White Paper

Morgue Operations, Identification, and Command and Control of Mass Fatalities resulting from a Pandemic Influenza Event in the United States

<u>Authored by</u>: Devlin, S. (Fairfax Co, Police), Gavin, C, (Battelle- US Army ECBC-MIRP), Lyle, B (Orange County, CA Sheriff-Coroner), McGovern, J LTC (US Army North)

<u>Contributing Authors:</u> Butcher, B (New York City, OCME), Fierro, M (VA State, OCME), Fitch, J (National Funeral Directors Association), Fudenberg, J (Clark County Office of the Coroner, Nevada), Gursky, E (ANSER-Biodefense), Kanis, P (US Red Cross), Roath, D (US Army ER)

I Executive Summary

The number of those estimated to perish during another pandemic influenza (PI) event in the United States (US) may be between 5%- 7% of the infected population (infected population est. to be 25%) or 3,612,500 – 5,057,500 respectively¹. Governmental authorities, primarily the medical examiner/coroner (ME/C), law enforcement, public health, and associated death care professionals, will not only need to manage these fatalities but also the 2.4 million deaths that occur annually. The purpose of this paper, written at the behest of the US Northern Command's Joint Task Force-Civil Support (JTF-CS), is to identify the predominant issues regarding command and control of mass fatalities, morgue operations, and body identification during a PI event and provide senior leaders actionable recommendations to managing this most daunting task.

Subject matter experts identified eleven major issues senior leaders need to address to manage numerous fatalities resulting from a PI event. These issues, described in more detail below, direct local, state and federal leaders to shift all limited resources, associated with fatality operations, toward performing only the most timecritical tasks and centralize the processing of remains at the most appropriate local level. Until the spread of the disease and the associated mortality rate slows, authorities must focus on the recovery of remains, the collection of minimal but specific victim identification materials (but not processing the material), and the placement of the deceased in temporary storage.

At the federal level, the most critical and actionable recommendation is the creation of a Mass Fatality Management Emergency Support Function (ESF), under the National Response Plan (NRP) that is separate from the management of living casualties (ESF #8). Although a PI event will necessitate local and state government performing a large portion if not all fatality management related tasks, clear and consistent federal policy will assist jurisdictions that are not familiar with managing large numbers of fatalities from a disaster and alleviate the public pressure these agencies experience when non-traditional death practices are employed.

II. Assumptions

The working group participants formulated the following planning assumptions regarding managing fatalities that result from a PI event.

- A PI event is not a single incident but an on-going event that will take place over a period of weeks and months. Bodies will need to be repeatedly recovered from multiple geographic sectors and processed at central locations until the PI event subsides to the point that normal operations can accommodate the surge in deaths.
- A PI event will affect the entire nation and tax every jurisdiction. It is unlikely that professionals from surrounding regions will be able to provide help outside their locale. Local and state authorities will have insufficient personnel, supplies, equipment, and storage to handle the demand.

¹ Infection numbers and fatality rate numbers provided by JTF-CS during the Pandemic Influenza Workshop on 22-23 March 2006, at Fort Monroe, Virginia.

Agencies will need to obtain assistance from existing public and private agencies in their area instead of looking to acquire these resources elsewhere.

- Every jurisdiction will require similar types of critical resources, to include personnel, equipment and supplies, to manage the surge in the number of decedents. Our nation's just-in-time inventory method however, will not be able to respond quickly enough to manufacture these additional supplies.
- Some states may attempt to contain disease spread by closing their borders. Such actions, though of limited proven disease containment value, may instead slow and frustrate the delivery and receipt of needed supplies and equipment.
- The public utility infrastructure may be temporarily shut down or hampered, causing shortages of water, food, medicine, and gasoline. Without such items all government personnel will have a difficult time performing their tasks. Agencies may need to develop creative methods to decrease their need for gasoline, which is believed to be the most likely item in short supply.
- For those jurisdictions whereby influenza is the cause of death and therefore is not considered a ME/C case, the public health department will authorize the ME/C to take jurisdiction of the bodies.
- The death care industry, comprised of public and private agencies, will not be able to process remains in the traditional manner due to the increased number of cases.
- PI related deaths will primarily fall into two major categories, attended and unattended. The process to identify remains from attended deaths will be relatively straightforward, however, unattended deaths, which require verification of identity, issuing a death certificate, and notifying the next of kin, will be labor intensive.
- There will be delays in the issuances of death certificates for both attended and unattended deaths. This delay will place substantial pressure on the ME/C to issue death certificates so that the next of kin can manage the decedent's estate.

III. Issues and Actionable Recommendations

- Issue- The Volume of Incoming Cases will Increase Significantly.
 - Discussion
 - A large number of people will die in a short time period and will continue to die at a high rate for an extended period of time during a PI event. Resultantly, most ME/Cs will not have additional staff to manage this surge.
 - The ME/C and Funeral Directors will still need to process those that typically die (normal death rate 2.4 million annually) during the PI event.

• Actionable Recommendations

- Shift use of all existing resources toward performing only the most vital fatality processing functions (recovery, abbreviated processing, temporary storage, and tracking) and use a phased approach to processing remains, whereby only one phase of the operation is active at one time, until the death rate slows and multiple phases can operate simultaneously.
- During this initial phase, when remains are recovered or upon their drop off at a collection point/morgue, trained personnel should sort remains by cause and manner of death, meaning those deaths that are likely due to the PI event from other ME/C cases, and then by ease of obtaining victim identification. Attended deaths will have a known identity and may have a signed death certificate. Those deaths that were unattended by a physician or family member will require the ME/C to further process remains to determine victim identification, issue the death certificate, track personal effects and also notify the next of kin. Such tasks will burden the ME/C

White Paper-

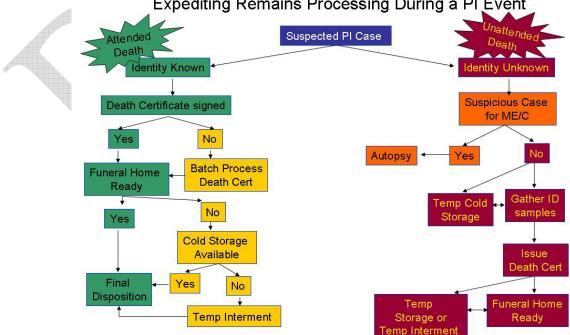
Managing Mass Fatalities During a Pandemic Influenza Incident in the United States

and hamper the process before remains can proceed to the final disposition operational phase.

Establish multiple collection points/morgues to centralize processing and holding remains at the lowest most appropriate local level.

Results 0

- Body decomposition slows once remains are placed in cold storage between (37-42 degrees Fahrenheit). Bodies can be stored for up to 6 months in refrigerated storage, which may provide ME/C and Funeral Directors enough time to process all bodies in accordance with jurisdictional standards and traditional public expectations.
- Performing only one phase of fatality management operations at a time, allows the ME/C to ask those who are comfortable handling bodies to perform different tasks, i.e., recover bodies and secure decedents identities, with limited resources.
- Focusing limited resources on accomplishing the most vital tasks minimizes a public health hazard and may restore public trust during a time when resources are scarce.
- Employing a phased operation provides the ME/C with the best management practice, during a worst-case scenario, to ensure bodies will be properly identified and handled with dignity.
- Although the public may conclude that this "new" method of processing and releasing bodies back to the next of kin is protracted (and this may be true) public trust in our government's ability to manage the event will diminish more rapidly if remains identification is compromised or bodies are haphazardly handled.
- Establishing ad-hoc collection points/morgues at the lowest most appropriate local level, centralizes the storage and processing of PI decedents and maintains the ME/C's ability manage a large number of fatalities.
- Effective decedent sorting will allow a large percentage of remains to be quickly processed or fast tracked and released for final disposition.



Expediting Remains Processing During a PI Event

• Issue- Transportation, Morgue, and Funeral Assets will be Overwhelmed.

- Discussion
 - Because the number of decedents will rise dramatically, normal transportation resources for any given jurisdiction will be overwhelmed.
 - It is highly likely that agencies will use non-traditional means of transportation, such as buses, trucks, and vans and employ non-traditional drivers and handlers.
 - It is also likely that some family members will transport their deceased loved one to a known local collection point/morgue, when the ME/C is not able to recover bodies quickly.
 - Even if bodies can be recovered in a timely manner, it is unlikely that funeral homes will be able to process remains for final disposition at the same rate.
 - It is unlikely all bodies will be able to be processed using current infrastructure (i.e. standard morgues).

• Actionable Recommendations

- Prior to an event, leaders must obtain temporary morgue resources and pre-identify central collection points/morgues at the local level.
- Leaders must recognize that "normal" decedent transportation processes will be altered and will require identifying and training suitable drivers and handlers to support the recovery and final disposition process.
- Each collection point/ morgue will require multiple refrigerated storage containers.
- Educate the public, using mass media, on the location of collection points/morgues, the need for personal protection (if applicable) if they will be handling the bodies, and the type of procedures the ME/C may employ. In the end, the message to the public must be that the ME/C will implement alternate processing methods, which maintain dignity in death, to manage multiple PI related fatalities.
- Authorities should be prepared to develop a streamline approach for the movement of remains from recovery through final disposition to conserve fuel consumption.
- Authorities must be prepared to provide Just-in-Time training for ad hoc drivers and handlers regarding their transportation and handling duties.

• Results

- Setting up centralized temporary collection points/morgues in close proximity to dense populations where death rates are highest will minimize the number of people traveling to far-away locations, will avoid large crowds from gathering during a public isolation period, and will help workers achieve a more effective span of control to manage the large influx of human remains.
- By pre-identifying ad hoc transportation personnel and establishing a simple training brief, authorities will maximize their ability to recover, transport, and process those who have died in the community.
- Establishing local central collection points/morgues may indirectly encourage family members to transport their deceased loved one to a collection point, versus waiting for the ME/C recovery teams to come to their location. Providing the ME/C is prepared to accept remains arriving by private vehicle, citizens who bring their loved one to the collection point/morgue will lessen the logistical burden on the ME/C for transportation of bodies.

• Issue- Storage Capacity will be Overwhelmed.

- Discussion
 - ME/C offices, hospitals, and funeral homes do not have robust storage capabilities. Most of these entities' storage locations already operate at 90% capacity.
 - Even if bodies can be recovered in a timely manner, it is unlikely that funeral homes will be able to process remains for final disposition at the same rate the bodies can be recovered.
 - For those agencies that do have a surge capacity plan, it is likely that they have only identified one means of expanding their storage instead of identifying two or three.
 - It is likely that during a PI event the number of fatalities needing storage will exceed the local capability.
 - Those who die during a PI event may need to be stored for an extended period until the ME/C is able to identify remains, determine cause and manner of death, and issue a death certificate.
 - Temporary refrigerated storage (between 37- 42 degrees Fahrenheit) provides the best temporary storage option; however, bodies can only be held in refrigerated storage for approximately 6 months before the body decays.
 - Placing all remain in refrigerated storage may not be an option due to several factors, including limited gasoline to supply generators, limited maintenance personnel to repair broken units, limited refrigeration units (as the entire nation will need this same resource). Thus, the ME/C may need to use non-traditional methods of temporary storage, such as temporary interment.

• Actionable Recommendations

- Once remains are sorted by case type, they should be stored in different containers/locations at each collection point/morgue.
 - Those who recover bodies should "sort" them by the cause and manner of death, meaning separate PI event cases from ME/C cases requiring further investigation or autopsy.
 - Further "sort" the remains between attended cases that can be processed quickly (those with a known identify and signed death certificate or ability to obtain an immediate death certificate) from unattended cases wherein the victim's identification is not known and there are subsequent delays in obtaining a signed death certificate.
- Pre-purchase and/or pre-identify easy to assemble temporary refrigerated morgues, racking systems, temporary interment (burial) supplies and non-traditional holding facilities including warehouses, refrigerated vans, hangars, refrigerated rail cars.
- Provide a critical resource list of morgue supplies to those that maintain the Strategic National Stockpile both federally and for the state if applicable.
- Encourage ME/Cs to obtain or pre-identify local agencies that can deliver crucial supplies.
- Create dormant contracts with private local sector resources if possible, to obtain storage supplies and other services.
- Be prepared to make public statements regarding storage solutions particularly the employment of long-term temporary interment. *Note it is possible that the location used for long-term temporary interment may become the final resting location for many decedents.

• **Results**

 Placing sorted remains in different storage containers will simplify the process for workers and ensure only remains that have positive identification and a death certificate listing the cause and manner of death, are transitioned to the final disposition operational phase.

- By pre-identifying and/or purchasing resources and balancing local jurisdictional requirements with local available assets, the ME/C is better prepared to obtain additional storage assets during a PI event.
- Creating a storage method that simplifies how remains are processed will reduce the amount of time most family members will wait for final disposition to occur.
- An organized, segregated storage system will provide the public a higher level of confidence that government agencies are managing the PI event well.

• Issue- Tracking and Identification Process Must Remain a Priority.

• Discussion

- Although identifying remains during a PI event may not initially be problematic, a subset of those who die may not be easily identified, thereby slowing the ME/C's ability to release remains for final disposition.
- For this reason, identification and tracking should begin ideally upon body recovery, but at the latest upon the time remains are received at the local collection point/morgue.
- Historically, numbering systems have been unwieldy, disjointed and complicated during mass fatalities events, as each jurisdictional agency has its own method of numbering (ME/C, law enforcement, missing persons cases, Emergency Medical Service (EMS), etc.).
- To add to the confusion, the ME/C will also need to process their daily caseload during the same time the PI event takes place.

• Actionable Recommendations

- Authorities must establish a national, uniform, method for numbering and tracking decedents. For example,
 - Consider using the state abbreviation and the zip code (for example: VA23219.001) as an numerical identifier, followed by a case number.
 - Another idea may be to use a geographical marker such as Street Address or Global Positioning coordinate, followed by a case number.
- Gather identification material to include an identification photograph, 2 fingerprints, and a DNA sample (e.g., saliva swab or blood stain card). Although these identification samples may not need to be processed, those in authority are able to substantiate the identification of the decedent at a later time should individuals question the ME/C about a decedent's identity. *[*Note- Ideally, these tasks should be performed by those recovering the bodies to avoid double allocation of limited resources. However, some of those performing morgue operations must also be prepared to perform these duties when decedents arrive by some other means than via designated recovery teams.]*
- Consider using computer networks to link the identification database between all collection points/morgues.
- The ME/C should keep daily death cases separate from PI event cases and number them using different identifiers.
- **Results**
 - A systematic method for identifying and tracking remains at the collection points will help reduce the amount of time it will take to process remains and increase the ME/C's ability to ensure accuracy upon identifying the body, associating body parts

(which is unlikely in a PI event) or associating personal effects before the body is released for final disposition.

• Issue- There will be a Delay in Issuing Death Certification and Obtaining Decedent Identifications.

• Discussion

- During a PI event, it will be more difficult than normal to identify decedents of unattended deaths.
- When a death is attended and the identity is known, it still may be difficult to obtain a signed death certificate because personal physicians will be overwhelmed caring for the living.
- Before a death certificate can be signed, the ME/C will need to make a positive identification.
- Before a body can be released to the family or transition to permanent final disposition, a death certificate is required.

• Actionable Recommendations

- Leaders must not compromise the ability to make positive identification even during an overwhelming PI event.
- The ME/C should be prepared to employ a "batch processing" method for obtaining signed death certificates. This may be a two-stage process that includes batch processing death certificates using designated physicians who review cases and sign the certificate, and batch processing death certificates with the department of vital records.

• **Results**

- Batch processing will help alleviate the need for many physicians to sign death certificates, if one physician is assigned this task.
- Batch processing will simplify the department of vital records ability to complete the death certificate.
- Although inaccuracy in determining the cause and manner of death may occur during a PI event, accuracy in victim identification should never be compromised, as it helps family members collect insurance claims and manage the decedent's estate.

• Issue- There will be a Depletion in the Workforce.

• Discussion

- Many individuals will be sick or taking care of their family members who are sick and will not be available to perform their regular job.
- Only individuals that are accustomed to processing and handling remains should handle bodies. This requirement, however, limits the ME/C's ability to assign just anyone to perform most fatality processing related tasks.
- The ME/C and those in authority must be prepared to shift the function their staff performs from being "workers" to "managers". Thus, they must be able to fill key leadership roles that can appropriately manage, train, inform, direct, and coordinate the efforts of "volunteers".
- The ME/C must incorporate a means to protect employee health and reduce the spread of infection to workers (to include ad-hoc workers i.e., volunteers).

• Actionable Recommendations

- The ME/C and local authorities will need to organize and train a special group of "volunteers" before an incident occurs. Suitable volunteers may come from medical schools or internship programs, the department of corrections or state chapter association of funeral directors or embalmers at the local level. It is best if the ME/C has already identified what type of task they would like these volunteers to perform before a Memorandum of Agreement (MOA) is established.
- Those in authority must develop just-in-time training programs and train volunteers on appropriate tasks, which are focused and simple to execute. This training should also focus on if volunteers need to wear particular personal protective equipment.
- Those in authority must protect their current workforce and "volunteers" by identifying the type of personal protective equipment needed, specific to the types of tasks being performed, offering medical support to all staff, and dispensing medications for those individuals suspected of having acquired an infection while performing fatality oriented tasks.
- In some instances, when a PI event does not prevent "volunteers" from regional states to support a local jurisdiction's incident, those in authority must be in a position to accept outside state professional licensure. Often this can be accomplished by writing acceptance of the state's licensure as part of the state's Emergency Management Assistance Compact.
- ME/C must evaluate their own workforces' capabilities and build in redundancies so that staffs are prepared to perform different tasks, such as management tasks, recovery tasks, or DNA collection tasks, during a disaster.
- ME/Cs should encourage employees to develop "family care plans" knowing that they may not be able to be with their families for extended periods.
- The ME/C should collaborate with their Office of Emergency Management to identify temporary housing for staff and their families if the jurisdictional infrastructure has been severely compromised. One consideration is using the Department of Corrections and the Federal Bureau of Prisons because they are generally self contained organizations capable of providing temporary housing, sanitation, and food.
- The ME/C should pre-establish just-in-time training whereby they can orient their own staff to new performing a new role (management/oversight positions), and orient "volunteers" to performing specific tasks.

• Results

- When senior leaders know the response model they will employ during a PI event, then they are prepared to pre-identify persons, or professional groups that can perform fatality processing tasks.
- When functional jobs are broken down by tasks, "volunteers" are better able to perform tasks that they do not normally perform.
- Employing these tactics allows the ME/C to maximize their workforce.

• Issue- Critical Infrastructure and Supply Chains will likely be Compromised.

- \circ Discussion
 - During a PI event, local jurisdictional agencies will need to primarily rely on local resources.

- It is likely that the entire community infrastructure will be compromised and only partly operating during certain periods of the PI event. Water, supplies, food, and gasoline may be compromised.
- Manufacturing agencies within the United States employ just-in-time inventory systems and do not stock large inventories, thus there may be a supply shortage nation-wide for critical items.

• Actionable Recommendation

- The ME/C must develop contracts with local agencies to obtain critical supplies.
- The ME/C must be prepared to operate in austere environments. This may include prioritizing the use of water, limiting the number of generators that run, and immediately transitioning temporary storage to temporary interment if the local infrastructure can not support fatality management tasks.
- The ME/C should pre-identify supply distribution points where they can obtain resources from outside the state, and pre-identify how they will distribute limited supplies to collection points/morgues. The ME/C may need to employ creative transportation methods if the local region is subject to a gasoline shortage.
- The ME/C should include public safety and security personnel in their plan and identify the types of security tasks these agencies will likely support.
- The ME/C should consider stockpiling critical supplies that will support their operations for the first 240 hours of an incident (10 days).
- **Results**
 - Identifying and mobilizing critical supplies and people will allow the ME/C to operate for a limited period of time in austere environments and create resilience in the ME/C's ability to manage mass fatalities during a PI event.

• Issue- Mutual Aid Support Will Not be Available.

• Discussion

- Because the very nature of a PI event is widespread, surrounding states will not be able to support fatality management efforts for anyone other than their own location.
- Additionally, federal Disaster Mortuary Operational Response Teams (DMORT) will not be available, as they are professional volunteers, which support mortuary professions on a daily basis. These individuals will likely support the needs of their local region.

• Actionable Recommendation

- For those states that have established organized volunteer Citizen Corps and/or Medical Corps, the ME/C should request developing a specific volunteer category of death care professionals.
- Each state should develop its own version of a DMORT capability. Each state will need to decide to what extent they will develop a mobile morgue or stockpile critical supplies, and to what extent they expect this asset to function.
- The ME/C should establish MOAs with the state chapters of specific professional organizations, e.g. pathologists, dentists, anthropologists, funeral directors, etc, to obtain ad hoc staff with specific skill sets.
- **Results**
 - When the local community does not expect to receive federal support, they seek to
 integrate different private sector capabilities into the response model that help the ME/C

maximized their capability and create workforce redundancy during an overwhelming event.

• Issue: Public Expectations Regarding Fatality Management Operations and Final Disposition Must be Modified.

- \circ Discussion
 - The American culture has strong beliefs and traditions regarding handling decedents with dignity. Often these beliefs are enmeshed with religious beliefs. When the public is told that they cannot proceed with final disposition in the traditional manner, family members become upset. Often the result includes negative media coverage, involvement of elected officials, public distrust of the government, or concerns that the government is hindering individual civil liberties.
 - In almost every state in the US, public laws dictate that all human remains must be returned to the decedent's next of kin. There are only a few states that provide exception to these laws. Those states that have passed an Emergency Health Powers law will provide ME/C the authority they need to not return the decedent and determine final disposition when an incident is considered a public health hazard.

• Actionable Recommendations

- Senior leaders at the local, state, and federal level must be prepared to make public announcements regarding how fatalities will be handled differently during a PI event, with a focus on dignity in death and protection of the public's health. These announcements should be prepared, and jointly agreed upon and presented in cooperation with other government authorities.
- Jurisdictions should create and employ a mass fatality management planner position to establish just-in-time training, public news announcements, scenario driven operational response plans, etc.
- Senior leaders at the local, state, and federal level should provide policy and authoritative guidance ensuring that the ME/C is given appropriate authority under the Emergency Health Powers Act for their state.
- Results
 - If those in government positions honestly relay to the public the "new" standard of processing remains with dignity, not only will public backlash be minimized but citizens will be more prepared to deal with facets of death and dying.
 - Once the ME/C normalizes the new process for handling remains and educates the public, panic and hysteria will diminish.

• Issue: Requesting State and Federal Assets is Too Complicated and Lengthy.

• Discussion

- When a local jurisdiction makes requests to higher government echelons for people, supplies, or equipment, often those receiving the request have additional questions that only the originator of the request can answer.
- During federal disasters, the request for support includes a specific chain of communication and specific forms that key individuals must fill out. Usually each layer of government uses different forms to make the same request for resources.

• Actionable Recommendations

 Senior leaders must identify all critical items that are needed when a NRP target capability is requested.

- Local and state government should use the same form to identify requirements (people, supplies, equipment) that the federal government uses.
- These forms should be simple and allow a section whereby the local agency identifies their needs, and the same form goes to the state representative for approval, and then goes to the federal representative for approval. Should any individual have a question they would then be able to immediately identify the local point of contact for obtain prompt resolution.

o **Results**

- When local and state agencies understand how to identify "requirements" according to the NRP Target Capabilities List (TCL) those in administrative positions can more efficiently process the request.
- A simple form that allows local, state, and federal authorities to view all the points of contact for each level of government allows individuals to speak directly to those individuals when clarifying an identified resource need.

• Issue: There is a Lack of Federal Leadership and Clarity within the NRP dealing with the Topic of Mass Fatality Management.

- Discussion
 - Mortuary affairs is normally a local and state function, however, in a mass fatality scenario, which encompasses a large geographical area, neither one has the resources necessary to meet the demands.
 - Federal agencies are required to fund, prioritize, and manage mass fatalities from a PI event, however, no single agency at the federal level sufficiently has its focus on mass fatality/ mortuary affairs.
 - The NRP fails to clearly address how federal agencies will respond and synchronize their efforts during a mass fatality incident. In fact the word "Mass Fatality" appears in the NRP only once, under Catastrophic Incident Annex which lists the primary agency with these response responsibilities as the Department of Health and Human Services² (HHS)
 - Although this function falls under Emergency Support Function #8, with the HHS as the primary federal agency, there is little guidance. Under the ESF#8 Annex it only states:

"Victim Identification/Mortuary Services: HHS may request DHS and DOD to assist in providing victim identification and mortuary services; establishing temporary morgue facilities; performing victim identification by fingerprint, forensic dental, and/or forensic pathology/anthropology methods; and processing, preparation, and disposition of remains."³

This statement implies that Department of Homeland Security (DHS) and the Department of Defense (DOD) share responsibility for Victim Identification and Mortuary Service. It fails to address who among these two separate federal departments is responsible to perform what tasks.⁴ No plans or procedures have been developed between these two federal agencies to delineate responsibility or discusses how they will operate in support of HHS when given the mission or how these agencies will operate with the local government, responsible to perform these tasks.

²Department of Homeland Security, "National Response Plan" Washington, D.C., December 2004, page CAT-5

³ Department of Homeland Security, "National Response Plan" Washington, D.C., December 2004, page ESF 8-6.

⁴ Environmental Hazards Management, "Hurricane Katrina: Dimensions of a Major Disaster," Fall 2005

White Paper-

Managing Mass Fatalities During a Pandemic Influenza Incident in the United States

• Within the White House's report on the Lessons Learned from Hurricane Katrina it states:

"Federal and state officials struggled to locate, recover, and identify the hundreds of deceased victims. While mortuary affairs are generally a state and local responsibility, the NRP is unclear about the appropriate federal role, leading to substantial confusion."⁵

• The Select Bipartisan Committee that investigates the preparations and response to Hurricane Katrina was even more direct on the topics the recovery of the dead and the lack of coordination:

"The lack of coordination among agencies also contributed to delayed recovery of dead bodies in the Gulf coast region. According to ESF-8, HHS is responsible for victim identification and mortuary services. HHS has authority to ask DHS and DOD to assist in providing victim identification and mortuary services; establishing temporary morgue facilities; performing victim identification by fingerprint, forensic dental, and/or forensic pathology and anthropology methods; and processing, preparation, and disposition of remains. The most experienced personnel in this area are a part of NDMS under the authority of FEMA and DHS. DOD also has significant expertise in mortuary affairs and mass fatality management. Despite having this authority, HHS was slow to respond and coordinate efforts with DOD and DHS."⁶

- The ambiguities do not stop with the NRP. Recently the drafts for National Implementation Plan for Pandemic Influenza failed to address Mortuary Affairs.⁷
- It has become apparent that unless one agency focuses on this issue fully that no progress will be made. During Hurricane Katrina we learned how devastating it was for the victims, as well as the nation, to see our citizens dead and uncared for on the streets of New Orleans. The perception was that the government, at all levels, was uncaring and incompetent and media coverage of these scenes simply reinforced this perception. As a result, Katrina's dead took on both national and international dimensions.
- With the potential of a PI event on the horizon it is critical that deliberate planning and prior coordination is conducted to affect a synchronized approach to mass fatality operations.

• Actionable Recommendations

- Create a new NRP Fatality Management Emergency Support Function. Mass fatality management requires unique planning and special skill sets other than those that are a part of the traditional health and medical community outlined in ESF 8. Until there is a separate ESF, fatality management will continue to compete with the attention and allocation of resources assigned to care for the living and fatality management efforts will receive little support, as has been the case since ESF 8's inception.
- Establish a National Mass Fatality Coordinator Position within DHS/Federal Emergency Management Agency (FEMA).
- Deliberately plan and coordinate with all fatality management stakeholders.
- Clarify roles and responsibilities within the NRP and outline how each level of government will coordinate their response during an incident.

⁵ White House, "The Federal Response to Hurricane Katrina: Lessons Learned," 23 February 2006

⁶ US Congress, "A Failure of Initiative, Final Report of the Select Committee to Investigate the Preparations for and Response to Hurricane Katrina, 15 February 2006

⁷ Department of Homeland Security, "National Implementation Plan (DRAFT), February 2006

- Develop a national mortuary affairs working board that develops policy and provides authoritative guidance to the states in support of mass fatality operations.
- **Results**
 - A more coordinated synchronized approach to managing mass fatalities than what currently exists.

IV. Conclusion

Many of our JTF-CS committee members believe the single most important message that must be relayed to our senior leaders at the local, state, and federal levels is the need to develop a mass fatality/mortuary affair Emergency Support Function (ESF). Presently mass fatality management is listed as one functional element of eighteen under ESF #8 Health and Medical Support and does not adequately address the diverse approach and skill sets required to manage mass fatalities.

Most senior leaders do not realize that fatality management operations entails a diverse group of stakeholders, from public and private sectors, and involves multiple agencies within each level of government. These disparate agencies do not fall under one or even a few authorities but rather several or no authority. At present there is no policy, regulation, or agency that unifies these stakeholders.

The HHS, the current federal authority, should consider championing the development of this new ESF and becoming the lead federal agency to unify fatality management stakeholders. To ensure success, however, key aspects must be place to include (1) federal fatality management related assets must belong to the lead federal agency (i.e., DMORT), (2) the role and the responsibilities of the lead federal agency must be defined to include providing planning expertise to support local and state jurisdictions (3) the role of DMORT must be re-defined and the asset restructured accordingly, as the origin of its current design was based on air crash disasters, (4) adequate funds must be allocated to the lead federal agency for the development and execution of the ESF, (5) the roles and responsibilities of key supporting agencies must be clearly defined, (6) a general concept of operation that includes an Incident Command System organizational response model must be developed, (7) the identification of initial, continuing, and long range recovery action plans for each agency must be developed, and (8) the establishment of key policies and guidelines to synchronize the response effort between local, state, and federal agencies but be developed

Additionally, mass fatality/mortuary operations must move to the forefront of disaster planning rather than continue as a topic no one wants to address for all levels of government. With the potential of a PI event on the horizon, it is critical senior leaders deliberately address the aforementioned issues, and coordinate their response with other agencies, today, to affect an organized and synchronized approach to mass fatality operations.