Forest Service Version of the Federal Interagency Wildland Firefighter Medical Qualification Standards

Arduous Duty Wildland Firefighter

The Forest Service Version of the Federal Interagency Wildland Firefighter Medical Qualification Standards establishes the minimum levels of medical fitness for arduous duty that the agency has determined to be necessary for the safe and efficient performance of the job based on *5 CFR Part 339 Medical Qualifications Determinations*. These levels are the same as the Department of the Interior, and the Office of Personnel Management approved version of the Medical Standards can be found at the following website: http://www.nifc.gov/medical_standards/wf/index.html. These medical qualification standards demonstrate the agency's strong commitment to employee health and safety, while maintaining mission integrity and safety to the public. The firefighter will be under arduous exertion in rigorous and unusual conditions and exposed to extreme physical danger and irregular and extended hours of work. The purpose of these medical qualification standards is to reduce risk, as we know we can not completely eliminate risk.

The *Essential Functions and Work Conditions of a Wildland Firefighter* are the basis for these medical qualification standards and quantify the expectation that the firefighter can perform the full range of duties at any time and at any place, maintaining continuity of operations at all times. It is important to understand that any condition that has a high likelihood of causing sudden or subtle incapacitation or that could pose a safety risk to the examinee or their co-workers needs careful consideration as it may not be compatible with safe and efficient performance of wildland firefighter duties under these conditions.

Once the Forest Service Medical Qualifications Program is implemented, medical examinations will be required for all arduous duty wildland firefighters. Each of the medical qualification standards listed in this document is subject to clinical interpretation by the reviewing medical officer. Listed with the standards are examples of medical conditions and/or physical impairments that <u>MAY</u> 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 qualification standards. The examinee is responsible for providing documentation from their care provider for any condition/s they have, to show stability or resolution, to be reviewed to clear them for the duties of the job.

Psychiatric Standard

The firefighter must have judgment, mental function, and social interaction/behavior skills that will provide for the safe and efficient conduct of the job requirements. These include essential functions and work conditions on small and large teams, flying in helicopters and fixed wing aircraft, 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 may not be compatible with the safe and efficient performance of the job under these stressful conditions.

This may be demonstrated by:

1. No evidence on physical exam and medical history of psychiatric conditions, including alcohol/substance abuse, likely to present a safety risk to themselves or others, or to worsen as a result of carrying out the essential functions of the job.

Conditions that <u>MAY</u> be disqualifying include, but are not limited to (diagnoses must be consistent with the diagnostic criteria established in <u>Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition</u>, (DSM-IV):

- 1. Amnestic disorders
- 2. Delirium (dependent upon etiology and duration)
- 3. Dementias (dependent upon etiology)
- 4. Dissociative Disorders
- 5. Kleptomania
- 6. Panic Disorder and other Anxiety Disorders (dependent upon etiology, duration, and severity of clinical expression)
- 7. Pyromania
- 8. Schizophrenia (there may be exceptions such as a single episode of schizophrenic reaction associated with an acute illness capable of causing such reaction)
- 9. Personality Disorders (antisocial, schizoid, paranoid, etc)
- 10. Organic Brain Syndrome
- 11. Any other condition not listed that may adversely affect the safe and efficient performance of the job will be evaluated on a case-by-case basis

Prosthetics, Transplants, and Implants Standard

The presence of a transplanted organ, or the use of a prosthetic or implant are not of themselves disqualifying. The firefighter must be able to safely and efficiently perform the job requirements which include using shovels and 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 under conditions that may include very steep terrain, rocky, loose or muddy surfaces, wet leaves and grasses, isolated or remote sites, and very long assignments. The examinee is responsible to bring documentation, *for the hiring Agency's review*, from his/her surgeon or physician that the individual and, if applicable, the prosthetic/implanted device are fully cleared for the specified job requirements of wildland firefighting. There should be no evidence on physical exam or medical history that the condition that led to the need for these treatments, the prosthesis, transplant, or implant, will present a safety risk to them or others, or worsen as a result of carrying out the essential functions of the job.

Immune System/Allergic Disorders Standard

The firefighter must be free of communicable diseases, have a healthy immune system, and be free of significant allergic conditions to safely and efficiently carry out the requirements of the job such as arduous exertion in conditions that may be dusty or smoky, driving or riding for several hours, providing rescue or evacuation assistance in isolated or remote sites that may contain allergens, close quarters with large numbers of other workers, and long assignments. Some immune disorders/allergic conditions may not be compatible with the safe and efficient performance of the job under these stressful conditions.

This may be demonstrated by:

- A general physical exam that shows no current sign of communicable disease that would pose a
 threat to the health of any co-worker or the public or interfere with the safe and efficient
 performance of the job requirements, afebrile, and no evidence of an immune disorder or
 allergic condition that would pose a safety risk or worsen as a result of performing the duties of
 the job, OR
- 2. A general physical exam that is negative for abnormality with or without a normal CBC and/or Chem 12/14, and/or negative ANA and sedimentation rate, or negative PPD skin test or chest x-ray or sputum culture, dependent on the concern.
- 3. Up-to-date on his/her tetanus vaccination.

- 1. Hereditary Angioedema
- 2. Goodpasture's Syndrome
- 3. Autoimmune Hemolytic Anemia
- 4. Vasculitis
- 5. Hashimoto's Thyroiditis
- 6. Myasthenia Gravis
- 7. Systemic Lupus Erythematosus
- 8. Acute or Chronic Active Hepatitis B or C (unexplained elevated liver enzymes may require additional testing before a final medical recommendation is rendered)
- 9. Tuberculosis (a history of TB that has been appropriately treated is not disqualifying examinee must bring documentation of treatment history that supports this and have a current negative chest x-ray)
- 10. Mononucleosis
- 11. Any other condition not otherwise listed that may adversely affect the safe and efficient performance of the job will be evaluated on a case-by-case basis.

Medication Standard

The need and use of prescribed and over-the-counter medications are not of themselves disqualifying. These medications though cannot show evidence on exam and history that they impair the body in any way including mentally and cannot pose a safety risk to the examinee or co-workers or worsen the examinee's mental or body function, and must have a low risk of sudden or subtle incapacitation, while carrying out the job requirements such as work conditions that may include open holes or drop-offs, isolated or remote sites, irregular meals, dehydration, long work assignments, and exposure to heat.

The medical provider must consider the following:

- 1. Medication(s)- type and dosage requirements
- 2. Potential drug side effects
- 3. Drug-drug interactions
- 4. Adverse drug reactions
- 5. Drug toxicity or medical complications from long-term use
- 6. Drug-environmental interactions (hot and/or humid conditions)
- 7. Drug-food interactions
- 8. History of patient compliance

Vision Standard

The firefighter needs to see well enough to carry out the requirements of the job safely and efficiently using binocular vision, depth perception, peripheral vision, and color vision in order to drive, walk and climb, construct fire lines, and rapidly pull out to safety zones under conditions that may involve very steep terrain, rocky, uneven, loose or muddy surfaces, open holes or drop-offs, and dim light or darkness. Some visual conditions may not be compatible with the safe and efficient performance of the job.

This may be demonstrated by:

- 1. An examination of the eyes and associated structures that does not reveal any abnormalities.
- Uncorrected distant visual acuity is to be no worse than 20/100 in each eye which is consistent
 with NFPA 1582 along with a field assessment by the Federal Interagency Wildland Firefighter
 Medical Standards Team where different levels of acuity were evaluated in an operational
 setting related to the need for rapid or emergency movement under the conditions noted
 above, AND
- 3. Corrected distant visual acuity must be 20/40 or better in each eye.
- 4. Near visual acuity will consist of being able to read print that is comparable to size 5 font such as "This note is legal tender for all debts, public and private" on a dollar bill (size 5 font, smallest size font found in the Incident Response Pocket Guide). (with or without corrective lenses)
- 5. Color vision is required to be able to distinguish red, yellow/amber, and green which is consistent with Department of Transportation commercial driver regulations.
- 6. Peripheral vision is a minimum of 85 degrees laterally/temporally which is considered normal.

- 7. Depth perception to be considered normal.
- 8. There should be no condition present that would cause sensitivity to bright light, fumes, or airborne particulates, or that would cause sudden incapacitation.

Contact lenses and glasses are acceptable, but the user must be able to demonstrate that the corrective lenses can be worn safely and for extended periods of time without needing significant maintenance as well as being able to be worn with any necessary personal protective equipment. It is <u>a waiver</u> <u>requirement</u> that the firefighter carry a back-up pair of lenses or glasses.

Conditions that MAY be disqualifying include, but are not limited to:

- 1. Chronic conjunctivitis
- 2. Corneal ulcers
- 3. Retinal detachment
- 4. Night blindness
- 5. Monocular vision
- 6. Any other condition not otherwise listed that may adversely affect the safe and efficient performance of the job will be evaluated on a case-by-case basis.

Head, Nose, Ears, Mouth, Throat and Neck Standards

The firefighter needs to move his/her head and neck without restriction, breathe freely, wear personal protective equipment, and communicate clearly in high and changing altitudes, exposed to allergens, smoke and dust, in various climates, and isolated or remote sites. Some head, nose, ears, mouth, throat and neck conditions may not be compatible with the safe and efficient performance of the job.

This may be demonstrated by:

- 1. On exam there should be full range of motion of the neck, patent nares, normal oral exam including no obstruction or obvious sign of dental infection, unobstructed external auditory canals and intact tympanic membranes, normal speech, and no structural abnormality that would prevent the normal use of a hard hat and protective eyewear.
- 2. There should be no evidence of a condition that would be a safety risk or worsen while carrying out the essential requirements of the job.

- 1. Mutism/Aphonia
- 2. Nasal polyps that significantly obstruct breathing
- 3. Restricted range of motion of the neck
- 4. Perforated/Ruptured tympanic membranes
- 5. Congenital absence of an external auditory canal and/or inner ear
- 6. Mastoiditis
- 7. Chronic internal/external otitis media

- 8. Chronic sinusitis
- 9. Meniere's Disease
- 10. Acoustic Neuroma
- 11. Cholesteatoma
- 12. Otosclerosis
- 13. Tinnitus
- 14. Any other condition not otherwise listed that may adversely affect the safe and efficient performance of the job will be evaluated on a case-by-case basis.

Hearing Standard

The firefighter needs to hear verbal communication as well as natural and manmade warning sounds while working on small and large teams, driving, rapid pull out to safety zones or providing rescue or evacuation assistance under conditions that may include isolated or remote sites, falling rocks and trees, trucks and other large equipment, all potentially with high background noise and low light conditions that would hinder visual clues. Hearing aids are **not** allowed in meeting this standard as they, according to the USFDA regulation 21 CFR 801.420, are labeled that they do not restore normal hearing and are normally adjusted to only restore 1/3 to ¼ of the measured loss of hearing which allows improved hearing of speech but not other acoustic clues which are important to the firefighter's safety. They are also not calibrated to function in a high background noise environment and do not have auditory localization. Deficiencies in hearing will be evaluated on a case-by-case basis.

The gold standard of testing is the audiogram with the hand-held audiometer falling below this, but realizing that this may not be readily available, other testing options are listed and the best test available is to be utilized.

The requirements for an audiometer test are a threshold of 40dB at 500 Hz, 1000 Hz, 2000 Hz, and 3000Hz. (any dB higher than 40 dB being the lowest they can hear is not acceptable) The test is to be performed in a quiet environment. The examinee may bring documentation of a prior audiogram in the last 4 months for clearance.

Audiogram: 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)

Hand-held audiometer: This device must test at 500 Hz, 1000 Hz, 2000 Hz, 3000 Hz, at dB levels below 40, including 40, and above 40, with no specific amount of levels.

Whisper Test: The examinee is to be at least 10 feet from the examiner with the ear being tested facing the examiner. The other ear is covered. Using the breath that remains after a normal exhalation, the examiner whispers words or random numbers (ex. 66, 18, 23, 41) that the examinee has to repeat or asks a question they have to answer. The opposite ear should be tested in the same way using a different question, or sequence of words or numbers. If the individual fails the whisper test <u>in either ear</u>, they will require an audiometer test.

Examples of decibel levels:

10 dB – rustling leaves, 20 dB – water dripping, 30 dB - a whisper, 40 dB – a quiet radio in a room, 50 dB – moderate rainfall, 60 dB – normal conversation or a dishwasher, 70 dB – a vacuum cleaner, 80 dB – an alarm clock, 100 dB – a chainsaw, 120 dB – jet plane takeoff

Endocrine and Metabolic Standards

The firefighter needs to have normal body function and maintenance with a low risk of sudden or subtle incapacitation under arduous exertion in isolated or remote sites, dehydration, hunger and irregular meals, irregular hours and long assignments. Endocrine and metabolic issues can cause weight changes, affect stress adaptation and energy production, as well as elevate blood pressure, and cause weakness, fatigue and collapse. Some endocrine and metabolic conditions may not be compatible with the safe and efficient performance of the job.

This may be demonstrated by:

- 1. A general physical exam which includes a thyroid exam and vital signs showing no abnormalities, OR
- 2. A normal physical exam with or without a normal Chem 12/14, and/or TSH/T3/T4 to confirm a stable thyroid condition, and/or HgA1c under 7.0 to confirm diabetic control or fasting blood sugar under 100 to confirm no diagnosis of diabetes, dependent on the concern.
- 3. There should be no evidence of an endocrine or metabolic condition that may pose a safety risk or worsen while carrying out the essential requirements of the job.

Conditions that MAY be disqualifying include, but are not limited to:

- 1. Adrenal Dysfunction such as Addison's Disease or Cushing's Syndrome
- 2. Parathyroid/Thyroid Disease uncontrolled or with current complications
- 3. Pituitary Dysfunction
- 4. Insulin Dependent Diabetes Mellitus type 1 or 2, or uncontrolled Diabetes Mellitus
- 5. Hyperglycemia without a history of diabetes will require additional blood tests before a final medical determination is made
- 6. Diabetes Insipidus
- 7. Prior Heat Stroke
- 8. Any other condition not otherwise listed that may adversely affect the safe and efficient performance of the job will be evaluated on a case-by-case basis.

Dermatology Standard

The firefighter needs to have intact and healthy skin so as not to interfere with use of PPE, extensive walking and climbing, in conditions of highly variable climates, extreme ultraviolet light exposure, extreme heat, allergens and dust, and isolated or remote sites. Some dermatologic conditions may not be compatible with the safe and efficient performance of the job.

This may be demonstrated by:

- 1. A general exam that reveals no abnormalities, OR
- 2. A normal physical exam and a negative CBC, and/or a normal ANA or sedimentation rate, dependent on the concern.
- 3. There should be no evidence of a dermatologic condition that would pose a safety risk or worsen while carrying out the essential requirements of the job.

Conditions that MAY be disqualifying include, but are not limited to:

- 1. Lupus Erythematosus
- 2. Albinism
- 3. Kaposi's Sarcoma
- 4. Malignant Melanoma
- 5. Chronic Dermatitis
- 6. Active suspected MRSA or other infection
- 7. Venous Stasis Disease
- 8. Scleroderma
- 9. Photosensitive Skin Condition
- 10. Any other condition not otherwise listed that may adversely affect the safe and efficient performance of the job will be evaluated on a case-by-case basis.

Vascular System Standard

The firefighter needs a healthy vascular system to function under arduous exertion, driving or riding for extensive periods of time, flying in helicopters or fixed wing aircraft, extensive walking and climbing, being in isolated or remote sites, and long work assignments. Some vascular conditions may not be compatible with the safe and efficient performance of the job.

This may be demonstrated by:

- 1. A general exam of the upper and lower extremities showing no vascular abnormality of the arterial or venous systems.
- 2. There should be no evidence of a vascular condition that would pose a safety risk or worsen while carrying out the essential requirements of the job.

- 1. Chronic Venous Insufficiency/Venous Stasis Disease
- 2. Deep Venous Thrombosis
- 3. Chronic Thrombophlebitis
- 4. Intermittent Claudication
- 5. Vasculitis Syndromes
- 6. Raynaud's Syndrome

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

Cardiac Standard

The firefighter needs a healthy cardiovascular system, a low risk of sudden or subtle incapacitation, and the ability to function in work conditions such as arduous exertion, lifting and carrying heavy loads extensive walking and climbing, rapid pull out to safety zones over very steep terrain, isolated or remote sites, extreme heat, dehydration, and long work assignments. Some cardiac conditions may not be compatible with the safe and efficient performance of the job.

This may be demonstrated by:

- 1. A normal general exam of the cardiovascular system with a blood pressure (BP) less than 140/90 obtained with the correct BP cuff for the patient's arm size, OR
- 2. A normal general exam and BP less than 140/90 with a negative EKG/ECG and/or chest x-ray dependent on the concern.
- 3. The pulse should be between 60 and 100 to be normal, and may be between 40 and 60 if the examinee is fit aerobically. If the pulse is between 40 and 60 the examinee should run in place for 1 minute and the pulse repeated. If the pulse is still less than 50, this is considered abnormal unless they have documentation from a PCP in regards to this clearing them.
- 4. There should be no evidence of a cardiovascular condition that would pose a safety risk or worsen while carrying out the essential requirements of the job.

- Pacemakers or Prosthetic Valves documentation from the examinee's cardiologist stating the
 person is stable and can safely carry out the job requirements stated on the Essential Functions
 and Work Conditions of a Wildland Firefighter sheet will be needed before clearance can be
 granted
- 2. Coronary Artery Disease/Coronary Artery Bypass Graft/Myocardial Infarction
- 3. Hypertension uncontrolled, with end organ damage, or that requires a medication that may affect the ability of the examinee to safely and efficiently carry out the requirements of the job
- 4. Left Bundle Branch Block/2nd or 3rd degree AV Block
- 5. Myocarditis/Endocarditis/Pericarditis
- 6. Valvular Heart Disease
- 7. Dysrhythmias Ventricular tachycardia or fibrillation, Wolff-Parkinson-White Syndrome, Paroxysmal Atrial Tachycardia, Atrial flutter or fibrillation, multifocal PVC's, sinus pause more than 3 seconds
- 8. Angina Pectoris/Chest Pain
- 9. Cardiomyopathy
- 10. Congestive Heart Failure
- 11. Aortic Aneurysm

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

Chest and Respiratory System Standard

The firefighter needs a healthy respiratory system and residual aerobic capacity to function under arduous exertion, carrying heavy loads, with extensive walking and climbing on very steep terrain, in high altitudes, in smoky and dusty environments with airborne allergens, in isolated or remote sites. Pulmonary function tests are used for diagnosis and monitoring or surveillance of Chronic Obstructive Pulmonary Disease (COPD). This can also be used for surveillance for a job with known pulmonary exposure issues. A pulmonary function test showing less than 70% of predicted values for forced vital capacity (FVC), forced expiratory volume at 1 second (FEV $_1$), and the ratio FEV $_1$ /FVC should warrant further evaluation. In healthy individuals, a peak flow meter reading, peak expiratory flow rate (PEFR), correlates with a FEV $_1$. Any need for use of an inhaler requires review by the hiring Agency because of the incompatibility of the inhaler with high heat/fire. Some respiratory conditions may not be compatible with the safe and efficient performance of the job.

This may be demonstrated by:

- 1. An exam of the respiratory system and the chest wall including a peak flow meter reading that shows no abnormality, OR
- 2. A normal exam with a negative chest x-ray and/or normal pulmonary function test, dependent on the concern.
- 3. There should be no evidence of a respiratory condition that would pose a safety risk or worsen while carrying out the essential requirements of the job.

- 1. Significant Obstructive or Restrictive Pulmonary Disease/Emphysema/COPD
- 2. Asthma
- 3. Active or History of Pulmonary Tuberculosis (TB)
- 4. Chronic Bronchitis with Decreased Pulmonary Function
- 5. Lung Abscess
- 6. Spontaneous Pneumothorax recurrent or recent
- 7. Sarcoidosis with impaired pulmonary function tests
- 8. Pulmonary Embolism
- 9. Pulmonary Infarction
- 10. Pneumonectomy with impaired pulmonary function tests
- 11. Active hemoptysis
- 12. Pulmonary Hypertension
- 13. Pleural Effusion
- 14. Cystic Fibrosis

- 15. Sleep Apnea
- 16. Current Tracheostomy
- 17. Any other condition not otherwise listed that may adversely affect the safe and efficient performance of the job will be evaluated on a case-by-case basis.

The Condition of Pregnancy

The female firefighter who is pregnant or raises the issue as a basis for a request for a special benefit, a change in duty status, or job restrictions, must provide notification confirming the pregnancy from her obstetrician or primary care provider, and if there are any job restrictions, they need to be documented on the note from the medical provider as well as length of needed restrictions.

Hematopoietic System Standard

The firefighter needs a healthy blood producing system for work conditions that include arduous exertion, in high altitudes, isolated or remote sites, extreme heat, close quarters with large numbers of other workers, dehydration, and long assignments. Some blood and blood producing conditions may not be compatible with the safe and efficient performance of the job.

This may be demonstrated by:

- 1. A normal general exam which includes examination of lymph nodes, OR
- 2. A normal exam with a normal CBC with differential with or without a peripheral smear.
- 3. There should be no evidence of a blood or blood producing condition that would pose a safety risk or worsen while carrying out the essential requirements of the job.

Conditions that MAY be disqualifying include, but are not limited to:

- 1. Anemia
- 2. Hemophilia
- 3. Thrombocytopenia or Clotting/Bleeding Disorder
- 4. Sickle Cell Anemia or Trait/Hemoglobinopathies
- 5. Splenomegaly
- 6. Leukemia
- 7. Lymphoma
- 8. Any other condition not otherwise listed that may adversely affect the safe and efficient performance of the job will be evaluated on a case-by-case basis.

Musculoskeletal System Standard

The firefighter needs strength, flexibility, range of motion, and joint stability for arduous exertion, extensive walking and climbing, kneeling and stooping, lifting and carrying heavy loads, and rapid pull out to safety zones over terrain that may include very steep, rocky, loose, or muddy ground surfaces,

thick vegetation, wet leaves and grass, and falling rocks and trees. Some musculoskeletal conditions may not be compatible with the safe and efficient performance of the job.

This may be demonstrated by:

- 1. A normal physical exam of the upper and lower extremities, neck and back which includes evaluation for strength, flexibility, range of motion, and joint stability.
- 2. There should be no evidence of a musculoskeletal condition that would pose a safety risk or worsen while carrying out the essential requirements of the job.

Conditions that MAY be disqualifying include, but are not limited to:

- 1. Arthritis that limits major joint motion or causes pain with full range of motion
- 2. Amputations of an extremity or digit
- 3. Ankylosing Spondylitis/Vertebral Fusion/Spinal Rods present
- 4. Muscular Dystrophy
- 5. Lumbosacral Instability pain or limitations of flexibility and strength
- 6. Spina Bifida
- 7. Chronic/Recurrent Neck/Back Pain/Herniated Disc
- 8. Deformity of the Upper or Lower Extremities
- 9. Chronic Knee Pain or Instability
- 10. Chronic Sprain/Strain of the Neck limits mobility or causes recurrent headaches
- 11. Neuropathies/Sciatica
- 12. Scoliosis
- 13. Recurrent Shoulder Dislocation
- 14. Any recent orthopedic intervention surgery or fracture care, the orthopedist will need to give clearance stating that the examinee may participate in the required functions of a wildland firefighter
- 15. Any other condition not otherwise listed that may adversely affect the safe and efficient performance of the job will be evaluated on a case-by-case basis.

Central and Peripheral Nervous System and Vestibular System Standard

The firefighter needs balance and coordination, sensation of his/her surroundings and him/herself, and a low risk of sudden or subtle incapacitation while using hand and power tools, flying in helicopters and fixed wing aircraft, extensively walking and climbing in isolated or remote sites and over very steep terrain, rocky, loose, or muddy ground surfaces, wet leaves and grass, heights, around open holes and drop-offs, falling rocks and trees, trucks and other large equipment, and in high heat. Some nervous and vestibular system conditions may not be compatible with the safe and efficient performance of the job.

This may be demonstrated by:

- 1. Cranial nerve exam that is intact, normal proprioception of the major joints, normal sensation of hot and cold in the hands and feet, normal deep tendon reflexes in the upper and lower extremities, normal heel-to-toe walk, negative Romberg, can balance on each foot separately, and normal orientation to person, place, time, and current events.
- 2. There should be no evidence of a nervous or vestibular system condition that would pose a safety risk or worsen while carrying out the essential requirements of the job.

- 1. Ataxia
- 2. Vestibular Nystagmus
- 3. Vertigo
- 4. Cerebrovascular Accident/Transient Ischemic Attack
- 5. Epilepsy/Seizure Disorder*
- 6. Multiple Sclerosis
- 7. Narcolepsy
- 8. Neurofibromatosis
- 9. Parkinson's Disease
- 10. Sensory Dysfunction (smell, taste, touch, proprioception)
- 11. Migraine/Cephalgia
- 12. Myasthenia Gravis
- 13. Muscular Dystrophy
- 14. Head Trauma
- 15. Cerebral Palsy
- 16. Any other condition not otherwise listed that may adversely affect the safe and efficient performance of the job will be evaluated on a case-by-case basis.

- a. physician's name (legible), signature, and date
- b. confirmation that the physician has reviewed and is familiar with the *Essential Functions and Work Conditions of a Wildland Firefighter*
- c. a summary of all current medications, along with any known side effects experienced or expected to be experienced by the firefighter
- d. the known or suspected triggers or factors that may lead to seizure activity for the firefighter
- e. the results of the most recent diagnostic testing, such as an EEG

^{*}With any history of any seizures (other than infant febrile seizures), the firefighter must provide the following written information from a physician who is board certified in neurology, on their office letterhead, that includes:

- f. the firefighter's overall medical prognosis, related to the seizure disorder, and
- g. the estimated risk or likelihood of future seizure activity the firefighter might experience, of any degree of severity

Gastrointestinal System Standard

The firefighter needs to consume adequate nutrition and calories as well as have a low risk of sudden or subtle incapacitation while in arduous exertion, driving or riding for many hours, flying in helicopters or fixed wing aircraft, in isolated or remote sites, in close quarters with large numbers of other workers, hungry with irregular meals, on long assignments. Some gastrointestinal conditions may not be compatible with the safe and efficient performance of the job.

This may be demonstrated by:

- 1. A normal physical exam without abnormality with or without a normal Chem 12/14, and/or amylase and lipase, and/or liver function test, and/or CBC dependent on the concern.
- 2. There should be no evidence of a gastrointestinal condition that would pose a safety risk or worsen while carrying out the essential requirements of the job.

- 1. Acute or Chronic Hepatitis
- 2. Crohn's Disease/Ulcerative Colitis/Regional Enteritis/Ileitis/Celiac Sprue/Irritable Bowel Syndrome
- 3. Colostomies
- 4. Cholecystitis/Cholelithiasis
- 5. Diverticulitis
- 6. Cirrhosis of the Liver
- 7. Intestinal Obstruction
- 8. Esophageal Varices
- 9. Pancreatitis
- 10. Untreated or Unsuccessfully Treated Inguinal/Incisional/Ventral/Femoral Hernia
- 11. Active Gastric/Duodenal Ulcer
- 12. Gastric/Bowel Resection
- 13. GI bleeding
- 14. Splenomegaly
- 15. Hemorrhoids
- 16. Any other condition not otherwise listed that may adversely affect the safe and efficient performance of the job will be evaluated on a case-by-case basis.

Genitourinary System Standard

The firefighter needs to have a healthy genitourinary system and low risk of sudden or subtle incapacitation under arduous exertion, driving or riding for long periods of time, flying in helicopters or fixed wing aircraft, in isolated or remote sites, with irregular meals, dehydration, and long assignments. Some genitourinary conditions may not be compatible with the safe and efficient performance of the job.

This may be demonstrated by:

- 1. A normal physical exam and a negative clean catch urinalysis, OR
- 2. A normal physical exam with or without a negative Chem 6/7, dependent on the concern.
- 3. A female genital exam is not needed.
- 4. There should be no evidence of a genitourinary condition that would pose a safety risk or worsen while carrying out the essential requirements of the job.

- 1. Polycystic Kidney Disease
- 2. Frequent Symptomatic Ovarian Cysts
- 3. Acute or Chronic Renal Failure/Insufficiency
- 4. Nephrotic Syndrome
- 5. Symptomatic Urolithiasis or Known Nephrolithiasis unpassed
- 6. Neurogenic bladder
- 7. History of Renal Vein Thrombosis
- 8. Uncorrected Obstructive Uropathies
- 9. Renal Toxicity from any cause
- 10. Incapacitating Dysmenorrhea/Endometriosis
- 11. Dialysis
- 12. Active Bladder, Kidney or Prostate Infection
- 13. Painful Varicocele or Hydrocele
- 14. Any other condition not otherwise listed that may adversely affect the safe and efficient performance of the job will be evaluated on a case-by-case basis.