INTERNATIONAL ASSOCIATION OF FIRE FIGHTERS INTERNATIONAL ASSOCIATION OF FIRE CHIEFS



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1582

- Evaluation for candidates and incumbents must be based on the essential job tasks that a firefighter performs in that jurisdiction.
- Every candidate and incumbent must be evaluated individually
- Restrictions can lead to Reasonable accommodations health & safety remains paramount
- 1582 also includes the WFI
 - Annual medical evaluations
 - Prevention
 - Fitness
 - Tobacco free, tobacco cessation
 - Treatment medication, vaccination
 - Behavioral health
 - Screening for disease (physical and behavioral) based on risk stratification



5.1.1 Essential Job Tasks Revised – minor edits and addition of #15 - EMS

The fire department shall evaluate the following essential job tasks against the types and levels of emergency services provided to the local community by the fire department, the types of structures and occupancies in the community, and the configuration of the fire department to determine which tasks apply to their department members and candidates:

- 1. Wearing personal protective equipment (PPE) and self-contained breathing apparatus (SCBA) while performing firefighting tasks (e.g., hose line operations, extensive crawling, lifting and carrying heavy objects, ventilating roofs or walls using power or hand tools, forcible entry), rescue operations, and other emergency response actions under stressful conditions, including working in extremely hot or cold environments for prolonged time periods
- 2. Wearing the respirators required by the jurisdiction (e.g., N-95, half-face elastomeric, PAPR, SCBA), which includes a demand-valve-type positive-pressure facepiece or filter respirator, achieving a successful fit-test and tolerating increased respiratory workloads
- 3. Exposure to toxic fumes, irritants, particulates, biological (i.e., infectious) and nonbiological hazards, or heated gases, despite the use of PPE and SCBA
- 4. Climbing at least six flights of stairs or walking a similarly strenuous distance and incline in jurisdictions without tall buildings while wearing PPE and SCBA, commonly weighing 40–50 lb (18–23 kg) and carrying equipment/tools weighing an additional 20–40 lb (9–18 kg)



- 5. Wearing PPE and SCBA that is encapsulating and insulated, which will result in significant fluid loss that frequently progresses to clinical dehydration and can elevate core temperature to levels exceeding 102.2°F (39°C)
- 6. Working alone while wearing PPE and respirators required by the jurisdiction, searching, finding, and rescue-dragging or carrying victims to safety in hazardous conditions and low visibility
- 7. While wearing PPE and SCBA, advancing water-filled hose lines up to 1 3/4 in. (45 mm) in diameter from fire apparatus to occupancy [approximately 150 ft (50 m)], which can involve negotiating multiple flights of stairs, ladders, and other obstacles
- 8. While wearing PPE and SCBA, climbing ladders, operating from heights, walking or crawling in the dark along narrow and uneven surfaces that might be wet or icy, and operating in proximity to electrical power lines or other hazards
- 9. Unpredictable, prolonged periods of extreme physical exertion as required by emergency operations without benefit of a warm-up period, scheduled rest periods, meals, access to medication(s), or hydration 10. Operating fire apparatus or other vehicles in an emergency mode with emergency lights and sirens



- 11. Critical, time-sensitive, complex problem solving during physical exertion in stressful, hazardous environments, including hot, dark, tightly enclosed spaces, that is further aggravated by fatigue, flashing lights, sirens, and other distractions
- 12. Ability to communicate (i.e., give and comprehend written or verbal orders) while wearing PPE and respirators required by the jurisdiction, under conditions of high background noise, poor visibility, and drenching from hose lines or fixed protection systems (e.g., sprinklers)
- 13. Functioning as an integral component of a team, where sudden incapacitation can result in mission failure or in risk of injury or death to members of the public or other team members
- 14. Working in shifts, including during nighttime, that can extend beyond 12 hours (15)Performing EMS tasks, such as CPR or lifting or moving patients, while wearing PPE and respirators required by the jurisdiction
- 15. Performing EMS tasks, such as CPR or lifting or moving patients, while wearing PPE and respirators required by the jurisdiction

Special teams: In addition to the essential job tasks, individuals of specialized teams, such as hazardous materials units, dive teams, technical rescue teams, EMS teams, or units supporting tactical law enforcement operations, shall be evaluated for their ability to perform essential job tasks and wear specialized PPE related to the duties of those specialized teams.



- No change in the components of the medical evaluation
- Individual evaluations remain a legal requirement
- Category A condition list for candidates (Mandatory Not Qualified) violates this requirement, even though the decision occurs after an individual evaluation.
 - Action category A condition list removed and integrated into category B conditions
- Separate Candidate & Incumbent Medical Criteria are difficult to defend legally. And FEMA strongly believes that they should be eliminated
 - Action combine chapter 6 (candidate medical standard) with chapter 9 (incumbent medical standard)
 - Throughout the revision, the candidate and incumbent are now referred to as the "individual"
- AHJ reviews the 15 essential tasks for compatibility with the AHJ's Department and provides that list to the Department Physician



- 9.4.1
- The fire department physician shall perform an individualized assessment of the individual.
- 9.4.2
- The fire department physician shall be responsible for determining the medical qualification status of the individual in accordance with the following:
- (1) No restriction: There are no essential job tasks that the individual cannot safely and effectively perform
- Permanent restriction: There are specific essential job tasks that the individual cannot safely and effectively perform due to a permanent or long-term medical condition
- (3) <u>Temporary restriction</u>: There are specific essential job tasks that the individual cannot safely and effectively perform due to a medical condition that the fire department physician considers could be temporary, allowing the individual to return for reevaluation if allowed within the jurisdiction by the AHJ.



- 9.4.3
- Removal of an individual from permanent or temporary restriction status shall be approved by the fire department physician.
- 9.4.4
- The fire department physician shall provide the AHJ a written statement that identifies the specific essential job task(s) the individual is restricted from performing.
- 9.4.5
- The fire department physician shall not make a recommendation regarding the individual's employment in the fire department.
- 9.4.6
- There shall be no blanket exclusions.



- 9.4.7*****
- The AHJ shall determine the individual's employment status in consideration of any restrictions identified by the fire department physician and whether any reasonable accommodations might permit the individual to safely and effectively perform the essential job tasks. (See Annex B for additional legal considerations.)
 - A.9.4.7
 - Possible accommodations to provide qualified individuals with disabilities include reasonable
 modifications or adjustments to the work environment or the manner or circumstances under which the
 essential job tasks are customarily performed. These can include, but are not limited to, changes in
 assignment, provision of special devices to assist the individual in accommodating the medical disability,
 revision of standard operating procedures, and allowance of special techniques.
- Revised Annex with details provided by FEMA legal: Reasonable accommodations do not necessarily need to be identical for candidates and incumbents – see next 3 slides



- 9.4.7*
- Revised Annex with details provided by FEMA legal: Reasonable accommodations do not necessarily need to be identical for the candidate and the incumbent.
- 1. The requirement to consider reassignment applies only to employees and not to candidates. For example, if an incumbent has a disability that prevents the incumbent from wearing respiratory protection, and assuming there is no reasonable accommodation that would allow the incumbent to perform safely and effectively the essential functions of the job that require wearing respiratory protection, the department must consider reassigning the employee to an existing position that the employee can perform with or without a reasonable accommodation. The reassignment to a different position that the employee can perform with or without the accommodation is the reasonable accommodation provided to the incumbent. For a candidate, again assuming there is no reasonable accommodation for being unable to wear respiratory protection, the candidate would not be qualified for hire and the department is not required to offer reassignment to the candidate.



1582 Revision "legally required"

• 9.4.7*

Revised Annex with details provided by FEMA legal: Reasonable accommodations do not necessarily need to be identical for the candidate and the incumbent.

2. The ADA allows for qualification standards that screen out, tend to screen out, or otherwise deny a job or benefit to an individual with a disability, that have been shown to be job-related and consistent with business necessity, and when such performance cannot be accomplished by reasonable accommodation, to include a requirement that an individual shall not pose a "direct threat" to the health or safety of other individuals in the workplace.



1582 Revision "legally required"

• 9.4.7*

Revised Annex with details provided by FEMA legal: And for both candidate and incumbent.

Undue hardship means significant difficulty or expense and focuses on the resources and circumstances of the particular employer in relationship to the cost or difficulty of providing a specific accommodation. Undue hardship refers not only to financial difficulty, but to reasonable accommodations that are unduly extensive, substantial, or disruptive, or those that would fundamentally alter the nature or operation of the business. An employer is also not required to eliminate an essential function when considering a reasonable accommodation. An employer must assess on an individualized basis whether a particular reasonable accommodation would cause undue hardship. Where a requested accommodation would result in undue hardship, the employer must offer an alternative accommodation if one is available absent undue hardship



1582 Revision

- Combining Chapters 6 & 9 resulted in lengthy text that was difficult to read
- Also resulted in difficulties with NFPA standards language requirements
- New Format layout for each organ system was devised
 - Introduction Medical Conditions Involving an organ system or topic
 - Same exam components and same list of diseases/conditions as in prior editions: hearing, vison, lungs, heart, endocrine, spine, extremities, cancers, medications, psychiatric, etc.
 - Table of specific conditions with:
 - special criteria for restriction
 - special provisions for NO restriction
 - the affected essential job tasks
 - If needed, additional brief annex information to explain above material



1582 Revision Combining Chapters 6 & 9

- Decisions were needed when in the current edition of 1582, candidate and incumbent medical standards differed.
- The committee understood that it is difficult to justify:
 - A higher medical standard for candidates when incumbents historically function safely and effectively at a lower medical standard
- Therefore, when different, the standard was equalized by choosing the candidate standard as
 the <u>criteria for restriction</u> and then using the incumbent standard as the "<u>special provisions for NO restriction</u>" which now would apply to both candidates and incumbents.
- In doing so, the committee corrected minor errors in criteria and language. but deferred a few major issues to the next revision (ex 12 METS standard)
- The next slides provide examples



- Combining Chapters 6 & 9 Coronary Artery Disease.
- <u>Current Edition:</u> Category A candidates. Incumbents restricted from specific essential job tasks unless met list of special provisions
- Revised Edition Same for candidates & incumbents by applying same list of special provisions for NO restrictions found in current edition to both
- Special Provisions for NO Restriction: Meets following annually or at frequency indicated:
- Has absence of angina pectoris, even if relieved by medication
- Has absence of stenosis in any coronary artery (>70% lumen diameter narrowing) following treatment
- Every 2 to 3 years, as medically indicated, has normal left ventricular ejection fraction as measured by radionuclide scan, contrast ventriculography, or echocardiography
- Every 2 to 3 years, as medically indicated, has maximal exercise tolerance (see 9.3.4)
- Every 2 to 3 years, as medically indicated, has no exercise-induced evidence of ischemia, toxic arrhythmias, hypoxia, exercise hemoglobin oxygen desaturation, left ventricular dysfunction, or abnormal blood pressure response observed by radionuclide stress test (see 9.3.4)
- Has control of modifiable risk factor(s) for acute coronary plaque rupture Continued next slide



Combining Chapters 6 & 9 - Coronary Artery Disease.

- <u>Current Edition:</u> Category A candidates. Incumbents restricted from specific essential job tasks unless met list of special provisions
- Revised Edition Same for candidates & incumbents by applying same list of special provisions for NO restrictions found in current edition to both
- <u>Special Provisions for NO Restriction:</u> Meets following annually or at frequency indicated: Continued:
- g) Had no myocardial infarction within the previous 6 months
- h) Had no coronary artery bypass surgery within the previous 6 months
- (i) Had no angioplasty, with or without stent placement, within the previous 3 months
- (j) Is not currently prescribed anticoagulation medication, regardless of dose (see Section 9.13 for anticoagulation medication)
- (k) Has completed cardiac rehab, if indicated
- (I) Has a signed statement and medical records from a cardiologist, indicating that the individual meets the provisions specified in (a) through (j) and can safely and effectively perform the essential job tasks



Combining Chapters 6 & 9 - Toxic Arrhythmias.

- <u>Current Edition:</u> Category A candidates. Incumbents restricted from specific essential job tasks unless met list of special provisions
- Revised Edition Same for candidates & incumbents by applying same list of special provisions for NO restrictions found in current edition to both
- Special Provisions for NO Restriction: Meets following annually or frequency indicated:
- a) Has normal function and no structural abnormalities as demonstrated by cardiac imaging
- ls not currently prescribed cardiac anti-arrhythmic medication and has no toxic arrhythmias present as determined by a cardiologist with testing (e.g., 24-hour or longer duration loop recorders, EP study, etc.)
- s is not currently prescribed anticoagulation medication
- Every 2 to 3 years, as medically indicated, has no exercise-induced evidence of ischemia, toxic arrhythmias, exercise hemoglobin oxygen desaturation, left ventricular dysfunction, or abnormal blood pressure response when subjected to stress testing with imaging, off cardiac medications (see 9.3.4)
- e) Has a signed statement and medical records from a cardiologist, indicating that the individual meets the provisions specified in (a) through (d) and can safely and effectively perform the essential job tasks

Combining Chapters 6 & 9 - Pulmonary

- <u>Current Edition:</u> Candidates pulmonary function less than 70% predicted (Category A); incumbents with less than 60% predicted lung function restricted from specific essential job tasks unless met list of special provisions Prediction equations same for candidate & incumbent based on sex, age, height & race.
- Revised Edition Same for candidates & incumbents by adapting list of special provisions for NO restrictions found in current edition to both
- Special Criteria for Restriction: Has pulmonary function less than 70% predicted
- <u>Special Provisions for NO Restriction:</u> Has 60% or greater of predicted FEV1 and can show all of the following provisions that already existed in chapter 9 for incumbents with any pulmonary condition
- a) no bronchodilator response
- no bronchospasm and does not use or require bronchodilator rescue medications during exertion; temperature or humidity extremes; irritant exposures; or fire suppression, hazmat, or training activities
- Has not required systemic corticosteroids, emergency room treatment, or hospital admission for COPD or other pulmonary disease in the past 2 years
- d) Has experienced continuous tobacco cessation for more than 3 months
- e) Does not have a chronic cough that compromises the performance of the essential job tasks

Continued next slide



Combining Chapters 6 & 9 - Pulmonary

- <u>Current Edition:</u> Candidates pulmonary function less than 70% predicted (Category A); incumbents with less than 60% predicted lung function restricted from specific essential job tasks unless met list of special provisions Prediction equations same for candidate & incumbent based on sex, age, height & race.
- Revised Edition Same for candidates & incumbents by adapting list of special provisions for NO restrictions found in current edition to both
- Special Criteria for Restriction: Has pulmonary function less than 70% predicted
- <u>Special Provisions for NO Restriction:</u> Has 60% or greater of predicted FEV1 and can show all of the following provisions that already existed in chapter 9 for incumbents with any pulmonary condition

Continued:

- f) Every 2 to 3 years, as medically indicated, has no exercise-induced evidence of any of the following (see 9.3.4):
 - 1. Bronchospasm
 - 2. A decline in FEV1 to less than 60% predicted
 - Oxygen desaturation (i.e., a fall in oxygen saturation on room air by 4% from baseline or to below 90%)
 - 4. Cardiac ischemia or toxic arrhythmias
- g) Has a signed statement and medical records from a pulmonary specialist, indicating that the individual meets the criteria specified above and can safely and effectively perform the essential job tasks

Combining Chapters 6 & 9 – Other Medical Conditions (ex diabetes, seizures, etc.)

- <u>Current Edition:</u> Category A candidates unless met a list of special provisions. Incumbents restricted from specific essential job tasks unless met list of special provisions
- Revised Edition Same for candidates & incumbents by applying same list of special provisions for NO restrictions found in current edition to both



Combining Chapters 6 & 9 – Extremity - Joint Dislocation - Recurrent.

 <u>Current Edition:</u> Category A candidates unless special provisions met. Incumbents meant to be similar to candidates but not as clearly spelled out

	Candidates	Incumbents
(7)* Recurrent dislocation of a major joint	Category A - if Recurrent without surgical repair or within the last 5 years with pain or with loss of motion and with or without radiographic deviation from normal	Restricted if recurrent unrepaired or if post-surgical repair the member cannot perform the essential job tasks due to pain, lack of full motion or instability.



Combining Chapters 6 & 9 – Extremity - Joint Dislocation - Recurrent

- <u>Current Edition:</u> Category A candidates unless special provisions met. Incumbents meant to be similar to candidates but not as clearly spelled out
- Revised Edition: Same for both candidates & incumbents

	Special criteria for restriction	Special Provisions for NO restriction
(7)* Recurrent dislocation of a major joint		Has full functional motion, strength, and stability of the joint when examined after surgical repair



Combining Chapters 6 & 9 – Spine Disorders.

 <u>Current Edition:</u> Category A candidates unless special provisions met. Incumbents meant to be restricted based on same list of special provisions. But not well written in current edition

	Candidates	Incumbents
Spine Disorders	Category A – if evidence of nerve damage, disc involvement, dislocation, fragmentation, abnormal exam, instability, symptomatic or less than 6 months post injury or less than 12 months post surgery	



Combining Chapters 6 & 9 – **Spine Disorders**.

• Revised Edition: Same for both candidates & incumbents

	Criteria for Restriction	Special Provisions for NO restriction
Spine Disorders	Restricted if individual cannot perform the essential job tasks due to radiculopathy, pain, weakness, numbness, loss of reflexes, gait disturbances, lack of full motion or instability.	Can perform the essential job tasks



Combining Chapters 6 & 9 – **Medications**.

 <u>Current Edition:</u> Category A candidates. Apply same list of medications as candidates to incumbents but restricted for the specific essential job tasks impacted by specific drug

	Candidates	Incumbents
Medications	Category A – if chronic or frequent treatment with narcotics, sedative-hypnotics, anticoagulation (full or low dose), beta-adrenergics, high dose corticosteroids, anabolic steroids, respiratory medications (while at work), any drug that interferes with ability to perform ANY essential job task(s)	In brief, it basically says restricted from the specific essential job tasks that are relevant for each drug (see candidate list)



Combining Chapters 6 & 9 – **Medications**.

• Revised Edition: Same for both candidates & incumbents

	Criteria for Restriction	Special Provisions for NO restriction
Medications	Restricted from the specific essential job tasks that are relevant for each drug (see candidate list – prior slide)	No special provisions in current edition and none in this revision.



Combining Chapters 6 & 9 – Psychiatric Conditions & Disorders

 <u>Current Edition:</u> Timeline for candidates (category A until time elapsed) or incumbent (removal of restrictions) was different only for substance use disorder.

Psychiatric Conditions & Disorders	Candidates timeline	Incumbent timeline
bipolar, delusional, brief psychotic episode, schizophrenia, schizoaffective,	No episodes or suicidal attempts in past 12 months	No episodes or suicide attempts in past 12 months
depressive, PTSD,	No suicidal attempts in past 12 months	No suicidal attempts in past 12 months
substance use disorder	No substance use in <u>past 12 months</u>	No substance use in <u>past 3 months</u>



Combining Chapters 6 & 9 – Psychiatric Conditions & Disorders

 Revised Edition: Same for both candidates & incumbents. Accomplished by changing timeline for substance use disorder from 12 to 3 months for candidates. And remember in our discussions for the current edition, the timeline was always a point of controversy

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Psychiatric Conditions	Candidates timeline	Incumbent timeline
& Disorders		
bipolar, delusional, brief psychotic episode, schizophrenia, schizoaffective,	No episodes or suicidal attempts in past 12 months	No episodes or suicide attempts in past 12 months
depressive, PTSD,	No suicidal attempts in past 12 months	No suicidal attempts in past 12 months
substance use disorder	No substance use in <u>past 3 months</u>	No substance use in <u>past 3 months</u>



Combining Chapters 6 & 9 – Metabolic Syndrome. *Example of work in progress*

- <u>Current Edition:</u> Category A candidates. Incumbents restricted from specific essential job tasks unless met list of special provisions
- Revised Edition: Same for both candidates & incumbents ???? (still working on this)
- Special Criteria for Restriction: Identical.
- Special Provisions for NO Restriction: Meets following annually or frequency indicated:
- a) Has control of modifiable risk factor(s)
- b) Has aerobic capacity of 12 METs or higher
 - a) Currently that is the case if have (metabolic syndrome, cardiopulm, diabetes, etc) must be 12 METS
 - b) Currently if no illness then falls under fitness chap 8 standard with special provisions for
 - o) less than 12 METS, 10 METS, or 8 METS.
 - d) This will be discussed further at next NFPA mtg
- Every 2 to 3 years, as medically indicated, has no exercise-induced evidence of ischemia, toxic arrhythmias, hypoxia, exercise hemoglobin oxygen desaturation, left ventricular dysfunction, or abnormal blood pressure response (see 9.3.4)



Screening: NFPA includes the WFI

- Screening is all about risk vs. benefit.
 - Every "positive" test requires follow up
 - Higher the risk, more likely that a screening test result is real.
 - Lower the risk, more likely that it is false leading to anxiety, invasive tests with morbidity/mortality
- Annual medical hypertension, etc
- Cardiac: If at risk, exercise stress test with imaging (echo or nuclear), CT Calcium score (??)
- Pulmonary: Spirometry
- Behavioral Health validated screening questionnaires for
 - PTSD, Depression, Alcoholism, Suicide



Screening: NFPA includes the WFI

• Screening is all about risk vs. benefit. Every "positive" test requires follow up. Higher the risk, more likely that a screening test result is real. Lower the risk, more likely that it is false leading to anxiety, invasive tests with morbidity/mortality

Cancers

- WFI bloods and urine including Cell Counts for blood borne cancers (leukemia), blood in urine for bladder cancer
- Low Dose Chest CT scans
- Colonoscopy, Cologuard
- Mammography & Pap Smears
- Other tests not yet endorsed by USPSTF
- Prostate Specific Antigen (PSA), thyroid ultrasound
- Dermatology skin screen
- Body Scans, MGUS, Toxicology, personalized medicine (mutations), etc?



Prevention: NFPA includes the WFI

- Toxin reduction on the fire scene
- Tobacco free (all forms)
- Addiction
- Nutrition
- Exercise
- Medication for prevention (ex. Statins)
- Vaccination
- Stress Reduction and counseling



Summary: I believe we have managed to combine the medical standards for candidates and incumbents without sacrificing quality, safety or performance.

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