

**Regulations for Initial Medical and Physical Fitness Standards Tests for Municipal Public
Safety Personnel
(Effective September 7, 2007)**

01 Purpose

The purpose of the initial medical and physical fitness standards programs is to minimize health and safety risks to the public, fellow workers and police officers and fire fighters themselves. These standards are promulgated pursuant to M.G.L. c.31, s.61A and c.32, s.5 (3) (e).

02 Definitions

Cardiovascular Fitness Cardiovascular Fitness (aerobic endurance, stamina) is a measure of heart and lung function. It is the ability to

Initial Standards Tests to determine if job candidates possess the abilities to perform the essential functions of their jobs, and have no disqualifying conditions. This term applies to both medical and physical fitness standards.

Medical Standards Medical (or Health) Standards are tests of various health status categories that are demonstrably related to an occupation. These tests are designed to ensure that employees have no disqualifying conditions and have the physical attributes that will permit performance of the essential functions of their jobs.

Muscular Endurance Muscular Endurance is a measure of a muscle's ability to maintain a submaximal force or repeatedly apply a submaximal force without a rest; that is, the number of times one can lift a certain amount of weight. Adequate levels of muscular endurance allow one's muscles to perform a task for a longer period of time before the muscles get tired.

Muscular Strength Muscular Strength (also referred to simply as "strength") is a measure of the greatest amount of force a muscle can apply; that is, the most weight a muscle group can move at one time.

Physical Fitness Physical Fitness is defined as “the ability to carry out daily tasks with vigor and alertness, without undue fatigue and with ample energy to enjoy leisure-time pursuits and to meet unforeseen emergencies” (President’s Council on Physical Fitness and Sports). An adequate level of physical fitness is required to perform many jobs and to provide energy for recreational activities. Physical fitness consists of the following components: cardiovascular fitness, muscle strength, muscular endurance, and flexibility. In order to perform optimally at work and in our other daily activities it is necessary to develop and maintain adequate levels of fitness in each of these components.

Physical Fitness Standards Physical Fitness Standards are tests of physical abilities that are demonstrably related to an occupation. These tests are designed to ensure that employees have the physical abilities required to perform the essential functions of their jobs.

Standards and Wellness Community A standards and wellness community is a community that is subject to the requirements of MGL Chapter 31, Sections 61A and 61B, either through independent acceptance of these sections, or through acceptance of Chapter 32, Section 22D. The Human Resources Division (HRD) periodically promulgates a list of standards and wellness communities.

03 Eligibility Criteria

(1) These Initial Medical and Physical Fitness Standards Programs apply to each individual who receives an offer of employment from a fire or police department in a standards and wellness community, that is one that accepted or is deemed to have accepted M.G.L. c. 32, s.22D or that has independently accepted M.G.L. c.31, s.61A and s. 61B. Every individual hired after November 1, 1996 in a standards and wellness community police or fire department is subject to the initial medical and physical fitness standards programs as promulgated by the Personnel Administrator.

04 Timing of Standards Tests

(1) Initial Standards Examinations (Examination and Re-examination) Effective November 2, 1996, every new hire in standards and wellness communities must take Initial Medical and Physical Fitness Standards Examinations within thirty days of the date of appointment. Each candidate who does not pass the Medical Standards Examination will not be permitted to take the Physical Fitness Standards Examination unless and until he/she passes the Medical Standards Examination. Any candidate who does not appear for his/her scheduled examination or re-examination will be determined to have failed that examination or re-examination. Any candidate who fails the Medical Standards Examination or Physical Fitness Standards Examination may be re-tested *within* sixteen weeks. Any candidate who fails the Medical Standards Test or Physical Fitness Standards Test upon re-examination (second attempt) will have his/her appointment rescinded.

05 Medical Standards Examinations and Re-examinations

(1) Conducting Medical Standards Examinations and Re-examinations Medical Standards Examinations shall be conducted by physicians in conformance with the guidelines and forms promulgated by the Massachusetts Human Resources Division. All decisions concerning whether or not an individual passes the Medical Standards Examination must be based upon the individual's ability to perform the essential functions of the job. The physician conducting the Medical Standards Examination or Re-examination is responsible for conducting a thorough and complete examination. Medical Standards Examinations and Re-examinations must be conducted by a physician approved by the standards and wellness community for which the candidate seeks to work.

(2) Review of Medical Standards Examinations and Re-examinations Standards and wellness communities' physicians are responsible for reviewing the results of the

examinations and advising HRD, the hiring department and the candidate whether or not the candidate has passed the Medical Standards Examination.

(3) Medical Standards Records Information and records concerning an individual's Medical Standards Examination must be kept confidential and in conformance with medical records requirements.

(4) Incomplete Medical Standards Examinations or Re-examinations Any community that concludes that a physician has conducted an incomplete or less than thorough Medical Standards Examination is required to notify HRD and return the results of the exam to the physician with an explanation of the reasons for their conclusion. The physician is then required to review the community's concerns and respond to those concerns in a thorough and complete manner.

06 Physical Fitness Standards Examinations and Re-examinations

(1) Monitors Each examination monitor must be trained and must understand his/her roles and areas of responsibility as prescribed by the Human Resources Division. Each test site must be supervised by a monitor-in-charge who is responsible for all operations at the site, including testing of events and equipment to ensure that everything is working properly and safely. The monitor-in-charge is responsible for supervising the work of all monitors. An Emergency Medical Technician must be present during all testing and is responsible for the operation of the Safety Plan.

(2) Safety Plan Each testing site must have a safety plan in place for responding to any emergency situation. The safety plan shall include the following:

(a) Administration of a Self-evaluation questionnaire (PAR Q) to each individual who intends to participate in the fitness test to determine physical readiness for testing.

(b) Screening of blood pressure, pulse rate and oral temperature of each candidate to ensure that these measurements are within normal limits on the day of testing.

(c) Emergency Medical Technician on site who will be responsible for implementing the necessary precautions (screenings and evaluation) and responding to or obtaining the needed medical assistance in case of an emergency situation.

(d) Reports must be made to HRD and the hiring department documenting any injuries or medical emergencies that occur during the physical fitness testing.

(3) Examination Administration Each monitor must examine every individual by delivering the authorized instructions for each event, in the same manner, accurately scoring the individual's performance, and precisely recording all scores on the score sheets provided by HRD. The instructions for each event will be provided by the Human Resources Division. Any candidate who fails the test will be informed by the Monitor-in-Charge of his/her test results and provided with guidance on how to prepare for his/her re-examination. All examination results will be kept confidential.

(4) Examination Preparation Each individual should be permitted sixteen weeks to prepare for the Physical Fitness Standards Examination. Each individual will be provided with a Test Preparation Guide promulgated by HRD to assist them in their preparation. Prior to any re-examination candidates will be afforded sixteen weeks to prepare. Individuals who wish to waive the sixteen weeks in order to undergo an examination or re-examination may do so.

07 Medical Standards Examinations for Municipal Fire Fighters*

(1)* Medical Evaluation¹: Each municipal fire department shall establish and implement a pre-placement medical evaluation for candidates. During the medical evaluation, the physician shall evaluate each individual to ascertain the presence of any medical conditions listed in these standards, or any medical conditions not listed which would prevent the individual from performing the essential job functions without posing significant risk. It is our intent to encourage the use of professional judgment regarding medical conditions which are not specifically listed. A candidate shall not be certified as meeting the medical requirements of these standards if the physician determines that the candidate has any Category A medical condition specified in these standards. Furthermore, a candidate shall not be certified as meeting the medical requirements of these standards if the physician determines that the candidate has a Category B medical condition that is of sufficient severity to prevent the candidate from performing the essential functions of a fire fighter without posing a significant risk to the safety and health of him/herself or others.

(2)* The medical evaluation shall minimally include the following:

- (a) a comprehensive medical history
- a baseline (pre-placement) occupational history, including significant past exposures and training and experience with personal protection equipment
- (b) height and weight
- (c) vital signs: pulse, respiration, blood pressure, and, if indicated, temperature
- (d) dermatological system
- (e) ears, eyes, nose, mouth, throat
- (f) cardiovascular system
- (g) respiratory system
- (h) gastrointestinal system
- (i) genitourinary system
- (j) endocrine and metabolic systems
- (k) musculoskeletal system

¹ Physicians are also advised to ascertain the presence of any medical conditions listed in the National Fire Protection Association's (NFPA) 1582, *Medical Requirements for Fire Fighters*, which would prevent the individual from performing the essential job functions without posing a significant risk.

- (l) neurological system
- (m) mental status evaluation. Based on the severity, diagnosis, and impairment of any identified behavior or condition, the initial examiner is encouraged to consider referral of the applicant to a doctoral level mental health professional for further evaluation. In general, the current or recent use of psychotropic medications shall be reviewed by a Board certified psychiatrist.
- (n) audiometry. Audiograms should be performed in an ANSI approved "soundproof" booth (ANSI S3.1-1977) with equipment calibrated to ANSI standards (ANSI S3.6-1973). If a booth is unavailable, the test room sound pressure levels should not exceed those specified in the Federal OSHA noise regulations (29 CFR 1910.25),
- (o) visual acuity and peripheral vision testing
- (p) pulmonary function testing. A baseline test should be administered by an experienced individual. Only a spirogram that is technically acceptable and demonstrates the best efforts by an individual should be used to calculate the Forced Vital Capacity (FVC) and Forced Expiratory Volume in one second (FEV1.0),
- (q) review of hepatitis B immunization status including hepatitis B surface antibody titer if immunized, offer of hepatitis B vaccine if not fully immunized or HbgAb titer less than 10 and documentation of declination if vaccination refused by examinee,
- (r) a Purified Protein Derivative (PPD) test for tuberculosis, based on individual departmental infection control plans, and,
- (s) other diagnostic testing where indicated.

(3)* The medical evaluation process should also include:

- (a) a review of tetanus immunization status.

(4)* All medical information collected as part of a medical evaluation shall be considered confidential medical information, and shall be released by the physician only with the specific written consent of the candidate. The physician shall report the results of the medical evaluation to the candidate, including any medical condition(s) disclosed during the medical evaluation, and the recommendation whether the candidate is medically certified to perform as a fire fighter. The physician shall inform the fire department only whether or not the candidate is medically certified to perform as a fire fighter. The specific written consent of the candidate shall be required to release confidential medical information to the fire department, following guidelines set forth under the Americans With Disabilities Act (ADA) and other relevant policies.

(5) Category A and Category B Medical Conditions:

- (a) A Category A Medical Condition is a medical condition that would preclude an individual from performing the essential job functions of a municipal fire fighter in a

training or emergency operational environment, or present a significant risk to the safety and health of that individual or others.

- (b) A Category B Medical Condition is a medical condition that, based on its severity or degree, may or may not preclude an individual from performing the essential job functions of a municipal fire fighter in a training or emergency operational environment, or present a significant risk to the safety and health of that individual or others.

(6) The following biological systems shall be components of the Initial Medical Standards for fire fighters:

(a) Musculoskeletal

1. Head and Skull

a. Category A medical conditions shall include:

i. none.

b. Category B medical conditions shall include:

i. deformities of the skull or loss or congenital absence of the bony substance of the skull which limit the ability to wear a mask and/or protective breathing apparatus,

ii. thoracic outlet syndrome sufficient to compromise required activity,

iii. congenital cysts, chronic draining fistulas, or similar lesions,

iv. any other head condition that results in an individual not being able to perform the job of fire fighter.

2. Neck and Cervical Spine

a. Category A medical conditions shall include:

i. none

b. Category B medical conditions shall include:

i. cervical arthrodesis/fusion,/instability

ii. cervical canal stenosis,

iii. cervical radiculopathy or myelopathy,

iv. herniated disc,

- v. degenerative disc disease,
- vi. abnormal chronic contraction of neck muscles,
- vii. any other neck condition that results in an individual not being able to perform the job of municipal fire fighter

3. Thoracic/lumbar/sacral Spine

- a. Category A medical conditions shall include:
 - i. symptomatic spondylolisthesis, whether or not surgically corrected.
- b. Category B medical conditions shall include:
 - i. lumbar laminectomy or discectomy, with or without fusion.
 - ii. degenerative disease/spondylolysis/pars defect
 - iii. structural abnormality, fracture, or dislocation,
 - iv. degenerative disk disease,
 - v. herniated disk/sciatica/radiculopathy,
 - vi. spinal stenosis,
 - vii. spinal surgery not covered in Category A,
 - viii. any other spinal condition that results in an individual not being able to perform the job of fire fighter

4. Extremities

- a. Category A medical conditions shall include:
 - i. hemipelvectomy,
 - ii. hip disarticulation,
 - iii. above-the-ankle amputation,
 - iv. upper extremity amputation at or above the wrist

b. Category B medical conditions shall include:

- i. severe limitation of motion of a joint, fibrosis, or arthrodesis,
- ii other amputations not covered in Category A,
- iii. total joint arthroplasty:
 - i. shoulder
 - ii. elbow
 - iii. wrist
 - iv. hip
 - v. knee
- iv. deformity or dislocation of a joint or limb,
- v. joint reconstruction, ligamentous instability, or joint replacement not covered in (iii),
- vi. chronic osteoarthritis or traumatic arthritis,
- vii. inflammatory arthritis,
- viii. osteomyelitis,
- ix. compressive neuropathies including carpal tunnel syndrome or ulnar nerve palsy,
- x. required use of stabilizing orthopedic braces,
- xi. any other extremity condition that results in an individual not being able to perform the job of fire fighter

(b) Eyes And Vision

The medical evaluation shall minimally include visual acuity (Snellen) and peripheral vision testing using a Titmus or Optec Vision Screener or other similar standardized testing device. Contact lenses are not permitted to meet the uncorrected standard. When the candidate is being tested, he/she must present without wearing contact lenses for at least 24 hours, so that uncorrected vision can be accurately tested.

1. Category A medical conditions shall include:

- a. uncorrected vision worse than 20/100 in either eye

- b. corrected vision worse than 20/20 in the better eye UNLESS – the vision in the good eye alone is at least 20/25 AND the vision with both eyes together is 20/20 or better.
- c. peripheral vision of less than 70 degrees temporally and 45 degrees nasally in either eye AND/OR any history of conditions limiting field of vision will necessitate additional assessment by an eye care professional who will use a Goldmann-type perimeter to determine if the binocular visual field is 140 degrees (at least 70 degrees temporally in each eye) with a III4e isopter.

2. Category B medical conditions shall include:

- a. diseases of the eye such as cataracts, retinal detachment, progressive retinopathy, or optic neuritis,
- b. ophthalmological procedures such as radial keratotomy or repair of retinal detachment, any other vision disorder or eye condition that results in an individual not being able to perform the essential functions of a fire fighter.

(c) Ears And Hearing

The medical evaluation shall minimally include audiograms performed in an ANSI approved sound-treated booth (ANSI S3.1-1999) with equipment calibrated to the ANSI S3.6-1996, or current, standard. If a booth is unavailable, the test room sound pressure levels should not exceed those specified in the Federal OSHA noise regulations (29 CFR 1910.95 Appendix D).

1a. Category A (Failure of general standard):

Hearing deficit in pure tone thresholds in both ears, the deficit in each ear averaging 35 dB HL or worse at 500, 1000, 2000, and 3000 Hz,

1b. Category A: Candidates failing the Category A standard and who still wish to be considered for appointment will be required to have follow-up examinations that include:

Full audiological examination, including speech reception threshold (SRT) and speech discrimination testing (NU-6 word lists) in both ears,

Full otological examination,

In order to pass:

Pure tone thresholds in better ear indicating average hearing levels at 500, 1000, 2000, and 3000 Hz to be lower than 35 dB HL,

AND

Performance score of 80% or better on the speech discrimination test in the better ear.

2. Category B medical conditions shall include:

- a. perforated tympanum,
- b. auditory canal - atresia, severe stenosis, or tumor,
- c. severe external otitis,
- d. auricle - severe agenesis or traumatic deformity,
- e. mastoid - severe mastoiditis or surgical deformity,
- f. Meniere's disease, labyrinthitis or any disorder of equilibrium,
- g. otitis media,
- h. any other hearing disorder or ear condition that results in an individual not being able to perform the essential functions of a fire fighter.

HEARING AIDS: Non-implantable hearing aids are not permitted; must pass above-described standards unaided, or pass with the use of implantable hearing aids based on sound field testing.

(d) Dental

1. Category A medical conditions shall include:

- a. dental, jaw structural, or other abnormalities which preclude the ability to be fitted for and safely use protective equipment.

2. Category B medical conditions shall include:

- a. diseases of the jaws or associated tissues,
- b. orthodontic appliances,
- c. oral tissues, extensive loss,
- d. any other dental condition that results in an individual not being able to perform as a fire fighter.

(e) Nose, Mouth, And Throat

1. Category A medical conditions shall include:

- a. tracheostomy,
- b. aphonia,

- c. congenital or acquired deformities which interfere with wearing a face mask or other required protective equipment.

2. Category B medical conditions shall include:

- a. congenital or acquired deformities not covered in Category A,
- b. defects of articulation that materially interfere with verbal communication
- c. defects of rate (stuttering, stammering, or cluttering) that interfere with verbal communication
- d. chronic severe rhinitis,
- e. any other nose, oropharynx, trachea, esophagus, or larynx condition that interferes with breathing or speech or otherwise results in an individual not being able to perform as a police officer or to communicate effectively.

(f) Respiratory

1. Category A medical conditions shall include:

- a. lung abscess or empyema,
- b. active tuberculosis,
- c. pneumothorax,
- d. interstitial disease with abnormal exercise oxygen desaturation,
- e. moderate to severe obstructive pulmonary disease, using the following criteria:
 - i. frequent exacerbation of symptoms (>1-2 times per week),
 - ii. cough and low grade wheezing between exacerbations,
 - iii. diminished exercise tolerance,
 - iv. signs of airway obstruction using spirometry,
 - v. regular drug therapy required.

2. Category B medical conditions shall include:

- a. lobectomy or pneumonectomy,
- b. obstructive disease not meeting Category A criteria,
- c. chronic bronchitis,
- d. emphysema,
- e. bronchiectasis,
- f. history of bronchiectasis, bronchitis, fibrous pleuritis, fibrosis, cystic disease, tuberculosis, mycotic lung disease, or pneumothorax,
- g. interstitial disease with normal exercise oxygen saturation,
- h. any other respiratory condition that results in an individual not being able to perform as a fire fighter.

(g) Cardiovascular

1. Heart

- a. Category A medical conditions shall include:
 - i. current diagnosis of angina pectoris,
 - ii. congestive heart failure,
 - iii. aneurysm,
 - iv. acute or chronic pericarditis, endocarditis, or myocarditis. Endocarditis with resultant significant valvular lesions, or myocarditis leading to myocardial insufficiency,
 - v. cardiac or multi-organ transplant or left ventricular assist device,
 - vi. third degree AV block without cardiac pacemaker,
 - vii. coronary artery disease, cardiac hypertrophy, or other cardiac condition without evidence of a functional capacity greater than 9 METs,
 - viii. recurrent syncope,
 - ix. history of sudden cardiac death syndrome,
 - x. hemodynamically significant valvular heart disease,
 - xi. current diagnosis of embolism or thrombophlebitis,

- xii. automatic implantable cardioverter defibrillator (AICD).
- b. Category B medical conditions shall include:
 - i. coronary artery disease not covered in Category A,
 - ii. significant arrhythmias,
 - iii. cardiac hypertrophy,
 - iv. history of myocardial infarction, coronary artery bypass, coronary angioplasty, stent placement, or atherectomy,
 - v. congenital abnormality,
 - vi. cardiac pacemaker,
 - vii. any other cardiac condition that results in an individual not being able to perform as a fire fighter.

2. Vascular System

- a. Category A medical conditions shall include:
 - i. congenital or acquired lesions of the aorta and major vessels,
 - ii. marked circulatory instability as indicated by orthostatic hypotension, persistent tachycardia, and severe peripheral vasomotor disturbances,
 - iii. aneurysm of a major vessel, congenital or acquired,
 - iv. untreated persistent hypertension (systolic blood pressure of 160 mmHg or greater or diastolic blood pressure of 100 mmHg or greater).
- b. Category B medical conditions shall include:
 - i. persistent hypertension controlled through medication (systolic blood pressure less than 160 mmHg and diastolic blood pressure less than 100 mmHg),
 - ii. peripheral vascular disease, including intermittent claudication and Raynaud's phenomenon,
 - iii. thrombophlebitis,
 - iv. chronic lymphedema,
 - v. severe varicose veins,

- vi. any other vascular condition that results in an individual not being able to perform as a fire fighter.

(h) Gastrointestinal

1. Category A medical conditions shall include:

- a. liver or multi-organ transplantation,
- b. active gastrointestinal bleeding.

2. Category B medical conditions shall include:

- a. cholecystitis,
- b. gastritis,
- c. chronic or acute hepatitis,
- d. hernia,
- e. inflammatory bowel disease,
- f. intestinal obstruction,
- g. pancreatitis,
- h. bowel resection,
- i. gastrointestinal ulcer,
- j. cirrhosis,
- k. diverticulitis,
- l. any other gastrointestinal condition that results in an individual not being able to perform as a fire fighter.

(i) Reproductive

1. Category A medical conditions shall include:

- a. none.

2. Category B medical conditions shall include:

- a. pregnancy, for its duration. Any appointee who is pregnant shall be evaluated based on the appointee's ability to perform as a fire fighter in a training or emergency operational environment. Furthermore, a pregnant appointee shall be informed of the potential risks to her fetus due to possible exposures during fire fighter duties

- b. any other reproductive condition that results in an individual not being able to perform as a fire fighter.

(j) Genitourinary

1. Category A medical conditions shall include:

- a. renal disease requiring dialysis,
- b. renal or multi-organ transplantation.

2. Category B medical conditions shall include:

- a. any other renal, urinary, or genital condition that results in an individual not being able to perform as a fire fighter.

(k) Neurological

1. Category A medical conditions shall include:

- a. ataxia,
- b. cerebral arteriosclerosis as evidenced by documented episodes of neurological impairment, including cerebrovascular accidents (CVAs) and transient ischemic attacks (TIAs),
- c. multiple sclerosis with activity or evidence of progression within previous three (3) years,
- d. muscular dystrophy,
- e. myasthenia gravis,
- f. ALS,
- g. all seizure disorders and choreoathetosis to include psychomotor, focal, petit mal, or grand mal seizures other than for those with:
 - i. complete control during previous five (5) years with either no medication or a constant dose of the same medication,
 - ii. normal neurological examination, and
 - iii. definitive statement from qualified neurological specialist,
- h. dementia,

- i. any disorder affecting equilibrium which is acute, episodic, chronic, or recurrent.

2. Category B medical conditions shall include:

- a. congenital conditions and malformations,
- b. migraines,
- c. clinical disorders with paresis, paralysis, loss of coordination, abnormal motor function, or abnormalities of sensation,
- d. history of subdural, subarachnoid, or intracerebral hemorrhage,
- e. recent severe head contusion or concussion,
- f. any other neurological condition that results in an individual not being able to perform as a fire fighter.

(l) Skin

1. Category A medical conditions shall include:

- a. none.

2. Category B medical conditions shall include:

- a. non-localized, i.e., widespread, skin disease.
- b. extensive skin grafts,
- c. any other dermatologic condition that results in an individual not being able to perform as a fire fighter.

(m) Hematopoietic And Lymphatic

1. Category A medical conditions shall include:

- a. hemorrhagic states requiring replacement therapy, including hemophilia,
- b. sickle cell disease (homozygous).

2. Category B medical conditions shall include:

- a. anemia, leukopenia, or thrombocytopenia or chronic anticoagulation therapy,
- b. polycythemia vera,

- c. splenomegaly,
- d. history of thromboembolic disease,
- e. any other hematological condition that results in an individual not being able to perform as a fire fighter.

(n) Endocrine And Metabolic

1. Category A medical conditions shall include:

- a. uncontrolled diabetes mellitus.

2. Category B medical conditions shall include:

- a. diseases of the adrenal gland, pituitary gland, parathyroid gland, or thyroid gland of clinical significance,
- b. nutritional deficiency disease or metabolic disorder,
- c. diabetes mellitus not covered in Category A,
- d. any other endocrine or metabolic condition that results in an individual not being able to perform as a fire fighter.

(o) Tumors And Malignant Disease

1. Category A medical conditions shall include:

- a. none.

2. Category B medical conditions shall include:

- a. malignant disease which is newly diagnosed, untreated, or currently being treated. The medical evaluation of any appointee with malignant disease which is newly diagnosed, untreated, or currently being treated shall be deferred until treatment has been completed. Treated malignant disease shall be evaluated based on that individual's current physical condition and on the likelihood of that individual's disease to recur or progress.
- b. any other tumor or malignancy that results in an individual not being able to perform as a fire fighter.

(p) Psychiatric

1. Category A medical conditions shall include:

- a. none.

2. Category B medical conditions shall include:

- a. a history of any psychiatric condition, behavior disorder, or substance abuse problem not covered in Category A. Such history shall be evaluated based on that individual's history, current status, prognosis, and ability to respond to the stressors of the job,
- b. any other psychiatric condition that results in an individual not being able to perform as a fire fighter.

(q) Conditions Not Otherwise Covered

1. Category A medical conditions shall include:

- a. none.

2. Category B medical conditions shall include:

- a. connective tissue and autoimmune diseases, including dermatomyositis, lupus erythematosus, scleroderma, and rheumatoid arthritis,
- b. history of heat stroke, frostbite, or other thermal injury,
- c. potentially transmissible infectious disease, including HIV and AIDS,
- d. any other systemic condition that results in an individual not being able to perform as a fire fighter.

(r) Chemicals, Drugs, And Medications

1. Category A medical conditions shall include:

- a. active alcoholism or substance abuse.

2. Category B medical conditions shall include the regular use of various chemicals and drugs, including -- but not limited to -- the following categories:

- a. anticoagulant agents,
- b. cardiovascular agents
- c. narcotics,
- d. sedative-hypnotics,
- e. stimulants,
- f. psychoactive agents,

- g. systemic steroids,
- h. any other chemical, drug, or medication that results in an individual not being able to perform as a fire fighter.

*** Special Notations:**

This is the amended version of the Commonwealth of Massachusetts Human Resource Division's (HRD) Initial Hire Medical Standards for Municipal Fire Fighters. In amending this document, HRD adopted the 1997 edition of NFPA 1582, Standard on Medical Requirements for Firefighters as the basis for its regulations. Also, per agreement with the NFPA in acknowledgement and appreciation for the prior work performed by the NFPA in the development of these standards, HRD is presenting its medical standards for fire fighters in the enclosed format.

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An asterisk (*) following the number or letter designating a paragraph indicates portions of NFPA 1582 that have been adopted.

08 Physical Fitness Standards Test Course for Fire Fighters

(1) General Description The Physical Fitness Standards Test for Fire Fighter consists of 7 events that require each candidate to perform simulations of activities that are part of the fire fighter's job. These events require cardiovascular fitness, muscle strength, muscular endurance and flexibility. Each event will be timed. During all events, the candidate will wear a weighted vest which approximates the weight of the clothing, equipment and breathing apparatus that a fire fighter normally wears during these types of activities. The events are described below. They will be performed in the order listed.

(a) Stair Climb This event simulates continuous stair climbing, an activity that fire fighters may perform when getting to a fire at an incident scene. For this event, the candidate will be required to step on a rotating staircase (also known as a stepmill) at a pre-determined stepping pace for a specific period of time. There is a five minute rest period after the stair climb event.

(b) Ladder Event This event simulates various activities related to using extension ladders. The candidate will be required to remove a ladder from a rack, carry it some distance, raise a weight of approximately 45 lbs. attached to a rope that simulates the raising of an extension ladder, lower that weight and return the ladder to the rack from which it was taken. The event ends when the ladder is back in the rack. This event will be timed.

(c) Hose Advance This event simulates the actions necessary to manipulate a fully charged fire hose. The candidate will be required to pull 50 feet of hose through a U-shaped course with several turns. There will be a ceiling on the U-shaped course to prevent the candidate from standing upright. This event will be timed.

(d) Forcible Entry This event simulates breaking down a door to gain entry to a burning structure or an incident scene. For this event the candidate will be required to strike a rubber pad mounted on a moveable post. The candidate will use a 12 lb. sledge hammer to move the post a set distance. The post and structure are weighted to simulate the force one would need to exert on a door in order to gain entrance. The candidate's score will be based on the time it takes to move the post the required distance.

(e) Search This event simulates the actions necessary to enter and search a smoke-filled structure. Candidates crawl through a dark wooden tunnel with obstructions and turns. The tunnel is approximately 65 feet long. The tunnel is 4 feet high and 4 feet wide. At one location in the tunnel there is an obstacle on the floor and at one location there is an obstacle from the ceiling. In addition, at two locations, the tunnel is reduced from 4 feet to 3 feet in width. This event will be timed.

(f) Rescue Through a Doorway This event simulates the actions necessary to drag an unconscious victim through a doorway to get the victim to safety. Individuals drag a 125 pound dummy approximately 60 feet along a zigzag course to a designated area at the end of the course. In this event, there is a low ceiling over the course to prevent candidates from standing upright. This event will be timed.

(g) Ceiling Hook (Pike Pole) This event simulates the use of a pike pole or ceiling hook. A pike pole or ceiling hook is a fire fighting tool used to tear down ceilings or open walls while looking for hidden fires. This event requires the candidate to take a pike pole, tipped with an industrial hammer head, and thrust it upward at a metal plate in an 8 foot ceiling. The metal plate weighs approximately 60 lbs. and must be lifted six inches in order for the strike to count. The candidate then steps over to the next part of the event, where a pike pole handle is suspended from a ceiling height. The pole is attached to a counter balance that weighs approximately 80 lbs. The candidate must pull the pole down six inches in order for the pull to count. The candidate must perform one push and five pulls in a sequence. The event will require the candidate to perform four one-minute periods of work, in which he/she will try to do as many push-pull sequences as possible. Only completed sequences will count in the scoring of this event. Each work period will be followed by a 30 second rest period.

(2) Specifications for these test events are on file at HRD.

09 Scoring of the Physical Fitness Standards Test Course for Fire Fighters

(1) The scoring will be as follows:

TABLE OF CUT SCORES	
Stepmill	200 secs
Ladder	35.56 secs
Hose Advance	20 secs
Forcible Entry	13.91 secs
Search	39 secs
Rescue	36 secs
Ceiling Hook	25 reps

(2) In order to pass the Physical Fitness Standards Test successfully, a candidate must pass every sub-test by achieving at least the passing score indicated on the above chart. If upon examination, a candidate does not pass the test, then that candidate will be required to retake the entire test (all the sub-tests) during the re-examination.

10 Medical Standards for Municipal Police Officers

(1) Medical Evaluation: Each municipal police department shall establish and implement a pre-placement medical evaluation process for candidates. During the medical evaluation, the physician shall evaluate each individual to ascertain the presence of any medical conditions listed in these standards, or any medical conditions not listed which would prevent the individual from performing the essential job functions without posing significant risk. It is our intent to encourage the use of professional judgment regarding medical conditions that are not specifically listed. A candidate shall not be certified as meeting the medical requirements of these standards if the physician determines that the candidate has any Category A medical condition specified in these standards. Furthermore, a candidate shall not be certified as meeting the medical requirements of these standards if the physician determines that the candidate has a Category B medical condition that is of sufficient severity to prevent the candidate from performing the essential functions of a police officer without posing a significant risk to the safety and health of him/herself or others.

(2) The medical evaluation shall minimally include the following:

- (a) comprehensive medical history, that is, a baseline (pre-placement) or interval (periodic) occupational history, including significant past exposures and training and experience with personal protection equipment
- (b) height and weight
- (c) vital signs: pulse, respiration, blood pressure, and, if indicated, temperature
- (d) dermatological system
- (e) ears, eyes, nose, mouth, throat
- (f) cardiovascular system
- (g) respiratory system
- (h) gastrointestinal system
- (i) genitourinary system
- (j) endocrine and metabolic systems
- (k) musculoskeletal system
- (l) neurological system
- (m) basic mental status evaluation. Based on the severity, diagnosis, and impairment of any identified behavior or condition, the initial examiner is encouraged to consider referral of the applicant to a doctoral level mental health professional for further evaluation. In general, the current or recent use of psychotropic medications shall be reviewed by a Board certified psychiatrist.

- (n) audiometry. Audiograms should be performed in an ANSI approved "soundproof" booth (ANSI S3.1-1977) with equipment calibrated to ANSI standards (ANSI S3.6-1973). If a booth is unavailable, the test room sound pressure levels should not exceed those specified in the Federal OSHA noise regulations (29 CFR 1910.25).
- (o) visual acuity and peripheral vision testing.
- (p) pulmonary function testing. A baseline test should be administered by an experienced individual. Only a spirogram that is technically acceptable and demonstrates the best efforts by an individual should be used to calculate the Forced Vital Capacity (FVC) and Forced Expiratory Volume in one second (FEV1.0).
- (q) a review of hepatitis B immunization status.
- (r) a Purified Protein Derivative (PPD) test for tuberculosis, based on individual departmental infection control plans, and
- (s) other diagnostic testing where indicated.

(3) The medical evaluation process may also include:

- (a) a review of tetanus immunization status.

(4) All medical information collected as part of a medical evaluation shall be considered confidential medical information, and shall be released by the physician only with the specific written consent of the candidate. The physician shall report the results of the medical evaluation to the candidate, including any medical condition(s) disclosed during the medical evaluation and the recommendation whether the candidate is medically certified to perform as a police officer. The physician shall inform the police department and HRD only whether or not the candidate is medically certified to perform as a police officer. The specific written consent of the candidate shall be required to release confidential medical information to the police department and HRD, following guidelines set forth under the Americans With Disabilities Act (ADA) and other relevant policies.

(5) Category A and Category B Medical Conditions

- (a) A Category A Medical Condition is a medical condition that would preclude an individual from performing the essential job functions of a municipal police officer, or present a significant risk to the safety and health of that individual or others.
- (b) A Category B Medical Condition is a medical condition that, based on its severity or degree, may or may not preclude an individual from performing the essential job functions of a municipal police officer, or present a significant risk to the safety and health of that individual or others.

(6) The following biological systems shall be components of the Initial Medical Standards for police officers:

- (a) Musculoskeletal

1. Head and Skull

a. Category A medical conditions shall include:

- i. none.

b. Category B medical conditions shall include:

- i. deformities of the skull, loss or congenital absence of the bony substance of the skull which limit the ability to wear a mask and/or protective breathing apparatus,
- ii. thoracic outlet syndrome sufficient to compromise required activity,
- iii. congenital cysts, chronic draining fistulas, or similar lesions,
- iv. any other head condition that results in an individual not being able to perform the job of police officer.

2. Neck and Cervical Spine

a. Category A medical conditions shall include:

- i. none

b. Category B medical conditions shall include:

- i. cervical arthrodesis/fusion,/instability
- ii. cervical canal stenosis,
- iii. cervical radiculopathy or myelopathy,
- iv. herniated disc,
- v. degenerative disc disease,
- vi. abnormal chronic contraction of neck muscles,
- vii. any other neck condition that results in an individual not being able to perform the job of police officer

3. Thoracic/lumbar/sacral Spine

a.. Category A medical conditions shall include:

i. symptomatic spondylolisthesis, whether or not surgically corrected.

b. Category B medical conditions shall include:

i. lumbar laminectomy or discectomy, with or without fusion.

ii. degenerative disease/spondylolysis/pars defect

iii. structural abnormality, fracture, or dislocation,

iv. degenerative disk disease,

v. herniated disk/sciatica/radiculopathy,

vi. spinal stenosis,

vii. spinal surgery not covered in Category A,

viii. any other spinal condition that results in an individual not being able to perform the job of police officer

4. Extremities

a. Category A medical conditions shall include:

i. hemipelvectomy,

ii. hip disarticulation,

iii. above-the-knee amputation,

iv. upper extremity amputation at or above the wrist, of either thumb, or of digits if absence of those digits interferes with performance of essential job functions, (which includes weapon firing with either hand)

b. Category B medical conditions shall include:

i. severe limitation of motion of a joint, fibrosis, or arthrodesis,

ii. below-the-knee amputation and other amputations not covered in Category A,

iii total joint arthroplasty:

- i. shoulder
- ii. elbow
- iii. wrist
- iv. thumb, first, or second digit
- v. hip
- vi. knee
- vii. ankle

iv. deformity or dislocation of a joint or limb,

v. joint reconstruction, ligamentous instability, or joint replacement not covered in (iii),

vi. chronic osteoarthritis or traumatic arthritis,

vii. inflammatory arthritis,

viii. osteomyelitis,

ix. compressive neuropathies including carpal tunnel syndrome or ulnar nerve palsy,

x. required use of stabilizing orthopedic braces,

xi. any other extremity condition that results in an individual not being able to perform the job of police officer

(b) Eyes And Vision

The medical evaluation shall minimally include visual acuity (Snellen) and peripheral vision testing using a Titmus or Optec Vision Screener or other similar standardized testing device. Contact lenses are not permitted to meet the uncorrected standard. X-chrom contact lens use is not permitted to meet the color standard. When the candidate is being tested, he/she must present without wearing contact lenses for at least 24 hours, so that uncorrected vision can be accurately tested.

1. Category A medical conditions shall include:

- a. uncorrected vision worse than 20/100 in either eye
- b. corrected vision worse than 20/20 in the better eye UNLESS – the vision in the good eye alone is at least 20/25 AND the vision with both eyes together is 20/20 or better.
- c. peripheral vision of less than 70 degrees temporally and 45 degrees nasally in either eye AND/OR any history of conditions limiting field of vision will necessitate additional assessment by an eye care

professional who will use a Goldmann-type perimeter to determine if the binocular visual field is 140 degrees (at least 70 degrees temporally in each eye) with a III4e isopter.

- d. Testing by Ishihara or Richmond pseudo-isochromatic plates is required and if the candidate fails, testing by Farnsworth D-15 is required. Two or more major errors on the Farnsworth is a Category A condition.

2. Category B medical conditions shall include:

- a. diseases of the eye such as cataracts, retinal detachment, progressive retinopathy, or optic neuritis,
- b. ophthalmological procedures such as radial keratotomy or repair of retinal detachment,
- d. any other vision disorder or eye condition that results in an individual not being able to perform the essential functions of a police officer.

(c) Ears And Hearing

The medical evaluation shall minimally include audiograms performed in an ANSI approved sound-treated booth (ANSI S3.1-1999) with equipment calibrated to the ANSI S3.6-1996, or current, standard. If a booth is unavailable, the test room sound pressure levels should not exceed those specified in the Federal OSHA noise regulations (29 CFR 1910.95 Appendix D).

1a. Category A:

Hearing deficit in pure tone thresholds in both ears, the deficit in each ear averaging 35 dB HL or worse at 500, 1000, 2000, and 3000 Hz,

1b. Category A: Candidates failing the Category A standard and who still wish to be considered for appointment will be required to have follow-up examinations that include:

Full audiological examination, including speech reception threshold (SRT) and speech discrimination testing (NU-6 word lists) in both ears,

Full otological examination,

In order to pass:

Pure tone thresholds in better ear indicating average hearing levels at 500, 1000, 2000, and 3000 Hz to be lower than 35 dB HL,

AND

Performance score of 80% or better on the speech discrimination test in the better ear.

HEARING AIDS:

Initial hearing examinations (1.a.) must take place unaided. Candidates who cannot pass the initial examination should be referred to a certified audiologist for the follow-up examination. Candidates may use hearing aids for the follow-up examination. Candidates using hearing aids must pass the follow-up examination based on sound field-testing.

2. Category B medical conditions shall include:

- a. perforated tympanum,
- b. auditory canal - atresia, severe stenosis, or tumor,
- c. severe external otitis,
- d. auricle - severe agenesia or traumatic deformity,
- e. mastoid - severe mastoiditis or surgical deformity,
- f. Meniere's disease, labyrinthitis or any disorder of equilibrium,
- g. otitis media,
- h. any other hearing disorder or ear condition that results in an individual not being able to perform the essential functions of a police officer.

(d) Nose, Mouth, And Throat

1. Category A medical conditions shall include:

- a. tracheostomy,
- b. aphonia,
- c. loss of sense of smell,
- d. congenital or acquired deformities which interfere with wearing a gas mask.

2. Category B medical conditions shall include:

- a. congenital or acquired deformities not covered in Category A,

- b. defects of articulation that materially interfere with verbal communication
- c. defects of rate (stuttering, stammering, or cluttering) that interfere with verbal communication
- d. chronic severe rhinitis,
- e. any other nose, oropharynx, trachea, esophagus, or larynx condition that interferes with breathing or speech or otherwise results in an individual not being able to perform as a police officer or to communicate effectively.

(e) Respiratory

1. Category A medical conditions shall include:

- a. lung abscess or empyema,
- b. active tuberculosis,
- c. pneumothorax,
- d. interstitial disease with abnormal exercise oxygen desaturation,
- e. moderate to severe obstructive pulmonary disease, using the following criteria:
 - i. frequent exacerbation of symptoms (>1-2 times per week),
 - ii. cough and low grade wheezing between exacerbations,
 - iii. diminished exercise tolerance,
 - iv. signs of airway obstruction using spirometry,
 - v. required regular drug therapy other than inhaled steroids.

2. Category B medical conditions shall include:

- a. lobectomy or pneumonectomy,
- b. obstructive disease not meeting Category A criteria,
- c. chronic bronchitis,
- d. emphysema,
- e. bronchiectasis,
- f. history of bronchiectasis, bronchitis, fibrous pleuritis, fibrosis, cystic disease, tuberculosis, mycotic lung disease, or pneumothorax,

- g. interstitial disease with normal exercise oxygen saturation,
- h. any other respiratory condition that results in an individual not being able to perform as a police officer.

(f) Cardiovascular

1. Heart

- a. Category A medical conditions shall include:
 - i. current diagnosis of angina pectoris,
 - ii. congestive heart failure,
 - iii. aneurysm,
 - iv. acute or chronic pericarditis, endocarditis, or myocarditis. Endocarditis with resultant significant valvular lesions, or myocarditis leading to myocardial insufficiency,
 - v. cardiac or multi-organ transplant or left ventricular assist device,
 - vi. third degree AV block without cardiac pacemaker,
 - vii. coronary artery disease, cardiac hypertrophy, or other cardiac condition without evidence of a functional capacity greater than 8 METs,
 - viii. recurrent syncope,
 - ix. history of sudden cardiac death syndrome,
 - x. hemodynamically significant valvular heart disease,
 - xi. current diagnosis of embolism or thrombophlebitis,
 - xii. automatic implantable cardioverter defibrillator (AICD).

- b. Category B medical conditions shall include:
 - i. coronary artery disease not covered in Category A,
 - ii. significant arrhythmias,
 - iii. cardiac hypertrophy,
 - iv. history of myocardial infarction, coronary artery bypass, coronary angioplasty, stent placement, or atherectomy,
 - v. congenital abnormality,

- vi. cardiac pacemaker,
- vii. any other cardiac condition that results in an individual not being able to perform as a police officer.

2. Vascular System

- a. Category A medical conditions shall include:
 - i. congenital or acquired lesions of the aorta and major vessels,
 - ii. marked circulatory instability as indicated by orthostatic hypotension, persistent tachycardia, and severe peripheral vasomotor disturbances,
 - iii. aneurysm of a major vessel, congenital or acquired,
 - iv. untreated persistent hypertension (systolic blood pressure of 160 mmHg or greater or diastolic blood pressure of 100 mmHg or greater).
- b. Category B medical conditions shall include:
 - i. persistent hypertension controlled through medication (systolic blood pressure less than 160 mmHg and diastolic blood pressure less than 100 mmHg),
 - ii. peripheral vascular disease, including intermittent claudication, Raynaud's disease, and Buerger's disease,
 - iii. recurrent thrombophlebitis,
 - iv. chronic lymphedema,
 - v. severe or symptomatic varicose veins or venous insufficiency,
 - vi. any other vascular condition that results in an individual not being able to perform as a police officer.

(g) Gastrointestinal

(1) Category A medical conditions shall include:

- a. liver or multi-organ transplantation,
- b. active gastrointestinal bleeding.

(2) Category B medical conditions shall include:

- a. cholecystitis,
- b. gastritis,

- c. chronic or acute hepatitis,
- d. hernia,
- e. inflammatory bowel disease,
- f. intestinal obstruction,
- g. pancreatitis,
- h. bowel resection,
- i. gastrointestinal ulcer,
- j. cirrhosis,
- k. diverticulitis,
- l. any other gastrointestinal condition that results in an individual not being able to perform as a police officer.

(h) Reproductive

1. Category A medical conditions shall include:

- a. none.

2. Category B medical conditions shall include:

- a. pregnancy, for its duration. Any candidate who is pregnant shall be evaluated based on the candidate's ability to perform as a police officer. Such evaluation shall be based in part on the timing of training and duties as related to pregnancy duration and postpartum recovery. Furthermore, a pregnant candidate shall be informed of the potential risks to her fetus in the performance of essential job functions, due to possible exposures to hazardous materials and physical contact.
- b. any other reproductive condition that results in an individual not being able to perform as a police officer.

(i) Genitourinary

1. Category A medical conditions shall include:

- a. renal disease requiring dialysis,
- b. renal or multi-organ transplantation.

2. Category B medical conditions shall include:

- a. any other renal, urinary, or genital condition that results in an individual not being able to perform as a police officer.

(j) Neurological

1. Category A medical conditions shall include:

- a. ataxia,
- b. cerebral arteriosclerosis as evidenced by documented episodes of neurological impairment, including cerebrovascular accidents (CVAs) and transient ischemic attacks (TIAs),
- c. multiple sclerosis with activity or evidence of progression within previous three years,
- d. muscular dystrophy,
- e. myesthenia gravis,
- f. ALS,
- g. all seizure disorders and choreoathetosis to include psychomotor, focal, petit mal, or grand mal seizures other than for those with:
 - i. complete control during previous two (2) years with either no medication or a constant dose of the same medication,
 - ii. normal neurological examination, and
 - iii. definitive statement from qualified neurological specialist,
- h. dementia
- i. any disorder affecting equilibrium which is acute, episodic, chronic, or recurrent

2. Category B medical conditions shall include:

- a. congenital conditions and malformations,
- b. migraines,
- c. clinical disorders with paresis, paralysis, loss of coordination, abnormal motor function, or abnormalities of sensation,
- d. history of subdural, subarachnoid, or intracerebral hemorrhage,
- e. recent severe head contusion or concussion,
- f. any other neurological condition that results in an individual not being able to perform as a police officer.

(k) Skin

1. Category A medical conditions shall include:

- a. none.

2. Category B medical conditions shall include:

- a. non-localized, i.e., widespread, skin disease,
- b. extensive skin grafts,
- c. contact allergies,
- d. any other dermatologic condition that results in an individual not being able to perform as a police officer.

(l) Hematopoietic And Lymphatic

1. Category A medical conditions shall include:

- a. hemorrhagic states requiring replacement therapy, including hemophilia,
- b. sickle cell disease (homozygous),
- c. chronic anticoagulation therapy.

2. Category B medical conditions shall include:

- a. anemia, leukopenia, or thrombocytopenia,
- b. polycythemia vera,
- c. splenomegaly,
- d. history of thromboembolic disease,
- e. any other hematological condition that results in an individual not being able to perform as a police officer.

(m) Endocrine And Metabolic

1. Category A medical conditions shall include:

- a. uncontrolled diabetes mellitus.
- b. insulin dependent diabetes not controlled by the use of a pump or basal/bolus technique
- c. insulin dependent diabetes not meeting criteria described in Attachment A.

2. Category B medical conditions shall include:

- a. Diabetes mellitus

Note: Any patient with diabetes is required to provide medical information indicating that they meet the requirements described in Attachment A.

- b. diseases of the adrenal gland, pituitary gland, parathyroid gland, or thyroid gland of clinical significance,
- c. nutritional deficiency disease or metabolic disorder,
- d. any other endocrine or metabolic condition that results in an individual not being able to perform as a police officer.

(n) Tumors And Malignant Disease

1. Category A medical conditions shall include:

- a. none.

2. Category B medical conditions shall include:

- a. malignant disease which is newly diagnosed, untreated, or currently being treated. The medical evaluation of any candidate with malignant disease which is newly diagnosed, untreated, or currently being treated shall be deferred until treatment has been completed. Treated malignant disease shall be evaluated based on that individual's current physical condition and on the likelihood of that individual's disease to recur or progress.
- b. any other tumor or malignancy that results in an individual not being able to perform as a police officer.

(o) Psychiatric

1. Category A medical conditions shall include:

- a. disorders of behavior,
- b. anxiety disorders,
- c. disorders of thought,
- d. disorders of mood.
- e. disorders of personality

2. Category B medical conditions shall include:

- a. a history of any psychiatric condition, behavior disorder, or substance abuse problem not covered in Category A. Such history shall be evaluated based on that individual's history, current status, prognosis, and ability to respond to the stressors of the job,
- b. any other psychiatric condition that results in an individual not being able to perform as a police officer.

(p) Conditions Not Otherwise Covered

1. Category A medical conditions shall include:

- a. none.

2. Category B medical conditions shall include:

- a. connective tissue and autoimmune diseases, including dermatomyositis, lupus erythematosus, scleroderma, and rheumatoid arthritis,
- b. history of heat stroke, frostbite, or other thermal injury,
- c. potentially transmissible infectious disease, including HIV and AIDS,
- d. any other systemic condition that results in an individual not being able to perform as a police officer.

(q) Chemicals, Drugs, And Medications

1. Category A medical conditions shall include:

- a. active alcoholism or substance abuse.

2. Category B medical conditions shall include the regular use of various chemicals and drugs, including -- but not limited to -- the following categories:

- a. cardiovascular agents,
- b. narcotics,
- c. sedative-hypnotics,
- d. stimulants,
- e. psychoactive agents
- f. systemic steroids,
- g. any other chemical, drug, or medication that results in an individual not being able to perform as a police officer.

11 Physical Fitness Standards Test Course for Police Officers

- (1) The Physical Fitness Standards Test for Police Officer consists of four (4) events that require candidates to perform simulations of activities that are a part of the police officer's job. These events require cardiovascular fitness, muscle strength, muscular endurance and flexibility. Each event will be timed. During all events, the candidate will wear a duty belt equipped with a holster, plastic gun and night stick to simulate the equipment a police officer normally wears during these types of activities. The events are described below. They will be performed in the order listed. There will be a twenty second rest period between events.
 - (a) Event #1: "Getting to a Problem" - The Obstacle Course.

This event simulates the actions necessary to pursue and "takedown" a suspect. The event begins with a 340-yard obstacle course where the candidate will be faced with climbing under an obstacle, climbing up and down steps, going through an open window, climbing over a wall and negotiating a series of cones arranged in a zigzag pattern. At the end of the course, the candidate will be required to grab hold of a weighted bag attached to a pulley and touch it to the ground beyond a three (3) foot line. The candidate will then immediately move around the Power Station to the handcuffing simulation where he/she will be required to pull on two hand levers until the cable hits the stop. This completes the event.
 - (b) Event #2 "Resolving the Problem" - The Trigger Pull Event. The event consists of raising a handgun and squeezing the trigger six (6) times with each hand.
 - (c) Event #3: "Resolving the Problem" - The Separation Event. This event simulates tasks that require separating one party from another and controlling individuals, such as in crowd control situations. The candidate will be required to pull a hanging bag, weighted against 75 lbs., backwards touching it to the ground across a marked line. Each candidate will have to perform two "pulls".
 - (d) Event #4: "Removing the Problem" - The Dummy Drag. This event simulates dragging a victim or suspect. The candidate will be required to drag a 6', 145 pound dummy over a straight 25 foot course.
- (2) Specifications for these test events are on file at HRD.

12 Scoring of the Physical Fitness Standards Test Course for Police Officers

(1) The scoring will be as follows:

TABLE OF CUT SCORES	
Obstacle Course	130.4 secs
Trigger Pull	7.1 secs
Bag Pull	14.2 secs
Dummy Drag	11 secs

(2) In order to pass the Physical Fitness Standards Test successfully, a candidate must pass every sub-test by achieving at least the passing score indicated on the preceding chart. If upon examination, a candidate does not pass the test, then that candidate will be required to retake the entire test (all the sub-tests) during the re-examination.

Attachment A: Diabetes Mellitus

A candidate with Diabetes Mellitus (diabetes) must comply with the requirements described below. At their own expense, the candidate or officer must submit medical information from their treating medical provider responsive to these criteria, including actual medical data which can be reviewed by the Police Physician. These criteria apply to all cases of diabetes, independent of whether insulin is required or not. The requirements pertaining explicitly to insulin do not apply to individuals whose diabetes is being managed without insulin.

The medical information must cover the following:

1. Care: The individual is under the care of an endocrinologist or other physician knowledgeable about diabetes management. Outpatient and in-patient medical record(s) of the last three years or since date of diagnosis (whichever is shorter) should be reviewed by the treating physician and provided to the Police Physician.
2. Treatment: The method of treatment of diabetes
 - A. If the individual has type 1 diabetes, the individual has been on a basal/bolus regimen or an insulin pump using analogue insulins for the six (6) months prior to evaluation.

If the individual uses an insulin pump, documentation is needed as follows:

 1. proper understanding and education in the use of the insulin pump
 2. state date for the use of the pump
 3. history of insulin site infections
 4. history of pump cessation and pump malfunction
 5. backup plan for pump malfunction including use of injectable insulin
 6. frequency of infusion set changes
 - B. If has type 2 diabetes on insulin, the individual has been on a stable medication regimen for the three (3) months prior to evaluation.
 - C. If on oral agents alone, the individual has been on a stable medication regimen for the month prior to evaluation.
3. Education: The individual has been educated in diabetes and its management and thoroughly informed of and understands the procedures that must be followed to monitor and manage his/her diabetes and what procedures should be followed if complications arise.

4. Quantitative Glucose Monitoring

- A. The individual has documentation of ongoing self-monitoring of blood glucose.
- B. This must be done with a glucose meter that stores every reading, records date and time of reading and from which data can be downloaded.
- C. Monitoring logs must be available covering the time period (1, 3 or 6 months) described in sections 2.A. – C. . The frequency of glucose monitoring must follow a schedule acceptable to the Police Physician in consultation with the treating physician.
- D. Has had hemoglobin A1C measured at least four times a year (intervals of two to three months) over the last 12 months prior to evaluation if diagnosis has been present over a year. If hemoglobin A1C > 8%, this may signal a problem with diabetes management that warrants further assessment

5. Incapacitating events

- A. Has not had any episodes within the past one (1) year

and

- B. no more than two (2) episodes in the past three (3) years,

or

- C. since diagnosis of diabetes (if less than one year) has not had any episodes of:

- 1. severe hypoglycemia (loss of consciousness, seizures or coma, requiring the assistance of others or needing urgent treatment [glucagon injection/IV glucose]) or

blood sugar < 60 mg/dl with unawareness demonstrated in current glucose logs.

- 6. Chronic complication screening: Chronic complications of diabetes are associated with increased risk for severe hypoglycemic episodes and warrant further assessment. The components of screening for chronic complications are:

- A. complete eye exam by a qualified ophthalmologist or optometrist, including a dilated retinal exam, demonstrating no more than mild background diabetic retinopathy.

- B. Normal vibratory testing with a 128 Hz tuning fork, has normal testing with 10 gram Semmes-Weinstein monofilament and normal orthostatic blood pressure and pulse testing.
- C. Normal cardiac physical exam. Cardiac stress testing to at least 12 METS is recommended and should begin based on either the criteria of the American Heart Association / American College of Cardiology or those of the American Diabetes Association. Individuals with diabetes who have a normal cardiac stress test will be retested every one to three years based on individual clinical assessment. This assessment should consider:
 - the age of the individual
 - the number and persistence of CAD risk factors
 - the severity of CAD risk factors
- D. Microalbumin/creatinine ratio <30:1, measured or calculated creatinine clearance > 60 ml/min.

7. Ongoing evaluation and requirements

- A. Should have medical records and glucose meter logs reviewed periodically. Because of the nature of diabetes it is important that regular medical follow up be provided to the individual. The frequency and content of the evaluation should be determined on an individual basis by the Police Physician in consultation with the treating physician.
- B. Must advise Police Physician of any change in type of medication.
- C. Must advise Police Physician of any episodes of significant hypoglycemia or hyperglycemia (ketoacidosis, hyperosmolar hyperglycemic nonketotic state).
- D. Must provide documentation of ongoing evaluation of cardiac, ophthalmological, neurological and/or renal status. [see sections above]

The diabetes requirements above are adopted from the National Consensus Guideline for the Medical Evaluation of Law Enforcement Officers (2007), issued by the American College of Occupational and Environmental Medicine in consultation with the American Diabetes Association. The full document (soon to be available from ACOEM.org) should be consulted for additional details regarding recommended evaluation and monitoring. www.acoem.org.