

CRITICAL INCIDENT STRESS AND THE WICHITA FIRE DEPARTMENT

EXECUTIVE LEADERSHIP

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Abstract

A critical incident can occur in many different forms, from a tragic emergency response to a mass causality, such as the World Trade Center attack. In 1991, the Wichita/Sedgwick County Critical Incident Stress Debriefing Team was formed. All Sedgwick County emergency response organizations were invited to participate.

The problem this applied research paper addressed is that the number of personnel from the Wichita Fire Department who are on the Critical Incident Stress Team has significantly dropped off, and the use of the team for debriefings of all critical incidents has not been occurring. The purpose of this paper was to evaluate the issue of Critical Incident Stress Management and how it is working for the Wichita Fire Department. The descriptive research method was utilized to answer the following research questions:

Research Question 1. How is Critical Incident Stress Management currently being handled in the Wichita Fire Department?

Research Question 2. What are the perceptions of the personnel on the Wichita Fire Department concerning the Wichita/Sedgwick County Critical Incident Stress Management Team?

Research Question 3. What modifications should be made as to how the Wichita Fire Department helps its personnel deal with the stress caused by critical incidents?

A literature review was conducted. The president of the Wichita/Sedgwick County Critical Stress Management Team was interviewed. Wichita Fire Department personnel who had left the CISM team were interviewed, and a survey was distributed to members of the Wichita Fire Department.

The results of the research indicated that the members of the department are responding to critical incidents, and support having a system in place to help them deal with the stress

caused by critical incidents. More than half of those who responded to the survey had been to a critical incident stress debriefing and approximately two thirds of those found the debriefing to be helpful in dealing with the stress caused by such event.

The recommendations were first, that the Wichita Fire Department creates a CISM team made up of trained personnel from the Wichita Fire Department to conduct debriefings for the Wichita Fire Department personnel. Second, to recruit members from all shifts and battalions, who would be trained in CISM. Third, those trained in critical incident stress debriefing will conduct a yearly training class for the fire department on the stress caused by critical incidents.

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Introduction

The Wichita Fire Department is part of a County Critical Incident Stress Management Team; it is called the Wichita/Sedgwick County Critical Incident Stress Team. The team was formed in 1991 and has been in operation for eleven years. All emergency services in Sedgwick County are invited to have members on the team and respond to calls for debriefings at Critical Incidents.

The problem this applied research project will address is that the number of personnel from the Wichita Fire Department who are on the Critical Incident Stress Team has significantly decreased. In addition, the use of the team, as a whole, has not been occurring at every Critical Incidents.

The purpose of this paper was to take an analytical look at the issue of Critical Incident Stress Management, how it is working for the Wichita Fire Department, and to make recommendations as to which direction the department should go in handling the stress caused by critical incidents on the Wichita Fire Department personnel. The descriptive research method will be used to answer the following research questions:

Research Question 1. How is Critical Incident Stress Management currently being handled in the Wichita Fire Department?

Research Question 2. What are the perceptions of the personnel on the Wichita Fire Department concerning the Wichita/Sedgwick County Critical Incident Stress Management Team?

Research Question 3. What modifications should be made as to how the Wichita Fire Department helps its personnel deal with the stress caused by critical incidents?

Background and Significance

The Wichita Fire Department is the largest fire department in the state of Kansas. The department serves 337,000 citizens and covers 136 square miles with 18 stations and 368 commissioned officers and firefighters. Over the years, the department has evolved into an all-inclusive department. The Wichita Fire Department responds as a first responder to all medical calls in the city, fires, water rescue, high angle rescue, trench rescue, hazardous materials calls, system alarms, lock in and lock outs, assist citizens, and many other types of incidents. The department also provides fire prevention activities that include arson investigation, public education and inspection.

Prior to the organization of the Critical Incident Stress Management Team the Wichita Fire Department suffered its last line of duty death. This was the death of Firefighter C.C. Killingsworth on December 31, 1988. Firefighter Killingsworth died while doing search and rescue at a house fire. The Department had no system in place to help the firefighters deal with the stress caused by this incident, except for the fire department Chaplain. In 1989 the Wichita Fire Department selected interested fire department personnel to attend a sixteen-hour training class on critical incident stress debriefing. This was the first effort by the Wichita Fire Department to address the stress caused by critical incidents.

In 1991 a countywide organization was formed called the Wichita/Sedgwick County Critical Incident Stress Debriefing Team. This name was recently changed to the Wichita/Sedgwick County Critical Incident Stress Management Team. All emergency response organizations within the county were invited to join the team and participate in critical stress debriefings. The main participants on the team were the Wichita Fire

Department, Sedgwick County Fire Department, Sedgwick County Emergency Medical Services, Sedgwick County Dispatch Center, Sedgwick County Sheriff, Wichita Police Department and the Derby Police Department. In addition to the emergency response personnel, the Chaplains involved with these various organizations, and health care professionals participate.

One of the first debriefings conducted by the Wichita/Sedgwick County Critical Incident Stress Debriefing Team was in 1991. The debriefing was conducted after a house fire in which three children were pulled from the second floor of a house and were pronounced dead either at the scene or upon arrival at the hospital. Some of the firefighters involved had difficulty coping with the stress caused by the incident. The fire was in the middle of the night and ran until the early morning hours. Before crews were allowed to return to their stations they were ordered to meet at the main downtown station and attend a debriefing. For most of the personnel gathered this was their first experience with critical incident stress debriefing, and while the debriefing may have helped a few personnel it also caused a lot of discussion as to why it was mandatory to attend and if there was any benefit to attending.

The Critical Stress Management Team has come a long way since that beginning, but there are still questions as to the usefulness of the team. In the last two years the participation by members of the Wichita Fire Department has dropped from a high of twenty-five down to ten, and of those ten still involved only two of them actively participate. The author recently was the first officer on the scene of a train/motorcycle accident involving a 13 year old. Upon arrival the author discovered the youth was dead on the scene and had been cut in half by the train. The next arriving crew was ordered to

cover the victim in an attempt to prevent traumatizing the responding rescuers. When personnel on the Wichita Fire Department were called about conducting a debriefing, their main response was “I’m not sure I am still on the team”. A debriefing was conducted, and all personnel are handling the stress created by this incident in a healthy manner. This call however, created questions for the author regarding what may be a loss of interest in those Wichita Fire Department members who are on the Wichita/Sedgwick County Critical Incident Stress Management Team.

This research problem can be tied to the National Fire Academy course titled Executive Leadership by looking at the surveys that the students were required to obtain prior to attending the class and then were reviewed in class. These survey forms were given to peers and subordinates of the students to evaluate their management and leadership skills. One of the main areas on both survey instruments was if the person being evaluated was a caring individual. Further, did the person being evaluated show concern for the well being of his subordinates. The author believes that taking an analytical look at how the Wichita/Sedgwick County Critical Incident Stress Management Team is currently working and making recommendations for improvement directly ties to being a good leader, manager and executive fire officer. This applied research project relates to the following USFA operational objective: “Reduce the loss of life from fire of firefighters” (Staff, 2001). If critical incident stress is not dealt with in the best possible way, officers and firefighters suffering from critical incident stress could make the wrong decision at a fire and cause the loss of life for themselves or others. So it is important that we assist our members and ourselves deal with the effects of stress from critical incidents in the best possible means.

Literature Review

An analysis of the literature surrounding the issues relative to this applied research project was conducted at the Learning Resource Center at the National Fire Academy and in the Wichita Fire Department's Training Library. The review was based on relevant information pertaining to Critical Incident Stress.

In examining the literature available regarding the issue of Critical Incident Stress there were three main areas focused on that applied to this research project. The three areas that were focused on include: defining critical incident stress and what its effects can be on firefighting personnel; what is being done to offset the effects of critical incident stress in the emergency responder; and does critical incident stress management work in relieving the stress caused by critical incidents.

The word stress can mean several different things. When using the term in relation to critical incident stress the definition, found in the Webster's II: New College Dictionary, is "Mental, emotional, or physical tension, strain, or distress" (Houghton Mifflin, pg. 1091, 1995). Shearer (1989) further defines stress as a fairly predictable mind and body arousal system that can fatigue or damage an individual to the point of malfunction and disease. "Like civilian direct victims, public safety professionals may develop psychological symptoms and psychiatric disorder, such as anxiety and depression, associated with their exposure" (Staff, pg. 40, 2002).

"Emergency responders are highly vulnerable to the effects of both acute and cumulative critical incident stress (CIS). Exposure to this type of stress often triggers a host of responses ranging from immediate anger, guilt, or frustration to long-term, ill health, substance abuse, marital discord, and job loss. Evidence also exists that critical incident

stress also increases the tendency to avoid involvement with loved ones and others who would provide emotional support, as well as an increased frequency of domestic violence. Stress among emergency workers may reduce performance to the extent of endangering both the professionals and civilians at an emergency scene” (Neely & Spitzer, pg. 43, 1997).

When looking at the fire service, Shearer (1989) cites chronic exposure to stress-producing events such as violent accidents, citizen complaints, personal losses, suicides and death, as threats to an individual’s health.

“A critical incident is any traumatic event that is outside the usual range of human experience. These events have the potential of causing traumatic stress reactions that may impair cognitive, emotional, spiritual, or physical function” (Dodge, pg. 7, 1998). Dodge (1998) goes on to give examples of critical incidents: line of duty death/injury, death of a child or serious trauma, mass casualty, fire death, suicide, and trauma to someone you know.

Dowling (1996) breaks down reactions to stress into four categories, they are: physical reaction; psychological reactions; behavioral effects; and social effects. Under physical reactions there are headaches, backache, muscular cramp, poor sleep and indigestion. Psychological reactions include fatigue, anxiety, tension, irritability, depression, boredom, inability to concentrate, feelings of unreality, and low self esteem. Behavioral effects are heavy indulgence in smoking, alcohol and drugs, and impulsive emotional behavior. Social effects include poor relationship with others at home and at work, an inability to fulfill social and family roles, and social isolation.

The literature reviewed regarding the effects of critical incident stress on the emergency responder influenced the research by demonstrating the need to address the emotional well being of our firefighters.

Carlisle (1999) writes that greater numbers of firefighters and other emergency workers are experiencing psychological trauma. The results of these experiences are classified as Burnout, Critical Incident Stress, or Post Traumatic Stress Disorder. The stress caused by a critical incident can have a psychological toll on emergency responders. Gillum (1995) says the stress can build up to the point where the responder becomes severely affected and unable to cope. If left untreated, responders may burn out on the job.

“The notion that something more systematic should be done to help the psychologically traumatized has been gaining ground in the Fire Service for more than a decade” (Gist, pg. 38, 1996). Gist (1996) goes on to suggest that one way to handle critical incident stress lies in good management, command, and “solid developmental supervision on a daily basis, rather than any technique for circling the wagons after the battle has ended” (Gist, pg. 42, 1996).

Dodge (1998) relates several stories involving the traumatic death of children to demonstrate that “no matter how experienced and how stable a firefighter is, tragic events like these can have a profound and lasting effect” (Dodge, pg. 7, 1981). Dodge (1998) writes that time, communicating with fellow firefighters and family all help the firefighter to work through the stress of critical incidents. “However, there is an additional approach available to emergency service personnel which can provide additional assistance in working through such incidents more rapidly and more thoroughly. It is called a critical incident stress debriefing” (Dodge, pg. 7, 1998). Dodge (1998) goes on to describe a critical incident stress debriefing as being conducted by a team of trained emergency service peers and a mental health professional.

“Debriefings specifically are not psychotherapy. They are structured sessions during which participants may express their reactions to a difficult event” (Neely & Spitzer, pg. 44, 1997). “The goals of a debriefing are to normalize a stressful or ‘critical’ event and to attempt to remove any associated emotional charge” (Neely & Spitzer, pg. 44, 1997).

Al-Mansouri (1987) writes that the traumatic events that are encountered by emergency responders, called critical incidents, are causing critical incident stress and this stress is be addressed with the introduction of Critical Incident Stress Management. Al-Mansouri goes on to state, “CISD was developed as a means of preventing or mitigating traumatic stress and since its inception, CISD has been developed to mitigate the impact of a traumatic event and accelerate the normal recovery of healthy people who have been exposed to very unusual events (Al-Mansouri, pg. 17, 1987).

“The generic term “debriefing” tends to obscure differences in approaches and procedures. For example, while models developed by Mitchell and Bergman were intended for use with any traumatized populations other approaches have focused more specifically on catering for the present and future needs of disaster workers” (Paton, pg. 43, 1997).

“More that a decade ago Jeffrey T. Mitchell, PhD, offered EMS providers a crisis intervention model designed specifically to mitigate stress responses following a critical incident. He called it Critical Incident Stress Debriefing (CISD)” (Ostrow, pg. 29, 1996). Ostrow (1996) goes on to explain that Mitchell, while working as a volunteer with the Arbutus Fire Department in Baltimore County, Md. Went through some tragic events. At this time Mitchell was also a student taking psychology classes at Loyola College and conducted his first debriefing in 1974. Mitchell went on to refine his debriefing technique and “introduced CISD to the fire and emergency medical services in 1982 in *Response!* Magazine” (Ostrow, pg. 29, 1996).

“Group interventions following critical incidents and disasters have become increasingly utilized for preventing unnecessary aftereffects in helpers and victims throughout different region of the world” (Dyregrov, pg. 589, 1997). Dyregrov (1997) also states that Mitchell was the first to formulate the structure and procedures to be followed in these group meetings termed Critical Incident Stress Debriefings or psychological debriefing. “A psychological debriefing is referred to as a planned structured group activity, organized to review in detail the facts, thoughts, impressions and reactions following a critical incident as well as providing information on typical reactions to critical events” (Dyregrov, pg. 589, 1997).

The literature reviewed on what is being done to offset the effects of critical incident stress brought out the use of Critical Incident Stress Management Teams to conduct Critical Incident Stress Debriefings.

“The notion that something more systematic should be done to help the psychologically traumatized has been gaining ground in the fire service for more than a decade” (Gist, pg. 38, 1996). Gist (1996) states that since the fire service has expanded from structural fire suppression to basic emergency care there seems to be a need for firefighters to have the opportunity to talk about the tragic events where they provide emergency care. “Elaborately structured programs, particularly the ubiquitous Mitchell model of critical incident stress debriefing with its labyrinth of teams and layers of intervention, have stepped in to address this need” (Gist, pg. 38, 1996). Furthermore, Gist (1996) discusses the problem that there is little solid evidence to indicate critical incident stress debriefings are helping anyone and that some of the evidence indicates that there could be negative outcomes for the participants. “There have been no data reported in any credible venue that would suggest the “Mitchell model” of debriefing as superior to any other system of addressing psychological and organizational impact of occupational events”

(Gist et al., pg. 27, 1997). “Recently some studies and commentaries claim that psychological debriefings are of dubious benefit, and may increase problems” (Dyregrov, pg. 591, 1997).

“For the past decade, the fire-rescue service has recognized the need to provide psychological first aid to its personnel” (Taylor, pg. 15, 1997). “Stress debriefing has been promoted as a means of preventing or reducing the psychological distress experienced by emergency service personnel and disaster workers following a severe trauma” (Kenardy et al., pg. 37, 1996). “No one seems to doubt that emergency workers are better off talking about stressful calls than keeping their feeling inside” (Ostrow, pg. 29, 1996). Ostrow (1996) discusses how critics are questioning the scientific foundation and lack of research supporting CISD.

“Robinson and Mitchell (1993) recently conducted an exploratory, descriptive study of 172 emergency service, welfare and hospital personnel who took part in 31 debriefings. Emergency workers rated the debriefing as having considerable personal value” (Kenardy et al., pg. 39, 1996). The article reports most of the participants who experience stress at the time of the incident said their reduction in stress was, in part, due to the debriefing.

“CISM has to be available at all times, because it is impossible to predict when it will be needed” (Hassling, pg. 17, 2000). Hassling (2000) states that every fire department should be prepared to support their firefighters with a CISM peer-support team specially trained in defusing and debriefing techniques.

“More research is necessary to document positive changes in emergency workers following debriefings. Feedback from agencies debriefed generally has been positive, but it has not been gathered scientifically or measured across time” (Neely & Spitzer, pg. 47, 1997). “CISM promotes the return to normal functioning more quickly and more completely than coping with a critical incident without a debriefing” (Dodge, pg. 7, 1998). Hokanson and Wirth

(2000) write that the CISM program for the Los Angeles County Fire Department is effective in educating personnel about stress symptoms, coping techniques and creating an environment where open discussion of traumatic events is possible. Furthermore, the program is well received and participants expressed their overall satisfaction with defusing, debriefing, and peer support processes.

The literature reviewed dealing with critical incident stress debriefing and it's value reveals that while many departments are using CISD and find it helpful, there are also those who would like to see more scientific research conducted which would prove that CISD is working to relieve traumatic stress.

Procedures

The purpose of this applied research paper was to take a descriptive look at the issue of critical incident stress and how the Wichita Fire Department is dealing with this issue. A literature review was conducted to provide a background as to what has been done in the area of dealing with critical incident stress. The literature review was conducted at the Learning Resource Center, located at the National Fire Academy, and the Wichita Fire Department Training Division Library.

A personal interview was conducted with Lieutenant Nick Mendoza, of the Wichita Fire Department. Lieutenant Mendoza is the president of the Wichita/Sedgwick County Critical Incident Stress Management Team and was one of the first members of the department to take the sixteen-hour basic class dealing with critical incident stress. The information gained from this interview provided details for the background and significance section of this paper. Lieutenant Mendoza was also able to supply a list of names of past Wichita Fire Department personnel who had been on the CISM team and who were no longer participating.

Wichita Fire Department personnel who were past members of the Wichita/Sedgwick Critical Incident Stress Management Team were interviewed to determine why they were no longer participating in the CISM team. There were fourteen personnel contacted who had left the team. The names of the personnel contacted have not been identified to provide confidentiality. This information was used in the results section under research question three.

A survey was developed and distributed to the commissioned personnel of the Wichita Fire Department to address the issues posed by the research questions. The survey form was distributed to all three hundred and sixty eight commissioned fire personnel; two hundred and thirty two of the surveys were completed and returned for analysis. On survey questions ten and eleven, the respondents were asked to rank the available choices with one being their most preferred. When the data was compiled on these two questions, the first choice was given a point value of three on question ten, and a point value of six on question eleven. The respondents second choice was worth one less, and so on. Survey findings were used in the results section. A sample survey is included in appendix A.

Definition of terms

CIS. Critical Incident Stress: A critical incident is often called a crisis event, which has an impact sufficient to overwhelm the usually effective coping skills of either an individual or group.

CISD. Critical Incident Stress Debriefing: A seven step, group psychological process developed as a method for mitigating the harmful effects of work-related trauma and mitigating posttraumatic stress disorder.

CISM. Critical Incident Stress Management: A comprehensive, organized approach for the reduction and control of the harmful aspects of stress in the emergency services.

W/SGCISM. Wichita/Sedgwick County Critical Incident Stress Management.

Assumptions and Limitations

It was assumed that surveys, and the information obtained in the personal interviews, completed by the Wichita Fire Department personnel were answered honestly and accurately. It was also assumed that the Wichita Fire Department would implement the recommended changes.

The only limitation identified was the failure for all Wichita Fire Department commissioned officers and firefighters to take the opportunity to complete the survey, although completion of the survey would have allowed them to have input into the recommended changes.

Research Methodology

The descriptive research method was used to write this applied research paper. The commissioned officers and firefighters of the Wichita Fire Department were the subjects studied. A sub-group of the above listed were those individuals who had been on the Wichita/Sedgwick Critical Incident Stress Management Team but were no longer team members.

A sample was not necessary since the entire group was included in the survey. However, not all members of the group completed the surveys. The return rate on the surveys was 63%, 232 of 368 were returned. Personal interviews were conducted of 100% of those W/SGCISM team members who are no longer on the team, and are still employed by the Wichita Fire Department.

The surveys were collected and analyzed. The gathered data can be seen in the results section of this paper.

Results

In answer to the research questions presented in the applied research paper:

Research question 1. How is Critical Incident Stress Management currently being handled in the Wichita Fire Department?

Members of the Wichita/Sedgwick County Critical Incident Stress Management Team are responded to conduct a defusing and/or a debriefing when requested by the Incident Commander or the Wichita Fire Department Safety Officer. When the defusing/debriefing will only involve personnel from the Wichita Fire Department, the department will contact a member of the department who is on the W/SGCISM team to conduct the defusing/debriefing.

The first three questions of the survey were used to provide some insight into what is currently taking place with the issue of critical incident stress in the Wichita Fire Department. Currently three hundred and sixty eight personnel are commissioned officers or firefighters on the Wichita Fire Department. Two hundred and thirty two of those three hundred and sixty eight responded to the survey.

To determine if Wichita Fire Department personnel were using the Critical Incident Stress Management Team they were asked if they had attended a defusing or debriefing. One hundred and twenty four of the two hundred and thirty two stated they had attended a critical incident defusing or debriefing. This results in fifty-three percent of the personnel responding having attended a defusing or debriefing.

One of the questions that needed answered was if personnel were responding to what they felt were critical incidents. Sixty-two percent of the respondents (143) stated they had responded

to incidents where they felt that they might have benefited from critical stress defusing and/or debriefing. Of the one hundred and forty three who stated they had made calls where intervention would have been useful, eighty-six indicated they had responded to three or less calls of this nature, twenty-one indicated they had made four to six calls, six indicated they had made seven to nine calls, and thirty-four indicated they had responded to more than ten calls where they would have benefited from a defusing and/or debriefing.

When the respondents were asked if they had made calls where the person or persons responding with them could have benefited from defusing and/or debriefing seventy-nine percent (183) responded in the affirmative. Of the one hundred and eighty three who responded in the affirmative, one hundred and two indicated they had responded to three or less of this type of calls, forty-one indicated they had made four to six calls, six indicated they had made seven to nine calls, and thirty-four indicated they had respond to more than ten calls where the person or persons with them could have benefited from defusing and/or debriefing.

Research question 2. What are the perceptions of the personnel on the Wichita Fire Department concerning the Wichita/Sedgwick County Critical Incident Stress Management Team?

One of the main issues raised during the literature review was the question as to the usefulness of critical incident stress debriefing. In order to determine if the personnel on the Wichita Fire Department felt critical incident stress debriefings were needed and helpful, several questions were asked. These questions provided results that indicate what current perceptions are regarding the critical incident stress management system currently being used in Wichita, Kansas.

Personnel were asked if they believed critical incident stress management was needed. Ninety-five percent (220) of those who responded indicated that there should be a system to deal with critical incident stress. Only twelve of the respondents indicated that critical incident stress management was not needed.

One hundred and twenty-four of the respondents indicated that they had attended a defusing and/or a debriefing. The next issue examined was if the defusing/debriefing was found to be helpful. Sixty-seven percent (83) found the defusing/debriefing to be beneficial. When asked if they felt others benefited from the defusing/debriefing the number went up to 89, which means that seventy-two percent of the respondents indicated that the defusing and/or debriefing was helpful in dealing with the stress caused by a critical incident.

Respondents were also asked if they would recommend attending a defusing and/or debriefing to others. Eighty-five percent responded in the affirmative. This is an overwhelming majority of the personnel responding who had been to a defusing and/or debriefing believing that it was a positive experience and would recommend it to others.

Research question 3. What modifications should be made as to how the Wichita Fire Department helps its personnel deal with the stress caused by critical incidents?

When developing the survey, one of the main concerns addressed was what changes need to be implemented to improve the current critical incident stress management system. When asked what type of incidents should be considered critical and require defusing and/or debriefing, the respondents were asked to check all that applied and were given an opportunity to write in others. The following results were obtained:

Code black (dead) -15

Code blue (no pulse or breathing) - 13

10-48 Pin (vehicle accident with injuries, person trapped) – 9

Fire fatality – 99

Incidents involving children – 140

Incidents involving firefighter casualties – 157

Other – 189, listed as other was the following: mass casualties, when you have personal knowledge of the victim (friend), incidents involving weapons of mass destruction, and anytime requested by the responding crew.

Respondents were questioned if they had made incidents that were still an issue with them. Thirty-four percent (78) personnel responded there were calls that continue to be an issue with them. Six stated there were three or less calls, eleven stated the calls at issue were from four to six, five had issues with seven to nine calls, and seven of the respondents still had issues with more than ten calls.

Those surveyed were asked if they would prefer the defusing and/or debriefing be held in a formal or informal manner. Sixty-six percent (154) preferred the defusing and/or debriefing be an informal affair as opposed to formal.

When those surveyed were asked who they seek out to assist them deal with critical incidents they responded as follows:

Family and friends – 1132.

Your WFD crew – 1126.

Trained CISM team members – 771.

Your religious family/leader – 640.

Doctor – 394.

City provided Employee Assistance Program – 336.

Personnel were asked to rank in order of choice who they would prefer to conduct the defusing and or debriefing. The results are as follows:

CISM trained WFD members of your Battalion – 533.

CISM trained WFD personnel, city wide – 390.

CISM trained personnel on the Wichita/Sedgwick County CISM team – 295.

In addition to the survey, ex-members of the Wichita/Sedgwick County Critical Stress Management Team were interviewed and asked why they were no longer on the team. Fourteen personnel were contacted and the following reasons were given: eight of the fourteen stated they had left the team because they were unable to attend the three required team meetings each year; four personnel stated that they had not been called upon to do any debriefings and had lost interest in the team; one person stated that he had gotten promoted to where he did not feel he should be conducting debriefings; and one person stated that doing the debriefings kept bringing up an incident, he had made, and he no longer wished to be on the team.

Discussion

Results indicate that ninety-five percent of those who responded to the survey indicated that they felt there was a need to have a system in place to deal with the stress caused by critical incidents. “The notion that something more systematic should be done to help the psychologically traumatized has been gaining ground in the Fire Service for more than a decade” (Gist, pg. 38, 1996). Over half of the Wichita Fire Department indicated that they have attended a defusing and/or debriefing to help deal with the stress caused by a critical incident. “Stress among emergency workers may reduce performance to the extent of endangering both the professionals and civilians at an emergency scene” (Neely & Spitzer, pg. 43, 1997).

“The underlying goals of the CISM program are: 1) to reduce the impact of a traumatic event; 2) to accelerate the normal recovery process from a traumatic event; 3) to normalize the stress response for emergency workers in traumatic events; and 4) to provide for education in stress management and coping techniques” (Hokanson & Wirth, pg. 249-250, 2000).

The Wichita Fire Department’s current system, of handling critical incident stress, is meeting the above listed goals. However, the results obtained indicate that while fifty-three percent of those responding to the survey had attended a defusing and/or debriefing, sixty-two percent indicated they had responded to at least one critical incident. Seventy-nine percent indicated that they had responded to at least one critical incident where they felt that someone with them could have benefited from a defusing and/or debriefing. This would indicate that while the department is addressing the stress caused by some critical incidents, not all critical incidents are being defused and/or debriefed.

One of the needs that should be addressed is the recruitment and training of additional personnel for the CISM team. Those personnel who responded, to the survey, identified that they would prefer to be debriefed by a member of the fire department that they know. “We have developed a CISM peer-support team, consisting of firefighters and officers specially trained in defusing and debriefing techniques” (Hassling, pg. 17, 2000). Gothenburg Fire Department developed their CISM team after the tragedy where one hundred and fifty eight people died in the fire involving the passenger ship the Scandinavian Star. “When a person is overwhelmed with feelings, they are also very sensitive and vulnerable – to meet an unknown person could be threatening and put them on their guard” (Hassling, pg. 17, 2000). “One of the problems with stress debriefing is the difficulty in establishing trust” (Kenardy et. al., pg. 47, 1996). “Process

debriefings demand leaders and co-leaders who are trained and have practice in using and understanding such process issues” (Dyregrov, pg. 593, 1997). Dyregrov (1997) discusses that the background, training, and personal qualities of the leader are important when recruiting CISM team members. Paton (1997) states that for a debriefing to be effective, participants must be able to disclose their feelings and reactions in a supportive environment. Paton (1997) goes on to state, while a debriefing is usually of short duration, recovery may take weeks or months. Establishment of a CISM team consisting of Wichita Fire Department members, and the Fire Chaplin, would allow for additional follow-up with those personnel who need it without the need to activate the countywide CISM team. “Within the work environment, longer-term recovery assistance can be anticipated as coming from colleagues and from those in managerial or command positions” (Paton, pg. 45, 1997). “Firefighters should debrief incidents in order to identify areas of achievement and create an arena for sharing experiences” (Dowling, pg. 22, 1996). Taylor (1997) expands on using debriefings for sharing experiences by emphasizing that personnel should be asked to share how they rose to the challenge of a critical incident. Allowing personnel to share how they rose to the challenge shifts the context of the debriefing “from one that emphasizes damage to one that emphasizes challenge” (Taylor, pg. 13, 1997). Support for the personnel of the Wichita Fire Department by the leaders of the department will be shown by fully endorsing the establishment of a WFD CISM team.

The results of the survey indicate that debriefings are found to be helpful in dealing with critical incident stress. Showing our personnel that we care enough about them to talk to them about their emotional wellness will benefit the organizational structure. Education for members of the department should become part of the yearly training sessions. “Education and mental preparation of the individual in pre-incident training is essential” (Hassling, pg. 18, 2000).

Hassling goes on to say, “In our department every firefighter has had pre-incident training and education on critical incidents” (Hassling, pg. 18, 2000). “A number of prevention and intervention techniques have been developed, including pre-incident stress education” (Al-Mansouri, pg. 17, 1987).

The results have indicated that the Wichita Fire Department is responding to critical incidents and its personnel are dealing with the stress caused by these incidents. Attending a defusing and/or debriefing was helpful and those who have attended would recommend them to others. The area that needs addressed is where the respondents indicated that they had responded to a critical incident and not attended a defusing and/or debriefing. Education and the support of the leadership of the Wichita Fire Department will encourage personnel of the department to request CISM after responding to critical incidents.

Recommendations

The Wichita Fire Department became involved with critical incident stress management in 1989, in part due to having suffered the line of duty death of Firefighter Killingsworth on December 31st, 1988. With the implementation of the Wichita/Sedgwick County Critical Incident Stress Management Team in 1991, a system was put in place to deal with the stress caused by critical incidents. Recent incidents and the loss of Wichita Fire Department personnel participating in the W/SCCISM team prompted the author to research this topic.

Review of the literature and analysis of the responses received from interviews and surveys, completed by the members of the Wichita Fire Department, has led to three recommendations. There is a definite need for a way to deal with the stress caused by critical incidents. The majority of the members of the department who have attended a defusing and/or

debriefing found them to be helpful, think they were helpful for others, and would recommend them to others.

The loss of Wichita Fire Department members on the Wichita/Sedgwick County Critical Incident Stress Management Team has led to a shortage of WFD personnel trained to conduct debriefings without activating the County team. The survey indicated WFD personnel would prefer to be debriefed by fellow CISM trained WFD personnel. The first recommendation is that additional personnel be recruited from the Wichita Fire Department to attend the basic training in critical incident stress management. These personnel should be recruited from all shifts and battalions to ensure that a person, or crew, being debriefed will know the person doing the debriefing. Those persons recruited, and trained in CISM, should be given a choice as to whom they wish to help.

To stop the loss of trained CISM debriefing personnel, the second recommendation is that the Wichita Fire Department utilize its current team members and establish a separate team, made up of all WFD personnel and the Fire Chaplain to handle those debriefings which only involve personnel from the Wichita Fire Department. The current team members, from the WFD, can choose a leader for the new unit, shift coordinators can be selected, and debriefings can be conducted by personnel who are trusted and respected by the personnel of the WFD. If a WFD team member wishes to join the County team they can apply to that organization for admission.

The survey showed most personnel turn to their family and their WFD crew to assist them in dealing with the stress of a critical incident. The third recommendation is that education be provided to the entire department, once a year, during a drill cycle dealing with the topic of critical incident stress management. This will help to familiarize everyone with the stress that

can be caused by critical incidents, the importance of have a defusing and/or debriefing, what a defusing/debriefing is all about, and assist the Wichita Fire Department officers and firefighters help each other to deal with the stress caused by critical incidents.

References

- Al-Mansouri, Jassim. (1987, April). Kuwait's work on stress debriefing. *Fire International*. No. 175. 17-18.
- Carlisle, C.F. (1999). The role of occupational stress in the contemporary fire service: psychological stress, its causation, identification, treatment, reduction and resolution. Emmitsburg, MD: National Fire Academy.
- Dodge, Gordon R. (1998, March/April). Critical Incidents – how do they affect a firefighter, what can be done about it? *Minnesota fire Chief*. Volume 34. no. 4. 7.
- Dowling, Dave. (1996, January). Stress within the fire brigade. *Fire Engineers Journal*. Volume 56. no. 180. 17-22.
- Dyregrov, Atle. (1997). The Process in Psychological Debriefing. *Journal of Traumatic Stress*. Volume 10. no. 4. 589-605.
- Gillum, L. (1995, January/February). CISD: Sealing the breaking point. *Industrial Fire World*. 12-13.
- Gist, R. (1996, August). Sound Off. *Fire Chief*. 38-42.
- Gist, Richard; Lohr, Jeffrey; Kenardy, Justin; Bergmann, Lawrence; Meldrum, Lenore; Redburn, Bradley; Paton, Douglas; Woodall, Joseph; Rosen, Gerald. (1997, May). Researches Speak on CISM. *Jems*. Volume 22. no. 5. 27-28.
- Hassling, Per. (2000, April). Stress management: don't wait until the big one. *Fire International*. No. 175. 17-18.

Hokanson, Melvin; Wirth, Bonnita. (2000, Fall). The Critical Incident Stress Debriefing Process for the Los Angeles County Fire Department: Automatic and Effective. *International Journal of Emergency Mental Health*. Volume 2. no. 4. 249-257.

Kenardy, Justin A.; Webster, Rosemary A.; Lewin, Terry J.; Carr, Vaughan J.; Hazell, Philip L.; Carter, Gregory L. (1996, January). Stress Debriefing and Patterns of Recovery Following a Natural Disaster. *Journal of Traumatic Stress*. Volume 9. no. 1. 37-49.

Neely, Keith W.; Spitzer, William J. (1997, April-June). A model for a statewide critical incident stress (CIS) debriefing program for emergency services personnel. *Prehospital and Disaster Medicine*. Volume 12, no. 2, 43-48.

Ostrow, Lauren S. (1996, August). Critical Incident Stress Management: Is it worth it? *JEMS*. Volume 21. no. 8. 28-36.

Patton, Douglas. (1997). Post-event support for disaster workers: integrating recovery resources and the recovery environment. *Disaster Prevention and Management*. Volume 6. no. 1. 43-49.

Shearer, Robert W. (1989, April). Occupational Stress in the Fire Service. *Professional Safety*. 22-25.

Staff. (2002, June). On-scene stress and its effects. *Fire Chief*. 40.

Staff. (2001, January). Executive Fire Officer Program: Operational Policies and Procedures. *Federal Emergency Management Agency*.

Taylor, Vickie. (1997, September). From CISD to Coaching for Success. *The Voice*. Volume 26. no. 8. 13-15.

Webster's II, New College Dictionary. (1995). Boston: Houghton Mifflin Company.

Appendix A

WFD Personnel Survey on Critical Incident Stress

The information gathered will also be used to write an applied research paper to complete my 4th year requirements. Thanks for your help. Dan

1. Have you attended a defusing or debriefing? Yes _____ No _____
2. Have you made any calls where you believe you may have benefited from defusing/debriefing?
Yes _____ No _____
If yes how many? 1-3 _____ 4-6 _____ 7-9 _____ over 10 _____
3. Have you made any calls where you believe someone you responded with would have benefited from defusing/debriefing? Yes _____ No _____
If yes how many? 1-3 _____ 4-6 _____ 7-9 _____ over 10 _____
4. Do you feel there is a need for CISM? Yes _____ No _____
5. If you have attended a defusing or debriefing, do you feel you benefited from the experience?
Yes _____ No _____
6. If you have attended a defusing or debriefing, do you think others benefited from the defusing or debriefing? Yes _____ No _____
7. Would you recommend attending a defusing or debriefing to others? Yes _____ No _____
8. Of all the calls you have made throughout your career, are there alarms that continue to be an issue?
Yes _____ No _____
If yes how many? 1-3 _____ 4-6 _____ 7-9 _____ over 10 _____
9. Mark the following if you feel there should be an automatic CISM call out:
 - Code Black....._____
 - Code Blue._____
 - 1048 pin....._____
 - Fire fatality....._____
 - Incidents involving children....._____
 - Incidents involving firefighter casualties....._____
 - Other....._____

Explain _____

10. Rank in order the following as to who you would prefer conducted the defusing or debriefing. (1 would indicate your most preferred)

- ___ CISM trained WFD members of your Battalion.
- ___ CISM trained WFD personnel, city-wide.
- ___ CISM trained personnel on the Wichita/Sedgwick County CISM Team.

11. Rank in order the following, with 1 being most preferred, as to who you look to for help when dealing with Critical Incident Stress.

- ___ Family and Friends.
- ___ Your WFD Crew.
- ___ Trained CISM team members.
- ___ Your religious family/leader.
- ___ Doctor.
- ___ City provided Employee Assistance Program.

12. In your opinion, should the defusing and/or debriefing be a formal or informal process?

Formal _____ Informal _____

Once again thank you for completing this survey. I hope the results will benefit you in an improved CISM Team. It is my hope that Critical Incidents will be few and far between but we must prepare for them to the best of our ability.