

Rules and Regulations

Administrative Regulations
Policy 122.0
Health and Fitness



Purpose:

Firefighting is an inherently dangerous occupation. The risk of injury and death are always present. Injuries from lifting, dragging, pulling, and pushing the heavy tools and equipment associated with firefighting are quite common. The stress alone from situations handled by firefighters may be enough to send them to the Emergency Room. Unfortunately, heart attacks still remain one of the largest killers of firefighters.

The most vital resource of The City of Bryan Fire Department is its firefighters. The implementation of this program is aimed at improving the health and wellness of every firefighter. Through health and wellness the ever present risk of injury and death may be reduced.

The fire department will make every effort to educate its firefighters about the benefits of exercise and wellness. The goal of the program is to promote positive lifestyle changes through education on wellness and exercise. The definition of wellness, according to Dictionary.com, “Is the quality or state of being healthy in body and mind, esp. as the result of deliberate effort.” The “deliberate effort” is taking a proactive role in one’s own health. The City of Bryan Fire Department will promote wellness by encouraging positive changes in not only physical health, but behavioral health as well.

Policy:

Health and Fitness Program

The scope of the Health and Fitness Program relates to all firefighters on the City of Bryan Fire Department. All firefighters will comply with all components of this program. The three main components addressed by the program are medical, fitness, and behavioral health.

A health and fitness coordinator (HFC) will be appointed by the fire chief. The HFC will coordinate and be responsible for the health and fitness programs of the Fire Department.

The HFC will have access to the department physician as needed for consultation. The HFC will be the administrator of all components of the Health and Fitness Program. The HFC will have access to educational materials, and maintain continuing education requirements set forth by the certifying body. The HFC will maintain all necessary records and comply with all confidentiality regulations.

A Peer Fitness Trainer will work under the HFC to oversee the correct participation in the Health and Fitness Program. The Peer Fitness Trainer will have level of

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training/certification as required by fire department and will maintain their certifications as required.

Medical Evaluation

This standard will reflect aspects of NFPA #1582 Comprehensive Occupational Medical Program for Fire Departments and NFPA #1583 Health Related Fitness Program for Firefighters. All Firefighters will be medically cleared prior to beginning any fitness assessment or fitness program. Department personnel will fully cooperate, participate, and comply with the medical evaluation process. Personnel will comply with and provide accurate information to all medical personnel.

Members will report to their own physician any medical condition that could interfere with the ability of the individual to safely perform essential job tasks, such as illness or injury, use of prescription or non-prescription drugs.

Each medical evaluation will include but not be limited to medical history, physical examination, ECG, Chest X-Ray, Vision Test, Hearing Test, Vitals, Pulmonary Function Test, Blood Analysis, Prostate specific antigen, and Urinalysis. The annual medical evaluation will meet the requirements set forth in NFPA 1582.

At the conclusion of the physical examination, the physician will certify that the firefighter is able to perform the duties of firefighter.

If an employee requires additional testing outside of what is included in the standard physical evaluation to become medically cleared for duty, the following procedure is to be followed:

- a. Notify the Fire Chief of your status and the name of the test being performed.
- b. A copy of the City of Bryan Fire Department Medical Standards will be given to the firefighter, who in turn will give it to their physician. The physician will review the standards and sign-off stating that the firefighter is fit for unrestricted duty.
- c. If the test results are such that you are still not cleared for normal duty. Further testing after a diagnosis is the sole responsibility of the employee.
- d. Medical procedures of any kind that are required for you to return to normal duty are to be filed with your insurance company and the employee is responsible for all deductible cost.

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If a member receives a designation of not physically capable of safely performing the job, or capable with accommodation; the physician will supply a general diagnosis of the problem to the Fire Chief. The information provided by the Physician is limited to only the amount needed by the City to complete their required duties and will not include other confidential information that is unrelated to the diagnosis.

Fitness Assessment

All firefighters will participate in a periodic fitness assessment supervised by an approved Exercise Specialist. The fitness assessment will be done at least annually. Only firefighters who are deemed medically fit for active duty will participate in the fitness assessment. Any medical condition, disease, or personal limitation in participation of an annual fitness assessment must be addressed by a physician. The fitness assessment will be postponed so as to provide appropriate recovery time as prescribed by the physician for any medical condition limiting the firefighter's condition. The HFC will provide a pre-assessment questionnaire to recognize any contraindications for the fitness assessment and Health and Fitness Program. All confidentiality will be respected by the Exercise Specialist.

The components of the Fitness assessment should as a minimum be as follows:

- Aerobic Capacity
- Body Composition
- Muscular Strength
- Muscular Endurance
- Flexibility

Following the fitness assessment, the exercise specialist will collect this data and propose a fitness schedule to the firefighter. Ultimately, it is the firefighters' choice to follow this program. He or she may use another fitness program. However, depending on their level of fitness it may be best to follow the recommendation of the exercise/fitness specialist.

Exercise and Fitness Training Program

The goal of the program is to enhance the firefighter's present level of fitness so they may be able to perform their duties safely. By enhancing their personal level of fitness, their risk of injury or death may be reduced. The program is intended to benefit the health and fitness of the firefighters.

The program will consist of the following components:

1. Cardiovascular Fitness
2. Strength Training

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3. Flexibility Training

Cardiovascular Fitness: The goals of the cardiovascular portion of the fitness program are to improve performance, improve health, prevent injury, decrease the risk of heart attack, and increase heat tolerance.

The first step is for the firefighter who is not already exercising regularly, to increase daily activity. Leisure walking and general house and yard work are low-intensity activities that can prepare the firefighter for the next step in fitness. Not only will this improve their health, but it also creates a more positive, active image for first responders in the community. At the next level, participants could engage in moderate intensity exercise for 30 or more minutes a minimum of three times per week. This can include such activities as a brisk walk or a bicycle ride. Firefighters should set a pace with which they are comfortable and increase the pace as they wish.

As participants become comfortable with the moderate level, they could transition to a higher intensity exercise. Once again, participants set their own pace. Depending on the needs of the individual, this exercise could be performed in a gym, at the department, or at home.

Strength Training: The goals of strength training are to protect against injury, improve performance, maintain the appropriate body composition, and improve health. An appropriate strength-training regimen includes a progressive weight lifting and calisthenics program. These exercises should be performed two to four times per week, working the major muscle groups twice a week.

A weight-training regimen includes a minimum of one to three sets of six to 12 repetitions each day at a comfortable weight. Individuals should begin with one set at a lower weight level and work up to three sets at a higher weight level. Participants, however, need to progress at their own pace. Ideally, the selection of exercises should emulate first responder activities for the weight training to improve job performance.

A calisthenics routine may include sit-ups, pull-ups, and crunches plus a selection of exercises aimed at strengthening and stabilizing the core muscle group. Here too, participants should progress at their own pace.

Weight lifting and calisthenics can be done at a fitness center, in the department's fitness room, or at home.

Flexibility Training: The goal of flexibility training is to prevent injuries, especially to the lower back. Participants engage in moderate stretching, holding each stretch for 10 to 30 seconds. Although stretching is encouraged prior to exercise or physical activity, the

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greatest gains in flexibility are made after exercise, when muscles are warm. Therefore, stretching should be done both as a warm-up and after exercise. Strength and flexibility go hand-in-hand. Increasing both simultaneously will improve first responder performance and decrease the risk for injury.

Exercise Safety: Prior to beginning any type of fitness training, it is important for the participant to perform appropriate warm-up exercises and stretching to prevent injuring muscles and joints. Also, following any type of fitness training, the participant should perform the appropriate cool-down and stretches to prevent some muscular soreness.

Every participant in the physical fitness program must be aware of the indications of overexertion when participating in any physical activity. When any of the following symptoms develop, stop the activity immediately. If necessary, appropriate medical care should be obtained.

1. Tightness or pain in chest
2. Numbness or pain in extremities
3. Severe breathlessness
4. Lightheadedness with loss of balance
5. Loss of bowel/bladder control
6. Severe nausea
7. Unusual or severe pain, anywhere
8. Loss of coordination

Behavioral Modification

Behavioral modification is another core component of a comprehensive health and wellness program. Firefighters and emergency services personnel will want to address any preexisting health conditions and personal behaviors that heighten their risks of Cardiovascular Disease (CVD) or other injuries. CVD is by far the leading cause of firefighter deaths in the United States. Smoking, hypertension, an unhealthy diet, unmanaged cholesterol, unmanaged diabetes, and high blood glucose levels are all contributors to CVD, and each can be modified.

Smoking: Smoking cessation is one of the most important interventions for preventing CVD. Smoking cessation reduces the risk of the first heart attack by 65 percent. The strategies to reduce the risk of CVD associated with smoking are straightforward:

- Individuals can attend a smoking cessation program, employ nicotine replacement therapy, or discuss medication options with their physician. Over-the-counter and prescription medications are available to help overcome the smoking addiction.

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- Departments can aggressively promote smoking cessation programs available through local hospitals and other health agencies and consider sponsoring programs for their employees.
- Departments can ban smoking among personnel at the station.
- Departments can implement regulations that protect personnel from second-hand smoke at the station.

Hypertension: Strategies to reduce the risk of CVD associated with hypertension are varied and often overlapping. The degree of risk and the appropriate interventions depend on the degree of hypertension and the presence of additional risk factors. Individuals with elevated blood pressure, even high-normal blood pressure, should consult with their physician. During the consultation, the physician needs to be made aware of the types of job stresses encountered in emergency response. The physician may recommend drug therapy to treat hypertension, but lifestyle modifications also should be used in conjunction with medication. In fact, lifestyle modifications may be sufficient to avoid medication or to prevent the need for medication.

Diet: An appropriate diet is an important factor in the prevention of CVD. In general, the three primary objectives of diet modification are

1. Attaining ideal body weight.
2. Ensuring a well-balanced diet high in fruits and vegetables.
3. Restricting saturated fats and simple, refined carbohydrates (sugars).

In general, less than 30 percent of daily calorie intake should be from fats (with less than 10 percent of calories coming from saturated fats). Cholesterol intake should be less than 300 mg/day. Because of growing evidence that Omega-3 fatty acids protect against CVD, it is commonly recommended that individuals eat fish one or two times per week.

Facilities and Equipment

The City of Bryan Fire Department Fitness room is available for use to all City of Bryan Fire Department firefighters and family members, (spouses, children, or significant other), 24 hours a day, seven days a week. All persons using the City of Bryan Fire Department Fitness Room must sign-in. All participants must also record the amount of time they use the fitness room. Minimum attire while using the fitness room are shorts, t-shirt, athletic shoes, and socks.

Firefighters and family members, (spouses, children, or significant other), must be medically cleared prior to using any exercise equipment in the fitness room. Family members who want to use the fitness room can obtain appropriate documentation from the Fire Chief. The documentation needs to be signed by the physician and returned to the Fire Chief. This must be done on an annual basis. Minor children can only use

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fitness room when their parents are present. Firefighters and family members must be trained on all fitness equipment prior to use. In addition to the annual medical clearance family members must also sign a waiver annually, before using the fitness facility.

Bryan Fire Department Explorers are allowed to use the fitness facility as a group, with an advisor present. They must also be medically cleared prior to using any exercise equipment in the fitness room. Explorers who want to use the fitness room can obtain appropriate documentation from the Fire Chief. The documentation needs to be signed by the physician and returned to the Fire Chief. This must be done on an annual basis.

All firefighters have a responsibility of maintaining equipment and appearance of the Fitness Room. Any equipment failures need to be reported as soon as possible. All fitness equipment must be cleaned with the provided cleaning material, after completion of their workout. Firefighters may not bring any food or beverages, other than water, into the Fitness Room. Smokeless tobacco use is prohibited in the fitness room.

Injuries that occur during the use of the City of Bryan Fire Department Fitness Room must be reported to the Fire Chief immediately.