

A Fire/EMS/Safety CENTER PUBLICATION



FIREFIGHTER PHYSICAL EXAMINATIONS: PERIODIC AND ENTRANCE

Original: August 1992
Revised: September 1996

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I. FIRE DEPARTMENT PERIODIC PHYSICAL EXAMINATIONS

- A. What are a Fire Chief's responsibilities regarding physical examinations for fire department employees?
1. If you expect fire department employees to respond to **hazardous materials incidents** as part of a designated Hazardous Materials team, then baseline and annual physical exams are required for those persons. HAZMAT team members must also be examined when reassigned FROM the team to another position within the department.
 2. If an employee is exposed to a hazardous substance, OSHA 1910.120 requires that a physician to determine if the exposure has been harmful to the individual's health evaluate the person exposed.
 3. If a fire fighter does **interior structural fire fighting** while wearing a self-contained breathing apparatus (SCBA), your personnel files should contain documentation as required by OSHA 1910.134 the employee has been found fit to **perform those tasks**. See our publication: The Fire Brigade Standard, January 1992.
 4. After September 15, 1990, OSHA requires that your fire department document that every fire fighter who performs fire suppression tasks has been determined to be fit to perform fire suppression duties. A physician who is familiar with fire suppression tasks and the working environment performs this evaluation.

The Fire/EMS/Safety Center is not in a position to recommend that your municipality engage any commercial vendor to conduct your exams. There are some services, which appear to be offering a fairly complete service at a reasonable price. Some may even perform the examination in your own community.

Under Minnesota OSHA Rule (1910.156) (b) (2) "The employer shall assure that employees who are expected to do interior structural fire fighting are physically capable of performing the duties which may be assigned to them during emergencies. The employer shall not permit employees with known heart disease, epilepsy or emphysema to participate in fire brigade emergency activities unless a physician's certificate of employee's fitness to participate in such activities is provided."

This OSHA Rule was adopted in 1982. Fire Department records should already contain physical capability documents for fire fighters hired since August 1, 1982.

Effective September 1990, the fire department must have physical capability documents for ALL fire fighters.

In federal and state regulations, the word, "shall" indicates that compliance is mandatory.

A fire department may have a physician who is familiar with fire fighter tasks conduct an examination.

The department may also document physical ability in a performance test. This means that a fire fighter who has completed training satisfactorily, and who can perform assigned tasks, can be presumed to be physically capable of performing the tasks.

Minnesota OSHA Rule 1910.134 also gives guidance concerning those who wear Self-Contained Breathing Apparatus. "Persons should not be assigned to tasks requiring use of respirators unless it has been determined that they are physically able to perform the work and use the equipment. The local physician shall determine what health and physical conditions are pertinent.

The above Minnesota OSHA rules have the force of law, but do not outline the **scope** of a physical examination.

National Fire Protection Association (NFPA) Standard 1500 deals with fire fighter health and safety. NFPA 1500 is a **national consensus standard, but does not carry the force of law** in Minnesota. Minnesota OSHA uses NFPA Standards and will cite as reference when issuing citations. NFPA 1500 (8-1.1 and 8-1.2) calls for an annual physical exam to ensure that a **fire fighter continues to be healthy and capable of work.**

There are several standards against which a fire fighter's health may be measured. National Fire Protection Association Standard 1582 (Standard on Medical Requirements for Fire Fighters) may be used by a municipality as the standard for evaluating fire fighter medical requirements. Make sure that you furnish a copy to the physician performing the medical examination.

American National Standards Institute (ANSI Z88.6-1984) also carries a guideline for physical qualifications for respirator users. The ANSI standard recommends an electrocardiogram and some pulmonary function tests including Forced Vital Capacity, Forced Expiratory Volume -1 second and Maximum Voluntary Ventilation -15 seconds. The ANSI Z88.6-1984 standard carries a questionnaire which queries medical history including claustrophobia, high blood pressure, diabetes and punctured eardrums.

29 CFR 1910.120 impacts medical screening. The hazardous materials emergency response regulations require a baseline physical exam by a licensed

physician *before* a person becomes a member of a HAZMAT team. This includes members of an organized and designated HAZMAT response team and HAZMAT Specialists, "who are expected to perform work to handle and control actual or potential leaks or spills of hazardous substances requiring possible close approach to the substance. The team members perform responses to releases or potential releases of hazardous substances for the purpose of control or stabilization of the incident."

Regardless of assignment, ANYONE who is exposed to a hazardous substance in the course of a response must be medically evaluated.

Regulations are becoming more demanding. If an annual physical exam is not REQUIRED for your personnel, it is still a very good idea

Many fire departments in Minnesota have fire fighters who have never had a physical examination. It is never too late to begin a periodic physical examination program. Again, the exam may identify problems that might preclude the fire fighter from participating in fireground activities. It establishes a "base line" or starting point for evaluating a fire fighter's physical condition. Frequency of periodic examinations depends on monies available and the department's program goals.

1. Establishing a Periodic Examination Program

Many communities have a physician who works with the fire department as a Medical Director for the EMS response that the department provides. This person can usually be of assistance in setting up a physical evaluation program.

The other option is to contact any local physician and ask him/her to assist you in establishing both an entry level and periodic physical evaluation program. There are a number of clinics in the suburban metropolitan area that specialize in occupational or industrial medicine and can work with your department in establishing a program. Prior to administering a fire fighter medical examination you will be required to submit a job description for that position.

II. FIRE FIGHTER ENTRANCE PHYSICAL EXAMINATIONS

A. Entrance Examinations

There are two reasons for a recruit fire fighter to undergo a physical examination prior to being placed in active status.

1. Ensures that the person has no existing physical problems that would preclude him or her from performing the rigorous physical activity required in fire fighting operations and may result in a future claim against the municipality or fire department as a result of aggravation of that pre-existing physical condition.

2. Establishes a medical "baseline" so that any service connected physical problems can be detected during a periodic examination. As an example: If a fire fighter develops coronary artery disease after joining the department, it might be detected during a periodic physical examination and steps may be taken to treat this problem before the fire fighter further aggravates this condition by strenuous physical activity on the fireground.

An entry-level physical examination protects both the municipality/fire department **and** the fire fighter as both parties have the best record possible of the individual's physical condition at the time of entry into active service.

The entry level examination should be based on the same criteria as the periodic physical examination described above.