

Periodic Medical and Physical Fitness Evaluations for the Marquette Fire Department

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Certification Statement

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed:

A handwritten signature in black ink, appearing to be "J. L. Smith", written over a horizontal line.

### Abstract

The problem was that the Marquette City Fire Department did not periodically evaluate the medical and physical fitness of current department personnel. The purpose of the research was to develop a policy that mandated periodic medical and physical fitness evaluations for current department personnel. Action research was utilized to determine the requirements of relevant national standards, the consensus components of medical and physical fitness evaluations, and the organizational barriers and solutions to the development and implementation of an evaluation policy. The research procedures incorporated a document analysis of relevant national standards, an external survey polling select, similar fire departments, and interviews examining the views of department administration and union representatives. The research results indicated that the majority of the queried fire departments provided evaluation programs that were in accord with national standards. It was determined that program cost was the main organizational barrier for department administrations, and, while job security was the main obstacle for most unions, local union representatives did not foresee such barriers. The research results yielded a policy that paralleled the National Fire Protection Association 1582 standard and the Fire Service Joint Labor Management Wellness-Fitness Initiative, as well as accounted for the probable need for cost savings by providing for evaluations to be conducted by members' personal physicians. The author recommends the consensus policy mandating the annual medical and physical fitness evaluation of Marquette City Fire Department members be implemented. Further research should be considered toward the development of a comprehensive health and wellness program.

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## **Introduction**

Cardiovascular disease and cancer are the leading causes of death in the United States. Each account for almost 25% of deaths, annually (Xu, J., 2013). The American Heart Association states that the best way to prevent cardiovascular disease is to manage the risk factors, such as high blood pressure, high cholesterol, high blood glucose, and obesity. The best way to determine what risk factors someone has is through screening tests during regular medical evaluations (American Heart Association, 2014). Screening tests are also useful in finding cancers before symptoms appear, making it easier to treat or cure (National Cancer Institute, 2014).

Just by acknowledging these facts, it could be inferred that the fire service would benefit from instituting mandatory periodic medical evaluations for firefighters. However, the situation is even more dire in the fire service, as the rate of cardiovascular death is over 44% for firefighters (United States Fire Administration, 2002). Firefighters also have an increased risk of cancer compared to the general population, due to occupational exposure (Daniels et al., 2013). Contributing to the problem is the fact that firefighters have a higher rate of obesity than the general population, due to the nutrition environment in the fire hall, work schedules, and sleep patterns. This increases their risk for cardiovascular disease, cancer, and diabetes (Haddock, Poston, & Jahnke, 2011). The higher rate of these diseases in the fire service, and the modifiable risk factors that contribute to them, can negatively affect the health and safety of firefighters, their coworkers, and their communities.

The problem was that the Marquette City Fire Department did not periodically evaluate the medical and physical fitness of current department personnel. The purpose of the research was to develop a draft policy that mandates periodic medical and physical fitness evaluations for

current department personnel. Action research was used to answer the following research questions:

1. What are the guidelines and requirements of applicable national standards?
2. What is the consensus of selected fire departments on the necessary components of periodic medical and physical evaluations?
3. What are the organizational barriers and practical solutions to the development and implementation of periodic medical and physical fitness policies of selected fire departments?
4. What are the organizational barriers and practical solutions to the development and implementation of a periodic medical and physical fitness evaluation policy for the Marquette Fire Department?

### **Background and Significance**

The City Of Marquette is located along the south shore of Lake Superior in the upper peninsula of Michigan and covers over 11 square miles. The Marquette City Fire Department (MFD) provides services to approximately 21,000 permanent residents. During the time from August to June, the approximately 9,000 students enrolled at Northern Michigan University add to the overall population. The main employers in the city are Northern Michigan University, Marquette Branch Prison, and the local hospital, Upper Peninsula Health systems-Marquette.

The MFD is a fully paid, full-service organization with a general fund budget of \$2,841,000 annually. In addition to traditional fire department services, the MFD specializes in: high angle, near shore, ice, and confined space rescue. Vehicle extrication and hazardous material technician level services are also provided, along with EMT level, non-transport medical service. The full-time fire prevention and education bureau reaches all age groups of the resident and transient populations. The department consists of 24 fire suppression personnel,

working a 24/48 schedule. Administrative personnel include the Fire Inspector and Fire Chief. Two front line engines, a ladder truck, and a brush truck are staffed out of two stations. Minimum staffing is set at six per shift. Exclusive of the Fire Chief, personnel have been represented by the International Association of Fire Fighters Local 643 since 1939. The department responded to 1,178 emergency service calls during 2014. Emergency medical service calls represented over 75% of the total calls.

The MFD hired its first fire chief from outside the department's ranks in 1994. His hiring led to a fairly rapid change in the department from a reactive mindset to a proactive one. Several proactive, prevention programs were implemented. The fire prevention program and code enforcement program have been successful in lowering the occurrence of fires in the city since their implementation.

To gain insight into the background of the problem, an interview was conducted with Marquette City Fire Chief, Tom Belt. He stated that one program, discussed twice during collective bargaining, was a wellness program consisting of mandatory physical training and minimum medical standards. Both times the program was broached, it was met with fear by the union. It was thought that failing to meet any one of the standards would be used as grounds for dismissal. Because of this perception, and the realization that some of the current firefighters may not be able to meet the standards, the program failed to be implemented. Shortly after this time, room was provided in both stations for the union to install gym equipment. Working out was on a voluntary basis.

At the same time, new requirements were instituted to provide a more comprehensive baseline medical and physical evaluation for candidate firefighters. The City's occupational physician was given a list of firefighter job responsibilities and physical demands. This medical

evaluation closely, but not completely, follows the outline of NFPA 1582, Comprehensive Occupational Medical Program for Fire Departments. It consists of a medical history questionnaire, physical examination, and pertinent lab tests. Along with the medical evaluation, a new physical agility evaluation was implemented. It requires the completion of pushups, sit-ups, a forwards and backwards ladder walk, a ladder walk carrying a 125-pound dummy, a search and rescue scenario, a one-mile run, and a 125-pound dummy drag. No medical certificate of health is required prior to completing the physical agility evaluation (T. Belt, personal communication, June 15, 2015).

These evaluations give the department and the prospective firefighters an idea of each firefighter's physical fitness and a baseline medical snapshot. However, not providing similar, periodic, evaluations to current firefighters would negatively affect their health and safety, the safety of their fellow firefighters, and the safety of the community. It is likely, as in the entire fire service, that the firefighters of the MFD have a higher risk of being diagnosed with cancers and cardiovascular disease now and in the future. There has been an observable decline in some of the firefighters' physical abilities and health as their careers have progressed. In the last twenty years, the department has had two firefighters suffer incidents of cardiac disease. Luckily, they did not succumb to it. While the incidence of disease can be seen once symptoms appear, latent disease conditions and the risk factors leading to them will not be apparent without medical evaluation. It is possible, with periodic evaluation, that these conditions could have been remedied medically and with behavioral changes. There is no reason to believe that the problem will remedy itself without direct intervention. The profession of firefighting is not getting easier; in fact, the number of duties that firefighters are tasked with is only increasing. Not providing periodic medical and physical evaluations to current firefighters has affected their



health and safety, reduced the effectiveness of the department, and effectively reduced the safety of the community.

Mandating medical and physical evaluations for the Marquette City Fire Department will “reduce risk at the local level through prevention and mitigation” (United States Fire Administration, n.d., p. 13). This is one of the five strategic goals of the United States Fire Administration. The Executive Development course, as part of the National Fire Academy’s Executive Fire Officer Program, is designed to assist executive level fire officers to develop effective management and leadership skills (United States Fire Administration, 2015).

Mandating medical and physical evaluations will require successfully changing the organizational culture by changing preconceived notions. Leadership will be vital in showing personnel the realities of the problem before them and to help them to face the situation willingly. Finally, solving the problem will require analysis of the problem, planning, implementation of the policy, and evaluation in the future. These areas and ideas are covered by the course content of the “Change Management, Leadership, and Organizational Culture and Change” units of the Executive Development course (United States Fire Administration, 2015).

### **Literature review**

The first research topic that was reviewed covered the guidelines and requirements of applicable national standards. The National Fire Protection Association (NFPA) is an international nonprofit organization established in 1869. It is the world’s leading advocate of fire prevention and an authority on public safety (National Fire Protection Association, 2015, para. 1). The two NFPA codes that pertain to medical and physical fitness evaluations are

- the NFPA 1500 Standard on Occupational Safety and Health Program; and

- the NFPA 1582 Standard on Comprehensive Occupational Medical Program for Fire Departments.

The 2013 edition of NFPA 1500 has a stated purpose of specifying “safety requirements for those members involved in rescue, fire suppression, emergency medical services, hazardous materials operations, special operations, and related activities” (National Fire Protection Association, 2013, p.6). Chapter 10 contains both medical and physical performance requirements for fire departments. It mandates candidates to be medically evaluated by the fire department physician while taking into account the risks associated with duties performed by firefighters. It further mandates that suppression personnel meet the medical requirements in NFPA 1582. Physical performance requirements are mandated to be developed by the fire department and members must qualify annually. If they cannot meet the requirements, they may not engage in emergency operations, and they must be provided with a rehabilitation program to progress towards meeting the requirements. The fire department has to maintain a permanent, confidential health file for each member. These must contain the members medical and physical evaluations, any work related illnesses or injuries, and any instance of hazardous material or infectious disease exposure (National Fire Protection Association, 2013).

A study of fire fighter fatalities, done by the National Institute of Occupational Safety and Health (2008), recommends that fire departments conduct annual medical evaluations and states that NFPA 1582 is a key resource in doing so. The stated purpose of the 2013 edition of NFPA 1582 is

to outline an occupational medical program that, when implemented in a fire department, will reduce the risk and burden of fire service occupational morbidity and mortality while

improving the health, and thus the safety and effectiveness, of firefighters operating to protect civilian life and property. (National Fire Protection Association, 2013b, p. 6)

Chapter 7 of the standard covers the occupational medical evaluation of members. It states that the medical evaluation should be conducted to set a baseline and conducted at least annually thereafter. The medical evaluation must consist of a medical history questionnaire and a physical examination. The physical examination covers the head, ears, eyes, nose, throat, neck, cardiovascular, pulmonary, breast, gastrointestinal, genitourinary, hernia, lymph nodes, neurological, musculoskeletal, skin, and vision. Furthermore, the following ancillary tests are required at the listed intervals or as indicated (National Fire Protection Association, 2013b).

Blood tests, urine laboratory tests, audiology, spirometry, and electrocardiograms are conducted annually. Initial chest x-rays are administered as a baseline and then provided every five years. Mammograms are conducted annually for female members over the age of 40. Also, colon cancer screening is done annually for members over the age of 40. Annual prostate cancer screenings for male members over the age of 50 are given. Infectious disease screening, blood borne pathogen testing, HIV testing, and heavy metals evaluations are provided as indicated or as requested (National Fire Protection Association, 2013b).

Chapter 8 of the standard covers the annual occupational fitness evaluation of members. It states that the fitness assessment should not be punitive or competitive. It should only be used to establish a baseline for each member, and the results of future assessments should be measured only against that baseline and not against a standard or norm (National Fire Protection Association, 2013b).

It first provides for the measurement of body weight and body composition of members. Before a member may participate in the aerobic portion of the fitness assessment, they must be

medically cleared by the department physician. The aerobic evaluation consists of a maximal or sub maximal protocol. It states that if the evaluation result is below 12 METS, the member should be counseled to improve his aerobic conditioning. If the result is below 8 METS, the member should be counseled to improve his aerobic conditioning, and consideration should be given to restricting them from strenuous job tasks. Muscular strength is then measured by evaluating grip strength, leg strength, and arm strength. Next, muscular endurance is measured by a pushup evaluation and a curl up evaluation. Finally, flexibility is measured using a sit and reach protocol. The components of the medical evaluations for incumbents conform to the following Occupational Safety and Health Administration standards.

- 29 CFR 1910.120, Hazardous waste operations and emergency response
- 29 CFR 1910.134, Respiratory protection
- 29 CFR 1910.95, Occupational noise exposure
- 29 CFR 1910.1030, Bloodborne pathogens (National Fire Protection Association, 2013b)

The Fire Service Joint Labor Management Wellness- Fitness Initiative (WFI) is a comprehensive, consensus wellness program put together through a collaborative effort by the International Association of Fire Fighters Union (IAFF) and the International Association of Fire Chiefs (IAFC). The IAFF worked in conjunction with the NFPA to ensure that NFPA 1582 was consistent with the WFI. The stated purpose of the WFI is to increase and maintain the health of Firefighters (International Association of Fire Fighters, 2008).

Like the NFPA 1582 standard, the WFI is not punitive in nature, but participation is mandatory. The five components of the WFI are (a) medical, (b) fitness, (c) rehabilitation, (d) behavioral health, (e) data collection and reporting. The following chapters cover the requirements pertaining to mandatory periodic medical and physical fitness evaluations. Chapter

2, “Medical”, outlines the requirements for mandatory, comprehensive annual medical evaluations. The medical evaluation is an integral part of the overall wellness and fitness initiative. It states that the medical evaluation is a critical tool that allows fire department members to receive medical evaluations that will result in the early detection of illness and disease. The components of the prescribed medical evaluation mirror those that were reviewed previously in the NFPA 1582 standard (International Association of Fire Fighters, 2008).

Chapter 3, “Fitness”, covers the necessary components of comprehensive physical fitness programs. For the purpose of this research, the section pertaining to fitness evaluations will be reviewed. While the fitness assessment in and of itself is not a fitness program, it is an important tool in measuring health status. As in NFPA 1582, medical clearance is necessary before the fitness assessment is administered. The assessment consists of the same tests as the NFPA 1582 standard, including body composition, aerobic endurance, muscular strength, muscular endurance, and flexibility (International Association of Fire Fighters, 2008).

Another organization that has its own standard for firefighter medical evaluations is the United States Department of Defense (DOD). The standard the DOD uses for military firefighter medical evaluations is the “Occupational Medical Examinations and Surveillance Manual”. It states that the purpose of the firefighter medical examination is to determine the likelihood of a firefighter to be able to complete the necessary functions of rescue and fire suppression tasks. Some of the requirements differ from both the NFPA 1582 and WFI documents (Department of Defense, 2007). Specifically, it does not include certain preventative services if the available medical research doesn’t show an increased risk for firefighters. The listed examples are screenings for mammography and colonoscopy. For example, even though NFPA 1582 includes screening firefighters for colon cancer, the DOD’s research of 21 medical studies of colon cancer

in firefighters showed no increased risk. They do, however, go on to recommend that all people, regardless of their occupation, should receive preventative screening by their personal physician (Department of Defense, 2007).

The second research topic reviewed was the consensus components of periodic medical and physical fitness evaluations for fire departments. Several studies that surveyed fire departments on this topic indicated a majority of respondents provided periodic medical evaluations. Foulks (2008) found that 92.1% offered medical evaluations with 73.3% being annual. Sarver (2014) found that 78.7% of surveyed departments provided evaluations but did not query the interval between evaluations. Metheney (2008) reported that 55.6% of surveyed departments offered annual medical evaluations. These three authors did not determine what percentage were career departments. However, Gudie (2009) and Hubbard (2010) found that a correlative amount, 100%, of career departments offered annual evaluations.

When looking at NFPA 1582 compliance, Sarver (2014) reported only 27% of evaluations complied and 48.3% didn't know if their evaluations were in compliance. Foulks (2008) found 67% compliance with NFPA 1582 for medical evaluations. Hubbard (2010) indicated that 100% of the surveyed career department evaluations were compliant. While Gudie (2009) noted that NFPA 1582 was one of the standards being followed by the surveyed departments, the actual number using it was not provided.

In regards to physical fitness evaluations, Foulks (2008) stated that 75% offered physical fitness testing. Of those, 56.5% required physical agility tests, 23.9% fitness level tests, and 19.6% required both. The majority, 55.3%, conducted the physical fitness evaluations annually. 73.4% of respondents answered that the physical fitness tests did not differ by gender or age.

Sarver (2014) found that 57.3% of departments provided incumbent physical agility tests, but only 42% of those believed they adequately measured firefighters' fitness levels.

Additionally, Gudie (2009) noted that 42% of departments offered annual fitness evaluations and 14% made it mandatory. Metheny (2008) stated that 30.1% mandated physical fitness evaluations. The author did not poll the interval between evaluations.

The third and fourth research topics reviewed covered the organizational barriers and practical solutions to the development and implementation of periodic medical and physical fitness policies of selected fire departments and the Marquette City Fire Department. One of the major organizational barriers preventing fire departments from developing and implementing evaluations is cost. Hubbard (2010) indicated that 48% of his department's firefighters felt that costs were a perceived barrier to annual medical evaluations. His research found three possible ways to reduce the cost of his department's program. First was the possibility of using free annual health screenings provided to all city employees. The screenings would assess cardiac risk factors but would not be specific to fire fighter needs. Second, a group of local physicians offered to provide cardiac screening, liver function tests, and blood analysis for \$90 per firefighter. Neither of the first two options would meet the requirements of NFPA 1582. Lastly, firefighters could have their personal physician administer an evaluation that met NFPA 1582 requirements. However, there was a question as to whether the department's insurance carrier would cover mandatory annual evaluations. Foulks (2008) and Johnston (2005) also found that lack of financial support was a major obstacle to implementing a successful program. Another way to lower the cost of implementation is to develop a joint program with other agencies within the jurisdiction, such as police and fire. Also, fire departments could seek grant funding (International Association of Fire Fighters, 2008).

Foulks (2008) stated that union resistance was the main barrier to implementing a medical and physical fitness program. Johnston (2005) found that firefighters feared losing their job if they didn't meet a certain standard. In another study, 44.5% of firefighters answered either yes or unsure to the question of whether they feared losing their job by participating in physical fitness evaluations (Metheny, 2008). On the other hand, Hubbard (2010) indicated that union/management issues were only a barrier for 3% and 16% of respondents in two surveys.

One solution is to include all of the stake holders in the implementation process and to educate all those involved as to the safeguards and benefits of the program (International Association of Fire Fighters, 2008). Another suggestion to ease the fear of termination is to provide alternate duty positions for firefighters needing temporary duty restrictions (Rhoades & Favorite, n.d.). Johnston (2008) stated that resistance to programs was reduced by education and not making the programs punitive. In two of the departments there was no resistance to mandatory wellness programs because firefighters had input into the programs. One department even stated that the firefighters who were initially against the program became its biggest proponents.

Beyond these two main barriers, the responses obtained by the reviewed research were numerous, varied, and not consistent. Hubbard (2010) reported 66% of one group surveyed felt individual laziness was a barrier to annual medical evaluations, while 74% of another said call volume versus staffing was the main barrier. The largest barrier in the study by Metheny (2008) was the belief that the physicians conducting the evaluations were not knowledgeable about the aspects of firefighter health and wellness. Johnston (2005) stated that the main barrier to mandatory evaluations was simply that they were mandatory.



To summarize, the review of current research and the national standards pertaining to mandatory medical and physical fitness evaluations in the fire service provided sufficient support for additional research to be done specific to the MFD. The national standards may be used as a standard for the fire service in its entirety. However, the literature review showed that the necessary components for these type of programs and the organizational barriers and practical solutions to their development and implementation, may be unique to the fire department's specific region, type and size of department, and to the department's organizational culture itself.

The review of the previous work by Foulke (2008) influenced this author to utilize his survey instrument, as it accurately and thoroughly addressed the intent of the second and third questions posed in this research. While the national standards and the components used by similar fire departments provide the framework for a draft policy, the policy may not be implemented successfully until the organizational barriers are faced and dealt with by all of the stakeholders. The literature review showed that this step may well be the most daunting.

### **Procedures**

The health and physical fitness of MFD personnel has never been evaluated. The purpose of this research project was to develop a draft policy that mandates periodic medical and physical fitness evaluations for MFD personnel. Substantially quantitative methods were utilized to answer the first and second research questions. These determined current data from relevant national standards and similar, select fire departments. Qualitative methods were then utilized to identify organizational barriers and to find agreeable solutions for development of a consensus draft policy.

The first procedure used for the research project was a document analysis of the pertinent national standards relating to periodic medical and physical evaluations. The document

search was conducted using the National Fire Academy's (NFA) online Learning Resource Center library portal and online search engines to find pertinent articles, documents, and research. Program component requirements were compared between the standards to identify common elements. The document search was limited by the unavailability of interlibrary loan at the only two local, available libraries. Fire service related materials in print form were unavailable for this research.

The second procedure that was used was an online survey hosted and disseminated through the online company Survey Monkey (Appendix A). This author utilized an existing survey template designed by Foulks (2008). The survey template was comprehensive in covering all of the essential research queries. The goal of the survey was to identify, in similar fire departments, the necessary components of periodic medical and physical fitness evaluations, including barriers and solutions to their implementation, of similar fire departments.

This survey consisted of three sections totaling twenty-five questions. The first section contained six questions pertaining to medical evaluations. The second section consisted of eight questions on physical fitness evaluations. The final section posed eleven questions pertaining to organizational barriers and possible solutions. The survey was posted on May 11<sup>th</sup>, 2015, and was open for response until June 8<sup>th</sup>, 2015. An email invitation was sent to thirty-three select fire departments on May 11<sup>th</sup>, 2015.

This author used four criteria in selecting fire departments for inclusion in the survey sample. First, it was decided to only survey Michigan fire departments. This was done to control for any unforeseen state requirements or restrictions on medical or physical fitness evaluations. Secondly, similar to the MFD, only career departments were selected. Next, only fire departments with forty or less uniformed members were chosen. This was done to control

for similar availability of resources and funding, as the MFD consists of 26 members. Finally, combined public safety departments were excluded. This author felt there were enough differences in department funding, staffing, essential job tasks, and organizational culture that they would not be similar enough to the MFD to warrant inclusion. The survey was offered to a total population of thirty fire departments (Appendix B). A 95% confidence level in the data was assured by the sample size ( $S = 30$ ), of the total population studied ( $N = 30$ ). The list of Michigan fire departments that was used for selection was accessed from the fire service directory of the Michigan Department of Licensing and Regulatory Affairs website (Appendix B). The limitations to this procedure included the following. Beyond the previous use of the survey template by Chief Foulks, the validity of the survey was not assessed by using a pilot test. Chief Foulks felt that the number of open-ended questions should be reduced; however, this author chose to use the survey template as originally written. The open-ended questions were harder to tabulate and analyze, but they allowed respondents to fully articulate their answers and did not force them to alter their answer to fit fixed options. The data provided by the respondents was self-reported and was not verified by this author. However, respondents were notified that their survey results would be kept confidential, increasing the chance of receiving open and candid responses.

A situational analysis determined that one of the organizational forces likely to impede this author's research aim was the fear that department personnel would be terminated if they were found to have a serious medical condition or could not meet a physical fitness standard. Also, the administration may find the financial obligation to such a policy onerous. Members' fear of termination may be mitigated through education and making sure the adopted policy is non-punitive in nature. Also, through retirement, the average age of MFD personnel has

decreased and general levels of observable fitness have increased in recent years. Making sure that MFD personnel are allowed input into the development and implementation process may assist in achieving its acceptance. Administration objections to the financial burden of the program may be assuaged by utilizing the department members' health insurance to cover the cost of the medical evaluations and having the physical fitness evaluation conducted by a selected member of the department. Alternatively, Assistance to Fire Fighters Grants or other funding vehicles might be found. Definitive proof of these realities will be determined by reviewing the draft policy with department administration and representative members of the firefighters' union.

The results of the document analysis and the survey were used to develop a draft policy (Appendix F). The draft policy was reviewed during an interview with Fire Chief, Tom Belt on July 27, 2015, to determine the existence and extent of barriers to the policy's implementation found by department administration (Appendix D). After the barriers were determined, possible solutions were discussed. Next, the policy was reviewed during an interview with the IAFF Local 643 executive board on July 29 and 30, 2015, to determine the existence and extent of barriers to the policy's implementation found by representatives of the firefighters' union membership (Appendix E). After the barriers were determined, possible solutions were discussed. The solutions to the identified barriers were then used to develop the final consensus policy (Appendix G). The interview results were limited by two realities. The restriction of the interview to only the fire chief limited the validity of the results as there were other City management entities that had authority over department organizational and capital expenditures. The restriction of the interview to only the union executive board, while representative of the union membership, could not speak to the concerns of the entire union membership. Also, the

union executive board was younger in age than the department average and may not have accurately represented the differing generational views of all members.

### **Definition of Terms**

Audiology – The study of hearing disorders through the identification and measurement of hearing impairment (Pugh et al., 2000)

Electrocardiogram – The graphic record of the heart's integrated action currents (Pugh et al., 2000)

Gastrointestinal – Relating to the stomach and intestines (Pugh et al., 2000)

Genitourinary – Relating to the organs of reproduction and urination (Pugh et al., 2000)

METS – Indicates metabolic equivalent, a unit of sitting, resting oxygen uptake (Yanker, G., 1999)

National Institute of Occupational Safety and Health (NIOSH) – The U.S. federal agency that conducts research and makes recommendations to prevent worker injury and illness

Occupational Safety and Health Administration (OSHA) – The U.S. federal agency that sets and enforces protective workplace safety and health standards

Spirometry – The measuring of flows and volumes inspired and expired by the lungs, thus assessing pulmonary function (Pugh et al., 2000)

### **Results**

The results of the document analysis were used to answer the first research question seeking to determine the guidelines and requirements of applicable national standards pertaining to medical and physical fitness evaluations. Both the NFPA 1582 code and the WFI require fire departments to provide annual medical and physical fitness evaluations. The evaluations are mandatory, but not punitive, with an emphasis on measuring members' results against their

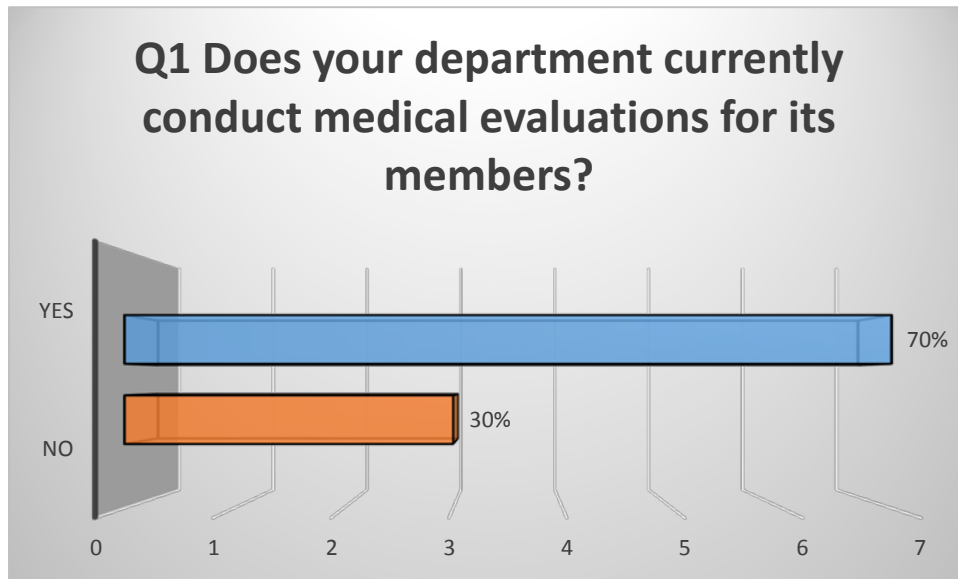
previous results and not against a norm or standard (International Association of Fire Fighters, 2008; National Fire Protection Association, 2013b).

These documents provide for medical evaluations that include a medical history questionnaire, a physical evaluation, blood and urine lab analysis, evaluation of hearing and vision, spirometry, cancer and infectious disease screening, immunizations, and cardiovascular evaluation through chest x-ray and electrocardiogram. The purpose of the medical evaluation is to provide for the early detection of illness and disease (International Association of Fire Fighters, 2008).

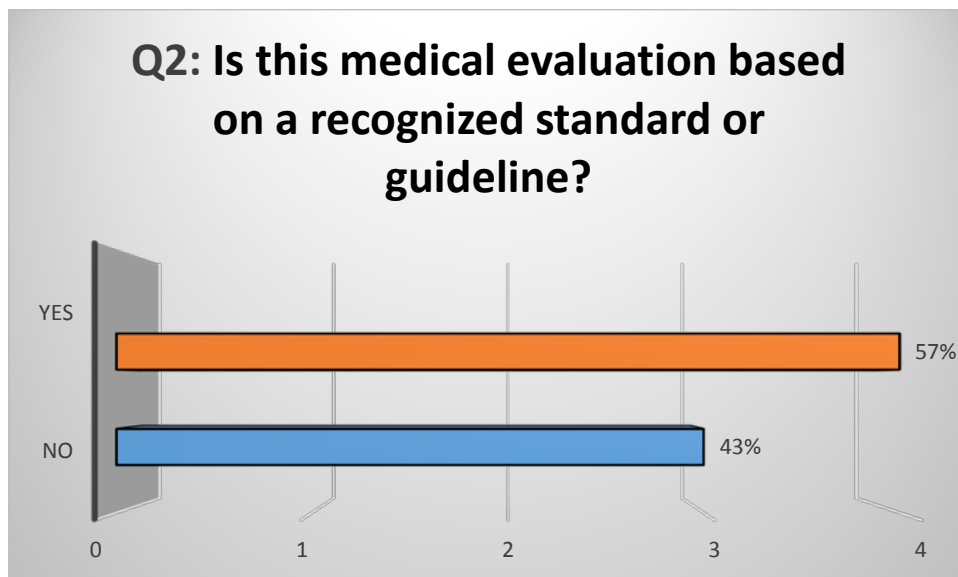
The five tests that comprise the physical fitness evaluation are (a) body composition, (b) aerobic capacity, (c) muscular strength, (d) muscular endurance, and (e) flexibility. Members must receive medical screening for contraindications and be instructed in correct technique before participating in the physical fitness evaluation. The stated purpose of the physical fitness evaluation is to determine members' fitness levels and provide feedback to increase wellness in order for members to perform their jobs safely and effectively (International Association of Fire Fighters, 2008).

The next research procedure used was a questionnaire. The questionnaire was used in formulating the answers to research questions two and three. Thirty career, Michigan fire departments were solicited to take the survey. Of those, a total of ten departments answered, 30%. A narrative summary of the results for each research question follows. The corresponding graphic illustration of the results is inserted after each narrative. The complete individual responses to the survey are listed in Appendix C. Percentages have been rounded to the nearest whole number.

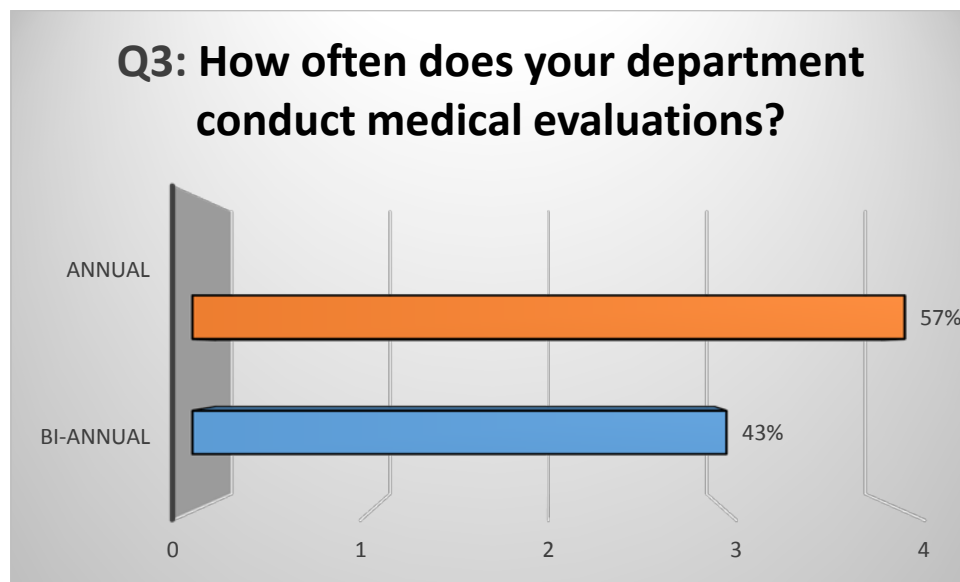
Question number one sought to determine the number of departments that currently provided medical evaluations to their members.



All ten respondents answered this question with a majority, 70% indicating that their department provides for the medical evaluation of its members in some form. Having determined that most of the departments provided medical evaluations, the second question asked whether the evaluations were based on recognized standards or guidelines.



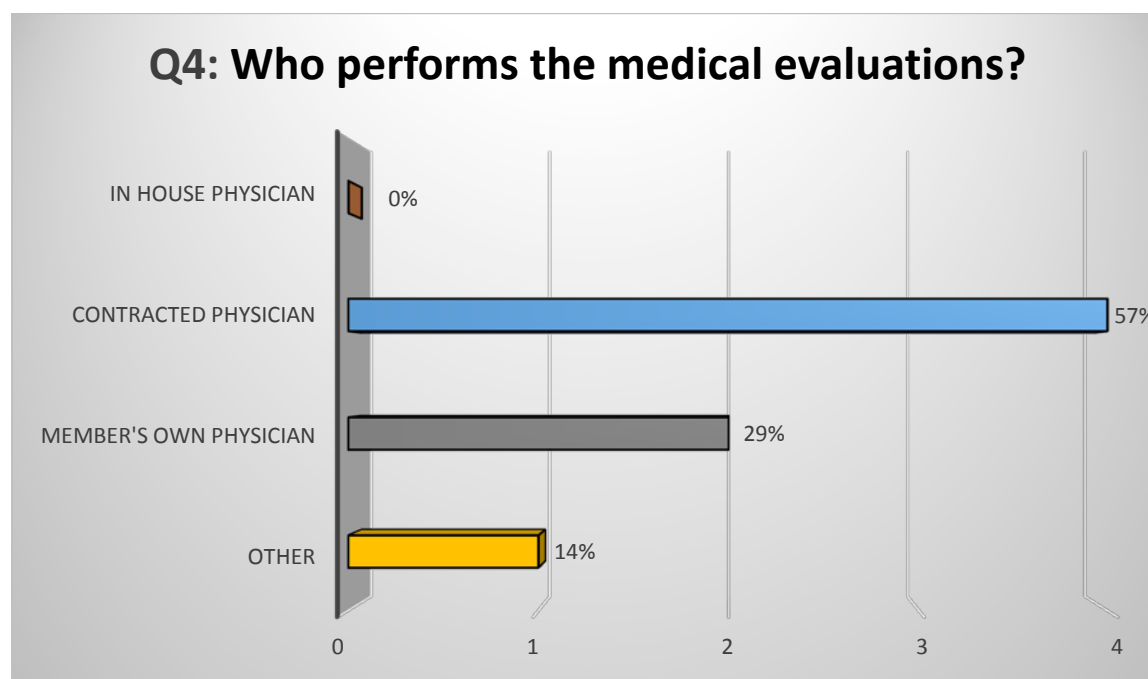
All ten respondents answered this question. Although a majority stated the evaluation was not based on a recognized standard or guideline, three of these respondents, in a previous survey question, indicated their department did not provide this evaluation. These three responses were omitted to provide a more accurate picture of the results. This left three departments, 43%, that provide medical evaluations not based on a standard or guideline. Consequently, an actual majority, 57%, provide medical evaluations based on a standard or guideline such as the OSHA respiratory protection requirement and the NFPA. The next question, number three, was designed to ascertain the interval provided between medical evaluations.



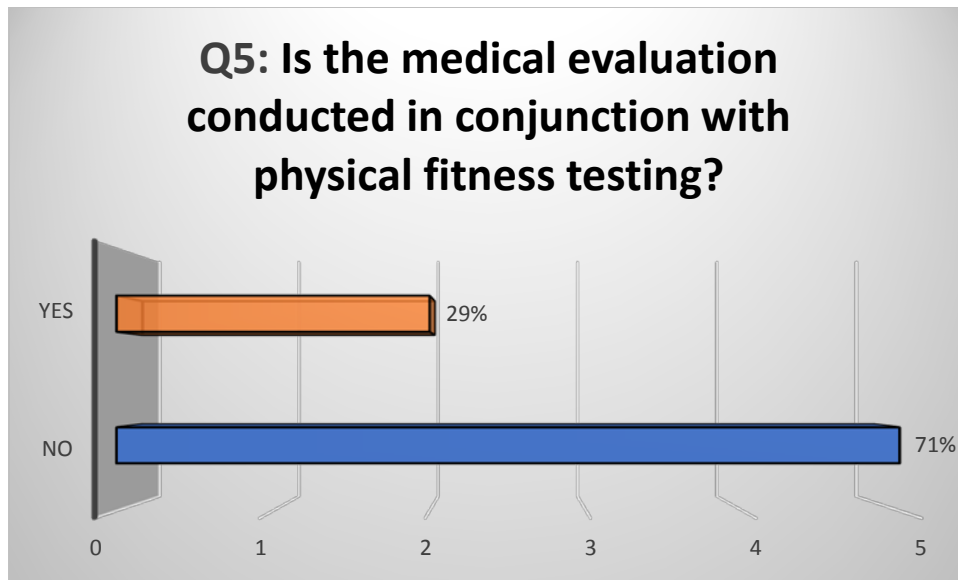
All ten respondents answered this question, with the majority, 57%, stating evaluations were given annually. Although two of respondents chose “Other”, they stated the interval was once every two years, which should have been placed under “Bi-annually”. This added up to 43% of departments conducting evaluations bi-annually. Again the three respondents who stated their departments did not provide evaluations, provided answers, this time under “Other”. These



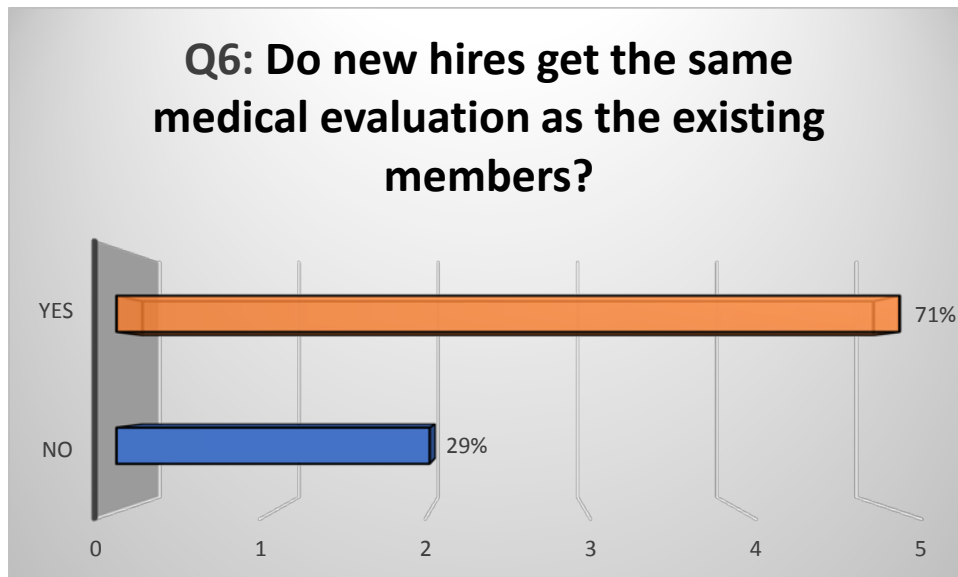
three answers were excluded to provide an accurate result. The fourth question sought to determine who performed the medical evaluations.



All ten respondents answered this question. The answers from the three respondents whose departments do not provide medical evaluations were excluded. The majority, 57%, of departments use a contracted physician to perform the medical evaluation. Two departments, 29%, use the members, own physicians to conduct the medical evaluations. One department, 14%, uses either a contracted physician or the members' physicians. The fifth question asked respondents if the medical evaluation is done at the same time as physical fitness testing.

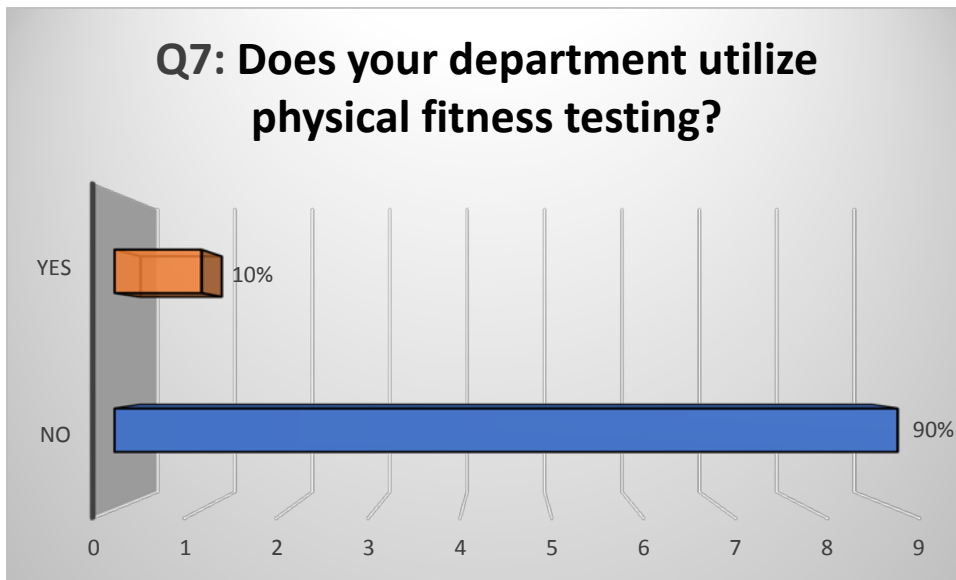


Nine of the ten survey participants answered this question. The answers from the two remaining respondents whose departments do not provide medical evaluations were excluded. The majority, 71%, stated it is not done at the same time. Two departments, 29%, conduct medical evaluation in conjunction with physical fitness testing. The sixth question was posed to confirm if new hires are provided the same medical evaluation as existing members.

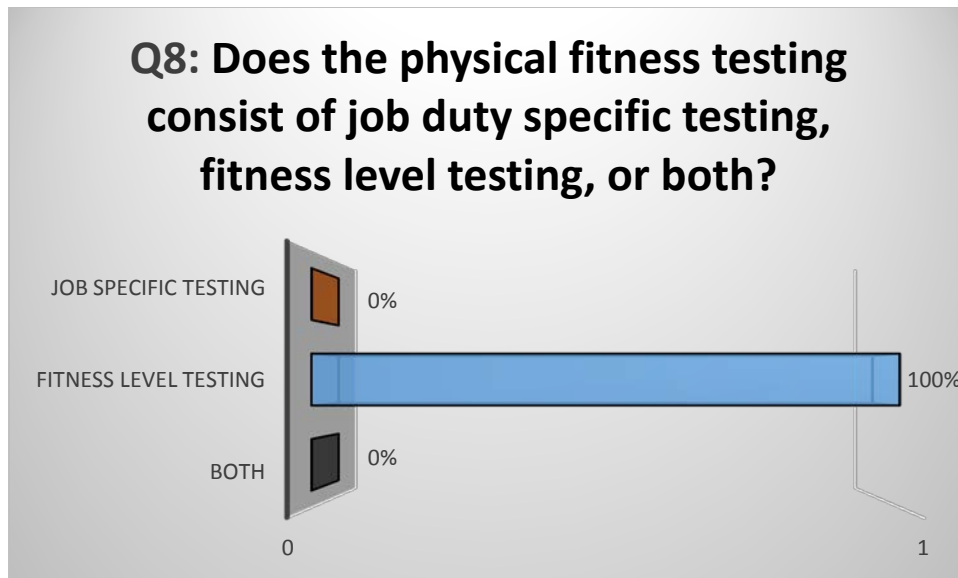


All ten respondents answered this question. The answers from the three respondents whose departments do not provide medical evaluations were excluded. The majority, 71%,

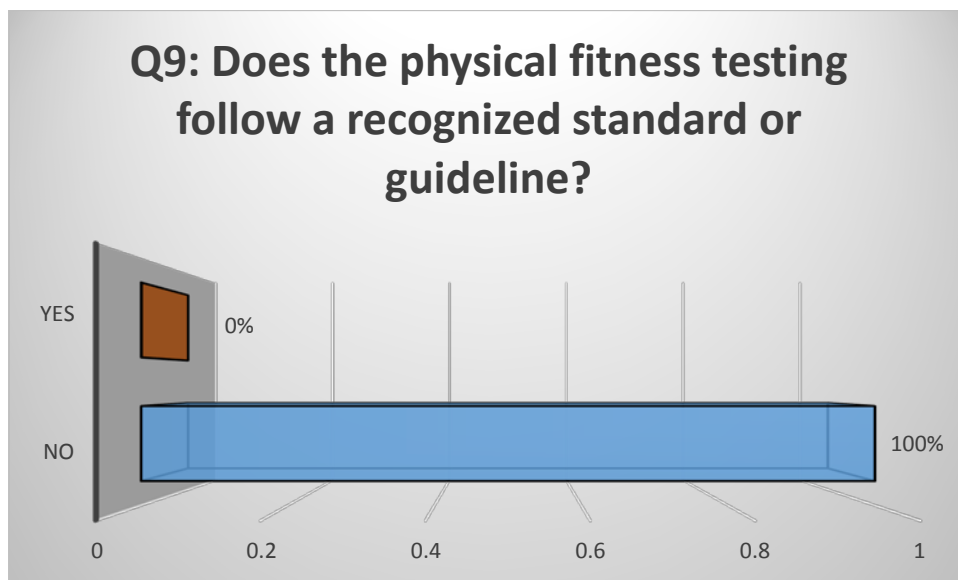
indicated that the medical evaluation is the same for new hires and existing members. Two respondents, 29%, answered that new hires are provided with a different medical evaluation. These included MDOT physicals for pre-employment and NFPA 1582. Questions seven through fourteen dealt with physical fitness evaluations. Question seven sought to determine whether respondents' departments utilize physical fitness evaluations.



All ten respondents answered this question. Nine departments, 90%, do not provide current members with physical fitness evaluations, while one respondent, 10%, indicated that their department does offer them. This question was only supposed to apply to current members, although that was accidentally omitted from the question. Interpreting the responses this way provided the above listed result. Question eight was posed to determine if the physical fitness evaluations consisted of job duty specific testing or fitness level testing.

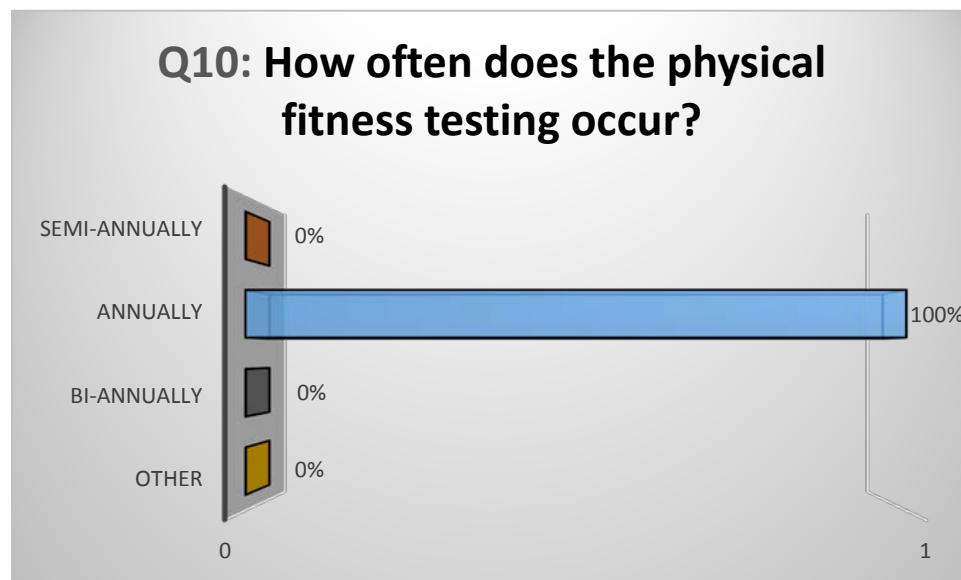


Five respondents answered this question; however, four of the respondents stated that they only test candidates. These responses were omitted from the results, as they were outside the scope of the research. One department uses fitness level testing. The ninth question asks whether the physical fitness testing follows a recognized standard or guideline.

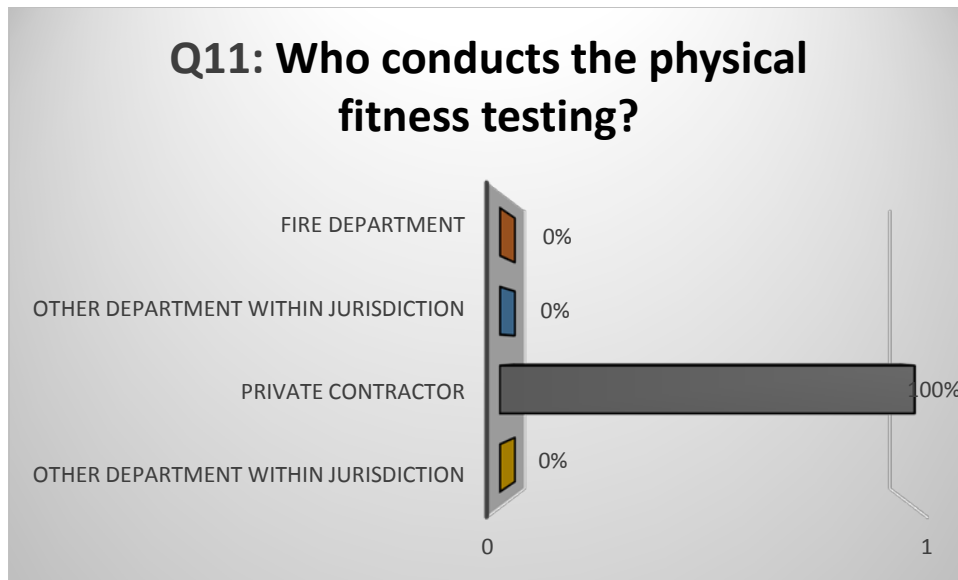


Eight respondents answered this question, but again, seven of them either stated that they do not provide physical fitness evaluations, or they only provide them to candidate firefighters. These seven responses were omitted from the results. The one respondent, whose fire

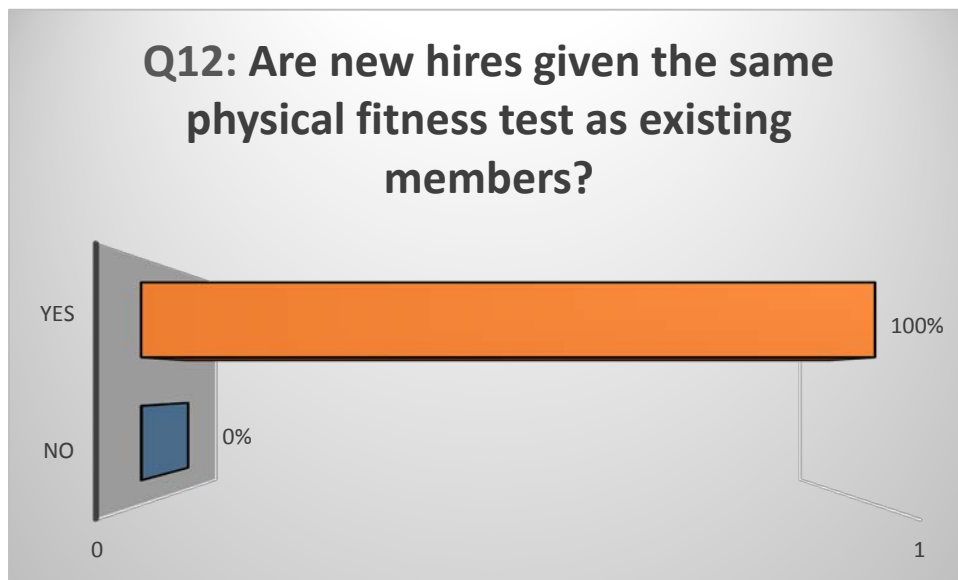
department provides for physical fitness testing to current members, stated that the evaluation does not follow a recognized standard or guideline. The tenth question sought to determine the interval between physical fitness testing.



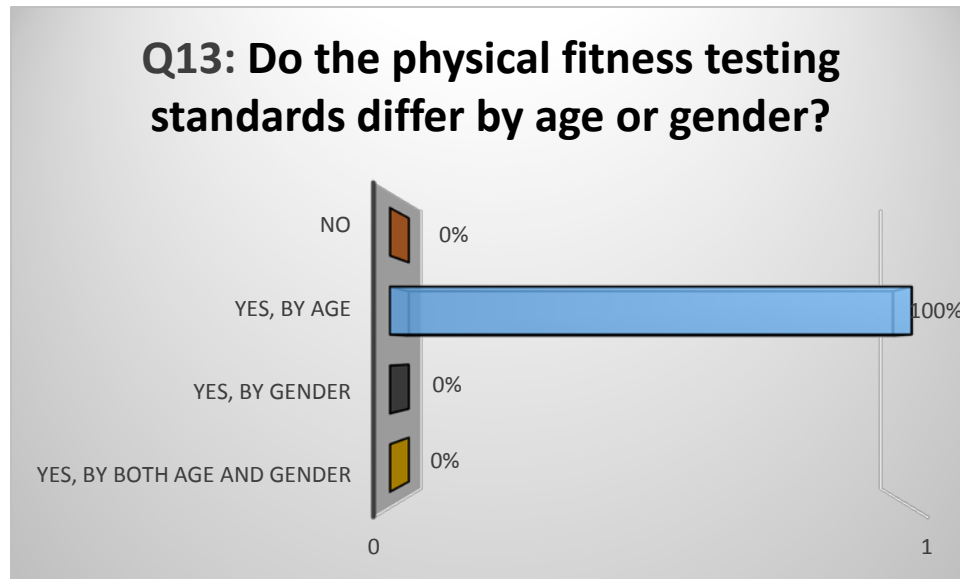
Five respondents answered this question. The one respondent, whose fire department provides for physical fitness testing to current members, stated that his department provides the tests on an annual basis. The other four responses were omitted as they pertained to candidate firefighter testing only. The eleventh question was posed to determine who conducts the physical fitness testing.



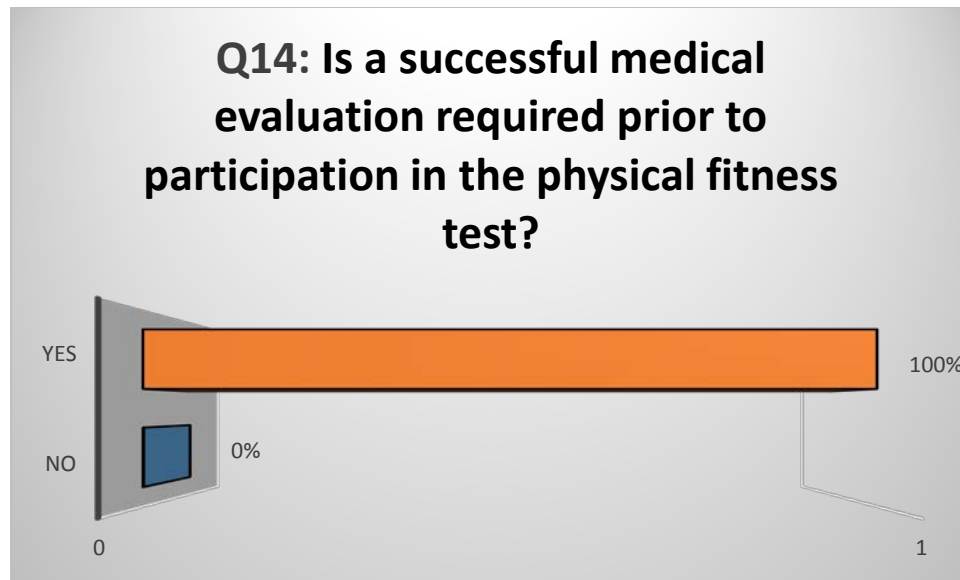
Five respondents answered this question. The one respondent, whose fire department provides for physical fitness testing to current members, stated that the department uses a private contractor to administer the physical fitness testing. The other four responses were omitted as they pertained to candidate firefighter testing only. The twelfth question asked whether new hires are given the same physical fitness test as existing members.



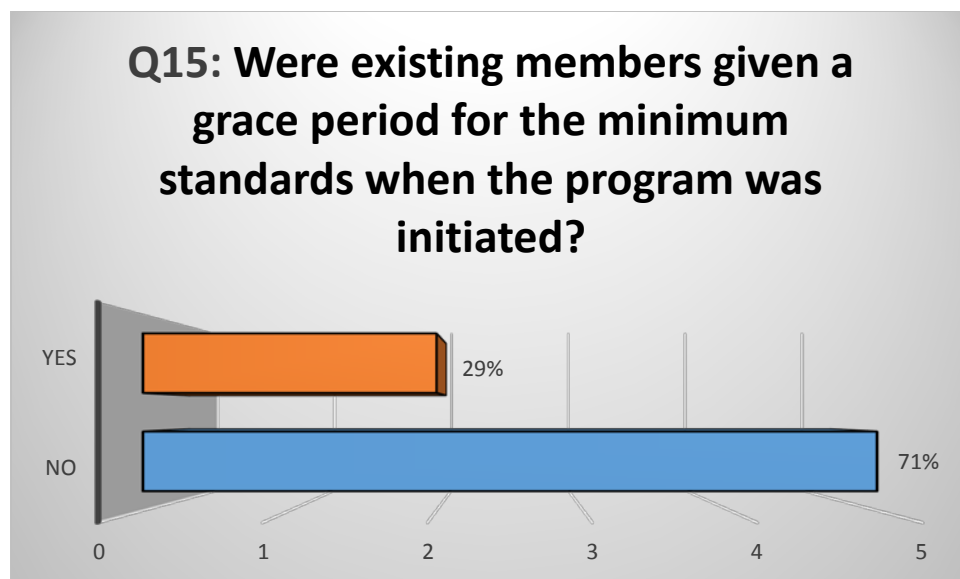
Six respondents answered this question. The one respondent, whose fire department provides for physical fitness testing to current members, stated that new hires are given the same physical fitness test as existing members. The other five responses were omitted as they did not provide any physical fitness test to existing members. Question thirteen was posed to determine if the physical fitness testing standards differ by age or gender.



Seven respondents answered this question. The one respondent, whose fire department provides for physical fitness testing to current members, stated that the department's physical fitness testing standards differ by the age of the member. The six other responses were omitted as the departments do not provide physical fitness testing or only provide it for candidates. Question fourteen asked respondents if a successful medical evaluation was required to participate in the physical fitness test.

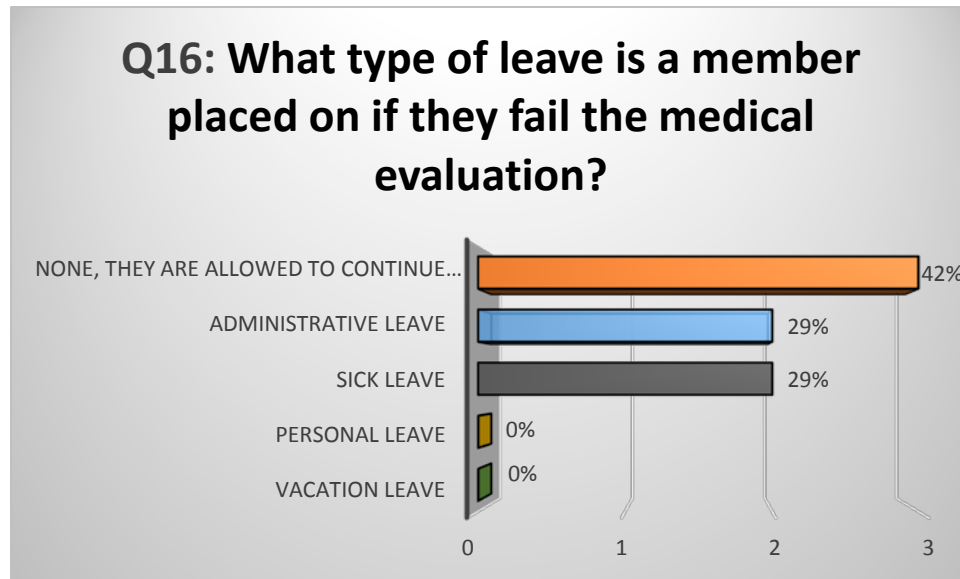


Six respondents answered this question. The one respondent, whose fire department provides for physical fitness testing to current members, stated that a successful medical evaluation is required prior to participation in the physical fitness test. Again, the other five responses were eliminated as the departments either do not provide physical fitness testing or only provide it to candidate firefighters. Question fifteen sought to determine whether existing members were given a grace period to meet the minimum standards when the medical and physical fitness evaluation program was initiated.

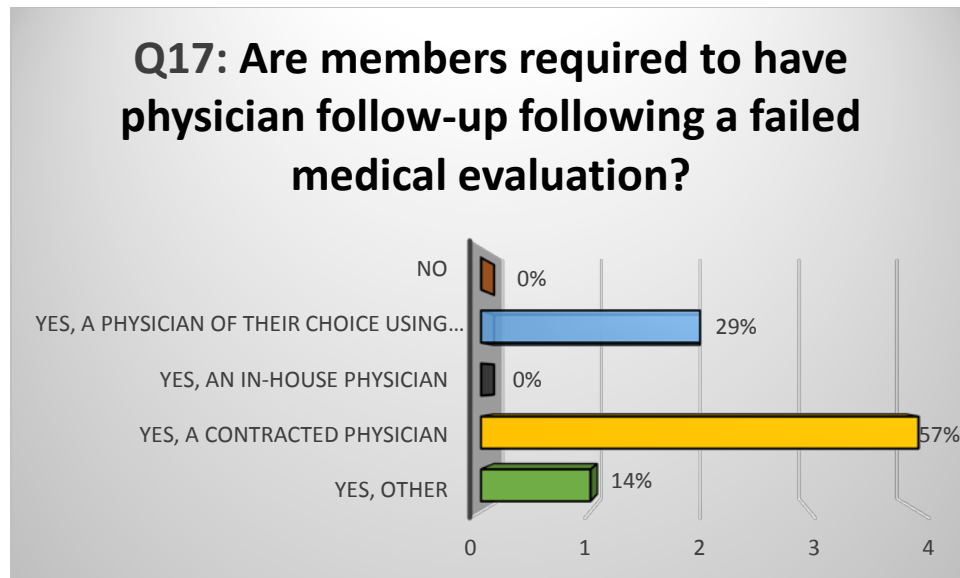




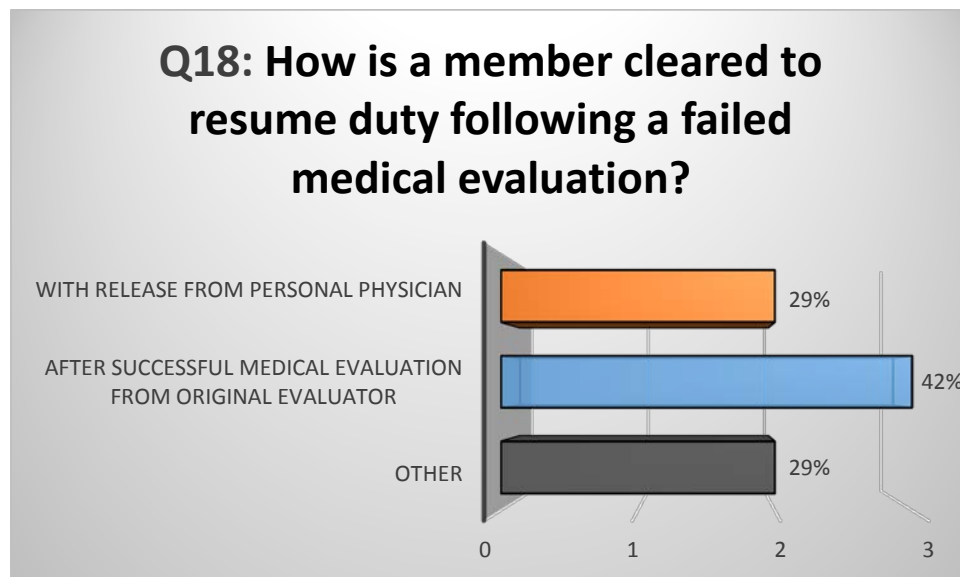
Seven respondents answered the question. Five, 71%, stated that their departments did not give a grace period after the initiation of the evaluation program. Two departments, 29%, gave a grace period after the initiation of the evaluation program, with one stating that existing members were given a one or two year grace period. Question sixteen asked the respondents on what type of leave members are placed if they fail the medical evaluation.



All ten respondents answered the question. Three respondents previously stated their departments do not provide medical evaluations. These responses were therefore omitted. The majority, 42%, stated that members are allowed to continue working after failing a medical evaluation. Two, 29%, stated members were put on sick leave and the remaining two departments, 29%, placed members on administrative leave if a medical evaluation was failed. Question seventeen asked whether members were required to have a physician follow up after a failed medical evaluation.

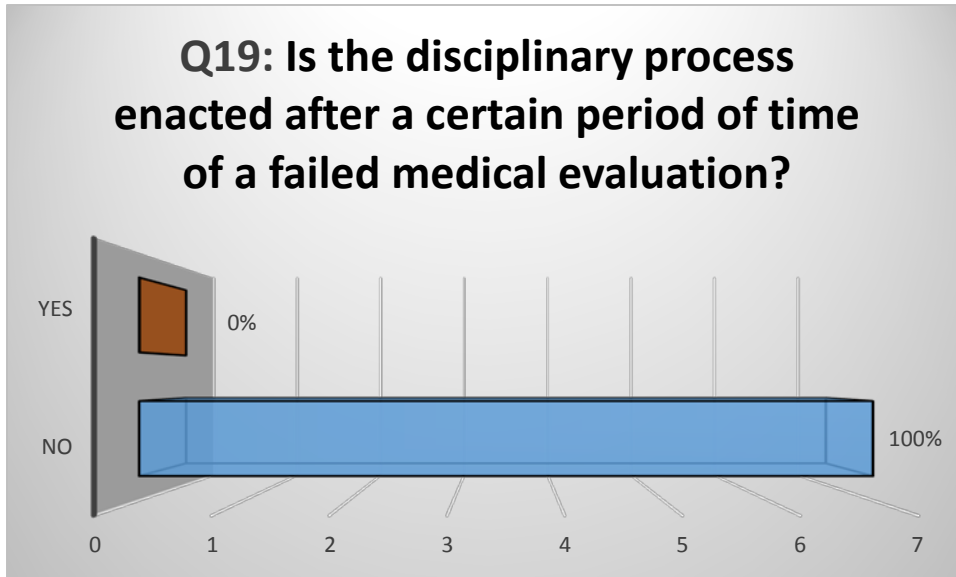


All ten respondents answered the question. Three respondents previously stated their departments do not provide medical evaluations. These responses were therefore omitted. All of the respondents' departments require a physician follow up, with the majority, 57%, using a contracted physician. Question eighteen was posed to determine how a member is cleared to resume duty following a failed medical evaluation.

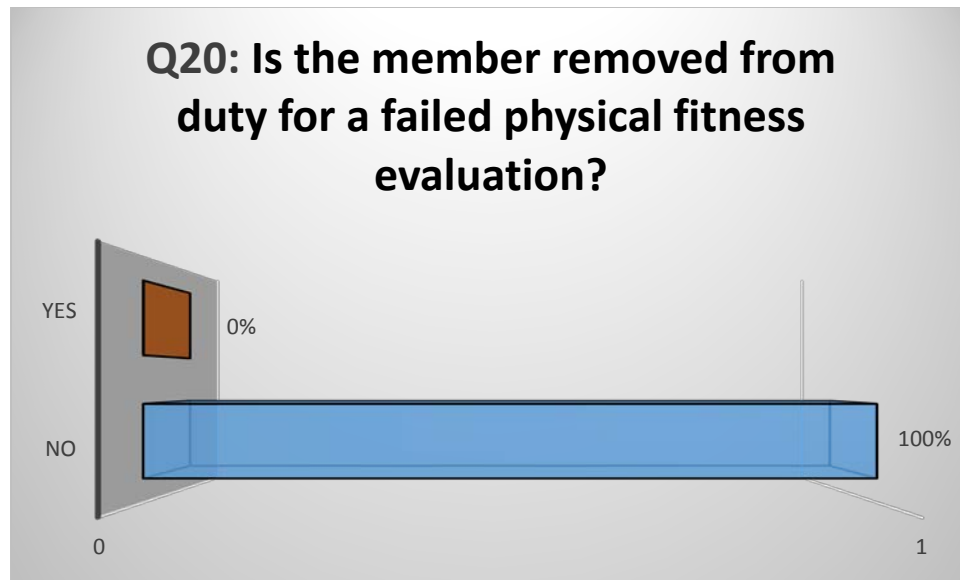


Nine respondents answered this question. Two respondents previously stated their departments do not provide medical evaluations. These responses were therefore omitted. Three

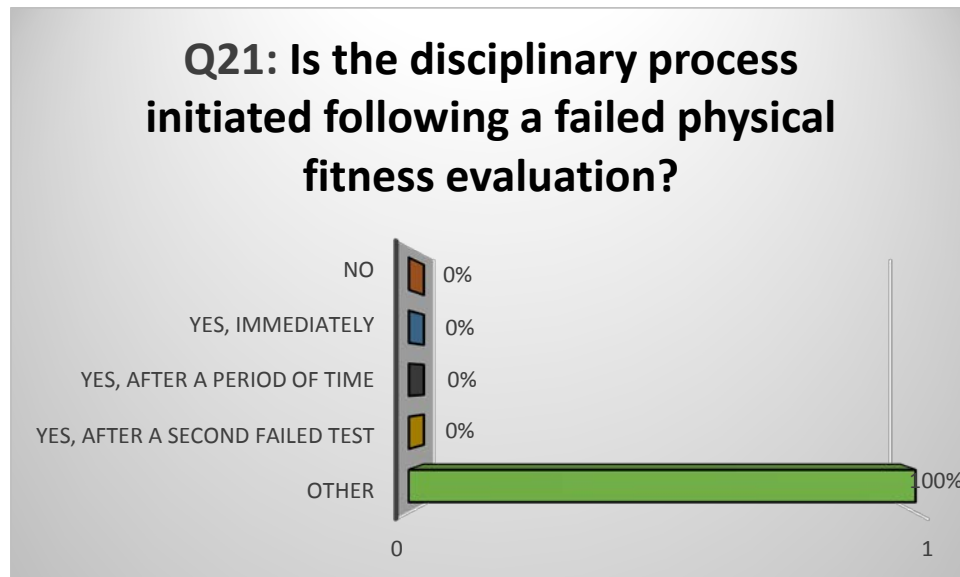
departments, 42%, require clearance from the original evaluator. Two, 29%, require clearance from a personal physician. Two, 29%, stated “other” with one requiring clearance from an in-house physician and the other department stating the requirement varies by the case. The nineteenth question sought to determine if the disciplinary process was enacted after a failed medical evaluation?



All ten respondents answered the question. Three respondents previously stated their departments do not provide medical evaluations. These responses were therefore omitted. All respondents stated that their disciplinary process is not enacted after a failed medical evaluation. The twentieth question asked whether the member is removed from duty for a failed physical fitness evaluation.

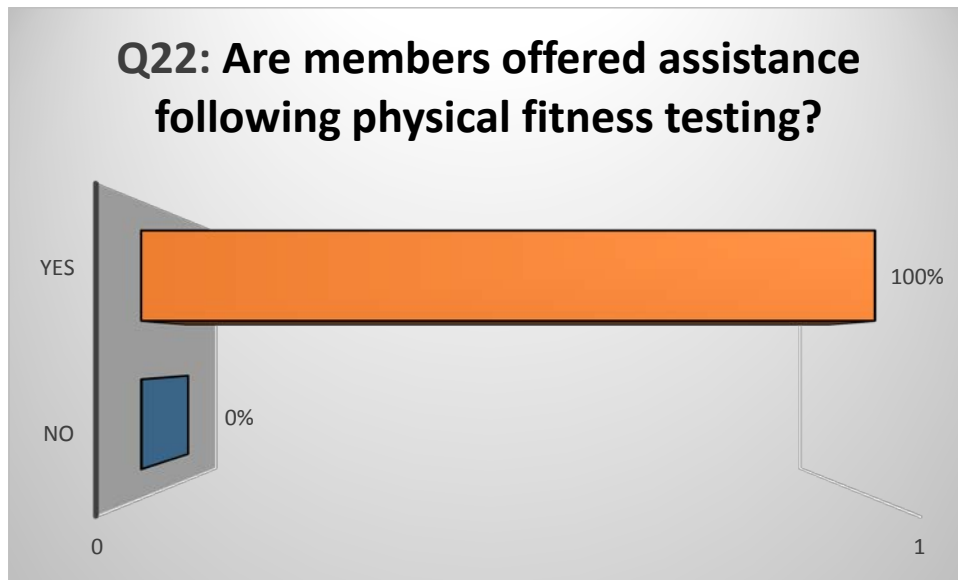


All ten respondents answered the question. The one respondent, whose fire department provides for physical fitness testing to current members, stated that members are not removed from duty. The other nine responses were omitted as they did not provide physical fitness testing to existing members. The twenty-first question inquired whether the disciplinary process is initiated following a failed physical fitness evaluation.

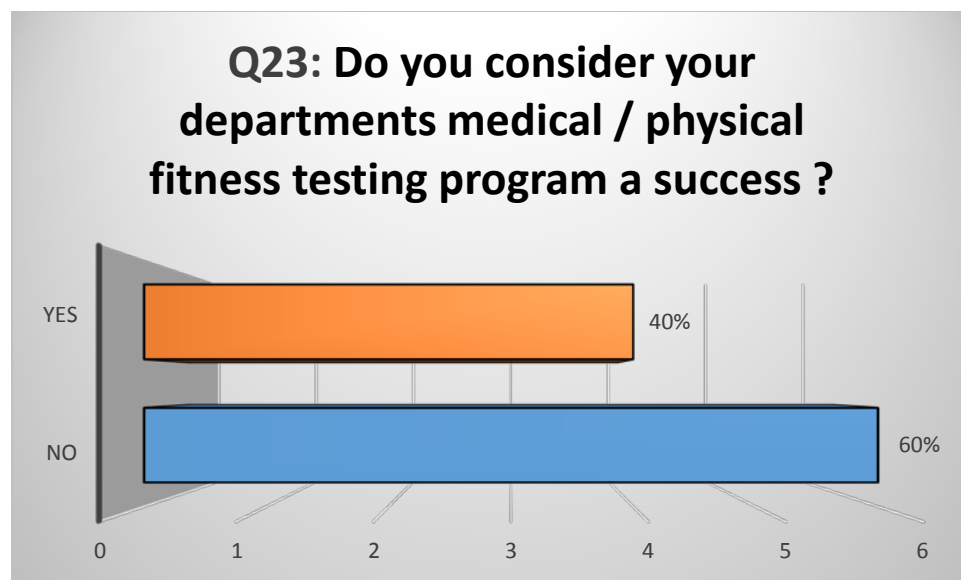


All ten respondents answered this question. The one respondent, whose fire department provides for physical fitness testing to current members, stated that the disciplinary process is

initiated after a failed physical fitness evaluation through a progressive process per the collective bargaining agreement with engagement of the health and wellness committee and occupational health. The other nine responses were omitted as they did not provide physical fitness testing to existing members. The twenty-second question was posed to determine whether members are offered assistance following physical fitness evaluations, such as nutrition counseling and personal training.



Eight respondents answered the question. The one respondent, whose fire department provides for physical fitness testing to current members, stated that members do receive assistance after physical fitness evaluations. The other seven responses were omitted as they did not provide physical fitness testing to existing members. The twenty-third question sought to determine if the respondents consider their department's medical and physical fitness evaluation program to be a success.



All ten respondents answered the question. One of the respondents previously stated that their department does not provide members with either medical or physical fitness evaluations. This response was, therefore, omitted. The majority, 56%, of respondents do not feel that their departments' programs are a success. One respondent felt this way even though 80% of their members maintain acceptable fitness levels on their own and work out both while on the job and off. 44% felt that their programs were a success.

The twenty-fourth question asked respondents to identify any obstacles they observed to a successful medical and physical fitness evaluation program. The main obstacles are obtaining employee acceptance and unions not supporting mandatory programs. On the administration side, the obstacles were related to costs of programs and not wanting to support voluntary programs.

The twenty-fifth and final question asked respondents to provide additional comments that would aid the research. Most of the comments provided possible solutions to the organizational obstacles. One respondent felt that obstacles could be overcome through the

passage of time, bargaining and the influx of younger firefighters. Another stated that they use an incentive-based program that provides monetary bonuses for different fitness levels.

The resultant consensus components derived from the questionnaire are as follows.

Medical evaluations are

- based on a recognized standard or guideline;
- conducted annually;
- conducted by a contract physician;
- not conducted in conjunction with physical fitness testing; and
- the same as the evaluations provided to new hires.

Physical fitness evaluations

- consist of fitness level testing;
- are not based on a recognized standard or guideline;
- are conducted annually;
- utilize a private contractor;
- are the same as the evaluations provided for new hires;
- differ by members' ages; and
- require successful medical evaluation prior to participation.

Members who fail the medical evaluation are allowed to continue working.

Physician follow up is required after a failed medical evaluation.

The original evaluator is used to clear members after a successful medical evaluation.

The medical evaluation programs are not punitive.

Members who fail the physical fitness evaluation are allowed to continue working.

The disciplinary process is initiated following a failed physical fitness evaluation.

Members are offered assistance, such as personal training or nutrition counseling, following physical fitness testing.

The results of the survey were compared to the results of the document analysis and used to formulate the draft policy (Appendix F). The draft policy was reviewed during an interview (Appendix D) with Fire Chief Tom Belt on July 27, 2015, to determine the existence and extent of barriers to the implementation of the draft policy from the department's and City administration's viewpoints. After the barriers were determined, possible solutions were discussed. The only obstacle identified by Chief Belt that would affect implementation of the policy was the monetary cost. This author solicited the cost of a full physical per NFPA 1582 from the City's contract occupational physician. The cost for the initial medical evaluation would be about \$750 per member and about \$500 per member annually thereafter. The annual price would increase to about \$750 every fifth year to cover the required chest x-rays. The total baseline cost of medical evaluations for the current twenty-six members would be approximately \$19,500 and the annual evaluations would total approximately \$13,000 (E. Rose, personal communication, July 21, 2015). Because of the economic realities facing the City, Chief Belt stated that implementation of the policy with the City covering the majority of the cost would likely not be feasible. One possible solution would be to apply for an Assistance to Firefighters Grant through FEMA. The only stumbling block to utilizing a grant would be the necessity of providing for sustainability of the program when the grant funding ended. The other possible solution was to mandate that members get annual physicals by their personal primary physicians following the guidelines of NFPA 1582 and the WFI. This author solicited the insurance codes for every required procedure according to NFPA 1582 and submitted them to the local office of the City's insurance carrier, Blue Cross/ Blue Shield of Michigan. According to their office,



every required procedure except spirometry would be covered under the wellness/preventative portion of the members' medical insurance.

The draft policy was reviewed during an interview (Appendix E) with union Local 643 President Kurt Hillier on July 29, 2015, and with union Local 643 Vice President Kirk Vogler on July 30, 2015, to determine the existence and extent of barriers to the implementation of the draft policy from the union Local 643's viewpoint. After reviewing the draft policy, neither executive board member identified any barriers to implementation of the policy from the union's standpoint. President Hillier stated that medical evaluations and mandatory workouts had been recently brought up by some of the younger union membership. The executive board had been reviewing different wellness programs, and the subject will likely be discussed during the next contract negotiation.

### **Discussion**

Acknowledging the high rate of cardiovascular death in the fire service found by the United States Fire Administration (2002) and the increased cancer risk to firefighters noted by Daniels et al (2013), it is encouraging to see that a large majority of the Michigan fire departments polled provide for the periodic medical evaluation of their members. Their cancer rate of 70% was consistent with the findings of Foulks (2008), Sarver (2014), Metheny (2008), Gudie (2009), and Hubbard (2010), who found fire departments provided periodic medical evaluations at a rate of between 55.6% to 100%. Even though this alludes to a majority of departments across the country providing medical evaluations, it also shows the need for improvement.

The fire service utilizes national, state and local standards, such as standard operating procedures, NFPA and OSHA standards, and policies in every facet of operations. Standards

ensure that methods are consistent throughout the fire service and attempt to ensure outcomes and results are positive by providing a template of best practices that set a baseline for acceptable procedures. The pertinent standards applying to periodic medical and physical fitness evaluations for the fire service were identified during the document analysis as the NFPA 1582 standard, the Fire Service Joint Management Wellness Fitness Initiative, and the DOD Occupational Medical Examinations and Surveillance Manual.

This author found that 57% of respondents' evaluations follow a standard. The research results in the reviewed literature varied on this subject from a low of 27% to a high of 100%. The most comprehensive standard should be used as a starting point for a medical evaluation program to ensure that best practices are followed. The majority of Michigan departments whose programs did not follow a standard felt their programs were not successful. Firefighter health and wellness is not an area to try to reinvent the wheel or utilize half measures. (Hubbard, 2010; Sarver, 2014).

In regards to the evaluation of firefighters' physical fitness, it was found that only 10% of respondents indicated that periodic physical fitness evaluations were provided. The results detailed in the reviewed literature showed a much higher percentage, between 30.1% and 75% of departments, offered evaluations. This low rate is alarming since it has been shown that firefighters have a higher rate of obesity than the general population. Providing firefighters with a complete picture of their current fitness level compared to previous results allows them to determine whether they meet the recommended levels to be able to safely fulfil the duties of the job and maintain their health (Foulks, 2008; Metheny, 2008).

Common organizational barriers to the implementation of periodic medical and physical fitness evaluations were determined from the literature review. The main administrative barrier

was program cost, as found by Hubbard (2010), Foulks (2008), and Johnston (2005). This coincides with the findings at the MFD. Current fiscal realities would likely preclude implementation of an evaluation program conducted by the City's contract physician. However, NFPA 1582 allows for the members' personal physicians to conduct the medical evaluation as long as it follows the standard's criteria (NFPA, 2013b). This method was chosen as a solution to this barrier for the final draft policy.

The main union barrier identified in the reviewed research was that members feared losing their jobs if they didn't meet standards during the evaluations (Johnston, 2005; Metheny, 2008). The views of the MFD's union differed in that they saw no barriers to implementing the proposed policy. Hubbard (2010) also found that labor/management issues were seen as barriers to only a small percentage of respondents. This author feels that basing the evaluation policy on the WFI afforded the union reassurance that labor questions on job security had been satisfactorily resolved by the IAFF in the construction of that document.

The organizational implications identified by the findings of this research are, for the most part, positive. Adoption and implementation of the policy on medical and physical fitness evaluations may realize the City financial savings due to identifying members' risk factors and/or disease status earlier, allowing intervention and positive health outcomes. It would also increase the firefighters' awareness of their health situation and positively affect their lifestyle choices, thereby increasing their overall health and wellness. Adoption of this policy could also be used as a positive stepping stone to the creation and adoption of a comprehensive health and wellness program. The eventual inclusion of a physical fitness program, behavioral modification instruction, mental health and stress management interventions, and injury prevention and ergonomic improvements, could provide for a larger return on investment for the City and

increase the health, moral, and effectiveness of the firefighters. This incremental approach may allow for increased buy in and decreased stakeholder concern relating to the cost of programming or employment security.

### **Recommendations**

The purpose of this research was to develop a draft policy that mandates periodic medical and physical fitness evaluations for current Marquette Fire Department personnel. This was action research and resulted in the creation of a consensus draft policy. The following are short term recommendations regarding policy implementation for the Marquette City Fire Department.

The Marquette City Fire Department should

- Have the draft policy reviewed by the City's human resources director and the City's labor attorney;
- amend the current collective bargaining agreement by implementing the mandatory annual medical and physical fitness evaluation policy through direct contract negotiation or a memorandum of understanding;
- modify the scope of responsibility of the existing joint labor/management health and safety committee to include the ongoing review of the medical and physical fitness evaluation program;
- create and provide the City contracted physician with up to date job descriptions for all positions, including essential job tasks, physical requirements, and environmental working conditions;
- provide for the confidential collection and analysis of relevant, non-identifying, baseline data on members' rates of illness and injury and continue with the collection and analysis of this data annually; and

- apply for an Assistance to Firefighters Grant to cover all program costs or to cover the initial equipment costs for the physical fitness evaluations.

The following are long term recommendations for the Marquette City Fire Department.

The Marquette City Fire Department should

- provide for the ongoing education of members on health related topics by utilizing local health and wellness professionals, such as dietitians, doctors, personal trainers, etc...; and
- work towards the creation and implementation of a comprehensive health and wellness program including a physical fitness program, behavioral modification instruction, mental health / stress management interventions, and injury prevention / ergonomic improvements.

The following are general recommendations for future readers who may wish to replicate this research.

- In regards to the questionnaire, pilot testing should be conducted to make sure the questions are clear and will produce the desired information. The author's use of "if so" statements in survey questions numbers one and seven, directing respondents to skip questions two through six and eight through fourteen if they answered "no" would have provided more accurate results and made analysis of those results simpler.
- In regards to the interview process, the inclusion of a broader selection of ages and a larger number of stakeholders in the process by using a focus group may have provided a more accurate picture of labor's views.

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## Appendix A

**Components of periodic medical and physical fitness evaluations for the fire service**

1.

**Medical Evaluation Section**

1. Does your department currently conduct medical evaluations for its members?

- ☐ Yes
- ☐ No

2. Is this medical evaluation based on a recognized standard or guideline?

- ☐ Yes
- ☐ No

If so please list the standard. (i.e. NFPA, OSHA, etc.)

3. How often does your department conduct medical evaluations?

- ☐ Semi-annually
- ☐ Annually
- ☐ Bi-annually
- ☐ Other (please specify)

4. Who performs the medical evaluations?

- ☐ In-house Physician (Department, City, or County)
- ☐ Contracted Physician
- ☐ Member's own Physician
- ☐ Other (please specify)

5. Is the medical evaluation conducted in conjunction with physical fitness testing?

- ☐ Yes
- ☐ No

6. Do new hires get the same medical evaluation as the existing members?

- ☐ Yes  
☐ No

Please describe if evaluations differ.

### **Physical Fitness Testing Section**

7. Does your department utilize physical fitness testing?

- ☐ Yes  
☐ No

8. Does the physical fitness testing consist of job duty specific testing, fitness level testing (i.e. timed run, push-ups, sit-ups, etc.), or both?

- ☐ Job duty specific testing  
☐ Fitness level testing  
☐ Both

9. Does the physical fitness testing follow a recognized standard or guideline? (i.e. NFPA, CPAT, etc.)

- ☐ Yes  
☐ No

If yes, please specify what standard is utilized.

10. How often does physical fitness testing occur?

- ☐ Semi-annually  
☐ Annually  
☐ Bi-annually  
☐ Other (please specify)

11. Who conducts the physical fitness testing?

- ☐ Fire department
- ☐ Other department within jurisdiction
- ☐ Private contractor
- ☐ Other (please specify)

12. Are new hires given the same physical fitness test as existing members?

- ☐ Yes
- ☐ No

If tests differ please describe.

13. Do the physical fitness testing standards differ by age or gender?

- ☐ No
- ☐ Yes, by age
- ☐ Yes, by gender
- ☐ Yes, by both age and gender

Comments

14. Is a successful medical evaluation required prior to participation in the physical fitness test?

- ☐ Yes
- ☐ No

### **Administrative Issues Section**

15. Were existing members given a grace period for the minimum standards when the program was initiated?

- ☐ Yes
- ☐ No

If yes, how long was the grace period?

16. What type of leave is a member placed on if they fail the medical evaluation?

- ☐ None, they are allowed to continue working
- ☐ Administrative leave
- ☐ Sick leave
- ☐ Personal leave
- ☐ Vacation leave

17. Are members required to have physician follow-up following a failed medical evaluation?

- ☐ No
- ☐ Yes, a physician of their choice using their health insurance
- ☐ Yes, an in-house physician
- ☐ Yes, a contracted physician provided by the department or governmental entity
- ☐ Yes, other (please specify)

18. How is a member cleared to resume duty following a failed medical evaluation?

- ☐ With release from personal physician
- ☐ After successful medical evaluation from original evaluator
- ☐ Other (please specify)

19. Is the disciplinary process enacted after a certain period of time of a failed medical evaluation?

- ☐ Yes
- ☐ No

If yes, please specify.

20. Is the member removed from duty for a failed physical fitness evaluation?

- ☐ Yes
- ☐ No

21. Is the disciplinary process initiated following a failed physical fitness evaluation?

- ☐ No
- ☐ Yes, immediately
- ☐ Yes, after a period of time
- ☐ Yes, after a second failed test
- ☐ Other (please specify)

22. Are members offered assistance following physical fitness testing? (i.e. personal training, nutrition counseling, etc.)

- ☐ Yes
- ☐ No

If yes, please describe.

23. Do you consider your departments medical / physical fitness program a success?

- ☐ Yes
- ☐ No

Comments

24. Please identify any obstacles to a successful medical / physical fitness testing program.

25. Please give any additional comments that you may have that would add to this research project.

Appendix B

Gun Plain FD

Alpena FD

Sault Ste Marie FD

Dewitt Area ESA

Jackson FD

Eastpointe Fire and Rescue

Harrison TWP FD

Muskegon FD

Birmingham FD

Ferndale FD

Hazel Park FD

Madison Heights FD

Pittsfield TWP FD

Ypsilanti FD

Allen Park FD

Brownstone FD

Garden City FD

Hamtramck FD

Harper woods FD

Highland Park FD

Inkster FD

Lincoln Park FD

Melvindale FD

Plymouth TWP FD

Redford TWP FD

River Rouge FD

Riverview FD

Southgate FD

Wyandotte FD


Northville TWP FD

Accessed from the fire service directory, Michigan Department of Licensing and  
Regulatory Affairs website at [http://www.dleg.state.mi.us/fire\\_directory/](http://www.dleg.state.mi.us/fire_directory/)

## Appendix C

Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

<b>#1</b> 	<b>COMPLETE</b> <b>Collector:</b> Web Link 1 (Web Link) <b>Started:</b> Monday, May 11, 2015 3:38:46 PM <b>Last Modified:</b> Monday, May 11, 2015 3:46:30 PM <b>Time Spent:</b> 00:07:44 <b>IP Address:</b> 75.151.31.5
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PAGE 1

<b>Q1: Does your department currently conduct medical evaluations for its members?</b>	No
<b>Q2: Is this medical evaluation based on a recognized standard or guideline?</b>	No
<b>Q3: How often does your department conduct medical evaluations?</b>	Other (please specify) none
<b>Q4: Who performs the medical evaluations?</b>	Member's own Physician
<b>Q5: Is the medical evaluation conducted in conjunction with physical fitness testing?</b>	No
<b>Q6: Do new hires get the same medical evaluation as the existing members?</b>	No
<b>Q7: Does your department utilize physical fitness testing?</b>	No
<b>Q8: Does the physical fitness testing consist of job duty specific testing, fitness level testing (i.e. timed run, push-ups, sit-ups, etc.), or both?</b>	Job duty specific testing
<b>Q9: Does the physical fitness testing follow a recognized standard or guideline? (i.e. NFPA, CPAT, etc.)</b>	No
<b>Q10: How often does physical fitness testing occur?</b>	Respondent skipped this question
<b>Q11: Who conducts the physical fitness testing?</b>	Respondent skipped this question
<b>Q12: Are new hires given the same physical fitness test as existing members?</b>	No



Components of periodic medical and physical fitness evaluations for the fire service


SurveyMonkey

Q13: Do the physical fitness testing standards differ by age or gender?	No
Q14: Is a successful medical evaluation required prior to participation in the physical fitness test?	No
Q15: Were existing members given a grace period for the minimum standards when the program was initiated?	No
Q16: What type of leave is a member placed on if they fail the medical evaluation?	None, they are allowed to continue working
Q17: Are members required to have physician follow-up following a failed medical evaluation?	No
Q18: How is a member cleared to resume duty following a failed medical evaluation?	<i>Respondent skipped this question</i>
Q19: Is the disciplinary process enacted after a certain period of time of a failed medical evaluation?	No
Q20: Is the member removed from duty for a failed physical fitness evaluation?	No
Q21: Is the disciplinary process initiated following a failed physical fitness evaluation?	No
Q22: Are members offered assistance following physical fitness testing? (i.e. personal training, nutrition counseling, etc.)	No
Q23: Do you consider your departments medical / physical fitness program a success?	No
<b>Q24: Please identify any obstacles to a successful medical / physical fitness testing program.</b>  The bargaining unit has tried to work with the administration on a fitness but the city worries about the costs of medical evaluations and they claim it would cost more in workers compensation. We have equipment in the station , it is geared to firefighting tasks, and most members do work out. I have asked that all company officers allow time in the day for working out.	
Q25: Please give any additional comments that you may have that would add to this research project.	<i>Respondent skipped this question</i>

Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

#2



**COMPLETE**

Collector: Web Link 1 (Web Link)  
 Started: Tuesday, May 12, 2015 8:49:24 AM  
 Last Modified: Tuesday, May 12, 2015 8:54:17 AM  
 Time Spent: 00:04:53  
 IP Address: 75.151.0.109

PAGE 1

Q1: Does your department currently conduct medical evaluations for its members?	Yes
Q2: Is this medical evaluation based on a recognized standard or guideline?	Yes,  If so please list the standard. (i.e. NFPA, OSHA, etc.) NFPA
Q3: How often does your department conduct medical evaluations?	Annually
Q4: Who performs the medical evaluations?	Member's own Physician
Q5: Is the medical evaluation conducted in conjunction with physical fitness testing?	No
Q6: Do new hires get the same medical evaluation as the existing members?	Yes
Q7: Does your department utilize physical fitness testing?	Yes
Q8: Does the physical fitness testing consist of job duty specific testing, fitness level testing (i.e. timed run, push-ups, sit-ups, etc.), or both?	Both
Q9: Does the physical fitness testing follow a recognized standard or guideline? (i.e. NFPA, CPAT, etc.)	Yes,  If yes, please specify what standard is utilized. NFPA
Q10: How often does physical fitness testing occur?	Other (please specify) At time of hire
Q11: Who conducts the physical fitness testing?	Private contractor


Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

Q12: Are new hires given the same physical fitness test as existing members?	No, If tests differ please describe. New hires are the only ones who receive it
Q13: Do the physical fitness testing standards differ by age or gender?	No
Q14: Is a successful medical evaluation required prior to participation in the physical fitness test?	No
Q15: Were existing members given a grace period for the minimum standards when the program was initiated?	No
Q16: What type of leave is a member placed on if they fail the medical evaluation?	Administrative leave
Q17: Are members required to have physician follow-up following a failed medical evaluation?	Yes, a contracted physician provided by the department or governmental entity
Q18: How is a member cleared to resume duty following a failed medical evaluation?	After successful medical evaluation from original evaluator
Q19: Is the disciplinary process enacted after a certain period of time of a failed medical evaluation?	No
Q20: Is the member removed from duty for a failed physical fitness evaluation?	Yes
Q21: Is the disciplinary process initiated following a failed physical fitness evaluation?	No
Q22: Are members offered assistance following physical fitness testing? (i.e. personal training, nutrition counseling, etc.)	Yes
Q23: Do you consider your departments medical / physical fitness program a success?	Yes
Q24: Please identify any obstacles to a successful medical / physical fitness testing program.	Respondent skipped this question
Q25: Please give any additional comments that you may have that would add to this research project.	Respondent skipped this question

Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

#3	 <p><b>COMPLETE</b>  <b>Collector:</b> Web Link 1 (Web Link)  <b>Started:</b> Tuesday, May 12, 2015 9:35:15 AM  <b>Last Modified:</b> Tuesday, May 12, 2015 9:50:47 AM  <b>Time Spent:</b> 00:15:31  <b>IP Address:</b> 198.108.4.105</p>
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PAGE 1

Q1: Does your department currently conduct medical evaluations for its members?	Yes
Q2: Is this medical evaluation based on a recognized standard or guideline?	No
Q3: How often does your department conduct medical evaluations?	Bi-annually
Q4: Who performs the medical evaluations?	Other (please specify) choice, either own physician or in house
Q5: Is the medical evaluation conducted in conjunction with physical fitness testing?	Respondent skipped this question
Q6: Do new hires get the same medical evaluation as the existing members?	No, Please describe if evaluations differ. NFPA 1582
Q7: Does your department utilize physical fitness testing?	No
Q8: Does the physical fitness testing consist of job duty specific testing, fitness level testing (i.e. timed run, push-ups, sit-ups, etc.), or both?	Respondent skipped this question
Q9: Does the physical fitness testing follow a recognized standard or guideline? (i.e. NFPA, CPAT, etc.)	Respondent skipped this question
Q10: How often does physical fitness testing occur?	Respondent skipped this question
Q11: Who conducts the physical fitness testing?	Respondent skipped this question

Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

Q12: Are new hires given the same physical fitness test as existing members?	If tests differ please describe. Pre hiring physical testing is done only
Q13: Do the physical fitness testing standards differ by age or gender?	No
Q14: Is a successful medical evaluation required prior to participation in the physical fitness test?	<i>Respondent skipped this question</i>
Q15: Were existing members given a grace period for the minimum standards when the program was initiated?	<i>Respondent skipped this question</i>
Q16: What type of leave is a member placed on if they fail the medical evaluation?	None, they are allowed to continue working
Q17: Are members required to have physician follow-up following a failed medical evaluation?	Yes, a contracted physician provided by the department or governmental entity
Q18: How is a member cleared to resume duty following a failed medical evaluation?	Other (please specify) mostly with release form. can be different for certain cases
Q19: Is the disciplinary process enacted after a certain period of time of a failed medical evaluation?	No
Q20: Is the member removed from duty for a failed physical fitness evaluation?	No
Q21: Is the disciplinary process initiated following a failed physical fitness evaluation?	No
Q22: Are members offered assistance following physical fitness testing? (i.e. personal training, nutrition counseling, etc.)	If yes, please describe. NA
Q23: Do you consider your departments medical / physical fitness program a success?	No,  Comments though 80% of our personnel are maintaining acceptable fitness level on their own and work out regularly in and out the job
Q24: Please identify any obstacles to a successful medical / physical fitness testing program.	making it mandatory. last NFPA 1582 is too involved.

Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

**Q25: Please give any additional comments that you may have that would add to this research project.**

Fitness and healthy living habits are crucial to decrease work injuries. Making it mandatory was not found to be a successful option. Our department is blessed to have 80% of suppression personnel maintaining a good fitness level by working regularly and practicing good eating habits. The Department has a low injury rate and does not need a structured program at this time.

Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

#4



COMPLETE

Collector: Web Link 1 (Web Link)  
 Started: Wednesday, May 13, 2015 4:50:18 PM  
 Last Modified: Wednesday, May 13, 2015 5:01:59 PM  
 Time Spent: 00:11:40  
 IP Address: 68.188.135.184

PAGE 1

Q1: Does your department currently conduct medical evaluations for its members?	Yes
Q2: Is this medical evaluation based on a recognized standard or guideline?	No
Q3: How often does your department conduct medical evaluations?	Annually
Q4: Who performs the medical evaluations?	Contracted Physician
Q5: Is the medical evaluation conducted in conjunction with physical fitness testing?	Yes
Q6: Do new hires get the same medical evaluation as the existing members?	Yes
Q7: Does your department utilize physical fitness testing?	Yes
Q8: Does the physical fitness testing consist of job duty specific testing, fitness level testing (i.e. timed run, push-ups, sit-ups, etc.), or both?	Fitness level testing
Q9: Does the physical fitness testing follow a recognized standard or guideline? (i.e. NFPA, CPAT, etc.)	No
Q10: How often does physical fitness testing occur?	Annually
Q11: Who conducts the physical fitness testing?	Private contractor
Q12: Are new hires given the same physical fitness test as existing members?	Yes

Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

Q13: Do the physical fitness testing standards differ by age or gender?	Yes, by age
Q14: Is a successful medical evaluation required prior to participation in the physical fitness test?	Yes
Q15: Were existing members given a grace period for the minimum standards when the program was initiated?	Yes
Q16: What type of leave is a member placed on if they fail the medical evaluation?	None, they are allowed to continue working
Q17: Are members required to have physician follow-up following a failed medical evaluation?	Yes, a contracted physician provided by the department or governmental entity
Q18: How is a member cleared to resume duty following a failed medical evaluation?	After successful medical evaluation from original evaluator
Q19: Is the disciplinary process enacted after a certain period of time of a failed medical evaluation?	No
Q20: Is the member removed from duty for a failed physical fitness evaluation?	No
Q21: Is the disciplinary process initiated following a failed physical fitness evaluation?	Other (please specify) Progressive process per Collective Bargaining Agreement with engagement of Health & Fitness Committee and Occupational Health
Q22: Are members offered assistance following physical fitness testing? (i.e. personal training, nutrition counseling, etc.)	Yes
Q23: Do you consider your departments medical / physical fitness program a success?	Yes
Q24: Please identify any obstacles to a successful medical / physical fitness testing program.	<i>Respondent skipped this question</i>
Q25: Please give any additional comments that you may have that would add to this research project. Program is incentive based. Monetary bonus for different fitness levels achieved per CBA.	



Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

#5



COMPLETE

Collector: Web Link 1 (Web Link)

Started: Monday, May 18, 2015 8:29:02 AM

Last Modified: Monday, May 18, 2015 8:35:25 AM

Time Spent: 00:06:23

IP Address: 75.144.84.188

PAGE 1

Q1: Does your department currently conduct medical evaluations for its members?	Yes
Q2: Is this medical evaluation based on a recognized standard or guideline?	Yes, If so please list the standard. (i.e. NFPA, OSHA, etc.) Osha 1910.134
Q3: How often does your department conduct medical evaluations?	Other (please specify) once every two years
Q4: Who performs the medical evaluations?	Contracted Physician
Q5: Is the medical evaluation conducted in conjunction with physical fitness testing?	No
Q6: Do new hires get the same medical evaluation as the existing members?	Yes
Q7: Does your department utilize physical fitness testing?	No
Q8: Does the physical fitness testing consist of job duty specific testing, fitness level testing (i.e. timed run, push-ups, sit-ups, etc.), or both?	Respondent skipped this question
Q9: Does the physical fitness testing follow a recognized standard or guideline? (i.e. NFPA, CPAT, etc.)	No
Q10: How often does physical fitness testing occur?	Respondent skipped this question
Q11: Who conducts the physical fitness testing?	Respondent skipped this question


Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

Q12: Are new hires given the same physical fitness test as existing members?	<i>Respondent skipped this question</i>
Q13: Do the physical fitness testing standards differ by age or gender?	<i>Respondent skipped this question</i>
Q14: Is a successful medical evaluation required prior to participation in the physical fitness test?	<i>Respondent skipped this question</i>
Q15: Were existing members given a grace period for the minimum standards when the program was initiated?	<i>Respondent skipped this question</i>
Q16: What type of leave is a member placed on if they fail the medical evaluation?	Sick leave
Q17: Are members required to have physician follow-up following a failed medical evaluation?	Yes, a physician of their choice using their health insurance
Q18: How is a member cleared to resume duty following a failed medical evaluation?	With release from personal physician
Q19: Is the disciplinary process enacted after a certain period of time of a failed medical evaluation?	No
Q20: Is the member removed from duty for a failed physical fitness evaluation?	No
Q21: Is the disciplinary process initiated following a failed physical fitness evaluation?	No
Q22: Are members offered assistance following physical fitness testing? (i.e. personal training, nutrition counseling, etc.)	No
Q23: Do you consider your departments medical / physical fitness program a success?	Yes
Q24: Please identify any obstacles to a successful medical / physical fitness testing program.	<i>Respondent skipped this question</i>
<b>Q25: Please give any additional comments that you may have that would add to this research project.</b> We do not conduct physical fitness testing but we do Physical fitness training which is non punitive. All members are required to participate	

Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

<b>#6</b> 	<b>COMPLETE</b>
	Collector: Web Link 1 (Web Link)
	Started: Monday, May 18, 2015 8:29:02 AM
	Last Modified: Monday, May 18, 2015 8:35:25 AM
	Time Spent: 00:06:23
	IP Address: 75.144.84.188

PAGE 1

<b>Q1: Does your department currently conduct medical evaluations for its members?</b>	Yes
<b>Q2: Is this medical evaluation based on a recognized standard or guideline?</b>	Yes, If so please list the standard. (i.e. NFPA, OSHA, etc.) Osha 1910.134
<b>Q3: How often does your department conduct medical evaluations?</b>	Other (please specify) once every two years
<b>Q4: Who performs the medical evaluations?</b>	Contracted Physician
<b>Q5: Is the medical evaluation conducted in conjunction with physical fitness testing?</b>	No
<b>Q6: Do new hires get the same medical evaluation as the existing members?</b>	Yes
<b>Q7: Does your department utilize physical fitness testing?</b>	No
<b>Q8: Does the physical fitness testing consist of job duty specific testing, fitness level testing (i.e. timed run, push-ups, sit-ups, etc.), or both?</b>	Respondent skipped this question
<b>Q9: Does the physical fitness testing follow a recognized standard or guideline? (i.e. NFPA, CPAT, etc.)</b>	No
<b>Q10: How often does physical fitness testing occur?</b>	Respondent skipped this question
<b>Q11: Who conducts the physical fitness testing?</b>	Respondent skipped this question

Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

Q12: Are new hires given the same physical fitness test as existing members?	<i>Respondent skipped this question</i>
Q13: Do the physical fitness testing standards differ by age or gender?	<i>Respondent skipped this question</i>
Q14: Is a successful medical evaluation required prior to participation in the physical fitness test?	<i>Respondent skipped this question</i>
Q15: Were existing members given a grace period for the minimum standards when the program was initiated?	<i>Respondent skipped this question</i>
Q16: What type of leave is a member placed on if they fail the medical evaluation?	Sick leave
Q17: Are members required to have physician follow-up following a failed medical evaluation?	Yes, a physician of their choice using their health insurance
Q18: How is a member cleared to resume duty following a failed medical evaluation?	With release from personal physician
Q19: Is the disciplinary process enacted after a certain period of time of a failed medical evaluation?	No
Q20: Is the member removed from duty for a failed physical fitness evaluation?	No
Q21: Is the disciplinary process initiated following a failed physical fitness evaluation?	No
Q22: Are members offered assistance following physical fitness testing? (i.e. personal training, nutrition counseling, etc.)	No
Q23: Do you consider your departments medical / physical fitness program a success?	Yes
Q24: Please identify any obstacles to a successful medical / physical fitness testing program.	<i>Respondent skipped this question</i>
<b>Q25: Please give any additional comments that you may have that would add to this research project.</b> We do not conduct physical fitness testing but we do Physical fitness training which is non punitive. All members are required to participate	

Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

#7



COMPLETE

Collector: Web Link 1 (Web Link)

Started: Monday, May 18, 2015 10:51:25 AM

Last Modified: Monday, May 18, 2015 10:54:17 AM

Time Spent: 00:02:51

IP Address: 198.0.105.65

PAGE 1

Q1: Does your department currently conduct medical evaluations for its members?	Yes
Q2: Is this medical evaluation based on a recognized standard or guideline?	No
Q3: How often does your department conduct medical evaluations?	Annually
Q4: Who performs the medical evaluations?	Contracted Physician
Q5: Is the medical evaluation conducted in conjunction with physical fitness testing?	No
Q6: Do new hires get the same medical evaluation as the existing members?	Yes
Q7: Does your department utilize physical fitness testing?	No
Q8: Does the physical fitness testing consist of job duty specific testing, fitness level testing (i.e. timed run, push-ups, sit-ups, etc.), or both?	Respondent skipped this question
Q9: Does the physical fitness testing follow a recognized standard or guideline? (i.e. NFPA, CPAT, etc.)	No
Q10: How often does physical fitness testing occur?	Other (please specify) only at date of hire
Q11: Who conducts the physical fitness testing?	Other department within jurisdiction
Q12: Are new hires given the same physical fitness test as existing members?	No

Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

Q13: Do the physical fitness testing standards differ by age or gender?	No
Q14: Is a successful medical evaluation required prior to participation in the physical fitness test?	Yes
Q15: Were existing members given a grace period for the minimum standards when the program was initiated?	No
Q16: What type of leave is a member placed on if they fail the medical evaluation?	Administrative leave
Q17: Are members required to have physician follow-up following a failed medical evaluation?	Yes, a contracted physician provided by the department or governmental entity
Q18: How is a member cleared to resume duty following a failed medical evaluation?	After successful medical evaluation from original evaluator
Q19: Is the disciplinary process enacted after a certain period of time of a failed medical evaluation?	No
Q20: Is the member removed from duty for a failed physical fitness evaluation?	No
Q21: Is the disciplinary process initiated following a failed physical fitness evaluation?	No
Q22: Are members offered assistance following physical fitness testing? (i.e. personal training, nutrition counseling, etc.)	No
Q23: Do you consider your departments medical / physical fitness program a success?	No
Q24: Please identify any obstacles to a successful medical / physical fitness testing program.	<i>Respondent skipped this question</i>
Q25: Please give any additional comments that you may have that would add to this research project.	<i>Respondent skipped this question</i>

Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

#8



COMPLETE

Collector: Web Link 1 (Web Link)  
 Started: Tuesday, May 19, 2015 3:06:51 PM  
 Last Modified: Tuesday, May 19, 2015 3:11:42 PM  
 Time Spent: 00:04:50  
 IP Address: 207.74.77.55

PAGE 1

Q1: Does your department currently conduct medical evaluations for its members?	No
Q2: Is this medical evaluation based on a recognized standard or guideline?	No
Q3: How often does your department conduct medical evaluations?	Other (please specify) On initial hire only
Q4: Who performs the medical evaluations?	Contracted Physician
Q5: Is the medical evaluation conducted in conjunction with physical fitness testing?	No
Q6: Do new hires get the same medical evaluation as the existing members?	Yes, Please describe if evaluations differ. Existing are not evaluated
Q7: Does your department utilize physical fitness testing?	Yes
Q8: Does the physical fitness testing consist of job duty specific testing, fitness level testing (i.e. timed run, push-ups, sit-ups, etc.), or both?	Job duty specific testing
Q9: Does the physical fitness testing follow a recognized standard or guideline? (i.e. NFPA, CPAT, etc.)	Yes, If yes, please specify what standard is utilized. CPAT
Q10: How often does physical fitness testing occur?	Other (please specify) On initial hire only
Q11: Who conducts the physical fitness testing?	Private contractor

Components of periodic medical and physical fitness evaluations for the fire service


SurveyMonkey

<b>Q12: Are new hires given the same physical fitness test as existing members?</b>	No, If tests differ please describe. No testing of existing members
<b>Q13: Do the physical fitness testing standards differ by age or gender?</b>	No
<b>Q14: Is a successful medical evaluation required prior to participation in the physical fitness test?</b>	No
<b>Q15: Were existing members given a grace period for the minimum standards when the program was initiated?</b>	No, If yes, how long was the grace period? Existing members only evaluated for cause
<b>Q16: What type of leave is a member placed on if they fail the medical evaluation?</b>	Sick leave
<b>Q17: Are members required to have physician follow-up following a failed medical evaluation?</b>	Yes, an in-house physician
<b>Q18: How is a member cleared to resume duty following a failed medical evaluation?</b>	After successful medical evaluation from original evaluator
<b>Q19: Is the disciplinary process enacted after a certain period of time of a failed medical evaluation?</b>	No
<b>Q20: Is the member removed from duty for a failed physical fitness evaluation?</b>	Yes
<b>Q21: Is the disciplinary process initiated following a failed physical fitness evaluation?</b>	No
<b>Q22: Are members offered assistance following physical fitness testing? (i.e. personal training, nutrition counseling, etc.)</b>	No
<b>Q23: Do you consider your departments medical / physical fitness program a success?</b>	No
<b>Q24: Please identify any obstacles to a successful medical / physical fitness testing program.</b> Union will not support mandatory program. City administration is not supportive and would not consider any program that is not mandatory.	
<b>Q25: Please give any additional comments that you may have that would add to this research project.</b> Sorry we can't be of more help. Best wishes on your ARP :)	



Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

#9	 <p><b>COMPLETE</b>  <b>Collector:</b> Web Link 1 (Web Link)  <b>Started:</b> Wednesday, May 20, 2015 8:59:15 AM  <b>Last Modified:</b> Wednesday, May 20, 2015 9:01:35 AM  <b>Time Spent:</b> 00:02:19  <b>IP Address:</b> 173.13.31.185</p>
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PAGE 1

Q1: Does your department currently conduct medical evaluations for its members?	No
Q2: Is this medical evaluation based on a recognized standard or guideline?	No
Q3: How often does your department conduct medical evaluations?	Other (please specify) N/A
Q4: Who performs the medical evaluations?	Other (please specify) N/A
Q5: Is the medical evaluation conducted in conjunction with physical fitness testing?	No
Q6: Do new hires get the same medical evaluation as the existing members?	No, Please describe if evaluations differ. Entry physical and drug screen
Q7: Does your department utilize physical fitness testing?	Yes
Q8: Does the physical fitness testing consist of job duty specific testing, fitness level testing (i.e. timed run, push-ups, sit-ups, etc.), or both?	Job duty specific testing
Q9: Does the physical fitness testing follow a recognized standard or guideline? (i.e. NFPA, CPAT, etc.)	Yes, If yes, please specify what standard is utilized. CPAT
Q10: How often does physical fitness testing occur?	Other (please specify) Before hire
Q11: Who conducts the physical fitness testing?	Private contractor
Q12: Are new hires given the same physical fitness test as existing members?	No

Components of periodic medical and physical fitness evaluations for the fire service


SurveyMonkey

Q13: Do the physical fitness testing standards differ by age or gender?	No
Q14: Is a successful medical evaluation required prior to participation in the physical fitness test?	No
Q15: Were existing members given a grace period for the minimum standards when the program was initiated?	No
Q16: What type of leave is a member placed on if they fail the medical evaluation?	None, they are allowed to continue working
Q17: Are members required to have physician follow-up following a failed medical evaluation?	No
Q18: How is a member cleared to resume duty following a failed medical evaluation?	Other (please specify) N/A
Q19: Is the disciplinary process enacted after a certain period of time of a failed medical evaluation?	No
Q20: Is the member removed from duty for a failed physical fitness evaluation?	No
Q21: Is the disciplinary process initiated following a failed physical fitness evaluation?	Other (please specify) N/A
Q22: Are members offered assistance following physical fitness testing? (i.e. personal training, nutrition counseling, etc.)	If yes, please describe. N/A
Q23: Do you consider your departments medical / physical fitness program a success?	No
Q24: Please identify any obstacles to a successful medical / physical fitness testing program.	<i>Respondent skipped this question</i>
Q25: Please give any additional comments that you may have that would add to this research project.	<i>Respondent skipped this question</i>

Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

#10



**COMPLETE**

Collector: Web Link 1 (Web Link)  
 Started: Friday, May 29, 2015 3:10:49 PM  
 Last Modified: Friday, May 29, 2015 3:22:02 PM  
 Time Spent: 00:11:12  
 IP Address: 209.252.211.194

PAGE 1

Q1: Does your department currently conduct medical evaluations for its members?	Yes
Q2: Is this medical evaluation based on a recognized standard or guideline?	Yes,  If so please list the standard. (i.e. NFPA, OSHA, etc.) Program offer thru local Hospital
Q3: How often does your department conduct medical evaluations?	Annually
Q4: Who performs the medical evaluations?	Member's own Physician
Q5: Is the medical evaluation conducted in conjunction with physical fitness testing?	Yes
Q6: Do new hires get the same medical evaluation as the existing members?	No,  Please describe if evaluations differ. MDOT Physical for Pre Employment
Q7: Does your department utilize physical fitness testing?	No
Q8: Does the physical fitness testing consist of job duty specific testing, fitness level testing (i.e. timed run, push-ups, sit-ups, etc.), or both?	Respondent skipped this question
Q9: Does the physical fitness testing follow a recognized standard or guideline? (i.e. NFPA, CPAT, etc.)	Respondent skipped this question
Q10: How often does physical fitness testing occur?	Respondent skipped this question
Q11: Who conducts the physical fitness testing?	Respondent skipped this question

Components of periodic medical and physical fitness evaluations for the fire service

SurveyMonkey

Q12: Are new hires given the same physical fitness test as existing members?	<i>Respondent skipped this question</i>
Q13: Do the physical fitness testing standards differ by age or gender?	<i>Respondent skipped this question</i>
Q14: Is a successful medical evaluation required prior to participation in the physical fitness test?	<i>Respondent skipped this question</i>
Q15: Were existing members given a grace period for the minimum standards when the program was initiated?	Yes, If yes, how long was the grace period? 1 or 2 year
Q16: What type of leave is a member placed on if they fail the medical evaluation?	None, they are allowed to continue working
Q17: Are members required to have physician follow-up following a failed medical evaluation?	Yes, other (please specify) It depends it could be with either physician
Q18: How is a member cleared to resume duty following a failed medical evaluation?	Other (please specify) In house medical evaluation.
Q19: Is the disciplinary process enacted after a certain period of time of a failed medical evaluation?	No
Q20: Is the member removed from duty for a failed physical fitness evaluation?	No
Q21: Is the disciplinary process initiated following a failed physical fitness evaluation?	No
Q22: Are members offered assistance following physical fitness testing? (i.e. personal training, nutrition counseling, etc.)	Yes, If yes, please describe. counseling
Q23: Do you consider your departments medical / physical fitness program a success?	No
Q24: Please identify any obstacles to a successful medical / physical fitness testing program.	Getting employee buy in is the challenge. The Administration needs to start out voluntary then be happy with whatever participation.
Q25: Please give any additional comments that you may have that would add to this research project.	FF's are hard to break tradition. Time, bargaining and younger employees can help the transition.

## Appendix D

Questions posed during an interview conducted with Chief Tom Belt on July 27, 2015, at the #1 fire station in Marquette, Michigan.

1. Can you identify any obstacles to the implementation of the draft policy from the department or City administration's viewpoint?
2. What are some possible solutions to the monetary cost/ budgeting problem?

## Appendix E

Questions posed during interviews conducted with union Local 643 President Kurt Hillier on July 29, 2015, and Vice President Kirk Vogler on July 30, 2015, at the #1 fire station in Marquette, Michigan.

1. Can you identify any obstacles to the implementation of the draft policy from the viewpoint of union Local 643?

Appendix F

## **Marquette City Fire Department**

**Policy Number: 2015-1**

**Revision Date:**

**Date Adopted:**

**SUBJECT:**

Occupational Medical Program

**PURPOSE:**

The purpose of this policy is to define a mandatory occupational medical and physical fitness evaluation program that reduces morbidity and mortality while improving the health, safety, and effectiveness of firefighters working to protect life and property. The program is geared to be constructive, progressive and non-punitive, based on the current recommendations of the Fire Service Joint Labor Management Wellness-Fitness Initiative and the National Fire Protection Association (NFPA) 1582 Standard on Comprehensive Occupational Medical Program.

**SCOPE:**

The policy applies to all uniformed members of the Marquette City Fire Department.

**RESPONSIBILITY:**

It is the responsibility of the Fire Chief or designee to review and update this policy.

**DEFINITIONS:**

City: The City of Marquette

Department: Marquette City Fire Department

Fitness Coordinator: The Fire Chief or designee

Morbidity: A diseased condition or state

Mortality: The rate of death

## **PROGRAM REQUIREMENTS**

- The medical and physical fitness evaluations shall be conducted after adoption of the policy as a baseline and every 12 months thereafter (+/-3 months).
- Medical evaluations shall be conducted by the City's contracted physician. Physical fitness evaluations shall be conducted by the Department Fitness Coordinator.
- Medical clearance must be obtained before participation in the physical fitness evaluation.
- Medical and physical fitness evaluations shall follow the exact protocols outlined in the Fire Service Joint Labor Management Wellness-Fitness Initiative and the National Fire Protection Association (NFPA) 1582 Standard on Comprehensive Occupational Medical Program.
- Testing for illegal drugs shall not be performed as a part of the medical evaluation.

## **PROGRAM COSTS**

- The City shall be responsible for the expenses associated with the administration and execution of the Occupational Medical and Physical Fitness Program.

## **PROGRAM RESULTS**

- All medical information shall be confidential and shall not be released unless written permission is obtained from the concerned individual.
- Results shall be recorded in the member's confidential Department medical record.
- The Fitness Coordinator will provide the City's contracted physician with all physical fitness evaluation results.



- All medical and physical fitness evaluation results shall be compared to the member's prior evaluation results to identify clinically relevant changes.
- Department members will receive a report of their results, including feedback and health status from the City's contracted physician.
- If, during the course of the occupational medical evaluations, the City's contracted physician finds any abnormalities in any of the tests being conducted, the member may be required to see their personal physician for additional testing or procedures.
- The costs associated with any follow-up appointments, testing, or procedures will be the responsibility of the member.
- Based on a complete medical and physical fitness evaluation, the City's contract physician will provide written documentation that indicates that the individual member is or is not medically cleared to perform the essential job tasks with or without physical restrictions. The written notification will be forwarded directly to the Fire Chief. This clearance for or restriction from duty will be kept in the individual's personnel file.
- If the City's contract physician states that the member is not medically cleared to perform the essential job tasks, the member and the member's personal physician, in consultation with the City's contracted physician shall determine a corrective course of action that may presumably lead to the restoration of full duty status.
- Until medical clearance is obtained, the member may be placed on light duty assignment or medical leave, as determined by the Fire Chief in consultation with the City's contracted physician.
- Medical leave is terminated when the City's contracted physician provides medical clearance for light-or full-duty assignment.

- Light duty assignment is terminated when the City's contracted physician provides medical clearance for full duty.
- Any costs associated with corrective actions or rehabilitation will be the responsibility of the member.
- If the member has more than one job function with the department (i.e. paramedic) the member will be medically evaluated as to his ability to perform each separate job function. The member may be on light duty or medical leave from one job function while performing another job function.

Appendix G

**Marquette City Fire Department**

**Policy Number: 2015-1**

**Revision Date:**

**Date Adopted:**

**SUBJECT:**

Occupational Medical Program

**PURPOSE:**

The purpose of this policy is to define a mandatory occupational medical and physical fitness evaluation program that reduces morbidity and mortality while improving the health, safety, and effectiveness of firefighters working to protect life and property. The program is geared to be constructive, progressive and non-punitive based on the current recommendations of the Fire Service Joint Labor Management Wellness-Fitness Initiative and the National Fire Protection Association (NFPA) 1582 Standard on Comprehensive Occupational Medical Program.

**SCOPE:**

The policy applies to all uniformed members of the Marquette City Fire Department.

**RESPONSIBILITY:**

It is the responsibility of the Fire Chief or designee to review and update this policy.

**DEFINITIONS:**

City: The City of Marquette

Department: Marquette City Fire Department

Fitness Coordinator: The Fire Chief or designee

Member – Individual department member

Morbidity: A diseased condition or state

Mortality: The rate of death

## **PROGRAM REQUIREMENTS**

- The medical and physical fitness evaluations shall be conducted after adoption of the policy as a baseline and every 12 months thereafter (+/-3 months).
- Medical evaluations shall be conducted by the member's personal physician. Medical evaluations will be conducted during duty hours, if possible. Medical evaluations may have to be conducted during off-duty hours due to scheduling or staffing restrictions. Members will be compensated pursuant to the current collective bargaining agreement.
- Physical fitness evaluations shall be conducted by the department Fitness Coordinator during duty hours.
- Medical clearance must be obtained before participation in the physical fitness evaluation.
- Medical and physical fitness evaluations shall follow the protocols outlined in The Fire Service Joint Labor Management Wellness-Fitness Initiative and the National Fire Protection Association (NFPA) 1582 Standard on Comprehensive Occupational Medical Program.
- Testing for illegal drugs shall not be performed as a part of the medical evaluation.

## **PROGRAM COSTS**

- The member shall be responsible for the expenses associated with the administration and execution of the medical evaluation.

- The City shall be responsible for the expenses associated with the administration and execution of the physical fitness evaluation.

## **PROGRAM RESULTS**

- All medical information shall be confidential and shall not be released unless written permission is obtained from the concerned individual.
- Results shall be recorded in the member's confidential Department medical record.
- The member's personal physician will provide the City's contracted physician with all medical evaluation results.
- The Fitness Coordinator will provide the City's contracted physician with all physical fitness evaluation results.
- All medical and physical fitness evaluation results shall be compared to the member's prior evaluation results to identify clinically relevant changes.
- Department members will receive a report of their results, including feedback and health status from the City's contracted physician.
- Any costs associated with follow up appointments, testing, or procedures will be the responsibility of the member.
- Based on a complete medical and physical fitness evaluation, the City's contracted physician will provide written documentation that indicates that the individual member is or is not medically cleared to perform the essential job tasks with or without physical restrictions. The written notification will be forwarded directly to the Fire Chief. This clearance for or restriction from duty will be kept in the individual's personnel file.
- If the City's contracted physician states that the member is not medically cleared to perform the essential job tasks, the member and the member's personal physician, in

consultation with the City's contracted physician shall determine a corrective course of action that may presumably lead to the restoration of full duty status.

- Until medical clearance is obtained, the member may be placed on limited duty assignment or medical leave, as determined by the Fire Chief in consultation with the City's contracted physician.
- Medical leave is terminated when the City's contracted physician provides medical clearance for limited-or full-duty assignment.
- Limited duty assignment is terminated after sixty days or when the City's contracted physician provides medical clearance for full duty.
- The costs associated with any corrective actions or rehabilitation will be the responsibility of the member.
- If the member has more than one job function with the department (i.e. paramedic) the member will be medically evaluated as to his ability to perform each separate job function. The member may be on limited duty or medical leave from one job function while performing another job function.