processing area or keep the remains at the receiving holding area under refrigeration to wait for further processing.

2.4.6. Initiate an original and duplicate individual case file. The top portion of the file should have tentative name, rank, SSN, seal number, and evacuation number. Create an alpha index card containing the following information: deceased name or “unidentified”, SSN/Drivers License, evacuation number, and other appropriate remarks. This file is kept at the CP as a quick reference for questions about remains processed through the CP.

2.5. Processing Operations

2.5.1. The method and extent of processing conducted at the CP depends on the prevailing operational constraints and local MA procedures. When the CP workload is overwhelming, the CP OIC may make the decision to follow the minimum hasty processing procedures. The minimum procedures that must be accomplished are: prepare evacuation tags, complete CP Register, remove any ammunition, explosives or weapons, place evacuation tag on remains, and place remains in pouch. Place the PE bag in the human remains pouch, then place an evacuation tag on the pouch and seal it. The remains are then placed in the refrigeration container. Finally, load the remains on the transport vehicle. The driver must sign for the remains on the CP Register. The original CP Register goes with the driver while a copy is maintained at the CP.

2.5.2. Identify, inspect, and record all personal identification media, PE, and personal equipment using (**Note:** Do NOT cut pockets, clothing or equipment to inventory PE). Be particularly careful during processing to avoid contaminating or destroying forensic evidence. PE should be carefully removed, and handled minimally to preserve physical and biological forensic evidence. (i.e., If a ring won’t come off easily, leave it where it is and annotate it’s location on 1076.) Pay particularly close attention to locating the identification tags and the identification card. Leave identification tags around the neck if found there. Use official identification media found as a basis for establishing tentative identification. Leave all clothing on the remains. Inventory PE and record these items on Record of Personal Effects of Deceased Personnel (RPEDP). Upon completion of the inventory, place the PE and one copy of RPEDP in a plastic slide closure bag to prevent the effects from being damaged by body fluids. Place slide closure bag in a PE bag. Secure the PE bag to the wrist or other suitable areas of the remains.

2.5.3. In cases when unassociated PE is received at a CP, do not attempt to associate them with particular remains. Create a file using the RPEDP. Generate an unassociated PE tag for the unassociated PE. The tags will have the words "unassociated effects" written on one side. On the reverse side assign a sequential "E" to each unassociated personal effect. Record service letter designator, the unit operating the CP, and CP number designator. Place the unassociated PE, with one copy of the RPEDP and the tag, in the slide closure plastic bag. Store in one or more PE bag(s) as needed. Place the other tag on the PE bag. Evacuate the loose PE when evacuating remains as a separate item.

2.5.4. The use of computers at the CP will help facilitate expedient processing of remains information throughout the theater.

2.5.5. Take two sets of pictures, using a digital camera, for each remains. Take a full facial picture, complete anterior photo of the body, then gently roll the body over and take a posterior view of the body. The pictures are used by the OCME to aid in the identification process and to document the state of the remains at the time the remains enter the MA system. Pictures should be stored on disk and only released by the OCME.

2.5.6. The original, completed, case file is placed in a plastic slide closure bag and placed in the remains pouch. The duplicate case file is kept at the CP and a statement as to whether PE were present on the remains and if they were evacuated from the CP. Any additional documentation, required forms, and photos of the remains are placed in the case file. The remains pouch is then sealed and stored or evacuated. The seal number should already be recorded on the case file and both evacuation tags.

3.0 Identification of Remains

3.1. The process of identifying a deceased person begins when remains and all biological and physical evidence are recovered. Information from witnesses, the decedent's unit, recovery personnel, medical, dental, and fingerprint records are vital in this process. The biological and physical evidence obtained in the theater and supporting post-and ante-mortem records are examined by the medical examiner to aid in determining the cause and manner of death and the identification process. The remains, supporting biological and physical evidence, associated identifying media and PE are examined and the findings documented. The completed documentation makes up a Remains Case File. If a comparison of ante-mortem and post-mortem identification data, and the results of any scientific testing prove favorable, and the identification specialist feels he/she can take the case to court and be successful, a positive identification is made of the remains. If the completed documentation shows that the remains cannot be positively identified, the case is continued in an active status so that further attempts at successful resolution can be made.

3.2. In many cases deaths due to pandemic influenza will be documented by a physician giving care to a patient who died at home, or in a hospital. In these cases the remains may end up in a MACP awaiting burial. No further identification will be needed.

4.0. Evacuation Operations

4.1. Coordinate for transportation to evacuate the remains. When vehicles are used, they must be covered.

4.2. Remains awaiting evacuation must be kept under refrigeration. The temperature of the refrigerated container is maintained between 34 and 37 degrees Fahrenheit. Holding remains in a refrigerated container will minimize decomposition. Do not freeze remains under any circumstances. Ensure that the temperature is checked at periodic intervals. Additionally, ensure that maintenance checks are performed as prescribed in applicable technical manuals on the refrigerator unit and generator.

4.3. Upon arrival of transportation, load the remains on a first in/first out basis. Ensure the remains are handled in a respectful and reverent manner. Carry remains feet first and face up. Position remains in such a manner that prevents the stacking of remains. Secure remains in such a manner that prevents shifting during movement.

4.4. The evacuation location of the remains will be annotated on the appropriate CP register.

TAB 1 TO APPENDIX 4 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

RECORD OF PERSONAL EFFECTS OF DECEASED PERSONNEL	**Date**	**Page ____of ____ Pages**

PRIVACY ACT STATEMENT

AUTHORITY: 10 USC Sections 1481 through 1488, EO 9397, Nov. 1943 (SSN).
PURPOSE AND USE: This form is used to establish initial identification of deceased personnel.
DISCLOSURE: Personal information provided on this form is given on a voluntary basis. Failure to provide this information, however, may result in improper identification of the deceased person and person making visual identification.

Name (Last, First Middle Initial)	**Address**		
Place of Recovery	**Date of Recovery**	**Grave Registration No.**	**Evacuation Numbers**

Inventory of Personal Effects

Quantity	**Description**	**Condition**	**Disposition**

Funds/Negotiable Instruments/Other High Value Items Transmitted with Personal Effects

Quantity	**Description**	**Condition**	**Disposition**

EFFECTS INVENTORIED ABOVE REPRESENT (Pace an X in the appropriate box)

□ **All Known Effects** □ **All Known Effects Recovered From Remains**

Preparing Official

Name (Last, First Middle Initial)	**Organization**	
Signature	**Date**	**Telephone Number**

Receiving Official

Name (Last, First Middle Initial)	**Organization**	
Signature	**Date**	**Telephone Number**

Receiving Official

Name (Last, First Middle Initial)	**Organization**	
Signature	**Date**	**Telephone Number**

TAB 2 TO APPENDIX 4 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

COLLECTION POINT REGISTER OF DECEASED PERSONNEL					Date of Report		Page _____ of _____ Pages	
Collection Point Name			**Collection Point Location**			**Name of Person in charge of CP**		
Evacuation Number	**Name**	**SSN or Drivers License**	**Address**	**Graves Registration Number**	**Name of Team Lead Recovering Remains**	**Place of Recovery**	**Date of Recovery**	**Remains Evacuated To**

APPENDIX 5 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

PERSONAL EFFECTS

1.0. PURPOSE

To provide mortuary affairs system (MAS) workers procedures for the accountability of Personal Effects (PE).

2.0. OVERVIEW

This appendix specifies procedures for recovery, collection, inventory, transfer, storing, and processing of PE of deceased people. The procedures also include PE of foreign nationals (FN), Native Americans, Undocumented Aliens (UDA), and the homeless.

3.0. GENERAL GUIDANCE

3.1. Procedures. Disposition of PE includes the collection, receipt, recording, accountability, storage, and disposal of the PE of all deceased persons for whom the County Office of the Chief Medical Examiner (OCME) is providing mortuary services. The handling of PE begins at the time of initial collection by representatives of the Search and Recovery (S&R) and extends to the time of receipt by the Person Eligible to Receive Effects (PERE) or representatives of the host country or for FN and UDA or until another disposition is made in accordance with applicable laws.

3.2. COUNTY OCME RESPONSIBILITIES The County OCME is responsible for the control and coordination of MAS support, which includes PE. PE of FN and UDA will be processed in accordance with any standing agreements. In the absence of agreements, FN and UDA PE should be processed in the same manner as for U.S. citizens. When arrangements are made to transfer PE to the other nation, OCME will maintain accountability records and provide information for all FN, UDA and Tribal remains for which they have responsibility.

4.0 PERSONAL EFFECTS

4.1. Personal Effects on Remains. When remains arrive at the Mortuary Affairs Control Point (MACP), personnel operating the MACP should check for PE and organizational equipment (for example Law Enforcement weapons, MACE, etc.) that may be on the remains. Leave all PE that are found on the remains in such a manner that protects the effects from destruction by body fluids. Remove serviceable organizational equipment from the remains and return serviceable equipment to the appropriate Agency. Unserviceable equipment and all clothing are left on the remains. Do not remove the identification tags and identification cards under any conditions. Keep them on the remains in the original location that they were found at the time of recovery if there is no risk that they will become unsecured or lost. During current death program, mortuary affairs personnel ensure that all PE found on remains not needed for identification purposes are returned to the PE Depot. During graves registration and concurrent return programs, PE on remains not used for identification is shipped to the PE Depot, when established.

5.0 PERSONAL EFFECTS DEPOT

5.1. Introduction. The primary mission of the PE depot is to receive, safeguard, inventory, store, process, and make final disposition of PE for deceased and missing personnel. In addition, the PE depot must have necessary Summary Court jurisdiction to determine the eligible recipient. When the PE depot is located in the theater of operation, the depot processes the PE of deceased allied and enemy personnel that come into custody of the U.S. military.

5.2. Package Verification. When the TMEP is tasked to handle PE, it processes it in the following manner. Upon arrival, TMEP personnel will verify that packages are sealed and properly labeled. The label consists of the phrase "EFFECTS OF DECEASED/MISSING PERSON" (name, SSN or Drivers license of the deceased person). Personnel verify that the name on the package matches the name of the signed inventory sheet and annotate on the inventory sheet that the package was sealed at arrival. (The signing of the inventory sheet only certifies liability for the actual sealed package and not the contents inside the package.)

- Establish a case file for each package of PE received. Assign an evacuation number for all packages pertaining to a particular individual. The PE number (PEN) consists of three parts: a numerically sequential case number, the location of the PE storage facility, and the number of packages containing PE for the particular individual. Record the PEN on the case file and on all applicable inventory sheets and/or Statement of Recognition inside the file. Prepare and secure an evacuation tag to each package pertaining to a particular individual. Place a plastic packing list envelope on each package and place a copy of the inventory sheet for that package inside the envelope.

- Make the appropriate entries to the TMEP log book and establish an alpha file for each individual. Use the TMEP log book and alpha file as a reference for any inquiries and reports dealing with the handling of PE. Use computer automation, when available, to promote efficiency.

- Secure all packages, until transportation is coordinated to ship the packages, to the PE depot. Initiate the required shipping documentation as determined by previous coordination with the appropriate transportation office.

5.3. Flow of Personal Effects When the PE depot is located in the theater of operations, PE is forwarded to the depot from the following organizations or activities:

- Individual units and medical facilities;
- CP and TMEP or
- In-theater mortuary when established. Organizations are responsible for including an inventory sheet listing all items being forwarded.

- In cases when the PE depot is not located in the theater of operations, the TMEP serves as the transfer point between the theater and the depot. Once again, organizations are responsible for generating the appropriate inventory documents prior to forwarding PE to the TMEP.

- Mortuaries that receive deceased personnel, and their accompanying PE, examine the effects for identification value.

- After examining the effects, the mortuary forwards the effects and accompanying inventory documents to the PE depot.

- From the PE depot, PE are shipped to the eligible recipient according to the applicable local County statutes. Figure B-2 illustrates the flow of PE from the theater to the eligible recipient.

5.4. Depot Operations A PE depot is structured into four main sections: receiving, administration, processing, and shipping sections. The primary functions for these sections are as follows.

5.4.1. **RECEIVING SECTION:** Receive, account for, and store all PE.

5.4.2. **ADMINISTRATIVE SECTION**: Prepare and maintain all required reports and case files and provide administrative assistance to the Summary Court.

5.4.3. **PROCESSING SECTION:** Screen, clean, inventory, and package PE.

5.4.4. **SHIPPING SECTION:** Initiate required shipping documents, coordinate for transportation, and prepare packages for shipment. The PE depot is established in a permanent or temporary facility. The following planning factors should be considered when selecting a site and developing a site layout.

- Ability to establish separate areas for each section with sufficient space to accomplish its designed function.

- Ability to establish controlled drop-off and pick-up points.

- Ability to build or emplace storage bins or shelves.

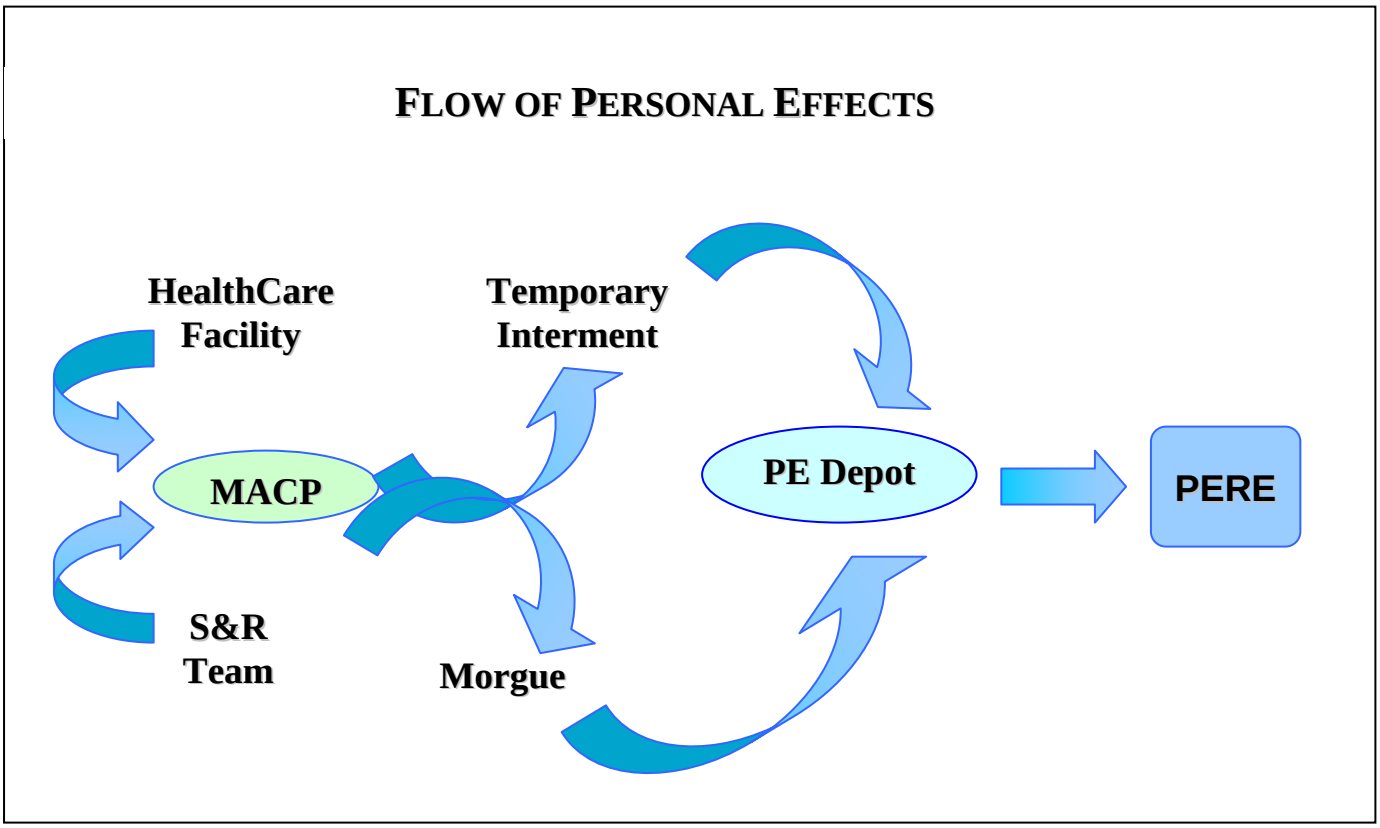


Figure 1. Flow Chart of Personal Effects from the Hospital/S&R thorough the MAS System to PERE.

- Ability to secure valuable items.
- Ability and facilities to clean PE.
- Ability to store oversized or bulky items.

  Ability to provide office space for outside agencies (i.e., Summary Court, finance, and criminal investigation) as appropriate. There is no mandated layout for a PE depot.

5.5. Receiving

When the PE depot is located outside the theater, personnel operating the depot accomplish the following tasks:

- Conduct an inventory immediately upon receipt of PE to verify the contents against the accompanying records.

- Record any discrepancies on the inventory sheet or R and initiate an investigation.

- If the discrepancy cannot be resolved internally, turn the case over to the appropriate criminal investigation agency and continue to monitor progress of the investigation.

- Obtain the correct casualty status of the individual for each package of PE.

- Separate the PE for deceased personnel from those of the missing.

- Process the PE of deceased personnel for shipment to the PERE.

- Store the PE until shipment to the PERE can be effected.

5.5.1. High Dollar Value Items During the inventory, segregate high dollar value items, official personal papers, monetary funds, and oversized items from the remaining PE. Withdraw any organizational clothing, equipment, and other government property still with the PE. Forward these items to the appropriate supply activity. Remove all ordinance, explosives and flammable items. Dispose of these items in a proper manner. Prepare a memorandum listing all items withdrawn and place this memorandum in the case file.

5.5.2. Completing Inventory Upon completion of the inventory, place high dollar value items and official personal papers in an individual container and store in a safe or in a locked security cage. Convert monetary funds, both US and foreign (in the amount of five dollars or more) to a US treasury check . Store the treasury check with the rest of the high dollar value items for that particular individual. Place monetary funds of less than five dollars with the rest of the high dollar value items to be shipped. Place the remainder of the PE in an appropriate container and store in a controlled area. Annotate the location of all PE on the applicable DD Form 1076 or inventory sheet. Finally, forward the case file to the administrative section for filing until the processing section is ready to handle the case.

5.5.3. Logging Upon the receipt of PE, log the case in the Personal Effects Depot Log Book. Assign a case number for each case. The case number consists of sequential number and the current year. Record the case number on all processing documentation and on all containers when the PE is packaged for shipment. In addition, personnel who operate the administrative section perform the following functions:

- Maintain the original case files until disposition is made on the PE.

- Maintain an internal copy of each case file that documents all events pertaining to each case.

- Monitor the status and request disposition instructions on the PE of missing personnel.

- Initiate and monitor investigations pertaining to missing PE.

- Request disposition instructions for oversized items of PE.

- Coordinate the return of any allied and enemy personnel PE that may become the custody of the depot through command channels to the appropriate government.

5.5.4. Administrative Assistance Provide administrative assistance to the Summary Court(s) in the depot. Coordinate with the appropriate Service's casualty and/or Mortuary Affairs Office to determine the PERE and to obtain disposition instructions for the PE. In addition, provide administrative assistance in completing the required Summary Court reports for the Summary Court's signature, according to applicable Service regulations.

5.6. Processing

5.6.1. Screening Check the case file to determine the exact location of the entire PE for the individual. Locate and move all PE to a controlled processing area. Screen and re-inventory all items. During the screening, remove items of questionable sentimental or salable value for reviewing and determination by a Summary Court. In addition, remove items which may cause embarrassment (pornographic material or letters) or added sorrow if forwarded to the eligible recipient. These items include, but are not limited to, PE that is contaminated, mutilated, burned, blood stained, damaged beyond repair, or unsanitary. Follow the applicable Service regulations closely for guidance in the removal and destruction of the above mentioned items. Annotate all items that are destroyed on a Certificate of Destruction (Figure B-5). Prepare a memorandum listing all items removed. Include the disposition of these items on the memorandum. Finally, clean, launder and/or repair all items designated for shipment to the eligible recipient.

5.6.2. Re-inventory and Documentation Re-inventory and document all PE designated for shipment on PREDP form or an appropriate OCME form. Ensure that the correct status (deceased or missing) for the individual is entered on the inventory form. Place the new and original inventory documents along with any Certificates of Destruction, memorandum of items withdrawn, and any other documentation in the case file. Ensure that a copy of all items in the case file is made for internal records. Place oversized items back in storage until disposition instruction can be obtained.

5.6.3. Final Authority The Summary Court assigned to the case oversees the processing and inventory operations according to the applicable Service regulations. The Summary Court is the final authority in determining if any items are to be withdrawn, destroyed, or held from shipment. The Summary Court verifies for accuracy and signs all processing documentation.

5.7. Storage and Shipping Prepare the PE for shipment by completing the following:

- Select proper size containers for shipment
- Line all containers with packing material
- Coordinate for a customs inspection to coincide with the actual packing of PE
- Wrap all items that may be damaged in shipment
- Place items in the container in reverse order from how it appears on the inventory sheet to allow for the unpacking of the items in the correct order
- Place the original case file inside, on the top of the PE, prior to closing the container
- Close and seal the container for shipment.

5.7.1. Labeling After the containers are closed and sealed, label the containers. Include the phrase "EFFECTS OF DECEASED PERSON" or "EFFECTS OF MISSING PERSONS" and the name, SSN, and status of the particular individual. Verify that the status on the container matches the status shown on the inventory documents. Attach a plastic packing list envelope to each container. Place a copy of the inventory for that container inside the envelope.

5.7.2. Shipping Documents Complete the required shipping documents based on previous coordination with transportation personnel and coordinate for shipping

5.7.3. Verification The assigned agency supervises the packing and shipment operations to include:

- Verifying the contents packed against the inventory sheet for accuracy
- Verifying that all items are packed in a professional manner according to applicable service regulations
- Ensuring that containers are securely sealed and in good working order upon completion of packing
- Ensuring that proper labels and shipping documents are placed on the container
- Verifying that the items are shipped to the eligible recipient at the correct address for the recipient
- Ensuring that the containers are shipped on a government Bill of Lading or by Registered or Insured mail

- Ensuring that disposition instructions are requested and implemented for oversized items

- Completing all required reports and correspondences with the eligible recipient according to the applicable County statutes.

APPENDIX 6 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

TEMPORARY INTERMENT PROGRAM

1.0. GENERAL

There are many factors that can influence the final disposition of human remains. **The expedient and respectful return of deceased personnel to the Person Authorized to Direct Disposition of human remains, or PADD, is the top priority of the MAS.** However, during extreme situations when safety, sanitation, or health considerations leave no alternatives, the temporary interment program (TIP) may be implemented.

Any event involving an influenza pandemic will have major environmental, legal, political, and/or religious consequences. The decision on the manner in which the human remains will be handled will most likely be made at the very highest levels of State Government.

- The state may be more inclined to accept county-sponsored temporary interment if human remains are placed in individual caskets and are located in an area that is protected, and the site is commemorated.
- Temporary interment can consist of individual graves and, as a last resort, consist of burial by rows.
- The County Medical Examiner shall have overall lead responsibility.

2.0. SPECIAL CONSIDERATIONS

Clergy and Cultural Leader support should be available to hold memorial services at temporary interment sites and ensure cultural requirements are accomplished to the best ability during this trying time.

Contact the Arizona Funeral Directors Association (AzFDA) for assistance in setting up a temporary interment site.

3.0. SITE SELECTION

The burial site should be in a location that has easy access to a highway, yet in a location that can be isolated by fencing the area off. An entry control point should be set up with 24 hour, 7 days a week security. In addition, the following criteria should be met:

- The burial site should be on high ground with good drainage.
- Avoid areas which have high water tables or that can flood easily.
- Ensure that during the survey of the site that pilot holes are dug to check for underlying rock formations and ease in digging.

4.0. TEMPORARY INTERMENT PROCEDURES

4.1. Personal Protection Equipment (PPE) Whenever personnel are conducting disinterment operations, workers should wear PPE such as respiratory protection, gloves, aprons or Tyvek type coveralls, and/or other types of PPE in accordance with Arizona Department of Occupational Safety and Health requirements. A State Industrial Hygienist, Infection Control

Practitioner, Epidemiologist and a Medical Doctor should jointly make the decision as to the proper PPE.

Human remains should be placed in a Human Remains Pouch (HRP) or other similar pouch designed to hold remains, unless there are none available. If HRPs or similar pouches are not available then a blanket or other covering may be used as a burial shroud. The burial shroud should be tied around the ankles, crisscross around the body and around the neck to keep it in, but do not tie around the around the head or face.

4.2. Row Construction When individual graves cannot be accommodated, temporary interment graves should be constructed consisting of straight rows. The burial site may consist of any number of rows.

- Each row holds 10 human remains, head to foot, lengthwise (see Figure B-1)
- The rows are approximately 70 feet long
- Three feet deep, as wide as the earthmoving equipment blade (minimum of 2.5 feet) and at least 7 feet apart (minimum of two feet wider than the outside track of the earthmoving equipment).
- Earth-moving equipment should be used, if possible, as it can open all types of soil with relative ease.
- Ideally, rows should be side by side, but may not be if terrain conditions prohibit.

4.3 Reception When remains are received, interment site personnel meet the personnel transporting the remains. All documentation and information is turned over to the temporary interment site personnel. If a list of remains is present, verify the list as remains are offloaded. Upon verification, mortuary affairs personnel at the site sign for the remains. Disposition of personal effects found on the remains will be resolved by the OCME. If at all possible, the global positioning system, or GPS, location for each human remains placed in temporary interment should be logged next to the identification number.

4.4. Opening the Burial Site The burial site may consist of any number of rows. Each row holds 10 remains, head to foot, lengthwise (see Figure C-1). The rows are approximately 70 feet long, 3½ feet deep, and as wide as the earth-moving equipment blade (minimum of 2.5 feet). Earthmoving equipment should be used if possible, as it can open all types of soil with relative ease. Ideally, rows should be side by side, but may not be if terrain conditions prohibit.

4.5. Processing When remains are received, interment site personnel meet the personnel transporting the remains. All documentation and information is turned over to interment site personnel. If a list of remains is present, verify the list as remains are offloaded.

4.6. Verification Upon verification, mortuary affairs personnel sign for the remains. Assign each remains an interment processing number by using the next available sequential number, Temporary Interment Grave Registration (TIGR) form (see Tab 1) in Block 1. Use one page of TIGR form for each row.

4.7. Contaminated Remains

Contaminated human remains pose a much larger problem. Burial does not necessarily kill all biological agents, and some can remain resistant or dormant underground.

Temporary Interment may also be considered when human remains are biologically contaminated rather than chemically contaminated. To prevent contamination from spreading, authorities may choose to minimize the handling of human remains and identify a site that can support mass temporary interment.

4.8. Preparation of Documentation

Use soft metal tags (not steel or copper) that a ball point pen can make an impression on when writing down the information.

Prepare two metal temporary interment tags. Legibly print or etch the processing number on each tag and attach both tags to the remains. One tag will be attached later to the Human Remains Pouch or burial shroud.

Initiate an interment registration number to put on the tag. The number shall have the day/month/year-location-row-unit number such as:

Date Location Row Unit

250902-1-2-07

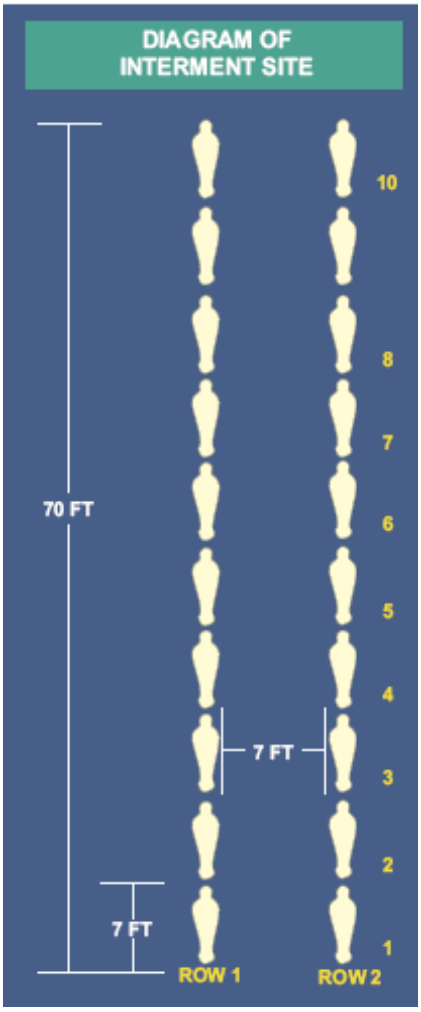


Figure 1. TIP Row layout

4.9. Filing Establish a separate file for each remains, labeling the file with the interment processing number and the name, SSN, driver's license number or other identifying number, and any other information that will assist in identification at a later date. Include any documentation generated during recovery and at the temporary morgue, as part of the interment case file.

4.10. ID Search remains for ID media, i.e. ID tag, clothing name tag, ID card, driver's license, credit card(s), or other billfold items which may contain the name of the individual.. Establish tentative identification based on one or more of the above ID media.

4.11. Form Completion

Complete all blocks on the TIGR form. Use "unidentified" if tentative ID cannot be established. Complete Record of Personal Effects of Deceased Personnel (RPEDP) (See Annex 7), time permitting. PE found on the remains are placed in a plastic bag and attached to the remains for interment. Personnel should ensure that the plastic bag is sealed securely. Do not remove ID tags or ID card from remains.

Complete a standard fingerprint card by printing all available fingers. Ensure that the fingerprint card is placed in the case folder. Place the remains in a remains pouch or wrap with shrouding. Remove one metal tag from the remains and attach it to the outside of the HRP or shroud.

- The assignment of the actual row and space number to the remains should not take place until the remains is at the interment site. Then assign the next available interment site row and space number, i.e., Row 10, Space 6, on TIGR form, in the row and grave blocks.

- Enter the row and space number on the top right hand corner of the fingerprint card and the RPEDP form (see Annex 7). Place the remains in the assigned row and space, in a head to foot relationship to other remains. Place all completed forms in the case folder. Write the name and SSN or Driver's License of the remains on the folder label, along with the processing number.

5. CLOSING THE SITE

When all burials have been completed in each row, the row may be refilled. A bucket loader-type vehicle should be carefully used for refill. Care should be taken not to drive over the rows, even after dirt has been refilled.

Mark the beginning and end of each row with a metal stake. The stake should extend into the ground at least two feet, and two feet should be left above ground. Securely affix a metal tag to each stake indicating the row number. Use a GPS device to determine the location of each row, and record it on TIGR form. All forms and records will be hand-carried by special courier to the OCME.

6.0. SITE CARE UNTIL REOPENED.

6.1. **Security** The site shall remain fenced in with a security guard at all times until the site is reopened. Security is necessary to prevent unauthorized personnel from tampering with the temporary interment location.

6.2. **Contract with a cemetery** If there is going to be a long period of temporary interment (in excess of 6 months), then the County should develop a contract with a nearby cemetery to take care of the grounds, or have the Recreation and Parks Department take care of the grounds until all the remains have been disinterred

6.3. Memorial (Temporary or Permanent) may be located at the Temporary Interment Site.

7.0 DISINTERMENT

7.1. Purpose To provide guidance for the disinterment of remains temporarily interred.

7.2. Responsibilities of the OCME The OCME is responsible to ensure that all temporary interments are disinterred and U.S. remains are returned to PADD. This responsibility is carried out by the County under the direction of the OCME. The OCME is responsible for monitoring, coordinating, and providing special guidance during disinterment operations.

7.3. Trench Disinterment Procedures

Whenever personnel are conducting disinterment operations, workers should wear PPE such as respiratory protection, gloves, aprons or Tyvek type coveralls, and/or other types of PPE in accordance with Arizona Department of Occupational Safety and Health requirements. A State Industrial Hygienist, Infection Control Practitioner, Epidemiologist and a Medical Doctor should jointly make the decision as to the proper PPE.

- Once in the general area of the burial site, the GPS device (in conjunction with maps) may be used to determine the exact location of each row.
- The row may be opened from either end. Using a backhoe and digging with care, the operator may dig down approximately one and one half feet. Multiple rows may be opened simultaneously depending on the availability of equipment. The remaining depth should be dug with hand tools so as not to mutilate the remains.
- Remove the dirt from all sides of the remains carefully. Look for the metal tag that was pinned to the outside of the remains pouch or shroud.
- Match the number on the tag to the TIGR form processing number recorded during interment operations.
- Complete the TIGR form and prepare processing tag in the same manner as in interment operations. Attach this tag to the pouch or shroud.
- If the pouch or shroud is not intact, the soil in the immediate area should be sifted for skeletal anatomy and PE.
- Place remains and pouch on a litter and remove them from the row or interment site. Evacuate the remains to the OCME for processing. It may be beneficial to establish a command post at or near the disinterment site.
- After all rows have been opened and remains removed, refill all rows and return the area as close as possible to the original condition. Report to the OCME when all remains have been disinterred from the interment site. Include the condition of the restored land being vacated in this report. Once a site has been evacuated, the County is responsible for turning the land back to the appropriate host

TAB 1 TO APPDNDIX 6 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

TEMPORARY INTERMENT GRAVES REGISTRATION FORM					Date of Report		Page _____ of _____ Pages		
Name of Cemetery or Interment Site		Location			organization and Team Chief				
Information on Deceased				Organization Delivering Remains	Date/Time Received Remains	Date Time of Interment	Grave Site		
Graves Registration Number	Name	SSN or Drivers License	Next of Kin or Address				Row	Grave	GPS

APPENDIX 7 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

ESTABLISHING A MORTUARY AFFAIRS BRANCH IN THE INCIDENT RESPONSE PLAN

1.0 GENERAL

In 2004, the Department of Homeland Security released the National Incident Management System (NIMS) as required by Homeland Security Presidential Directive (HSPD) -Management of Domestic Incidents and HSPD-8 Preparedness. HSPD-5 established and designated the NIMS Integration Center (NIC) as the lead federal entity to coordinate NIMS compliance.

While most incidents are generally handled on a daily basis by a single jurisdiction at the local level, there are important instances in which successful domestic incident management operations depend on the involvement of multiple jurisdictions, functional agencies, and emergency responder disciplines. These instances require effective and efficient coordination across this broad spectrum of organizations and activities. The NIMS uses a systems approach to integrate the best of existing processes and methods into a unified national framework for incident management. The NIMS framework forms the basis for interoperability and compatibility that will, in turn, enable a diverse set of public and private organizations to conduct well-integrated and effective incident management operations. It does this through a core set of concepts, principles, procedures, organizational processes, terminology, and standards requirements applicable to a broad community of NIMS users.

The NIMS represents a core set of doctrine, concepts, principles, terminology, and organizational processes to enable effective, efficient, and collaborative incident management at all levels. It is not an operational incident management or resource allocation plan. To this end, HSPD-5 requires the Secretary of Homeland Security to develop a National Response Plan (NRP) that integrates Federal government domestic prevention, preparedness, response, and recovery plans into a single, all-disciplines, all hazards plan. The NRP, using the comprehensive framework provided by the NIMS, will provide the structure and mechanisms for national-level policy and operational direction for Federal support to State, local, and tribal incident managers and for exercising direct Federal authorities and responsibilities as appropriate under the law.

HSPD-5 requires all Federal departments and agencies to adopt the NIMS and to use it in their individual domestic incident management and emergency prevention, preparedness, response, recovery, and mitigation programs and activities, as well as in support of all actions taken to assist State, local, or tribal entities. The directive also requires Federal departments and agencies to make adoption of the NIMS by State and local organizations a condition for Federal preparedness assistance (through grants, contracts, and other activities) beginning in FY 2005. Jurisdictional compliance with certain aspects of the NIMS will be possible in the short term, such as adopting the basic tenets of the Incident Command System.

2.0 ADDING A MORTUARY AFFAIRS BRANCH TO THE EXISTING NIMS SYSTEM

Establish a Mortuary Affairs Branch into your community's incident command structure for a pandemic event. The Mortuary Affairs Branch would normally fall under the Operation Section Chief in the Incident Command Structure.

The following organizational charts are suggested for consideration by localities:

Chart 1. Incident Command Structure with Fatality Management Included.

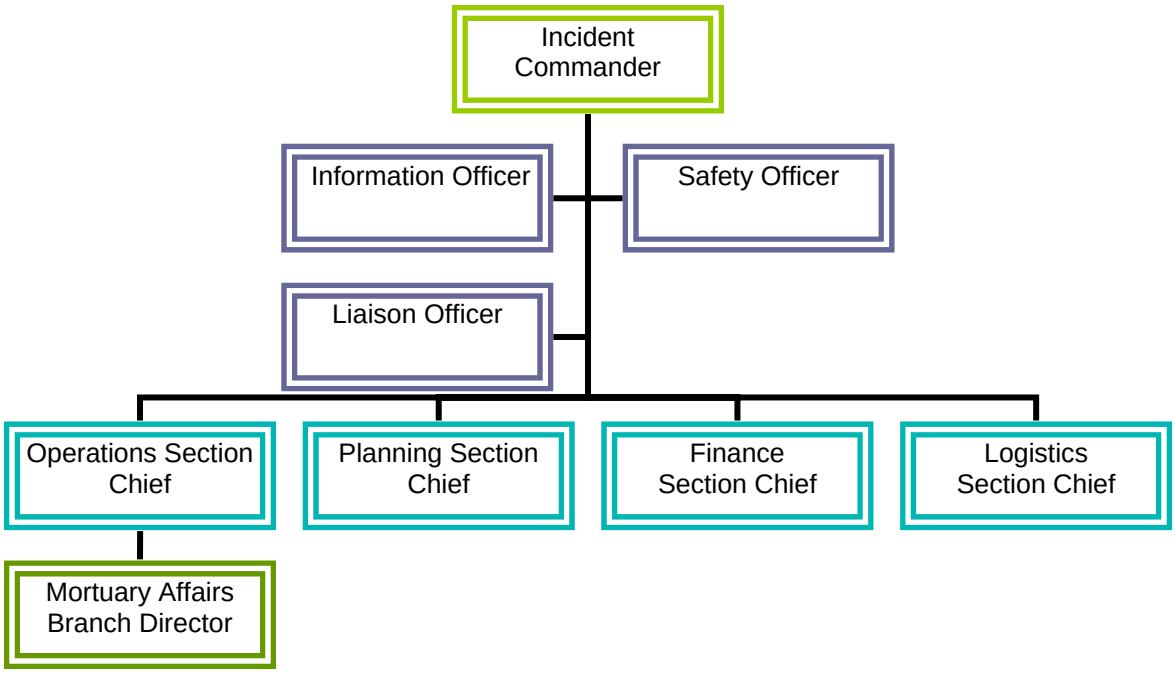
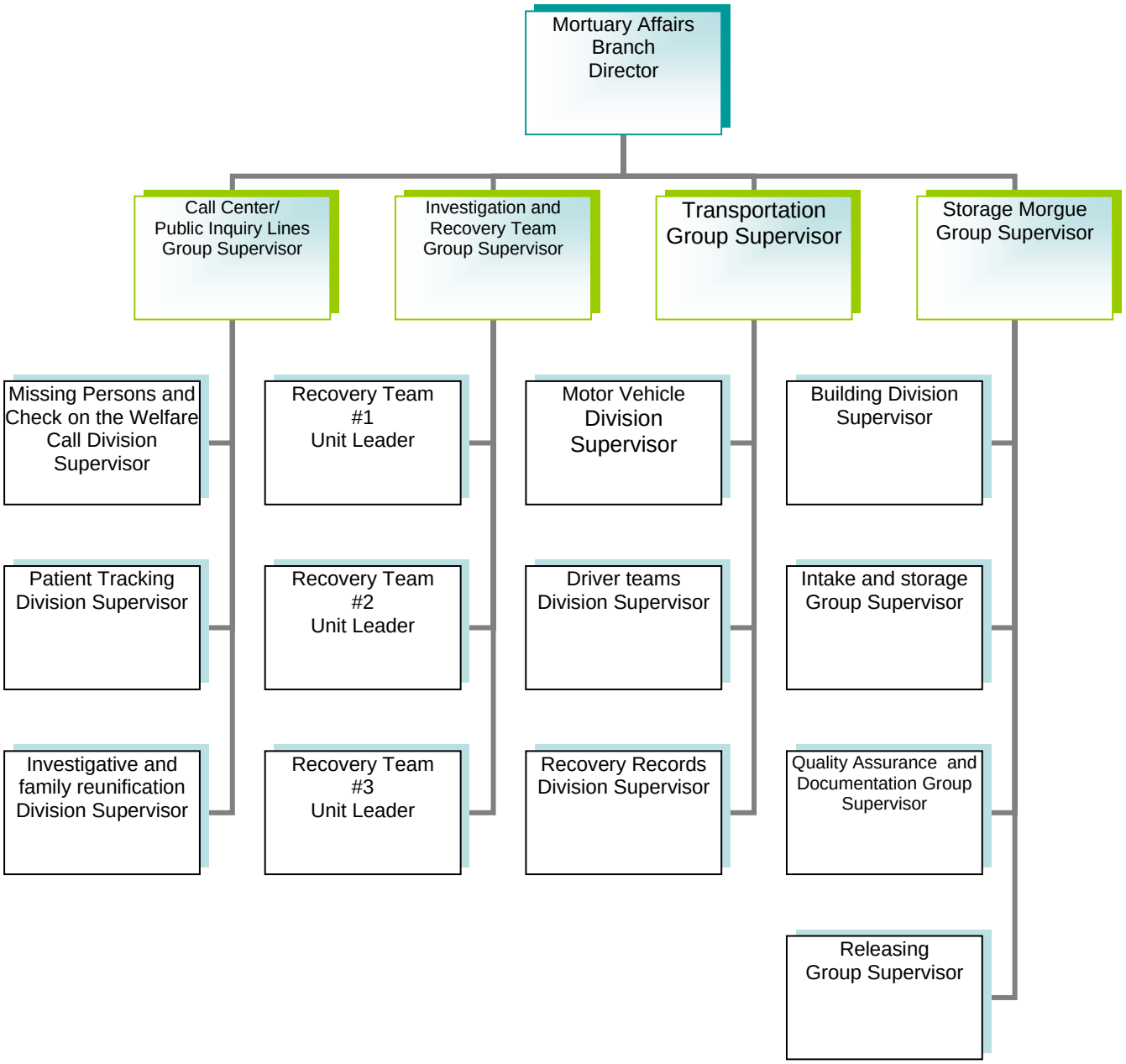


Chart 2. Suggested Mortuary Affairs Branch Structure in a Natural Disease event within ICS



2.1. Duties to be Preformed

Localities or regions should identify the functional tasks required for the circumstances and identify the agencies or personnel required to run the sections or branches.

2.1.1. Mortuary Affairs Branch Director. Responsible for managing all aspects of the Mortuary Affairs Branch mission from the time of activation through the return to normal operations including all resources (e.g., personnel and equipment). Reports directly to the Operations Section Chief.

2.1.1.1. Description of Duties

- Manages and ensures proper and timely completion of the overall MA function of identification and mortuary services for deceased victims. Interacts with the Lead Law Enforcement Agency and Planning Section Chief.
- Ensures that supplies and support necessary to accomplish MA mission objectives and activities are identified, coordinated with the Incident Command System and made known to the Emergency Operations Center at both the local and state level.
- Supervises subordinates.
- Interacts with the Lead Law Enforcement Agency and the private entities of the funeral services in the community.
- Ensures all medical examiner cases encountered are reported to the local and/or district Office of the Chief Medical Examiner.
- Ensures the completion of all required reports and maintenance of records.
- Will coordinate with the PIO for the incident concerning all press releases about the deceased.
- Participates in the after action review.

2.1.2. Call Center/Public Inquiry Lines Group Supervisor. Responsible for the establishment of call-in centers for the reporting of the dead and inquires into the welfare of individuals.

2.1.2.1 *Description of Duties*

- Reports to the Mortuary Affairs Branch Manager
- Receives all reports for missing persons and death related information from citizens, hospitals, and other medical treatment facilities as well as vital records offices.
- Ensures Investigation and Recovery Teams receive all reported scenes of death information
- Ensures the completion of all required reports and maintenance of records especially all missing persons reports which are required to be maintained by law enforcement in accordance with Arizona Statutes.

- Collects all reports of patient admissions and transport for the purposes of clearing the official missing persons list and the reunification of family members.
- Supports the investigative missing persons and family reunification supervisor with data, personnel and records maintenance.

2.1.2.2. *Some Recommendations to Consider*

- A separate line for missing persons and reports of deaths may be utilized to free 911 operators for live safety activities.
- Police have the knowledge, skills and expertise to manage the missing persons units established. They also have a legal responsibility to take reports of missing children without and to submit all reports to the Arizona's Missing Children's Clearing House established, and managed by Arizona State Public safety.
- Police Chiefs and Sheriffs are required to maintain all records of missing persons in accordance with Arizona Statutes.
- Hospitals and other established in-patient medical treatment facilities should be encouraged to visualize patients official government identification cards before admission or treatment, and to report their patients by name and other data to the call center. By centralizing this function, hospitals could be assisted in reuniting families, and the notify the next-of-kin of illness/death. A waiver of Health Insurance Portability and Accountability Act of 1996 (HIPAA, Title II) requirements may be needed. HIPAA required the Department of Health and Human Services (HHS) to establish national standards for electronic health care transactions and national identifiers for providers, health plans, and employers. It also addressed the security and privacy of health data.

2.1.3. **Investigation and Recovery Team Group Supervisor.** Established for non-hospital/medical treatment facility deaths.

2.1.3.1. *Description of Duties*

- Reports to the Mortuary Affairs Branch Manager
- Receives all reports for death related information from Call Center.
- Ensures dispatch of appropriate resources to reported scenes of death
- Responsible for conducting scene investigations into the circumstances of death.
- Responsible for notifying the next-of-kin of death,
- Responsible for collecting demographic data on the deceased, and reporting that data to the Investigative and family reunification unit.
- Responsible for notifying and coordinating with primary care physicians for the completion of death certificates. by the same

- Responsible for reporting all recovered human remains to the Call Center's Investigative and Family Re-unification Unit.
- Recovers the remains from the death scene and coordinates transportation services to the appropriate location.
- Responsible for ensuring each human remain and personal effects bad is tagged with a unique identifier or full name and demographic information

2.1.3.2 ***Investigation and Recovery Unit Recommended Staffing.***

- 1 Search Team Leader
- 2 Evidence Specialists (Photographers and scribes)
- 4 Assistants to recover remains (one designated as Team Leader)
- 1 Safety Officer Assistant

2.1.3.3. ***Physical Considerations Equipment***

- Radios or other communication equipment
- Heavy Work Gloves (leather)
- Nitrile gloves
- PPE (level D) including eye protection (should meet ANSI 287.1)
- Re-hydration supplies, drinking water and light food
- Heavy boots (with steel toe/shank, water resistant)
- Clip boards, pens, paper, and appropriate forms
- Camera kits with film, batteries or battery chargers, memory cards as appropriate
- GPS Unit
- Laptop PC with windows and Microsoft Office Suite
- Tyvek Suits
- Toe Tags and permanent markers or VDH EMS triage tags with bar coded serial numbers
-

2.1.3.4. ***Areas of Concern:***

- For bodies found out in the open, there are no concerns for government agents entering public domain. However, entering of private homes or businesses pose legal issues which should be discussed with the legal department.
- Even during a known and documented Pandemic, deaths must still be investigated by trained individuals to determine if death was caused by natural disease. (no violence, trauma, suspicious circumstances, etc.) and is a function is normally conducted by police agencies at the local level. Local police investigative staff should be included in the local planning process.

- For bodies found in homes, businesses and other private property, a search must be done by an authorized agent, normally law enforcement. If the Government, or a government authorized agent, enters such a facility, plans should be in place to ensure the property is secured or turned over to a legally authorized agent of the victim. Local locksmiths may be useful for entering and securing private property. It is recommended the locality's attorneys be involved in the planning process for recovery team policies.
- Each remain should have an initial examination to ensure there are no apparent injuries on the deceased. If injuries are found, the police should be notified immediately (if not already present) and the scene should be protected from further disruption or intrusion.
- Each decedent should have an individual case file (or investigative report as done by police) which is started in the "field" and retained by the local government. As part of the case file, field notes should be taken in all circumstances. The notes should allow for any agency to have enough information to allow for a re-construction of the circumstances and event in case the death becomes suspicious or questioned at a later date. At a minimum, the following information should be completed:

    - First, Middle, Last Name & Suffix
    - Sex, Race/Ethnicity, Color of Eyes, (Hair, Height, and Weight if unidentified)
    - Home Address, City, State, Zip Code, & Telephone #
    - Location of Death and Place Found (place of origination of the body before movement to the hospital or other facility)
    - Place of Employment and Employer's Address
    - Date of Birth, Social Security Number (or Driver's license number) & Age
    - Next-of-Kin (or Witness) Name, Contact # & Address
    - Name of primary care physician as indicated by family, witnesses, bills or insurance documents.
    - List of existing prescriptions found at the scene and the name of the physician who prescribed them.
    - Witness statements and all their contact information.
    - Names and contact information for investigators, drivers, or other "response" personnel for each case.
    - Complete list of personal effects (with photographic documentation if possible) all which accompany remains to a governmental morgue.

2.1.4. TRANSPORTATION GROUP: Responsible for the resources and personnel required for the pick-up and transportation of human remains from places of death to the cold storage facilities or the Funeral Homes.

2.1.4.1. Description of Duties

- Reports to the Mortuary Affairs Branch Manager
- Acts on the requests from the Investigation and Recovery Team Director and/or the hospital morgue facilities.
- Ensures dispatch of appropriate resources to provide respectful removal of human remains
- Document all human remains and accompanying personal effects and Field paperwork.
- Checks and logs each toe tag on all remains collected and items of personal effects.
- Responsible for transport and delivery of remains, personal effects and documentation to the appropriate morgue.
- Closely coordinates with the Logistics Branch to ensure adequate supplies are readily available.

2.1.4.2. Recommended Staffing

- Transportation group supervisor
- 3- teams of 3-Transportation Unit Specialists (one designated as Team Leader)
- Transportation Dispatcher
- Motor Vehicle Division Supervisor
- Drivers

2.1.4.3. Physical Equipment

- Radios or other communication equipment
- Heavy Work Gloves (leather)
- Latex or Nitrile gloves
- PPE (level D) including eye protection (should meet ANSI 287.1)
- Re-hydration supplies, drinking water and light food
- Heavy boots (with steel toe/shank, water resistant)
- Clip boards, pens, paper, and appropriate forms
- Human Remains Pouches of various sizes (infant, child, adult, adult X-Large)
- Toe Tags or VDH EMS Triage Tags
- Motor vehicles for remains transport (vans, station wagons, etc.)
- Waterless hand sanitizer
- Permanent Markers
- Church Carts" or Litters for body removal

2.1.4.4. Areas of Concern

- If the family of the deceased is available, they can identify which funeral home they wish to hire for their services. If possible, that funeral home or it's sub-contractor will provide transportation services from the place of death to the appropriate morgue facility.

- If NOK is not available, or if they cannot decide on a funeral home, communities, usually through the police department, have contracts with licensed funeral directors or removal services to transport remains which the locality must move because of criminal or suspicious activities, or next of kin is not available. In a pandemic event, there is a greater chance that Next-of-kin will be difficult to find and contact because they too may have been affected.
- In a pandemic event, funeral homes and transporters could be over helmed and may require augmentation from the local or regional government.
- If vehicles are to be used for collecting remains certain guidelines should be observed.
  - The vehicle shall have all markings removed if it is a commercial business.
  - The vehicle shall be covered so the people or the press cannot see into the bed of the vehicle.
  - Bodies shall not be stacked in the vehicle under any circumstances.
  - The vehicle must be refrigerated. Air conditioning will not suffice.
  - Loading and unloading of the vehicle shall be accomplished discretely. Tarps or other ways of blocking the view may be used. The top must also be covered to prevent observance from the air.
  - The interior area used to store bodies should have a double plastic lining
  - After use, or if the plastic lining is grossly contaminated and must be changed out, disposal should be in accordance with the Occupational Safety and Health Administration's Bloodborne Pathogens Standard (29 CFR 1910.1030).
  - Shelving should not be wood, or materials that bodily fluids may be absorbed. Metal or plastic shelving that may be cleaned off is acceptable. A method of securing the body within the shelf should be required.

2.1.4.5 Persons coordinating transportation should set up a schedule with hospitals for remains transfer to the storage morgue. Schedules should be set up and operate on a 24 hour basis. State and Federal Department of Transportation (DOT) Requirements must be satisfied for the transportation of human remains.

2.1.4.6. Death certificates will most likely be required for transportation across state lines and will require approval of receiving state(s). Transportation Across international lines (Canada and Mexico) may require State Department approval and the receiving nation's approval.

2.1.4.7. Quarantine measures may affect the movement of human remains. For example, can remains move into, through, or out of a quarantined area? If movement is prohibited then temporary storage must be developed. While a quarantine is designed to protect public health, plans must still be made for removing the dead.

2.1.5. Storage Morgue Team Responsible for the set-up and management of the storage morgue for the locality or region. Receipts, stores, and releases human remains and their personal effects to the legal next of kin (or their funeral home), or legally authorized person(s)/agency for final disposition.

2.1.5.1. ***Description of Duties***

- Reports to the Mortuary Affairs Branch director
- Checks the documentation on remains, personal effects and accompanying paperwork to ensure all data is consistent for remains.
- Maintains a complete log of all remains and personal effects being stored and released from the facility.
- Documents s all human remains and accompanying personal effects and documentation.
- Checks and logs each toe tag on all remains collected and associated personal effects.
- Receives and files the signed NOK's release of human remains and funeral home contract forms
- Ensures each remain and each bag of personal effects are released with the funeral home or family signature.
- Maintains a file of all signed release documents.

2.1.5.2. ***Recommended Staffing***

- 1-Storage Morgue Manager
- Refrigeration Specialists
- 3-Facility Maintenance Team (with one facility manager)
- 3-Admitting team and documentation specialists
- 1-Releasing Supervisor
- 6-Body Escorts

2.1.5.3. ***Equipment***

- Tables
- Chairs
- Laptops with windows and Window's Office Suite Software
- Telephones
- Fax Machines
- Paper
- Gloves
- N95 Respirators
- Tyvek suits Various sizes
- Human Remain Pouches in various sizes in case of damage to existing bags
- Gurneys, church carts or litters to move remains
- File cabinets
- Log Books

- Photocopier
- Bar code label makers and readers

2.1.5.4. *Planning Considerations:*

- Additional temporary cold storage facilities may be required during a pandemic.
- for the storage of corpses prior to their transfer to funeral homes. Cold storage facilities require temperature and biohazard control, adequate water, lighting, rest facilities for staff, and office areas and should be in communication with patient tracking sites and the emergency operations center. A cold storage facility must be maintained at 34 – 37^{o} F. However, corpses will begin to decompose in a few days when stored at this temperature.
- If the legal Next-of-Kin (NOK) is not going to have the remains cremated, plans to expedite the embalming (if desired by the NOK) process should be developed since, in the case of a pandemic, bodies may have to be stored for an extended period of time. In counties where a timely burial is not possible due to frozen ground or lack of facilities, corpses may need to be stored for the duration of the pandemic wave (6 to 8 weeks).
- It is recommended communities work together in a regional manner. This is especially true when identifying and acquiring refrigeration resources, as there will be high demand and few resources. Each region (or county) in the Northern part of the state should make pre-arrangements for cold storage facilities based on local availability and requirements. The resource needs (e.g. human remains pouches) and supply management for cold storage facilities should also be addressed. The types of temporary cold storage to be considered may include refrigerated trucks, cold storage lockers or refrigerated warehouses. Refrigerated trucks can generally hold 25-30 bodies without additional shelving. To increase storage capacity, temporary wooden shelves can be constructed of sufficient strength to hold the bodies. Shelves should be constructed in such a way that allows for safe movement and removal of bodies (i.e., storage of bodies above waist height is not recommended but may be required (ensure enough staffing is available to avoid injuries). To reduce any liability for business losses, using trucks with markings of a supermarket chain or other companies should be avoided, as the use of such trucks for the storage of corpses may result in negative implications for business. If trucks with markings are used, the markings should be painted or covered over to avoid negative publicity for the business.
- Using local businesses for the storage of human remains is not recommended and should only be considered as a last resort. The post-pandemic implications of storing human remains at these sites can be very serious, and may result in negative impacts on business with ensuing liabilities.

- There should be no media, families, friends or other onlookers permitted on the temporary morgue site. Families should make arrangements with their funeral homes to conduct viewings of the remains at the home or medical facility of death, prior to removal, at the grave site or at the crematory. (If responders can take a facial photograph, when appropriate for viewing, and keep the photo in the case files, the photo could be utilized to meet families needs of viewing or viewing for identification purposes.)

3.0. HOSPITAL AND/OR MEDICAL TREATMENT FACILITY DEATHS.

Decedents who die in medical treatment facilities will normally have a confirmed identification. However, since families and friends do share insurance company cards with each other, and since unknown individuals may come into a hospital, hospitals should ensure at least a government issued photographic identification confirmation process is in place before a death certificate is certified by a primary care physician.

Treating physicians in the medical treatment facilities should sign the death certificates for their patients and release the death certificates with the remains to the family's funeral home with the body within 24 hours of death.

To ensure appropriate death certification occurs at medical treatment facilities, a position could be established for the sole purpose to ensure death certificates are completed and certified.

If there is any doubt the person signing the death certificate should review Arizona Department of Health Services, Office of Vital Records, Death Certificate Processing, Completing the Cause of Death Section of the Arizona Death Certificate, Deaths To Be Referred To the Medical Examiner: Arizona Revised Statute (A.R.S.) § 11-593, Reporting of certain deaths; autopsies; failure to report; classification and A.R.S. § 36-325 Death certificate registration; moving human remains; definition Article 3. Duties Of Person Responsible For Death Records; Postmortem Procedures. R9-19-301. Completion of Medical Cause of Death and Manner of Death Sections of Death Certificate.

APPENDIX 8 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

PERSONAL HEALTH AND SANITATION

1.0. Purpose To provide personal health and sanitation practices which are to be used when conducting mortuary affairs.

2.0. Overview This appendix provides the personal health and sanitation practices which individuals should follow when handling remains. Personal health and sanitation practices are important in the daily operation of any mortuary affairs facility. Handling remains in various stages of decomposition may result in medical hazards. Infectious organisms may be associated with human remains and the areas where remains are held or processed. The necessary handling of remains during receiving, processing, and evacuation operations may cause these organisms to spread from body openings. Therefore, each mortuary affairs activity needs to ensure that strict personal health, personal hygiene, and sanitation procedures are constantly followed. The successful implementation of personal health and sanitation procedures will prevent the facility from becoming a health and morale problem to MAS personnel and other units in the nearby vicinity by preventing the following.

2.1. The spreading of diseases from human remains to personnel working in, or located at, a mortuary affairs facility.

2.2. The contracting of diseases from the mortuary affairs facility's environment (i.e., walls and floors, protective clothing, equipment and supplies that are used to handle or process remains) to individuals who work in, visit, or are located at a mortuary affairs facility.

2.3. The spread of a disease from an individual who has contracted, or is a carrier of, a disease to other susceptible individuals with whom the infected individual comes in contact.

3.0. Guidelines and Procedures

3.1. To reduce the possibility of becoming infected when dealing with remains, personnel conducting mortuary affairs functions should adhere to the following health and sanitation guidelines:

- Always wear disposable surgical or rubber gloves when handling human remains. Discard the gloves after each use, especially when the remains are known to have an infectious disease.

- Always wear an outer protective garment, preferably one which prevents the penetration of liquids (i.e., a rubber or plastic wrap-around apron or gown).
- Wear a protective respirator designed to prevent inhalation of infections or hazardous particles.

- Wear protective head and shoe coverings, especially in handling known infectious disease cases.

- Rinse gloved hands in appropriate disinfectant between actual uses during preparation of remains.

- Scrub hands and forearms with a suitable medicated soap or disinfectant after handling the last remains.

- Shower, cleansing the entire body surface, including shampooing of the hair at the end of the day.

- Incinerate all disposable protective clothing, bandages, dressings, sheets, towels, and other items coming into direct contact with the remains or body fluids.

- Take necessary steps to circulate the air in the entire facility, especially when working in an enclosed facility.

- Clean and disinfect all supplies, equipment and facility surfaces that came in contact with the remains or body fluids.

3.2. In addition to health and sanitation measures, mortuary affairs personnel should take the following medical precautions:

- Receive a thorough, routine, physical examination, including chest x-rays, every six months.

- Adhere to a strict program of routine immunizations to include those immunizations required for all contagious and/or infectious diseases common to the area of operations. , All mortuary affairs personnel should also be vaccinated for hepatitis B and C.

- Have periodic blood tests to check for the human immunodeficiency virus and other blood-related diseases.

- Contact a physician for proper preventive treatment prior to handling remains with a known infectious disease.

APPENDIX 9 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

STANDARD OPERATING PROCEDURES FOR DECONTAMINATION OF ALUMINUM FLOOR REFRIGERATED TRAILERS

1.0. General History

At the present time we were unable to receive the proper documentation or clarification regarding policies from Clean Harbor on statements of " the decontamination process shall meet and/or exceed the Department of Labor (DOL) and agreement with the recommendation of U.S. Public Health Service (USPHS) Centers for Disease Control and Prevention (CDC) method for acceptable disinfecting/sterilization possibility contaminated waste" which is stated on the bottom of Clean Harbor's Contract.

The Disaster Portable Morgue Unit (DPMU) Logistics did contact, by telephone, Dodge Chemical Company of Ohio (Embalming Chemical Company) and speak directly with one of their scientists Mark J. De Benedetto, PhD. Dodge Company stated that a 100% solution of sodium hypochlorite "commonly known as household bleach" is an effective cold disinfecting/sterilization practice. The process explained by Mark De Benedetto was, however, different than the process that Clean Harbor incorporates. DPMU Logistics learned that a 100% solution of sodium hypochlorite should be placed on the interior of the trailer after being dry swept and pressure washing of interior is complete. The 100% solution of sodium hypochlorite is then allowed to air dry on the interior of the trailer. This is an effective means of cold sterilization.

In an article from the Dodge Company, "Glutaradehyde as a Disinfectant" in June 2003, it states that bleach "is not tuberculocidal at low use dilutions (1:10, 1:100) which is often employed, however, A 60% dilution of household bleach (3:15% final concentration) is required for tuberculocidal efficacy." This raises the question of the effectiveness of a 1:10 dilution of sodium hypochlorite used in disinfection/sterilization of refrigerated trailers to be returned for use of commercial transportation.

DPMU Logistics' reason for contacting embalming chemical companies are that they supply information and chemicals for disinfecting/sterilization to funeral homes in regards to their embalming preparation rooms and instruments used in embalming.

DPMU Logistics found information through the Internet on an article from Champion Company (Embalming Chemical Company) entitled "Bleach in the Embalming Rooms: Overrated and Overused Part 2" by: James H. Bedino, Chemist/Dir/Research. In this article Bedino states, " 1:10 dilution of bleach are ineffective against HIV disinfection at times of 5 minutes or less". "Even 1:1 concentrations of bleach takes up to 30 seconds for HIV disinfection". Also, in our search for information, we have yet to find a suitable means of disinfections of CJD (Creutzfeldt-Jakob Disease). In this article it is stated, "Most labs find bleach is effective and usable for CJD and the evidence points to bleach as an effective disinfectant for CJD". This leaves many uncertainties as to the effect if TB, CJD or HIV is actually disinfected through a 1:10 dilution of bleach.

DPMU Logistics has taken on the challenge of finding the most effective way for disinfection/sterilization of refrigerated trailers for use in the holding and/or the transportation of human remains. Therefore, it is the recommendation of the DPMU Logistics that the refrigerated trailers that are used for the holding and/or the transportation of human remains are cleaned and disinfected to the closest standards that are available at this time. It is also the recommendation of the DPMU Logistics that these refrigerated trailers shall not be placed back into operation for commercial transportation after being used for mortuary operations (holding and/or human remains).

This SOP contains the latest information on truck decontamination and will be updated as the situation changes.

2.0. Standard Operating Procedures For Decontamination of Aluminum Floor Refrigerated Trailers

Cleaning of the Aluminum Floor refrigerated trailers may proceed after the trailer is emptied of human remains and shelving units. Plastic of 6 mil thickness shall be placed at the door openings of the refrigerated trailer extending at least 3 feet beyond the width of the trailer opening and 3 feet under the actual end of the trailer. The plastic should extend at least 10 feet to 12 feet from the bumper of trailer outward. This is to collect all debris that is swept from the trailer.

2.1. Personal Protection Equipment (PPE) requirements

Personnel that will be performing the actual decontamination within the contaminated trailer will wear as a minimum the following NIOSH approved PPE:

- Level C or higher.
- Air purifying respirator or powered air purifying respirator equipped with acid gas (white band) or organic vapor/acid gas (orange band) cartridges.
- Full hooded Tychem coveralls or a similar chemical resistant suit that is waterproof and impervious to sodium hypochlorite (household bleach).
- Non-skid chemical proof or HAZMAT steel toed safety boots.
- Outer heavy nitrile or butyl rubber (minimum 0.011 gauge thickness) gloves, inner nitrile gloves and optional cotton glove liners.
- All seams will be taped with ChemTape or other chemical resistant tape designed as part of the PPE ensemble (NOT Duct Tape) .

2.2. Establishment of a “Hot Zone”.

Due to the hazardous nature of sodium hypochlorite, a hot zone perimeter should be set up under the direction of a Safety Officer or Industrial Hygienist. The perimeter should be large enough so that vapors and mists from the cleaning process are at safe levels to the public and other workers.

2.3. Cleaning before Decontamination.
The trailer shall be swept out thoroughly with a dry push broom with all contaminates swept on to the plastic. After the trailer has been thoroughly dry swept and all contaminates are on the plastic, sweep all contaminates into a pile and place all contaminates in a proper biohazard container for disposal.

After trailer has been dry swept and all contaminates placed in biohazard containers, using a hand operated pressure sprayer, apply a straight household bleach solution to the interior ceiling, walls, floor and doors of the trailer. Start at the front of the trailer and work from the ceiling, down the walls to the floor of the trailer, towards the back "the rear doors".

The intake opening for the refrigeration system should also be sprayed while the refrigeration system is operating and cycling in order to thoroughly clean the system.

After a 5.25% Sodium hypochlorite solution, diluted 1:10 with water, has been applied and the trailer has been completely saturated, use a pressure washer with a minimum of 1500 psi, to spray the interior of the refrigerated trailer. Spray starting in the front with the ceiling, walls and finally the floor to remove all loose contaminates. Spray a second time using the same procedures. There may be need of a bucket and brush to remove any heavy stains from interior of trailer.

NOTE: Not all commercial bleach (sodium hypochlorite) is 5.25%. Commercially available bleaches range from 3% to 7%. Be sure to choose the correct percentage.

All water must be contained; most refrigerated trailers have drain holes in the front and rear of the trailer within the floor. A hose may be attached to drain holes and placed in a containment system to collect all possible contaminated waste. All wastewater from the cleaning process must be disposed of in liquid biohazard containers for proper disposal.

2.4. Decontamination Using a Solution of 5.25% Sodium Hypochlorite:
After the trailer has been thoroughly sprayed, as in section 2.3, and all material has been removed to the plastic, reapply a light misting of a 5.25% Sodium Hypochlorite solution using the hand operated pressure sprayer *on low pressure* to the interior of the trailer. Allow the trailer to air dry with the doors left open until bleach odor has dissipated and the chlorine is at a non detectable level. The trailer must remain wet with the bleach solution for a minimum of 20 minutes (using CDC disinfection guidelines).

After the trailer has been fully decontaminated, be sure the refrigerated unit has been turned on with air following throughout the trailer. Apply a number of light mists of 2 to 3 sprays from the pressurized sprayer directly into the intake of the refrigerated unit to clean the unit of any contamination. Allow the refrigerated unit to run a minimum of 10 minutes before shutting unit off.

2.5. Cleanup and Disposal

All wastewater gathered within the plastic barrier shall be placed in liquid bio hazard containers for proper disposal and all plastic sheeting shall be disposed of in proper bio hazard containers for proper disposal. Personnel's PPE shall also be placed in proper biohazard containers after decontamination as been fulfilled. Disposal of brooms, brushes and any other equipment that is unable to be decontaminated should be disposed of properly within a biohazard container. After decontamination of trailer and affected area, and proper disposal of PPE's, always wash hands with a disinfectant soap.

If followed according to Standard Operating Guidelines for Decontamination of Aluminum Floored Refrigerated Trailer, the decontamination process shall meet and/or exceed the Department of Labor (DOL) and in agreement with the recommendation of U.S. Public Health Service Center for Disease Control method for acceptable disinfecting/sterilization of possibly contaminated waste. This, however ,does not constitute that this trailer may be used again for use of transportation of food and/or food related products.

APPENDIX 10 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

MYTHS SURROUNDING FATALITY MANAGEMENT

Myth 1: ***It is best to limit information to the public on the magnitude of the tragedy.***

Reality: Restricting the public to information during a disaster creates a lack of confidence in, and distrust of, our government by the general population .

Myth 2: ***Because a Pandemic event may also cause a mass fatality event, the Office of the Chief Medical Examiner is in charge of all the dead bodies and the Localities do not have a role in human remains management.***

Reality: The OCME does not have jurisdictional authority over naturally occurring disease deaths. Physicians are required to sign death certificates for the patients they treated. All licensed physicians in Arizona are authorized to sign death certificates for their patients who die of naturally occurring diseases; there is no requirement for the OCME to assume jurisdiction over the remains. The most efficient plan to manage the deaths is to keep the remains available (locally) to the physicians, families and the funeral service personnel who manage human remains.

Also, not all counties have Medical Examiners; some use contract Medical Examiners, while others contract with different counties for Medical Examiner services.

Myth 3: ***The dead bodies of persons who die from Pandemic Influenza events will pose the threat of generating disease and causing epidemics.***

Reality: "If highly pathogenic H5N1 Avian Influenza becomes easily transmittable from person to person, viral spread from dead bodies to people handling the remains is possible, but unlikely, to be a major contributor to additional cases. Personnel handling remains of patients who die of H5N1 Avian Influenza are assessed to be at minimal risk for infection." (Care and Disposition of Remains and Disposition of Personal Effects, Army Regulation 638-2, 22 January 2002)

Myth 4: ***The fastest way to dispose of bodies and avoid the spread of disease is through mass graves or cremations. This can create a sense of relief among survivors.***

Reality: The risk of disease from human remains is low and should not be used as a reason for mass graves. Mass graves do not allow individual family members to grieve and perform the religious or final acts for their loved ones as individual, private ceremonies. Cremations may violate certain ethnic or religious practices resulting in increased anguish and anger for the survivors.

Myth 5: ***It is impossible to identify a large number of bodies after a tragedy.***

Reality: With the advancements in forensic procedures such as fingerprinting and DNA technology, identification of human remains has become much more precise. Visual identification and comparison can, and have been, utilized in "normal" death cases. However, there are circumstances where scientifically based identification methods must be applied such as fingerprints, dental, medical implants, etc. Law Enforcement and Medical Examiner staffs can apply forensic studies on individual identification cases when needed. The complications in forensic studies lie in the fact that ante-mortem records and samples are required for comparisons.

Myth 6: ***Eliminating the requirements to complete and certify death certificates for disaster victims will speed up the healing process for the victim's families.***

Reality: These documents are required to collect insurance, settle estates, award guardianship of minors and ownership of property, re-marriage, as well as many other legal issues that will benefit survivors. Failure to properly document and certify an individual's death will cause severe hardships on the surviving family members.

Myth 7: ***The Office of the Chief Medical Examiner runs and operates the Arizona Funeral Directors Association, the crematories and cemeteries in the State.***

Reality: The AzFDA and other human remains management companies are privately owned and operated.

Myth 8: ***The OCME mandates to families how they must dispose of all human remains following a disaster.***

Reality: The authority and directions of any next of kin shall govern the disposal of the body. However, ADHS, in consultation with the Governor, shall have the authority to determine if human remains are hazardous to the public health. If the Commissioner determines that such remains are hazardous, the State, with direction from the ADHS Director, shall be charged with the safe handling, identification, and disposition of the remains, and shall erect a memorial, as appropriate, at any disposition site. For the purposes of this section, "hazardous human remains" means those remains contaminated with an infectious, radiological, chemical or other dangerous agent. It is not anticipated that an Influenza strain will meet the criteria of "hazardous" because there has never been an influenza strain which has in the past. However, since we do not know what will cause pandemic, normal precautions should always be followed.

Myth 9: ***During a known Pandemic Influenza event, all deaths can be assumed to be from the PI disease process and no medico-legal death investigations are necessary.***

Reality: During a PI event, communities will experience cases where their citizens die from accidents, suicides, homicides, and sudden unexplained deaths which are NOT related to the PI event. Investigations into each death by community resources are necessary to differentiate between deaths from PI verses other activity (violence, other disease related, suicide, etc.)

Myth 10: ***All deaths occur in hospitals***.

Reality: Data collected from Arizona Vital Records show fifty-five percent of the deaths in Virginia are outside of medical treatment facilities. Local police, fire and/or EMS are normally involved in each of these deaths to verify that death has actually occurred and to ensure the death is from a natural disease and not a result of suspicious or violent activity or in other words a Medical Examiner's case.

Myth 12: ***HIPAA regulations prevent the Red Cross, medical staff and institutions from releasing information to the public, police, funeral directors and other governmental agencies even during disasters.***

Reality: Under the exceptions portion of the HIPAA regulations, the following paragraphs are presented verbatim:

> a. Funeral directors. A covered entity may disclose protected health information to funeral directors, consistent with applicable law, as necessary to carry out their duties with respect to the decedent. If necessary for funeral directors to carry out their duties, the covered entity may disclose the protected health information prior to, and in reasonable anticipation of, the individual's death.
>
> b. Coroners and medical examiners. A covered entity may disclose protected health information to a coroner or medical examiner for the purpose of identifying a deceased person, determining a cause of death, or other duties as authorized by law. A covered entity that also performs the duties of a coroner or medical examiner may use protected health information for the purposes described in this paragraph.

Following Hurricane Katrina, CDC and the U.S. Public Health Service conceded that law enforcement officials may also receive patient's demographic data for the purposes of solving missing persons reports in a disaster.

APPENDIX 11 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

MORTUARY AFFAIRS UNITS, CAPABILITIES, AND TEAMS

I. MORTUARY AFFAIRS (MA) UNITS AND CAPABILITIES

1.0 JOINT OR MULTI SERVICE MA ASSETS

1.1 Armed Forces Medical Examiner System (AFMES) establishes a department of Defense (DOD) standard system for medicolegal investigations. The AFME and OAFME are located at the AFIP.

The AFME is notified expeditiously by the casualty branch, safety center, or investigative agency of the death of any service member on active duty or active duty for training, and of any individual, regardless of status, who dies on a military installation, vessel, or aircraft or while enrolled in the Personnel Reliability Program. Such notification will be by electronic mail or telephone. Upon determination by the AFME that a medicolegal investigation is necessary, the notifying activity is responsible for advising appropriate command authority that AFME personnel will arrive to participate in the investigation.

The AFME has authority to order medicolegal investigations, including an autopsy of the decedent, for any service member on active duty, or member of the Reserve Components on active duty for training, whose death occurs in an area where the Federal Government has exclusive jurisdictional authority and if circumstances surrounding the death are suspicious, unexpected, or unexplained. At locations with a military medical treatment facility (MTF), the AFME will provide consultative services to the MTF and/or local operational commander(s) in determining the necessity and/or extent of medicolegal investigation.

Final determination on the necessity of a medicolegal investigation extends to medicolegal investigations rests with the Armed Forces Medical Examiner as specified in the DOD Directive. Where no medical or command authority is present, the AFME will determine the need or extent of medicolegal investigation. All deaths with medicolegal significance will have a medicolegal investigation and will include an autopsy.

In areas where the AFME believes a medicolegal investigation needed, the AFME can seek the assistance and cooperation of the local authorities.

1.2. Armed Forces Medical Examiner has primary jurisdiction of active duty fatalities in exclusive federal jurisdictions and secondary jurisdiction in concurrent, local, and foreign jurisdictions. AFME coordinates and certifies identification of remains. AFME also conducts autopsies, determines cause and manner of death, and signs death certificates.

1.3. Armed Forces Institute of Pathology (AFIP). The AFIP is a tri-service agency of the Department of Defense specializing in pathology consultation, education, and research. AFIP maintains 22 subspecialty departments with a combined workforce of over 820 personnel, including over 120 pathologists and other scientists. A number of departments deal with larger, more encompassing disciplines such as the Department of Infectious and Parasitic Diseases, the Department of Veterinary Pathology, the Office of the Armed Forces Medical Examiner, and the Center for Medical and Molecular Genetics.

2.0. U.S. AIR FORCE MA ASSETS

2.1. 512th Memorial Affairs Squadron runs the military's largest mortuary, a 73,000-square-foot, state-of-the-art facility, at Dover AFB. The full-time mortuary staff is made up of 8 workers; however, the staff is augmented by more than 40 reservists and active-duty military personnel depending upon the MA requirement. The entire mortuary process can be completed in as little as six to eight hours. Complicated cases may extend for several weeks in an attempt to make a full identification. Technicians photograph the remains, compare dental records and look for a match in FBI fingerprint databases. DNA is the final test to ensure that the remains have been labeled correctly. ***This unit stays with the Dover Facility and normally does not deploy.***

2.2. Air Force Bases. Most Air Force Bases have a cadre of 26 people in the Services Squadron that are trained in Search and Recovery with minimal training in mortuary affairs. These personnel are used to respond to an Air Force aircraft crash site where they will search for remains and secure the crash site. There is potential to use these personnel to assist civilian authorities under MACA.

2.3. Air Force Services Agency Mortuary Affairs Unit. The Air Force also has a cadre of 8 licensed morticians that are the Air Force Services Agency Mortuary Affairs Unit (actually a branch off the Pentagon) stationed in San Antonio, Texas. These morticians will deploy to a crash site and assist in USAF mortuary affairs tasks. They currently rotate in and out of Iraq providing assistance to the Army MA units currently deployed in that theater.

3.0. U.S. NAVY MA ASSETS:

3.1. Mobile Medical Augmentation Readiness Team (MMART) is a Navy medical deployment augmentation program for operational platforms and contingencies. MMART has the additional Chemical, Biological, Nuclear/ Radiological and Enhanced Environmental (CBRE) capabilities. The MMRT can be task organized for fewer personnel but has a twelve-member core detachment necessary to provide coverage to all technical specialties supported by the full team. The current manning utilized by U.S. DOD units with similar and overlapping mission requirements in the areas of preventive medicine, CBRE, and laboratory capabilities was examined. MMART Organization., MMART teams are designed to be small, task-organized, flexible units that can be easily expanded to respond to specific taskings.

3.2. Special Psychiatric Rapid Intervention Team (MMART-SPRINT) The MMART-SPRINT provides short-term mental health and emotional support immediately after a disaster with the goal of preventing long-term medical psychiatric dysfunction or disability. The team may provide educational and consultative services to local supporting agencies for long-term problem resolution.

3.3. Preventive Medicine/Vector Control Team (MMART-PREVMED) The MMART-PREVMED provides preventive medicine and vector control capability and may be task organized and deployed to assess, prevent, and control potential or actual health threats in support of deployed operating forces, humanitarian assistance, and/or disaster relief operations. The team is task organized for each specific mission.

3.4. Chemical/Biological Assessment Team (MMART-CBAT) The MMART-CBAT provides assessment capability and may be task organized and deployed in support of an operational or contingency requirement that has been affected by chemical or biological warfare (CW/BW) agent exposure. The MMART-CBAT may also be deployed to support humanitarian assistance or disaster response operations involving CW/BW agent involvement.

3.5. Chemical/Biological Assessment Team (MMART-CBAT)) The MMART-HST cares for non-combatant casualties or patients in response to migrant/refugee processing and support, natural disaster relief, non-combatant evacuation, and exposure to chemical or biological hazards. The MMART-HST is also available for enhancement of MTF capabilities.

4.0. U.S. MARINE CORPS MA ASSETS

4.1. 4TH FSSG Graves Registration Company. The reserve unit is the Graves Registration Platoon, H&S Company, H&S Battalion, 4th FSSG. The graves registration platoon's T/O consists of 1 Marine officer, 42 Marines, and 3 enlisted Navy embalmers. The platoon conducts tactical search and recovery operations in hostile, benign, and/or contaminated environments; recovers personal effects and records personal information; conducts temporary interment/disinterment; and conducts temporary burials, if necessary, of human remains. The platoon must also be prepared to establish and operate casualty collection points, supervise theater evacuation point operations, and coordinate the transfer of remains and personal effects of deceased service members.

4.2. Chemical Biological Incident Response Force Mission (CBIRF) The CBIRF is in the Capitol Region and remains in the Capitol Region. The unit does not deploy. The CBIRF is prepared to respond to no-notice WMD incidents in the Capitol Region.

- Organizational Structure: The CBIRF is composed of 350 to 375 USMC and USN personnel and consists of three elements. In garrison, the CBIRF is under the OPCON and administrative control (ADCON) of the 4th Marine Expeditionary Brigade

Antiterrorism, II Marine Expeditionary Force (II MEF), and Marine Corps Forces, Atlantic (MARFORLANT). The CBIRF is an incident-response force that executes CM operations in support of a CINC or an LFA. The CBIRF has limited organic equipment decontamination capability but does not conduct detailed equipment decontamination (DED) or area decontamination operations

- The majority of CBIRF personnel are trained in Level A and B operations. TIC and TIM are potential threats to US forces, even outside the continental US (OCONUS), since littoral areas include port and industrial complexes where storage and manufacture of these materials are common. The CBIRF also has state-of-the-art monitoring and detection equipment used to identify, sample, and analyze NBC hazards, including TIC and TIM as well as oxygen (O2) and lower explosive levels (LEL).

5.0. U.S. ARMY MA ASSETS

MA assets range from the unit's own search and recovery teams to the Quartermaster MA Company (EAC). The type of asset required will depend on the nature of fatalities anticipated and the type of operation being planned. There are three mortuary affairs companies in the Army.

5.1. 54th QM Corps Collection Company (MA) and the **111th QM Corps Collection Company (MA)** garrisoned at Ft Lee, VA has 5 forward collection platoons of 4 teams each and 1 main collection platoon. Teams from this unit routinely support ongoing missions at the Landstuhl Mortuary in Germany and at the Central Identification Laboratory, Hawaii (CILHI), as well as providing support to units training at the National Training Center and the Joint Readiness Training Center in the United States. The needed additional support which conducts MA decontamination activities includes: Security, Communications, Medical (Physical/Psychological), and Public Affairs. The 54th QM Corps Collection Company now has level A (encapsulated suits with SCBA) and re-breathers, PPE and the necessary equipment to perform remains decontamination.

5.2. U.S. Army Technical Escort Unit (TEU) provides the Department of Defense and other federal agencies with a unique, immediate response capability for chemical and biological warfare material. The Tech Escort missions include worldwide response for escorting, packaging, detection, and monitoring, rendering-safe, disposing, sampling, mitigating hazards and identifying weaponized and non-weaponized chemical, biological and hazardous material.

Upon receiving orders, these units will conduct no-notice deployment to provide chemical and biological advice, verification, sampling, detection, mitigation, render-safe, decontamination, packaging, escort and remediation of chemical and biological devices or hazards worldwide in support of crisis or consequence management and chemical and biological defense equipment, technical intelligence and doctrine development.

- HQ and HQ COMPANY (HHC) Aberdeen Proving Ground, Maryland

- COMPANY A (ALPHA) Aberdeen Proving Ground, Maryland
- COMPANY B (BRAVO) Aberdeen Proving Ground, Maryland
- COMPANY C (CHARLIE) Dugway Proving Ground, Utah
- COMPANY D (DELTA) Fort Belvoir, Virginia
- COMPANY E (Echo) Pine Bluff Arsenal, Arkansas
- The US Army Technical Escort Unit has "cutting edge" as well as "tried and true" equipment and technologies. To ensure that TEU has the best equipment for the job, they participate in numerous ongoing equipment research and development projects. Some examples of their current equipment capabilities are listed below:
    - Field Biological Warfare (BW) Agent Detection
    - Non-intrusive (without opening the container) Chemical Warfare (CW) Agent Detection
    - CW monitoring down to levels below TWA
    - Screening of unknowns with portable GC/MS
    - All matrix sampling, package, and transport of BW or CW materials
    - All levels of civilian personal protective equipment (PPE) including OSHA Level A SCBA
    - Re-breather as well as conventional Self-Contained Breathing Apparatus (SCBA)
    - CW/BW environment Bomb Suit
    - State of the art CW/BW improvised explosive device (IED) blast mitigation
    - Inflatable Decontamination Tents
    - Foaming Decontamination capability
    - Various low and high penetration X-ray equipment, including real-time, filmless X-ray
    - Unexploded Ordnance (UXO) detection and survey
    - Secure worldwide communications systems

- Extensive reference materials, and access to subject matter experts for all aspects of BW/CW
- Radiation detection and survey instruments
- UXO and IED render safe tools

5.3. U.S Army Central Identification Laboratory (CILHI) is made up of military personnel from all branches of the military and an on-staff scientific staff with specialties in different aspects of forensic identification. Their work involves dispatching recovery teams to suspected sites that conduct excavations and search for remains. American remains are then flown to the CILHI Laboratory in Hawaii where they undergo forensic identification to match the remains to MIA records using DNA, dental, medical, military records and any other means for identification. Finally, CILHI is responsible for locating the next of kin and return the remains to family members. U.S. Army Central Identification Laboratory 310 Worchester Avenue Hickam AFB, HI 96853-5530.

6.0. NATIONAL GUARD/RESERVE MA ASSETS

6.1. 311th Quartermaster Army Reserve Company from Aguadilla, Puerto Rico has recent MA experiences. The unit was called up shortly after Sept. 11 and deployed to assist with mortuary affairs at the Pentagon. The unit deployed with 200 personnel.

6.2. 246th Quartermaster Army Reserve Battalion from Puerto Rico has recent MA experiences. The unit was called up shortly after Sept. 11 and deployed to assist with mortuary affairs at the Pentagon. The unit also deployed 40 personnel during the gulf war.

6.3. Weapons of Mass Destruction Civil Support Teams (WMD-CST)

Unless federalized, the CSTs will remain as state National Guard assets that can be quickly accessed by proximate governors. The CST mission is to:

- assess a suspected WMD attack,
- advise civilian responders on appropriate actions, and
- facilitate the arrival of additional state and Federal military forces.

Each team consists of 22 full-time Army and Air National **Guardsmen** and is broken down into six smaller teams -- command, operations, communications, administration and logistics, medical, and survey -- that have been trained and equipped to provide a technical capability to "reach back" to other experts who can assist the incident commander. In essence, these "scouts" are a unique military capability.

They can deploy rapidly to a suspected or actual terrorist attack, conduct special reconnaissance to determine the effects of the attack, provide situational understanding to military command channels. They can offer technical consultation to local authorities on managing the effects of the attack to minimize the impact on the civilian population, and facilitate follow-on military support performing validated civilian requests for assistance.

6.4. **The National Guard CBRNE Enhanced Response Force Packages (NG CERFP)** is comprised of M-Day soldiers and airmen who are task organized from existing National Guard units or organizations, and provides specialized capabilities the National Guard may be requested to perform by either local, state, or federal authorities. The training and tailoring of existing forces into more-responsive, better-prepared, more-flexible elements ensures the National Guard is ready to respond, when asked, with specialized CBRNE support. Specifically, the NG CERFP is trained and equipped to perform the functions of Casualty Decontamination, Medical Triage and Treatment, and Casualty Extraction when directed.

The NG CERFP supports both civil and military requirements essential to defend the United States and respond to CBRNE attacks outlined in the National Strategy for Homeland Security and to provide Civil Support outlined in DOD Directives 3025.1, 3025.12, and 3025.15. It further implements the concepts originated in Defense Reform Initiative Directive #25. Additionally, the NG CERFP specifically supports DODI 2000.18, DOD Installation CBRNE Emergency Response Guidelines, December 2002:

- Develop, maintain, and execute CBRNE emergency response measures to include detection, assessment, response capabilities, medical treatment, containment, emergency responder casualty decontamination, and reporting.

- Law enforcement and/or security response functions to CBRNE events should include securing an appropriate perimeter around the CBRNE incident.

- Fire and hazardous material response functions to CBRNE events should include: establishing command, control, communications, accountability; fire suppression, rescue, extrication; atmospheric monitoring and detection; environmental sampling to determine contaminant and level of contamination; triage; mass decontamination of ambulatory and non-ambulatory patients; and preserving evidence.

- Extricate casualties from a CBRNE environment.

- Decontaminate and treat chemically, biologically, or radiological contaminated casualties.

The NG CERFP will be organized, trained, and equipped using existing Army and Air National Guard units, including:

- CSTs (ARNG/ANG)
- Medical Units (ARNG/ANG)

- Engineer Units (ARNG/ANG)
- Chemical Units (ARNG)
- Patient Decontamination Teams (ANG)
- Counter Drug RAID Assets (ARNG/ANG)
- Other NG Units identified by the State

The NG CERFP may include other capabilities of the National Guard Task Force in accomplishment of their CBRNE mission. Other Guard units may include:

- Transportation and Fixed and Rotary Wing Air assets
- Security forces (MP, Infantry, SF, etc.)
- EMEDS + 25
- Others as identified by the Task Force Commander.

Several basic concepts frame the operation of the NG CERFP:

> National response operations will be organized and supported using a tiered response of local, state, and federal responders. **The NG CERFP will be employed as an element of the state response under National Guard command and control.**

The NG CERFP will operate within the State's Emergency Management Incident Command System (ICS), in a supporting role when requested through the State Emergency Management System.

7.0. ADDITIONAL DOD MA CAPABILITIES

7.1. Mobile Integrated Remains Collection System (MIRCS) a refrigerated container for temporary storage and processing of human remains. This expandable, dual-compartment shelter has a 36-degree holding area with a holding capacity of 16-20 remains and also a climate-controlled work area. MIRCS is mounted on a medium tactical vehicle chassis and is compatible with the Army's load handling system (LHS) and the palletized load system (PLS). Designed to process remains at a forward collection point, MIRCS reduces the logistics footprint by eliminating the need for a 5-ton tractor and a 30-foot trailer. MIRCS reduces strategic lift requirements from two C-17 aircraft to one C-130.

7.2. Mortuary Affairs Automated Tracking System (MAATS) is an endeavor to automate Mortuary Affairs processing methods. Still in the research and development phase, this software is projected to improve processing rates by allowing "hands-free," voice-activated processing that will virtually eliminate the requirement to record notes by hand. This software is also projected to significantly reduce errors and lost information.

7.3. The ARINC Aeromedical Pallet Systems (AAPS) which can be rolled out, set up and ready for patients in less then 20 minutes, has significantly increased the Air Force's aeromedical evacuation capability and responsiveness. Utilizing this litter and

ambulatory holding system, aeromedical evacuation squadrons can respond to patients' needs in a more timely and flexible manner.

AAPS is a rigid aluminum pallet with roll-on, roll-off capability that carries up to eight NATO litter patients, or six ambulatory patients belted into passenger seats. Depending on the size of the aircraft, as many as 18 pallets can be accommodated. Not only does the AAPS greatly expand the number of aircraft usable for aeromedical evacuation, it greatly reduces operating costs. The Air Force purchased 25 AAPS sets that are currently being routed to the different units within United States Air Force Europe (USAFE), Pacific Air Force (PACAF) and Air Mobility Command (AMC). Because of this success, the other U.S. armed forces are looking into the AAPS as well.

The imminent retirement of the C-141 Starlifter and aging of the C-9 Nightingale aircraft led the Air Force to increase the requirement for an aeromedical evacuation (AE) system based on the standard 463L aircraft pallet. The system had to be flexible enough to be used to convert cargo aircraft to patient airlift aircraft. This provides AMC and the overseas commands a flexible, modular capability to rapidly reconfigure opportune airlift aircraft, to include the KC-135 Stratotanker, KC-10 Extender, and C-17 Globemaster III, for use in transporting various numbers and combinations of patients in order to carry out the AE mission. ARINC has developed a pallet for use on C-130 aircraft as well.

AAPSs are configurable in four different setups as follows: an all litter configuration with a center aisle, AAPS-W; an all litter configuration (litter stanchions back to back) which provides side aisles, AAPS-L; an all seat configuration, AAPS-S and; a mixed configuration of a single stanchion set with a row of seats across a center aisle, AAPS-M.

Along with the pallet system, several optional accessories have been developed, including: a medical equipment storage bar; a level 4 bulletproof ballistic curtain to protect litter patients; and optional lighting kits that attach to the litters and seats to give medical caregivers ample lighting to navigate around the litters and give care to the patients. Both storage bar and ballistic curtain have to be used on the outside of the stanchions that are in the AAPS-W configuration.

II. U.S. ARMY MORTUARY AFFAIRS TEAMS AND COMPOSITION

1.0. UNIT SEARCH AND RECOVERY TEAMS: These are teams detailed from the members of a platoon or company responsible for recovery of remains of their own unit and evacuation of those remains to the nearest MA Collection Point. These teams should be familiarized on their responsibilities before deployments. There are Mortuary Affairs Specialists (92M) who are assigned to the Support Battalions and Senior NCOs who have completed training these teams.

2.0. THE QM COLLECTION COMPANY (MA) MORTUARY AFFAIRS COLLECTION POINT (MACP)

2.1. The MACP is comprised of six platoons (five forward collection platoons and a main collection platoon) and a headquarters element, with a total of about 221 personnel.

The forward collection platoons setup MACPs which receive, process, and coordinate evacuation of remains and accompanying personal effects, with a total of about 31 personnel in each platoon. The five forward collection platoons are organized into four collection sections each, with a total of about seven personnel per section. Each forward collection section can receive, process, and coordinate evacuation of about 20 remains and associated PE per day. The company, as a whole, can process about 400 remains per day.

2.2. The QM Collection Company (MA) will setup and operate MACPs. The MACPs can receive, process, and coordinate evacuation of deceased U.S. military and certain U.S. civilian personnel and their accompanying personal effects. Their duties are to:

- Conduct limited search and recovery missions, as required.
- Set up and operate collection points with refrigeration capability in the corps area.
- Set up and operate a corps main collection point with refrigeration capability.
- Conduct MADCP operations, on orders, with equipment sets not organic to the company.
- Be prepared to setup and operate a TMEP until arrival of the QM Company (EAC).
- The MADCP and TMEP operations will reduce the mission capabilities of the Collection Company since two of the six platoons are conducting TOE nonresourced missions.
- Conduct temporary interments and disinterments when directed by the geographic combatant commander. This mission is also nonresourced by the TOE and reduces the capabilities of this unit to perform its primary mission.
- Maintain essential records and reports.
- Respond to peacetime mass fatality incidents as requested and authorized IAW DOD Directive 3025.1 (for CONUS, United States, or US Territories) or DOD Directive 5100.46 (for OCONUS).
- At full strength, the company can set up approximately 20 MACPs, receive, process, and coordinate evacuation of about 400 remains per day from the 20 MACPs (about 20 remains per MACP per day) and receive, inventory, and coordinate evacuation of all PE with the remains.
- NOTE: The MACP operations capability drops significantly if the Collection Company is also operating the theater mortuary evacuation point (TMEP), conducting decontamination operations, or conducting interment/disinterment.

- This unit depends on appropriate elements of the corps for religious, legal, health service, finance, personnel and administrative services, engineer, and transportation support . The host unit must provide for food service and maintenance when collection platoons are deployed.

3.0. MA MAIN COLLECTION PLATOON

Although not structured to do so, the 31-person Main Collection Platoon can operate a temporary mortuary evacuation point or a temporary interment site if required with adequate transportation or engineer assets available. During large-scale operations this platoon will operate a mortuary evacuation point until the EAC Company arrives in on the scene. The EAC Company will then serve as a large collection point for processing remains in the corps area and assisting in retrograde movement of remains from the MSFI.

4.0. MORTUARY EVACUATION POINT (MEP)

This 38 person echelon above corps (EAC) asset provides for evacuation of approximately 200 remains a day from the MCFI with adequate transportation assets available, if evacuation is necessary. There are two teams in the EAC Company.

5.0. PERSONAL EFFECTS (PE) DEPOT

This platoon will collocate with the MEP, otherwise it will locate near the POE mortuary in CONUS. In theater, this 51 person Reserve Component EAC asset, provides for receipt, packaging, and shipping of personal effects to the person eligible to receive effects for final disposition. There is one PE Depot platoon in the EAC Company.

6.0. MA DECONTAMINATION COLLECTION POINT (MADCP)

The MA Decontamination team requires 38 personnel from a unit to operate and is a combination of MA, chemical, medical and MOS immaterial detail personnel. The team will have to retrieve and decontaminate NBC contaminated remains. Up to 12 of these personnel can be mortuary affairs specialists, but the remainder are chemical, medical or MOS immaterial. Working a 12-hour shift, this team should be able to process approximately 30-48 remains. Current military MA cannot adequately address the decontamination of a large number of remains from a battlefield or city.

6.1. A MADCP may become operational whenever the threat of NBC warfare exists. The Joint Mortuary Affairs Officer (JMAO) acts as the theater central point of coordination for this operation. The handling of contaminated remains is a three-phase process consisting of the following.

6.2. Recovery from the place of death to a MADCP, where decontamination and field verification occur.

6.3. Movement to the Theater Quality Control (QC) Station, where a second verification check is made using specialized monitoring equipment.

6.4. Positive verification of decontamination must be made prior to shipment of remains out of the County. Final verification within the county or upon arrival at County Mortuary ,must occur prior to preparation of the remains for release to personnel authorized to direct disposition of remains (PADD).

6.5. External Support Required for MADCP operations includes:

- **Transportation.** Planners should consider dedicated transportation assets to reduce confusion and avoid the spread of contamination. Equipment used to evacuate remains to the MADCP must be decontaminated prior to leaving the MADCP site.

- **Engineer Support.** Engineer support is required to prepare the MADCP site, which includes a sump. Coordination of engineer support through the logistics channels.

- **Communications.** Communications equipment, such as long-FM radios, wire, and hand-held sets, is imperative in this operation because this mission must be isolated.

- **Decontamination.** Personnel support is required after completion of the mission. Detailed troop decontamination takes approximately one hour. The MADCP site will require a complete detailed decontamination by a chemical decontamination unit.

- **Security.** Plan for security forces to protect against enemy action and/or to prevent unauthorized personnel from entering the MADCP operational area.

- **Medical Support.** Medical support is necessary for MADCP personnel, not only for combat-related injury but for occupational hazards resulting from working in such an environment. There will be medics assigned to the MADCP task force to provide this support.

- **Maintenance.** Maintenance support should be provided by nearby DS or GS maintenance units.

- **EOD Support.** EOD support is required to clear unexploded ordinance which is removed from the remains and the work site. Coordination should have EOD personnel “on call” to support this operation.

- **Life Support and/or Personnel Services.** MADCP personnel should be supported by the nearest unit for subsistence, laundry, bath, and billeting.

7.0. ARMY CASUALTY AND MEMORIAL AFFAIRS OPERATIONS CENTER (CMAOC)

CMAOC has oversight responsibility to ensure the myriad of mortuary affairs, actions, and benefits are properly coordinated and executed. Many installations and agencies will have a role in the disposition of remains and disposition of personal effects operations for a single decedent. CMAOC ensures that information is disseminated between the preparing mortuary, home station CAC, supporting CACs, receiving funeral home, and other affected agencies and organizations.

CMAOC provides policy and procedural guidance to the field and installation commanders, Recovery Liaison Team, Mortuary Liaison Team, and the Mortuary Support Team.

8.0. MORTUARY LIAISON TEAM (MLT)

8.1. The MLT represents Headquarters, Department of the Army, at the preparing mortuary. The MLT also serves as the official conduit for information between all Army activities, commands and agencies and the preparing mortuary and Armed Forces Medical Examiner for mortuary and medicolegal investigations operations to include identification of remains processing, preparation and transportation of remains, escorts, decedent's personnel and personal information, disposition of personal effects received with the remains, and other administrative actions and requirements.

8.2. It also establishes a working relationship with the Mortuary Control Center at the preparing mortuary and provides assistance as required.

8.3. A Casualty and Memorial Affairs Operations Center (CMAOC) team will be led by an officer or civilian of appropriate rank or level. The team will consist of the following members, as appropriate:

- Team Leader.
- Mortuary Affairs Officer
- Administrative NCO

APPENDIX 12 OF
ARIZONA PANDEMIC INFLUENZA MASS FATALITY RESPONSE PLAN

MORTUARY AFFAIRS ACRONYMS, TERMS, AND DEFINITIONS

Like any other field the Mortuary Affairs Workers/Medical Examiners/Funeral Directors have their own acronyms that are used on a daily basis. This appendix is to explain the various terms and acronyms that are used in the field.

Note: There are many Department of Defense (DOD) acronyms and terms in the list. DOD may be assisting in the Temporary Interment Process and it will be useful to understand this terminology.

ACRONYMS

AO	Area of Operations
ARC	American Red Cross
BSI	Base Support Installation
BTB	Believed-to-Be
C2	Command and Control
C3	Command, Control, and Communications
C4	Command, Control, Communications, and Computers
CBRNE	Chemical, Biological, Radioactive, Nuclear, Explosive
CDC	Centers for Disease Control and Prevention
CJCS	Chairman of the Joint Chiefs of Staff
CJMAO	Central Joint Mortuary Affairs Office
COA	Course of Action
CONUS	Continental United States
CP	Collection Point
CS	Combat Support
CSG	Corps Support Group
CSS	Combat Service Support
DCIPS	Defense Casualty Information Processing System
DSCA	Defense Support of Civil Authorities
DCSLOG	Deputy Chief of Staff for Logistics
DCSOP	Deputy Chief of Staff for Personnel
DISCOM	Division Support Command
DOD	Department of Defense
DOS	Department of State
DNA	Deoxyribonucleic Acid
DSA	Division Support Area

DS	Direct Support
EAC	Echelons Above Corps
EOD	Explosive Ordnance Disposal
FEMA	Federal Emergency Management Agency
FM	Field Manual
GMT	Greenwich Mean Time
GPM	Gallons Per Minute
GPS	Global Positioning System
GRREG	Graves Registration
GS	General Support
G4	Army Component Logistics Staff
HA	Humanitarian Assistance
HTH	High Test Hypochlorite
HRP	Human Remains Pouch
IAW	In Accordance With
J-4	Logistics Directorate of a Joint Staff
JAG	Judge Advocate General
JDOMS	Joint Director of Military Support
JIC	Joint Information Center
JMAO	Joint Mortuary Affairs Office
JTF	Joint Task Force
JTTP	Joint Tactics, Techniques, And Procedures
LOGSTAT	Logistics Statistics
MA	Mortuary Affairs
MACP	Mortuary Affairs Collection Point
MADCP	Mortuary Affairs Decontamination Collection Point
MAS	Mortuary Affairs System
MCO	Movement Control Office
MCT	Movement Control Team
ME	Medical Examiner
ME/C	Medical Examiner/Coroner
MEDCOM	Medical Command
MFFIMS	Mass Fatality Field Information Management System
MOPP	Mission-Oriented Protective Posture
MTT	Mobile Training Team
NBC	Nuclear, Biological, and Chemical

NCOIC	Noncommissioned Officer In Charge
NG	National-Guard
NGO	Non-governmental Organization
NTSB	National Transportation Safety Board
OAFME	Office of the Armed Forces Medical Examiner
OCME	Office of the County Medical Examiner
OIC	Officer In Charge
OPCON	Operational Control
OPLAN	Operation Plan
OPORD	Operations Order
OR	Operational Requirements
PADD	Person Authorized to Direct Disposition of Remains
PAO	Public Affairs Office
PDDA	Power Driven Decontamination Apparatus
PE	Personal Effects
PEO	Peace Enforcement Operations
PERE	Person Eligible To Receive Effects
PERSTAT	Personnel Statistics
PERSCOM	Personnel Command
POC	Point Of Contact
PVO	Private Voluntary Organizations
QC	Quality Control
SITMAP	Situation Map
SME	Subject Matter Expert
SOP	Standing Operating Procedure
S&S	Supply and Service
S&R	Search and Recovery
SSN	Social Security Number
STB	Super Topical Bleach
TIP	Temporary Interment Program
TOE	Table of Organization and Equipment
USNORTHCOM	US Northern Command
USTRANSCOM	US Transportation Command
WO	Warning Order
ZOI	Zone of Interior
ZULU	Greenwich Mean Time

GLOSSARY

Area of Operations	An operational area defined by the Joint Force Commander for Land and Naval Forces. Areas of Operation do not typically encompass the entire operational area of the Joint Force Commander, but should be large enough for component commanders to accomplish their missions and protect their forces. (Joint Pub 1-02)
Area Port of Debarkation	Point at which personnel and equipment arrive at destination (FM-10-64)
Area Port of Embarkation (FM-10-64)	Point from which personnel and equipment depart.
Antemortem Identification Media	Records, samples, photographs taken prior to death. These include, but are not limited to, fingerprints, dental x-rays, body tissue samples, photographs of tattoos or other identifying marks. These "predeath" records would be compared against records completed after death to help establish a positive identification of a remains. (Approved for inclusion in the next edition of Joint Pub 1-02.)
Area of Responsibility	1. The geographical area associated with a combatant command within which a combatant commander has authority to plan and conduct operations. 2. In naval usage, a predefined area of enemy terrain for which supporting ships are responsible for covering by fire on known targets or targets of opportunity and by observation. Also called AOR. (Joint Pub 1-02)
Base Support Installation	The installation to which supplies and personnel are shipped (normally the closest to the disaster location without being part of the disaster).
Believed-To-Be	The status of any remains until a positive identification. Used interchangeably with tentative identification. (Joint Pub 4-06.)
Casualty	Any person who is lost to the organization by having been declared dead, duty status - whereabouts unknown, missing, ill, or injured. (Joint Pub 1-02)
Collecting Point	A point designated for the assembly of personnel casualties, stragglers, disabled material, salvage, etc., for further movement to collecting stations or rear installations. (Joint Pub 1-02)

Combatant Command	A unified or specified command with a broad continuing mission under a single commander established and so designated by the President, through the Secretary of Defense and with the advice and assistance of the Chairman of the Joint Chiefs of Staff. Combatant commands typically have geographic or functional responsibilities. (Joint Pub 1-02)
Combatant Command (Command Authority)	Nontransferable command authority established by title 10 ("Armed Forces"), United States Code, section 164, exercised only by commanders of unified or specified combatant commands unless otherwise directed by the President or the Secretary of Defense. Combatant command (command authority) cannot be delegated and is the authority of a combatant commander to perform those functions of command over assigned forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction over all aspects of military operations, joint training, and logistics necessary to accomplish the missions assigned to the command. Combatant command (command authority) should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or Functional component commanders. Combatant command (command authority) provides full authority to organize and employ commands and forces as the combatant commander considers necessary to accomplish assigned missions. Operational control is inherent in combatant command (command authority). Also called COCOM. (Joint Pub 1-02)
Combatant Commander	A commander in chief of one of the unified or specified combatant commands established by the President. (Joint Pub 1-02)
Contaminated Remains	Remains of personnel which have absorbed, or upon which have been deposited, radioactive material, or biological or chemical agents. (Approved for inclusion in the next edition of Joint Pub 1-02.)
Continental United States	United States territory, including the adjacent territorial waters, located within North America between Canada and Mexico. Also called CONUS. (Joint Pub 1-02)
Defense Support to Civil Authorities	This Directive consolidate all policy and responsibilities previously known as "Military Assistance to Civil Authorities," applicable to disaster-related civil emergencies within the United States, its territories, and possessions, with those related to attacks on the United States, which previously were known as "Military Support to Civil Defense". There are three primary

	mechanisms by which DOD would take part in a Federal response to a domestic incident. Federal assistance, including assistance from DOD, would be provided: (1) at the direction of the President, (2) at the request of another Federal agency under the Economy Act, or (3) in response to a request from DHS's Federal Emergency Management Agency under the Stafford Act. The second and third mechanisms require a request for assistance and approval of the Secretary of Defense.
Emergency Interment	An interment, usually on the battlefield, when conditions do not permit either evacuation for interment in an interment site or interment according to national or international legal regulations. (This term and its definition modify the existing term "emergency burial" and its definition and is approved for inclusion in the next edition of Joint Pub 1-02.)
Decedents	Deceased or expired humans (FM-10-64)
Echelons Above Corps	Units and commands at levels above Corps e.g. theater and CONUS based headquarters (FM-10-64)
Embalm	Preservation of a dead body against decomposition (FM-10-64)
Escort	A member of the Armed Forces assigned to accompany, assist, or guide an individual or group, e.g., an escort officer. (Joint Pub 1-02)
Graves Registration Program	A program which provides for search, recovery, tentative identification and evacuation, or temporary interment. Temporary interment is only authorized by the Geographic Combatant Commander. Disposition of personal effects is included in this program. (This term and its definition modifies the existing term "graves registration" and its definition and is approved for inclusion in the next edition of Joint Pub 1-02.)
Group Interment	An interment in a common grave of two or more individually unidentified remains. (This term and its definition modifies the existing term "group burial" and its definition and is approved for inclusion in the next edition of Joint Pub 1-02.)
Hostile Casualty	A person who is the victim of a terrorist activity or who becomes a casualty "in action." "In action" characterizes the casualty as having been the direct result of hostile action, sustained in combat or relating thereto, or sustained going to, or returning from, a combat mission provided that the occurrence was directly related

	to hostile action. Included are persons killed or wounded mistakenly or accidentally by friendly fire directed at a hostile force or what is thought to be a hostile force. However, not to be considered as sustained in action and not to be interpreted as hostile casualties are injuries or death due to the elements, self-inflicted wounds, combat fatigue, and except in unusual cases, wounds or death inflicted by a friendly force while the individual is in an absent-without-leave, deserter, or dropped-from-rolls status or is voluntarily absent from a place of duty. (Joint Pub 1-02)
Interment	Burial of human remains (FM-10-64)
Joint Mortuary Affairs Office	Plans and executes all mortuary affairs programs within a theater. Provides guidance to facilitate the conduct of all mortuary programs and to maintain data (as required) pertaining to recovery, identification, and disposition of all U.S. dead and missing in the assigned theater. Serves as the central clearing point for all mortuary affairs and monitors the deceased and missing personal effects program. Also called JMAO. (Approved for inclusion in the next edition of Joint Pub 1-02.)
Mortuary Affairs	Covers the search for, recovery, identification, preparation, and disposition of remains of persons for whom the Services are responsible by status and Executive Order. (Approved for inclusion in the next edition of Joint Pub 1-02.)
Odontologist	Forensic dentist (FM-10-64)
Organizational Equipment	Referring to method of use, signifies that equipment, other than individual equipment, which is used in furtherance of the common mission of an organization or unit. (Joint Pub 1-02)
Person Authorized to Direct Disposition of Remains.	A person, usually primary next of kin, who is authorized to direct disposition of remains. (Joint Pub 4-06.)
Person Eligible to Receive Effects	The person authorized, by law, to receive the personal effects of a deceased military member. Receipt of personal effects does not constitute ownership. (Approved for inclusion in the next edition of Joint Pub 1-02.)
Personal Effects	All privately owned, moveable, personal property of an individual. (Approved for inclusion in the next edition of Joint Pub 1-02.)

Remains	Whenever used within this publication, remains will mean a corpse, or a portion thereof. (Joint Pub 4-06.)
Search	A systematic reconnaissance of a defined area, so that all parts of the area have passed within visibility. (Joint Pub 1-02)
Task Organization	Element comprised of various types of units to perform a specific mission. (FM-10-64)
Temporary Interment	A site for the purpose of: A. The interment of the remains if the circumstances permit, or B. The reburial of remains exhumed from an emergency interment. (This term and its definition modifies the existing term “temporary cemetery” and its definition and is approved for inclusion in the next edition of Joint Pub 1-02.)
Theater	A Theater is defined as the total area of land, air, and sea that is or could become involved in the conduct of war. (FM-10-64)
Theater Mortuary Evacuation Point	The point where remains are evacuated, prepared, and evacuated from the theater. (FM-10-64)
Trench or Row I Interment	A method of interment in which remains are placed head-to-toe. Used only for temporary multiple burials. (This term and its definition modifies the existing term “trench burial” Joint Pub 4-06.)
Zone of Interior	A zone of interior supports the theater of operations. It includes industries, mines, farms, natural resources, and supply depots. (FM-10-64)