

## **Abstract**

Until surpassed by the events of September 11, 2001, the Oklahoma City bombing was the worst terrorist attack suffered by an American city. After the explosion 12,384 first responders assisted in the rescue. Research indicates that mass casualty incidents constitute a mental health danger to first responders. Project Heartland was the first American community mental health program designed to intervene with the survivors of a major U.S. terrorist event. The goal of the present article is to describe and discuss the strategies used by the Oklahoma City Fire Department as well as Project Heartland and Project Heartland Center to help first response teams cope with the stress of an incident of mass violence.

Key Words:

Rescue Workers; Project Heartland; Terrorism; Mental Health; Mass Casualty Incidents

**RESCUE WORKERS AND PROJECT HEARTLAND: DISASTER MENTAL HEALTH**  
**LESSONS LEARNED FROM THE OKLAHOMA CITY BOMBING**

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**INTRODUCTION**

At 9:02 am CDT April 19, 1995, an incident of mass violence and terrorism occurred in Oklahoma City. On that date a yellow Ryder rental truck, containing an ANFO bomb composed of thousands of pounds of ammonium nitrate and fuel oil stored in blue plastic drums, exploded in front of the Alfred P. Murrah Federal Building. At the time, this incident of mass violence represented the worst terrorist attack ever suffered by an American city. For the next seven years, until surpassed by the grim statistics of the September 11, 2001 attack on the World Trade Center, the Oklahoma City bombing was the largest mass murder in American history (168 people dead including 10 children); the largest criminal assault in American history (over 700 people injured); the largest crime scene in American history (almost 50 square blocks including 312 buildings damaged, 25 damaged severely, and 5 buildings ultimately destroyed); and the most costly crime in American history (estimated \$652 million dollars in property damage) (Boehler, Lowrance, and Allen, 1995).

After the explosion 12,384 workers and volunteers assisted in the rescue. This included individuals from 74 police departments, 33 sheriff's offices, 57 fire departments, 11 Urban Search and Rescue Teams, and 75 ambulance services. The last three bodies were recovered on May 29, 1995, 41 days after the bombing.

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Following any occurrence of mass violence and terrorism, a key emergency response priority involves securing and maintaining the safety, health, and mental health of first responders—fire fighters, paramedics, police officers, and disaster workers. Research with emergency rescue personnel indicates that these professionals are at risk for developing an array of physical, psychological, and social difficulties. This is particularly true in those instances where the disaster involves extensive loss of life, particularly loss of children’s lives, dangerous working conditions, extended time on scene, unsuccessful rescue attempts of survivors, and intense media attention.

Disasters constitute a mental health danger for first responders and thus require the implementation of preventive strategies using specialized programs to reduce or prevent long-range impairment (Myers, 1994). Prevention programs can be categorized in relation to the time of service with respect to original disaster impact. Thus, prevention strategies are implemented immediately; some are provided in the short-to-medium term post impact; and others are implemented in the medium-to-long term post impact (Zarle, Hartsough, and Ottinger, 1974; Heffron, 1977; Lindy, Grace, and Green, 1981; Creamer, Buckingham, and Burgess (1991).

The aim of this article is to describe and discuss the strategies used by the Oklahoma City Fire Department as well as Project Heartland and Project Heartland Center to help first response teams cope with the stress of an incident of mass violence, short and long term.

Project Heartland was the first American community mental health program specifically designed to intervene with the survivors of a major U.S. terrorist event in the short-to-medium term post attack. Project Heartland and Project Heartland Center opened on May 15, 1995 in Oklahoma City and closed on December 31, 2000.

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## **DISASTER MENTAL HEALTH SERVICES DURING THE IMMEDIATE POST IMPACT PHASE**

The Oklahoma City bombing, an act of mass violence and terrorism, can technically be described as a human-made, social disaster; one that is centripetal in nature. As such its impact has unique characteristics and, thus, unique consequences for the populace. Hodgkinson (1989) notes that both natural and human-made disasters are sudden and powerful. However, natural disasters are seen as uncontrollable, as “Acts of God”. Human-made disasters, though, are usually perceived as avoidable; if it were not for the negligence or criminal activity of some person or persons the disaster would not have occurred.

Lindy and colleagues (1981) compare and contrast centrifugal disasters with centripetal disasters. Centrifugal disasters include plane crashes, train wrecks, or fires. Prior to the disaster, the victims neither live nor work in the disaster area; after the disaster, the survivors scatter centrifugally away from the site of death and destruction. Centripetal disasters, on the other hand, include tornadoes, floods, or bombings of a city’s downtown area. Prior to the disaster, the victims live or work in the disaster area. The community itself becomes a victim and a survivor. This occurred in Oklahoma City.

Social disasters are those that threaten the social structure of a given population through civil and political unrest. Examples include the 1992 Los Angeles unrest, the 1995 Oklahoma City bombing, and the 2001 attack on the World trade Center. Social disasters are hypothesized to be particularly demoralizing for those affected (Scott, 1992; Aguilera and Planchon, 1995).

In addition to the direct victims, 104 injuries and one death, occurred among those involved in the rescue and recovery efforts. In reality most rescuers did not officially report the injuries they suffered fearing they would not be allowed to continue working. Two thirds of the rescue workers reported handling body parts. One third felt they were in extreme danger during

their rescue efforts and one-half of the workers spent the majority of their time for more than ten days at the bomb site. (Boehler, Lowrance, and Allen, 1995).

Traditionally, first responders such as fire fighters are perceived as a hardy, resilient group, who, by nature and training, are inured to coping with duty-related stressors, including exposure to traumatic incidents. Recent studies confirm, however, that rescue workers are not immune to the effects of death and destruction and can experience emotional problems both during and after a disaster, including posttraumatic stress disorder (Beaton, Corneil, Pike & Murphy, 1996; Bryant & Harvey, 1996; Corneil, 1995; IAFF, 1995; Ursano, McCaughey & Fullerton) (1994); McFarlane, A.C. (1988).

As a result of the realization that rescue workers, because of their occupation, are at risk for mental health problems the National Center for PTSD, among others, recommend that first responders be provided disaster mental health services both during and after their disaster relief efforts.

On the day before the bombing, the Oklahoma City Fire Department had available 36 fire fighters trained in critical incident stress debriefing (CISD), a disaster mental health counseling technique developed by Jeffrey Mitchell (1983). Also available to the OCFD were the volunteer consulting services of less than a half dozen mental health professionals who had established a working relationship, albeit informal in nature, with the fire department chaplain. On the day of the bombing almost the entire cadre of OCFD peer counselors (30) were assigned to operational duties that immediately disqualified them from providing disaster mental health services.

The Critical Incident Stress Management Network of Oklahoma (CISMNO) responded and arrived at the site with state CISM teams. The CISMNO, of which the OCFD is a member, is a statewide coalition made up primarily of emergency service personnel along with a few mental health professionals. By the end of the first day, a formalized response was in place,

staffed primarily by members of CISMNO. This response included endorsement and recognition from Fire Department Incident Command. The OCFD Incident Commander required that all fire personnel report to CISMNO following each shift. On the second day post attack Critical Incident Stress Management (CISM) services became a part of the Incident Command System, thus CISMNO was able to provide services to all personnel on site. The CISM center was open 24 hours a day during the entire rescue and recovery effort.

Also on the second day, CISM trained personnel arrived from Louisiana and on the third day CISM teams from Indiana arrived to assist. Many individuals and groups volunteered their services. Acceptance of these offers was based upon a combination of prior personal knowledge of the volunteering organization and their training. For example, the OCFD chaplain had developed a prior personal relationship with the fire chaplain and the leaders of the CISM team from Louisiana who were also professional fire fighters. Likewise, only those volunteers who could document recognized training in CISM or the training offered by the FBI Academy were accepted. Eventually CISMNO recruited 170 volunteers from 10 different states. Furthermore, the OCFD chaplain requested that the Federation of Fire Chaplains provide CISM trained chaplains be sent to the bomb site. No CISM team stayed longer than one week and most spent approximately three days in Oklahoma City. Some of these teams had mental health professionals as members and some did not. Of course no out of state mental health professional was cognizant of the mental health facilities in the Oklahoma City area or of relevant referral sources.

Once in full operation, the disaster mental health services included pre-briefings, on-scene intervention and presence of ministry, defusing or demobilization meetings after shift, family defusing, and individual counseling intervention with rescue workers as required. Defusing, also termed demobilization meetings, is a process designed to facilitate opportunities

for rescue workers to express their thoughts and feelings about the rescue tasks at hand without feeling obligated to do so. Pre-briefing is a process where current information obtained from the most recent demobilization meeting is provided to the rescue workers before moving on site and receiving their operational briefing. On-scene intervention and/or individual counseling intervention occurred upon request of the individual rescue worker, at the suggestion of a rescue worker peer, and/or was initiated by a member of a CISM team.

Defusing was required for all OCFD personnel and was conducted immediately after a crew was released from the site. Relevant information acquired during the defusing, with permission, was shared with the next crew during pre-briefings. Pre-briefings consisted of a review of conditions on-site, hazards, smells and any information thought relevant that would help prepare the rescue worker emotionally for site entry. Thus a crew's pre-briefing was qualitatively different than the operational briefing they received at Rescue Command on-site; the later briefing being designed solely to instruct workers in their work duties for that shift.

On scene activities included observation of personnel, work condition stress mitigation, presence of ministry, and one on one defusing in a rest area or "hiding place" where privacy could be assured. Site entry was limited to only credentialed rescue workers. Fire fighter's families were offered the opportunity to participate in their own defusing beginning the second week of the recovery process. This occurred at a local church. Data indicates that CISMNO defused over 6500 individuals at the CISM Center.

In conclusion, of note is the fact that neither the Oklahoma Department of Mental Health and Substance Abuse Services nor any contracted or certified community mental health facility provided any disaster mental health services to the rescue workers during the emergency response phase of the bombing.

### *Lessons Learned and Recommendations*

During the emergency response phase of the Oklahoma City bombing the Incident Commander recognized the need for disaster mental health services for emergency responders and requested critical incident stress management and chaplain services both at the staging areas and inside the inner parameter. These services were provided principally by peer CISM teams and chaplains already affiliated with fire and police departments. The over arching protocol used was largely developed and adjusted at the scene as the recovery progressed. Prior disaster exercises had neither included a thorough discussion nor planned for the provision of the mental health needs of the disaster rescue workers. Furthermore, licensed mental health professionals were infrequently utilized. The reason for the limited use of such professionals appears to be, in part, (1) lack of prior integration, recognition, and, thus, acceptance within the first responder community and (2) lack of a cadre of mental health professionals who had training and experience in providing disaster mental health services.

It is recommended that “crisis mental health” services become a recognized component of the Incident Command System involving disasters of mass violence and terrorism. On a state level this requires clearly defined and practiced plans that involve coordination among state agencies such as the state’s department of emergency management, department of mental health, and local law enforcement, fire fighting, and rescue and recovery organizations. On a local level, disaster mental health services should be clearly identified in Incident Command protocols and should be recognized as a necessary part of a community’s emergency operation plan. As a consequence disaster mental health teams should be routinely involved in a community’s disaster training exercises.

Next, mental health professionals need to be more involved in the emergency response phase of a mass casualty incident. To help accomplish this goal more mental health

professionals should be trained and integrated into the existing CISM teams that already exist within a community's first responder community.

In a situation of mass violence local and state resources are quickly depleted. Thus it would be helpful for states to develop mutual aid agreements with neighboring state's disaster mental health teams. Furthermore, by developing a mutual aid agreement that includes reviewing credentialing and training requirements prior to a disaster, precious time and embarrassment may be saved and avoided later when assistance is needed.

Finally, CISM was the primary model utilized by the various disaster mental health teams despite the lack of research clearly demonstrating the efficacy of CISM in preventing or mitigating development of psychological problems post disaster (Kaplan, Iancu & Bodner, 2001). Nevertheless, the use of CISM as a way of monitoring the mental health of rescue workers as well as introducing rescue workers to important mental health concepts is believed useful. The fact that CISM depends upon peer involvement and leadership was found critical in breaking through the typical reticence of first responders to utilize disaster mental health services.

#### **DISASTER MENTAL HEALTH SERVICES DURING THE INTERMEDIATE AND LONG TERM POST IMPACT PHASE**

Within five days after the bombing, the Oklahoma Department of Mental Health and Substance Abuse Services had been selected by the Governor as the lead state agency for coordinating, organizing, and conducting the intermediate and long-term mental health crisis response efforts. Personnel from ODMHSAS began designing and implementing Project Heartland.

Several important decisions relevant to the mental health needs of first responders were applied. The first decision was to the location of Project Heartland Center. For the sake of

confidentiality, it was decided that Project Heartland Center should not be located as the sole tenant in a separate, readily identifiable building. It was believed potential clients, particularly police officers and fire personnel, would feel more comfortable with the anonymity of visiting such a multi-tenant building. Thus, a two-story office complex was selected. Many different businesses and professional offices, such as dentists, accountants, and attorneys, were located within this complex. Next was the decision that all client contacts would be strictly confidential and that no personal identifying information would be kept permanently and/or shared with any state agency or other organization.

On May 8, the establishment of Project Heartland and Project Heartland Center was announced and on May 15 the facility was opened. Project Heartland was designed to provide crisis counseling, support groups, outreach, and education for individuals affected by the bombing. Project Heartland sought to obtain further input from the community as a whole. Thus on May 31, ODMHSAS sponsored a statewide forum in Oklahoma City to develop a mental health disaster recovery plan (A. Lowrance, personal communication, January 5, 1996). One hundred stakeholders were invited to participate in one of five, half-day facilitated workshops designed to develop specific goals for mental health disaster recovery. Each work group was asked to develop and prioritize a list of five crucial needs. Representatives from professional organizations; the police and fire department; the city, county, and state government; the school system; and various charitable organizations, among others, attended.

This half-day forum was not a cross agency disaster planning meeting, but rather a state wide meeting composed of invited citizens asked to develop overarching objectives for mental health recovery. The results of the workshop deliberations were incorporated into Project Heartland's agenda and used by the ODMHSAS as a guide in developing overall service goals

(A. Lowrance, personal communication, January 5, 1996). A crucial recommendation stemming from this workshop was the need to provide services to the disaster rescue workers.

Although the officials of the OCFD were aware that Project Heartland had opened, they were unaware of the nature and breadth of services to be provided. The OCFD's traditional Corporate Assistance Program was perceived as not having the expertise to provide the specialized counseling services needed following a disaster of this magnitude. Thus the decision was made in September 1995 to seek specialized long-term mental health services from a private organization, the city's worker's compensation provider, utilizing donated funds. During the one-year contract period, only six firefighters workers sought counseling from this provider. Investigation revealed that the fire fighters perceived a problem with lack of confidentiality. In fact, when a fire fighter sought counseling services from the private provider a bill was sent to the city denoting the receipt of services. Rightly or wrongly these two factors prevented most of those wanting mental health services from seeking counseling.

Other efforts were made to obtain services for rescue workers. This included a referral in September 1995 of a small number of fire fighters to one four day residential group debriefing program in Garner, Maine; and, over a four year period, to one of 19 four day critical incident debriefing workshops (CIW) developed and held in Stillwater, Oklahoma. These workshops are still being utilized on a monthly basis with an average of 14 new participants each session.

By 1996 Project Heartland's outreach efforts began to have impact on the first responder community. Project Heartland's director had assigned two experienced master's level counselors with military experience to work specifically with the disaster rescue workers. These two factors, plus the fact of strict confidentiality, enhanced the acceptance of Project Heartland services by the first responder community. Rescue workers gradually began to utilize services.

Simultaneously, OCFD officials requested that the city deposit the donated funds that had been used to reimburse the private provider into the Oklahoma City Community Foundation for administration. Removing the city from the reimbursement loop allowed the OCFD chaplain to make referrals to Project Heartland and to private mental health professionals in complete confidentiality.

OCFD officials have purposely not kept records regarding the number of first responders who were referred for mental health counseling. Although this fact concerns behavioral research scientists who are critical of such practices, the fact of the matter is that the Oklahoma fire fighters refused to seek services if they felt they did not have complete confidentiality.

As required by federal mandate, Project Heartland did keep non-identifiable client contact records. Table 1 shows that between June 1, 1995, and December 31, 2000 a total of 728 rescue worker clients or their family members were provided with a total of 4,841 hours of emergency/crisis intervention and/or 2,627.41 hours of individual, group, family and/or marital counseling.

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**Table 1****Services and activities of Project Heartland to rescue worker clients****June 1, 1995 to December 31, 2000**

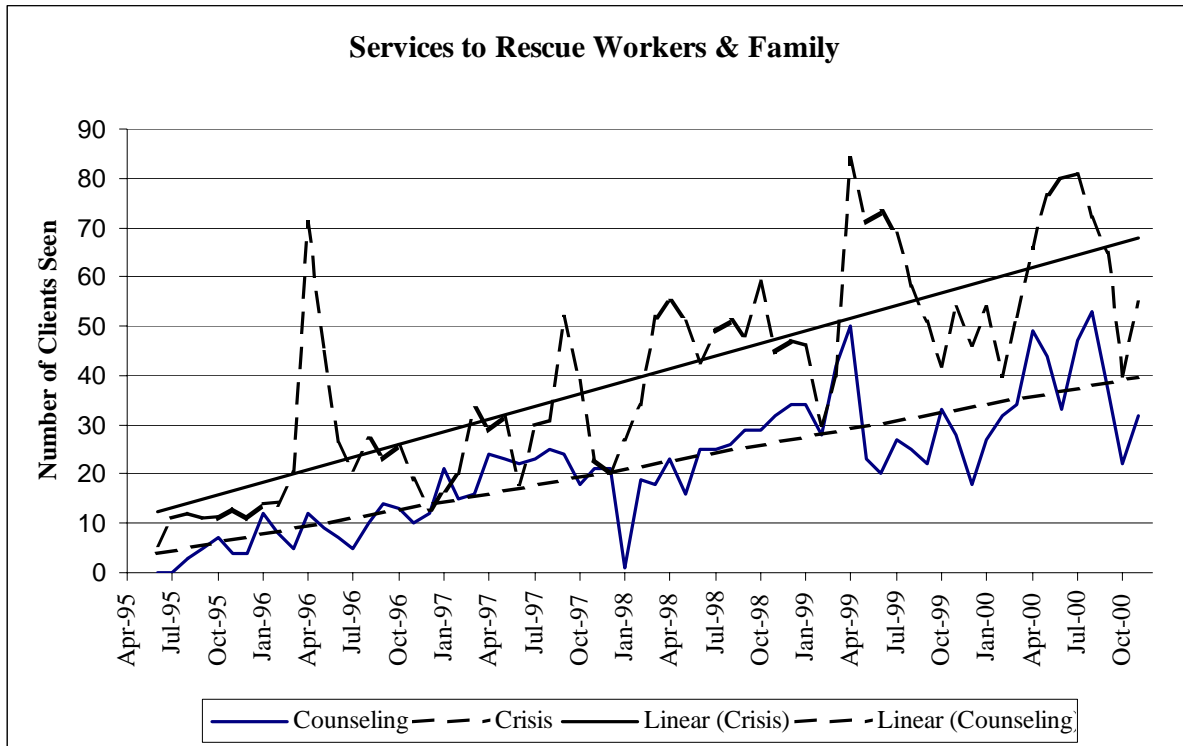
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<b>SERVICE OR ACTIVITY</b>	<b>HOURS</b>	<b>SESSIONS</b>	<b>CLIENTS</b>
<b>Screening/Referral</b>			
Referral	3.25	17	16
<b>Emergency/Crisis intervention</b>			
Face to Face	3,605	2,502	609
Telephone	1,227.8	1,312	417
Mobile	8.75	5	4
<b>Counseling/Therapy</b>			
Individual	2,575.33	1870	352
Group	2	1	1
Family/marital	50.08	33	10
<b>Support Services</b>			
Client Advocacy	12.58	19	17
Disaster Support Service	3,214.33	1,526	117
<b>TOTAL</b>	<b>10,699.3</b>	<b>7285</b>	<b>728</b>

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Of special note is the fact that use of services by rescue workers and their families increased each year over the life of the program. See Figure 1.

**Figure 1**



Note also that many of the peaks in use of services by rescue workers and their families correlate with the anniversary of the bombing, the month of April.

***Lessons Learned and Recommendations***

First, a state’s department of mental health (DMH) needs to develop an intermediate and long-term post disaster crisis-counseling plan in preparation for future disaster. This post disaster plan should include services for disaster first responders. Likewise, it is important that a number of a state’s DMH staff obtain and maintain disaster mental health training. Furthermore, more private sector mental health professionals as well as public sector community mental health professionals should obtain and maintain training to treat mental health problems associated with mass casualty incidents particularly with first responder personnel.

The services outlined for rescue workers by the long-term post disaster plan should be designed in consultation with representatives of the various rescue worker organizations within a state, for example the state's association of fire department chaplains. Utilizing such consultation services will help prevent barriers to acceptance of services being inadvertently incorporated into the programs.

Furthermore, because first responders are initially skeptical about mental health services, special outreach programs should be utilized. Chaplains, peer counselors, and mental health professionals closely associated with various rescue worker organizations should be trained and used to explain the benefits of the program to impacted workers post disaster. Next, rescue workers must be assured of complete confidentiality for themselves and their families. Finally, since use of program services increased each year of Project Heartland's existence it would appear that the program may have been terminated prematurely. Therefore, future programs should consider continuing to provide services as long as there is a need.

## **CONCLUSION: THE FUTURE OF DISASTER MENTAL HEALTH**

Emotional trauma caused by disasters can have long-standing effects. Hodgkinson (1989), citing Raphael (1986), observed that in those human-made disasters where there was severe destruction and shock, such as occurred in the Oklahoma City bombing and even more dramatically in the World Trade Center and Pentagon attacks, 30% of the survivors continued to demonstrate symptoms two years post impact. Disaster first responders are just as much at risk as are disaster victims.

Practically speaking, Oklahoma City was not prepared to be victimized by an incident of mass violence. Officials of the OCFD disaster mental health team and, later, the Project Heartland staff and the ODMHSAS had to be creative and flexible in designing and implementing assistance to rescue workers. Mistakes were made but lessons were learned.

These lessons need to be studied by concerned professionals for the benefit of first responders of future terrorist attacks in other American cities.

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