

# From Shovels to Backhoes

By Donald W. Kautz, Ph.D., M.P.H.

*Though largely ignored in the planning process at national, state and local levels, funeral directors will prove critical to successfully responding to a future mass-fatality pandemic.*

**T**hroughout history, epidemics and pandemics have occurred with much the same results relative to handling large numbers of dead. Tales of the 1918 Spanish influenza pandemic sound very much like those from medieval Europe, during the time of the Black Death. In 1918, the pandemic marched across the nation, giving health care providers, medical examiners, coroners and funeral directors little time to prepare for the coming onslaught of illness and death. Given today's mobile society, this time will be dramatically reduced should another pandemic occur.

The 1918 pandemic moved slowly enough, however, that the East Coast could give some advice to the West Coast. Unfortunately, that advice was: "Hunt up your wood-workers and cabinet-makers and have them start making coffins. Take then your street laborers and set them to digging graves. If you do this, you will not have your dead accumulating faster than you can dispose of them."

The essential service that totally overwhelmed Philadelphia and other cities was mortuary affairs — the service that prepares the body and places it in the ground. If funeral directors are unable to perform their tasks, two things occur. First, bodies begin to accumulate, not only causing a stench described in numerous accounts, but also becoming a health hazard. During the 1918 pandemic, bodies were stacked

like cordwood, morgues overflowed, and the dead were left in their homes and even on the street where they died. Second, as Alfred Crosby states, a little dramatically, but true: "Two and more immediately significant, the accumulation of corpses will, more than anything else, sap and even



break the morale of a population. When that happens, superstitious horror thrusts common decency aside, all public services collapse, friends and even family members turn away from one another, and the death rate bounds upward."

## Lessons Learned?

By comparing the society of 1918 during the pandemic to today's society, we find many similarities, but also many differences. The comparison does offer, however, a basic road map as to what mistakes were made in 1918, what they did correctly, and what courses of action this nation needs to pursue.

Have things changed since 1918?

Very little has changed in mass-fatality planning. The weakest link appears to involve funeral directors and medical examiner/coroner agencies, as they receive no significant funding from federal or state governments for training, equipment and/or additional supplies.

Medical care has significantly improved, but there will still be shortages of doctors, nurses, medical staff and equipment, such as ventilators and pharmaceuticals. Bed space will prove critical, and surge capacities and capabilities will be limited due to the lack of staff to support surge sites.

Hospitals plan for mass casualties but do not include mass-fatality management in their planning. Moreover, individuals today are healthier and, overall, sanitation and living conditions have significantly improved.

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for training, equipment and/or additional supplies. While the health care system receives funding, the overall mortuary affairs system does not. It is vital to our national security, however, that medical examiners, coroners and funeral directors be made part of the overall disaster-response team and receive funding.

Hurricane Katrina demonstrated the horrors that people experienced when watching a body float past or the deceased "man on the bridge" that lay there for several days. Emphasis was placed on the living, and rightly so; but there is a point when the mortuary affairs process will take over. What happened in 1918 will happen again unless we treat medical examiners,

coroners and funeral directors as first responders and give them the same training, equipment and pharmaceutical protection.

Following a mass-fatality incident or pandemic, funeral directors will face the same shortages that occurred in 1918: caskets, supplies and manpower. While technologic improvements have sped up the mortuary process, such as backhoes vs. shovels, there are now environmental requirements that must be met. The Environmental Protection Agency has yet to develop a plan to waive those regulations.

Under "The National Response Plan," Emergency Support Function #8, the Department of Health and Human Services (HHS) is the primary agency. HHS may request the Department of Homeland Security and the Department of Defense (DOD) assist in providing victim identification and mortuary services; help establishing temporary morgue facilities; performing victim identification by fingerprint, forensic dental, and/or forensic pathology/anthropology methods; and processing, preparation and disposition of remains. Nothing is said about final disposition or burying the dead, however.

For the most part, state and local planning for mortuary affairs, including funeral homes, is nonexistent. In some cases, medical examiners and coroners have their own plans, but rarely do they include funeral directors.

In today's disaster planning, all the focus is on the living. Initially, all assets will be used on the living and those that can be saved, but there will be a transition process that will start to include remains recovery. The incident will then become a full mortuary affairs operation, which will include funeral homes.

Heavy emphasis has been placed on the DOD because of the very involved and logical mortuary affairs system run by the Army. Yet, the Army system — outlined in Joint Publication 4-06 "Joint Tactics, Techniques and Procedures for Mortuary Affairs in Joint Operations" — does not really apply to the civilian community, and the Army does not bury the dead; it releases the remains to a funeral home. Thus, we are back where we started with funeral directors.

There are 10 Disaster Mortuary Operations Response Teams (DMORT), one of which is the DMORT-WMD (a specialized unit whose function is the search and recovery as well as decontamination of human remains for the ultimate purpose of returning these remains to family members where possible for humanitarian and legal reasons). As with DOD, once the cause and manner of death is established, then the remains are released to a funeral home. This is where the unplanned-for bottleneck occurs. Should a pandemic occur, funeral directors will be overwhelmed; morgue space will overflow with remains awaiting final disposition; and cemetery space will prove limited. In most cases, communities will not have planned for the expansion of existing cemeteries or creating emergency cemeteries.

There are prophylaxis plans to protect first responders and health care workers in the event of a bioterrorist incident. It is essential to include medical examiners, coroners and funeral directors (and their staff members) in this group.

### Pandemic Q&A

**Funeral directors bury people that die from diseases all the time, so what is the difference?**

Sheer numbers of dead will overwhelm the system. Funeral directors will have many questions that must be answered before they can safely handle remains. Supplies will be used up rapidly. Embalming methods might have to be changed, including using alternate chemicals, or embalming might be waived altogether. Most likely, there will be an emergency requirement to immediately expand cemeteries. Temporary interment might be an option; and when recovery gets under way, the bodies can be exhumed and properly buried.

**Is there a difference between a pandemic and a terrorist event in terms of the mass-fatality response for funeral directors?**

Yes. A pandemic is not over in a few hours as is a terrorist attack. A chemical, biological, radiological, nuclear, high-yield explosive attack is short in duration, with the exception of a human-to-human transmittable disease. Even if the latter event occurs, its effect will be much smaller and



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quicker to contain than a pandemic. Any logistical problems, for the most part, will also be solved in a short period, and might come from alternate sources in other countries.

On the other hand, a pandemic is a worldwide epidemic, can last several months and has historically come back in a second or third wave. During the 1918 pandemic, it was actually the second wave that devastated the world. Not only were funeral homes swamped with bodies, but they also faced staffing shortages due to illness in their worker population.

**What might happen if the U.S. is not prepared to handle mass fatalities?**

The term *mass grave* might rear its ugly head. "Mass grave" means that bodies are buried with no intent to exhume and iden-

tify the remains. There are tremendous legal, cultural and religious problems with mass graves. Insurance companies will not pay if there is no death certificate. This happened

after the tsunami in Asia in December 2004, where many people were merely listed as "missing."

Another method, equally unappealing to the American public, is to place bodies in a large hole, pour petrol or another flammable liquid over the bodies and burn them. As implausible as this seems, some senior planners have already made that very statement. The political and legal ramifications of a mass grave and/or burning remains would last for years and would prove a dark time in our history.

#### How can this country better prepare for a possible pandemic?

The answer is training, education and guidance from local, state and federal health departments. There is a federally funded program called the Citizens Corps. Under this program, there are training programs, such as the Community Emergency Response Team and the Medical Reserve Corps. Other training programs include volunteers for police and fire services.

So why not include training for funeral directors under this program? Very few medical examiners receive training or funds for mass-causality events, and the counties that have provided funds for equipment and training are an exception to the norm. Instructors are already available with training materials, however, and grant monies for personal protective equipment and training for funeral directors and their staffs could be channeled through state health departments, since the latter already handle the monies for health care.



Along with the training, preparedness exercises need to include funeral directors and final disposition. Exercises, for the most part, end with high numbers of dead, but a

very important part of recovery is never exercised, i.e., final disposition of the bodies. A few exercises have actually involved medical examiners, coroners and DMORT, but even these ended with the identification process. The real mortuary affairs problem during the 1918 pandemic occurred at the funeral home level, which is why funeral directors must be part of the national program to include TOPOFF exercises (terrorism response exercises).

#### Learning From 1918

It is imperative to include medical examiners, coroners and funeral directors as part of the whole planning process. The current planning process is incomplete and recovery from a major disaster will be extended. Training funeral directors and providing them with personal protection equipment is essential to their performance when responding to a disaster. Funeral directors not only respectfully bury the dead, but they also provide closure for the families. Failing to prepare now will result in public outcry, followed by legal actions later, when the remains of loved ones are not laid to rest with dignity and respect.

It is strongly recommended that national, state and local funeral director associations contact their local emergency-preparedness planners and/or state health department and become part of the process. Should the worst happen, everyone will benefit from having funeral directors as part of the community emergency-preparedness team. ■

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#### ABOUT THE AUTHOR

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Note: OGR is keeping an eye on this important topic and its possible effects on the funeral profession and will distribute information as it becomes available. The sidebar ("Emergency and Pandemic Preparedness Brochure") is one example.