NFPA 1582

Medical

Requirements for Fire Fighters

1992 Edition



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SC-AM-92

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#### **NFPA 1582**

#### Standard on

# **Medical Requirements for Fire Fighters**

#### 1992 Edition

This edition of NFPA 1582, Standard on Medical Requirements for Fire Fighters, was prepared by the Technical Committee on Fire Service Protective Clothing and Equipment and acted on by the National Fire Protection Association, Inc. at its Annual Meeting held May 18-21, 1992 in New Orleans, LA. It was issued by the Standards Council on July 17, 1992, with an effective date of August 14, 1992.

The 1992 edition of this document has been approved by the American National Standards Institute.

# Origin and Development of NFPA 1582

A joint task force of members representing both the Technical Committees on Fire Service Occupational Safety and Health and Fire Fighter Professional Qualifications began addressing medical requirements for fire fighters in March 1988. A standing Subcommittee on Medical/Physical Requirements for Fire Fighters was created under the Fire Service Occupational Safety and Health Committee in 1990 and was responsible for the development of NFPA 1582.

This new document covers the medical requirements necessary for persons who perform fire fighting tasks. Medical requirements that were previously contained in Section 2-2 of NFPA 1001, Standard for Fire Fighter Professional Qualifications, applied only to the entry level. They are being deleted from NFPA 1001. Legal opinion and federal laws show that requirements set for a position must be the same for anyone who would be in that position or is in the position. These medical requirements are, therefore, intended to apply to candidates as well as current fire fighters.

Two categories of medical conditions were created, Category A and Category B. Category A represents conditions that, if they exist in the candidate or current fire fighter, would not allow this person to perform fire fighting operations. Category B conditions must be evaluated on a case-by-case basis so that the fire department physician can determine if the medical condition in a particular candidate or current fire fighter would prevent that person from performing fire fighting operations.

Medical evaluations, medical examinations, records keeping, and confidentiality are addressed in Chapter 2. Chapter 3 contains the actual medical conditions that comprise the requirements.

Extensive advisory and informational material was developed in the appendixes to aid fire department administrators and fire department physicians.

The Committee completed its work in January 1992, and this first edition was presented to the Association membership at the 1992 Annual Meeting in New Orleans, Louisiana.

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This list represents the membership at the time the Committee was balloted on the text of this edition. Since that time, changes in the membership may have occurred.

NOTE: Membership on a Committee shall not in and of itself constitute an endorsement of the Association or any document developed by the Committee on which the member serves.

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#### Standard on

# **Medical Requirements for Fire Fighters**

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NOTICE: An asterisk (\*) following the number or letter designating a paragraph indicates explanatory material on that paragraph in Appendix A.

# Chapter 1 Administration

#### 1-1 Scope.

- **1-1.1** This standard contains medical requirements for fire fighters, including full-time or part-time employees and paid or unpaid volunteers.
- 1-1.2 These requirements are applicable to organizations providing rescue, fire suppression, and other emergency services, including public, military, private, and industrial fire departments.
- 1-1.3 This standard does not apply to industrial fire brigades that also may be known as emergency brigades, emergency response teams, fire teams, plant emergency organizations, or mine emergency response teams.

## 1-2 Purpose.

- **1-2.1** The purpose of this standard is to specify minimum medical requirements for candidates and current fire fighters.
- 1-2.2 The implementation of the medical requirements outlined in this standard will help ensure that candidates and current fire fighters will be medically capable of performing their required duties and will help to reduce the risk of injuries and illnesses.
- **1-2.3** Nothing herein is intended to restrict any jurisdiction from exceeding these minimum requirements.

## 1-3 Implementation.

- **1-3.1** For candidates, the medical requirements of this standard shall be implemented when this standard is adopted by an authority having jurisdiction on an effective date specified by the authority having jurisdiction.
- 1-3.2 When this standard is adopted by a jurisdiction, the authority having jurisdiction shall set a date or dates for current fire fighters to achieve compliance with the requirements of this standard and shall be permitted to establish a phase-in schedule for compliance with specific requirements of this standard in order to minimize personal and departmental disruption.

## 1-4 Definitions.

**Approved.\*** Acceptable to the "authority having jurisdiction."

**Authority Having Jurisdiction.** The "authority having jurisdiction" is the organization, office or individual responsible for "approving" equipment, an installation or a procedure.

**Candidate.\*** A person who has made application to commence performance as a fire fighter.

**Category A Medical Condition.** A medical condition that would preclude a person from performing as a fire fighter in a training or emergency operational environment by presenting a significant risk to the safety and health of the person or others.

**Category B Medical Condition.** A medical condition that, based on its severity or degree, may preclude a person from performing as a fire fighter in a training or emergency operational environment by presenting a significant risk to the safety and health of the person or others.

**Current Fire Fighter.** A person who is already a member and whose duties require the performance of essential fire fighting functions.

**Drug.** Any substance, chemical, over-the-counter medication, or prescribed medication that may affect the performance of the fire fighter.

**Emergency Operations.** Activities of the fire department relating to rescue, fire suppression, and special operations, including response to the scene of the incident and all functions performed at the scene.

**Evaluation.** See Medical Evaluation.

**Fire Department Physician.** The licensed doctor of medicine or osteopathy who has been designated by the fire department to provide professional expertise in the areas of occupational safety and health as they relate to emergency services.

**Fire Fighter.\*** A member of a fire department whose duties require the performance of essential fire fighting functions or substantially similar functions.

**Medical Evaluation.** The analysis of information for the purpose of making a determination of medical certification. Medical evaluation may or may not include a medical examination.

**Medical Examination.** An examination performed or directed by the fire department physician that incorporates the components described in 2-4.1.4.

**Medically Certified.** A determination by the fire department physician that the candidate or current fire fighter meets the medical requirements of this standard.

**Member.** A person involved in performing the duties and responsibilities of a fire department, under the auspices of the organization. A fire department member may be a full-time or part-time employee or a paid or unpaid volunteer, may occupy any position or rank within the fire department, and may or may not engage in emergency operations.

**Shall.** Indicates a mandatory requirement.

**Should.** This term, as used in the appendixes, indicates a recommendation or that which is advised but not required.

## Chapter 2 Medical Process

## 2-1 Medical Evaluation Process.

- 2-1.1\* The fire department shall establish and implement a medical evaluation process for candidates and current fire fighters.
- **2-1.2** The medical evaluation process shall include preplacement medical evaluations, periodic medical evaluations, and return-to-duty medical evaluations.
- **2-1.3** The fire department shall ensure that the medical evaluation process and all medical evaluations meet all of the requirements of this section.
- **2-1.4** Each candidate or current fire fighter shall cooperate, participate, and comply with the medical evaluation process and shall provide complete and accurate information to the fire department physician.
- 2-1.5\* Each candidate or current fire fighter shall, on a timely basis, report to the fire department physician any exposure or medical condition that may interfere with the ability of the individual to perform as a fire fighter.
- **2-1.6** If the candidate or current fire fighter presents with an acute medical problem or newly acquired chronic medical condition, medical evaluation shall be postponed until that person has recovered from this condition and presents to the fire department for review.

# 2-2 Fire Department Physician.

- **2-2.1\*** The fire department physician shall be a licensed doctor of medicine or osteopathy.
- 2-2.2\* The fire department physician shall be qualified to provide professional expertise in the areas of occupational safety and health as they relate to emergency services.
- 2-2.3\* For the purpose of conducting medical evaluations, the fire department physician shall understand the physiological and psychological demands placed on fire fighters and shall understand the environmental conditions under which fire fighters must perform.
- **2-2.4** The fire department physician shall evaluate the person to ascertain the presence of any medical conditions listed in this standard.
- **2-2.4.1** When medical evaluations are conducted by a physician other than the fire department physician, the evaluation shall be reviewed and approved by the fire department physician.

# 2-3\* Preplacement Medical Evaluation.

**2-3.1** The candidate shall be certified by the fire department physician as meeting the medical requirements of Chapter 3 of this standard prior to entering into a training program to become a fire fighter or performing in an emergency operational environment as a fire fighter.

- **2-3.2** The candidate shall be evaluated according to the medical requirements of Chapter 3 of this standard to assess the effect of medical conditions on the candidate's ability to perform as a fire fighter.
- **2-3.3** A candidate shall not be certified as meeting the medical requirements of this standard if the fire department physician determines that the candidate has any Category A medical condition specified in Chapter 3 of this standard.
- 2-3.4\* A candidate shall not be certified as meeting the medical requirements of this standard if the fire department physician determines that the candidate has a Category B medical condition specified in Chapter 3 of this standard that is of sufficient severity to prevent the candidate from performing, with or without reasonable accommodation, the essential functions of a fire fighter without posing a significant risk to the safety and health of the candidate or others.
- **2-3.4.1** The determination of whether there is reasonable accommodation shall be made by the authority having jurisdiction in conjunction with the fire department physician.
- **2-3.5** If the candidate presents with an acute medical problem or newly acquired chronic medical condition that interferes with the candidate's ability to perform the functions of a fire fighter, medical certification shall be postponed until that person has recovered from this condition and presents to the fire department for review.

#### 2-4\* Periodic Medical Evaluation.

- 2-4.1 The current fire fighter shall be annually certified by the fire department physician as meeting the medical requirements of Chapter 3 of this standard to determine that fire fighter's medical ability to continue participating in a training or emergency operational environment as a fire fighter.
- **2-4.1.1** The components of the annual medical evaluation specified in 2-4.1.2 of this section shall be permitted to be performed by qualified personnel as authorized by the fire department physician. When other qualified personnel are used, the fire department physician shall review the data gathered during the evaluation.
- **2-4.1.2** The annual medical evaluation shall consist of:
  - (a) An interval medical history.
- (b) An interval occupational history, including significant exposures.
  - (c) Height and weight.
  - (d) Blood pressure.
- **2-4.1.3** The annual medical evaluation shall include a medical examination according to the following schedule:
  - (a) Ages 29 and under—every 3 years.
  - (b) Ages 30 to 39—every 2 years.
  - (c) Ages 40 and above—every year.

- **2-4.1.4\*** The medical examination shall include examination of the following components:
- (a) Vital signs: Pulse, respiration, blood pressure, and, if indicated, temperature.
  - (b) Dermatological system.
  - (c) Ears, eyes, nose, mouth, throat.
  - (d) Cardiovascular system.
  - (e) Respiratory system.
  - (f) Gastrointestinal system.
  - (g) Genitourinary system.
  - (h) Endocrine and metabolic systems.
  - (i) Musculoskeletal system.
  - (j) Neurological system.
  - (k) Audiometry.
  - (l) Visual acuity and peripheral vision testing.
  - (m) Pulmonary function testing.
  - (n) Laboratory testing, if indicated.
  - (o) Diagnostic imaging, if indicated.
  - (p) Electrocardiography, if indicated.
- **2-4.2** A current fire fighter shall not be certified as meeting the medical requirements of this standard if the fire department physician determines that the fire fighter has any Category A medical condition specified in Chapter 3 of this standard.
- 2-4.3\* A current fire fighter shall not be certified as meeting the medical requirements of this standard if the fire department physician determines that the fire fighter has a Category B condition specified in Chapter 3 of this standard that is of sufficient severity to prevent the fire fighter from performing, with or without reasonable accommodation, the essential functions of a fire fighter without posing a significant risk to the safety and health of the fire fighter or others.
- **2-4.3.1** The determination of reasonable accommodation shall be made by the authority having jurisdiction in conjunction with the fire department physician.
- **2-4.4** If the current fire fighter presents with an acute illness or recently acquired chronic medical condition, the evaluation shall be deferred until the fire fighter has recovered from the condition and presents to the fire department to return to duty.

#### 2-5 Return-to-Duty Medical Evaluation.

**2-5.1** A current fire fighter who has been absent from duty for a medical condition of a nature or duration that may affect performance as a fire fighter shall be evaluated by the fire department physician before returning to duty.

- **2-5.2** The fire department physician shall not medically certify the current fire fighter for return to duty if any Category A medical condition specified in Chapter 3 of this standard is present.
- 2-5.3\* The fire department physician shall not medically certify the current fire fighter for return to duty if any Category B medical condition specified in Chapter 3 of this standard is present that is determined to be severe enough to affect the fire fighter's performance as a fire fighter. The fire department physician, in conjunction with the authority having jurisdiction, shall take into account the fire fighter's current duty assignment and alternative duty assignments or other programs that would allow a fire fighter to gradually return to full duty.

# 2-6 Medical Evaluation Records, Results, Reporting, and Confidentiality.

- **2-6.1** All medical information collected as part of a medical evaluation shall be considered confidential medical information and shall be released by the fire department physician only with the specific written consent of the candidate or current fire fighter.
- **2-6.2** The fire department physician shall report the results of the medical evaluation to the candidate or current fire fighter, including any medical condition(s) disclosed during the medical evaluation, and the recommendation as to whether the candidate or current fire fighter is medically certified to perform as a fire fighter.
- **2-6.3** The fire department physician shall inform the fire department only as to whether or not the candidate or current fire fighter is medically certified to perform as a fire fighter. The specific written consent of the candidate or current fire fighter shall be required to release confidential medical information to the fire department.

# Chapter 3\* Category A and Category B Medical Conditions

#### 3-1 Head and Neck.

#### 3-1.1 Head.

- **3-1.1.1** Category A medical conditions shall include:
  - (a) None.
- **3-1.1.2\*** Category B medical conditions shall include:
- (a) Deformities of the skull such as depressions or exostoses.
- (b) Deformities of the skull associated with evidence of disease of the brain, spinal cord, or peripheral nerves.
- (c) Loss or congenital absence of the bony substance of the skull.
- (d) Any other head condition that results in a person not being able to perform as a fire fighter.

## 3-1.2 Neck.

- **3-1.2.1** Category A medical conditions shall include:
  - (a) None.

# **3-1.2.2\*** Category B medical conditions shall include:

- (a) Thoracic outlet syndrome.
- (b) Congenital cysts, chronic draining fistulas, or similar lesion.
  - (c) Contraction of neck muscles.
- (d) Any other neck condition that results in a person not being able to perform as a fire fighter.

#### 3-2 Eyes and Vision.

## 3-2.1\* Category A medical conditions shall include:

- (a) Far visual acuity. Far visual acuity shall be at least 20/30 binocular corrected with contact lenses or spectacles. Far visual acuity uncorrected shall be at least 20/100 binocular for wearers of hard contacts or spectacles. Successful long-term soft contact lens wearers shall not be subject to the uncorrected criterion.
- (b) Peripheral vision. Visual field performance without correction shall be 140 degrees in the horizontal meridian in each eye.

#### **3-2.2\*** Category B medical conditions shall include:

- (a) Color vision inadequate to identify red, green, and yellow colors.
- (b) Diseases of the eye such as retinal detachment, progressive retinopathy, or optic neuritis.
- (c) Ophthalmological procedures such as radial keratotomy or repair of retinal detachment.
- (d) Any other eye condition that results in a person not being able to perform as a fire fighter.

## 3-3 Ears and Hearing.

## 3-3.1\* Category A medical conditions shall include:

- (a) Hearing deficit in the pure tone thresholds in the unaided worst ear:
  - (1) Greater than 25 dB in three of the four frequencies:
    - (i) 500 Hz,
    - (ii) 1000 Hz,
    - (iii) 2000 Hz,
    - (iv) 3000 Hz.
  - (2) Greater than 30 dB in any one of the three frequencies:
    - (i) 500 Hz,
    - (ii) 1000 Hz,
  - (iii) 2000 Hz; and an average greater than 30 dB for the four frequencies:
    - (i) 500 Hz.
    - (ii) 1000 Hz,
    - (iii) 2000 Hz,
    - (iv) 3000 Hz.

#### **3-3.2\*** Category B medical conditions shall include:

- (a) Auditory canal atresia, severe stenosis, or tumor.
- (b) Severe external otitis.

- (c) Auricle severe agenesis or traumatic deformity.
- (d) Mastoid severe mastoiditis or surgical deformity.
- (e) Meniere's syndrome or labyrinthitis.
- (f) Otitis media.
- (g) Any other ear condition that results in a person not being able to perform as a fire fighter.

#### 3-4 Dental.

#### **3-4.1** Category A medical conditions shall include:

(a) None.

# **3-4.2\*** Category B medical conditions shall include:

- (a) Diseases of the jaws or associated tissues.
- (b) Orthodontic appliances.
- (c) Oral tissues, extensive loss.
- (d) Relationship between the mandible and maxilla that precludes satisfactory postorthodontic replacement or ability to use protective equipment.
- (e) Any other dental condition that results in a person not being able to perform as a fire fighter.

#### 3-5 Nose, Oropharynx, Trachea, Esophagus, and Larynx.

## **3-5.1\*** Category A medical conditions shall include:

- (a) Tracheostomy.
- (b) Aphonia.
- (c) Anosmia.

#### **3-5.2\*** Category B medical conditions shall include:

- (a) Congenital or acquired deformity.
- (b) Allergic respiratory disorder.
- (c) Sinusitis, recurrent.
- (d) Dysphonia.
- (e) Any other nose, oropharynx, trachea, esophagus, or larynx condition that results in a person not being able to perform as a fire fighter or to communicate effectively.

#### 3-6 Lungs and Chest Wall.

# **3-6.1\*** Category A medical conditions shall include:

(a) Suppurative disease of lung or pleural space.

# 3-6.2\* Category B medical conditions shall include:

- (a) Lobectomy.
- (b) Bronchial asthma.
- (c) History of bronchiectasis, bronchitis, fibrous pleuritis, fibrosis, cystic disease, tuberculous, or mycotic disease of the lung.
  - (d) Pneumothorax.
- (e) Any other pulmonary or chest wall condition that results in a person not being able to perform as a fire fighter.

#### 3-7 Heart and Vascular System.

#### 3-7.1 Heart.

## **3-7.1.1\*** Category A medical conditions shall include:

- (a) Current angina pectoris.
- (b) Left bundle branch block or second degree Type II atrioventricular block.
  - (c) Myocardial insufficiency.
- (d) Acute pericarditis, endocarditis, or myocarditis. Chronic pericarditis, endocarditis with resultant significant valvular lesions, or myocarditis leading to myocardial insufficiency or excludable arrhythmias.
- (e) History of myocardial infarction, coronary artery bypass, or coronary angioplasty.
  - (f) Cardiac pacemaker.
  - (g) Recurrent syncope.

## **3-7.1.2\*** Category B medical conditions shall include:

- (a) Significant valvular lesions of the heart including prosthetic valves.
  - (b) Coronary artery disease.
  - (c) Atrial tachycardia, flutter, or fibrillation.
  - (d) Third degree atrioventricular block.
  - (e) Ventricular tachycardia.
  - (f) Hypertrophy of the heart.
  - (g) Recurrent paroxysmal tachycardia.
  - (h) History of a congenital abnormality.
- (i) Any other cardiac condition that results in a person not being able to perform as a fire fighter.

#### 3-7.2 Vascular System.

## **3-7.2.1\*** Category A medical conditions shall include:

- (a) Congenital or acquired lesions of the aorta or major vessels.
- (b) Marked circulatory instability as indicated by orthostatic hypotension, persistent tachycardia, and severe peripheral vasomotor disturbances.
- (c) Aneurysm of the heart or major vessel, congenital or acquired.

# **3-7.2.2\*** Category B medical conditions shall include:

- (a) Hypertension.
- (b) Peripheral vascular disease such as Raynaud's phenomenon.
  - (c) Recurrent thrombophlebitis.
- (d) Chronic lymphedema due to lymphopathy or severe venous valvular incompetency.
- (e) Any other vascular condition that results in a person not being able to perform as a fire fighter.

## 3-8 Abdominal Organs and Gastrointestinal System.

- 3-8.1\* Category A medical conditions shall include:
  - (a) Chronic active hepatitis.

#### **3-8.2\*** Category B medical conditions shall include:

- (a) Cholecystitis.
- (b) Gastritis.
- (c) Hemorrhoids.
- (d) Acute hepatitis.
- (e) Hernia.
- (f) Inflammatory bowel disease.
- (g) Intestinal obstruction.
- (h) Pancreatitis.
- (i) Resection, bowel.
- (i) Ulcer, gastrointestinal.
- (k) Cirrhosis, hepatic or biliary.
- (l) Any other gastrointestinal condition that results in a person not being able to perform the duties of fire fighter.

#### 3-9 Genitourinary System.

# 3-9.1 Reproductive.

## **3-9.1.1** Category A medical conditions shall include:

- (a) None.
- **3-9.1.2\*** Category B medical conditions shall include:
  - (a) Pregnancy, for its duration.
  - (b) Dysmenorrhea.
- (c) Endometriosis, ovarian cysts, or other gynecologic conditions.
  - (d) Testicular or epididymal mass.
- (e) Any other genital condition that results in a person not being able to perform as a fire fighter.

# 3-9.2 Urinary System.

#### **3-9.2.1** Category A medical conditions shall include:

(a) None.

## **3-9.2.2\*** Category B medical conditions shall include:

- (a) Diseases of the kidney.
- (b) Diseases of the ureter, bladder, or prostate.
- (c) Any other urinary condition that results in a person not being able to perform as a fire fighter.

## 3-10 Spine, Scapulae, Ribs, and Sacroiliac Joints.

# **3-10.1** Category A medical conditions shall include:

- (a) None.
- **3-10.2\*** Category B medical conditions shall include:
  - (a) Arthritis.

- (b) Structural abnormality, fracture, or dislocation.
- (c) Nucleus pulposus, herniation of or history of laminectomy.
- (d) Any other spinal condition that results in a person not being able to perform as a fire fighter.

#### 3-11 Extremities.

- **3-11.1** Category A medical conditions shall include:
  - (a) None.
- 3-11.2\* Category B medical conditions shall include:
  - (a) Limitation of motion of a joint.
  - (b) Amputation or deformity of a joint or limb.
  - (c) Dislocation of a joint.
- (d) Joint reconstruction, ligamentous instability, or joint replacement.
  - (e) Chronic osteoarthritis or traumatic arthritis.
  - (f) Inflammatory arthritis.
- (g) Any other extremity condition that results in a person not being able to perform as a fire fighter.

#### 3-12 Neurological Disorders.

- **3-12.1\*** Category A medical conditions shall include:
  - (a) Ataxias of heredo-degenerative type.
- (b) Cerebral arteriosclerosis as evidenced by documented episodes of neurological impairment.
- (c) Multiple sclerosis with activity or evidence of progression within previous three years.
  - (d) Progressive muscular dystrophy or atrophy.
- (e) All seizure disorders to include psychomotor, focal, petit mal, or grand mal seizures other than for those with complete control during previous five years, normal neurological examination, and definitive statement from qualified neurological specialist.
- **3-12.2\*** Category B medical conditions shall include:
  - (a) Congenital malformations.
  - (b) Migraine.
- (c) Clinical disorders with paresis, paralysis, dyscoordination, deformity, abnormal motor activity, abnormality of sensation, or complaint of pain.
  - (d) Subarachnoid or intracerebral hemorrhage.
- (e) Abnormalities from recent head injury such as severe cerebral contusion or concussion.
- (f) Any other neurological condition that results in a person not being able to perform as a fire fighter.

#### 3-13 Skin.

- 3-13.1 Category A medical conditions shall include:
  - (a) None.
- **3-13.2\*** Category B medical conditions shall include:
  - (a) Acne or inflammatory skin disease.

- (b) Eczema.
- (c) Any other dermatologic condition that results in the person not being able to perform as a fire fighter.

## 3-14 Blood and Blood-Forming Organs.

- **3-14.1\*** Category A medical conditions shall include:
  - (a) Hemorrhagic states requiring replacement therapy.
  - (b) Sickle cell disease (homozygous).
- **3-14.2\*** Category B medical conditions shall include:
  - (a) Anemia.
  - (b) Leukopenia.
  - (c) Polycythemia vera.
  - (d) Splenomegaly.
  - (e) History of thromboembolic disease.
- (f) Any other hematological condition that results in a person not being able to perform as a fire fighter.

#### 3-15 Endocrine and Metabolic Disorders.

- **3-15.1** Category A medical conditions shall include:
  - (a) None.
- **3-15.2\*** Category B medical conditions shall include:
- (a) Diseases of the adrenal gland, pituitary gland, parathyroid gland, or thyroid gland of clinical significance.
  - (b) Nutritional deficiency disease or metabolic disorder.
  - (c) Diabetes mellitus.
- (d) Any other endocrine or metabolic condition that results in a person not being able to perform as a fire fighter.

#### 3-16 Systemic Diseases and Miscellaneous Conditions.

- **3-16.1** Category A medical conditions shall include:
  - (a) None.
- 3-16.2\* Category B medical conditions shall include:
- (a) Connective tissue disease, such as dermatomyositis, lupus erythematosus, scleroderma, and rheumatoid arthritis.
  - (b) Residuals from past thermal injury.
- (c) Documented evidence of a predisposition to heat stress with recurrent episodes or resulting residual injury.
- (d) Any other systemic condition that results in a person not being able to perform as a fire fighter.

#### 3-17 Tumors and Malignant Diseases.

- 3-17.1 Category A medical conditions shall include:
  - (a) None.

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- **3-17.2\*** Category B medical conditions shall include:
- (a) Malignant disease that is newly diagnosed, untreated, or currently being treated. Candidates shall be subject to the provisions of 2-3.5 of this standard. Current fire fighters shall be subject to the provisions of 2-4.4 of this standard.
- (b) Treated malignant disease shall be evaluated based on that person's current physical condition and on the likelihood of that person's disease to recur or progress.
- (c) Any other tumor or similar condition that results in a person not being able to perform as a fire fighter.

#### 3-18 Psychiatric Conditions.

- **3-18.1** Category A medical conditions shall include:
  - (a) None.
- 3-18.2\* Category B medical conditions shall include:
- (a) A history of psychiatric condition or substance abuse problem shall be evaluated based on that person's current condition.
- (b) Any other psychiatric condition that results in a person not being able to perform as a fire fighter.

## 3-19 Chemicals, Drugs, and Medications.

- **3-19.1** Category A medical conditions shall include:
  - (a) None.
- **3-19.2\*** Category B medical conditions shall include the use of:
  - (a) Anticoagulant agents.
  - (b) Cardiovascular agents.
  - (c) Narcotics.
  - (d) Sedative-hypnotics.
  - (e) Stimulants.
  - (f) Psychoactive agents.
  - (g) Steroids.
- (h) Any other chemical, drug, or medication that results in a person not being able to perform as a fire fighter.

## Appendix A

This Appendix is not a part of the requirements of this NFPA document, but is included for information purposes only.

**A-1-4 Approved.** The National Fire Protection Association does not approve, inspect or certify any installations, procedures, equipment, or materials nor does it approve or evaluate testing laboratories. In determining the acceptability of installations or procedures, equipment or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization concerned

with product evaluations which is in a position to determine compliance with appropriate standards for the current production of listed items.

A-1-4 Authority Having Jurisdiction. The phrase "authority having jurisdiction" is used in NFPA documents in a broad manner since jurisdictions and "approval" agencies vary as do their responsibilities. Where public safety is primary, the "authority having jurisdiction" may be a federal, state, local or other regional department or individual such as a fire chief, fire marshal, chief of a fire prevention bureau, labor department, health department, building official, electrical inspector, or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the "authority having jurisdiction." In many circumstances the property owner or his designated agent assumes the role of the "authority having jurisdiction"; at government installations, the commanding officer or departmental official may be the "authority having jurisdiction."

**A-1-4 Candidate.** In an employment context, the Americans With Disabilities Act (discussed in further detail in Appendix D) requires that any medical examination to be conducted take place after an offer of employment is made and prior to the commencement of duties. Therefore, in the employment context, the definition of "candidate" should be applied so as to be consistent with that requirement.

Volunteer fire fighters have been deemed to be "employees" in some states or jurisdictions. Volunteer fire departments should seek legal counsel as to their legal responsibilities in these matters.

- **A-1-4 Fire Fighter.** See Appendix C.
- **A-2-1.1** See Appendix D.
- **A-2-1.5** Exposures and medical conditions that should be reported if they can interfere with the ability of the individual to perform as a fire fighter include but are not limited to the following:
- (a) Exposures to hazardous materials or toxic substances.
  - (b) Exposure to infectious or contagious diseases.
  - (c) Illness or injury.
  - (d) Use of prescription or nonprescription drugs.
  - (e) Pregnancy.
- A-2-2.1 See Section D-2 in Appendix D.
- A-2-2.2 See Appendix B.
- **A-2-2.3** See Section B-2 in Appendix B and Appendix C.
- **A-2-3** See Section B-3 in Appendix B.
- **A-2-3.4** See Section D-1 in Appendix D.
- A-2-4 See Section B-3 in Appendix B.

#### A-2-4.1.4 See Appendix B.

**A-2-4.3** See Section D-1 in Appendix D.

## **A-2-5.3** See Section D-1 in Appendix D.

**A-Chapter 3** The medical conditions listed are organized by organ system. With the listing of a condition, a diagnostic example is often included to help the examiner understand the type of condition that might result in rejection or acceptance. In addition, the rationale for the exclusion is presented in terms of the affect of the medical condition on the capability of the person to perform as a fire fighter.

## **A-3-1.1.2** Category B medical conditions:

- (a) Deformities of the skull such as depressions or exostoses (e.g., of a degree that interferes with the use of protective equipment). [Inability to properly wear protective equipment.]
- (b) Deformities of the skull associated with evidence of disease of the brain, spinal cord, or peripheral nerves. [Potential for sudden incapacitation; inability to properly wear protective equipment; inability to communicate effectively due to oropharyngeal dysfunction.]
- (c) Loss or congenital absence of the bony substance of the skull (e.g., if associated with disease interfering with performance or if appropriate protection cannot be provided for area without interfering with protective equipment, vision). [Inability to properly wear protective equipment; inability to communicate effectively due to oropharyngeal dysfunction.]
- (d) Any other head condition that results in a person not being able to perform as a fire fighter.

## A-3-1.2.2 Category B medical conditions:

- (a) Thoracic outlet syndrome (e.g., symptomatic). [Frequent episodes of pain or inability to perform work.]
- (b) Congenital cysts, chronic draining fistulas, or similar lesion (e.g., if lesion or underlying disease interferes with performance). [Inability to properly wear protective equipment; inability to communicate effectively due to oropharyngeal dysfunction.]
- (c) Contraction of neck muscles (e.g., if it interferes with wearing of protective equipment or ability to perform duties). [Inability to properly wear protective equipment; inability to perform functions as a fire fighter due to limitation of flexibility.]
- (d) Any other neck condition that results in a person not being able to perform as a fire fighter.

# A-3-2.1 Category A medical conditions:

(a) Far visual acuity. Far visual acuity shall be at least 20/30 binocular corrected with contact lenses or spectacles. Far visual acuity uncorrected shall be at least 20/100 binocular for wearers of hard contacts or spectacles. Successful long-term soft contact lens wearers (i.e., six months without a problem) are not subject to the uncorrected standard. [Failure to have adequate visual acuity to read placards and street signs or see and respond to imminently hazardous situations.]

(b) Peripheral vision. Visual field performance without correction shall be 140 degrees in the horizontal meridian in each eye. (Fire fighter must not have just monocular vision.) [Failure to have adequate visual acuity to read placards and street signs or see and respond to imminently hazardous situations.]

## **A-3-2.2** Category B medical conditions:

- (a) Color vision inadequate to identify red, green, and yellow colors. [Inability to identify red, green, or yellow; to read hazardous materials placards and traffic control signs and signals, other color coded markings, warning signs, labels, or placards; or see and respond to imminently hazardous situations.]
- (b) Diseases of the eye such as retinal detachment, progressive retinopathy, or optic neuritis (i.e., severe or progressive). [Failure to have adequate visual acuity to read placards and street signs or see and respond to imminently hazardous situations.]
- (c) Ophthalmological procedures such as radial keratotomy, repair of retinal detachment. Sufficient time (i.e., six months) must have passed to allow stabilization of visual acuity and to ensure that there are no postsurgical complications. [Failure to have adequate visual acuity to read placards and street signs or see and respond to imminently hazardous situations.]
- (d) Any other eye condition that results in a person not being able to perform as a fire fighter.

# A-3-3.1 Category A medical conditions:

- (a) Hearing deficit in pure tone thresholds in the unaided worst ear:
  - (1) Greater than 25 dB in three of the four frequencies:
    - (i) 500 Hz,
    - (ii) 1000 Hz,
    - (iii) 2000 Hz,
    - (iv) 3000 Hz.
  - (2) Greater than 30 dB in any one of the three frequencies:
    - (i) 500 Hz,
    - (ii) 1000 Hz,
  - (iii) 2000 Hz; and an average greater than 30 dB for the four frequencies:  $\,$ 
    - (i) 500 Hz.
    - (ii) 1000 Hz,
    - (iii) 2000 Hz,
    - (iv) 3000 Hz.

[Inability to hear sounds of low intensity or to distinguish voice from background noise, leading to failure to respond to imminently hazardous situations.]

#### **A-3-3.2** Category B medical conditions:

(a) Auditory canal—atresia, severe stenosis, or tumor. [Inability to hear sounds of low intensity or to distinguish voice from background noise, leading to failure to respond to imminently hazardous situations.]

- (b) Severe external otitis (e.g., recurrent loss of hearing). [Inability to hear sounds of low intensity or to distinguish voice from background noise, leading to failure to respond to imminently hazardous situations.]
- (c) Auricle, severe agenesis, or traumatic deformity (e.g., interferes with ability to wear protective equipment or with hearing acuity). [Inability to properly wear protective equipment; inability to hear sounds of low intensity or to distinguish voice from background noise, leading to failure to respond to imminently hazardous situations.]
- (d) Mastoid, severe mastoiditis or surgical deformity. [Inability to properly wear protective equipment; inability to hear sounds of low intensity or to distinguish voice from background noise, leading to failure to respond to imminently hazardous situations.]
- (e) Meniere's syndrome or labyrinthitis (e.g., severe). [Potential for sudden incapacitation; inability to perform job functions due to limitations of balance.]
- (f) Otitis media (e.g., chronic). [Frequent episodes of pain or inability to perform work; inability to hear sounds of low intensity or to distinguish voice from background noise, leading to failure to respond to imminently hazardous situations.]
- (g) Any other ear condition that results in a person not being able to perform as a fire fighter.

#### A-3-4.2 Category B medical conditions:

- (a) Diseases of the jaws or associated tissues (e.g., incapacitating or preclude ability to use protective equipment). [Inability to properly wear protective equipment.]
- (b) Orthodontic appliances (e.g., precluding ability to use protective equipment). [Inability to properly wear protective equipment.]
- (c) Oral tissues, extensive loss (e.g., precludes satisfactory postorthodontic replacement or ability to use protective equipment). [Inability to properly wear protective equipment; inability to communicate effectively due to oropharyngeal dysfunction.]
- (d) Relationship between the mandible and maxilla that precludes satisfactory postorthodontic replacement or ability to use protective equipment. [Inability to properly wear protective equipment; inability to communicate effectively due to oropharyngeal dysfunction.]
- (e) Any other dental condition that results in a person not being able to perform as a fire fighter.

# A-3-5.1 Category A medical conditions:

- (a) Tracheostomy. [Inability to properly wear protective equipment; inability to perform job functions due to limitations of endurance; inability to communicate effectively due to oropharyngeal dysfunction.]
- (b) Aphonia, regardless of cause. [Inability to communicate effectively due to oropharyngeal dysfunction.]
- (c) Anosmia. [Inability to smell smoke or hazardous materials resulting in failure to respond to imminently hazardous situation.]

#### **A-3-5.2** Category B medical conditions:

- (a) Congenital or acquired deformity (e.g., interferes with the ability to use protective equipment). [Inability to properly wear protective equipment.]
- (b) Allergic respiratory disorder (e.g., not controlled). [Frequent episodes of pain or inability to perform work; inability to perform functions as a fire fighter due to limitations of endurance.]
- (c) Sinusitis, recurrent (e.g., severe requiring repeated hospitalizations or impairment). [Frequent episodes of pain or inability to perform work.]
- (d) Dysphonia, severe. [Inability to communicate effectively due to oropharyngeal dysfunction.]
- (e) Any other nose, oropharynx, trachea, esophagus, or larynx condition that results in a person not being able to perform as a fire fighter or to communicate effectively.

# **A-3-6.1** Category A medical conditions:

(a) Suppurative disease of lung or pleural space (e.g., chronic abscess of lung, bronchiectasis, or empyema). [Inability to perform functions as a fire fighter due to limitations of endurance.]

## A-3-6.2 Category B medical conditions:

- (a) Lobectomy (e.g., medical examination or pulmonary function testing that indicates significant impairment). [Inability to perform functions as a fire fighter due to limitations of strength or endurance.]
- (b) Bronchial asthma (e.g., frequent medication use or symptoms caused by exposures to exertion, heat and cold, or products of combustion and other irritant inhalation). [Frequent episodes of pain or inability to perform work; potential for sudden incapacitation; inability to perform functions as a fire fighter due to limitations of endurance.]
- (c) History of bronchiectasis, bronchitis, fibrous pleuritis, fibrosis, cystic disease, tuberculous, or mycotic disease of the lung (e.g., significant residual impairment of pulmonary function or requiring frequent therapy). [Frequent episodes of pain or inability to perform work; inability to perform functions as a fire fighter due to limitations of endurance.]
- (d) Pneumothorax (e.g., history of recurrent spontaneous pneumothorax). [Potential for sudden incapacitation; inability to perform job functions due to limitations of endurance.]
- (e) Any other pulmonary or chest wall condition that results in a person not being able to perform as a fire fighter.

## A-3-7.1.1 Category A medical conditions:

- (a) Current angina pectoris. [Frequent episodes of pain or inability to perform work; progressive illness leading to functional impairment; potential for sudden incapacitation.]
- (b) Left bundle branch block or second degree Type II artioventricular block. [Potential for sudden incapacitation.]
- (c) Myocardial insufficiency (e.g., congestive circulatory failure, cardiac decompensation). [Frequent episodes of pain or inability to perform work; progressive illness leading to functional impairment; potential for sudden incapacitation.]

- (d) Acute pericarditis, endocarditis, or myocarditis. Chronic pericarditis, endocarditis with resultant significant valvular lesions, or myocarditis leading to myocardial insufficiency or excludable arrhythmias. [Frequent episodes of pain or inability to perform work.]
- (e) History of myocardial infarction, coronary artery bypass, or coronary angioplasty. [Progressive illness leading to functional impairment; potential for sudden incapacitation.]
  - (f) Cardiac pacemaker. [Potential for sudden incapacitation.]
  - (g) Recurrent syncope. [Potential for sudden incapacitation.]

#### A-3-7.1.2 Category B medical conditions:

- (a) Significant valvular lesions of the heart including prosthetic valves (e.g., risk of sudden incapacitation, bleeding due to anti-coagulant therapy, or impaired exercise tolerance; mitral valve prolapse without significant symptoms or simple presence of aortic bicuspid valve would not exclude an individual). [Potential for sudden incapacitation.]
- (b) Coronary artery disease (e.g., asymptomatic, documented significant coronary artery disease). [Frequent episodes of pain or inability to perform work; progressive illness leading to functional impairment; potential for sudden incapacitation.]
- (c) Atrial tachycardia, flutter, or fibrillation (e.g., acute or recurrent even with treatment). [Potential for sudden incapacitation.]
- (d) Third-degree artioventricular block (e.g., disqualification unless exercise can be performed with an adequate heart rate response). [Frequent episodes of pain or inability to perform work; potential for sudden incapacitation.]
- (e) Ventricular tachycardia. [Potential for sudden incapacitation; inability to perform job functions due to limitations of strength or endurance.]
- (f) Hypertrophy of the heart (e.g., likely to lead to congestive heart failure). [Potential for sudden incapacitation; inability to perform job functions due to limitations of endurance.]
- (g) Recurrent paroxysmal tachycardia. [Potential for sudden incapacitation; inability to perform job functions due to limitations of strength or endurance.]
- (h) History of a congenital abnormality that has been treated by surgery but with residual complications or that has not been treated by surgery leaving residuals or complications. [Frequent episodes of pain or inability to perform work; potential for sudden incapacitation.]
- (i) Any other cardiac condition that results in a person not being able to perform as a fire fighter.

#### **A-3-7.2.1** Category A medical conditions:

(a) Congenital or acquired lesions of the aorta and major vessels (e.g., syphilitic aortitis, demonstrable atherosclerosis that interferes with circulation, and congenital or acquired dilatation of the aorta). [Potential for sudden incapacitation; inability to perform functions of a fire fighter due to limitations of endurance.]

- (b) Marked circulatory instability as indicated by orthostatic hypotension, persistent tachycardia, and severe peripheral vasomotor disturbances. [Inability to perform functions as a fire fighter due to limitations of endurance; inability to perform functions of a fire fighter due to limitations of balance.]
- (c) Aneurysm of the heart or major vessel, congenital or acquired. [Frequent episodes of pain or inability to perform work; potential for sudden incapacitation.]

# A-3-7.2.2 Category B medical conditions:

- (a) Hypertension (e.g., uncontrolled or poorly controlled, with evidence of significant end-organ damage, or requiring medication likely to interfere with performance of duties). [Progressive illness leading to functional impairment; potential for sudden incapacitation.]
- (b) Peripheral vascular disease such as Raynaud's phenomenon (e.g., interferes with performance of duties or makes the individual likely to have significant risk of severe injury). [Frequent episodes of pain or inability to perform work; inability to perform functions as a fire fighter due to limitations of endurance.]
- (c) Recurrent thrombophlebitis. [Frequent episodes of pain or inability to perform work; inability to perform functions as a fire fighter due to limitations of endurance.]
- (d) Chronic lymphedema due to lymphopathy or severe venous valvular incompetency. [Inability to perform functions as a fire fighter due to limitations of endurance.]
- (e) Any other vascular condition that results in a person not being able to perform as a fire fighter.

#### **A-3-8.1** Category A medical conditions:

(a) Chronic, active hepatitis. [Frequent episodes of pain or inability to perform work.]

## **A-3-8.2** Category B medical conditions:

- (a) Cholecystitis (e.g., frequent pain due to stones, infection). [Frequent episodes of pain or inability to perform work.]
- (b) Gastritis (e.g., recurrent pain and impairment). [Frequent episodes of pain or inability to perform work.]
- (c) Hemorrhoids (e.g., severe symptoms leading to impairment). [Frequent episodes of pain or inability to perform work.]
- (d) Acute hepatitis (e.g., until resolution of acute hepatitis as determined by clinical examination and appropriate laboratory testing). [Frequent episodes of pain or inability to perform work.]
- (e) Hernia (e.g., unrepaired inguinal or abdominal hernia that could obstruct during duty). [Potential for sudden incapacitation.]
- (f) Inflammatory bowel disease (e.g., disabling pain or diarrhea). [Frequent episodes of pain or inability to perform work; progressive illness leading to functional impairment.]
- (g) Intestinal obstruction (e.g., recent obstruction with impairment). [Frequent episodes of pain or inability to perform work; potential for sudden incapacitation.]

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- (h) Pancreatitis (e.g., chronic or recurrent with impairment). [Frequent episodes of pain or inability to perform work.]
- (i) Resection, bowel (e.g., if frequent diarrhea precludes performance of duty). [Frequent episodes of pain or inability to perform work.]
- (j) Ulcer, gastrointestinal (e.g., symptoms uncontrolled by drugs or surgery). [Frequent episodes of pain or inability to perform work.]
- (k) Cirrhosis, hepatic or biliary (e.g., symptomatic or danger of bleeding). [Frequent episodes of pain or inability to perform work.]
- (l) Any other gastrointestinal condition that results in a person not being able to perform as a fire fighter.

#### A-3-9.1.2 Category B medical conditions:

- (a) Pregnancy. [Frequent episodes of pain or inability to perform work; progressive inability to perform work due to limitations of endurance, flexibility, or strength; inability to properly wear protective equipment.] See Section B-4, Reproductive.
- (b) Dysmenorrhea (e.g., leading to recurrent incapacitation). [Frequent episodes of pain or inability to perform work.]
- (c) Endometriosis, ovarian cysts, or other gynecologic conditions (e.g., severe leading to recurrent incapacitation). [Frequent episodes of pain or inability to perform work.]
- (d) Testicular or epididymal mass (e.g., requires medical evaluation). [Frequent episodes of pain or inability to perform work; progressive illness leading to functional impairment.]
- (e) Any other genital condition that results in a person not being able to perform as a fire fighter.

## **A-3-9.2.2** Category B medical conditions:

- (a) Diseases of the kidney (e.g., requiring dialysis). [Frequent episodes of pain or inability to perform work; progressive illness leading to functional impairment.]
- (b) Diseases of the ureter, bladder, or prostate (e.g., requiring frequent or prolonged treatment). [Frequent episodes of pain or inability to perform work.]
- (c) Any other urinary condition that results in a person not being able to perform as a fire fighter.

## A-3-10.2 Category B medical conditions:

- (a) Arthritis (e.g., progressive impairment or limitation of movement). [Progressive illness leading to functional impairment; inability to perform functions as a fire fighter due to limitations of endurance or flexibility.]
- (b) Structural abnormality, fracture, or dislocation (e.g., progressive or recurrent impairment). [Progressive illness leading to functional impairment; inability to perform functions as a fire fighter due to limitations of strength or flexibility.]
- (c) Nucleus pulposus, herniation of or history of laminectomy (e.g., if symptomatic within last three years). [Progressive illness leading to functional impairment; inability to properly wear protective equipment.]

(d) Any other spinal condition that results in a person not being able to perform as a fire fighter.

## **A-3-11.2** Category B medical conditions:

- (a) Limitation of motion of a joint of a degree to interfere with successful and safe performance of fire fighting duties. [Inability to perform functions as a fire fighter due to limitation of flexibility.]
- (b) Amputation or deformity of a joint or limb of a degree to interfere with successful and safe performance of fire fighting duties. [Inability to perform functions as a fire fighter due to limitations of strength; inability to perform functions as a fire fighter due to limitations of balance.]
- (c) Dislocation of a joint (e.g., recurrent or with residual limitation of motion of a degree to interfere with successful and safe performance of fire fighting duties; successful surgery for recurrent shoulder dislocation if range of motion is intact would not exclude a person.) [Inability to perform functions as a fire fighter due to limitations of strength or flexibility.]
- (d) Joint reconstruction, ligamentous instability, or joint replacement (e.g., recurrent or with residual limitation of motion of a degree to interfere with successful and safe performance of fire fighting duties; surgery for a torn anterior cruciate ligament may disqualify if quadriceps strength is not normal or if the knee is lax or develops pain or swelling when stressed.) [Inability to perform functions as a fire fighter due to limitations of strength or flexibility.]
- (e) Chronic osteoarthritis or traumatic arthritis (e.g., recurrent exacerbations leading to impairment). [Frequent episodes of pain or inability to perform work; inability to perform functions as a fire fighter due to limitations of strength, endurance, or flexibility.]
- (f) Inflammatory arthritis (e.g., severe recurrent or progressive illness or with deformity or limitation of range of motion of a degree to interfere with successful and safe performance of fire fighting duties). [Frequent episodes of pain or inability to perform work; inability to perform functions as a fire fighter due to limitations of strength, endurance, or flexibility.]
- (g) Any other extremity condition that results in a person not being able to perform the duties of fire fighter.

#### A-3-12.1 Category A medical conditions:

- (a) Ataxias of heredo-degenerative type. [Inability to perform functions as a fire fighter due to limitations of balance.]
- (b) Cerebral arteriosclerosis as evidenced by documented episodes of neurological impairment. [Inability to perform functions as a fire fighter due to limitations of strength; inability to perform functions due to limitations of balance.]
- (c) Multiple sclerosis with activity or evidence of progression within previous three years. [Inability to perform functions as a fire fighter due to limitations of strength or flexibility.]
- (d) Progressive muscular dystrophy or atrophy. [Inability to perform functions due to limitations of strength; inability to perform functions as a fire fighter due to limitations of balance.]

(e) All seizure disorders to include psychomotor, focal, petit mal, or grand mal seizures except for those with complete control during previous five years, normal neurological examination, and definitive statement from qualified neurological specialist. [Potential for sudden incapacitation.]

## A-3-12.2 Category B medical conditions:

- (a) Congenital malformations (e.g., severe vascular malformations that interfere with ability to wear protective equipment). [Inability to properly wear protective equipment.]
- (b) Migraine (e.g., recurrent with impairment not controlled). [Frequent episodes of pain or inability to perform work.]
- (c) Clinical disorders with paresis, paralysis, dyscoordination, deformity, abnormal motor activity, abnormality of sensation, or complaint of pain (e.g., progressive or severe). [Progressive illness leading to functional impairment; inability to perform functions as a fire fighter due to limitations of strength, flexibility, or balance.]
- (d) Subarachnoid or intracerebral hemmorhage, verified either clinically or by laboratory studies, except for those corrected with verification by laboratory studies and report of treating physician. [Progressive illness leading to functional impairment; potential for sudden incapacitation.]
- (e) Abnormalities from recent head injury such as severe cerebral contusion or concussion. [Potential for sudden incapacitation.]
- (f) Any other neurological condition that results in a person not being able to perform as a fire fighter.

## A-3-13.2 Category B medical conditions:

- (a) Acne or inflammatory skin disease (e.g., if condition precludes good fit of protective equipment such as SCBA face piece or prevents shaving). [Inability to properly wear protective equipment.]
- (b) Eczema (e.g., if broken skin results in impairment from infections or pain or interferes with seal between skin and personal protective equipment). [Frequent episodes of pain or inability to perform work.]
- (c) Any other dermatologic condition that results in the person not being able to perform as a fire fighter.

#### **A-3-14.1** Category A medical conditions:

- (a) Hemorrhagic states requiring replacement therapy (e.g., von Willebrand's disease, thrombocytopenia, hemophilia). [Frequent episodes of pain or inability to perform work.]
- (b) Sickle cell disease (homozygous). [Frequent episodes of pain or inability to perform work; potential for sudden incapacitation.]

## A-3-14.2 Category B medical conditions:

(a) Anemia (e.g., requiring regular transfusions). [Frequent episodes of pain or inability to perform work; progressive illness leading to functional impairment.]

- (b) Leukopenia (e.g., chronic, indicative of serious illness). [Progressive illness leading to functional impairment.]
- (c) Polycythemia vera (e.g., severe, requiring treatment). [Frequent episodes of pain or inability to perform work; potential for sudden incapacitation.]
- (d) Splenomegaly (e.g., susceptible to rupture from blunt trauma). [Potential for sudden incapacitation.]
- (e) History of thromboembolic disease (e.g., more than one episode, underlying condition). [Potential for sudden incapacitation.]
- (f) Any other hematological condition that results in a person not being able to perform as a fire fighter.

## **A-3-15.2** Category B medical conditions:

- (a) Diseases of the adrenal gland, pituitary gland, parathyroid gland, or thyroid gland of clinical significance (e.g., symptomatic, poorly controlled). [Frequent episodes of pain or inability to perform work; potential for sudden incapacitation.]
- (b) Nutritional deficiency disease or metabolic disorder (e.g., clinically significant and not correctable by replacement therapy or other medication). [Frequent episodes of pain or inability to perform work.]
- (c) Diabetes mellitus (e.g., poorly controlled or untreated or significant risk of developing hypoglycemic episodes). [Frequent episodes of pain or inability to perform work; progressive illness leading to functional impairment; potential for sudden incapacitation.]
- (d) Any other endocrine or metabolic condition that results in a person not being able to perform as a fire fighter.

## **A-3-16.2** Category B medical conditions:

- (a) Connective tissue disease, such as dermatomyositis, lupus crythematosus, scleroderma, and rheumatoid arthritis (e.g., when manifested by systemic impairment or limitations of motion). [Progressive illness leading to functional impairment; inability to perform functions as a fire fighter due to limitations of strength or flexibility.]
- (b) Residuals from past thermal injury (e.g., frost bite resulting in significant symptomatic discomfort). [Inability to perform functions as a fire fighter due to limitations of strength, endurance, or flexibility.]
- (c) Documented evidence of a predisposition to heat stress with recurrent episodes or resulting residual injury. [Potential for sudden incapacitation; inability to perform functions as a fire fighter due to limitations of endurance.]
- (d) Any other systemic condition that results in a person not being able to perform as a fire fighter.

# A-3-17.2 Category B medical conditions:

- (a) The medical evaluation of any person with malignant disease that is newly diagnosed, untreated, or currently being treated will be deferred.
- (b) Any person with treated malignant disease should be evaluated based on that person's current physical condition and on the likelihood of that person's disease to recur or progress.

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(c) Any other tumor or similar condition that results in a person not being able to perform as a fire fighter.

#### A-3-18.2 Category B medical conditions:

- (a) Any person with a history of a psychiatric condition or substance abuse problem shall be evaluated based on that person's current condition. [Frequent episodes of pain or inability to perform work; progressive illness leading to functional impairment; potential for sudden incapacitation.]
- (b) Any other psychiatric condition that results in a person not being able to perform as a fire fighter.

## A-3-19.2 Category B medical conditions:

- (a) Anticoagulant agents (e.g., coumadin). [Frequent episodes of pain or inability to perform work; potential for sudden incapacitation.]
- (b) Cardiovascular agents (e.g., antihypertensives). [Frequent episodes of pain or inability to perform work; potential for sudden incapacitation.]
- (c) Narcotics. [Frequent episodes of pain or inability to perform work; potential for sudden incapacitation.]
- (d) Sedative-hypnotics. [Frequent episodes of pain or inability to perform work; potential for sudden incapacitation.]
- (e) Stimulants. [Frequent episodes of pain or inability to perform work; potential for sudden incapacitation.]
- (f) Psychoactive agents. [Frequent episodes of pain or inability to perform work; potential for sudden incapacitation.]
- (g) Steroids. [Frequent episodes of pain or inability to perform work.]
- (h) Any other chemical, drug, or medication that results in a person not being able to perform as a fire fighter.

# Appendix B Guide for Fire Department Physicians

This Appendix is not a part of the requirements of this NFPA document, but is included for information purposes only.

**B-1 Introduction.** This information is designed to help physicians implement the requirements of this standard. The appendix includes sections on the occupational health risks for fire fighters, organization of a medical program for fire fighters, guidance for conducting the examinations, and further information on medical conditions that might cause difficulties when implementing this standard.

The medical conditions outlined in Chapter 2 apply to individuals conducting essential fire fighting functions. (See Appendix C.) The application of these guidelines to individuals with other fire department jobs requires a careful consideration of the job duties of these other individuals and medical conditions that might affect a person's ability to conduct those duties.

**B-2** Occupational Safety and Health Problems for Fire Fighters. Fire fighting and emergency response are very difficult jobs. People in these jobs must perform functions that are physically and psychologically very demanding.

These functions must often be performed under very difficult conditions. (See Appendix C.) Studies have shown that fire fighting functions require working at near maximal heart rates for prolonged periods of time. Heavy protective equipment (including respirators) and the heat from the fire contribute to this physical load.

Fire fighters and emergency response personnel also are exposed to many toxic substances during their work. Carbon monoxide is the most common contaminant; studies have shown individual exposures as high as 5000 ppm in actual fires. Other significant exposures common in fires include cyanide, acrolein, hydrogen chloride, nitrogen dioxide, and benzene. The burning of plastics and other synthetic materials may expose fire fighters to other toxic materials such as isocyanates and nitrosamines. Hazardous materials incidents may involve exposures to many other toxic materials. While the use of respirators helps to reduce exposures, mechanical, environmental, and behavioral factors may limit their use during all phases of a fire.

The available health data on fire fighters are limited. While the protection for fire fighters has improved over the last several years, exposures may be changing due to the introduction of more synthetic materials. Given the delay between exposure and onset of many occupational illnesses (i.e., latency), current or past health studies of fire fighters may not reflect future health risks. These limitations should be recognized when reviewing the available studies.

Available data indicate that fire fighters have increased risk for injuries, pulmonary disease, cardiovascular disease, cancer, and noise-induced hearing loss. The increased risk for injuries is expected, given the demands and circumstances for this work. Fatalities and serious injuries from burns or other fire scene hazards may occur.

The risk for respiratory disease occurs due to the respiratory damage caused by many of the components of fire smoke (particulate, acrolein, nitrogen oxides, etc.). Acute reductions in pulmonary function and even hypoxemia are not uncommon after fires, even in asymptomatic fire fighters. Permanent damage from smoke inhalation has also been reported. Studies of chronic pulmonary changes from fire fighting have not had consistent results. Some follow-up studies have shown a greater rate of decline in pulmonary function among fire fighters over time while others have not been able to detect this change. Increased use of protective equipment and job selection factors (ill fire fighters transferring to other duties) may account for these inconsistent findings.

The strenuous work demands of fire fighting combined with exposures to carbon monoxide and other toxic substances may increase the risk for cardiovascular disease among fire fighters. Acute respiratory changes also may stress the cardiovascular system. This increased cardiovascular disease risk has been documented even in some mortality studies despite the job selection factors that tend to mask any increase when compared to the general population. Other studies have not detected this risk. Certainly, the combination of the physical stress of fire fighting and exposures for a person with preexisting coronary heart disease would be expected to increase the risk of a myocardial

infarction or other acute event. However, the degree of this acute risk and whether fire fighting also contributes to the development of coronary heart disease is uncertain.

Increased cancer risk for fire fighters has been found in several recent studies. While not totally consistent, these studies generally show an increased risk of brain cancer, gastrointestinal cancers, and leukemia among fire fighters in many different parts of the world. Increased incidence of other cancer sites has also been shown in some studies. Several studies are currently underway to further evaluate this risk.

Noise-induced hearing loss has now been documented in several studies of fire fighters. Fire fighters may also be at risk from other specific exposures including infectious diseases and liver, kidney, or neurological damage from exposure to specific chemicals.

## **B-3** Guidance for Medical Evaluations.

**B-3.1 Preplacement and Base Line Medical Evaluations.** Preplacement medical evaluations assess an individual's health status before assignment to a position. The purpose of the evaluation is to ascertain whether the individual has any health condition that prevents him or her from performing the job, including the ability to wear protective equipment required for the job. The evaluation should also identify any health problems that could be substantially aggravated by the physical demands and working conditions. Base line medical information concerning the applicant's health status can then be compared to subsequent evaluation results for the purpose of determining whether the individual has any significant health trends that may be occupationally related.

Two types of information are essential for a medical preplacement evaluation for those performing fire fighter duties. First, the physician must understand the working conditions and physical demands of this occupation. Appendix C provides a list of the environment encountered in fire fighting and emergency response. The physician should also obtain additional information from the fire department such as specific job duties and task lists if the fire department has conducted a validation study or job analysis and should be familiar with the organization of the fire department. For the evaluation of some medical conditions, the physician will need to obtain further information about specific job duties in order to make a determination. This may require on-site inspections and consultation with fire department personnel.

Secondly, the physician needs to have accurate information about the person's disease or medical condition, the functional limitations associated with that condition, and an understanding of how physical demands and working conditions would impact on that condition. An accurate diagnosis is often the key factor in determining the person's capability. For example, different skin diseases may have similar clinical appearances but may markedly differ in their response to environmental exposures. The physician must also recognize that individual variability may exist between persons with the same clinical condition.

Upon completion of the examination, the physician should inform the authority having jurisdiction if the applicant is medically qualified to perform as a fire fighter. **B-3.2 Periodic Medical Evaluations.** The periodic medical evaluation is designed to evaluate the person's continued ability to perform their duties and to detect any other significant changes in the condition of their health. The latter includes possible job-related changes or abnormalities.

Every year, each fire fighter will be medically evaluated by the fire department physician. This medical evaluation includes an update on the fire fighter's medical history, including any significant changes, a brief review of symptoms, and a report on any significant job-related exposures experienced during the past year. Height, weight, visual acuity, and blood pressure are measured and recorded. The extent of the medical evaluation and additional testing will depend on the fire fighter's medical condition.

A more thorough evaluation, including a medical examination, is conducted on a periodic basis. For individuals less than 30 years of age, the medical evaluation and examination is conducted every three years; for those 30 to 39, every two years; and for those 40 or over, every year. This evaluation should include an updated medical and interval history, complete physical examination, vision testing, audiometry, pulmonary function testing, and a CBC, urinalysis, and blood biochemistry (SMA).

The use of chest X-rays in surveillance activities in the absence of significant exposures, symptoms, or medical findings has not been shown to reduce respiratory or other health impairment. Therefore, only preplacement chest X-rays are recommended.

No firm guidelines for stress electrocardiography in asymptomatic individuals have been developed. There have been problems with false positive results from this testing, especially in younger age groups. In those with one or more risk factors for coronary artery disease, there may be more justification for performing the testing. At this time, stress tests may be considered on an individual basis depending on age (over 40) and the presence of coronary artery disease risk factors (premature family history [less than 55], hypertension, diabetes mellitus, cigarette smoking, and hypercholesterolemia [total cholesterol greater than 240 or HDL cholesterol less than 35]). Testing can also be done as indicated for those with symptoms suggestive of coronary artery disease as reported in their yearly medical histories or interim reports.

# B-3.3 Content of the Medical Evaluation.

**B-3.3.1 Medical and Occupational History.** The medical history should cover the person's known health problems, such as major illnesses, surgeries, medication use, allergies, etc. Symptom review is also important for detecting early signs of illness. In addition, a comprehensive medical history should include a personal health history, a family health history, a health habit history, an immunization history, and a reproductive history. An occupational history should also be obtained to collect information about the person's past occupational and environmental exposures.

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- **B-3.3.2 Medical Examination.** The medical examination includes the following organ systems:
- (a) Vital signs: Pulse, respirations, blood pressure, and, if indicated, temperature.
  - (b) Dermatological system.
  - (c) Ears, eyes, nose, mouth, throat.
  - (d) Cardiovascular system.
  - (e) Respiratory system.
  - (f) Gastrointestinal system.
  - (g) Genitourinary system.
  - (h) Endocrine and metabolic systems.
  - (i) Musculoskeletal system.
  - (j) Neurological system.
  - (k) Audiometry.
  - (l) Visual acuity and peripheral vision testing.
  - (m) Pulmonary function testing.
  - (n) Laboratory testing, if indicated.
  - (o) Diagnostic imaging, if indicated.
  - (p) Electrocardiography, if indicated.
- **B-3-3.2.1 Laboratory Tests.** Base line CBC, biochemical test battery (SMA), and urinalysis should be conducted for detecting specific illnesses as well as developing a base line for later comparison.
- **B-3-3.2.2 X-Rays.** A base line chest X-ray may be helpful for individuals with a history of respiratory health problems or symptoms. For others, it may be useful for later comparison.
- **B-3-3.2.3 Pulmonary Function Testing.** Pulmonary function testing may be helpful for individuals with a history of respiratory health problems and as a base line for later comparison. A base line test should be administered by an experienced person. Only a spirogram that is technically acceptable and demonstrates the best efforts by an individual should be used to calculate the forced vital capacity (FVC) and forced expiratory volume in one second (FEV1).
- **B-3-3.2.4 Audiometry.** Audiograms should be performed in an ANSI-approved "soundproof" booth (ANSI S3.1-1977) with equipment calibrated to ANSI standards (ANSI S3.6-1973). If a booth is unavailable, the test room sound pressure levels should not exceed those specified in the federal OSHA noise regulations (29 CFR 1910.95).
- **B-3-3.2.5 Electrocardiography.** Base line electrocardiography should be conducted.
- **B-3.4 Reporting the Results of the Medical Evaluation.** All individuals participating in a medical evaluation should be informed ahead of time about the purpose of the medical evaluation and the content of the exam. The results of any medical evaluation are considered to be confidential medical information subject to customary patient-physician confidentiality restrictions. Under most circumstances, results and recommendations arising from the evaluation should be expressed in general terms without specific diagnostic information. In cases where more specific information is needed in order to make a decision on the status of

a candidate or fire fighter, a specific consent form releasing that information should be obtained from the candidate or fire fighter. Blanket or general "release of medical information" forms should not be used.

In most cases, a simple statement will suffice:

Based on the results of the preplacement medical evaluation of December 10, 1990, Jane Doe is (or is NOT) medically certified to engage in training and emergency operations for Anytown Fire Department.

#### OR

Based on the results of the preplacement medical evaluation of December 10, 1990, John Doe is NOT medically certified to engage in training and emergency operations for Anytown Fire Department. He has been advised of the medical reasons for this recommendation and of the policies and procedures available to him if he disagrees with the results of the medical evaluation.

**B-3.5 Second Opinions.** Fire department policies and procedures should allow for a medical "second opinion" when a candidate or fire fighter disagrees with the results or recommendations of a medical examination conducted by the fire department physician or when the fire department physician is uncertain about the limitations or prognosis of the individual's condition. Often other physicians will not be familiar with the duties and demands of fire fighting and emergency response. When possible, the fire department physician should help educate the other physician about how the individual's condition may affect or be affected by fire fighting. If there is still disagreement about the condition or placement recommendation, a third physician (acceptable to both the fire department and the candidate) may be consulted.

## **B-4** Specific Medical Conditions.

- **B-4.1 Diabetes.** The term insulin-dependent diabetes as used here applies to an individual whose disease course is characterized by an absolute need for insulin with a tendency toward ketoacidosis or marked hyperglycemia and insulin-induced hypoglycemia. The latter condition is the major concern, as an individual who becomes hypoglycemic during a fire or other emergency response could endanger themselves, other fire fighters, or the public. The best predictor for the occurrence of a hypoglycemic episode in a diabetic is a history of a previous episode. On the other hand, the occasional individual treated with insulin for what would normally be considered maturity-onset diabetes (Type II) may be considered if there has been a documented stable course without a history of hypoglycemic episodes and where ongoing monitoring is assured.
- **B-4.2 Asthma.** Asthma and asthma-like conditions are characterized by variable and often rapidly fluctuating airways obstruction, cough, and sputum production. Conditions encountered in fire fighting (irritants, hot/cold air inhalation, and heavy exertion) may trigger asthmatic attacks in some individuals. However, asthmatics with a stable history of symptoms (i.e., only after respiratory infections or exposure to usually avoidable allergens) may not have attacks triggered by fire fighting. For a current fire fighter with preexisting or new onset asthma, their past response to fire fighting episodes may provide guidance on

their ability to continue to work. It should be noted that exposure to products of combustion and other irritants may cause acute airways obstruction in many individuals without asthma. Therefore, the mere presence of some airways obstruction after a fire does not necessarily indicate that an asthmatic condition exists.

**B-4.3 Coronary Artery Disease.** Due to the high prevalence of this condition and the changing diagnostic technology, this category may cause difficulty. Most individuals with coronary artery disease should not be doing fire fighting tasks. An example of an acceptable person with coronary artery disease would be an asymptomatic individual with insignificant coronary artery disease (less than 70 percent obstruction of any coronary artery) with normal left ventricular function and no evidence of myocardial ischemia at maximal exercise tolerance as determined by Thallium imaging, echocardiography, or a comparable technique.

**B-4.4 Reproductive.** Exposures in the fire fighting environment may cause adverse reproductive effects for both males and females. Medical evidence exists to indicate that chemical exposure, heat, noise, and physical exertion may affect various endpoints of reproductive health including fertility, fetal loss, and growth parameters of the offspring. All candidates and fire fighters should be educated about these risks and about the need to take appropriate steps to limit their exposures. There also may be some situations where a male or female fire fighter is attempting to conceive a child and is having difficulty. In these situations, where a complete medical evaluation has not identified another cause for this infertility, temporary assignment on a voluntary basis to alternative duty or a leave of absence should be considered.

Medical evidence exists that certain toxic substances or conditions that are present in the fire fighting environment are dangerous to the safety and well-being of the fetus. Therefore, it is important to educate all fire fighters about these risks and the reasons for recommending that pregnant fire fighters restrict their fire suppression activities. For example, there is good evidence that the fetus is especially sensitive to carbon monoxide, a known significant component of fire smoke. Although the use of SCBA is assumed to be protective, sometimes such equipment is not used throughout a fire suppression or hazardous materials incident. The use of such equipment also increases other fetal stressors, such as exertion and heat. Other concerns are those involving physical work. Prolonged standing, heavy lifting, and exposures to temperature extremes and humidity have been related to an increase of preterm and low birth weight infants. Because the fetus should be protected from these exposures at the earliest possible time, the fire fighter who may be pregnant should obtain early pregnancy testing. Recognizing potential risks to the fetus from the fire fighting environment is a relatively recent event, and many fire fighters may not be aware of these risks.

Based on a recent U.S. Supreme Court decision (International Union, et al. v. Johnson Controls, Inc., 59 U.S.L.W. 4209, March 20, 1991), the ability to perform as a fire fighter is to be the basis for the medical certification without consideration of health risks to the fetus. However, the pregnant fire fighter should be counseled of the potential risks to her fetus due to her exposures during fire fighting duties.

Any fire fighter who becomes pregnant should be offered the opportunity at any time during the pregnancy to be voluntarily removed from fire fighting duties and from other duties involving the hazards or physical stress that might endanger the fetus. If practical, the fire fighter should be offered voluntarily reassignment to an alternative position. At such time as the pregnant fire fighter can no longer be medically certified as being capable of performing fire fighting duties, the fire fighter should be reassigned to other duties. At such time as the fire fighter is no longer pregnant, the fire fighter should be reinstated to the position held prior to being pregnant. Nursing fire fighters should also be advised about the potential exposures to their infants.

**B-4.5 Noise-Induced Hearing Loss.** This category may pose difficulties because a high percentage of current fire fighters have noise-induced hearing loss due to their exposures as fire fighters. Implementation of hearing conservation programs and programs to reduce noise exposures should lead to a decrease in the prevalence of this condition in the future.

## Appendix C Essential Fire Fighting Functions

This Appendix is not a part of the requirements of this NFPA document, but is included for information purposes only.

The medical requirements in this standard were based on in-depth consideration of essential fire fighting functions. These essential functions are what fire fighters are expected to perform at emergency incidents and are derived from the performance objectives stated in NFPA 1001, Standard for Fire Fighter Professional Qualifications.

Such essential functions are performed in and affected by the following environmental factors:

- (a) Operate both as a member of a team and independently at incidents of uncertain duration.
  - (b) Spend extensive time outside exposed to the elements.
- (c) Tolerate extreme fluctuations in temperature while performing duties. Must perform physically demanding work in hot (up to 400°F), humid (up to 100%) atmospheres while wearing equipment that significantly impairs body-cooling mechanisms.
- (d) Experience frequent transition from hot to cold and from humid to dry atmospheres.
  - (e) Work in wet, icy, or muddy areas.
- (f) Perform a variety of tasks on slippery, hazardous surfaces such as on rooftops or from ladders.
- (g) Work in areas where sustaining traumatic or thermal injuries is possible.
- (h) Face exposure to carcinogenic dusts such as asbestos, toxic substances such as hydrogen cyanide, acids, carbon monoxide, or organic solvents either through inhalation or skin contact.
- (i) Face exposure to infectious agents such as hepatitis B or HIV.
- (j) Wear personal protective equipment that weighs approximately 50 pounds while performing fire fighting tasks.

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- (k) Perform physically demanding work while wearing positive pressure breathing equipment with 1.5 inches of water column resistance to exhalation at a flow of 40 liters per minute.
- (l) Perform complex tasks during life-threatening emergencies.
- (m) Work for long periods of time, requiring sustained physical activity and intense concentration.
- (n) Face life or death decisions during emergency conditions.
- (o) Be exposed to grotesque sights and smells associated with major trauma and burn victims.
- (p) Make rapid transitions from rest to near maximal exertion without warm-up periods.
- (q) Operate in environments of high noise, poor visibility, limited mobility, at heights, and in enclosed or confined spaces.
- (r) Use manual and power tools in the performance of duties.
- (s) Rely on senses of sight, hearing, smell, and touch to help determine the nature of the emergency, maintain personal safety, and make critical decisions in a confused, chaotic, and potentially life-threatening environment throughout the duration of the operation.

# Appendix D Guide for Fire Department Administrators

This Appendix is not a part of the requirements of this NFPA document, but is included for information purposes only.

**D-1 Legal Considerations in Applying the Standard.** The consideration of an application or continued employment of a fire fighter based on medical or physical performance evaluations involves a determination that is not without legal implications. To this end, prior to making an adverse employment decision based on the foregoing standard, the authority with jurisdiction may wish to consult with counsel.

(a) Individuals with Handicaps or Disabilities. The Rehabilitation Act of 1973, as amended, 29 U.S.C. 791 et seq., and implementing regulations, prohibit discrimination against those with handicaps or disabilities under any program receiving financial assistance from the federal government. The Americans with Disabilities Act of 1990, Pub. L. 101-336, to become effective in July 1992, will also prohibit employment discrimination by certain private employers against individuals with disabilities.\* In addition, many states have enacted legislation prohibiting discrimination against those with handicaps or disabilities.

These laws prevent the exclusion, denial of benefits, refusal to hire or promote, or other discriminatory conduct against an individual based on a handicap or disability, where the individual involved can, with or without reasonable accommodation, perform the essential functions of the job without creating undue hardship on the employer or program involved. Application of this standard should be undertaken with these issues in mind.

The medical requirements of this standard have been shown to be job-related by a committee comprised of medical doctors, physiological specialists, and fire service professionals, as processed through the NFPA consensus standards-making system. The standard provides, to the extent feasible, that decisions concerning those with medical ailments, handicaps, or disabilities be made after case-by-case medical evaluations.

The medical requirements in this standard were developed based on the fire fighting functions contained in Appendix C. Prior to use, therefore, appropriate measures should be taken to ensure that the fire fighting functions performed in the local jurisdiction are substantially similar to those contained in Appendix C.

- (b) Individuals Who Are Members of Protected Classes (Race, Sex, Color, Religion, or National Origin). Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. 2000e, and implementing regulations by the Equal Employment Opportunity Commission prohibit discrimination in employment on the basis of race, sex, color, religion, or national origin (i.e., protected classes).\*\* Additionally, many states, cities, and localities have adopted similar legislation. Generally, physical performance or other requirements that result in "adverse impact" on members of a protected class (e.g., on the basis of gender) are required to be validated through a study in accordance with EEOC guidelines, if such requirements are to be relied on in making employment decisions. Under EEOC guidelines, a study validating employment standards in one jurisdiction may be transportable to another jurisdiction (and therefore used in lieu of conducting a separate study). However, specific preconditions must be met in this regard, and the authority having jurisdiction should seek the advice of counsel before relying on a transported validation study.
- (c) Pregnancy and Reproductive. Federal regulations, as well as many court decisions (including the U.S. Supreme Court's decision in International Union, et al. v. Johnson Controls, Inc., 59 U.S.L.W. 4209, March 20, 1991), have interpreted the requirements of Title VII with respect to pregnancy and reproduction. The authority having jurisdiction should seek the advice of counsel in resolving specific questions concerning these requirements as well as other requirements that may be imposed by state or local laws.

<sup>\*</sup>Under Section 101 of the Americans with Disabilities Act of 1990, an "employer" is defined, generally, to include those persons with "15 or more employees for each working day in each of 20 or more calendar weeks in the current or preceding calendar year." However, for the first two years after enactment in July 1992, a phase-in period increases the "15 or more employees" threshold to "25 or more employees."

<sup>\*\*</sup>Under Title VII, an "employer" is defined, generally, to mean a person with "15 or more employees for each working day in each of 20 or more calendar weeks in the current or preceding calendar vear." See 42 U.S.C. 2000e. Several federal jurisdictions have held that unpaid volunteers are not considered to be "employees" under Title VII.

**D-2** Choosing a Fire Department Physician. Several factors should be considered in choosing a fire department physician. There are relatively few physicians with formal residency training and certification in occupational medicine. Therefore, physicians with other specialties need to be considered. The background and experience of the physician should be considered. Knowledge of occupational medicine and experience with occupational health programs obviously would be helpful.

The physician must be committed to meeting the requirements of the program including appropriate record keeping. Their willingness to work with the department to continually improve the program is also important. Finally, their concern and interest in the program and in the individuals in the department is vital.

There are many options for obtaining physician services. They could be paid on a service basis or through a contractual arrangement. For volunteer departments, local physicians may be willing to volunteer their services for the program with additional arrangements to pay for laboratory testing, X-rays, etc. Some departments may want to utilize a local health care facility for their care. However, in that case, the department should be sure to have one individual physician responsible for the program, record keeping, etc.

**D-3 Coordinating the Medical Evaluation Program.** An individual from within the department should be assigned the responsibility for managing the health and fitness program, including the coordination and scheduling of evaluations and examinations. This person should also act as liaison between the department and the physician to make sure that each has the information necessary for decisions about placement, scheduling appointments, etc.

Confidentiality of all medical data is critical to the success of the program. Members must feel assured that the information provided to the physician will not be inappropriately shared. No fire department supervisor or manager should have access to medical records without the express written consent of the member. There are occasions when specific medical information is needed to make a decision about placement, return to work, etc., and a fire department manager must have more medical information. In that situation, written medical consent should be obtained from the individual to release the specific information necessary for that decision.

Budgetary constraints may affect the medical program. Therefore, it is important that components of the program be prioritized such that essential elements are not lost. With additional funding, other programs or testing can be added to enhance the program.

#### Index

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