

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.

3-2l 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.

3-2l 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.

3-2o Make life or death decisions during emergency conditions.

3-2o 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
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, above ground 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.