

**PROPOSAL FOR  
City of Austin FY 97/98  
Safety Initiative Program**

**Department:** Fire Department, Safety Division

DATE SUBMITTED: 20 January, 1998

**Name and Title of Person Primarily Responsible for Proposal:**

Jill Craig, M.S.; Fitness/Safety Specialist \_  
Name Title

**Department Director:** (Signed by Gary Warren) January 20, 1998  
Signature Date

**1. Describe the purpose of the proposal and the desired outcomes of the implementation:**

The purpose of the proposal is to reduce the number of on-the-job injuries suffered by Operations personnel within the Austin Fire Department.

**2. Explain your proposal in enough detail to make it understandable.**

Musculoskeletal injuries far outnumber any other type of injury in the fire service. The International Association of Fire Fighters reports that fractures, sprains, and strains account for more injuries than all other types combined (see accompanying chart.) Within the Austin Fire Department, many of these injuries occur during fire suppression, in emergency medical response and during the mandated daily physical training activity. Because a significant number of physical training injuries occur during basketball and volleyball participation, one option which has been suggested is to remove basketball hoops and volleyball nets. This, however, would very likely result in depressed morale and reduction of physical activity, which are contrary to the purpose of the physical training mandate.

Another more positive approach would be to mount a campaign to better prepare fire fighters to withstand the rigors of their jobs and their training, whether at the fire station, during fire suppression, or in emergency medical response. As the exercise physiologist and coordinator of wellness and fitness programs for the Austin Fire Department, I propose a comprehensive campaign to reduce musculoskeletal injuries through positive preventive training. This would include the development of specific exercise protocols, videos to air on the intradepartmental I-net channel, an AFD internet Health and Fitness website, bimonthly injury prevention articles in the department newsletter, interviews with personnel who have suffered repeated injuries within the last five years, and access to peer trainers for personnel who have sustained Line of Duty injuries.

**3. Explain how your safety initiative will contribute to a safer work environment for departmental employees:**

There is an impressive body of literature supporting the fact that stronger people are injured less frequently; and when injured, are injured less severely.

The physical demands of the firefighter's work are rigorous, and frequently carried out with time urgency in uncontrolled conditions. Because the scene of the fire fighter's response cannot be certified as safe, the strength and physical agility of the individual is his/her best assurance of injury prevention. This could be addressed most efficiently by disseminating training protocols aimed specifically at muscle groups

that are most frequently injured (back, ankles, and knees according to Medical Operations' Line of Duty Injury records.)

Fire Department command staff has issued general orders for daily activity, aimed at preventing deconditioning among fire fighters over the span of their careers. Specific physical training will prepare fire fighters for sanctioned training drills and sport-oriented exercise, as well.

Dissemination of injury prevention information has been problematic, due to geographically scattered work sites and unusual shift hours. A campaign making use of all the media available to operations personnel would efficiently and effectively accomplish this goal.

**4. Explain the proposed cost in detail, broken down by item, service, etc.**

Production of two 30-minute videos	\$3100.00
Web Publishing software,	\$ 175.00
scanner,	\$ 600.00
digital camera	\$ 600.00
Services of off-duty peer trainers for hourly referrals	\$2000.00
Textbooks for peer trainer team's certification materials	\$900.00
Certification examinations for peer trainers in 1998	<u>\$2625.00</u>
<b>TOTAL</b>	<b>\$10,000.00</b>

**5. b. For Departments that had injuries, illnesses or vehicle collisions in FY 96/97: Explain how your initiative will reduce the on-the-job injury/illness rate.**

For individuals who have sustained multiple injuries resulting in lost time (three in five years) the Fire Department would provide the opportunity to meet with the staff exercise physiologist; this would focus individual attention on the population segment at highest risk. Those who would benefit from a progressive exercise program would be supported and motivated by a member of the Peer Fitness Training Team, which was assembled in December, 1997.

Video programs on strength and flexibility of the back, and of the lower extremity would be aired on I-net; this channel is available to most work sites. For those who do not have I-net, video tapes would be routed through interoffice mail. Virtually all operations work sites would have access to a specific exercise regime aimed at prevention of the injuries of highest incidence. Additions to this "library" would be made according to trend.

Operations personnel also have access to the internet. The development of a Health and Fitness Website would help to promote interest in health and injury prevention. The menu would include an encyclopedia of strength training and flexibility exercises, articles on Fire Fighter Fitness (including those published in the departmental newsletter) and links to existing Health and Fitness websites.

Increased awareness of the nature and prevalence of on-the-job injuries, access to specific techniques for preventing them, and support by trained personnel would effect a reduction in the injuries most prevalent among fire fighters.

**6. What is the Department's target goal, in percentage reduction, from FY 96/97 if your department did have injuries/illness in FY 96/97.**

- 15% reduction in injuries resulting in lost time.
- 25% reduction in injuries of ankle, knee, and back.
- 30% reduction in injuries caused by physical fitness and sports.

**7. List at least three (3) quantifiable performance and/or outcome measures of your proposed initiative.**

- (1) Reduction in Line of Duty injuries of body parts listed as "ankle or foot," "knee," and "back." \*
  - (2) Reduction in musculoskeletal injuries resulting in lost time.\*
  - (3) Reduction in injuries with cause listed as "Physical Fitness" and "Sports." \*
- \* Injury reports filed and recorded at Medical Operations can be sorted for above-mentioned data sets.

8. List the fund 1000, Agency 830, and ORG 2304 you want the grant money transferred to upon approval of your proposal.

9. Please respond to the following questions:

- 1. Has your department submitted a Departmental Accident Prevention Plan to HRD for approval? **YES**
- 2. Did your department have any injuries/illnesses or vehicle collisions in FY 96/97? **YES**
- 3. Do you plan on using the grant funds for any equipment, training, etc. that was included in your FY 96/97 proposal for which you received funds? **NO**
- 4. Do you intend to use the grant money for employee cash awards? **NO**
- 5. Do you intend to use the grant money to pay employee's salary for work performed or training attended during the employee's normal budgeted work hours? **NO**
- 6. Is the safety initiative for activities outside City owned or leased facilities? **NO**

**AFD Reports of IOJ's for FY 10/1/96 thru 9/30/97**  
**(This report excludes exposures.)**

15-Jan-98

<b>Animal/Insect Bite</b>	<b>2</b>
<b>Burn/Irritation</b>	<b>4</b>
<b>Caught In/Between</b>	<b>1</b>
<b>Chest Pain</b>	<b>1</b>
<b>Cut/Puncture/Scrape</b>	<b>15</b>
<b>Fall/Slip</b>	<b>15</b>
<b>Foreign Body in Eye</b>	<b>5</b>
<b>Hearing Loss</b>	<b>6</b>
<b>Mental Stress/Strain</b>	<b>1</b>
<b>Miscellaneous</b>	<b>1</b>
<b>Seizure</b>	<b>1</b>
<b>Strain/Sprain</b>	<b>121</b>
<b>Striking/Stepping On</b>	<b>5</b>
<b>Struck</b>	<b>24</b>
<b>Upset Stomach</b>	<b>1</b>
<hr/>	
<b>Grand Total:</b>	<b>203</b>

**ADDENDUM 1**

# City of Austin Fire Department On-the-Job Injuries Reported from October, 1996 through September, 1997

*Prepared by D. Parsons, Worker's Compensation Representative  
Updated January 15, 1998 12:06 PM*

**Listing of the CAUSES of injuries that occurred during the above mentioned dates.**

**Animal/Insect Bite**

Office	Office Incident	1
RUN	Medical Emergency	1
<b>Total Animal/Insect Bite</b>		<b>2</b>

**Burn/Irritation**

RUN	Structural Fire	4
<b>Total Burn/Irritation</b>		<b>4</b>

**Caught In/Between**

Office	Office Incident	1
<b>Total Caught In/Between</b>		<b>1</b>

**Chest Pain**

Station	Station Incident	1
<b>Total Chest Pain</b>		<b>1</b>

**Cut/Puncture/Scrape**

Office	Office Incident	1
RUN	Hazmat Incident	6
Sports	Basketball	1
Station	Station Incident	5
Training	"SOO" Drill	2
<b>Total Cut/Puncture/Scrape</b>		<b>15</b>

**Fall/Slip**

Office	Office Incident	1
RUN	Brush Fire	6
Sports	Basketball	3
Station	Equipment Incident	5
<b>Total Fall/Slip</b>		<b>15</b>

**Foreign Body in Eye**

RUN	Hazmat Incident	3
Station	Equipment Incident	2
<b>Total Foreign Body in Eye</b>		<b>5</b>

## ADDENDUM 2

# City of Austin Fire Department On-the-Job Injuries Reported from October, 1996 through September, 1997

*Prepared by D. Parsons, Worker's Compensation Representative  
Updated January 15, 1998 12:06 PM*

***Listing of the CAUSES of injuries that occurred during the above mentioned dates.***

**Hearing Loss**

RUN	Field Incident	4
Station	Station Incident	2
<b>Total Hearing Loss</b>		<b>6</b>

**Mental Stress/Strain**

Station	Station Incident	1
<b>Total Mental Stress/Strain</b>		<b>1</b>

**Miscellaneous**

Station	Station Incident	1
<b>Total Miscellaneous</b>		<b>1</b>

**Seizure**

Station	Station Incident	1
<b>Total Seizure</b>		<b>1</b>

**Strain/Sprain**

Office	Office Incident	3
Physical Fitness	Jogging	25
Physical Training	Running	1
RUN	Auto-Ped Accident	42
Sports	Basketball	13
St Davids	Lab Work	1
Station	Equipment Incident	9
Training	"SOO" Drill	26
Unknown	Unknown	1
<b>Total Strain/Sprain</b>		<b>121</b>

**Striking/Stepping On**

RUN	Structural Fire	2
Sports	Basketball	1
Station	Station Incident	1
Training	Training Exercise	1
<b>Total Striking/Stepping On</b>		<b>5</b>

# City of Austin Fire Department On-the-Job Injuries Reported from October, 1996 through September, 1997

*Prepared by D. Parsons, Worker's Compensation Representative  
Updated January 15, 1998 12:06 PM*

***Listing of the CAUSES of injuries that occurred during the above mentioned dates.***

**Struck**

RUN	Maint Inspection	7
Sports	Basketball	6
Station	Equipment Incident	8
Training	"SOO" Drill	3
<b>Total Struck</b>		<b>24</b>

**Upset Stomach**

RUN	Structural Fire	1
<b>Total Upset Stomach</b>		<b>1</b>

**TOTAL NUMBER OF INJURIES REPORTED from 10/94 thru 10/97: 203**