

U.S. DEPARTMENT OF ENERGY

OFFICE OF OCCUPATIONAL MEDICINE AND MEDICAL SURVEILLANCE



Implementation Guide of Medical Standards for Department of Energy FIREFIGHTERS

1. BACKGROUND:

Department of Energy (DOE) Order 5480.4, "Environmental Protection, Safety, and Health Protection Standards," requires DOE sites to comply with the National Fire Protection Association (NFPA) National Fire Code (NFC) as a matter of mandatory policy. DOE Order 5480.4 covers DOE contractor employees who perform the essential functions of firefighters on fire brigades. On August 14, 1992, NFPA 1582, "Standard on Medical Requirements for Firefighters," became NFPA's National Fire Code. The NFPA's requirements list diagnoses that immediately disqualify individuals from being firefighters and diagnoses that require evaluation of the individual on a case-by-case basis.

The Americans with Disabilities Act (ADA), 42 U.S.C. 12102 et seq., requires that individuals be evaluated for a job based on their ability to perform the essential functions of the job, not on the basis of the mere presence of a disease or disability. For example, under the ADA, a person may not be disqualified from a position simply because his or her medical history includes myocardial infarction, coronary bypass or coronary angioplasty. Instead, an evaluation must be made on a case-by-case basis as to whether the person can perform the essential functions of the job with or without reasonable accommodation and without posing a direct threat to self or others. Because the NFPA's medical standards do disqualify individuals with these diagnoses (NFPA 1582, Chap. 3-7.1.1(e)), Category A medical conditions requiring DOE contractors to implement current NFPA medical standards would, in effect, require them to violate the ADA.

These guidelines were prepared to assist the DOE contractor site occupational medical programs in developing NFPA-based firefighter standards that comply with the ADA. Within these guidelines, NFPA 1582 sections are quoted in the left column. Interpretive guidance, as it applies to DOE and in compliance with the requirements of ADA, appears in the adjacent right column. When no interpretive guidance appears, the NFPA guidance stands as written. Where the requirements of NFPA and the ADA conflict, the ADA standard should be followed.

The essential functions of a firefighter position are listed in Section 3: "Essential Fire Fighting Functions." Listed with each essential function are medical conditions that might interfere with an individual's ability to perform that particular function. The physician performing the evaluation must then determine if the medical problem is present and, if it is, whether the condition would interfere with the individual's ability to perform the essential function. This section replaces the section in the NFPA's medical standards that violates ADA by listing the specific disabilities, diseases, or previous medical history that automatically disqualify an individual.

In lieu of the term "fire department physician," which is used in the NFPA standard, these guidelines use the term "Designated Physician." Within DOE, the Designated Physician is the physician authorized to do the work that the NFPA standard designates to the fire department physician.

These guidelines apply to all firefighter applicants and current firefighters at DOE contractor sites, including those individuals in fire brigades who perform the essential functions of DOE firefighters. A medical evaluation will be performed on all firefighter applicants prior to their appointment. Management will provide the DOE Designated Physician with a specific job task analysis prior to the medical evaluation of any firefighter applicant or current firefighter. The medical evaluation will be performed by the DOE Designated Physician, and the specific contents of the evaluation will be based on the essential functions of the job.

The essential functions described in this document are considered to be core essential functions. It is recognized that additional site-specific essential functions may be added to this list by the site as appropriate. The essential functions of a firefighter include those listed in these guidelines and those associated with the site-specific job tasks.

Sites are required to have a physical fitness program for all firefighters. The specific fitness program requirements have not as yet been defined. Pending issuance of a document defining these requirements, fire departments are responsible for developing and implementing an appropriate physical fitness program.

The Secretarial Officer (SO) is responsible for ensuring that these guidelines are disseminated.

The Site Occupational Medical Director (SOMD) is responsible for the performance of the Designated physician, and for ensuring that the Designated Physician is knowledgeable with regard to the essential functions and job tasks of the firefighters. The Designated Physician is the licensed medical professional responsible for medically certifying that all firefighters are medically fit to perform their duties.

Pending the appointment of a Designated Physician for firefighters, the Designated Physician for security and protective forces will serve in this capacity.

2. GUIDELINES:

Medical Requirements for Firefighters

NFPA Standards

Chapter 1

1-1 Scope.

1-1.1 This standard contains medical requirements for firefighters, 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, which 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 firefighters.

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DOE Interpretive Guidance

Chapter 1

1-1 Scope.

1-1.3 These guidelines also apply to DOE fire brigades or plant emergency organizations whose members perform the essential functions of a firefighter, such as search and rescue and fire suppression, as defined in NFPA Standards 600 or 1500. These guidelines do not apply to individuals who provide a support function in conjunction with emergency response and who are not subjected to the physical demands of a firefighter, as determined by the Authority Having Jurisdiction.

1-2 Purpose.

1-2.1 The purpose of these guidelines is to specify minimum medical requirements consistent with the essential functions of both candidates and current firefighters.

Standard

1-2.2 The implementation of the medical requirements outlined in this standard will help ensure that candidates and current firefighters 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.

Interpretive Guidance

1-2.2 The implementation of the medical requirements outlined in these guidelines will help ensure that candidates and current firefighters will be medically capable of performing the essential functions of a firefighter without posing a direct threat to themselves or others.

1-2.3 Nothing herein is intended to restrict DOE or a DOE contractor from exceeding these minimum requirements. However, if site management proposes to establish requirements other than those listed, notice of such variance shall be submitted through the SO to the Director, Office of Occupational Medicine and Medical Surveillance. Variances from these guidelines should be justified and approved in accordance with the procedures established for "equivalences" and "exemptions" as defined in DOE Order 5480.7A, "Fire Protection."

1-3" Implementation.

1-3.1 DOE Order 5480.4 requires DOE sites to comply with the NFPA National Fire Codes as a matter of policy. On August 14, 1992, NFPA 1582, "Standard on Medical Requirements for Firefighters," became effective.

Standard

1-3.2 When this standard is adopted by a jurisdiction, the authority having jurisdiction shall set a date or dates for current firefighters to achieve compliance with the requirements of this standard and shall be permitted to establish a phased-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 firefighter.

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

Interpretive Guidance

1-3.2 An implementation plan for compliance with these guidelines shall be submitted to the SO for review and approval within 120 days of publication. A copy of the implementation plan shall also be submitted to the Director, Office of Occupational Medicine and Medical Surveillance.

1-4 Definitions.

Authority Having Jurisdiction (AHJ). Except as directed by the Secretarial Officers, the decision-making authority in matters concerning fire protection is the Heads of Field Organizations or their designees.

Candidate. A candidate is a person who has applied for and who has been offered a position as a firefighter, or a current employee who has made an application to commence performance as a firefighter.

Medical Condition. The DOE guidelines require that an individual who cannot perform all essential functions of the job, with or without reasonable accommodation, without posing a direct threat to self or others is not qualified to perform the essential functions of a firefighter. The individual's inability may be associated with a medical condition or conditions. Every individual's capabilities

Standard

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

Current Firefighter. 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 firefighter.

Emergency Conditions. Activities of the fire department relating to

Interpretive Guidance

will be individually assessed to ensure that qualified individuals are not rejected on the basis of a mere diagnosis of a medical condition, even if such a condition would usually be assumed to be associated with inability to perform; e.g., Category A medical condition listed in NFPA 1583 (Chap. 3.7.1.1 (e)). The medical standards are addressed in section 3 by essential function, rather than by body system or disease.

Direct Threat. A direct threat is a significant risk of substantial harm to the health or safety of the individual or others that cannot be eliminated or reduced by reasonable accommodation, based on an individualized assessment of the individual's present ability to safely perform the essential functions of the job.

Drug. Any substance, chemical, over-the-counter medication, or prescribed medication that may affect the ability of the individual to perform the essential functions of a firefighter.

Emergency Conditions. Activities of the fire department, including

Standard

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.

Firefighter. 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.

Interpretive Guidance

drills and exercises relating to rescue, fire suppression, and special operations, including response to the scene of an incident and all functions performed at the scene.

Essential Functions of the Job.
The essential functions are those fundamental job duties of firefighters that must be performed with or without reasonable accommodation.

Designated Physician. The licensed doctor of medicine or osteopathy who has been designated by the SOMD and approved by the SO with the concurrence of the Director, Office of Occupational Medicine and Medical Surveillance, to provide professional expertise in the areas of occupational medicine as it relates to the essential functions of firefighters (See section 2-2.2).

Firefighter. A member of a fire department, fire brigade, or an emergency response team whose duties require readiness and response to the performance of essential fire-fighting functions, or substantially similar functions, as those listed in section 5.

Standard

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 firefighter 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.

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 firefighters.

Interpretive Guidance

Medical Examination. An examination performed or directed by the Designated Physician that incorporates the components described in section 2-4.1.4.

Medically Certified. A determination by the Designated Physician that the candidate or current firefighter meets the medical requirements of the standard.

Site Occupational Medical Director. The physician responsible for the overall direction and operation of the site occupational medical program.

Site Occupational Medical Program. The occupational medical program or occupational medical department established by the contractor as required by DOE Order 5480.8A.

Chapter 2 Medical Process

2-1 Medical Evaluation Process.

2-1.1 The fire department, in cooperation with the SOMD, shall establish and implement a medical evaluation process for candidates and current firefighters.

Standard

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 the requirements of this section.

2-1.5 Each candidate or current firefighter 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 firefighter.

2-2 Fire Department Physician.

2-2.1 The fire department physician shall be a licensed doctor of medicine or osteopathy.

Interpretive Guidance

2-1.3 The fire department, in cooperation with the SOMD, shall ensure that the medical evaluation process and all medical evaluations meet all the requirements of this section.

2-1.4 Each candidate or current firefighter 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 firefighter shall report to the Designated Physician any exposure or medical condition that may interfere with the ability of the individual to perform the essential functions of a firefighter. The firefighter shall report to the site occupational medical program facility for a determination of fitness for duty by the Designated Physician when medication is started or when the dosage is changed for a medication that could cause a change in the individual's ability to perform the essential functions of a firefighter.

2-2 Designated Physician.

2-2.1 The Designated Physician shall be a licensed doctor of medicine or osteopathy who is associated with a DOE site occupational medical program.

Standard

2-2.2 The fire department physician should 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 firefighters and shall understand the environmental conditions under which firefighters 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.

Interpretive Guidance

2-2.2 The Designated Physician should be qualified to provide professional expertise in the areas of occupational medicine as they relate to essential functions of firefighters. This qualification is reviewed and approved by the Director, Office of Occupational Medicine and Medical Surveillance, at the time of the initial designation following submission of a request for such approval, through the SO, from the SOMD. The letter describes the relevant training, experience and licensure, and includes copies of the physician's curriculum vitae and his/her current, valid medical license. The Designated Physician is required to report problems with his or her licensure or hospital privileges to the SOMD within 10 working days. The SOMD shall monitor the performance and annually provide the Office of Occupational Medicine and Medical Surveillance with the current status of each Designated Physician.

2-2.3 For the purpose of conducting medical evaluations, the Designated Physician shall be responsible for understanding the physiological and psychological demands placed on firefighters and the environmental conditions under which firefighters must perform. Management shall provide the Designated Physician with each firefighter's specific job task analysis before each comprehensive medical evaluation.

2-2.4 The Designated Physician shall ascertain the ability of the individual to perform the essential functions of the job, using such examination, consultation, and testing elements as necessary.

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 firefighter or performing in an emergency operational environment as a firefighter.

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 firefighter.

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.

Interpretive Guidance

2-2.4.1 The Designated Physician shall conduct or supervise the examination and interpret and document the associated medical information and the presence of medical conditions in the site occupational medical record. The decision of the Designated Physician must be conveyed in writing to management and to the examinee. The Designated Physician shall identify any essential functions the individual cannot perform and may recommend rehabilitation or other actions necessary for the individual to attain this ability.

2-3 Preplacement Medical Evaluation.

2-3.1 The candidate shall be certified by the Designated Physician as meeting the medical requirements of these guidelines prior to entering into a training program to become a firefighter or performing in an emergency operational environment as a firefighter.

2-3.2 The candidate shall be evaluated according to these guidelines to assess the effect of medical conditions on the candidate's ability to perform the essential functions of a firefighter.

2-3.3 A candidate shall not be certified as meeting the medical requirements of these guidelines if the Designated Physician determines that the candidate cannot perform each of the essential functions of a firefighter with or without reasonable accommodation and without posing a direct threat to self or others.

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 firefighter 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 firefighter, medical certification shall be postponed until the person has recovered from this condition and presents to the fire department for review.

2-4 Periodic Medical Examination.

2-4.1 The current firefighter shall be annually certified by the fire department physician as meeting the medical requirements of chapter 3 of this standard to determine that firefighter's medical ability to continue participating in a training or emergency operation environment as a firefighter.

Interpretive Guidance

2-3.4.1 The determination of whether there is reasonable accommodation shall be made by contractor management in conjunction with the Designated Physician.

2-3.5 If the candidate has acute medical problems or a newly acquired, chronic medical condition that interferes with the candidate's ability to perform the essential functions of a firefighter, medical certification shall be postponed until the person has recovered from this condition and reports to the fire department for review.

2-4 Periodic Medical Examination.

2-4.1 The current firefighter shall be annually certified by the Designated Physician as medically able to perform all of the essential functions of a firefighter.

Standard

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; and
- (d) blood pressure.

2-4.2 A current firefighter shall not be certified as meeting the medical requirements of this standard if the fire department physician determines that the firefighter has any Category A medical condition specified in chapter 3 of this standard.

2-4.3 A current firefighter shall not be certified as meeting the medical requirements of this standard if the fire department physician determines that the firefighter has a Category B

Interpretive Guidance

2-4.1.1 The components of the annual medical evaluation specified in section 2-4.1.2 of these guidelines may be performed by qualified personnel, as authorized by the Designated Physician remains responsible to interpret and sign the certification. The other occupational health examiner should be under the personal supervision of the Designated Physician.

2-4.1.2 The annual medical examination shall include the elements of the comprehensive medical examination listed in DOE Order 5480.8A, and:

- (a) Additional medical tests, consultations or evaluations, as deemed necessary by the Designated Physician, to determine the candidate's ability to perform the essential functions of a firefighter or the need for temporary work restrictions; and
- (b) All examination elements, tests, or measurements that are necessary for required, concurrent medical certifications or medical surveillance programs for which the firefighter is enrolled, including pulmonary function testing necessary to evaluate the ability to use respirators.

2-4.2 A current firefighter shall not be certified if the Designated Physician determines that the candidate cannot perform all the essential functions of a firefighter. These essential functions include those functions listed in these guidelines and those associated with the specific job task analysis.

2-4.3 A current firefighter shall not be certified if the Designated Physician determines that the candidate cannot perform the essential functions of a firefighter. Section 5 of the

Standard

medical condition specified in chapter 3 of this standard that is of sufficient severity to prevent the firefighter from performing, with or without reasonable accommodation, the essential functions of a firefighter without posing a significant risk to the safety and health of the firefighter 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** a current firefighter presents with an acute illness or recently acquired, chronic medical condition, the evaluation shall be deferred until the firefighter 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 firefighter who has been absent from duty for a medical condition of a nature or duration that may affect performance as a firefighter shall be evaluated by the fire department physician before returning to duty.

Interpretive Guidance

guidelines may be used as a checklist of conditions that may be associated with an inability of the individual to perform each essential function. **If** a listed or similar condition is diagnosed, the Designated Physician shall document in the medical record why the individual with that condition is, or is not, able to perform the essential functions of a firefighter.

2-4.3.1 A determination of reasonable accommodation shall be made by management in conjunction with the Designated Physician.

2-4.4 If the current firefighter presents with an acute medical problem or newly acquired, chronic medical condition that interferes with the candidate's ability to perform the essential functions of a firefighter, medical evaluation may be postponed until that person has recovered from the condition and presents to the occupational medical program for review.

2-5 Return-to-Work Medical Evaluation.

2-5.1 A current firefighter who has been absent from duty for a medical condition of a nature or duration that may affect performance as a firefighter shall be evaluated by the Designated Physician before returning to duty. All such return-to-work evaluations shall be reviewed and signed by the Designated Physician. The responsibility for giving medical clearance for return to work as a firefighter rests with the Designated Physician.

Standard

2-5.2 The fire department physician shall not medically certify the current firefighter 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 firefighter 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 firefighter's performance as a firefighter. The fire department physician, in conjunction with the authority having jurisdiction, shall take into account the firefighter's current duty assignment and alternative duty assignments or other programs that would allow a firefighter 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 firefighter.

2-6.2 The fire department physician shall report the results of the medical evaluation to the candidate or current firefighter, including any medical condition(s) disclosed during the medical evaluation and the recommendation as to whether the candidate or current firefighter is medically certified to perform as a firefighter.

Interpretive Guidance

2-5.2 & 2-5.3 A firefighter wishing to return to work shall not be certified if the Designated Physician determines that the candidate cannot perform all of the essential functions of a firefighter.

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 only with the specific written consent of the candidate or current firefighter, except as permitted or required by law or regulation.

2-6.2 The Designated Physician shall report the results of the medical evaluation to the candidate or current firefighter, including any medical condition(s) disclosed during the medical evaluation and the recommendation as to whether the candidate or current firefighter is medically certified to perform as a firefighter.

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any medical condition(s) disclosed during the medical evaluation and the recommendation as to whether the candidate or current firefighter is medically certified to perform as a firefighter.

2-6.3 The fire department physician shall inform the fire department only as to whether or not the candidate or current firefighter is medically certified to perform as a firefighter. The specific written consent of the candidate or current firefighter shall be required to release confidential medical information to the fire department.

2-6.3 The Designated Physician shall inform the fire department only as to whether or not the candidate or current firefighter is medically certified to perform as a firefighter. The specific written consent of the candidate or current firefighter shall be required to release this confidential medical information to the fire department or to others, except as required by law or regulation.

3. ESSENTIAL FIREFIGHTING FUNCTIONS:

These essential functions are those that firefighters are expected to perform at emergency incidents and may be required to perform in training drills and emergency exercises. They are derived from the performance objectives stated in NFPA 1001," **Standard for Firefighter Professional Qualifications.** "

3-1 General Essential Functions. The examinee shall possess mental, sensorial, and motor skills as required to perform safely and effectively all essential job duties described below and those additional essential functions that are derived from the specific jobtask analysis that is developed for each firefighter. The specific job task analysis will be submitted to the Designated Physician prior to each medical evaluation of the candidate or current firefighter. The general essential functions include:

3-1.1 The ability to be stable with regards to consciousness and the control of voluntary motor functions, and to have the functional capacity to respond appropriately to routine and emergency situations of the job;

3-1.2 The ability to maintain the mental alertness, deductive and inductive reasoning, memory, and reliable judgment necessary to perform all essential functions without posing a direct threat to self or others;

3-1.3 Acuity of senses and ability of expression sufficient to allow essential, accurate communication by written, spoken, audible, visible, or other signals, while using required personal protective or other equipment; and

- 3-1.4 Motor power, dynamic strength, range of motion, neuromuscular coordination, stamina, gross body coordination, and dexterity adequate to perform essential functions under all required, routine and emergency duties.
- 3-2 Specific Essential Functions. Each standard, firefighter essential function is listed with examples of medical conditions that may affect the ability of the individual to perform that function. These conditions, or others, when found to be present, require the Designated Physician to determine and record why that individual is, or is not, qualified to perform all the essential functions.
- 3-2a The individual must be stable with regard to consciousness and the control of voluntary motor functions and have the functional capacity to respond appropriately to routine and emergency situations.
- 3-2a Examples of medical conditions that may affect performance include:
1. All uncontrolled seizure disorders;
 2. Myocardial insufficiency;
 3. Congestive heart failure;
 4. Documented predisposition to heat stress;
 5. Malignant diseases not in remission;
 6. Severe congenital deformities of the spine, trunk, or limbs; and
 7. Narcolepsy.
- 3-2b Operate both as a member of a team and independently at incidents of uncertain duration.
- 3-2b Examples of medical conditions that may affect performance include:
1. Diabetes mellitus requiring careful control through management of diet, timed exercise, and/or insulin;
 2. Sleep disorders;
 3. Addison's Disease (adrenal insufficiency);
 4. Allergic respiratory disorder; and
 5. Disorders producing orthostatic hypotension.
- 3-2c Spend extensive time outside exposed to the elements.
- 3-2c Examples of medical conditions that may affect performance include:
1. Congenital ectodermal dysplasia;
 2. Raynaud's Syndrome;
 3. Chronic sinusitis;
 4. Bronchial asthma; and
 5. Severe arthritis.

- 3-2d Tolerate extreme fluctuations in temperature while performing duties. Must perform physically demanding work in hot (up to 400° F), humid (up to 100% humidity) atmosphere while wearing equipment that significantly impairs body-cooling mechanisms.
- 3-2d Examples of medical conditions that may affect performance include:
1. Bronchial asthma;
 2. Diabetes mellitus;
 3. Pregnancy (after 1st trimester);
 4. Chronic sinusitis;
 5. Use of neuroleptic drugs (e.g., Thorazine); and
 6. Eczema.
- 3-2e Experience frequent transition from hot to cold and from humid to dry atmospheres.
- 3-2e Examples of medical conditions that may affect performance include:
1. Bronchial asthma;
 2. Chronic sinusitis;
 3. Arthritis; and
 4. Eczema.
- 3-2f Work, including walking, standing, pulling, and pushing in wet, icy, or muddy areas.
- 3-2f Examples of medical conditions that may affect performance include:
1. Neuromuscular injuries to the spine, or lower extremities with residual dysfunction of gait;
 2. Cerebral Palsy;
 3. Amyotrophic lateral sclerosis;
 4. Muscular atrophies;
 5. Arthritis;
 6. Cerebral vascular accident with residual dysfunction of gait; and
 7. Neurological disorders with ataxia.
- 3-2g Perform a variety of tasks on slippery, hazardous surfaces, such as on rooftops or ladders.
- 3-2g Examples of medical conditions that may affect performance include:
1. Labyrinthine or vestibular disorders with vertigo;
 2. Severe limitations of motion of joints;
 3. All uncontrolled seizure disorders;
 4. Ataxias; and
 5. Progressive muscular dystrophy.

- 3-2h Work in areas where sustaining traumatic or thermal injuries are possible.
- 3-2h Examples of medical conditions that may affect performance include:
1. Impaired immune system;
 2. Diabetes mellitus;
 3. Predisposition to heat stress;
 4. Hemophilia, Von Willebrand's disease, and other clotting/bleeding disorders;
 5. Anemia;
 6. Peripheral vascular disease;
 7. Raynaud's Disease; and
 8. Congenital multiple telangiectasia.
- 3-2i Ability to wear or use personal protective equipment without obstruction to prevent 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**.
- 3-2i Examples of medical conditions that may affect performance include:
1. Emphysema;
 2. Eczema, including dyshidrotic types;
 3. Asthma;
 4. Chronic sinusitis; and
 5. Malignancies.
- 3-2j Face exposure to infectious agents, such as Hepatitis B or HIV.
- 3-2j Examples of medical conditions that may affect performance include:
1. Impaired immune system;
 2. Hemophilia;
 3. Severe eczema or other dermatitis;
 4. Cirrhosis; and
 5. Pregnancy (after the 1st trimester).
- 3-2k Wear personal protective equipment that weighs approximately 50 pounds while performing fire-fighting tasks.
- 3-2k Examples of medical conditions that may affect performance include:
1. Hernia;
 2. Joint and limb deformities so severe that it would interfere with movement and flexibility;
 3. Arthritis;
 4. Ataxias; and
 5. Multiple sclerosis.

- 3-21 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.
- 3-21 Examples of medical conditions that may affect performance include:
1. Emphysema;
 2. History of previous pneumothorax;
 3. Eczema;
 4. Asthma;
 5. Spinal dysfunctions; and
 6. Chronic lung diseases.
- 3-2m Perform complex tasks during life-threatening emergencies.
- 3-2m Examples of medical conditions that may affect performance include:
1. Psychological conditions;
 2. Cardiovascular conditions, including angina;
 3. Severe hypertension;
 4. Substance abuse;
 5. Migraine; and
 6. Progressive dementias.
- 3-2n Work for long periods of time, requiring sustained physical activity and intense concentration.
- 3-2n Examples of medical conditions that may affect performance include:
1. Neuromuscular injuries to the spine, or lower extremities with residual dysfunction of gait;
 2. Cerebral Palsy;
 3. Amyotrophic lateral sclerosis;
 4. Muscular atrophies;
 5. Arthritis; and
 6. Cardiac conditions, including angina.
- 3-20 Make life or death decisions during emergency conditions.
- 3-20 Examples of medical conditions that may affect performance include:
1. Psychological conditions;
 2. Cardiovascular conditions;
 3. Severe hypertension;
 4. Substance abuse;
 5. Migraine;
 6. Suicide threat or attempt; and
 7. Cardiac conditions, including angina.

- 3-2p Be exposed to grotesque sights and smells associated with major trauma and burn victims.
- 3-2p Examples of medical conditions that may affect performance include:
1. Psychological conditions;
 2. Cardiac conditions, including angina;
 3. Recurrent syncope;
 4. Substance abuse; and
 5. Hypertension.
- 3-2q Make rapid transitions from rest to near maximum exertion without warmup periods.
- 3-2q Examples of medical conditions that may affect performance include:
1. Cardiovascular conditions;
 2. Arthritis and other chronic joint diseases;
 3. Chronic, obstructive or restrictive lung diseases;
 4. Progressive muscular dystrophy;
 5. Labyrinthitis; and
 6. Poor physical conditioning.
- 3-2r The ability to properly and effectively wear protective equipment.
- 3-2r Examples of medical conditions that may affect performance " include:
1. Deformities of the skull, congenital or developmental facial deformities;
 2. Oropharyngeal dysfunction, causing inability to communicate effectively;
 3. Contraction of neck muscles, inability to rotate head;
 4. Inflammatory skin diseases;
 5. Pulmonary functions diseases;
 6. Tracheotomy;
 7. Branchial cleft or other oropharyngeal fistulas; and
 8. Perforated eardrum.
- 3-2s Freedom from frequent episodes of pain or inability to perform work, or sudden incapacitation.
- 3-2s Examples of medical conditions that may affect performance include:
1. Pancreatitis;
 2. Ulcers;
 3. Acute hepatitis;
 4. Severe hemorrhoids;

5. Hernia;
 6. Chronic severe osteoarthritis; and
 7. Lumbar disc disease or other low back pain syndromes.
- 3-2t Ability to maintain balance under adverse conditions, weight loads, and at aboveground heights; and maintain body flexibility.
- 3-2t Examples of medical conditions that may affect performance include:
1. Labyrinthitis;
 2. Amputation or deformity of joint or limb;
 3. Cerebral arteriosclerosis;
 4. Multiple sclerosis;
 5. Muscular dystrophy;
 6. Chemical, drug, or medication abuse;
 7. Obstructive or restrictive lung disease;
 8. Ankylosing spondylitis; and
 9. Chronic back conditions with decreased range of motion or pain.
- 3-2u Operate in environments of high noise, poor visibility, limited mobility, aboveground heights, and in closed or confined spaces.
- 3-2u Examples of medical conditions that may affect performance include:
1. Hypertension;
 2. Hearing loss, recruitment, or other hearing-related conditions;
 3. Claustrophobia;
 4. Psychological conditions;
 5. Ulcers;
 6. Labyrinthine or vestibular disorders subject to vertigo;
 7. Syncope; and
 8. Acrophobia.
- 3-2v Use manual and power tools in the performance of duties.
- 3-2v Examples of medical conditions that may affect performance include:
1. Progressive muscular dystrophy;
 2. Neuromuscular injuries to the spine or limbs;
 3. Hearing loss;
 4. Arthritis and other chronic joint diseases;
 5. Cerebral Palsy; and
 6. Carpal tunnel syndrome.

- 3-2w Ability to maintain balance under adverse conditions, weight loads, and at aboveground heights; and maintain body flexibility.
- 3-2w Examples of medical conditions that may affect performance include:
1. Labyrinthine or vestibular disorders subject to vertigo;
 2. Amputation or deformity of joint or limb;
 3. Cerebral arteriosclerosis;
 4. Multiple sclerosis;
 5. Muscular dystrophy;
 6. Chemical, drug, or medication abuse;
 7. Syncope;
 8. Acrophobia; and
 9. Chronic back conditions with decreased range of motion or pain.
- 3-2x Rely on sense 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.
- 3-2x Examples of medical conditions that may affect performance include:
1. Hearing impairment with inability to hear the whispered voice at 12 feet in a quiet environment;
 2. Recurrent sinusitis;
 3. Visual acuity uncorrected worse than 20/100; and
 4. Anosmia.
- 3-2y The ability to identify colors and to read placards and street signs or to see and respond to imminently hazardous situations in less than standard visual lighting conditions.
- 3-2y Examples of medical conditions that may affect performance include:
1. Color blindness;
 2. Retinal detachment;
 3. Progressive retinopathy;
 4. Optic neuritis;
 5. Radial keratotomy prior to full healing; and
 6. Cataracts.
- 3-2z The ability temporarily to have useful vision in the event eyeglasses are broken or displaced by emergency activity.
- 3-2z Example of a medical condition that may affect performance: uncorrected vision worse than 20/100.

- 3-2aa Ability to smell smoke and other odors that might indicate hazardous conditions.
- 3-2aa Examples of medical conditions that may affect performance include:
1. Anosmia; and
 2. Severe sinusitis.
- 3-2ab Ability to verbally communicate effectively under noisy circumstances with a potential for voice obstruction by personal protective equipment.
- 3-2ab Examples of medical conditions that may affect performance include:
1. Hearing loss;
 2. Speech pathology;
 3. Laryngectomy;
 4. Tracheotomy;
 5. Bronchial asthma; and
 6. Congenital acquired deformities of the face and neck that interfere with speech.
- 3-2ac Ability to distinguish low intensity voice sounds from background noise in order to respond to imminently hazardous situations.
- 3-2ac Example of a medical condition that may affect performance: hearing loss, including presbycusis.
- 3-2ad Ability to work in closed or confined spaces.
- 3-2ad Example of a medical condition that may affect performance: claustrophobia.
- 3-2ae Ability to judge distances closer than 13 feet demonstrated either by testing of depth perception or by a practical field test.
- 3-2ae Examples of medical conditions that may affect performance include:
1. Monocular vision; and
 2. Amblyopia/anopsia.