

# Critical Incident Stress Defusing: A Firefighters' Perspective.

Ross Kennedy, ACT Fire Brigade

## EXECUTIVE SUMMARY

Of the 23 questions used in the questionnaire, 7 questions have addressed Firefighters perceptions of the Critical Incident Stress Defusing process. Of the 32 Questionnaires sent out, 21 completed questionnaires were returned. The 66% return rate was disappointing. I was anticipating a return rate of around 85%.

In reference to the research question, the following conclusions can be drawn:

1. The majority of fire fighters have experienced the signs/symptoms of Critical Incident Stress.
2. The majority of fire fighters are happy to participate in a Critical Incident Defusing.
3. A majority of fire fighters feel that the Critical Incident Defusing process does not require improving.
4. The majority of fire fighters are at ease with the presence of a psychologist at a critical incident stress defusing.
5. A majority of fire fighters are at ease with the presence of two Peer Supporters at a Critical Incident Stress Defusing.
6. A majority of fire fighters have benefitted from their involvement in a Critical Incident Defusing.
7. A majority of fire fighters feel that their involvement in a Critical Incident Stress Defusing can be of assistance to another fire fighter.
8. Analysis of questions relevant to the research question (see Interpretation / Findings section) have enabled me to draw the conclusion that Fire fighters perceive the Critical Incident Stress Defusing process as beneficial to themselves and their fellow employees.

## RESEARCH QUESTION

Do Fire fighters perceive Critical Incident Defusing as a beneficial process?

## INTRODUCTION

My search of secondary data has revealed that a lot of research has been done on Critical Incident Stress Management, the effectiveness of Critical Incident Stress Defusing and Debriefing, but at the time of doing this report, I have not located any previous research that has specifically addressed the perceptions of Fire fighters as to how they feel about the process.

Critical Incident Stress as defined by the Royal Australian Navy is "any situation faced by people that causes them to experience unusually strong emotional reactions which have the potential to interfere with their ability to function" (RAN-DI(N) PERS 5-7).

ACT Fire fighters attend Critical Incidents regularly and consequently the potential exists for fire fighters to suffer the effects of Critical Incident Stress. Critical Incident Stress Defusing is a process that can help these workers deal with the impact of Critical Incidents.

It provides an opportunity for emergency services workers to vent emotional and negative stressful thoughts and feelings after attending a critical incident. The process reinforces that what they are feeling is a normal reaction to an abnormal event. This venting or defusing process helps the worker normalise his/her reactions and continue on his/her capacity as an effective worker.

I chose to research this topic because I am actively involved in Critical Incident Stress Management in the ACT Fire Brigade and am curious to see if the Critical Incident Stress Defusing process is perceived to be an effective process. The population chosen is the one that I work within and thus gives me insight into the type of sample that would best suit my ability and time.

The sample process minimises the number of respondents to a fairly manageable amount and has selected the respondents without bias.

This comprehensive questionnaire was designed to investigate

- a. Career information and experiences of Fire fighters
- b. Fire fighters and their partners' knowledge of the Employee Assistance Program.
- c. Fire fighters knowledge of the Critical Incident Stress Defusing Process.
- d. Fire fighters opinions of the Critical Incident Stress Defusing Process.

## **HISTORY**

Dr Jeffrey Mitchell is recognised by his peers in the field of occupational stress to be the foremost authority in Emergency Services Critical Incident Stress Management (Dooley 1998) and is the author of over 75 pieces of literature on Critical Incident Stress and Emergency Services.

Most Australian Fire Brigades use the Mitchell Model of Critical Incident Stress Management.

Critical Incident Stress Defusing is a process the Fire Brigade has used to alleviate the symptoms of Critical Incident Stress since 1988. The process between 1988 and 1991 was facilitated by 2 trained trauma counsellors from the Royal Canberra Hospital and an ACT Fire Brigade liaison officer.

After 1991, a contract was awarded to Durham Smith and Associates to provide the ACT Fire Brigade with an Employee Assistance Program. The Employee Assistance Program incorporated a psychologist based 24 hour support service for the Fire Brigade personnel and their immediate families.

The Employee Assistance Program included the training of 6 Fire Brigade members as Peer Support Officers that complimented the Critical Incident Stress Management Procedure.

Durham Smith and Associates introduced the Mitchell Model of Critical Incident Stress Management that incorporated Critical Incident Stress Defusing into the ACT Fire Brigade. "Organisational Solutions" under the management of Janine Frazer and Tracey Jones, took over the function of the Employee Assistance Program Provider to the Fire Brigade in 1996 and continue to use the Mitchell Model of Critical Incident Stress Management.

## **PROCEDURE**

Critical Incident Stress Defusing can occur as a result of a fire crew attending any critical incident. Generally, Critical Incident Stress Defusings occur where the Critical Incident is of a particularly disturbing nature i.e. multiple fatalities, death of children or casualty mutilations.

Any fire fighter, Station Officer or District Officer involved in the incident can request a Critical Incident Stress Defusing.

The Critical Incident Management Team is available 24 hours a day and is notified through their pager or mobile phone. Upon notification of a critical incident, the on call CISM member notifies another CISM Team members and the Psychologist and passes on all details.

The Psychologist and two peer supporters meet at the pre-arranged location (usually a Fire Station) within 4 hours of the incident and the defusing is conducted which generally takes under 1 hour.

The defusing process draws on the participating crew members to explore the sights, sounds and smells experienced at the incident, their feelings, their actions at the scene and how they felt then and are feeling now.

Participation in a Critical Incident Stress Defusing is not compulsory but is encouraged. Complete confidentiality is maintained and everything that is discussed or observed in the Defusing "stays in the room".

At the completion of the Critical Incident Stress Defusing the Psychologist and 2 CISM Team members remain at the station where they are available for informal discussion with any crew members.

This process has been practised in the ACT Fire Brigade for the last 7 years without any major procedural changes. I felt it would be advantageous to explore the perceptions of fire fighters as to how beneficial they see the Critical Incident Stress Defusing process.

## **PROFILE**

Fire fighters

Professional (as opposed to volunteer) fire fighting and rescue service workers in the ACT.

On duty 24 hours a day.

Shift work of 2 x 10 hour days (0800-1800 hours) followed by 2 X 14 hour nights (1800-0800).

Minimum Station staffing levels consist of 1 Station Officer and 3 Fire fighters.

Shifts revolve around 4 Platoons i.e. A, B, C, and D Platoon being rostered on at any time.

9 Stations in the ACT.

## **ACT FIRE BRIGADE EMERGENCY RESPONSES**

Fire fighters respond to a range of emergency situations:

- Fire structural (domestic, industrial, commercial premises)
- Fire Other (Grass, bush, forest)
- Road accident rescue (all motor accidents)
- Trench collapse (involving below ground entrapment, ditches)
- Vertical rescue (cliff, high rise buildings)
- Confined space rescue (pipes, tunnels, caves)
- Industrial rescue (presses, crushers, rollers)
- Urban Search and Rescue (major building collapse)
- Medical emergencies (heart attack, overdoses)
- HAZMAT incidents (hazardous chemicals, dangerous substances)

## **DEFINITIONS**

Critical Incident "A critical incident is any event that has the capacity to overcome the usual coping abilities of people who are exposed to them". (Mitchell 1983).

Critical incidents are individual in nature and so the way people see and experience them. A person's response is based on their individual perception.

### **Critical Incident Stress Defusing**

In the ACT Fire Brigade program Defusings are held within 4 hours of the critical incident and involve a Psychologist, 2 Peer Supporters and the Fire Crews that went to the critical incident. A Critical Incident Stress Defusing usually takes between 45 and 60 minutes.

### **Critical Incident Stress Debriefing**

A similar process to Critical Incident Stress Defusing but is a more formal process that occurs from 24 to 72 hours after the incident or as soon as possible. A debriefing takes between 2 and 3 hours.

Aims of Critical Incident Stress Debriefing and Defusing

The two main aims of Critical Incident Stress Debriefing and Defusing are:

1. To lessen the impact of any distressing critical incidents or crisis events on the people exposed to them by acting as a preventative and lessening strategy.
2. To facilitate and accelerate the recovery process before any harmful stress reactions can have a chance to affect performance, careers, health and / or families.

## **CRITICAL INCIDENT STRESS MANAGEMENT**

"CISM relates to a wide range of procedures and interventions designed to assist individuals in preventing, managing, and recovering from stress after any critical incident or crisis event". (Skills for Critical Incident Stress Management)

### **PEER SUPPORT TEAM**

A group of fire fighters that are trained in CISM methods for the purpose of providing support for fellow fire fighters. Peer Support members enhance the effectiveness of the Employee Assistance Program.

## **RESEARCH LIMITATIONS**

A major research limitation exists in the time it would take to provide all 184 professional shift working Fire fighters and Station Officers with a questionnaire and then assess the results. Consequently 8 Fire fighters and Station Officers have been selected randomly from each Platoon. This provides a representative sample of 32 respondents.

## **METHODOLOGY**

This research involves a sample of staff that are shift working, operational Fire fighters and Station Officers that work at Fire Stations.

Shift working Fire fighters, Station Officers and District Officers are the Fire Brigade employee that attend emergencies and are consequently exposed to critical incidents.

Staff that work in Brigade Headquarters in an administrative role are District Officers, Superintendents and the Fire Commissioner and these people do not *usually* attend emergencies. Consequently their potential for exposure to a critical incident is minimal. If they do attend any critical incidents they are encouraged to participate in a critical incident stress defusing if the nature of the incident warrants such action.

For the purpose of this research, I have intentionally recognised Fire fighters and Station Officers in the same sample. Some fire fighters have more years of service than some Station Officers and vice versa, thus rank is not an indication of years of service in the Brigade nor is it an indication of the number of critical incidents attended.

The population to which this research project relates is all professional shift working fire fighters and Station Officers in the ACT that have a minimum of 5 years service.

## **SAMPLE**

In 1998, the ACT Fire Brigade employs 184 shift working Station Officers and Fire fighters spread over four Platoons.

Station staffing is achieved through a 4 Platoon (A, B, C, and D) rotation. Each Platoon is staffed by 46 crew made up of 13 Station Officers and 33 Fire fighters.

## **SAMPLE SELECTION**

From each Platoon I have randomly selected 8 potential respondents. This random selection was achieved in the following way. I placed the numbers 1 to 46 on individual pieces of paper and placed each numbered piece of paper in a box. I selected a single piece of paper, identified the number and located the corresponding numbered fire fighter or Station Officer from the Brigade disposition board located in the Communication Centre. For example, a piece of paper with 46 written on it related to the fire fighter / Station Officer that is last on the disposition board for the particular platoon. If the chosen number corresponded to a fire fighter with less than five years service i.e. a new recruit, I selected another piece of paper. I started with A Platoon and after selecting 8 candidates moved on to B, C, and then D Platoon.

My target sample for this research project is 32 and is made up of Fire fighters and Station Officers.

Of the 32 questions used in the questionnaire, 7 are relevant to the research question. The key questions from the questionnaire are Q4, Q13, Q15, Q16, Q17, Q18, and Q22.

Fire fighters believe that Critical incident Stress Defusing is a beneficial process because most respondents (in some cases all respondents):

Q4 have experienced Critical Incident Stress.

Q13 are comfortable with being involved in a Critical Incident Stress Defusing

Q15 are comfortable with the presence of a Psychologist at a Critical Incident Stress Defusing

Q16 are comfortable with the presence of 2 Peer Supporters at a Critical Incident Stress Defusing

Q17 feel that they have benefited from their involvement in a Critical Incident Stress Defusing

Q18 feel that their input in a Critical Incident Stress Defusing can help a fellow fire fighter.

Q22 Feel that the process does not require any major improvement.

A significant element in the whole process is the use of a Psychologist and 2 Peer Supporters to facilitate Critical Incident Stress Defusing process. Responses indicate that the presence of these personnel is an acceptable component in the procedure we have adopted and does not need to be changed (questions 15 and 16).

Initial analysis of Question 19 reveals that 38% (8 of 21) respondents feel that their level of input at a Critical Incident Stress defusing is influenced by who the Peer Supporters are. 43% (9 of 21) of

respondents believe that this is not the case while 19% (4 of 21) are unsure. This influence could equate to some Fire fighters feeling uneasy at a Defusing due to the presence of a particular Peer Supporter and consequently not contributing to the process or could mean that they contribute more than they normally would because of the particular Peer Supporter. This area needs further investigation to establish what type of influence the respondents are referring to.

In relation to Questions 6 and 9, Fire fighters have identified the need for their partners to be educated about Critical Incident Stress and also the range of services available through holding an information night for partners or be sending out literature to all households.

## **CONCLUSIONS**

Analysis of questions relevant to the Research question have provided the conclusion that Fire fighters perceive the Critical Incident Stress Defusing process as beneficial to themselves and their fellow employees.

Preliminary analyses of answers to the questionnaire are as follows:

Q1. Average years of service of respondents is 11 years.

Q2. Respondents have attended numbers of critical incidents in the following proportions: 0/10 incidents = 24%, 11/20 incidents = 33%, 21/30 incidents = 10%, 30+ incidents = 33%.

Q3. 44% of respondents agree that the more incidents they attend, the less the impact it has on them whereas 28% disagree. 28% are unsure.

Q4. 90% of respondents have suffered signs and symptoms of stress.

Q5. 62% of respondents partners have observed and commented on a change of fire fighters' behaviour after attending a critical incident.

Q6. 90% of respondents feel their partners need to be educated about Critical Incident Stress

Q7. 86% of respondents are aware of the services available from Employee Assistance program provider "Organisational Solutions"

Q8. 90% of fire fighters know how to access the services provided by Employee Assistance Program provider "Organisational Solutions".

Q9. 71% of fire fighters believe their partners do not know how to access the services provided by Employee Assistance program provider "Organisational Solutions".

Q10. 90% of fire fighters feel that they have a good / very good knowledge of the Critical Incident Stress Defusing Process.

Q11. Average number of critical incident stress defusing attended is 6.

Q12. 76% of respondents feel that Critical Incident Stress Defusings should not be compulsory after every critical incident.

Q13. 95% of respondents are happy to be involved in a Critical Incident Stress Defusing

Q14.

Q15. 81% of respondents are satisfied with the presence of a psychologist at each critical incident stress defusing

Q16. 95% of respondents are satisfied with the presence of two peer supporters at each critical incident stress defusing.

Q17. 62% of respondents feel that they benefit from a critical incident stress defusing.

Q18. 71% of respondents feel that their input in a critical Incident Stress defusing can be of benefit to another Brigade member.

Q19. 38% agree with the statement that their level of participation at a Critical Incident Stress Defusing is influenced by who the Peer Support people are. 43% of respondents disagree with the statement while 19% are unsure.

Q20. 52% of respondents feel that they have observed behavioural changes in other fire fighters after attending a critical incident.

Q21. 62% of respondents attended a Defusing after this incident.

Q21a. 15 of the 21 respondents answered this part. 56% of respondents felt unsure as to whether the Critical Incident Stress Defusing assisted the fire fighter.

Q22. 72% of respondents feel that there is no improvement required in the critical incident stress defusing process.

## **RECOMMENDATIONS**

In respect to the Research questions, I feel that fire fighters perceive the Critical Incident Stress Defusing process as beneficial to themselves and other fire fighters and as such I recommend the Employee Assistance Program continues to maintain a high profile and educate and inform fire fighters of the signs/symptoms of stress and reinforce the positive benefits attainable through this program.

## **REFERENCES AND BIBLIOGRAPHY**

ACT Government Service Occupational Health and Safety Policy No: P-13 1993 "Critical Incident"

Dooley, R.T. (1998) "Critical Incident Stress Debriefing: Do no Harm". Research paper delivered at a conference in Canberra 1998.

Durham Smith and Associates "Skills for Critical Incident Stress Management".

Kenardy, J. (1996) "Psychological Stress Debriefing: Is it effective?" *Psychotherapy in Australia*, Volume 3, Number 1, page 64.

Mitchell, J. (1996) "Critical Incident Stress Debriefing Operational Manual". Second Edition, Maryland, Chevron Publishing Corporation.

O H & S Industrial Relations Branch Chief Ministers Department ACT Government.

Watts, R. (1994) The Efficacy of Critical Incident Stress Debriefing for Personnel". *The Bulletin of the Australian Psychological Society*, Volume 16 (3). Pages 6 – 7.