MEDICAL EXAMINATION REQUIREMENTS FOR BRENTWOOD FIRE FIGHTERS

EXECUTIVE DEVELOPMENT

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An applied research project submitted to the National Fire Academy
As part of the Executive Fire Officer Program

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ABSTRACT

Brentwood Fire Department did not have medical examination for its fire fighters beyond the most basic medical examination required of all city employees. The city required each fire fighter to pass a physical performance appraisal (PPA) twice a year to remain employed. Two problems revolved around the limited medical examination. 1. Were fire fighters physiologically prepared to complete the PPA and (ultimately their job)? 2. The city also had inadequate baseline medical information for each employee. The purpose of this research was to investigate medical examination standards. Evaluative research was used to answer the following questions:

1. What are the current national consensus standards, relevant Tennessee laws, or national laws relative to medical examinations?
2. What consensus standards, if any, are other fire departments in Tennessee utilizing?
3. What components do physicians in Tennessee, believe are required for medical examinations?
4. What components should the new medical examination for the Brentwood fire fighters contain?

The procedures included a literature review of the relevant literature. A survey of fire departments in Tennessee was conducted to ascertain what standards they were utilizing. A survey was also given to physicians to determine what components they felt were necessary for a fire fighter medical examination.

The results revealed that firefighter medical standards must be identical for the incumbents and applicants. The majority of Tennessee fire department are unable, at the current time, to comply with NFPA 1582. Physicians agree that the guidance in NFPA 1582 is very

strict and should ensure that a fire fighter should be able to perform the essential duties contained in the job description.

It was recommended that the Brentwood Fire Department continue with implementation of its new medical examination. Incumbents are currently subject to random drug screening, so therefore it is only included in an applicant examination.

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INTRODUCTION

Should a fire fighter have an annual medical evaluation furnished by the city and given by a physician? The majority of fire department and city administrators would likely agree with some form of this question. However, there is no one law, regulation or standard, when taken alone, on which you can determine the type of evalulation or the frequency. However, can a responsible fire department operate without requiring - for the protection of the fire fighters, the citizens they protect and the government they serve – a base line medical examination at the beginning of employment and at a periodic rate while serving the community? “Without medical evaluations, employers are liable and incur substantial costs if they place an unfit worker ina potentially hazardous situation” (Sandler, 1992, p. 52).

The problem that initiated this research revolved around the following facts. The Brentwood Fire Department did not have medical examination for its fire fighters beyond the most basic medical examination required of all city employees. The city requires each fire fighter to pass a physical performance appraisal (PPA) twice a year to remain employed. The limited medical examination was insufficient to ensure that the fire fighters were physiologically prepared to complete the PPA and ultimately their job. The city also had inadequate baseline medical information for each employee.

The purpose of this research was to investigate medical examination standards and identify components for inclusion in medical examinations for Brentwood Fire Department fire fighters. The procedures used included a literature review of the relevant literature in the National Fire Academy's (NFA) Learning Resource Center (LRC) and on various state and national internet sites. A survey of fire departments in Tennessee was conducted to determine what standards they were following. A survey was also given to physicians to determine what

components they felt are necessary for a fire fighrer medical examination. Evaluative research was used to answer the following questions:

1. What are the current national consensus standards, relevant Tennessee laws, or national laws relative to medical examinations?
2. What consensus standards, if any, are other fire departments in Tennessee utilizing?
3. What components do physicians in Tennessee, believe are required for medical examinations?
4. What components should the new medical examination for the Brentwood fire fighters contain?

BACKGROUND AND SIGNIFICANCE

Brentwood, Tennessee, is a small city of 23,000 residents and 35,000 daily transients. The 1998 special census reported 9,345 households with a median income of $90,000. Commericial occupancies include 35 multi-story office buildings and 275 other commercial structures. Brentwood is home to country music industry executives and performers, doctors lawyers and CEO's that wish to escape from downtown Nashville.

Brentwood Fire Department currently employees 40 fire fighters on three shifts. Each fire fighter is responsible to maintain approximately 65 fire hydrants, conduct 15 commercial inspections annually; participate in two hours of training and one hour of physical training each shift. They must also respond to approximately 2000 calls annually. The call volume has increased 47% and staffing has been reduced by 15% over the last 5 years. Each member's workload has increased exponentially over this same time frame.

The age of the department members is also nearing a rapid transition. The Brentwood Fire Department was formed in 1986. The department and its members were fairly young. In 1992 the department instituted a requirement that all future fire fighters must have 60 college hours. This requirement also added younger employees to the staff. In 1999 there were 8 members over the age of 40. In 2004 27 members will be over 40 and several of those will be over 50.

Every 3 years each fire fighter has been given a medical examination that consisted of the basic city examination required of all new hires for any position. The examination obtained minimal information and would not ensure that the fire fighter was prepared to perform all the critical tasks contained in their job description. There was also a perception of inconsistancy between a **maximum** output physical performance appraisal and a **minimum,** at best, medical examination. As each fire fighter is asked to do more, the organization has an obligation to ensure that they are physically prepared. Malone and Newman (1986) clearly state that “More departments would benefit by taking stock of their most important asset, their personnel” (p. 38).

The department also requires individuals to complete the physical performance appraisal after being off for three shifts due to injury or illness. Each employee was required to bring a release from their personal physician. This lead to 40 standards of when an individual was fit to perform the duties of a fire fighter. With the development of a consistent medical examination and one fire department physician this inconsistancy should be eliminated.

Employers have an obligation to protect the fundamental rights of all employees and to provide a safe work environment. Implementing a comprehensive medical examination for firefighters relates to Unit 8 "Ethics" of the Executive Development course (NFA, 2000) of the Executive Fire Officer Program. The unit describes the role of fire service executives in

analyzing the implied ethical responsibilities which accompany the acceptance of informal and formal executive powers. The unit further elaborates on why ethical conduct is critical in the public sector. Any issues with the potential to harm or to benefit others has ethical implications. Managerial decisions impact others' lives and well-being. The need for a comprehinsive medical examination, that is consistantly administered, is crucial for any organization and its individuals.

LITERATURE REVIEW

A literature review was conducted to identify existing research on the subject of fire fighter medical examinations. The review involved a search of fire service trade journals, magazines, federal and state publications and occupational health journals. The literature review was particularly focused on any applicable standards or laws that applied to fire fighter medical examinations.

National Laws

OSHA has had the most legally binding impact on requirements for medical examinations. Tritz (1991) reminds us of a long standing standard, "Occupational Safety and Health Administration (OSHA 1910.156.b.2) requires the employer to assure that employees who perform interior structural fire fighting are physically capable of performing those duties" (p. 14). This standard further requires that "a physician may need to examine a fire fighter even if the individual passed a physical performance test" (Tritz, 1991, p. 14). This standard has been in place for many years but received little acceptance from municipal fire departments.

Two other OSHA standards can have an impact on certain fire department opeartions. OSHA 1910.120 Hazardous waste operations and emergency response require medical

surveillance in section (f). OSHA 1910.146 Permit required confined spaces require rescue agencies to comply with all parts of the standard in section (k). These two standards did not have the far reaching effects of the most recently introduced standard.

In 1998 OSHA introduced the most significant standard impacting fire department operations. OSHA Respiratory Protection 1910.134 replaced two standards, the 1971 version of 1910.134 and 1926.103. Section E *Medical Evaluation* added specific requirements for individuals wearing respirators. In the case of Brentwood Fire Department that respirator is a Self-Contained Breathing Apparatus (SCBA). The most stringent respiratory program must be in place when utilizing SCBA.

OSHA Final Rule (1998) states:

> SCBAs create the highest cardiovascular stress of any type of respirator because of their weight, and they are often used in high physical stress situations such as fire and other emergencies. This combination of stressors makes medical evaluation necessary to avoid myocardial infarction in susceptible individuals. (p. 104)

Tennessee is a state that has voluntarily elected to adopt an OSHA State plan. The Brentwood Fire Department is required by state law to follow OSHA standards. The literature review discovered specific citations for medical evaluation frequency. The *OSHA Small Entity Compliance Guide* points out that, "you must provide medical reevaluations in accordance with the PLHCP's recommendation" (p. e-10). OSHA 1910.134 requires annual fit testing in paragraph (f)(2) (p. 10). OSHA 1910.134 further requires that before an employee is fit tested, that a medical evaluation must take place. OSHA 1910.134 paragraph (e)(3)(ii) may leave a city at the mercy of the medical community, "The follow-up medical examination shall include any medical test, consultations or diagnostic procedure that the PLHCP deems necessary to make a

final determination" (1998, p. 8) This is an area where an organization must try to mitigate an outrageous physical exam. Negotiation on what components will be necessary before the physician will declare a fire fighter fit for duty should occur before the examinations take place. Ellis (1999) interprets that the rule requires, "reevaluation every one to two years is suggested for assuring the fitness of workers to use respirators (p. 102).

The ADA requires that medical examinations be job-related and consistent with business necessity, which means developing job-related medical examinations (Sandler**,** 1992). "The ADA does not restrict an employer's ability to ask about the employee's ability to perform job-related functions" (Snyder, 1991, p. 253). For incumbents, a critical ADA issue is ensuring continuing fitness-for-duty, which includes return-to-work procedures (Sandler, 1992)**.** Another key aspect of the ADA is the provision for reasonable job accommodations. If a physician determines that medical/physical restrictions are necessary, then the employer decides whether the required accommodations are reasonable for the employee's job (Sandler, 1992). In a recent court decision in Howard City, Maryland, it was determined that an incumbent fire fighter with asthma did have a disability, but that the City did not unreasonably fail to accommodate the employee given the nature of fire fighting work (Schneid, February 1997).

National Consensus Standards

Several current National Fire Protection Association (NFPA) standards address medical and physical standards. "In the 1980s, concern over the occupation safety and health of incumbent firefighters led to the establishment of NFPA 1500, *Standard on Fire Department Occupational Safety & HealthProgram"* (Burkman, 1992, p. 24). The 1997 edition of NFPA 1500 contains an entire chapter on medical and physical issues and requires that all fire suppression personnel be medically evaluated periodically as specified by NFPA 1582, *Standard*

for Medical Requirements for Fire Fighters (1997). The 1997 edition of NFPA 1582 covers medical requirements for persons who perform fire fighting tasks that were previously contained in Section 2-2, (1992) of NFPA 1001, *Standard for Fire Fighter Professional Qualifications,* which applied only to the entry level:

> On the assumption that a linkage exists between entry level requirements and incumbent job performance, and in an effort to resolve an inter-committee jurisdictional dispute between 1001 and 1500, a joint subcommittee (nominated the 1582 subcommittee) was established to coordinate efforts to draft and revise firefighter medical and physical abilities standards at the entry and incumbent levels (Burkman, 1992, p. 24).

"Legal opinion and federal laws show that requirements set for a position must be the same for anyone who would be in that position or is in the position. These medical requirements are therefore intended to apply to candidates as well as to current fire fighters" *(NFPA 1582,* 1997, p. 1). Section 1-3.2 of NFPA 1582 (1997) also states that when the standard is adopted, the jurisdiction "...shall be permitted to establish a phase-in schedule for compliance with specific requirements of this standard in order to minimize personal and departmental disruption." Appendix C of NFPA 1582 (1997) describes in detail the essential fire fighting functions upon which the medical requirements of the standard are based and are shown to be job-related. Lies also brings to light OSHA authority under the General Duty Clause, “OSHA can use national consensus standards to issue citations to employers who do not follow these practices" (Lies, 1997, p. 1).

PROCEDURES

The research project utilized evaluative research to analyze medical examination requirements. Research involved a review of literature from the LRC of the NFA and various internet sites of state and federal agencies. The review included fire service trade journals, magazines and occupational health journals. Two surveys were conducted, one with paid fire departments in Tennessee and the other with physicians.

A pilot survey was sent to twelve fire departments in Tennessee. Corrections were made and the surveys were sent to 99 fire departments in Tennessee, with a self addressed and stamped envelope. A follow-up letter was sent to each department that had not responded. According to the state fire marshal's office there are 102 departments in Tennessee that have 5 or more paid members. One of those departments is Brentwood and our response to the questions is included. Two of the departments are military, and due to their unique situations they were not surveyed. The total size of the sample was 100 departments.

A detailed survey was sent to 13 physicians. The original plan was to ask the four physicians located in Brentwood. The survey group was expanded in an effort to assist the University of Tennessee Municipal Technical Advisory Service. A follow up letter was sent to enhance the return rate. These physicians were selected because of their specific disciplines. Four were cardiologists, three were orthopedic specialists, two were trauma surgeons and four practice internal medicine. The primary cause of fire fighter deaths is related to cardiac and pulmonary problems. Some were selected as Brentwood residents and were asked to view this request as a taxpayer and a physician. This was due to the fact that costs will always be a consideration. The physicians that lived in Brentwood would be less inclined to go overboard.

Limitations

Only 52 of 100 surveys were returned. Ideally a more accurate conclusion could have been reached if more departments would have responded. Too many days elapsed between the initial mailing and the follow-up letter. Only 10 departments reported a reason for not complying with NFPA 1582. That low response rate to that question provides too little information to determine any typical pattern or cause. Question 1 on the Physical Exam Survey (Appendix A) should have specified for incumbents. The same question should have listed certain components for the examination to be considered comprehensive. A larger pool of physicians should be utilized. Face to face interviews may have been more effective for the physician surveys.

RESULTS

Specific Answers to Research Questions

1. What are the current national consensus standards, relevant Tennessee laws, or national laws relative to medical examinations?

There are two primary national concensus standards NFPA 1582 *Standard for Medical Requirements for Fire Fighters* (1997) and the IAFF/IAFC *The Fire Service Joint Labor Management Wellness/Fitness Initiative*. Frequency of examinations is the main difference between these two standards. The IAFF/IAFC Initiative recommends an annual examination.

The American National Standards Institute (ANSI z88.6-1984) describes guidelines for physical qualifications for respirator users and recommends an electrocardiogram and some pulmonary function tests. The *Code of Federal Regulations* (29 CFR 1910.120) requires

baseline and annual physical exams for fire department employees who respond to hazardous materials incidents (Metropolitan State University, 1996).

There is currently only one Tennessee law that has a direct impact on medical examinations. Tennessee Law *7-51-201 Law Enforcement officers and fire fighters; injury in course of employment; presumption regarding certain health impairments*. This law presumes that certain medical conditions are caused by the work environment unless the contrary is shown by competent medical evidence. The burden of proof is on the employer. A thorough baseline medical examination is crucial when dealing with an employee claim under this law.

The *U.S. Department of Transportation's Section 391.41 Physical Qualifications and Section 391.43 Medical Examination.* The DOT standards are required for fire fighters who possess a commercial driver's license. Fire fighters in Tennessee, however, are not required to possess a commercial driver's license. A review of related national legislation revealed the importance of medical examination for the fire service. In particular, the Civil Rights Act of 1991, the Americans with Disabilities Act (ADA) of 1991, and the Age Discrimination in Employment Act (ADEA) Amendments of 1996 focus on the need for job-related standards that are based on the essential functions of the position.

2. What consensus standards, if any, are other fire departments in Tennessee utilizing?

52 of the 99 surveys were returned for a return rate of 53%. Thirty-two (62%) departments provide some form of medical examination.

Table 1
Examination Provided (n=52)

	Provide Exam
Number	32
Percentage	62%

It is actually encouraging that 62% of the departments with five or more paid members in Tennessee are providing some sort of physical exam.

Twenty one (66%) utilize NFPA 1582 as their guidance. Eight (26%)departments utizlize a locally developed standard and 3 (9%) utilize OSHA guidelines, the remaining 20 departments did not specify why they have no medical examination.

Table 2
Standard Applied (n=32)

	NFPA 1582 Compliant	Locally Developed	OSHA
Number	21	8	3
Percentage	66%	25%	9%

75% of the departments with five or more paid members in Tennessee are utilizing a national consensus standard to accomplish medical examinations.

Of the 31 departments that did not follow NFPA 1582, only ten provided reasons for not following the standard. Four due to cost, two because of time and four utilize a different standard.

Table 3
Reasons For Not Following NFPA 1582 (n=10)

	Cost	Time	Different Standard
Number	4	2	4
Percentage	40%	20%	40%

Nineteen departments had to make changes to their medical examination process as a result of OSHA 1910.134. The average cost for the examinations is $253.00 based on the response of 28 of the departments.

2. What components do physicians in Tennessee, believe are required for medical exams?

We achieved a 62% return rate (8 surveys). The survey asked the physicians which of the 13 components would they feel was necessary to certify that a fire fighter was capable of performing the essential functions. The physician had two options, minimum requirements and recommended requirements. Table 4 provides a breakdown of responses.

Table 4
Physican Responses to Survey (n=8)

	MINIMUM	RECOMMEND
COMPONENTS		
Medical Questionnaire Administration	5	3
Pulmonary Function Test	4	4
Chest X-ray Series	3	3
Complete Blood Analysis	2	3
Complete Physical Exam	3	3
Body Composition Analysis	4	2
Electrocardiogram	5	3
Audiometry	4	4
Screening Eye Exam	4	3
Diagnostic Imaging	3	1
Treadmill Stress Test	5	3
Exercise and Nutrition Counseling	5	1
Return to Duty Physical (after injury)	2	5

All of the physicians at least recommended; a medical questionnaire, pulmonary function test, ECG, audiometry, treadmill stress test.

Seven of the eight recommended an eye exam, and a return to duty physical.

Six of the eight recommended chest X-rays, complete physical exams, body composition analysis and exercise and nutrition counseling.

Five recommended complete blood analysis and the diagnostic imaging were recommended by four of the physicians.

4 What components should the new medical examination for the Brentwood fire fighters contatin?

Development of reasonable medical exam for Brentwood fire fighters was in process when research for this project began. Recommendations for the Brentwood Fire Departments medical examination for fire fighters were based on the NFPA 1582 (1997) standards, OSHA 1910.134 and physician opinion.

One of the key aspects of the Brentwood Fire Department standards were that medical examination for applicant and incumbent fire fighters should be the same with one exception. Incumbent members are currently subject to random drug screening which will not be included in the periodic examination. Some of the specific components were as follows:

1. EKG (Treadmill) Stress Test-Require a treadmill test for all applicants and incumbents.
2. Chest X-ray--Brentwood Fire Department adopted the recommendation of several doctors and NFPA 1582 concerning chest X-rays. A baseline and again only when indicated.
3. Required questionnaires—OSHA and physicians

4. Pulmonary function test with interpretation.
5. Automated audiometry, including ear exam and hearing test.
6. Laboratory Blood Analysis—LDL and HDL cholesterol, 24 chemical profile test, complete blood count and complete urinalysis.
7. Screening eye exam
8. Body composition analysis
9. Exercise and nutrition counseling
10. Complete physical exam to include ultrasound visualization of thyroid gland, aorta, gall bladder, kidneys, liver, spleen and pancreas.
11. Return to duty medical examinations

The Brentwood Fire Department adopted NFPA 1582 guidelines concerning the frequency and types of periodic medical evaluations. The medical examination will be administered in accordance with section 2-4.1.2. Each of the components is administered each time a fire fighter participates in the physical exam. Regarding implementation, fire fighters who fail the initial medical examination under the new policy:

> Will immediately be placed on leave. This leave may be considered and treated, for up to twelve weeks in any two-year period, as medical leave pursant to the Federal Family and Medical Leave Act (FMLA), if and to the extent the employee qualifies for such leave and has not previously used such leave.
>
> An employee placed on such leave may not return to regular and unrestriced duty unless the employee has been found by a physician to be fit for regular duty. The employee has twelve weeks or until their leave is exhausted to return to duty.

DISCUSSION

The combination of all the research and relevant literature clearly points to some type of medical evaluation annually. Lies (1997) “As a means of protecting themselves against liability fire organizations should provide annual physical examinations” (p.10). As Dezelan (1998) pointed out labor and management agree that “long term, individualized fitness and wellness programs that include periodic medical examinations” (p. 57) are crucial. “The overlooked factor is that a person can be physically fit and not healthy. Long term productivity is achieved by being healthy and physically fit” (Healy, 1993, p. 21).

This is the point where the debate really begins. Just how extensive does the annual medical evaluation have to be to make it effective? Does the examination have to cover all the ground in NFPA 1582? That depends on whom you ask. I am sure if you asked the NFPA 1582 committee, they would tell you that all the criteria should be covered in the medical examination.

On the other hand, if you ask the fire fighter who has 15 + years of service but cannot pass the medical exam, he would tell you in no uncertain terms, that an annual medical examination is a bunch of bunk. The fire fighter is sure, in his own mind, that he can still do the job. Those of us that have been there know how physically demanding a fire or rescue can be. We also know how much burden can be placed on the team if one of our own goes down at a scene. That team member becomes the focus and the initial emergency takes a backseat.

The importance of medical examination for fire fighters is highlighted vividly by a review of fire fighter fatalities nationally. NFPA reports the following: "The leading cause of fatal injury for on-duty fire fighters in 1996 was, in fact, stress, as it has been in almost every year of this 20-year study, and this stress usually resulted in heart attacks" (Washburn, et al.,

1997, p. 48). In 1996, there were 92 on-duty fire fighter deaths, of which 50 percent were caused by stress resulting in a fatal heart attack. For career fire fighters, 69 percent of the deaths from heart attacks occurred in fire fighters between the ages of 41 and 55. Of the 532 heart attack deaths over the past 20 years for which documentation is available, 50 percent had had previous heart attacks or bypass surgery, 33 percent had severe arteriosclerotic heart disease, and 12 percent had hypertension or diabetes. Therefore, up to 95 percent of the heart attack deaths may have been prevented with proper medical and physical testing, which would have dropped the number of 1996 fire fighter deaths by nearly half.

Proper medical and physical screening is even more important for older fire fighters. "Approximately three-quarters of the fire fighters over age 45 who died in 1996 died of heart attacks" (Washburn, et al., 1997, p. 49). It could be argued that any attempt to lower medical/ physical standards for incumbent fire fighters based on age would not only be illegal and unfair to younger incumbent fire fighters, but could actually be a life-threatening disservice to older incumbent fire fighters:

> Properly screening fire service applicants, making sure they meet medical requirements throughout their careers, and testing their health annually are essential if they're to be ready for the stress of duty-and if we're to reduce the number of fatal heart attacks that fire fighters continue to suffer on duty each year (Washburn, et al., 1997, p. 52).

By requiring a thorough medical evaluation and/or examination each year, the Brentwood Fire Department is attempting to screen any incumbent who might be medically at risk before attempting the physical performance appraisal. However, deaths can occur even during monitored stress tests and physical fitness activities. "The NFPA's in depth study of 503 fire fighter deaths over past 10 years showed that ... 11 of those deaths occurred during physical

fitness activities or undergoing stress tests" (Siegfried, 1995, p. 34). While any fire fighter death is tragic, these 11 deaths represent only 2 percent of the deaths over the 10 years, and without medical and physical screening, these deaths may have occurred during an emergency response with even more unfortunate results.

RECOMMENDATIONS

It is recommended that Brentwood Fire Department continue with implementation of its new medical examination that is the same for applicants and incumbents alike. However, it is also recommended that Brentwood Fire Department take the following actions to reduce the amount of uncertainity that surrounds any change in procedures. Meet with the new contract physician for Brentwood Fire Department as soon as the contract is awarded in July 2000 to discuss the evolving nature of the medical examination. Thoroughly review the new medical examination, and consider any changes to the Brentwood standards. Arrange at least one meeting with the contract physician and the fire fighters to explain the new standards and to answer questions. Provide everyone with a copy of the new medical examination standard. Establish a mechanism to receive continuous feedback from the employees and to provide timely information. “The important moral of this story is that you should have a periodic physical examination” (Carter, 1999, p.86)

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APPENDIX A

Physical Exam Survey

1. Does your department provide a comprehensive physical exam? ___Yes __No __Unk
If no skip to question 7

2. Does your physical comply with NFPA 1582? ___Yes __No __Unk
If yes skip to question 5

3. We do not comply with NFPA 1582 due to:
_____ Cost
_____ Too stringent
_____ Time
_____ Compliance with a Different Standard

4. If you are using a different standard is it a? _____Consensus Standard
_____IAFC/IAFF Initiative
_____Locally developed
Please write in any other standard_____

5. What is the cost of your physical exam per person? $_____

6. Did OSHA 1910.134 require you to modify your physical exam? __Yes __No __Unk

7. Does your department have a fire department physician in accordance with NFPA 1582? __Yes __No __Unk

8. Does your department require daily physical fitness? __Yes __No __Unk

9. Are your fire fighters union members? __Yes __No __Unk

10. Would you like a copy of the survey results? __Yes __No __Unk
E-mail address_____

Please note that your department will not be identified by name in the research. However, I ask that your cooperation in providing your department's name so duplicate responses from the same agency can be prevented.

*Department Name:*_____
*Contact Person:*_____
Date:_____

APPENDIX B
COVER LETTER FOR TENNESSEE
FIRE DEPARTMENTS SURVEY

May 1, 2000

Dear Fire Chief

The Brentwood Fire Department is in the process of upgrading our physical exams for incumbent personnel. The purpose of the enclosed survey is twofold: (1) to determine what guideline fire departments in Tennessee are utilizing to administer physical exams; and (2) to obtain data to be included in an applied research project for the National Fire Academy's Executive Fire Officer Program

I would ask that you, or a designee, complete this survey, and return it to me at your earliest convenience in the pre-addressed, stamped envelope provided. The survey should take approximately three minutes to complete.
Your department will not be identified by name or description. If you have any comments or questions please feel free to contact me at work or home (615 794-3120). Your timely assistance with this survey will be greatly appreciated.

Sincerely,

David E. Windrow
Captain
Training/Public Education Officer

APPENDIX C
FOLLOW UP COVER LETTER FOR TENNESSEE
FIRE DEPARTMENTS SURVEY

May 12, 2000

Dear Fire Chief

On May 1, 2000 a survey was sent to 99 fire departments throughout the state of Tennessee. The survey was sent to each department that had 5 or more paid members. The purpose of the survey is twofold: (1) to determine what guideline fire departments in Tennessee are utilizing to administer physical exams; and (2) to obtain data to be included in an applied research project for the National Fire Academy's Executive Fire Officer Program

If you have completed the survey this letter was sent to you inadvertently, please disregard. I would ask that you, or a designee, complete this survey, and return it to me at your earliest convenience in the pre-addressed, stamped envelope previously provided. The survey should take approximately three minutes to complete.
Your department will not be identified by name or description. If you have any comments or questions please feel free to contact me at work or home (615 794-3120). Your timely assistance with this survey will be greatly appreciated.

Sincerely,

David E. Windrow
Captain
Training/Public Education Officer

APPENDIX D
COVER LETTER FOR PHYSICIAN SURVEY

April 21, 2000

Vanderbilt Health Services
2105 Edward Curd Lane
Franklin, TN 37067

Dear Dr.

The Brentwood Fire Department continuously develops programs to enhance service to the citizens. We need your expert assistance as we begin a new physical exam process. Enclosed is a job description, a physical performance appraisal description, and a survey. Would you please take a few moments and fill out just the *Components* column of the proposal. We have provided a self-addressed/metered envelope for you convenience. Currently there is no national or state law for a fire fighter physical. We are surveying several doctors to establish what components are necessary before the physician would certify that a person is fit to perform the duties of a fire fighter. Please return the survey page. We look forward to enhancing our fire fighter wellness to better serve the citizens of Brentwood.

Sincerely,

David E. Windrow
Captain
Training/Public Education Officer

APPENDIX E

City of Brentwood Fire Department Physician Survey

The City of Brentwood Fire Department must comply with the new Respiratory Protection Standard (OSHA 1910.134).
Initially, the services will be provided to all of the department's 40 members. What reasonable timeline should be followed after the baseline is established. Your professional medical experience and opinion will be greatly appreiciated. Please record your exam frequency opinon in the comment section below. There are currently ten members that are over 40, twenty between 30 and 39, and ten 29 or younger.

	Components	*Comments*
Medical Questionnaire Administration	Min ☐ Rec ☐	
Pulmonary Function Test	Min ☐ Rec ☐	
Chest X-ray Series	Min ☐ Rec ☐	
Complete Blood Analysis	Min ☐ Rec ☐	
Complete Physical Exam	Min ☐ Rec ☐	
Body Composition Analysis	Min ☐ Rec ☐	
Electrocardiogram	Min ☐ Rec ☐	
Audiometry	Min ☐ Rec ☐	
Screening Eye Exam	Min ☐ Rec ☐	
Diagnostic Imaging	Min ☐ Rec ☐	
Treadmill Stress Test	Min ☐ Rec ☐	
Exercise and Nutrition Counseling	Min ☐ Rec ☐	
Return to Duty Physical (after injury)	Min ☐ Rec ☐	

Min = minimum requirements Rec = recommended requirements

Name of Provider			
Name of Contact			
Authorized Signature			
Address			
Phone		Fax	
Comments Age 20-29 30-39 40 +			