PREFACE

The Cremation Association of North America hereafter known as CANA is posting "highlights" on this website of Summary Papers otherwise known as White Papers of a recent Pandemic Event (PI) event held March 22-23, 2006 at Fort Monroe, Hampton, Virginia.

This event was held on behalf of US Northern Command (USNORTHCOM) Joint Task Force Civil Support and in cooperation with the Department of Health and Human Services.

In attendance were fifty subject matter experts including Medical Examiners from across the Country, Representatives from the Department of Homeland Security, Department of Defense, US Senate, Red Cross and the Department of Health and Human Services to name a few. This was the first time the Private Sector was invited and included organizations and companies such as CANA, NFDA, ICFA, SCI, Matthews Cremation Division and Batesville Casket Company.

The purpose of the event was to assemble these experts to address major issues, provide potential solutions and make recommendations to leaders within the United States and our global sphere of influence as they relate to a Pandemic Influenza Mass Fatality Event.

CANA was represented at this event by Board Members Michael Nicodemus and Paul Rahill.

The opinions that follow are not the expressed or written opinions of CANA, but are "highlights" that have been compiled from the White paper summations.

CANA would like to thank USNORTHCOM for inviting our Organization to participate in this event.

White Paper

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

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 respectively(1). 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 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 throughout this paper, direct local, state and federal leaders to shift all limited resources, associated with fatality operations, toward performing only the most time-critical 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 causalities (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.

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

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. 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 temporarily shut down or be 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 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 the next of kin can manage the decedent's estate.

Issues

The Volume of Incoming Cases will Increase Significantly

- 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/C 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.

Transportation, Morgue and Funeral Assets will be Overwhelmed

- 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).

Storage Capacity will be Overwhelmed

- ME/C offices, hospitals and funeral homes DO NOT have adequate storage facilities. 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 unlikely 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 remains in refrigerated storage may not be an option due to several factors, including limited gasoline 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 internment.

Tracking and Identification Process Must Remain a Priority

- 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 ability to release remains for final disposition.
- For this reason, identification and tracking should begin 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 fatality events, as each jurisdiction agency has its own method of numbering.
- 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.

There will be a Delay in Issuing Death Certificates and Obtaining Decedent Identifications

- During a PI event, it will be more difficult than normal to identify decedents of unattended deaths.
- When a death is unattended and the identity is known, it still may be difficult to
 obtain a signed death certificate because 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.

There will be a Depletion in the Workforce

- 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 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).

Critical Infrastructure, Supply Chains will likely be Compromised and Mutual Aid Support Will Not be Available

- 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.

- 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.

Public Expectations Regarding Fatality Management Operations and Final Disposition Must be Modified

- 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 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.

There is a Lack of Federal Leadership and Clarity within the National Response Plan

- 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.

- It has become apparent that unless one agency focuses on this issue fully then 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 national and international dimensions.
- With the potential of a PI event on the horizon it is critical that deliberate
 planning and prior coordination to affect a synchronized approach to mass fatality
 operations.

Conclusion

Due to the size and duration of a pandemic influenza (PI) event, the negative impact on existing systems to handle the large increase in deaths will be very significant. This will also likely be true for other mass-fatality events such as natural disasters or WMD-related terrorism incidents. The trained professionals, who are normally charged with carrying out unattended death scene investigations, will be over extended, and will probably have to prioritize by limiting their response to deaths that appear to be accidents, suicides or homicides, are otherwise suspicious, or that do not fit the pattern for a PI-related scene.

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.

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.

This document was prepared for CANA by Michael Nicodemus and as previously stated has been scaled back to accentuate the "highlights" of all four working groups who attended the PI. I thank all of you for your hard work and dedication in addressing an extremely serious event