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Wildland Fire Management, 0456, Qualification Standards

Table of Contents

Associated Group Standard	3
Individual Occupational Requirements	3
Experience, Education, and Training Requirements	3
Experience	4
Education/Training	4
Use of Selective Factors	5
Requirements For Motor Vehicle Operation	5
Mechanical Equipment Operator Qualifications	5
Performance Test	5
Medical Requirements	6
Psychiatric Standard	7
Prosthetics, Transplants, and Implants Standard	8
Immune System/Allergic Disorders Standard	9
Medication Standard.....	10
Vision Standard	11
Head, Nose, Mouth, Throat, and Neck Standard	12
Hearing Standard	13
Dermatology Standard	14
Vascular System Standard.....	15
Cardiac Standard	16
Chest and Respiratory System Standard	16
Endocrine and Metabolic System Standard.....	18
The Condition of Pregnancy	19
Hematopoietic System Standard	19
Musculoskeletal System Standard	20

Not for Distribution or Use; Deliberative

Central and Peripheral Nervous System and Vestibular System Standard.....	22
Gastrointestinal System Standard	24
Genitourinary System Standard.....	24
Maximum Entry Age	25

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Associated Group Standard

There is no Group Coverage Qualification Standard for this series. Use the Individual Occupational Requirements described below.

Individual Occupational Requirements

Experience, Education, and Training Requirements

The following table shows the amounts of experience, education, and/or training required to qualify for positions covered by this standard.

Grade	Experience		Education/Training
	General	Specialized	
GS-3	6 months	None	1 year of related education or training
GS-4	6 months	6 months equivalent to at least GS-3	2 years above high school with related course work
GS-5	None	1 year equivalent to at least GS-4	4-year course of study above high school leading to a bachelor's degree
GS-6 and above	None	1 year equivalent to at least next lower grade level ¹	None

Equivalent combinations of education and experience are qualifying for grade levels for which both education and experience are acceptable.

¹ See provision on crediting level of experience for inservice placement actions in the "General Policies and Instructions" section of this Manual.

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Experience

General Experience (for GS-3 positions): Work experience or military service that demonstrated the ability to follow directions and to read, understand, and retain a variety of instructions, regulations, and procedures and that otherwise demonstrates the ability to perform or learn to perform the duties of the position.

Specialized Experience (for positions at GS-4 and above): Experience that demonstrated the particular knowledge, skills, and abilities (KSA's) to successfully perform the duties of the position. Such duties may include, but are not limited to (1) controlling or extinguishing fires as a member of an organized military, industrial, volunteer, or governmental fire department or brigade; (2) forest fire control, prevention, or suppression work; (3) rescue operations; (4) detection, reduction, or elimination of potential fire hazards; (5) operation of fire communications equipment when it requires specialized knowledge of firefighting techniques, equipment, and procedures to prevent and manage fires; (6) controlling hazardous materials incidents and/or (7) developing, implementing, or providing training in fire protection and prevention.

or

Education/Training

Education/Training (for positions at GS-5 and below): Appropriate firefighter training may be substituted for experience on a month-for-month basis. Firefighter training obtained as part of a high school curriculum- may be substituted for the 6 months of general experience required for GS-3. Successful completion of a 2-year course of study in an accredited college or university in Fire Training, Fire Science, Fire Technology or other related fields of study is qualifying for GS-4. Successful completion of a 4-year course of study in an accredited college or university with major study in Fire Science, Fire Training, Fire Technology or other related fields of study is qualifying for GS-5. Related Education is education above the high school level that has equipped the applicant with the knowledge, skills, and abilities to successfully perform the duties of the position being filled. Education may relate to the duties of a specific position or to the occupation, but must be appropriate for the position being filled. It is the applicant's responsibility to provide documentation or proof that he or she has met the applicable educational provisions described and to furnish supporting descriptive information concerning coursework as may be needed to determine relatedness.

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Use of Selective Factors

Some positions in this series require knowledge, skills, and abilities in addition to those described in this qualification standard. For such positions, job-specific selective factors may be required to ensure that applicants have the background necessary for successful performance in the position to be filled. For example, consideration may need to be limited for positions involving emergency medical treatment to applicants with certification as emergency medical technicians, for positions involving emergency response to hazardous substance releases to those individuals with appropriate experience, training, or certification, or for positions which involve parachute rigging to those individuals with appropriate experience, training, or certification. The use of Selective Factors must be substantiated by job analysis.

Requirements For Motor Vehicle Operation

For those positions requiring employees to drive motorized firefighting equipment, candidates must possess and maintain a valid State motor vehicle operator's license of the appropriate classification or kind. Applicants also may be required to pass a practical road test and provide information on their driving record. See 5 CFR 930 and the "General Policies and Instructions" section of this Manual for additional requirements for motor vehicle operators.

Mechanical Equipment Operator Qualifications

For those positions requiring the operation of specialized firefighting pumping equipment, mounted pressurized systems, dispensing devices, and/or rescue tools, applicants may be required to demonstrate the ability, before appointment, to operate the specific equipment to which they will be assigned, or similar related types of equipment.

Performance Test

Agencies may require candidates to demonstrate satisfactory performance of the minimum physical abilities necessary to perform safely and efficiently the essential tasks of a particular position. The abilities may be demonstrated through prior satisfactory performance in the same or a similar position, or agencies may choose to use a task demonstration. A task demonstration must be directly related to the essential job tasks, and thus, must consist of a sample of operations or steps that reflect a reasonably faithful representation of those selected job tasks. Any demonstration required must be uniformly applied to all similarly qualified candidates; the level of

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proficiency required cannot exceed that which is required in actual job performance; and reasonable accommodation must be provided where necessary.

Medical Requirements

The Federal Interagency Wildland Firefighter Medical Standards establish the levels of minimum medical fitness for arduous duty that the agencies have determined to be necessary for safe and efficient job performance based on 5 CFR Part 339 Medical Qualifications Determinations. Applicants for positions that have duties of an arduous or hazardous nature must meet the medical standards described below. Since individual positions may not include all such duties, a physical condition or impairment may be disqualifying for employment only if there is a direct relationship between the condition and the nature of the duties of the specific position to be filled. Failure to meet any of the required medical qualifications will usually be considered disqualifying for employment or a basis for termination, except when substantial evidence is presented that the individuals can perform the essential functions of the job efficiently and without hazard to themselves or others, with or without reasonable accommodation. Each of the medical standards listed are subject to clinical interpretation by a designated physician. Listed with the standards are examples of medical conditions and/or physical impairments that may be found to be disqualifying. Assessments will be made on a case-by-case basis to determine the individual's ability to meet the medical standards. These medical standards demonstrate the interagency fire community's strong commitment to public and employee health and safety, while maintaining mission integrity.

Employees in positions involving wildland firefighting duties or other duties involving arduous physical exertion may be subject to periodic (e.g., annual) medical examinations following appointment to determine fitness for continued performance of the duties of the position. (See 5 CFR 339.)

Any serious deviation from sound medical condition may be grounds for rejection of an applicant regardless of whether the condition is named below. Remediable defects or curable diseases will not exclude a person from consideration, but proof that such defects have been remedied or the disease cured must be received during the life of the eligible register before persons otherwise qualified may be considered for appointment under civil service rules.

The following medical conditions must be met:

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Psychiatric Standard

The Psychiatric standard relates (A) the firefighter's need for judgment, mental functioning, and social/behavior skills with (B) the essential functions and work conditions of a wildland firefighter, including working on small and large teams, flying in helicopters and fixed wing aircraft, and rapid pull out to safety zones under conditions that may include isolated or remote sites, snakes, close quarters with large numbers of other workers, limited and disrupted sleep, and long work hours. Some psychiatric conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

The applicant/incumbent must have judgment, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the requirements of the job. This may be demonstrated by no evidence (by a physical examination and medical history) of psychiatric conditions (including alcohol or substance abuse) that affect safe and efficient job performance, without presenting a safety risk to the individual or others, or to worsen as a result of performing the essential job functions.

Psychiatric disorders that affect safe and efficient job performance may be disqualifying, and consideration must be given to the individual's history of treatment and control of the condition(s). Any other psychiatric condition (including substance abuse that significantly or potentially impairs normal function and has the potential to render the individual incapacitated may be disqualifying.

Conditions which may result in disqualification include, but are not limited to, the following examples:

(All diagnoses must be consistent with the diagnostic criteria as established by the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, DSM-IV.)

- Amnestic disorders
- Delirium (depending upon etiology and duration)
- Dementias (depending upon etiology)
- Dissociative Disorders
- Kleptomania

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- Panic Disorder and other anxiety disorders (depending upon etiology, duration and severity of clinical expression)
- Pyromania
- Schizophrenia (Exceptions may be may in cases of a single episode of schizophrenic reactions associated with an acute illness capable of causing such reaction.)
- Antisocial Personality Disorder
- Paranoid Personality Disorder
- Schizoid Personality Disorder
- Organic Brain Syndrome
- Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Prosthetics, Transplants, and Implants Standard

The Prosthetics, Transplants, and Implants standard relates (A) the firefighter's need to work safely and efficiently despite medical conditions that have led to the need for a prosthesis, transplant or implant with (B) the essential functions and work conditions of a wildland firefighter, including using shovels or other hand tools to construct fire lines, using personal protective equipment, engaging in arduous exertion, carrying heavy loads, walking and climbing, kneeling and stooping, and pulling out rapidly to safety zones, and doing so under conditions that may include very steep terrain, rocky, loose or muddy surfaces, wet leaves and grasses, isolated and remote sites, and very long assignments. For individuals with transplants, prosthetics, or implanted pumps or electrical devices, the examinee will have to provide for agency review documentation from his/her surgeon or physician that the individual (and, if applicable, his/her prosthetic or implanted device) is considered to be fully cleared for the specified functional requirements of wildland fire fighting.

Individuals with transplants, prosthetics, or implanted pumps or electrical devices, will have to provide for agency review, documentation from his/her surgeon or physician that the individual (and, if applicable, his/her prosthetic or implanted device) is considered to be fully cleared for the specified functional requirements of wildland fire fighting.

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The presence or history of organ transplantation or use of prosthetics or implants are not of themselves disqualifying. However, the applicant/incumbent must be able to carry out the requirements of the job safely and efficiently. This may be demonstrated by:

- No evidence by physical examination and medical history that the transplant, the prosthesis, the implant, or the conditions that led to the need for these treatments are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Immune System/Allergic Disorders Standard

The Immune System/Allergic Disorders standard relates (A) the firefighter's need to be free of infectious disease, immune system, or allergy conditions likely to present a safety risk to self or others with (B) the essential functions and work conditions of a wildland firefighter, including arduous exertion, driving or riding for many hours, and providing rescue or evacuation assistance under conditions that may include isolated or remote sites, allergens, close quarters with large numbers of other workers, and long assignments. Some immune system/allergic conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

The applicant/incumbent must be free of communicable diseases, have a healthy immune system, and be free of significant allergic conditions to carry out the requirements of the job safely and efficiently. This may be demonstrated by:

- A general physical exam of all major body systems that is within the range of normal variation, including:
- no evidence of current communicable disease that would be expected to interfere with the safe and effective performance of the requirements of the job; and
- no evidence of current communicable disease that would be expected to pose a threat to the health of any co-workers or the public; and
- Normal complete blood count, including white blood count and differential; and
- Current vaccination status for tetanus; and
- No evidence by physical examination and medical history of infectious disease, immune system, or allergy conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

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Conditions that may result in disqualification include, but are not limited to, the following:

- Hereditary Angioedema
- Goodpasture's Syndrome
- Autoimmune Hemolytic Anemia
- Vasculitis
- Hashimoto's Thyroiditis
- Myasthenia Gravis
- Systemic Lupus Erythematosus
- Chronic or Acute Active Hepatitis B or Hepatitis C (A finding of unexplained elevated liver transaminases may require additional diagnostic studies before a final medical recommendation is rendered)
- Tuberculosis (A history of TB that has been appropriately treated for longer than 6 months is not disqualifying, provided that documentation supports the treatment history, and the person has a current chest x-ray showing no active).
- Disease. A person with a positive PPD or Mantoux skin test will be required to have a chest X-ray and, if indicated, a sputum culture).
- Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Medication Standard

The Medication standard relates (A) the firefighter's need for full physical and mental function and attention and a low risk of sudden or subtle incapacitation with (B) the essential functions and work conditions of a wildland firefighter under conditions that may include open holes and drop offs, isolated and remote sites, irregular meals, dehydration, and long work assignments. Some medications may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

The need for or use of prescription or over-the-counter medications does not automatically disqualify an applicant. However, a physical examination, laboratory tests, and medical history must not reveal any impairment of body function or mental function and attention due to medications that could pose a safety risk or worsen as a result of performing the specified functional requirements. Consideration must be given to the following: medication(s) (type and dosage requirements), potential drug

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side effects drug-drug interactions, adverse drug reactions, drug toxicity or medical complications from long-term use, drug-environmental interactions, drug-food interactions, and history of patient compliance

Vision Standard

The Vision standard relates (A) the firefighter's need to be able to see (including binocular vision, visual acuity, depth perception, peripheral vision, and color vision) with (B) the essential functions and work conditions of a wildland firefighter, including the ability to read maps and printed materials in variable lighting conditions, driving, walking, climbing, constructing fire lines, and rapid pull out to safety zones under conditions that may include very steep terrain, rocky, loose or muddy ground surfaces, open holes or drop offs, and dim light or darkness. The limit for uncorrected far vision is set at 20/100 binocular, consistent with the National Fire Protection Association's Standard on Medical Requirements for Fire Fighters (NFPA 1582, 1997 Edition), and with a field assessment by the medical standards team in which different levels of acuity were considered in an operational setting related to the need for rapid or emergency movement under the conditions noted above. Long-term users of soft contact lenses are not subject to the uncorrected far vision standard. Corrected far vision is set at 20/40, and the color vision requirement is for red/green/amber (yellow), consistent with Department of Transportation regulations for commercial driving and the need for safe and efficient function under expected firefighting conditions. Near visual acuity is set at reading printed material that is comparable to size 5 font, such as "This note is legal tender...public and private debts" found on all bills of American currency or other pre-printed material, with or without corrective lenses. Peripheral vision is set as 85° laterally, which is generally considered to be normal. Some vision conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

The applicant/incumbent must be able to see well enough to carry out the requirements of the job safely and efficiently. This requires binocular vision, far visual acuity, depth perception, peripheral vision, and color vision. which may be demonstrated by:

- Uncorrected, distant vision of at least 20/100 in each eye.
- Corrected, distant vision of at least 20/40 in each eye.

Not for Distribution or Use; Deliberative

- Near visual acuity is the ability to read printed material that is comparable to size 5 font, such as “This note is legal tender...public and private debts” found on all bills of American currency or other pre-printed material, with or without corrective lenses.
- Contact lenses and glasses are acceptable for correction of visual acuity, but the user must be able to demonstrate that the corrective device(s) can be worn safely and for extended periods of time without significant maintenance, as well as being worn with any necessary personal protective equipment.
- Color vision sufficient to distinguish at least red, green, and amber (yellow); and
- Peripheral vision of at least 85°(degrees) laterally in each eye.
- Normal depth perception
- No ophthalmologic condition that would increase ophthalmic sensitivity to bright light, fumes, or airborne particulates, or susceptibility to sudden incapacitation.

Conditions that may result in disqualification include, but are not limited to the following:

- Any ophthalmologic condition(s) that would increase an individual’s ophthalmic sensitivity to bright light, fumes, or airborne particulates, or susceptibility to sudden incapacitation.
- Chronic conjunctivitis
- Corneal ulcers
- Retinal detachment
- Night blindness
- Any other condition(s) that may affect safe and efficient performance and carries the potential to incapacitate the individual

Head, Nose, Mouth, Throat, and Neck Standard

The Head, Nose, Mouth, Throat and Neck standard relates (A) the firefighter’s need to be able to move the head without restriction, breath freely, wear personal protective equipment, and communicate clearly with (B) the essential functions and work conditions of a wildland firefighter, including working on small and large teams, flying in helicopters and fixed wing aircraft, and fighting fire under conditions that may include high (and changing) altitudes, allergens, varied climates, and isolated and remote sites. Some head, nose, mouth, throat, and neck conditions, including those

Not for Distribution or Use; Deliberative

listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions

The applicant/incumbent must have no evidence (by physical examination and medical history) of head, nose, mouth, throat, or neck conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job. Individuals must have structures and functions of the head, nose, mouth, throat, and neck that are sufficient for the individual to carry out the requirements of the job safely and efficiently.

Hearing Standard

The Hearing standard relates (A) the firefighter's need to hear verbal communications and both natural and manmade warning sounds with (B) the essential functions and work conditions of a wildland firefighter, including working on small and large teams, driving, rapid pull out to safety zones, and providing rescue or evacuation assistance under conditions that may include isolated and remote sites, falling rocks and trees, trucks and other large equipment. The hearing standard is set at an average threshold of no greater than 40 dB at 500, 1000, 2000, and 3,000 Hz in each ear, consistent with the DOT regulations for commercial drivers. This level is more lenient than that allowed by the NPFA 1582 standards (30 dB average threshold at these frequencies), or what is considered to be "normal" hearing (25 dB), but is felt to provide a reasonable hearing threshold level where louder than normal communications may be expected. Hearing aids are not permitted in meeting this standard, due both to the limitation in directional hearing afforded by hearing aids, and to the risk of dislodging of a hearing aid during critical or emergency periods when hearing must be acute. Some ear and hearing conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

The applicant/incumbent must be able to hear well enough to carry out the requirements of the job safely and efficiently. This requires binaural hearing (to localize sounds) and auditory acuity, which may be demonstrated by:

- A current pure tone, air conduction audiogram, using equipment and a test setting which meet the standards of the American National Standards Institute (see 29 CFR 1910.95).
- The thresholds at 500, 1000, 2000, and 3000 Hertz, measured by pure-tone audiometry, no greater than 40 dB in each ear.

Not for Distribution or Use; Deliberative

- No evidence (by physical examination and medical history) of ear conditions (external, middle, or internal) likely to present a safety risk or to worsen as a result of carrying out the essential job functions.
- Hearing aids are not permitted in meeting this standard

Conditions that may result in disqualification include, but are not limited to the following:

- Meniere's Disease
- Acoustic neuroma
- Otosclerosis
- Any other condition that adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Dermatology Standard

The Dermatology standard relates (A) the firefighter's need for intact and healthy skin with (B) the essential functions and work conditions of a wildland firefighter, including use of personal protective equipment, extensive walking and climbing, under conditions that may include highly variable climates, extreme ultraviolet light exposure, extreme heat, allergens, and isolated or remote sites. Some dermatologic conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

The applicant/incumbent must have skin that is sufficient for the individual to carry out the requirements of the function safely and efficiently. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation.
- No evidence (by physical examination and medical history) of dermatologic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions.

Conditions which may result in disqualification include, but are not limited to the following:

- Albinism
- Kaposi's Sarcoma

Not for Distribution or Use; Deliberative

- Chronic Dermatitis
- Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Vascular System Standard

The Vascular System standard relates (A) the firefighter's need for a healthy vascular system (including a lack of phlebitis, thrombosis, venous stasis, or arterial insufficiency) with (B) the essential functions and work conditions of a wildland firefighter, including arduous exertion, driving or riding for extensive periods, flying in helicopters and fixed wing aircraft, and extensive walking and climbing under conditions that may include isolated or remote sites, and long work assignments. Some vascular conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

Individuals must have no evidence by physical examination and medical history of peripheral vasculature conditions affecting healthy vascular system (including a lack of phlebitis, thrombosis, venous stasis, or arterial insufficiency) Some vascular conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

The applicant/incumbent must have a vascular system that is sufficient for the individual to carry out the requirements of the job safely and efficiently. This may be demonstrated by:

- A physical exam of the vasculature of the upper and lower extremities that is within the range of normal variation, including:
 - No evidence of phlebitis or thrombosis
 - No evidence of venous stasis
 - No evidence of arterial insufficiency
 - No evidence by physical examination and medical history of peripheral vasculature conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions which may result in disqualification include, but are not limited to, the following examples:

Not for Distribution or Use; Deliberative

- Chronic Venous Insufficiency
- Deep Vein Thrombosis
- Chronic Thrombophlebitis
- Intermittent Claudication
- Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis

Cardiac Standard

The Cardiac standard relates (A) the firefighter's need for a healthy cardiovascular system and a low risk of sudden or subtle incapacitation with (B) the essential functions and work conditions of a wildland firefighter, including arduous exertion, lifting and carrying heavy loads, extensive walking and climbing, and rapid pull out to safety zones under conditions that may include very steep terrain, isolated and remote sites, extreme heat, dehydration, and long work assignments. Some cardiac conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions. The standard for blood pressure was set at below 140/90 (with or without medication). At or above this level is considered to be hypertension (high blood pressure), a condition associated with increasing risk of cardiovascular morbidity and mortality.

The applicant/incumbent must have a cardiovascular system without cardiovascular conditions likely to present a safety risk that is sufficient for the individual to carry out the requirements of the job safely and efficiently.

Chest and Respiratory System Standard

The Chest and Respiratory System standard relates (A) the firefighter's need for a healthy respiratory system and residual aerobic capacity with (B) the essential functions and work conditions of a wildland firefighter, including arduous exertion, carrying heavy loads, and extensive walking and climbing under conditions that may include very steep terrain, high altitudes, airborne particulates, and allergens. Some chest and respiratory conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions. The stated standards of 70% of predicted values for forced vital capacity (FVC), forced expiratory volume at 1 second (FEV₁), and the ratio of FEV₁/FVC are intended as screens for further evaluation, not mandatory values. The requirement for agency review when inhalers are used is based on both the general incompatibility

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of inhalers and high heat or fire (according to guidance from inhaler manufacturers) and concern regarding the degree of respiratory sensitivity an individual may bring to a setting of high irritant exposure.

The applicant/incumbent must have a respiratory system that is sufficient for the individual to carry out the requirements of the job safely and efficiently. This may be demonstrated by:

- A physical exam of the respiratory system that is within the range of normal variation.
- A pulmonary function test (baseline exam) showing:
 - Forced vital capacity (FVC) of at least 70 percent of the predicted value.
 - Forced expiratory volume at 1 second (FEV1) of at least 70 percent of the predicted value
 - The ratio FEV1/FVC of at least 70 percent.
- No evidence by physical examination and medical history of respiratory conditions likely to present a safety risk or to worsen as a result of carrying out the essential job functions.
- The requirement to use an inhaler (such as for asthma) requires agency review.

Conditions that may result in disqualification include, but are not limited to the following:

- Significant obstructive or restrictive pulmonary disease
- Asthma
- Active Pulmonary Tuberculosis (TB)
- History of Chronic Bronchitis associates with decreased pulmonary function
- Lung abscess
- Spontaneous Pneumothorax
- Emphysema
- Sarcoidosis
- Pulmonary embolism
- Pulmonary infarction
- Pneumonectomy

Not for Distribution or Use; Deliberative

- Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Endocrine and Metabolic System Standard

The Endocrine and Metabolic System standard relates (A) the firefighter's need for normal body function and maintenance and a low risk of sudden or subtle incapacitation with (B) the essential functions and work conditions of a wildland firefighter, including arduous exertion under conditions that may include isolated and remote sites, hunger and irregular meals, dehydration, irregular hours, and long assignments. Some endocrine and metabolic conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

Any excess or deficiency in hormonal production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The applicant/incumbent must have endocrine and metabolic functions that are sufficient for the individual to carry out the requirements of the job safely and efficiently. This may be demonstrated by:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation.
- Normal fasting blood sugar level.
- Normal blood chemistry results
- No evidence by physical examination (including laboratory testing) and history of endocrine/metabolic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions which may result in disqualification include, but are not limited to, the following examples:

- Adrenal Dysfunction (in the form of Addison's Disease or Cushing's or Cushing's Syndrome)
- Thyroid Disease (uncontrolled or associated with current complications)
- Pituitary Dysfunction
- Insulin Dependent Diabetes Mellitus

Not for Distribution or Use; Deliberative

- Hyperglycemia without a history of diabetes will require additional tests, including, but not limited to a glycohemoglobin (or hemoglobin A1C) and fasting glucose before a final medical determination is made.
- Diabetes Insipidus
- Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

The Condition of Pregnancy

The Condition of Pregnancy does not become an issue under most circumstances since the condition is not a disability and is a time-limited condition.

If a female applicant or incumbent raises the issue of pregnancy as the basis for a request for a special benefit, a change in duty status, or job restrictions, then justification and clarifying information for that request must be provided by the woman's obstetrician or primary care physician, along with the estimated time period the special conditions are expected to apply.

Hematopoietic System Standard

The Hematopoietic System standard relates (A) the firefighter's need for a healthy blood and blood producing system and a low risk of sudden or subtle incapacitation with (B) the essential functions and work conditions of a wildland firefighter, including arduous exertion under conditions that may include high altitudes, isolated and remote sites, extreme heat, close quarters with large numbers of other workers, dehydration, and long assignments. Some blood and blood producing conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

Individuals must have no evidence by physical examination (including laboratory testing) and medical history of hematopoietic conditions that may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

The applicant/incumbent must have a hematopoietic (blood and blood-producing) system that is sufficient for the individual to carry out the requirements of the job safely and efficiently. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation

Not for Distribution or Use; Deliberative

- A complete blood count (including hemoglobin, hematocrit, platelets, and white blood count, with differential) that is within the normal range
- No evidence by physical examination (including laboratory testing) and medical history of hematopoietic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions which may result in disqualification include, but are not limited to, the following examples:

- Anemia—Generally considered as:
 - Hematocrit of less than 39% and a hemoglobin of less than 13.6 gm/dl for males
 - Hematocrit of less than 33% and a hemoglobin of 12 gm/dl for females
 - (If anemia does exist but physical performance levels and pulmonary function are normal, this condition may be acceptable.)
- Hemophilia
- Chronic Lymphangitis
- Thrombocytopenia or Clotting Disorder
- Sickle Cell Anemia
- Splenomegaly
- Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Musculoskeletal System Standard

The Musculoskeletal System standard relates (A) the firefighter's need for strength, flexibility, range of motion, and joint stability with (B) the essential functions and work conditions of a wildland firefighter, including arduous exertion, extensive walking and climbing, kneeling and stooping, lifting and carrying heavy loads, and rapid pull out to safety zones under conditions that may include rocky, loose, or muddy ground surfaces, thick vegetation, wet leaves and grass, and falling rocks and trees. Some musculoskeletal conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

Individuals must be free of musculoskeletal conditions that impair or negatively impact their strength, flexibility, range of motion, or joint stability. The

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applicant/incumbent must have a musculoskeletal system that is sufficient for the individual to carry out the functional requirements of the job safely and efficiently. This may be demonstrated by:

- A physical exam of the upper and lower extremities, neck, and back that is within the range of normal variation for strength, flexibility, range of motion, and joint stability; and
- No evidence by physical examination and medical history of musculoskeletal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Individuals who require the use of a prosthetic device, see prosthetic standard above, the examinee will have to provide for agency review documentation from his/her surgeon or physician that the individual (and, if applicable, his/her prosthetic device) is considered to be fully cleared for the essential functions of the job.

Conditions that may result in disqualification include, but are not limited to the following:

- Arthritis
- Amputations of an extremity or digits
- Ankylosing spondylitis
- Muscular dystrophy
- Lumbosacral instability
- Sciatica or other neuropathies
- Chronic low back pain (by medical history) without demonstrable pathology must be considered on a case-by-case basis. Each case will be reviewed in context of the original history or etiology, the response to therapeutic regimes, frequency of recurrence, exacerbating factors, and lengths of disability associated with the recurrences combined with the current clinical presentation.
- A history of a Chronic sprain or strain or the neck limiting mobility or causing recurring cephalgia (headaches).
- Any evidence of a Cervical neuropathy, including numbness, tingling or loss of motor strength in the upper extremities.
- Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

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Central and Peripheral Nervous System and Vestibular System Standard

The Central and Peripheral Nervous System and Vestibular System standards relate (A) the firefighter's need for balance, sensation of surroundings and self, and a low risk of sudden or subtle incapacitation with (B) the essential functions and work conditions of a wildland firefighter, including use of hand and power tools, flying in helicopters and fixed wing aircraft, and extensive walking and climbing under conditions that may include isolated and remote sites, very steep terrain, rocky, loose, or muddy ground surfaces, wet leaves and grass, heights, open holes and drop offs, falling rocks and trees, trucks and other large equipment, and high heat. Some sensory conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

Individuals must have no evidence by physical examination and medical history of nervous, cerebellar, or vestibular system conditions affecting balance and sensation of surroundings and self that are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

The applicant/incumbent must have a nervous system that is sufficient for the individual to carry out the requirements of the job safely and efficiently. This may be demonstrated by:

- A physical exam of the cranial and peripheral nerves and the vestibular and cerebellar system that is within the range of normal variation, including:
 - intact cranial nerves, I-XII
 - normal vibratory sense in the hands and feet
 - normal proprioception of the major joints
 - normal sensation of hot and cold in the hands and feet
 - normal sense of touch in the hands and feet
 - normal reflexes of the upper and lower extremities
 - normal balance (e.g., heel-toe walk; Romberg; balance on one foot)
 - Normal basic mental status evaluation (e.g., person, place, time, current events).
- No evidence by physical examination and medical history of nervous, cerebellar, or vestibular system conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

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Conditions which may result in disqualification include, but are not limited to the following:

- Ataxia
- Vestibular neuronitis
- Vertigo and Paroxysmal functional vertigo
- Cerebrovascular accident or transient ischemic attacks
- Epilepsy
- Multiple Sclerosis
- Muscular Dystrophy
- Narcolepsy
- Neurofibromatosis
- Parkinson's Disease
- Cerebrovascular accident (Stroke)
- Transient Ischemic Attacks
- Sensory Dysfunction (smell, touch, taste, proprioception)
- Migraine
- Cephalgia
- Seizure Disorders

To be considered for a medical clearance to perform arduous duty wildland firefighting, an individual with a history of one or more seizures must provide the following written information from a physician who is board certified in neurology. This information is to be provided on the physician's own letterhead, and must include:

- the physician's printed or typed name (i.e., legible), signature, and date.
- confirmation that the physician has reviewed and is familiar with the Essential Functions and Work Conditions Of A Wildland Firefighter (the job table developed for arduous duty wildland firefighters);
- a summary of all current medications, along with any known side effects experienced or expected to be experienced by the firefighter.
- the known or suspected triggers or factors that may lead to seizure activity for the firefighter.
- the results of the most recent diagnostic testing, such as an EEG, the firefighter's overall medical prognosis, related to his/her seizure disorder; and

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- the estimated risk or likelihood of future seizure activity the firefighter might experience, of any degree of severity.
- Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Gastrointestinal System Standard

The Gastrointestinal System standard relates (A) the firefighter's need to be able to consume adequate nutrition and calories, and to have a low risk of sudden or subtle incapacitation, with (B) the essential functions and work conditions of a wildland firefighter, including arduous exertion, driving or riding for many hours, and flying in helicopters and fixed wing aircraft under conditions that may include isolated or remote sites, close quarters with large number of other workers, hunger and irregular meals, and long assignments. Some gastrointestinal conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

Individuals must have no evidence by physical examination (including laboratory testing) and medical history of gastrointestinal conditions that interfere with consuming adequate nutrition and calories and are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job. The applicant/incumbent must have a gastrointestinal tract that is sufficient for the individual to carry out the requirements of the job safely and efficiently.

Genitourinary System Standard

The Genitourinary System standard relates (A) the firefighter's need for a healthy genitourinary system and a low risk of sudden or subtle incapacitation with (B) the essential functions and work conditions of a wildland firefighter, including arduous exertion, driving or riding for long periods, and flying in helicopters and fixed wing aircraft under conditions that may include isolated or remote sites, hunger and irregular meals, dehydration, and long assignments. Some genitourinary conditions, including those listed in the standards, may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

Individuals must have no evidence by physical examination and medical history of genitourinary conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

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The applicant/incumbent must have a genitourinary system that is sufficient for the individual to carry out the requirements of the job safely and efficiently. This may be demonstrated by:

- A normal clean catch urinalysis
- No evidence by physical examination and medical history of genitourinary conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions which may result in disqualification include, but are not limited to, the following examples:

- Polycystic kidney disease
- Acute or chronic renal failure
- Nephrotic syndrome
- Symptomatic urinary calculi
- Neurogenic bladder
- History of renal vein thrombosis
- Uncorrected obstructive uropathies
- Renal toxicity from any cause
- Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Maximum Entry Age

Title 5 U.S.C. 3307 authorizes the head of any agency to establish a maximum entry age for the original appointment of individuals to the position of firefighter.