

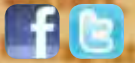
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9-11 Will Never Be Forgotten

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THE ROLE OF FIRE DEPARTMENTS IN HEALTH AND FITNESS

By Matt Brzycki

Firefighting is a highly strenuous job that requires an above-average level of health and fitness. Being healthy and fit is beneficial not only to the individual firefighter but also to others in the fire department and the general public.

Fire departments can play a key role in the physical preparedness of their firefighters – career as well as volunteer – by encouraging participation in a health and fitness program and providing opportunities to do so.

PROGRAM COMPONENTS

An effective health and fitness program for firefighters can be implemented with a four-pronged approach, involving wellness screenings, health education, physical training and job-specific testing. Let's take a detailed look at each of these components.

WELLNESS SCREENINGS

There are at least two reasons why screenings should be done. First, screenings can collect data on the health and fitness of firefighters that can be compared to future screenings. Second, screenings can identify problem areas and/or medical conditions that may impact a firefighter's health and/or job performance.

Firefighters should be screened on a periodic basis. Screenings should include measures of height, weight, body composition, Body-Mass Index, resting heart rate and blood pressure, cholesterol, joint flexibility, aerobic fitness, anaerobic fitness and muscular strength.

HEALTH EDUCATION

It's important that fire departments provide educational offerings for their personnel. Arming firefighters with solid information can give them direction and purpose.

A good idea is to use topics that relate to the wellness screenings. For example, workshops can be given on how to decrease blood pressure and how to improve flexibility. Other relevant topics are weight management, basic nutrition, low-back care, injury prevention, smoking cessation, stress management, diabetes and cholesterol.

Fire departments can tap into local resources for individuals to conduct workshops. Qualified educators who may volunteer their time can be found at hospitals, colleges, YMCAs, fitness centers and high schools. Nonetheless, it's wise to check their backgrounds and credentials to make sure that the person is really a resident expert and not the village quack.

PHYSICAL TRAINING

Firefighters should engage in four different types of physical training: **flexibility, aerobic, anaerobic and strength.**

- **Flexibility Training.** Being more flexible enables firefighters to exert their strength over a greater range of motion. Improving flexibility also allows firefighters to move their joints through a greater range of motion which makes it easier for them to perform job-related functions that might otherwise be difficult such as entering or exiting through a window while wearing restrictive gear.



- **Aerobic Training.** Firefighters who have a high level of aerobic fitness can function for longer periods of time at a lower heart rate. This aerobic advantage means that they can perform job-specific tasks with less effort since their heart won't have to work as hard. Also, aerobic training helps to modify several factors that contribute to the risk of coronary artery disease and heart attack (which is the leading cause of on-duty death among firefighters).

- **Anaerobic Training.** In contrast to the low-intensity, long-duration efforts of aerobic training, anaerobic training involves a series of high-intensity, short-duration efforts. These types of efforts are the ones that firefighters might normally employ in the performance of their jobs.

- **Strength Training.** Increasing strength improves a firefighter's capacity to execute job-specific tasks more easily and be more resistant to fatigue. In addition, strengthening muscles, bones and connective tissues can reduce the frequency and severity of injuries. Strength training also increases muscle mass and decreases body fat which makes a firefighter more functional.

JOB-SPECIFIC TESTING

The main purpose of fitness testing is to evaluate physical readiness. Traditional fitness testing – such as that which employs push-ups, sit-ups/crunches and other calisthenic-type activities – is certainly a means of assessing fitness and, to some degree, readiness. However, it falls short of evaluating whether or not someone is physically prepared to perform the strenuous duties of a firefighter. The best way to do this is to administer job-specific (aka fit-for-duty) testing.

The fact of the matter is that fitness testing for firefighters must be representative of the job requirements of firefighters. In other words, the tests must measure their ability to perform specific jobs that they're most likely to encounter in the line of duty. Suffice it to say, push-ups and sit-ups/crunches don't pass muster.

A great example of a job-specific test is the Candidate Physical Ability Test (CPAT). Developed by the International Association of Fire Chiefs and the International Association of Fire Fighters, this pass/fail test consists of eight job-specific elements that are done in a continuous circuit, including a stair climb, hose drag, equipment carry and forcible entry. Furthermore, the CPAT is taken while wearing a 50-pound vest to simulate the weight of self-contained breathing apparatus and protective clothing along with safety gloves and hard helmet.

Though the CPAT was intended to vet candidates as part of pre-employment screening, there's no reason why it can't be used to evaluate veteran firefighters. Job-specific testing should be conducted at least twice per year, preferably every quarter.

Bottom line: By implementing the aforementioned components, a fire department can help its firefighters enhance their health and fitness and, at the same time, maintain a constant state of physical readiness.

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