

Chapter 45

MENTAL HEALTH SUPPORT TO OPERATIONS INVOLVING DEATH AND THE DEAD

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INTRODUCTION

Exposure to the dead and death is common in military and civil conflict, disaster, crime, and other violent events such as transportation accidents. "Exposure to the dead" means the viewing and handling of human remains. "Exposure to death," on the other hand, refers to connotations associated with the deceased that bring forth cognitive and emotional reminders of the individual to the family and to other groups such as military units, communities, and even nations.

Many publications have addressed the effects of traumatic death on posttraumatic symptoms,¹ but none has focused on the role of the mental health provider in assisting soldiers and commanders with adjusting to the stress of caring for deceased soldiers on the battlefield or at a site of mass casualties. Mental health personnel should be familiar with this topic for three major reasons: (1) to understand the nature of distress in personnel exposed to the dead; (2) to recommend policies to medical and line commanders to reduce soldier distress; and (3) to understand their own vulnerability to these same stresses.

In the medical field, mental health personnel are probably among the most insulated from death. Psychiatrists dissect cadavers as medical students and attend medical school lectures about confronting the deaths of patients, but are unlikely to be exposed to traumatic death or even surgical or medical deaths on a routine basis. Psychologists and social workers may never have seen the dead outside of funerals. As a result, many, if not most, mental health personnel are largely unprepared to understand the nature of contact with the dead from mass disasters or war. These situations often involve large numbers of casualties, and most of the remains will not appear like those prepared for viewing in funeral homes. In the US Army mortuary affairs community, the term "remains" is used to refer to the dead; other terminology is often considered disrespectful. The term "bodies" is frequently used in the medical field and is occasionally used here to avoid repetition, but no disrespect is intended.

The purposes of this chapter are to (a) explain the

stresses of handling remains, (b) describe common feelings and responses of persons who have handled or seen the dead, (c) provide procedures to help mental health workers support personnel exposed to the dead, and (d) prepare mental health workers to effectively communicate the situation of those caring for the dead to higher authorities, who may fail to understand the nature of the services of both the remains' handlers and mental health professionals.

Persons who encounter remains may themselves have had a variety of previous experiences with the dead or no experience at all. Some gain experience through their professions. Among these are medical personnel such as pathologists, nurses, and some technicians; police, firefighters, and emergency service workers; and professionals who attend the dead such as military personnel who recover bodies from the battlefield, morticians, funeral directors and their staffs, and forensic investigators. Professional groups, for the most part, are protected from distress by their roles and identities. For example, pathologists are still serving a patient and achieve professional satisfaction in solving a mystery; they routinely provide the final medical procedures for their patients. The major goal of public service workers is to save lives, but over time their professionalism and frequent exposure to the dead generally protects them from the adverse consequences of such encounters.

A second group has encountered the dead episodically. Among these are people who have lived in a violent community, those involved in a natural or community disaster such as a building explosion or fire, victims of violent crime or violent civil disturbance, and military personnel whose regular job is handling the dead. A third group is composed of people who have rarely or never encountered the dead except at funerals or, secondarily, through the media. Members of these groups anticipate and experience exposure to the dead in a different manner.² Because of their relative lack of experience, the two latter groups usually need more preparation before exposure and more assistance afterward.

MILITARY CARE-OF-THE-DEAD POLICY AND TRAINING

The history and documentation of wartime care for the dead is very limited, although some official records of these services are publicly available.³ A recent history, prompted by the invasion of Iraq in 2003, has updated the record with personal stories and photographs.⁴

When a service member dies, the remains are no lon-

ger the responsibility of the Army Medical Department, but are handled through the military logistics system. Enlisted Army soldiers whose military profession is to collect, process, and return remains to the families are in the military occupational specialty of mortuary affairs and belong to the Army Quartermaster Corps. Following their basic training, they attend a 7-week

course at the Mortuary Affairs Center and School at Fort Lee, Virginia. The course curriculum consists of familiarization with the physical and psychological aspects of dying and death, search and recovery operations, tentative identification, decontamination, and accountability for the personal effects of the deceased. Students receive classroom and field experience at a morgue or mortuary where they are exposed to remains. They are also trained in the numerous Army procedures for the care of the dead, which helps ensure that the dead are handled in a dignified, reverent, and respectful manner, principles that are continually emphasized in the training. Following their initial training, mortuary affairs personnel can obtain additional experience in a variety of military and civilian mortuaries where they observe

and sometimes assist in autopsies. Unfortunately, however, mortuary affairs operations are not usually included in Army training exercises, which limits the ability of commanders to understand mortuary affairs functions and operations in wartime.

Quartermaster Corps officers receive familiarization training in mortuary affairs and may command a mortuary affairs company, but this command is only one of a variety of positions these officers are expected to assume. Of the other US military services, only the Navy has a dedicated career field for persons who handle remains. The Navy requires that personnel at sea who handle remains be licensed embalmers to care for bodies that cannot be returned quickly to the United States.

STRESSES OF EXPOSURE TO REMAINS

Research on groups of experienced (mortuary affairs soldiers) and inexperienced (those whose military profession did not require exposure to the dead) soldiers found three main concerns about working with remains⁵: (1) physical characteristics of the remains, (2) personal safety, and (3) emotional involvement associated with the remains.

Physical Characteristics of Remains

Senses seem to serve different cognitive and emotional processes. Each sense has special qualities that may produce distress in an individual.

Smell

The odor sensation has many special qualities⁶; aside from being immediately unpleasant, the smell of remains has additional effects. Smell is the most likely of the senses to trigger reminders at a later time. Odor memory is highly resistant to extinction, that is, there is long-term recognition of odors. A smell cannot be conjured up from the past, but can be recognized almost instantly (although a lemon's smell cannot be mentally conceptualized, its appearance can be visualized). Also, the strength of the memory varies with the involvement a person has with the odor.

People working with remains often try to mask odors by some means, such as wearing a mask laced with a strong fragrance. However, this strategy can be problematic for several reasons. Fragrances may not always be available, and the use of an additional olfactory stimulus adds another scent to the mix already present, which may also bring back unpleasant associations later. Breathing through the mouth is an effective way of avoiding unpleasant odors.

Sight

The sight of grotesque remains (burned, mutilated, dismembered, decomposed) may be the most dramatic aspect of casualties. Scenes of death are likely to be remembered and form the basis of conscious or intrusive memories. However, the most grotesque remains may not be the most bothersome to all observers. A body that looks natural with no or few visible signs of wounds may cause more distress than damaged remains. In addition, bodies that are badly burned or otherwise grossly distorted may not look human, which may make it easier for the handler to gain cognitive and emotional distance.

Touch

Tactile qualities of remains are disturbing to some workers, even when wearing gloves. For example, the skin of decomposing bodies will easily slip off the underlying tissue. Some tactile sensations are familiar, some are unfamiliar, and each has the capacity for disturbance.

Sounds

Dropping a body on a floor, truck bed, or table may remind the remains handler of sounds that would be painful to a living person. An example of such a sound is that of a head making a cracking noise against a hard surface. Autopsy equipment also produces potentially distressing sounds.

Taste

Sensations of taste are usually associated with

smell. Some remains handlers have an aversion to grilled meats after handling burned remains, but this reaction is not universal. People react individually to foods following exposure to remains, just as they have individual food references in other circumstances.

Types of Remains

What will bother individuals, or what will relieve their distress, is not completely predictable. However, with varying degrees of certainty, the categories that bother almost everyone can be enumerated and described, providing a framework for understanding situations and reactions peculiar to one person or another. Almost without exception, caring for the bodies of children is the most distressing type of exposure to the dead. Also distressing to most people are the remains of torture victims, innocent persons (such as casualties of friendly fire in the military), women who died in combat, and persons killed in a grotesque manner, as well as body parts and large numbers of remains. On the other hand, some types of remains, or some scenes or situations, are bothersome to some people but not others. In one case, remains wrapped in gauze in preparation for casketing reminded an experienced handler of a rag doll.

Each military conflict is likely to involve a unique type of death or types of remains and situations. Examples from the current wars in Iraq and Afghanistan are torture victims, fragmented remains from bombings, mass graves, and civilian casualties including children. Additionally, cultural differences in procedures for handling remains are often poorly understood by Americans.

Personal Safety

Remains handlers must protect themselves against battlefield dangers, disease, contamination, and occupational hazards. Battlefield recovery of remains can be hazardous. For example, remains can be booby-trapped with explosives. Local populations can be hostile, and the possibility of combat cannot always be ruled out. Physical contact with remains requires the same personal protective measures as are routinely taken by doctors and dentists to protect themselves from blood products and other sources of contamination. In addition to naturally occurring contamination, the enemy can contaminate remains with toxins such as chemical, biological, or radiological substances. Decontamination of remains and of the handler pose similar hazards.

In areas where certain diseases are endemic, remains handlers should be aware of necessary protective

measures. Persons who die due to combat or disasters rarely have medical conditions that cause epidemics. Remains (including animal remains) do not cause disease except under certain circumstances. This point is especially important for commanders, supervisors, and medical personnel to understand because misconceptions can cause errors in the handling and processing of remains.⁷ For example, if commanders or public officials incorrectly believe that remains can cause disease, a rush to bury or cremate them can occur, preventing the bodies from being returned to families or investigated for cause and manner of death.

Remains *can* cause disease when diseases are present in the area—microorganisms causing disease can survive in remains after death, and environmental conditions can facilitate the microorganisms' growth. Examples of such conditions are overcrowding, contaminated water, poor sanitation, and endemic disease. Some diseases that can be spread by remains are blood-borne diseases such as hepatitis B and C, human immunodeficiency virus, gastrointestinal diseases such as hepatitis A, *Escherichia coli*, cholera, and respiratory diseases such as tuberculosis. However, the most common risks to the remains handler are occupational hazards such as cuts, spills, sprains and strains, fatigue, and dehydration.

Emotional Involvement

Emotional involvement refers to the feeling of distress by the remains handlers when some quality of the remains creates a sense of shared humanity, weakening or destroying the handlers' psychological distance. The remains lose some of their inanimate quality, and the handler feels some sense of the loss of the life of another person. Emotional involvement often occurs when the handler is of similar age as the remains or has a child the same age. Other circumstances that can create a sense of emotional involvement are obtaining or preparing personal documents for deceased, media reports on the individual or situation that caused the death, contact with unit members in which more is learned about the history of the deceased, and contact with the family. These situations make the remains "like me." Emotional involvement is sometimes referred to as identification with the deceased.⁸

The personal effects of the deceased are highly likely to create a sense of emotional involvement with the deceased and, often, with the survivors of the deceased.⁹ Pictures, letters, and personal possessions and mementoes all help contribute to building a picture of the life of the deceased and a sense of loss or even threat for the handler ("it could have been me"). In the military, personal effects are given the same degree of

care and concern as the remains. Personal effects are sent to a personal effects depot where they are sorted, catalogued, inventoried, cleaned, and shipped to the next of kin. Mortuary affairs personnel staff these depots and are exposed in detail to the lives of the deceased. Policy requires that mortuary affairs staff read letters before they can be returned to the family

to ensure that the material is returned to the correct recipient and to remove material that might be sensitive or embarrassing to the family. Government property and morbid material (such as blood-soaked clothing) are not returned to the next of kin. A summary court officer is appointed to review all personal effects and to assure that all legal matters are observed.

PSYCHOLOGICAL EFFECTS OF CARING FOR REMAINS

Reactions to death and the dead are varied and difficult to catalogue or predict. Some reactions are immediate, and others may not appear until later. Typical immediate reactions are surprise and shock, withdrawal, nervousness, and shame at one's own reactions. Overworking is also common and leads to fatigue and errors. Other reactions are intrusive thoughts, avoidance of reminders of the situation, feeling "keyed up," and problems with daily functioning. These reactions are normal and expected unless prolonged. More extreme reactions can impact negatively on health, including substance abuse, excessive smoking, failure to seek needed medical care, and other behaviors that indicate a lack of self-care.

Additional behaviors can be expressed, and people respond differently and at different times. A longitudinal study of posttraumatic responses over a 13-month period in a group of mortuary workers found that intrusive and avoidance symptoms were elevated at 1, 4, and 13 months, but decreased over time. The level of probable posttraumatic stress disorder symptoms was 11% at 1 month, 10% at 4 months, and 2% at 13 months. Depression was not increased. Marital status was a factor in response: single remains handlers reported more avoidance and somatization than married remains handlers.¹⁰

Anticipation of exposure to traumatic death is stressful. In any remains-handling situation, an-

ticipation of one's own reaction must be considered,² especially for inexperienced people. Training and experience can reduce anticipated stress and result in improved performance, decrease fatigue, and decrease the risk of adverse psychological effects. For example, inexperienced forensic dentists working with the remains of the badly burned victims of a fire reported more distress from handling decomposed, burned, and fragmented remains than the experienced dentists.¹¹ However, both experienced and inexperienced dentists reported distress from handling the remains of children. These findings challenge the common belief that highly trained professionals are immune to distress.

In most circumstances, the groups with the most exposure have the most distress. For example, the distress for forensic dentists who handled burned remains was related to the hours of exposure to the remains.¹¹ In another study, the responses of mortuary workers were measured before and after exposure to the remains of service members killed in war.¹² When age, sex, volunteer status, and experience were controlled, intrusion symptoms increased significantly for all groups exposed to the dead, and avoidance symptoms increased in the two groups with the most exposure. Even after controlling for symptoms expressed in anticipation of exposure to the dead, exposure itself increased posttraumatic symptoms.

ROLE OF THE MENTAL HEALTHCARE PROVIDER IN MASS DEATH SITUATIONS

To be maximally effective in assisting soldiers, the mental health provider must be knowledgeable about the stresses of operations and their likely effects on exposed personnel; be available, known, and trusted; and coordinate efforts with the local chaplain or other first lines of support outside the military unit or civilian organization.

Recognizing Signs of Stress

No particular reactions or signs of distress shown by remains handlers differ from reactions of other

persons. Experienced supervisors have reported witnessing or hearing about many common stress-related behaviors and feelings (Exhibit 45-1). It cannot be overemphasized that these reactions are usually normal signs of understandable distress about a difficult situation. Only when these reactions are prolonged should mental health workers seek to intervene. For day-to-day distress reactions, first-line supervisors and colleagues should offer understanding and allow respite for a reasonable period of time. Mission demands rarely prevent such temporary respite. Mental health workers can assist in preparing supervisors to

EXHIBIT 45-1

SIGNS OF STRESS IN MORTUARY OPERATIONS AND COPING WITH THE WORK

Behavioral signs of stress

- Fatigue, agitation, withdrawal, sleeplessness
- Loss of, or gain in, appetite
- Quitting (not reporting for work)
- Extreme agitation or crying

Psychological signs of stress

- Depression, sadness, apathy
- Major change of personality
- Other feelings
 - Anxiety
 - Frustration
 - Anger
 - Feeling sick and nervous
 - Fear
 - Loneliness

recognize the normal stresses of working in a mass casualty environment and provide temporary relief. Exhibit 45-2 provides examples of ways mortuary affairs soldiers deal with stress.

Assisting Soldiers With Exposure to Mass Death

The plan recommended here for mental health professionals to assist soldiers, commanders, and other medical personnel after a mass death is based on a

EXHIBIT 45-2

HOW DO MORTUARY AFFAIRS SOLDIERS SAY THEY DEAL WITH STRESS?

- “Stay focused” (concentrate on doing their job)
- Exercise or engage in sports
- Keep busy
- Read and write letters
- Talk to others
- Listen to music
- Get away from the mass death scene
- Communicate with family back home

three-stage model: (1) preparation, (2) on-site actions, and (3) follow-up (Exhibit 45-3). Commanders should be visible and available to soldiers for at least part of

EXHIBIT 45-3

GUIDELINES FOR ASSISTING SOLDIERS AND COMMANDERS IN CARING FOR THE DEAD

Before: Anticipate operational procedures and train for them

- Obtain and share information
- Brief plans up (command) and down (soldiers) the chain of command
- Expose inexperienced personnel gradually
- Practice
- Anticipate reactions and prepare for them

During: Limit exposure to the remains and scene and support the soldier

- Avoid or decrease exposure to strong stimuli
- Provide respite: breaks, food, sleep
- Provide supervision
- Pair inexperienced with experienced person
- Encourage talk among workers and supervisors
- Recognize signs of stress and act
- Provide respectful and visible command or authority
- Emphasize job and role of remains handlers

After: Inform, talk, and listen

- Provide operational debriefing and education on the facts of the event
- Acknowledge the existence of intense personal feelings
- Encourage family and organizational support systems
- Reinforce the positive aspects of the work accomplished

Long-term: Follow-up guidelines for soldiers and commanders

- Posttraumatic symptoms are usually not lasting—most people “move on”
- Time is the most effective treatment for most people
- Watch for problems that do not go away
- Problems that persist should not be neglected

the operation and ensure that all necessary logistic support has been provided. In the follow-up phase, they should speak to soldiers as a group about their work, reinforcing the soldiers' role and the importance of their work. The question usually arises as to when soldiers should be ready to go back to work. Although there is no firm answer to this, it is recommended that soldiers be given some time off after the operation to rest and attend to personal matters. Several days of respite is common following a difficult mission. Sending soldiers back to work immediately, unless absolutely necessary, is likely to be detrimental to their functioning and may be interpreted as a lack of appreciation for them and their work. Support of soldiers in mass death operations involves three domains: (1) personal, (2) organizational, and (3) logistical.

Personal Support

In addition to normal social support, the supervisor and the mental health worker should attempt to reinforce in the soldier a pride of accomplishment whether the individual is distressed or not. Exhibit 45-4 lists many points that can be made by the mental health worker, the supervisor, and the commander. The exhibit includes unique military aspects of caring for remains with which the individual, particularly the lower ranking soldier, should be aware. Immediately obvious are the services to the deceased and the family of the deceased. Less obvious are the honor of upholding military service traditions and fulfilling the nation's cultural expectations. It is also vital that persons outside the mortuary affairs field understand the importance of recognizing these principles.

Personal support of soldiers also includes access to mental health and spiritual care. Because of the broad dispersion of mortuary affairs collection points and interruptions in transportation capabilities, mental health teams in the current Middle East conflicts often have difficulty establishing relationships with soldiers. Also, contact between soldiers and mental health personnel can be a touchy issue. In spite of the competency, good will, and attempts of mental health workers to be helpful, soldiers will not often engage with them if they are not known and trusted. Being credible requires frequent contact. Chaplains are often the primary resource for personal assistance, and mortuary affairs personnel report that chaplains from all the services are available and often spend time with them eating meals and staying overnight. Chaplains, medics, and mental health workers must be known as regular visitors to achieve credible status with soldiers. Regardless of these relationships, however, the commander or other supervisor who has the authority to

EXHIBIT 45-4

REINFORCE THE POSITIVE

Common individual reasons for care of the dead in war

- Upholding American military service traditions
- "Everybody comes back home"
- "If I do it for them, somebody will do it for me"

Personal pride in care of the dead in war

- Doing something important for the deceased soldier
- Doing something important for the families
- Doing a job that others cannot do
- Personal mastery of a difficult job

Practical considerations of families in having remains returned

- Document place and cause of death
- Assist with grieving
- Resolve legal and personal issues
 - Wills and inheritance
 - Remarriage
 - Government compensation
 - Insurance

Effects on society

- Respect for and care of the dead as an American tradition
- Social identity of the dead
- Funerals, memorials, and monuments
- National pride or shame

refer a soldier to mental health personnel should do so when the situation warrants.

Organizational Support

For mortuary affairs soldiers, the presence of commanders and their respectful attitude are extremely important when remains are being cared for. It is considered highly disrespectful for commanders and other visitors not to remove headgear or wipe their feet before entering the processing area when remains are present. Commanders and mental health personnel can assist the soldiers by adhering to these practices and preparing visitors to do the same.

Other forms of organizational support are related less to the stress of handling remains and more to oc-

cupational functioning. In widely dispersed conflicts such as Iraq and Afghanistan, soldiers operate many collection points, often with minimal personnel. Soldiers may be required to recover remains from distant locations and are always on duty. Processing remains requires physical work in lifting and moving the deceased as well as the transfer cases in which they are shipped. A large number of remains can require several hours to process. As a result, opportunities for rest, recreation, and personal time are limited. Commanders must ensure that soldiers have time for sleep and recuperation. Finally, collection points and mortuaries are often located at air fields away from Army support or are isolated to prevent unnecessary troop exposure. This isolation can have a positive effect in the freedom to accomplish the work without interference, but isolation can sometimes result in the mortuary affairs soldiers being shunned by others. Such situations require a great deal of command support for the soldier.

Logistical Support

The psychological stress of mortuary affairs work can be greatly reduced if soldiers have the necessary supplies and equipment, adequate transportation, and good area or unit support. Mortuary affairs soldiers often do not operate at an organic organizational level (platoon or company) in war. In the current Middle East conflicts, soldiers who staff collection points in the field are usually assigned to other Army organizations, such as a division, or even to other military services. Soldiers returning from Iraq and Afghanistan have reported excellent support from the US Air Force and Marine Corps. However, occasionally collection points lacked some logistic support, including refrigeration equipment and vehicles for transporting personnel

and remains. Army command authorities may have limited control over mortuary affairs personnel when those personnel are attached to another Army unit or military service. However, they can take steps to ensure that the organizations to which the mortuary affairs soldiers are attached provide them proper support.

Social Effects of Proper Care of the Dead

The effects on society are far from the battlefield but should be impressed on mortuary affairs soldiers to reinforce the positive aspects of their work. The requirement for dignified care of remains is not only doctrine, but becomes a creed for these soldiers. Members of American society must have faith that this tradition is carried on and that mortuary affairs soldiers accomplish this mission.

The social identity of the dead has meaning for the survivors of the deceased.⁴ Social identity refers to the place that the deceased will have in the minds of survivors such as fellow soldiers, the family, and others who may or may not have known the individual. After death, an identity can be broader than the identity the individual had in life. This identity includes, but is not limited to, knowledge of the place and manner of death, the place of burial, and how the individual is remembered. The return of the remains and personal effects contribute greatly to the formation of this identity.

Wartime funerals and memorials are legion. Whether humble or grand, funerals and memorials are less than complete without remains to memorialize. Families, without exception, want a remembrance of the deceased; if the remains are unrecoverable, then a memento is required. The memento can be a personal effect, soil from the area of death, or a symbol of the individual's life or death.

SUMMARY

The mortuary affairs soldier has an important role in the long chain of events that support the recovery and return of the dead from war. The soldiers who perform this role obtain support primarily from each other, but also from their organization and those above them. The job stresses are largely compensated for by the soldiers' own sense of accomplishment in performing an honorable but difficult task. Support from mental health workers, chaplains, or commanders, comes from (a) recognition of the work, including an understanding of the duties; (b) respect for the remains-handling pro-

cess; (c) spending time with personnel to decrease any possible isolation caused by the nature or location of the work; and (d) understanding how the stress of this particular job interacts with those stresses that affect all soldiers in a deployed environment.

The way a country cares for the remains of its war dead contributes to national pride or shame. This is reinforced in the soldier by the credo, "no one left behind." The commander, the mortuary affairs soldier, and the mental health provider all play important roles in ensuring the endurance of this tradition.

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REFERENCES

1. Ursano RJ, McCarroll JE, Fullerton CS. Traumatic death in terrorism and disasters: the effects on posttraumatic stress and behavior. In: Ursano RJ, Fullerton CS, Norwood AE, eds. *Terrorism and Disaster*. New York, NY: Cambridge University Press; 2003: 308–332.
2. McCarroll JE, Ursano RJ, Ventis WL, et al. Anticipation of handling the dead: effects of gender and experience. *Br J Clin Psychol*. 1993;32:466–468.
3. Risch E, Kieffer CL. Care of the dead. In: *United States Army in World War II. The Technical Services. The Quartermaster Corps: Organization, Supply, and Services*. Washington, DC: US Government Printing Office; 1955: 361–494.
4. Sledge M. *Soldier Dead*. New York, NY: Columbia University Press; 2005.
5. McCarroll JE, Ursano RJ, Fullerton CS, et al. Gruesomeness, emotional attachment, and personal threat: dimensions of anticipated stress of body recovery. *J Trauma Stress*. 1995;8:343–347.
6. Engen T. Remembering odors and their names. *Am Scientist*. 1987;75:497–503.
7. Pan American Health Organization and World Health Organization. *Management of Dead Bodies in Disaster Situations*. Disaster Manuals and Guidelines Series, No 5. Washington, DC: PAHO and WHO; 2004: 71–83. Available at: <http://www.paho.org/english/dd/ped/DeadBodiesBook.pdf>. Accessed November 18, 2008.
8. Ursano RJ, Fullerton CS, Vance K, Kao TC. Posttraumatic stress disorder and identification in disaster workers. *Am J Psychiatry*. 2003;156:353–359.
9. McCarroll JE, Blank AS, Hill K. Working with traumatic material: effects on Holocaust Memorial Museum Staff. *Am J Orthopsychiatry*. 1995;65:66–75.
10. Ursano RJ, Fullerton CS, Vance K, Kao TC, Bhartiya VR. Longitudinal assessment of posttraumatic stress disorder and depression after exposure to traumatic death. *J Nerv Ment Dis*. 1995;183:36–42.
11. McCarroll JE, Fullerton CS, Ursano RJ, Hermsen JM. Posttraumatic stress symptoms following forensic dental identification: Mt. Carmel, Waco, Texas. *Am J Psychiatry*. 1996;153:778–782.
12. McCarroll JE, Ursano RJ, Fullerton CS, Liu X, Lundy A. Effect of exposure to death in a war mortuary on posttraumatic stress symptoms. *J Nerv Ment Dis*. 2001;189:44–48.

