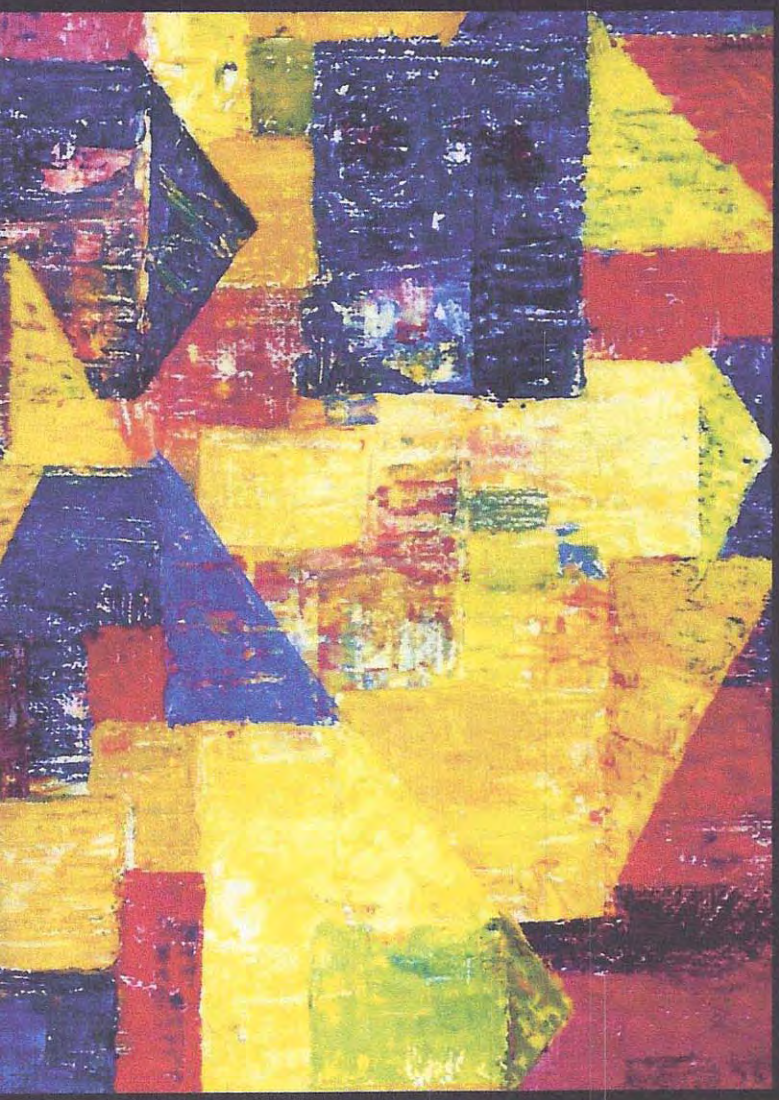
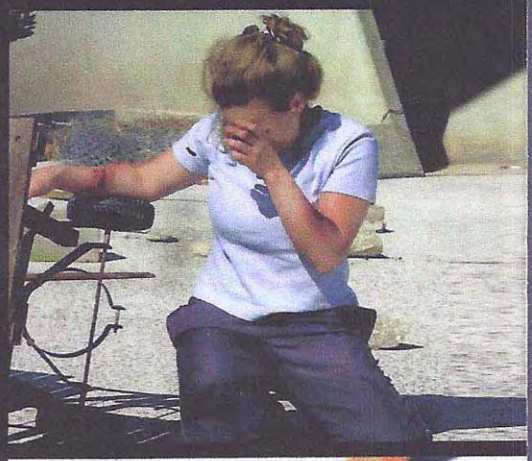
Behavioral Health Response to Disasters





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Brian McKernan, MEd, ACADC, had a background providing substance abuse and mental health treatment for adolescents and adults in a variety of public and private inpatient and outpatient settings, including culturally competent care for rural and LGBT populations. Mr. McKernan also managed the Whitman-Walker Clinic's Scott-Harper Recovery House, one of only four programs of its kind in the nation for HIV-positive or LGBT clients. His clinical work included the provision of long-term counseling for those with mental health and substance abuse disorders who were impacted by the events of September 11, 2001. From 2005 to 2011, he provided disaster behavioral health technical assistance to states, territories, local communities, and tribes at the SAMHSA Disaster Technical Assistance Center. He supported SAMHSA's Hurricane Katrina response by organizing deployment of three consecutive crisis-counseling teams to coastal Mississippi. His on-site technical assistance included providing consultation to the California Department of Mental Health regarding the California wildfires disaster of 2007 and the Iowa flooding disaster of 2008, in addition to grantee federal site visits. He provided extensive guidance on Crisis Counseling Assistance and Training Program (CCP) data collection and evaluation. In addition, he worked with the National Center for Child Traumatic Stress and the National Center for Posttraumatic Stress Disorder to increase collaborations with these valuable SAMHSA partners. He also presented internationally on disaster substance abuse, and nationally on opioid treatment provider preparedness, stress management, the CCP, and the behavioral health impact of pandemic influenza. Mr. McKernan was thrilled to have just accepted a position to become a project officer with SAMHSA to continue his work supporting the CCP when he died suddenly in a motor vehicle accident in September 2011.

Lauren M. B. Mizock is currently completing her predoctoral American Psychological Association internship at the Center for Multicultural Training in Psychology at Boston Medical Center, affiliated with Boston University. In addition, she is working at the Child and Adolescent Psychiatry Department at Boston Medical Center, where she provides child and family therapy. Her current research is investigating many topics of culture, including rates of transgender veterans, multiracial identity constructs, and culturally sensitive disaster mental health treatment. Ms. Mizock also received a graduate student research award from the psychology department at Suffolk University in 2008 and 2009. Her experience as an Outreach Fellow and Diversity Committee member has been invaluable to supporting her continued commitment to clinical work, research, and teaching in the areas of underserved and marginalized populations.

April Naturale is a traumatic stress specialist who obtained her MSW from Columbia University and her PhD in clinical social work from New York University. Dr. Naturale was the statewide director for the New York 9/11 response, Project Liberty, as well as the 9/11 10th anniversary Healing and Remembrance program. In 2004, she helped launch the National Suicide Prevention Lifeline; in 2006, the *In-Courage* program after Hurricanes Katrina and Rita in Louisiana; and more recently, the BP Oil Spill Distress Helpline. Her dissertation research studied the levels of PTSD and Secondary Traumatic Stress in social workers who responded to the terrorist attacks in New York City. Over the past 10 years, Dr. Naturale has continued to provide disaster mental health preparedness and response training, consultation, and field assistance throughout the United States and internationally. Dr. Naturale currently works with ICF International where her primary responsibility is as a Senior Advisor to the Substance Abuse and Mental Health Services Administration's Disaster Technical Assistance Center.

Anthony T. Ng, MD, is medical director of the Acadia Hospital Psychiatric Emergency Services. He is an assistant professor of psychiatry at the Uniformed Services University of Health Sciences and the George Washington University School of Medicine. He is also the immediate past president of the American Association of Emergency Psychiatry. Dr. Ng has worked extensively in several disasters and various major crisis responses, including the El Salvador earthquakes in 2001, the September 11th terrorist attacks in New York in 2001, the anthrax mental health responses at NBC

centers on emergency planning, hazards and risk assessment, and risk management. He has worked with many federal, state, and local entities to identify strategies to enhance community preparedness and ensure the resilience of communities impacted by disasters. Dr. Pine's recent publications include *Natural Hazards Analysis: Reducing the Impact of Disasters* (Auerbach, 2009), *Technology and Emergency Management* (Wiley, 2007), and *Tort Liability Today* (National League of Cities and Public Risk Management Association, 2005). He has served on the Board of Visitors for FEMA's Emergency Management Institute in Emmitsburg, Maryland. Dr. Pine's publications have been included in: *Disasters: The Journal of Disaster Studies, Policy and Management, Journal of Race and Society, International Journal of Mass Emergencies and Disasters, Oceanography, Journal of Emergency Management, Natural Disaster Review, Journal of Environmental Health,* and *Journal of Hazardous Materials.* He received his doctorate in higher education administration and public administration from the University of Georgia, Athens, in 1979.

Mary L. Pulido, PhD, currently serves as the executive director of The New York Society for the Prevention of Cruelty to Children. She is a consultant, lecturing and training nationally on the prevention and management of secondary traumatic stress. She has also developed a protocol, entitled Restoring Resiliency Response, for crisis debriefing following child fatality that is currently utilized throughout New York City for child protective services staff. She is president-elect of the American Professional Society on the Abuse of Children – New York (APSAC-NY), and is an adjunct assistant professor at the Silberman School of Social Work at Hunter College in New York City.

Gilbert Reyes earned his PhD in clinical psychology from the University of Colorado. He is a licensed clinical psychologist and associate dean in the School of Psychology at Fielding Graduate University, in Santa Barbara, California. Dr. Reyes specializes in disaster psychology and psychological trauma, and has consulted and participated in projects with organizations including the American Red Cross, the American Psychological Association, and the National Child Traumatic Stress Network. He has contributed to the development of a variety of training materials, and frequently trains mental health workers and others who serve their communities in disasters.

Kelly Rouba is an accomplished journalist and public speaker. Among the publications she currently writes for are *Life in Action* magazine, ThisAbled.com, and GalTime.com. She is also the author of *Juvenile Arthritis: The Ultimate Teen Guide* (Scarecrow Press, 2009). A children's book on disabilities that she coauthored with her brother Kevin will be released soon. Ms. Rouba works full time as a Communications & Emergency Management Specialist for the State of New Jersey and is also a DAE/Special Needs Specialist with the Department of Homeland Security/FEMA Region II. She is a member of the Patient Advocacy Institute, the American Society of Journalists & Authors, Hamilton YMCA's Advisory Board, Mercer County's Disability Advisory Council, Hamilton Township's Special Needs Commission, and the board of e-Quality Productions. She also serves as 2nd vice president of the Board of the Arthritis National Research Foundation, which named an annual grant of $75,000 in her honor called The Kelly Award for Juvenile Arthritis Research. She previously served on the boards of Enable, Inc., and Project Freedom, and on the NJ Independent Living Council. Ms. Rouba was diagnosed with juvenile rheumatoid arthritis at the age of two and later became an advocate for those living with all types of disabilities. She held the title of Ms. Wheelchair New Jersey from December 2006 to February 2008 and has been featured in numerous news publications and shows, from ABC's television show *Perspective New Jersey* to the *Wall Street Journal.*

Raymond Runo, MPA, is the president of Preparedness & Response Partners, LLC. He has an extensive background in law enforcement, occupational health and safety, human resources, and more than 25 years of experience in emergency management. From 2004 through 2010, he managed the State of Florida's public health and medical response system through 10 hurricanes, 16 tropical storms, other natural and manmade disasters, and in 2009/10 served as the Incident Commander

11 Helping the Helpers
Ameliorating Secondary Traumatic Stress in Disaster Workers

April Naturale and Mary L. Pulido

CONTENTS

11.1 BACKGROUND

Over the past two decades, there has been a growing recognition of the fact that persons may manifest symptoms of posttraumatic stress disorder (PTSD), depression, or other serious emotional distress through secondhand or indirect exposure to the traumatic experience of others (Figley 1995). Such cases include Holocaust survivors and their children (Danieli 1985), intimates of rape victims (Kelly 1988), and mental health professionals who work with trauma survivors (Lindy and Wilson 1994; Figley 1995; Stamm 2002). Literature generated from within the field of traumatology has also emphasized the potential for harm to therapists who specialize in trauma therapy (Figley 1995, 1999; Pearlman and MacIan 1995; Wilson 1994). Therapists are exposed to the stressors and psychic pain experienced by their clients. Therapists also carry the professional burden of being expected to remain open and available to their clients on an emotional level. This empathic involvement sets the stage for the potentially deleterious effects of therapy to impact the professional (Pickett 1998).

This chapter focuses on disaster responders who provide psychosocial support and mental health counseling in the aftermath of natural disasters (e.g., hurricanes, floods) as well as man-made events of mass violence such as terrorism and school shootings. While there is only a small body of

research that looks specifically at how trauma work affects the disaster mental health responder, it is sufficient to begin to inform the field and suggest further areas of study.

Hodgkinson and Shepherd (1994) report that disaster workers not only experience high levels of stress at the time of the traumatic event, but also that these elevated levels are still present at the 12-month follow-up. Wee and Meyers (2002) studied mental health workers who responded to the Oklahoma City bombing and found that staff who worked in this disaster over the long term (up to nine months) suffered higher distress levels than any other emergency services workers studied over the prior 16 years. Creamer and Liddle (2005) found that a longer length of assignment in the 9/11 mental health responders resulted in a higher risk of secondary traumatic stress, and Pulido (2005) described the levels of secondary traumatic stress (STS) in social workers who responded to 9/11 as "alarming." Naturale (2007) describes several cases that required personal and professional interventions for STS in workers responding to 9/11, Hurricane Katrina, and a school shooting. These studies support the need for more understanding of the risks that disaster mental health responders face and additional research to inform the process of how to mitigate the development of STS.

11.2 DEFINITIONS

11.2.1 Secondary Traumatic Stress

The experience of trauma symptoms in counselors often mirrors that of their clients and is attributed to hearing their client's trauma (Figley 1999; Cunningham 2003). This distress has been identified as compassion fatigue (CF; Figley 1994, 1999), vicarious trauma (VT; Pearlman and MacIan 1995; Pearlman and McCann 1990), and more recently as *secondary traumatic stress* (STS; Stamm 1999, 2002). Stamm (1999) indicates that STS and CF are alike in meaning, and Figley (1999) uses STS interchangeably with CF. He defines STS as the natural consequent behaviors and emotions resulting from knowledge about a traumatizing event experienced by a significant other or from helping or wanting to help a traumatized person (1999).

In the process of learning about the traumatic material of the client and trying to understand and identify with the experience, the therapist may actually experience emotions and other symptoms that are very similar to that of the victim (Figley 1999; Cunningham 2003). Dutton and Rubinstein (1995) categorize STS reactions/symptoms in three domains: (1) indicators of psychological distress or dysfunction, (2) changes in cognitive schema, and (3) relational disturbances.

Indications of psychological distress or dysfunction in trauma counselors may include distressing emotions such as sadness, grief, depression, anxiety, dread and horror, fear, rage, and shame (Dutton and Rubenstein 1995; Figley 1995; McCann and Pearlman 1990). Other indications of distress may include intrusive imagery, such as nightmares, flooding and flashbacks of images generated during and following the client's recounting of traumatic events (Courtois 1999; Herman 1992; McCann and Pearlman 1990). Numbing or avoidance of efforts to work with traumatic material of the client may also occur (Dutton and Rubenstein 1995; McCann and Pearlman 1990).

Other counselors have discussed the cognitive shifts that sometimes result from STS. These include shifts in the counselors' beliefs, expectations, and assumptions. This is often related to the need to find meaning in trauma, a process that can facilitate healing in many trauma survivors. McCann and Pearlman (1990) note that therapists may find their cognitive schemas altered or disrupted by long-term exposure to the traumatic experiences of their clients. For example, they may view the world as a more dangerous place. This concern could be transferred to their work with clients.

Relational disturbances, both personal and professional, are the final category of STS effects or symptoms. Figley (1995) notes that therapists' personal relationships may suffer due to increased stress, resulting in difficulty with trust and intimacy, or increased sensitivity to relationship dynamics that are similar to those being discussed by a trauma survivor (e.g., exploitation, abuse, or violence). In the professional domain, the counselor's response to the survivor client may be overidentification, detachment, or vacillation between the two (Miller 2000; Dutton and Rubenstein 1995).

Individual, organizational, social, community, and traumatic event factors have the potential to either increase or decrease one's vulnerability to STS. These include, but are not limited to: a history of psychiatric symptoms or a personal traumatic experience; demographic characteristics such as age and ethnicity; level of identification with the victim; organizational influences on the recognition of, and recovery from, on-the-job-trauma; the social support network of the therapist/crisis worker including the availability of professional supervision; and the level of community response/support for the disaster recovery and the characteristics of the traumatic event (Beaton and Murphy 1995; Figley 1995).

11.2.2 Vicarious Trauma

Vicarious trauma, a term introduced by Laurie Ann Pearlman and Lisa McCann (1990, 133), is identified as the "profound psychological effects ... that can be disruptive and painful for the helper and persist for months or years after work with traumatized persons."

Similar to compassion fatigue and secondary traumatic stress, vicarious trauma itself has not been identified as a diagnosable disorder such as acute stress or posttraumatic stress disorder. However, the concept of indirect trauma arose from the addition of the PTSD diagnosis to the *Diagnostic and Statistical Manual of Mental Disorders III* (APA 1980) by the American Psychiatric Association (Figley 1999). There is recognition that some vicarious trauma symptoms are similar to those seen in persons suffering with acute and posttraumatic stress disorders. Criteria that inform this view include the stipulation that the traumatic event from which the individual is suffering arises from outside the individual rather than an endogenous, individual weakness. These symptoms may emerge from any or all of the domains of PTSD, such as:

- *Intrusion*: The occurrence of memories, nightmares or flashbacks.
- *Avoidance*: Individuals make extensive efforts to go out of their way so as not be exposed to the site of a trauma or no longer even associate with any family or friends that remind them of the resulting pains of the traumatic event.
- *Hypervigilence*: The individual may become oversensitive to sounds around them and be easily frightened or even paranoid.
- *Disassociation*: The affected individual becomes numb, unable to feel emotion, or is distanced from any affect (Eriksson et al. 2001).

The description of vicarious trauma includes a number of symptoms that differ from the PTSD diagnosis and are measured by the Traumatic Stress Institute Belief Scale (TSI-BSL), which Pearlman and MacIan (1995) developed for use in her studies of VT. These symptoms include as examples a loss of sense of personal safety and a questioning of the meaning of events. McCann and Pearlman (1990) specifically note that vicarious trauma is an accumulation of symptoms over time due to multiple exposures to client's trauma material. This is one aspect that differentiates VT from STS as Figley (1999) indicates STS can occur from a single exposure to traumatic material.

11.2.3 Burnout

In addition to STS, helping professionals have long been known to experience *burnout*. As opposed to STS that can occur suddenly and without warning, burnout develops gradually due to the accumulation of stress and the erosion of idealism resulting from the combination of intensive contact with clients and the lack of institutional support systems. Burnout can be caused by one or a combination of the following: conflict between a person's values and organizational goals and demands; an overload of responsibility; a sense of having no control over the quality of services provided; awareness of little emotional or financial reward; a sense of loss of community within the work setting; and the existence of inequity or lack of respect at the workplace (Maslach and Leiter 1997).

This outcome can also be caused by continuous conflicts and lack of support from colleagues or supervisors. Freydenberger, who coined the term *burnout* described it as "a depletion or exhaustion of a person's mental and physical resources attributed to his or her prolonged, yet unsuccessful striving toward unrealistic expectations, internally or externally derived" (Wicks 2006, 18).

Many researchers and authors on the topic of burnout have developed their own list of the causes, but there is much overlap. Yet, all seem to point to the problem as being a lack of some type that produces frustration. Causes can include a deficiency, such as the lack of education, opportunity, free time, opportunities to ventilate, institutional power, or professional or personal recognition. Wicks (2006) cites causes that include:

- Inadequate quiet time/physical rest, cultural diversion, and personal psychological replenishment
- Vague criteria for success and/or adequate positive feedback on efforts made
- Guilt over failures and over taking time out to properly nurture oneself
- Unrealistic ideals that are threatening rather than motivating
- Inability to deal with anger or other interpersonal tensions
- Extreme need to be liked by others, prompting unrealistic involvement with others
- Seeing money or resources wasted on projects that do not seem to help people
- Too many clients assigned with too little time to handle their needs
- Serious lack of charity among those with whom we must work
- Significant lack of appreciation by superiors, colleagues, or those whom we are trying to serve
- Extreme powerlessness to effect needed change or being overwhelmed by paperwork and administrative tasks
- Working with people who have burnout

Burnout syndrome is characterized by physical symptoms such as fatigue, sleeplessness, backache, upset stomach, and headaches. Emotional changes may include anxiety, irritability, depression, and hopelessness. These symptoms are similar to STS, and therefore lead some people to confuse the syndromes. The major difference is in behaviors. The behavioral manifestations of burnout include aggression, cynicism, calling in sick, being relieved when clients do not show up for appointments, substandard work performance, and "just getting by." One specific characteristic noted in people who suffer burnout is that of indifference—a lack of caring about their work and even about their clients. Burnout fuels significant attrition among professionals working with traumatized populations (Pulido 2007).

In contrast to burnout, STS behaviors are quite different than those observed most often in disaster responders. The characteristic of indifference is lacking in staff experiencing STS. Instead, the counselor works relentlessly for the survivor, often sacrificing their own health and private life to devote more time to the case or cause. The counselor is passionately involved in her or his work, often stays late on the job, and skips lunch or breaks to continue their efforts to help others. Burnout victims are more often likely to quit the job or leave the profession altogether as opposed to those suffering from STS, who, with proper professional and self-care, will likely experience a quick recovery. Disaster mental health responders, in particular, generally remain working in the field, often moving from one traumatic event to another.

11.3 PSYCHOLOGICAL AND PHYSIOLOGICAL *RESPONSES TO TRAUMATIC STRESS*

As disaster mental health workers, it is important to help survivors recognize the normalcy of most stress reactions. It is important to recognize this for oneself as well. Mild to moderate stress reactions in the immediate and early postimpact phases of disaster are highly prevalent because

survivors (and their families, community members, and rescue workers) accurately recognize the grave danger in disaster (Young et al. 1998). Although stress reactions may seem "extreme," and cause distress, they generally do not remain or become chronic problems. Most people recover fully from even moderate to severe stress reactions within 6 to 16 months (Baum and Fleming 1993; Green and Lindy 1994; La Greca et al. 1996; Steinglass and Gerrity 1990). Physical distress may come and go in rapid intervals depending on the number of hours that the disaster worker continues in the field, their level of stress, the amount of sleep they get, and their general physical health.

A variety of factors have been found to influence the likelihood that an individual within a community will develop serious or lasting psychosocial problems in the wake of disasters or, conversely, serve as a support to aid the individual in recovering from the disaster experience. Gender, age, prior trauma experiences, ethnicity, culture, socioeconomic status, family structure, severity and length of exposure, secondary stressors, predisaster psychiatric history, and a lack of psychosocial resources all appear to play a role. Undoubtedly, these factors work together in complex ways, and in fact may be interactive to either mitigate or exacerbate the effects of the disaster (Norris, Friedman, and Watson 2002a).

The type, size, and scope of a disaster can affect the survivor's mental health. In particular, traumatic events caused by human malevolence are perceived as more stressful than those caused by human error or accident. In general, incidents precipitated by humans are seen as more stressful than natural disasters (Callahan 1998). Some traumatic events appear to be particularly difficult to cope with because of their apparent meaninglessness. Family members of victims who die in transportation disasters (large plane or boat accidents) or terrorist attacks report a meaninglessness about their family member's death that seems to add to their crisis state, possibly because of the rarity of such accidents (Brooks and McKinlay 1992; Dalgliesh et al. 1996; North et al. 1999). Several studies have compared the results across samples experiencing natural disasters, technological disasters, and war/mass violence (Norris et al. 2001; Norris et al. 2002b). The findings regarding the consequences of experiencing disasters caused by malicious human intent were unequivocal. Samples of survivors who experienced mass violence, such as terrorist attacks, were far more likely than other samples to be severely or very severely impaired. From either an information processing or resource loss perspective, disasters of mass violence may be especially difficult for victims to comprehend or assimilate, making intrusion and avoidance symptoms more likely. Because shooting sprees and terrorist attacks tend to be indiscriminate and random (Stern 1999), they create acute helplessness and anxiety and may be more likely than other disasters to shatter beliefs of the self as invulnerable and of the world as a meaningful and just place (Pearlman and MacIan 1995).

Disasters that engender severe, lasting, and pervasive psychological effects are rare, but they do happen. On occasion, even natural disasters may be of sufficient magnitude to produce severe and chronic impairment in a substantial portion of the population (Briere and Elliot 2000; Norris et al. 2001). The literature has indicated that effects were greatest when at least two of the following event-level factors were present: (1) The disaster caused extreme and widespread damage to property; (2) The disaster engendered serious and ongoing financial problems for the community; (3) The disaster was caused by human intent; and (4) The impact was associated with a high prevalence of trauma in the form of injuries, threat to life, and loss of life. When such disasters occur, it appears that the need for professional mental health services will be widespread (Norris 2002a, b; North, Hong, and Pfefferbaum 2002; Pfefferbaum et al. 1999).

There are a number of possible psychological and physiological reactions that are considered within the norm for individuals experiencing traumatic stress following a disaster. The psychological symptoms that align with the DSM-IV (2000) diagnosis of PTSD include intrusiveness, which can take the form of nightmares, flashbacks, sounds, and/or smells that are associated with the event; hypervigilance, which can take the form of a heightened startle response or a false sense of being unsafe; dissociation and/or numbing, which is often described as having observed the traumatic event from outside oneself as if watching a movie and having no feeling related to it; and avoidance, characterized by taking measures to assure that one is not exposed to the people or places that were associated with the traumatic event.

However, while PTSD is a serious and debilitating condition, it is neither the only nor the most common psychological response to a traumatic event. Symptoms of generalized anxiety may actually occur more often than PTSD, taking the form of nervousness or unrealistic and/or unfocused fear. Other psychological effects of trauma include depressive-like symptoms such as feeling down or feeling despair over one's situation. Some disaster workers may experience manic-like symptoms due to the buildup of adrenaline, cortisol, and other hormones that are not discharged properly. This chemical imbalance may present as a sense of fearlessness, overconfidence, or even grandiosity.

As noted in Table 11. 1, the psychological effects of trauma include a list of symptoms that may not create a diagnosis, but rather cause distress and disturbance to the individuals (and their families) as they continue to attempt to move toward recovery. Common complaints include irritability, rage, and feelings of guilt.

The physical effects of trauma can also be extracted from a long list of complaints. Most commonly noted trauma-related physical concerns, including fatigue, headaches, stomachaches, physical pain, insomnia, and loss or gain of appetite, are not associated with any physiological cause. These and other symptoms can occur alone or coincide with other problems listed in the domains located in Table 11.1.

The number of influential factors makes it important for survivors to perform their own self-assessment. They should be encouraged to reflect on what has changed for them since the traumatic event and to determine to what extent their symptoms are bothering them or interfering with their daily functioning. As with any physical complaints that continue for more than two weeks, a physical assessment or medical consultation is recommended. There may be physiological reasons for pain that may be related to or may be a result of the traumatic event. Conversely, the emergence of a physical problem unrelated to but occurring within the same time frame as the traumatic event may be coincidental and should be evaluated. Individuals with chronic medical conditions can suffer an exacerbation or worsening of symptoms during times of high stress. It is important to emphasize that disaster mental health workers may experience similar reactions as the survivors as a result of their exposure to, contact with, and concern for those individuals primarily impacted by the disaster situation. This "secondary" exposure to the grief and loss of others has been found to produce the same physiological and psychological responses among first responders. These symptoms include those listed in Table 11.1 in the emotional, cognitive, physical, social, or spiritual domains. Symptoms may be aggravated by the severity of the traumatic material to which the disaster worker is exposed, such as the direct contact with survivors, listening to their graphic accounts, stories, photos, and other circumstances associated with the traumatic event (Stamm 2002). For example, following the terrorist attacks of 9/11, mental health workers who were responsible for accompanying family members to identify body parts of their loved ones reported experiencing severe STS reactions following their sessions with these clients (Pulido 2005).

Additionally, since many disaster mental health response staffs are from within the affected community and often share the exposure of those they are helping, they may be doubly burdened by experiencing their own direct stress in addition to the stress of helping others. The study results described here are generalizeable to all disaster-response staff and most especially to those with a shared trauma experience (Tosone et al. 2003). Alternately, many staff report some stress relief resulting from their ability to take positive action by participating in the disaster response. In Hudnall-Stamm's Professional Quality of Life Compassion Satisfaction and Fatigue Scales (ProQOL-IV; 2002), she notes that having a sense of work satisfaction can mitigate STS.

Similar to survivors they are helping, disaster mental health response staffs can perform a self-assessment at intervals throughout their work to help them monitor their stress. Evaluating what has changed for them as a result of responding to the disaster as well as utilizing the ProQOL-IV (Stamm 2002) noted previously can assist in this process. This ProQOL-IV (2002) is described in more detail in Section 11.7.

TABLE 11.1
Summary Chart of Common Traumatic Stress Reactions

Emotional Effects	Cognitive Effects
Shock	Impaired concentration
Terror	Impaired decision-making ability
Irritability	Memory impairment
Blame	Disbelief
Anger	Confusion
Guilt	Nightmares
Grief or sadness	Decreased self-esteem
Emotional numbing	Decreased self-efficacy
Helplessness	Self-blame
Loss of pleasure derived from familiar activities	Intrusive thoughts/memories
Difficulty feeling happy	Worry
Difficulty experiencing loving feelings	Dissociation (e.g., tunnel vision, dreamlike or "spacey" feeling)
Physical Effects	**Interpersonal Effects**
Fatigue, exhaustion	Increased relational conflict
Insomnia	Social withdrawal
Cardiovascular strain	Reduced relational intimacy
Startle response	Alienation
Hyperarousal	Impaired work performance
Increased physical pain	Impaired school performance
Reduced immune response	Decreased satisfaction
Headaches	Distrust
Gastrointestinal upset	Externalization of blame
Decreased appetite	Externalization of vulnerability
Decreased libido	Feeling abandoned/rejected
Vulnerability to illness	Overprotectiveness
Pounding heart, rapid breathing, sweating	
Behavioral Effects	**Spiritual Effects**
Irritability; outbursts of anger	Questioning values and beliefs
Easily upset or agitated	Experiencing a loss of meaning
Startle response; jumpiness	Becoming cynical
Upset stomach; eating too much or too little; other gastrointestinal problems	Angry that bad things have happened to good people
Alcohol and/or substance abuse	Loss of interest in faith-based activities
Pounding heart, rapid breathing sweating, or severe headache	Directing anger toward God (Shultz et al. 2009)
Sleep problems	
Hypervigilence; constantly alert	
Worsening of medical problems	
Exhaustion	

Source: New South Wales Institute of Psychiatry and Centre for Mental Health, *Disaster Mental Health Response Handbook*, NSW Health, North Sydney, Australia, 2000.

11.4 COGNITIVE AND BEHAVIORAL REACTIONS TO TRAUMA

Individuals affected by trauma often do not make the connection between cognitive and/or behavioral changes in themselves in the immediate or even intermediate aftermath of the event. Most individuals do not see themselves as having reactions to a trauma that require any

type of mental health intervention and statistically, they are correct (Galea et al. 2005; CMHS 2001). Generally, people are able to recover over time and return to their predisaster level of functioning or adapt to the change in their environment with no mental health intervention at all. Still, in the time frame between the traumatic event and recovery, many people who have never previously suffered any emotional distress may, in fact, have seriously disturbing symptoms. They may still continue to function and therefore are not diagnosable. These individuals rise every morning and attend to their activities of daily living, get their children off to school, go to work, prepare dinner for the family, and so forth. They just do so while suffering with distress symptoms. During the time of recovery from the shock, grief, fear, anxiety, or other symptoms related to the trauma but before reaching a point where they experience recovery or adaptation, these groups may benefit from help to more easily or quickly work through their distress.

The same is true of disaster mental health response staff who often do not recognize STS symptoms in themselves. Since many responders are mental health professionals, they may feel they are "immune" or "not vulnerable" to the same types of distress experienced by the general population or a high-risk group. Moreover, an underlying sense of incompetency or lack of confidence may add to denying, avoiding, or hiding their symptoms. Cognitive and behavioral reactions to a disaster can appear in the immediate aftermath and can be quite disturbing. Yet, these symptoms are often perceived as unrelated to the trauma. A common cognitive problem reported by disaster-response staffs is memory impairment. This may be due to a combination of physical fatigue and information overload, but can also be a reaction to stress. Additionally, individuals may suffer with confusion or difficulty concentrating. Cognitive problems can also lead to poor judgment, a critically necessary attribute when responding to a disaster.

Responders who begin to realize that they may be having cognitive problems may risk being pulled from their assignment if they report such. Therefore, they may be even more hesitant to let anyone know of the difficulties they are experiencing. This is one of the many reasons why buddy systems work well in disasters and why supervisory supports are so important. There needs to be an agreement between designated buddies that they will trust each other to determine if a serious cognitive problem is evident. Poor judgment on a disaster site can result in high-risk or outright dangerous decisions being made (e.g., walking into a "hot" zone without protection or authorization, driving while impaired, etc.).

Other cognitive problems are closely related to behavioral and other responses (and are therefore listed in more than one domain in Table 11.1). These include nightmares, worrying, and dissociation. Behavioral issues themselves can present as the routine ups and downs that anyone might experience in the course of a few days, weeks, or months. These, too, can be direct stress reactions. Someone who is normally cool under pressure might become irritable or short tempered. A responder who is also a parent trying to manage their intense disaster caseload might become short tempered with her/his spouse or children—losing patience when they had previously shown more understanding and acceptance. Others might begin to use tobacco, alcohol, or illicit substances as a way of self-medicating, numbing, or negative coping. For many years, the excessive use of alcohol in the emergency response professions was accepted as a norm of the culture. Coworkers did not view nightly drinks together or weekend binges as problematic. Increased knowledge about the serious problems that can arise from using alcohol as a coping mechanism has changed this previous norm (SAMHSA 2010). It is no longer acceptable to watch colleagues use alcohol as a numbing agent, drink themselves into a divorce, or lose their profession due to alcohol or substance abuse.

Behavioral responses such as irritability, overworking, and substance abuse bring with them a tendency for isolation. It is worthwhile to note that lack of social supports has been known to increase an individual's risk of experiencing more serious distress symptoms and also that isolation itself is problematic. Connecting survivors with family members, friends, and other supports are primary aspects of helping (NCTSN and NCPTSD 2006).

11.5 RISK FACTORS INHERENT IN DISASTER RESPONSE WORK THAT CONTRIBUTE TO STS RISK

Disaster response workers need the valuable assets of empathy, perseverance, diligence, and the ability to give themselves to their work usually for long periods each day and over time (e.g., weeks and months). These important qualities combined with exposure to the disaster work environment and traumatic client cases may heighten STS symptoms. Empathy is a valuable tool for staff working with traumatized adults and children. Survivors recover with crisis interventions and/or good casework and therapy because staff are there emotionally for them. However, when disaster workers overempathize with survivors or "feel their pain," they become vulnerable to internalizing the survivor's trauma-related pain. Children's trauma is especially difficult and provocative for disaster-response workers. Empathy with a child who has been injured, witnessed violence, become homeless, or has lost a loved one can produce additional stress. In addition to the intense feelings empathy can invoke, the workers often perceive themselves as the caregiver, the one responsible for the safety and well-being of the child, and the one who has somehow failed regardless of the cause of the child's trauma.

Significant disparity between a worker's expectations and the realities of the work can also develop. This may be true especially for newer staff who were not anticipating the intensity of the work and have no previous experience or reference point. Difficulty can arise when taking on the "role" of bearing witness to a survivor's pain and discomfort. Training alone cannot prepare a new recovery worker for this job reality. The combination of being exposed to their client's trauma and the burden of having to achieve results in mental health, legal, or other administrative systems that are not always sympathetic to survivors also cause stress to the disaster worker.

Responding to a large-scale or grievous disaster with a significant number of deaths, exposure to physical injury, and/or massive destruction may evoke in disaster workers feelings of vulnerability, powerlessness, and ineffectiveness. Often workers may be embarrassed to admit that they are having a difficult time emotionally for fear of being perceived as weak or incompetent, and they may deny or try to conceal feelings. Disaster workers may try to make light of a negative experience or joke about it rather than admit to distressing feelings. This type of joking is known as gallows humor and is often seen in fire and police response staff who are trained to be "inoculated" against emotional responses to trauma.

In addition, many disaster workers have experienced prior personal losses or traumas as well as now having a "shared trauma" experience with the survivors. The pain of current or past experiences can resurface during work with disaster survivors, exacerbating the STS impact. Experiences that helpers share with survivors may deepen their understanding of the survivors' material. However, if the helper's trauma history or their own current experience remains unrecognized, unprocessed, or unresolved, helpers may have their own emotions triggered by survivors' stories and be at greater risk for missing or blocking out the survivors' most immediate needs (Rosenbloom, Pratt, and Pearlman 1999). In addition, they may then further bury their own emotions only to have them "triggered" again in another disaster, risking the development of a more serious and/or chronic problem.

Disaster responders may also experience information overload, as a result of interacting with a large number of survivors in a minimal amount of time, often with insufficient regrouping or recovery time. This can occur when the responder takes in a large amount of information quickly and over a short period of time regarding survivors' painful, gruesome, and horrific situations. Staff may be secondarily traumatized by listening to similar stories over and over without adequate time to recover, debrief, or process their cases with peers or supervisors.

The high level of accountability in all areas of disaster work is an additional stressor. Responders often have no control over their work schedule. Documentation of contacts, field reports, and referral tracking are needed, with little time, and inadequate support systems or equipment for timely completion. Disaster survivors with various needs, supervisors, agency demands, and public responsibility all contribute to the stress and unavoidable imbalance often experienced by staff. While

these stressors do not often lead to STS, workers need to be aware of potential contributing factors and develop a plan to manage these on both professional and personal levels.

11.6 MONITORING YOUR LEVELS OF STS, BURNOUT, AND SATISFACTION WITH WORK

Detection of secondary stress trauma may require taking a history of exposure to trauma through one's employment (Steinberg 1997). Professionals who work in the disaster-response field may benefit from being able to identify and monitor their levels of STS, potential for burnout, and level of satisfaction with their work life. A scientifically reliable and valid tool that is commonly used for this purpose is the Professional Quality of Life Scale–Revision IV (ProQOL R-IV), developed by traumatologist Charles R. Figley (1996) and revised by B. Hudnall-Stamm (2002). This scale, a self-test, measures three distinct subscales: Compassion Satisfaction, Burnout, and Compassion Fatigue/Secondary Trauma. Hudnall-Stamm (2002) reported that the ProQOL-IV is composed of three discrete scales that do not yield a composite score. Each scale is psychometrically unique and cannot be combined with the other scales.

The first scored scale is Compassion Satisfaction and is designed to identify the pleasure derived from work. For example, an individual may enjoy helping others through their work. They may feel positively about their colleagues and their ability to contribute to the work setting or even the greater good of society. Higher scores on this scale represent a greater satisfaction related to the ability to be an effective caregiver on the job. Compassion Satisfaction is also expected to mitigate the development of STS.

The second scored scale is Burnout. From the research perspective, burnout is associated with feelings of hopelessness and difficulties in dealing with work or in doing one's job effectively. These negative feelings usually have a gradual onset. They can reflect the feeling that an individual's efforts make no difference, or they can be associated with a very high workload or a nonsupportive work environment. It is important for workers to differentiate between burnout and STS, since the interventions differ.

The third scored scale is Compassion Fatigue/Secondary Trauma, which concerns work-related, secondary exposure to extremely stressful events, such as repeatedly hearing disturbing, traumatic stories of what happened to clients or others. Workers exposed to others' trauma experiences in areas such as disaster response, emergency medical care, or child protective services are at risk for suffering secondary traumatic stress. The symptoms of STS are usually rapid in onset and associated with a particular event. They often include excessive fear, difficulty sleeping, seeing mental images of the upsetting event, or avoiding things that remind one of the event.

The entire scale on the ProQOL consists of 30 questions, with 10 questions in each subscale. Respondents are asked to rate the frequency that they have experienced a characteristic or feeling in the last 30 days. Scores are then summed across subscales for three distinct scores. Theoretic cut scores and averages are noted as a reference point and may suggest a follow-up medical or mental health evaluation. Stamm (2002) indicates that these scores are not meant to be diagnostic in nature, but rather to assist in the awareness of STS and to be used as a guide. Disaster response workers can download this scale at the Web site http://www.isu.edu/~bhstamm. The ProQOL is free and should not be modified or sold. The author should be credited.

The ProQOL can be utilized by workers on a routine basis to monitor their compassion satisfaction, burnout, and secondary traumatic stress levels. Supervisors might use the completion of the ProQOL as part of an overall stress management or in-service self-care to assist workers by increasing their awareness and providing education about STS.

11.7 KNOWLEDGE, RECOGNITION, AND RESPONDING

In order to prevent or manage secondary trauma, there are three key prevention practices that disaster responders should know and incorporate into their routine work regime: (1) obtaining knowledge

of STS and risk factors; (2) monitoring and recognition of the symptoms of STS should they begin to impact the disaster recovery worker or their peers; and (3) responding to STS symptoms by applying skills to mitigate the effects.

Knowledge of STS is accomplished through the acquisition of information and skills, such as reading this chapter, familiarizing oneself with the personal and professional risk factors, and attending outside training on the subjects of STS and stress management, in general.

Recognition takes place as the worker is able to identify risks and exposure. The worker will notice personal changes that are not attributable to other factors in his or her life and seem to be connected to work with clients. These personal changes can occur in the worker's relationships, or in the worker's physical, emotional, or spiritual life. Sometimes colleagues, supervisors, or friends can play a role in helping one recognize signs of STS. Taking the ProQOL self-assessment can be useful as a guide and an indicator of change. The test should be taken at regular intervals that serve to create baseline and continuous data for comparison. This stage is accomplished with peer support, supervision, and reflection. Recognizing these changes leads to the next step—responding.

Responding is the application of skills, accomplished with organizational support, professional and peer support, and personal self-care. Fortunately, there are ways workers can manage secondary trauma. Secondary trauma can often be prevented, always be addressed, and usually resolved with the practices suggested herein.

11.7.1 Interventions That Help

The interventions that can be used to ameliorate the effects of STS are grouped into three main categories; organizational, professional and personal.

11.7.1.1 Organizational Interventions

Agency leaders and those in charge of disaster recovery efforts are responsible for helping prevent and manage STS (Munroe 1999). They need to be aware of the risks inherent in disaster work and address them proactively within the organizational structure and directly with the workforce. Some important responsibilities of management include: providing training and information to workers on handling STS; providing a healthy work setting that makes the environment as supportive as possible; adequate security precautions for workers both in the office and in the field; and instituting a "buddy system" for workers to offset STS reactions. Recognition of STS and "buy-in" from top executives down to managers and supervisors makes a significant difference.

Management must ensure adequate supervision for the staff, particularly in times of emergency/crisis cases. Supervisors should be trained to recognize and respond to STS among their workers. This skill will enable them not only to validate and normalize the STS reactions that staff are having regarding the disaster work, but can also quicken recovery. Accessibility to supervisors can be difficult in the throes of disaster work, so supervisors must be creative if individual supervisory sessions are not feasible. Managers can try to support their staff via individual telephone or e-mail supervision, or via group supervision, teleconferences or Web-based list serves. The critical component is the regularity of "check-ins" as the workers need to have time to discuss troubling issues that arise while working disaster recovery assignments. Debriefings, supervision, training, and peer support have been shown to be effective methods to ameliorate stress symptoms from traumatic events and hasten recovery (Bell 1995). Pulido (2005) reported that after the terrorist attacks of 9/11, those clinicians who received these services reported they were a benefit and that they appeared to help them reduce stress levels. Clinicians also reported a desire for individual "checking-in" by a supervisor as well as training on how to deal with the complex aspects of providing mental health care after a terrorist attack.

Management should attempt to provide disaster recovery workers with varied activities or caseloads so that certain staff are not always caring for the most traumatized or difficult cases. Scheduling needs to be thoughtful and include mechanisms by which the time that a disaster recovery worker

spends at the disaster site, or working directly with disaster victims, is monitored. Alternating caseloads, assigned activities, and site locations can serve to offset STS reactions. Management must also set good practice policies for hiring, compensation, work hours, overtime, and a regular break schedule. Personnel policies that ensure adequate time off, access to medical and mental health care, and solid insurance coverage for staff are also important organizational responsibilities. Munroe (1999) posited that since those who work with trauma survivors are susceptible to suffering effects from their exposure, organizations have a "duty to warn" workers prior to starting their assignments or job. A good time to address these issues is during the recruitment process, allowing the disaster recovery candidate to avoid being blindsided by the types of cases that he or she may encounter in the course of a normal work situation. It is appropriate to describe to the candidate the types of situations, cases, and overall working climate associated with disaster situations. Accessible resources for handling stress should be explored, along with an overview of agency supports available to candidates during assignments.

The organization leading the disaster recovery effort should also provide training for the workforce in logistical issues, standards of practice, and STS. A central repository of training information readily accessible for response to both current and future disaster work should be available. Content should include information on dealing with client reactions, therapeutic interventions, and referral sources. The most comprehensive, evidence-informed manual for immediate disaster mental health response work is the *Psychological First Aid: Field Operations Guide* (NCTSN and NCPTSD 2005). Following 9/11, clinicians expressed a desire for more seminars, training sessions, and workshops dealing specifically with outcomes related to terrorist-inflicted trauma. Trainings should also include information regarding the prevention and management of STS reactions (Pulido 2005).

Supervisors need to be familiar with the mental health supports available to staff and have a comfort level with recommending therapy or other counseling services when warranted. When supervisors and agency heads have a greater recognition and understanding of the impact of STS risks involved in treating trauma survivors, there will likely be a more supportive and encouraging milieu for counselors to utilize therapeutic support for themselves. Administrators should attend training regarding the management and prevention of STS and be prepared to initiate the organizational support for their staff.

Finally, organizations should plan follow-up care for disaster mental health workers once the disaster behavioral response program ends. Disaster recovery workers may have continued posttraumatic and STS responses associated with their own prior trauma history, the disaster that they just encountered, and the cumulative impact of their work with survivors. As a result of 9/11, many clinicians reported they began to experience STS reactions 30 months following the attacks. Unfortunately, this was the time when their contracts to provide services ended. Now unemployed, these workers were left to deal with their reactions on their own, without any organizational or professional support. This scenario was especially evident for many counselors who participated in the 9/11 disaster mental health response called Project Liberty, who were released from their agencies as soon as the contracts to provide this service ended (Pulido 2005). Routine, monthly follow-up programs and activities targeted for these workers should be integrated into the overall framework of terrorist disaster recovery plans as disaster-response programs end.

Forums should be provided as a venue by which counselors can not only talk about their experiences, but also to be recognized for their heroic efforts in helping with the disaster recovery effort. This programming should include the following: an overview of the symptoms of STS explaining why disaster recovery clinicians experience STS; examples of disaster STS reactions and the differences between STS and "burnout"; self-report measures for STS, burnout, and work satisfaction; and an overview of the various types of interventions that can be put in place to prevent and manage STS. Workers should know that STS is an unavoidable, but manageable, aspect of disaster mental health response work.

11.7.1.2 Professional Interventions

Disaster recovery workers can utilize the followings steps to minimize the impact of trauma-related work:

1. *Balancing the number of hours* worked per week as well as the proportion of work that is directly trauma related should be taken into consideration when cases are assigned. Disaster recovery workers should also create a work pace that maximizes emotional and physical health, taking time for breaks, lunch, and vacation. It is also important to set time boundaries that balance work life with personal life. Overworking is common among dedicated professionals. Many assume too many responsibilities, take work home, and subsequently do not allow adequate time to separate from work. Setting limits may be hard, especially in disaster-response settings where long days are expected, but rejuvenation is critical for sustaining the ongoing recovery effort.
2. *Regular supervision* for all staff conducting high-stress work is essential, regardless of their years of experience. Receiving perspective on a case from someone skilled and trusted, or to receive guidance when facing a new challenge, can be most helpful. If supervision is not available at the disaster-recovery site, staff should reach out to a mentor, preferably another professional familiar with the unique stressors of disaster work.
3. *Peer group supervision* used for case consultation is helpful. Such collaboration nurtures collegiality and reduces worker isolation. This worker-team concept can also help staff acknowledge STS reactions as well as recognize the toll that exposure to a survivor's trauma can have on a professional. Colleagues can also help peers arrange particularly complex trauma cases into manageable action steps and reduce the overwhelming quality and disorganizing influence of disaster-recovery work.
4. Staff should try to attend *professional trainings* and subscribe to newsletters or pertinent journals that will enhance knowledge about issues facing disaster survivors, early intervention techniques, treatment modalities, and ongoing research in the area. These formats can be reinvigorating and serve to provide new knowledge in the effort to support survivors' recovery. Disaster-recovery workers should be aware of the impact that their own personal trauma history could have on current work. Some activities may help the worker ameliorate the secondary effects that are related to their trauma histories (e.g., personal therapy or supportive counseling). Awareness of personal "red flags" and even structuring the caseload to avoid certain types of clients or situations may be helpful for both the disaster-recovery worker and the survivor.
5. Finally, all disaster-recovery workers should develop a *workday self-care plan* to aid with coping. Plan for time pre and post contacts with survivors and for emergencies, which may include suicidal ideation or flashbacks. Also, it is important to take breaks throughout the day. Respite should be part of the scheduling process. Depending on the schedule, make time for breakfast, lunch, or dinner. If pressed for time, workers should take mini breaks where they can. Even minimal down time helps keep a positive perspective. Staffs should incorporate replenishment into each workday.

11.7.1.3 Personal Interventions

Personal interventions include aspects of physical, social, and psychological self-care. Maintaining the health of one's body is essential. This includes regular exercise, scheduling and keeping routine medical and dental appointments, and making sure to get adequate sleep and nutrition every day. Workers should try to plan for nutritious meals as best they can under the circumstances. Prepackaged energy or protein snacks can be helpful and are easily transported. Workers should also be aware of how sleeping and eating habits can change under stress and how careful monitoring helps to ensure functioning at full capacity.

As with survivors, social support is essential for disaster mental health response workers. Talking with others can be a stress reliever. Coworkers may share similar feelings, and discussions can serve to normalize and validate staffs' experiences as well as reduce isolation. Therapeutic support from a licensed clinician may also be helpful and, in some situations, recommended.

Social activism may be a restorative activity for some. Connecting with other advocates about issues impacting survivors generates a sense of hope and purpose, and provides a sense of shared mission. Joining professional societies that have an advocacy arm or informative newsletters/mailings can give one a sense of control and purpose.

Maintaining a diversity of activities further strengthens coping capacity. Disaster recovery staff should aim to have a balance of work, outside interests, social contacts, personal time, and recreation. Recommendations include: incorporating relaxation into every day; engaging in pleasurable activities such as having contact with nature; spending time caring for pets or gardening; and engaging in creative expression. This change of view gives one a larger perspective of the world. Recovery workers are so busy they may forget to engage the creative side of themselves. Artistry, baking, cooking, playing a musical instrument, singing, dancing, and playing sports all help mitigate STS reactions.

Practitioners often cite spirituality and meditation as helpful in handling STS (Pulido 2005). The benefits of meditation can include reduced blood pressure, easier breathing, and muscle relaxation. Spirituality can include participating in an organized religion or simply engaging in activities that bolster positive faith in one's self. Some find comfort in religious groups; others may expand their beliefs in new ways.

Humor is a precious commodity. Workers should aim to have a good laugh at least once a day. Laughing can reduce stress and relieve tension, and as a coping strategy, it is priceless.

Finally, disaster recovery workers should be encouraged to develop a self-care protocol. There are basic elements of a self-care protocol that almost everyone needs to renew themselves on a daily basis. It really does not require too much to take a step back from our work routine to become refreshed and regain perspective. Wicks (2006) cited some basic elements that include:

- Quiet walks
- Time and space for meditation
- Spiritual and recreational reading, including the diaries and biographies of others whom you admire
- Exercise
- Opportunities to laugh offered by television, movies, or cheerful friends
- A hobby such as baking, gardening, or painting
- Telephone calls to family and friends who inspire you
- Listening to music

It is most important to recognize the need to intentionally and spontaneously put leisure activities into a schedule so they represent a constant, significant portion of the time that disaster recovery workers have available each day, week, month, and year.

By selecting a few of the interventions from each category, workers can greatly reduce the negative impact of STS while keeping themselves strong and energized so they can continue their important and life-saving work.

11.8 TRAINING

Relevant professional training, education, and supervision can assist staff to develop and improve the skills required to respond appropriately to disaster-affected communities. These are also the supports and structure that most mental health professionals require to perform at their best (Young et al. 1998). In their study of 9/11 responders, which included construction workers, engineers, law

enforcement, and other unaffiliated volunteers as well as mental health staffs, higher rates of PTSD were found in those workers with less experience and training (Perrin et al. 2007). The New York Case Study (Norris et al. 2006) found that despite confidence in their clinical skills, most providers felt that additional training was necessary for their mental health response staffs.

These studies support the recommendation that while mental health professionals are involved in disaster-response programs, many of the staffs are paraprofessionals (students, interns, related health professionals) and untrained community workers. Response staffs should all receive disaster training despite varying levels of education. Professional mental health workers may fill roles as supervisors and managers, but should be well informed as to the primary skills being taught to crisis counselors and outreach workers. While many mental health professionals receive crisis intervention and assessment skills training as part of core educational curriculum, disaster-specific education and training is not currently part of required university study. Therefore, it is highly recommended that disaster-specific training be a requirement for all responder staffs. National crisis counseling and training programs authorized as a result of federally declared disasters mandate that all staffs receive basic disaster-response training (SAMHSA 2009). Core trainings include information about what disaster mental health counseling is, and about what it is not. As an example, core training or "just-in-time" training that is offered in the immediate aftermath of a disaster should convey the message that disaster mental health counseling is not office-based, psychoanalytic or psychodynamic psychotherapy that addresses trauma. Moreover, it is not formal mental health treatment for posttraumatic stress disorder or other diagnosable mental illnesses such as anxiety or depression.

In brief, disaster mental health services focus on making a connection that helps to calm and support survivors. While these connections are based in the present time frame, they will assist survivors in planning for the immediate future by helping them remain functional and hopeful. The *Psychological First Aid: Field Operations Guide* (PFA; NCTSN and NCPTSD 2006) is the most current evidence-informed manual that provides detailed instruction for addressing disaster survivors in the immediate phase response. The PFA identifies eight core actions: contact and engagement; safety and comfort; stabilization; information gathering/needs and current concerns; practical assistance; connection with social supports; information on coping; and linkage with collaborative services. Examples of communication with survivors are provided, and as with any type of counseling, flexibility is stressed. The counselor must work with the survivors "where they are at" and recognize that not all survivors will want or need all core actions. Survivors might not be ready to address each of these actions in the allotted time frame.

Psychological First Aid training is recommended as a preparedness measure since the materials can be taught prior to a disaster. The PFA is appropriate as a "just-in-time" training post incident as well. In addition, the PFA training can be offered to community workers, paraprofessionals, and mental health professionals responding to a disaster. One does not need to be a clinician to learn how to deliver psychological first aid.

While PFA is best delivered in the immediate aftermath of an event, it may continue to be offered in circumstances where safety issues remain unresolved (e.g., numerous earthquake aftershocks or continued terrorist activity). PFA may also benefit survivors who have been previously unattended by mental health service providers weeks into the response.

The United States Federal Emergency Management Agency (FEMA) and Substance Abuse and Mental Health Services Administration (SAMHSA) training curricula are available to states requesting such assistance in the event of a federally declared disaster. These trainings are generally provided in the acute phase of the disaster mental health response and aim to assist disaster survivors in returning to their previous level of functioning. The federal Crisis Counseling Assistance and Training Program (CCP) core training covers the topics of active listening, outreach, cultural competence, and provision of education, support, resources, and referral. While only the core training is mandated for federal grantee CCPs, several additional, related trainings are strongly recommended. The content of supplemental training includes transition training,

which can assist workers to understand how survivors' needs might be changing. Such changes may be based on the physical status of the affected community, the economic losses, and the level of political attention over time. The mid-phase training is generally offered three to six months post incident. This training addresses the stress survivors may encounter as disaster-related problems continue and new issues—such as health concerns, substance abuse, or serious mental health concerns—emerge. Anniversary training is generally held a few weeks prior to the first-year anniversary of the disaster and assists mental health responders in identifying anticipatory reactions to the anniversary as well as other triggers. Responders learn what kinds of intervention strategies to offer survivors and to assimilate themselves as they move through this time frame with the communities they are assisting. Phase-down and close-out training teaches staff how to turn over any remaining concerns to the community in a way that empowers those affected to manage independently.

Additional training that addresses the needs of high-risk populations, namely, children, frail elderly, immigrants, and those previously traumatized may be helpful. Such training is generally contingent upon how much information the responders already possess and what further needs are indicated (Young et al. 2006). As noted at the beginning of this section, several studies report that staffs have fewer symptoms of distress, report higher levels of confidence, and perform optimally with appropriate training.

Disaster responders who remain working in a response setting with the same survivors for extended periods of time may require special training to address more complex issues such as boundary setting, transference/countertransference, and burn-out. Emergency and disaster situations can decrease the natural defense systems that individuals (and groups) build over the course of their life experience resulting in increased vulnerability. Susceptibility may create a false or temporary character presentation atypical of the person in nonemergency situations. For example, the person may present as more helpless or needy than usual. As a result of needing more help than they would outside of the traumatic circumstances, they may share more personal details or invite a deeper level of intimacy. Disaster mental health counselors need to be highly aware of the appropriate boundaries in such situations to avoid disempowering, infantilizing, or, at worst, becoming personally involved in an inappropriate manner with affected individuals and colleagues. Responders also need to differentiate between crisis counseling and case management so as not to join the survivor in emotional avoidance or using their designated time advocating for physical and economic needs rather than in counseling. Staff who cannot create proper boundaries, or who foster dependency rather than empowering survivors, or who have difficulty realizing that survivors' needs are usually more than any staff can completely address, likely require supervisory intervention rather than training. Such staff should be closely supervised to assure appropriate interactions or, possibly, be removed from the disaster setting as necessary.

In addition to specific training aimed at providing staff with the skills needed to assist community members, stress management training should be offered throughout the response for the workers themselves. If staff are not managing their own distress as it relates to the trauma itself as well as their work, they may be susceptible to secondary traumatic stress. Building stress management training into the formal response program assures that mental health response staff have an opportunity to address their own needs (Pulido and Jacina 2007).

Stress management and secondary traumatic stress trainings have multiple goals, including:

- Educating the staff about the existence of secondary traumatic stress in the responder population
- Providing staff the skills to self assess, or to self-identify
- Destigmatizing secondary traumatic stress responses in the workers; assisting the workers in understanding they are not alone
- Providing a venue where the staff are more comfortable talking about their stress as well as offering an immediate opportunity to interact with colleagues

The psychoeducational materials presented in secondary traumatic stress trainings should include much of what has been presented in this chapter—education about the effects on different domains, namely, the physical, psychological, emotional, behavioral, and spiritual. Just as staff teach disaster survivors about their common responses, STS training should include normalizing details about what symptoms may be observed in the disaster mental health response population. Further, staff should be provided with tools to self-identify and self-assess. Trainings should include recommended interventions for addressing STS on a personal level such as self-care, pleasurable activity scheduling, adequate rest and physical exercise, proper nutrition, and a healthy dose of friends and family.

Staff should also be informed that STS symptoms might appear post deployment. While the Cochrane Review (Rose, Bisson, and Weseley 2001) on Critical Incident Stress Debriefing (CISD) cautions that the model may cause harm, some of the CISD recommendations provide useful and practical information that is harmless. These include reducing alcohol consumption and avoiding overexercising, addressing sleep problems, monitoring one's physical status, seeking spiritual support, and visiting a physician or counselor if any symptoms persist over a two-week period. Staff should avoid overexposure and refrain from participating in any situations where traumatic stress symptoms may be rearoused. Staff are at risk of rearousal or reexperiencing the trauma if they are mandated to give details of their traumatic experiences or witness that of others, especially when they are psychologically unprepared to do so.

Finally, disaster mental health response managers and administrators have a clear responsibility to provide staff with professional supports such as supervision, case conferencing, peer supports, buddy systems, and rotating schedules (Munroe 1999).

The Task Force on International Trauma Training of the International Society for Traumatic Stress Studies (Weine et al. 2002) suggests a supervision structure to support newly trained humanitarian aid workers who are exposed to traumatic stressors. These guidelines are based on a consensus process and state the necessity of monitoring and evaluation for training procedures. Still, empirical research regarding the outcomes of training and supervision has not yet emerged in this developing field (Weine et al. 2002).

Of note is a recommendation from the New York Case Study (Norris et al. 2006) aimed at trainers indicating the need to recognize that trainees are likely to have been affected by the disaster themselves. Norris and her colleagues (2004) note that a trainee's own acute emotions can interfere with the understanding or acceptance of educational materials. Tosone and Bialkin (2003) also note that direct exposure becomes integrated into the professional lives of trauma counselors. Training and supervision are the most responsible ways by which to address these concerns and mitigate the development of secondary traumatic stress in the disaster mental health response population.

11.9 CONCLUSION

In this chapter, we have identified the differences between secondary traumatic stress and other terms that have been used interchangeably. The various domains that secondary traumatic stress can touch have been identified as well as the potential symptoms in each of these domains. Risk factors and ways in which to mitigate the development of secondary traumatic stress emphasizing the need for proper training, supervision, stress management, and self-care have been reviewed. Still, every disaster is as different as it is the same. There will be different types of survivors and communities with varying needs, as there will be different types of staff who participate in the response. When preparing disaster mental health response staff to work in the field, it is important to address the consideration that staff may be stressed in different ways depending on the disaster and the populations they are assigned to assist. Working under certain conditions with specific populations can increase the risk of stress. For example, we know that emergency response workers who are exposed to bodies in water and injured children may be at higher risk of suffering with distress symptoms themselves (Leffler and Dembert 1998).

Also, certain populations that require more attention, or who are physically more frail, or less able to communicate adequately, or unstable emotionally due to previous trauma, can be more demanding on responders. Disaster response managers should not assume that staff know how to properly respond to or how to self-protect against the risk of developing secondary traumatic stress. Staff should not be expected to manage alone. Programs should implement the structures, trainings, and proper oversight that will support both survivors and staffs in addressing their needs in the aftermath of disasters.

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