DEVELOPING A FIREFIGHTER WELLNESS/FITNESS PROGRAM

EXECUTIVE DEVELOPMENT

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ABSTRACT

Over the years, the Clinton Township Division of Fire has spent thousands of dollars to purchase, upgrade and maintain stations and equipment; unfortunately, the Division has not done as well with the most important resource - it's firefighters! The problem was that the Clinton Township Division of Fire did not have a comprehensive wellness/fitness program in place for the Division’s firefighters. The purpose of this applied research project was to identify methods available to initiate a comprehensive wellness/fitness program for firefighters.

This research utilized action research methodology to develop a checklist of items to address when implementing a firefighter wellness/fitness program in a small organization. The research questions investigated were:

1. What are the necessary components of an effective firefighter wellness program?
2. What components have been included in firefighter wellness programs in both adjacent and like-sized fire departments?
3. What is the projected impact of a firefighter wellness program on the operation of the Clinton Township Division of Fire?

There were two primary procedures employed in the research. The first was collecting wellness/fitness program information from adjacent and like-sized fire departments through the use of a survey. The other was the review of written and instructional materials available to identify recommended wellness/fitness components and to examine the impact of firefighter wellness/fitness programs on the fire department. The desired outcome of this research was to create a checklist to implement a firefighter wellness/fitness program.

The major finding of this research was that the need for a firefighter wellness/fitness program is clearly documented and that such a program can have a significant impact on the
organization both economically and administratively. Based on the findings from the literature, there were two primary implementation guidelines available. The primary guidelines included the *NFPA 1500: Standard of Fire Department Occupational Safety and Health Program* published by the National Fire Protection Association and *The Fire Service Joint Labor/Management Wellness/Fitness Initiative* distributed by the International Association of Fire Fighters. The components of an effective firefighter wellness/fitness program included (a) a medical component; (b) a fitness component; (c) a rehabilitation component; (d) a behavioral component; and (e) a data collection process.

The results of the survey indicated that the fire departments of central Ohio are in various stages of wellness/fitness program development and usage. The survey did indicate that the more aggressive programs positively impacted the organization by reducing firefighter injuries and by reducing worker's compensation premiums.

It is recommended that the Clinton Township Division of Fire develop and implement a firefighter wellness/fitness program utilizing a combination of the guidelines issued separately by the National Fire Protection Association and the International Association of Fire Fighters. Specifically, a wellness/fitness team should be established to develop, implement, monitor and evaluate the program. Lastly, further research should be conducted to better identify the impact of wellness/fitness programs.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>2</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>4</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>5</td>
</tr>
<tr>
<td>BACKGROUND AND SIGNIFICANCE</td>
<td>6</td>
</tr>
<tr>
<td>LITERATURE REVIEW</td>
<td>7</td>
</tr>
<tr>
<td>PROCEDURES</td>
<td>12</td>
</tr>
<tr>
<td>RESULTS</td>
<td>15</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>20</td>
</tr>
<tr>
<td>RECOMMENDATIONS</td>
<td>23</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>26</td>
</tr>
<tr>
<td>APPENDIX A (WELLNESS/FITNESS PROGRAM SURVEY)</td>
<td>28</td>
</tr>
<tr>
<td>APPENDIX B (WELLNESS/FITNESS PROGRAM CHECKLIST)</td>
<td>30</td>
</tr>
</tbody>
</table>
INTRODUCTION

Fire departments are known for the care that they give their equipment. They purchase rigorously tested equipment and maintain it with meticulous upkeep. Yet, they will hire employees who barely pass a selection test, and then ignore the need for on-going physical maintenance (Sharkey, 1997).

American adults may be more aware of the need to exercise and count calories than they once were, but more of them than ever are overweight. The need for fitness is clear. The number of overweight adults, which remained stable at about one fourth of the adult population from 1960 through 1980, suddenly jumped to one third of all adults between 1980 and 1991 and then to one half by 1996, according to a recent study by the National Center for Health Statistics in the Center for Disease Control and Prevention (Brody, 1997).

The problem is that the Clinton Township Division of Fire does not have a comprehensive wellness/fitness program for the Division’s firefighters. The research questions investigated are:

1. What are the necessary components of an effective firefighter wellness/fitness program?

2. What components have been included in firefighter wellness/fitness programs in both adjacent and like-sized fire departments?

3. What is the projected impact of a firefighter wellness/fitness program on the operation of the Clinton Township Division of Fire?

Studies show that unfit workers can become a safety hazard to themselves, as well as to co-workers. Fit workers are more productive than their sedentary colleagues, are absent fewer days, are far less likely to incur job-related disabilities or retire early due to heart or other
Physically fit workers have a more positive attitude about work and life in general (Sharkey, 1997). The purpose of this applied research project is to identify methods available to initiate a comprehensive wellness/fitness program for firefighters. Action research is employed to develop a checklist of items to address when implementing a firefighter wellness/fitness program.

BACKGROUND AND SIGNIFICANCE

Clinton Township, Ohio is a small public jurisdiction located in the metropolitan area of Columbus, Ohio. The 1990 U.S. census reports Clinton Township as a community of nearly 5000 people residing in 2238 housing units and a median income of the $27,865. (U.S. Census Bureau, 1998). The property valuations of Clinton Township occupancies is approximately 95 million dollars (Franklin County, Ohio Auditor's Office, 1998). The majority of the residential and commercial occupancies were constructed in the mid-1950’s with many of those structures now posing a serious fire threat due to deteriorating conditions.

The Clinton Township Division of Fire is combination-type fire department with a total of 35 full-time, part-time, and volunteer members. The Division operates an engine company and an advanced life support paramedic unit from one fire station. The daily firefighter staffing ranges from 3-5 firefighters. According to the Clinton Township Division of Fire Annual Report, the on-duty Clinton Township fire crews responded to 3647 emergencies. (Clinton Township Division of Fire, 1998, p. 4). Because of actual and potential emergency incident workload, the fire department participates in an automatic response agreement with the Columbus, Ohio Fire Department.
Over the past 10 years, the organizational rate of firefighter injury and illness has exceeded acceptable levels. Those injuries and illnesses are affecting morale, productivity and worker’s compensation rates. The survey conducted for this research project indicates that in some instances, Clinton Township is paying worker’s compensation premiums 3-4 times that of other area fire departments. One noticeable difference between Clinton Township and the adjacent fire departments is the lack of a comprehensive firefighter wellness/fitness program in Clinton Township.

The National Fire Protection Association has addressed the subject of firefighter wellness/fitness with a standard that states “The fire department shall provide health promotion activities that identify physical and mental health risk factors and shall provide education and counseling for the purpose of preventing health problems and enhancing overall well-being.” (National Fire Protection Association, 1997, p. 1500-22). The Fire Service Joint Labor Management Wellness/Fitness Initiative states "Wellness is a comprehensive term that includes medical fitness, physical fitness, emotional fitness, and access to rehabilitation when indicated. Wellness is a personal commitment that all uniformed personnel must make to survive and sustain a career in the professional fire service. When uniformed personnel are injured or ill, malnourished or overweight, over stressed or out of balance, it affects their ability to effectively do their job" (International Association of Fire Fighters, 1997, p. 3).

This research project was completed in accordance with the applied research requirements of the National Fire Academy’s Executive Fire Officer Program. The problem addressed by this research project related specifically to Unit 7: Organizational Culture and Unit 10: Service Quality/Marketing, as presented in the Executive Development course.
LITERATURE REVIEW

The literature review for this project focused on three essential areas: (1) the components of an effective firefighter wellness/fitness program; (2) the components included in the firefighter wellness/fitness programs in other adjacent fire departments; and (3) the impact of a firefighter wellness/fitness program on a fire department. The first and third topics were primarily researched through literature searches conducted at the libraries of the National Emergency Training Center in Emmitsburg, Maryland and the public library located in Newark, Ohio. Additional research was conducted through resources available on the internet. The second topic was researched by conducting a survey of central Ohio fire departments.

Components of an Effective Firefighter Wellness Program

There is no standard “off the shelf” approach to guarantee worker health in a wide range of settings (Institute for Work and Health, 1996). The Oklahoma State University (1998) states "Each fire department has different personnel, training officers, and administration. All these factors are a key in the development of a wellness program tailored to met the needs of your department" (p. 26). The literature reviewed indicates that there are several approaches to identifying the components of a successful wellness program. The National Fire Protection Association (NFPA) and the International Association of Fire Fighters (IAFF) are two organizations that have taken steps to identify the keys elements to a successful firefighter wellness/fitness program.

The National Fire Protection Association (1997) primarily addresses the issue of firefighter wellness/fitness in NFPA 1500: Standard on Fire Department Safety and Health Program. The standard addresses key wellness program components including, but not limited to:
a) A written general policy addressing firefighter wellness.

b) Physical examinations.

c) Physical performance requirements.

d) A rehabilitation program for those who cannot meet the physical requirements.

e) Mandatory participation in a physical fitness program.

f) Confidential and permanent health files on each department member.

g) An infectious disease identification and prevention policy.

h) An employee assistance program to assist members with problems such as substance abuse and personal problems that have an adverse affect on the firefighter's work performance.

i) A program designed to identify the risks of tobacco along with a smoking cessation element.

j) An avenue to relieve the stress generated by an incident that could adversely affect the psychological and physical well-being of the fire department members.

k) Education and counseling for the purpose of preventing health problems and enhancing overall well-being.

The International Association of Fire Fighters (1997) has addressed the topic of firefighter wellness by publishing *The Fire Service Joint Labor Management Wellness/Fitness Initiative*. The initiative is a joint project of the International Association of Fire Fighters (IAFF) and the International Association of Fire Chiefs (IAFC). The keys elements of the program include a medical component, a fitness component, a rehabilitation component, a behavioral health component, and a data collection element. The International Association of Fire Fighters clearly states "The program is designed to be non-punitive in nature. The initiative is a total
program and all components must be implemented" (International Association of Fire Fighters, 1997, p. 2).

The literature also reveals other approaches including that of Bloomfelt (2000, January) in *Safety and the Supervisor*. Bloomfelt cites the P.O.W.E.R. (Promoting Optimal Wellness for Employee Rewards) project being utilized by the Laredo Community College in Laredo, Texas as "…a program that is designed to cover the six dimensions of wellness - social, environmental, occupational, intellectual, emotional, and physical" (p. 2).

**Wellness Program Components Utilized In Other Area Fire Departments**

The wellness/fitness information from other area fire departments was obtained by conducting a survey of career and combination fire departments in the central Ohio area. The survey was developed to assess the presence and utilization level of fitness/wellness programs in comparable fire departments and to identify the components being used. The survey is included in this report as Appendix A.

**The Impact of Firefighter Wellness Programs**

The literature reviewed indicates that a well-designed wellness/fitness program will have a positive impact on the organization. In *Fitness and Health*, Sharkey (1997) states that healthy employees are a good investment and that thousands of companies spend billions on fitness and health (wellness) programs for their employees. According to Sharkey (1997), the expenditure is justified on several grounds:

a) Cost effectiveness – each dollar spent saves several dollars.

b) Increased productivity.

c) Safety – fit employees are less likely to be injured and when they are injured, they miss fewer days.
d) Health – fit employees miss fewer days and use a smaller share of the health-care dollar.

e) Morale – fit employees have higher morale. Wellness/fitness programs increase loyalty and reduce turnover (Sharkey, 1997, p. 296).

The cost effectiveness and the impact of the wellness/fitness program can easily be realized when one examines the data available from just one component - an effective employee assistance program (EAP). The Ohio Bureau of Worker's Compensation (1998) states, the value of an EAP includes the following:

a) There is a return on the investment anywhere from $5 - $16 for every dollar spent on an EAP.

b) There is a decrease of up to 60% in absenteeism and lost time.

c) There is a decrease of up 7% in lost time of co-workers and supervisors in discussions of personal problems.


It is common knowledge that productivity is a concern of most organizations and fire departments are certainly not excluded. The literature reveals that wellness/fitness programs can have a positive effect on productivity. Sharkey (1997) states that in a study of wildland firefighters - highly fit and motivated workers outperformed less fit workers by a factor of 3 to 1.
A concern of the entire fire service industry is the death and injury rate of the firefighting profession. A mandatory physical fitness program reduces the total number injuries, the severity of injuries and the worker compensation rates (Bennett, 1997).

A wellness/fitness program may also benefit the organization in other indirect ways. According to Bloomfelt (1999), “A wellness program also helps to attract and maintain employees in a tight labor market. When job applicants learn that they receive release time to work on fitness and wellness, they view it as a positive benefit” (Bloomfelt, 1999, p. 2).

In summary, the literature review identified (a) two primary models identifying the key components of a wellness program; (b) the components of firefighter wellness programs being utilized by the fire service within central Ohio; and (c) the significant impact that a firefighter wellness program has on a fire department.

**PROCEDURES**

**Definition of Terms**

**Age Discrimination in Employment Act (ADEA).** The federal act of 1967 that outlawed job discrimination based on age except when age was a bona fide occupational qualification (BFOQ). For a while, Congress exempted fire and law enforcement personnel for ADEA, assuming that age was a BFOQ.

**Employee Assistance Program.** A humanitarian, job-based strategy for helping employees whose personal problems are affecting their work performance.

**International Wellness/Fitness Database.** A wellness/physical fitness database supported by the International Association of Fire Fighters to provide for the aggregation of all case data from participating departments.
Wellness. A comprehensive term that includes medical fitness, physical fitness, emotional fitness, and access to rehabilitation when indicated.

Work Capacity. Work capacity is defined as the ability to accomplish production goals without undue fatigue and without becoming a hazard to yourself or co-workers.

Research Methodology

This research project employs action research methodologies to meet the objectives of (a) identifying the components of an effective firefighter wellness/fitness program; (b) identifying the components being utilized firefighter wellness/fitness programs in both adjacent and like-sized fire departments; and (c) projecting the impact of a firefighter wellness/fitness program on the operation of the Clinton Township Division of Fire. The objectives were addressed through an extensive literature review and by conducting a survey in the central Ohio area. The survey utilized appears as Appendix A.

The problem statement was rechecked for both clarity and comprehensiveness. The purpose statement established the desired outcome and goal of creating a checklist to utilize when implementing a firefighter wellness/fitness program in the Clinton Township Division of Fire. The researcher conducted a situational analysis to determine if there were any factors and/or forces that may be present during the project that could either assist or impede reaching the project goal. The primary factor identified that could either assist or impede the research was the perception of the project from the local firefighter's union. In an effort to gain their support, the researcher informed the union executive board as the project progressed and solicited their input.

An extensive literature review was conducted to determine (a) the components of an effective firefighter wellness/fitness program; and (b) the impact of a firefighter wellness/fitness
program on a fire department. The topics were primarily researched through literature searches conducted at the libraries of the National Emergency Training Center in Emmitsburg, Maryland and the public library located in Newark, Ohio. Additional research was conducted through resources available on the internet.

To address the question of wellness/fitness program components being utilized in adjacent, like-sized departments, the researcher drafted a survey with the assistance of the staff and union officers of the Clinton Township Division of Fire. These members suggested various criteria and items that may be considered when developing a wellness/fitness program in their own organization. A total of 61 surveys was distributed throughout central Ohio by several means including hand-delivery, facsimile, electronic mail, and the regular mail system. Forty-two surveys were completed and returned, which accounted for a 69% response rate.

The survey was designed to assess (a) the demographics of the responding fire department; (b) an evaluation of the existing personnel; (c) wellness/fitness components being utilized; (d) conformance with national standards; and (e) the impact of the wellness/fitness program on the organization. The surveys initially asked responders to rate the size of their fire department, the funding available, and whether a labor union represented the firefighter workforce. The survey then requested an overview of the existing workforce by specifically including the percentage of firefighters that fit into various weight classifications and the percentage of department members who use some form of tobacco products. The survey requested that the responder identify the wellness/fitness items currently being utilized and to estimate the impact of such items on the organization. The raw data obtained from the surveys was arranged and tabulated to attain average ratings for each of the designated criteria.
Assumption and Limitations

The lack of some applicable resource materials limited the research. The local library system did not recognize the interlibrary system to obtain materials from the National Fire Academy Library. The National Fire Academy Library was able to provide limited materials but was not able to provide all resources requested by the researcher without the assistance of a local library.

RESULTS

A checklist of components to address when initiating a firefighter wellness/fitness program in the Clinton Township Division of Fire appears as Appendix B.

Answers to Research Questions

Research Question 1. The Fire Service Joint Labor Management Wellness/Fitness Initiative states that a wellness/fitness the program must include the following components:

(a) a medical component.

(b) a fitness component.

(c) a rehabilitation component.

(d) a behavioral component.

(e) a data collection system.

(International Association of Fire Fighters, 1997, p. 9).

The medical component is specifically addressed in NFPA 1582: Standard on Medical Requirements for Firefighters stating "The purpose of the standard is to help ensure that candidates and current firefighters will be medically capable of performing their required duties
and to help reduce the risk of occupational injuries and illnesses" (National Fire Protection Association, 1997, p. 1582-4). The medical component must include:

(a) A detailed medical evaluation process.

(b) A designated fire department physician.

(c) A pre-employment medical evaluation.

(d) A periodic medical evaluation.

(e) A return-to-duty medical evaluation.

(f) A system of medical evaluation records, results, reporting, and confidentiality.

(National Fire Protection Association, 1997).

Performance in physically demanding work is related to fitness; the harder the work, the higher the relationship to measures of aerobic and muscular fitness (Sharkey, 1997). The implementation of the fitness component will help not only with the work production, but also with reducing the risk of coronary heart disease (Smith, 1995). The results of the survey conducted for this research indicate that as many as 50% of central Ohio firefighters are at least slightly overweight. According to Smith (1995), "There is one and only one way to permanently rid the body of body fat. It is to exercise! Too often we have tried diets as a way of reducing weight. Weight is not the issue here; it is body fat" (Smith, 1995, p. 7). Smith (1995) also states that in order to get the best results possible, "... a program needs to be customized and individualized" (Smith, 1995, p. 8).

The rehabilitation component of the program must not be overlooked. In The Fire Service Joint Labor Management Wellness/Fitness Initiative, the International Association of Fire Fighters (1997) state "The rehabilitation of our uniformed personnel must be a priority. The cost of one low back or knee injury can exceed $18,000, and this figure does not include the cost
of replacing injured personnel on an overtime basis. When personnel re-injure themselves after inadequate rehabilitation, the costs are even higher. The specifics of the rehabilitation component include (a) a physical therapy program; (b) an alternate duty program; (c) periodic re-evaluation following return to duty; and (d) a comprehensive injury prevention program" (International Association of Fire Fighters, 1997, p. 66).

A wellness/fitness program is not complete without addressing the behavioral well-being of those involved. The behavioral health of our uniformed personnel is every bit as important as their physical health. (International Association of Fire Fighters, 1997). The issue is addressed by the National Fire Protection Association in NFPA 1500, Standard on Fire Department Occupational Safety and Health Program by stating "The fire department shall provide a member assistance program that identifies and assists members and their immediate families with substance abuse stress, and personal problems that adversely affect fire department work performance" (National Fire Protection Association, 1997, p. 1500-22). According to the Ohio Bureau of Worker's Compensation, an employee assistance program is designed to meet the needs of two groups:

a) Employees- helping them identify problems and appropriate resources.

b) Employers – helping them identify and understand productivity and safety issues caused by personal problems and how to “preserve” employees impaired by such problems. (Ohio Bureau of Worker's Compensation, 1998).

Employee assistance programs can address a wide range of important topics such as firefighter nutrition and stress management. O'Conner (1995) states that a healthy diet can be defined as one that fosters good health and provides the necessary calories to achieve energy balance. Captain Mark Nugent serves as the health-fitness coordinator of the Chesterfield Fire
department in Chesterfield, Virginia and has developed The Nutritional Overhaul Plan for firefighters. The plan includes four easy steps: education, appetite modification, exercise and proper mind set. (Nugent, 1993). According to the U.S. Fire Administration, "Stress, positive or negative, affects all of us. Stress is a key factor that directly influences the breakdown of health and happiness in America’s fire service community. By acquiring knowledge about stress and applying sound management principles, fire service members can minimize the unhealthy and costly consequence of stress and become active, competent architects of productive careers and lifestyles" (U.S. Fire Administration, 1991, p. 16). An employee assistance program can be an effective tool to help the firefighter address the topics of nutrition, stress, and a multitude of other behavioral issues.

An employee assistance program can also address the use of tobacco. Medical data clearly shows that tobacco use is not compatible with a healthy fire service. The use of tobacco, whether through smoking or smoke-free products, is contrary to the philosophy of the goals of a comprehensive wellness/fitness program. (International association of Fire Fighters, 1997). Sharkey (1997) states "While many forms of industrial, urban, and automotive pollution are nauseating, troublesome, or even fatal, no other single source of pollution is as deadly as the cigarette. In the United States, cigarette smoking is responsible for 400,000 deaths annually" (Sharkey, 1997, p. 342). The survey conducted for this research revealed that the use of tobacco products in central Ohio fire departments ranged from 5% - 50% with the average usage being 21.5%. Removing tobacco from the fire service has become a priority. The National Fire Protection Association states "The fire department shall provide a program on the health effects associated with the use of tobacco products and the fire department shall provide a smoking cessation program" (National Fire Protection Association, 1997, p. 1500-22).
The final component necessary for an effective wellness/fitness program is a data collection system. According to the International Association of Firefighters, "The critical areas of a data collection system are the uniform, effective, and efficient collection from participating departments and the compilation of this information in an international database for analysis purposes. To accomplish this, key components of the information system include the local fire department information system, a data dictionary, the transfer file specification and the International Wellness/Fitness Database" (International Association of Fire Fighters, 1997, p. 92).

Research Question 2. The responses to the Firefighter Fitness/Wellness Survey revealed that the fire departments of central Ohio are utilizing a wide-variety of wellness/fitness components within their organizations. The table below indicates the elements as reported.

<table>
<thead>
<tr>
<th>WELLNESS/FITNESS COMPONENTS UTILIZED IN CENTRAL OHIO</th>
<th>F.D. %</th>
<th>Component</th>
<th>F.D. %</th>
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<tbody>
<tr>
<td>Pre-employment medical physical</td>
<td>100.0%</td>
<td>Transitional work/alternate duty work program</td>
<td>52.8%</td>
</tr>
<tr>
<td>Pre-employment drug screen</td>
<td>84.0%</td>
<td>Designated wellness/fitness coordinator</td>
<td>16.8%</td>
</tr>
<tr>
<td>Pre-employment physical ability test</td>
<td>50.4%</td>
<td>Designated health and safety officer</td>
<td>86.4%</td>
</tr>
<tr>
<td>Mandatory on-duty physical fitness</td>
<td>72.0%</td>
<td>Designated physician to advise members</td>
<td>31.2%</td>
</tr>
<tr>
<td>Voluntary on-duty physical fitness</td>
<td>48.0%</td>
<td>Department safety program</td>
<td>96.0%</td>
</tr>
<tr>
<td>Periodical medical physical of dept members</td>
<td>26.4%</td>
<td>Infectious disease program</td>
<td>74.4%</td>
</tr>
<tr>
<td>Established physical performance standards</td>
<td>48.0%</td>
<td>Critical incident stress debriefing availability</td>
<td>69.6%</td>
</tr>
<tr>
<td>Periodical physical ability testing</td>
<td>69.6%</td>
<td>Employee well/fitness education</td>
<td>19.2%</td>
</tr>
<tr>
<td>Substance abuse program including testing</td>
<td>12.0%</td>
<td>Others</td>
<td>4.8%</td>
</tr>
<tr>
<td>Employee assistance program</td>
<td>72.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: The wellness/fitness components being utilized by central Ohio fire departments.

The survey also identified that 23% of the responding organizations are utilizing National Fire Protection Association standards as medical and physical guidelines and 15% are using such guidelines for member assistance and wellness programs, otherwise known as an employee assistance programs. Even though every response to the survey identified wellness/fitness
components in use, only 9 of 42 (21.6%) specifically stated that they have a formal wellness/fitness program in place in their fire departments.

Research Question 3. The impact of a comprehensive wellness/fitness program is revealed in several key areas including reduced worker's compensation rates, a reduction in firefighter injuries, and a decrease in absenteeism.

An initial review of the survey results reveals that only 4.8% of the respondents were able to identify a reduction in the frequency of firefighter injuries, the severity of firefighter injuries, or the related worker's compensation rates. However, a closer look indicates lower worker's compensation rates when a responding fire department identifies using 10 or more of the listed components. Worker's compensation rates are directly correlated to the size of the organization, the number of injuries/illnesses per capita, and the severity of the injuries/illnesses (Ohio Bureau of Worker's Compensation, 1998). The average worker's compensation rate of all of the responding fire departments is 6.9%. The average rate for the fire departments utilizing 10 or more of the listed wellness/fitness components is 3.8%, a 45% reduction in worker's compensation costs.

Other wellness/fitness components can have a specific impact on the organization. In *The Ohio Bureau of Worker's Compensation Drug-Free Workplace Program: A Policy and Reference Guide*, the Bureau states that substance abuse is a serious problem in the workplace and that addressing the problem can increase productivity, reduce absenteeism, reduce accidents, reduce medical claims, and reduce employee theft (Ohio Bureau of Workers Compensation, 1998, p. 5-6).

The wellness/fitness program can also impact the organization other indirect manners. As mentioned in the literature review, a wellness/fitness program also helps to attract and
maintain employees in a tight labor market. When job applicants learn that they receive release
time to work on fitness and wellness, they view it as a positive benefit (Bloomfelt, 2000).

**DISCUSSION**

The researcher believes that the need for a firefighter wellness/fitness program is
obvious. The literature reviewed and the information collected by survey clearly reveal that a
wellness program is at least beneficial, if not necessary. As mentioned in the earlier in this
document, wellness is a personal commitment that all uniformed personnel must make to survive
and sustain a career in the professional fire service. When uniformed personnel are injured or ill,
malnourished or overweight, over stressed or out of balance, it affects their ability to effectively
do their job (International Association of Fire Fighters, 1997).

It is the belief of the researcher that there are two superior sets of wellness/fitness
guidelines available for the fire service. Both the International Association of Fire Fighters and
the National Fire Protection Association have developed programs to address the issue of
firefighter health. Both sets of guidelines outline several key program components including
medical, fitness, behavioral, rehabilitation, and data collection (International Association of Fire
Fighters, 1997; National Fire Protection Association, 1997). While all of the components are
needed for a successful program, it is the opinion of the researcher that the fitness and the
behavioral elements are the most critical.

Health experts say the level of physical activity among Americans has decreased because
people watch television and ride in automobiles instead of walking and because of the
disappearance of physical education classes for school programs (Brody, 1997). It is the opinion
of the researcher that today's firefighter is no exception. During the period of exemption from
the *Age Discrimination in Employment Act*, studies of fire and law enforcement personnel indicated the dismal level of physical readiness of emergency personnel (Sharkey, 1997). In *NFPA 1500, The Standard of Fire Department Occupational Safety and Health Program*, the standard specifically states "The fire department shall require the structured participation of all members in the physical fitness program (National Fire Protection Association, 1997). The researcher also feels that an individualized physical fitness program is one of the key elements of a comprehensive wellness/fitness program.

The fire service must also address the issue of the firefighter's behavioral well-being. The Oklahoma State University, Wellness Center Department (1998) recommends an employee assistance program for firefighters and their immediate families to address problems such as the following:

- a) Alcohol/drug addictions.
- b) Stress.
- c) Marital concerns.
- d) Family/child issues.
- e) Domestic abuse.
- f) Emotional, legal, and financial problems.
- g) Critical incident stress.
- h) Workplace violence.
- i) Death/grief counseling.

Any of the above issues could easily have an adverse affect on the firefighter's work performance. For example, stress, positive or negative, affects all of us. Stress is a key factor that directly influences the breakdown of health and happiness in America’s fire service
community. An employee assistance program can assist by acquiring knowledge about stress and by minimizing the unhealthy and costly consequence of stress so that firefighters can become architects of productive careers and lifestyles (U.S. Fire Administration, 1991).

The researcher believes that implementing a comprehensive wellness/fitness program would have a positive impact on the Clinton Township Division of Fire. The department's percentage of overweight firefighters, the number of lost time injuries, and the worker's compensation rate are all excessive when compared to the fire departments responding to the research survey. The researcher feels that the program would not only address these management concerns, but it would also address the overall issue of life longevity for the members of the fire department.

RECOMMENDATIONS

The Clinton Township Division of Fire should work towards implementing a comprehensive wellness/fitness program. A combination of the guidelines from the International Association of Fire Fighters (IAFF) and the National Fire Protection Association (NFPA) should be utilized to construct the program for the organization. Those guidelines include:


b) NFPA 1500: Standard on Fire Department Occupational Safety and Health Program (NFPA, 1997).

c) NFPA 1581: Standard on Fire Department Infection Control Program (NFPA, 1995).

d) NFPA 1582: Standard on Medical Requirement for Firefighters (NFPA, 1997).

An organizational wellness/fitness team should be established to develop, implement, and evaluate the program. The development of the program should follow the
checklist outlined here and as shown in Appendix B. The team should include members from all levels of the department. The team should also include a department fitness/wellness coordinator and a physician to advise members and guide the process. A key responsibility of the team would be to establish the goals and objectives of the program. The team must also establish a data collection process to evaluate the effectiveness of the entire program.

The organization must establish the standards for the medical evaluations utilizing *NFPA 1582: Standard on Medical Requirement for Firefighters* (National Fire Protection Association, 1997) as a guideline. Once the standards are established, the next step is to apply them in the medical evaluation process including pre-placement medical exams, periodic medical exams, and return-to-duty medical evaluations.

A critical area of the wellness/fitness program is the development of the physical performance standards and the physical fitness program to enable members to develop and maintain an appropriate level of fitness to safely perform their jobs in accordance with the performance requirements. The fitness component should include medical clearance, a structured mandatory physical fitness program, on-duty time to exercise, equipment and facilities, and individual exercise prescriptions. Fire department members should be certified annually to assure that they meet the physical performance standards. Members who are unable to meet the performance standards should be required to enter a physical rehabilitation program. It is recommended that management consider an alternate duty or transitional duty work assignment during the time that the firefighter is being rehabilitated.

The fire department must designate a department Infection Control Officer to identify and address the issue of contagious diseases. It should be the responsibility of such person to develop
and operate an infectious control program in accordance with *NFPA 1581: Standard on Fire Department Infection Control Program* (National Fire Protection Association, 1995).

An employee assistance program is needed to ensure the success of the wellness/fitness program. The program should be available to all department members and their families. It should provide services including assessment, referral, and education for a wide-range of topics. Specifically, the organization must develop and implement a written policies on alcohol/substance abuse and critical incident stress debriefing. The policy should include several forms of alcohol/substance testing including pre-placement, random, post-accident, and for reasonable suspicion. The availability of critical incident stress debriefing will assist the employee to deal with stressful events. The employee assistance program can and should be utilized to assist employees with these critical life issues that could have an adverse effect on the workplace. Additionally and somewhat related, the fire department should consider obtaining chaplain services for those members with spiritual needs.

The organization should develop a plan to eliminate the use of tobacco products; however, a key component is to include a plan to assist current members with tobacco cessation. All new employees should be required to be tobacco free throughout their career. Finally, the department should completely remove tobacco use from inside of the workplace including the fire stations and inside of emergency apparatus.

It is clear that a wellness/fitness initiative will be beneficial to the fire department, the firefighter, and ultimately the public served. Firefighters need to adopt a lifestyle that promotes total health over their entire career (Pearson, 1994). In an effort to improve the data currently available, further research should be conducted to better identify the long-term impact of wellness/fitness programs.
REFERENCES


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APPENDIX A

NATIONAL FIRE ACADEMY/EXECUTIVE FIRE OFFICER PROJECT
FIREFIGHTER WELLNESS/FITNESS PROGRAM SURVEY

1. Please provide the following demographic data about your department:

   Department budget
   ___ under 1 million annually
   ___ 1- 5 million annually
   ___ over 5 million annually

   No. of firefighters ____________________
   Worker’s Compensation rate ____________________

2. In your opinion, what percentage of your department’s personnel fit into the following categories:

   Slightly underweight ____________________
   Normal weight ____________________
   Slightly overweight (10-25 lbs) ____________________
   Overweight (26-50 lbs) ____________________
   Obese (>50 lbs) ____________________

3. What approximate percentage of your department’s personnel use some form of tobacco products? _________

4. Please check all that apply to your organization:

   ___ Pre-employment medical physical
   ___ Pre-employment drug screen
   ___ Pre-employment physical ability test
   ___ Mandatory on-duty physical fitness program
   ___ Voluntary on-duty physical fitness program
   ___ Periodical medical physical of existing firefighters
   ___ Department established physical performance standards
   ___ Periodical physical ability testing of existing firefighters
   ___ Substance abuse program including drug and alcohol testing
   ___ Employee assistance program
   ___ Transitional work program for injured firefighters
   ___ Designated fitness/wellness coordinator
   ___ Designated health and safety officer
   ___ Designated physician to advise members
   ___ Department safety program
   ___ Infectious disease program
   ___ Critical incident stress debriefing
   ___ Employee wellness education
   ___ Other - please describe ____________________________________________________
5. Does your department follow NFPA guidelines regarding:
   Medical and Physical   [ ] yes    [ ] no
   Member Assistance and Wellness   [ ] yes    [ ] no

6. Does your fire department have a formal Wellness/Fitness Program?
   [ ] yes    [ ] no (if no, please quit and return survey)

7. What affect has the Wellness/Fitness Program had on the frequency of firefighter injuries?
   [ ] no effect
   [ ] fewer injuries
   [ ] more injuries
   [ ] undetermined

8. What affect has the Wellness/Fitness program had on the severity of injuries?
   [ ] no effect
   [ ] less severe
   [ ] more severe
   [ ] undetermined

9. What has been the effect of the Wellness/Fitness program on Worker’s Compensation rates?
   [ ] no effect
   [ ] raised costs
   [ ] lowered costs
   [ ] undetermined

10. What has been the effect of the Wellness/Fitness program on sick leave usage?
    [ ] no effect
    [ ] less usage
    [ ] more usage
    [ ] undetermined

Thank you for your assistance!

Please return, fax, or e-mail the survey by March 1, 2000 to:

Chief Randy Stickle
3820 Cleveland Avenue
Columbus, Ohio 43224
Fax: (614) 476-9700
E-mail: rstickle@iwaynet.net
APPENDIX B

Firefighter Wellness/Fitness Program Implementation Checklist

1. Form the Wellness/Fitness Team.
   Include organizational members from all levels.

2. Establish goals and objectives of the program.

3. Designate a department fitness/wellness coordinator.

4. Designate a physician to advise members and guide the process.

5. Establish the standards for the medical evaluations.
   Consider using NFPA 1582.

6. Establish the medical evaluation process.
   Include pre-placement medical exams, periodic medical exams, and return-to-duty medical evaluations.

7. Develop physical performance standards.
   Adjust for age and requirements of the specific position within the organization.

8. Develop a physical fitness program to enable members to develop and maintain an appropriate level of fitness to safely perform their jobs in accordance with the performance requirements.
   Include medical clearance, on-duty time to exercise, equipment and facilities, and individual exercise prescriptions.

9. Certify members annually that they meet the physical performance standards.

10. Require members who are unable to meet the performance standards to enter a physical rehabilitation program.
    Consider alternate duty provisions.

11. Require all members to participate in a structured physical fitness program.

12. Designate a department Infection Control Officer.

13. Develop and operate an infectious control program in accordance with NFPA 1581.

14. Provide an Employee Assistance Program to all department members and their families.
    Services provided should include assessment, referral, and education for a wide-range of topics.

15. Develop and implement a written policy on alcohol and substance abuse. Include several forms of testing including pre-placement, random, post-accident, and for reasonable suspicion.

16. Establish the availability of critical incident stress debriefing.

17. Develop criteria that designates utilization if the critical incident stress debriefing program.

18. Incorporate injury prevention as part of the fire department philosophy.

19. Develop a plan to eliminate the use of tobacco products.
    Include a plan to assist current members with tobacco cessation.
    Require all new employees to be tobacco free throughout their career.
    Remove tobacco use from inside of the workplace.

20. Provide chaplain services for spiritual needs.

21. Establish a data collection process to evaluate the effectiveness of the entire program.