

FIREFIGHTER CANDIDATE MEDICAL EXAMINATION GUIDANCE

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Introduction

The job of a Firefighter is physically and mentally demanding. For this reason, the FDNY Bureau of Health Services (“BHS”) conducts a thorough examination of each candidate to determine whether the candidate can safely fulfill the requirements of the job.

There are three parts of the BHS evaluation prior to being appointed as a Probationary Firefighter:

- **Medical Examination**
- **Psychological Screening**
- **Timed Run**

This Guidance gives you information about what to expect on the day of the medical examination and psychological screening at BHS and the subsequent timed run conducted at the FDNY Fire Academy. The medical examination and psychological screening will take place on the same day at BHS. Once you are medically and psychologically qualified – and you have passed the character/background screening – you will be scheduled for a timed run that takes place at the FDNY Fire Academy, approximately 2 to 4 weeks before the start of the next Probationary Firefighter class.

This Guidance also provides tips on how to increase your chance of success. Increase your chances of passing the medical examination by preparing for it! The FDNY encourages you to build and maintain your physical fitness throughout your entire candidacy. Weight management, fitness training, and an overall healthy lifestyle should increase your chances of passing the examination. You should follow a physical training program that combines aerobic capacity with strength building.

You must cooperate with BHS for all parts of the evaluation. If you need a reasonable accommodation in order to take any part of the evaluation, please contact the FDNY Equal Employment Opportunity (EEO) Office at the phone numbers listed in Appendix E (Contact List).

1. Medical Examination

1.1 What to Expect at the Medical Examination

Most of the FDNY medical examination takes place at BHS, located at FDNY Headquarters, 9 MetroTech Center, Second Floor, Brooklyn, NY 11201. Should any component of the examination take place elsewhere, you will be notified of the location in writing.

You will be required to arrive at BHS at 6:30 AM. You should expect to be at BHS until about 4:00 PM, although you may finish earlier or later. Wear sneakers and appropriate gym/fitness or lightweight exercise clothing, and be clean shaven. Carefully read the letter scheduling your appointment with BHS for complete instructions to help you prepare for the appointment. For example, that letter tells you which information you will need to bring with you to fill out a computerized questionnaire about your medical history on the date of your appointment.

After completing various questionnaires and forms, you will visit 12 “stations” where one or more medical tests will be administered.

1.2 Computerized Medical Questionnaire and Other Forms

You can view a PDF of the medical history questionnaire on the [Candidate Portal](#). Questions include whether you currently take or have taken certain medications, or whether you currently have, or have a history of, certain:

- conditions;
- illnesses; or
- medical procedures.

In addition to the computerized medical questionnaire, a BHS representative will give you other forms¹ and describe them to you. You must give complete and accurate information on all forms. Your answers to the questions on the forms will be used during the medical evaluation and to assist in determining whether you are medically fit for appointment as a Firefighter.

Failure to report any condition, illness, medical procedure, disability status, or any other information requested by the FDNY to evaluate your medical condition can result in your disqualification.

1.3 Individualized Evaluation

No one is disqualified from appointment as a Firefighter just because they disclose that they had (or have) a specific illness, condition, or medical procedure **or** were certified as disabled by the US Department of Veterans Affairs **or** were disqualified from service by the US military or another employer. Your medical history will be evaluated on an individual basis together with the results of the medical examination.

No two people are the same and outcomes depend on your overall health and the severity of the specific condition. For example, someone may report a mild case of hypertension that is controlled with medication and someone else may have a more serious case of hypertension with related medical complications. In some cases, BHS will require further information after your initial appointment to be able to make a determination that you are medically qualified or BHS may require that you meet certain conditions before you are found to be medically qualified. For example, BHS has required some candidates to lose weight, be evaluated by an outside physician, or undergo certain testing before they could be appointed. The particular requirements are determined based on the severity of the issue and the candidate’s overall medical condition.

¹ You can look at these forms at <https://www1.nyc.gov/site/fdny/jobs/career-paths/candidate-resources.page>. You also may refer to the resources on the Candidate Portal once you have received a login to the Portal. If you need assistance accessing the FDNY Candidate Portal, please call FDNY Recruitment at the number listed in Appendix E (Contact List).

1.4 The Stations

After completing the forms, you will visit 12 physical health “stations” where one or more medical tests will be administered. A BHS representative will describe each station so that you will know what will happen and what will be expected of you. As you complete each station, you will be directed to the next station by BHS personnel.

You will be permitted to complete all 12 stations (whether or not you “pass” the requirements of each station), unless FDNY medical personnel determine that it is unsafe for you to continue. For example, FDNY medical personnel may determine that it is unsafe for you to take the Stairmill Test.

Please refer to the appendices for additional information on the stations:

- **Appendix A** describes each station, including examples of conditions that candidates have had that require further evaluation and that may ultimately lead to disqualification.
- **Appendix B** describes the Cardiopulmonary Fitness Evaluation and the Stairmill Test.
- **Appendix B-1** is the Consent and Release form you will be asked to complete in the event BHS requires you to undergo certain follow-up medical tests.
- **Appendix B-2** describes some of the follow-up diagnostic tests you may be asked to take.
- **Appendix C** is the Table of Target Weight for FDNY Firefighter Candidates.
- **Appendix D** provides additional instructions, including information about some of the stations.
- **Appendix E** is a Contact List

1.5 Candidate Discharge Report

On the day of your initial visit, FDNY personnel will **not** tell you whether you “passed” a specific station or the overall medical examination. An FDNY physician must review the results from each station, review your laboratory results and any other test results, and review the computerized medical questionnaires before any determination can be made.

All candidates who complete the initial medical examination receive a Candidate Discharge Report at the conclusion of the initial medical examination (and at the conclusion of all follow-up appointments). The most recent Candidate Discharge Report also will be available on the Candidate Portal shortly after any appointment or change in your status. If for some reason you need a duplicate report, you may contact BHS at the phone numbers listed in Appendix E (Contact List).

The Candidate Discharge Report specifies any medical conditions that need to be addressed and follow-up actions that you are required to take so that the FDNY can make a decision as to

whether you are medically qualified. The content of the Candidate Discharge Report will depend on your unique circumstances:

- If you do not have any medical conditions that require you to take further action at the time of the initial medical examination, the Candidate Discharge Report will indicate (1) you are in reserved status for your laboratory results; and (2) explain the actions that need to be taken to follow up on the PPD skin test for tuberculosis.
- If you have a medical condition that *could* medically disqualify you from appointment at the time of the initial medical examination, the Candidate Discharge Report will explain the additional tests you need and/or the information you must provide.²

If, for some reason, you are unable to complete the medical examination on your initial appointment date, you will be rescheduled to take the entire medical examination on a different day and will not receive a Candidate Discharge Report.

Make sure to read all notices from BHS carefully – including the Candidate Discharge Report – and follow the specific directions given by BHS. Any delay in providing information, including test results, will prevent the FDNY from making a determination about whether you are medically qualified. If you are in reserved status for one year, you will need to retake the entire medical examination. (Refer to Section 1.9 below.)

1.6 Additional Diagnostic Testing at No Cost to You

1.6(A) Outside Providers

The Candidate Discharge Report may list diagnostic testing that you must undergo with an outside provider (i.e., a doctor or other medical professional not at BHS). If diagnostic testing with an outside provider is required, BHS may be able to schedule and pay to have the following tests conducted at no cost to you, such as:

- Blood and/or Urine Testing. These tests are often required for conditions such as: elevated blood sugar, diabetes, abnormal liver or kidney function, or abnormal cell counts such as low platelets.
- Full pulmonary function testing, a methacholine challenge test and/or a chest CT scan. These tests may be required if you show signs of certain pulmonary conditions, like asthma.
- Echocardiogram or stress test. These tests might be required if you show certain cardiac conditions, such as valve problems.

² In unusual circumstances, a candidate could have a medical condition that is so severe that the candidate will be medically disqualified from appointment as a Firefighter without the need for further follow up after the initial appointment. If that happens, the FDNY will issue a Notice of Proposed Disqualification (“NOPD”) that will state the medical reason for the proposed disqualification. If you receive an NOPD, it will explain how you can challenge the disqualification. It will also explain that you can “decline appointment” which means temporarily declining consideration for appointment as a Firefighter. For more information about declining appointment see Section 1.10 below.

- Imaging (X-ray, CT or MRI scans) of the joint or bones. These tests might be required if you have certain orthopedic issues.

If you choose to have the FDNY pay for the required diagnostic testing at an outside provider, BHS will schedule your follow-up appointment for you. Should this happen, information about the medical condition will be listed on your Candidate Discharge Report and you will receive an Authorization Form with the location, date, and time of your appointment with the outside provider. BHS will work with you to schedule the testing on a date that is as convenient as possible for you within 30 days of the date of the Candidate Discharge Report. If for some reason you need a duplicate Authorization Form, you may contact BHS at the phone numbers listed in Appendix E (Contact List).

You will be required to complete the Consent and Release form in Appendix B-1 to this Guidance.

If you are unable to appear for the diagnostic testing appointment as scheduled, you must follow the re-scheduling instructions in the Candidate Discharge Report. If you fail to appear for a scheduled medical appointment with an outside provider on two occasions, the FDNY will issue a Notice of Proposed Disqualification (“NOPD”) for Failure to Cooperate.

1.6(B) Follow-Up Appointments at BHS

The Candidate Discharge Report may list follow-up diagnostic appointments with BHS. If you are unable to appear for a follow-up appointment at BHS, you must follow the re-scheduling instructions in the Candidate Discharge Report. If you fail to appear for a scheduled follow-up appointment with BHS on five occasions, the FDNY will issue a NOPD for Failure to Cooperate.

1.7 **Diagnostic Testing and Other Medical Services Conducted at Your Own Expense**

If you are given the option of having required diagnostic tests performed by an outside provider paid for by the FDNY and you choose to have those tests conducted by your own medical services provider, those tests will be performed *at your own expense* and BHS will not assist you in scheduling appointments.

BHS will not pay for all outside medical testing you may choose to undergo. For example, the following types of medical testing or services must be obtained at your own expense:

- An opinion from a medical services provider that is being obtained to challenge the findings which have been made by BHS; or
- Any treatment or consultation you seek in response to a condition reported on your Candidate Discharge Report. For example: diabetes, hypertension, orthopedic conditions, or obesity. Although certain conditions may impede your appointment as a Firefighter, you are required to pay for any medical treatment(s) that you seek to address a condition. There is no guarantee that treating a condition will be enough to qualify you for appointment.

1.8 Timeframe to Address Items Listed in the Candidate Discharge Report

You should complete all medical testing – including testing performed by an outside provider – and submit all requested information described in the Candidate Discharge Report within 30 days of the date of the Candidate Discharge Report, unless you request and are granted an extension. You may request an extension of time to complete your testing and provide all requested information. If you request an extension of time and that extension is granted, please note that the extension generally will be within 30 days from the original due date. The form to request an extension is available on the FDNY Candidate Resources webpage and via the FDNY Candidate Portal. The decision to grant or deny your request for an extension will be noted on an updated Candidate Discharge Report. Please refer to Section 1.5 about how to obtain a copy of your report. If you fail to follow the instructions in the Candidate Discharge Report, the FDNY will issue an NOPD for Failure to Cooperate. If you need more than 30 days to resolve a condition listed in the Candidate Discharge Report (or more time than any extension you were granted), you can temporarily decline appointment, as described in Section 1.10.

1.9 Expiration of the Medical Examination

If you do not complete all medical testing and provide all requested information to BHS, the FDNY will not be able to determine if you are medically qualified and you will not be appointed to the position of Firefighter. If 12 months pass from the date of your initial medical examination and you have not yet been appointed as a Firefighter, you will be scheduled for another full medical examination. This medical examination is the same as described above.³ You cannot be appointed as a Firefighter unless you have passed the medical examination within 12 months of appointment.

1.10 Temporary Declination

If, for any reason, you decide that you do not wish to be considered for the position of Firefighter at a particular time, you can temporarily decline being considered for appointment. For example, you may need more than 30 days to complete additional diagnostic testing or to lose weight. To temporarily decline appointment, you must send a letter or an email to the FDNY Candidate Investigation Division (“CID”) that clearly states that you are requesting a temporary declination, along with your name, exam number, list number, last four digits of your social security number, address, and contact phone number. You must submit your request to CID either by email or by U.S. Mail. Refer to Appendix E for CID’s email and mailing address.

Keep a copy of your request for temporary declination and the Declination Acknowledgment for your records.

When you are ready to restore yourself to the civil service list, you must request restoration of your name to the eligible list from the New York City Department of Administrative Services (“DCAS”) by writing to DCAS at the address listed in Appendix E (Contact List). You are encouraged to make this request at least six (6) months before the list expires to allow the FDNY

³ Please be advised that FDNY medical personnel will have access to all prior medical tests and results.

sufficient time to consider you for appointment. You can call DCAS at the number listed in Appendix E (Contact List) at any time to confirm the status of the list for your Exam. Be advised that you may decline and be restored to the civil service list no more than three times.

1.11 Completion of the Medical Examination

You can access the FDNY Candidate Portal to check on your progress from the CPAT through the timed run. In order to learn if you have completed the medical examination, click on the “View My Progress” button. When the “Medical” button is green, you have completed the examination. Please note that if your medical status changes at some point after the progress bar had indicated the medical examination was complete, the progress bar will then change to yellow to indicate that your status is “pending” and you will need to resolve any issues before you proceed further in the process.

2. Psychological Screening

On the same date as the initial medical examination, you will complete a computerized mental health questionnaire, which consists of a series of multiple choice questions. The computerized mental health questionnaire is not available to candidates before the day of the screening. This questionnaire uses questions developed by national experts for mental health screening, including whether you currently take or have taken medications, or whether you currently have, or have a history of, certain conditions. We are asking these questions because you are a candidate seeking work in a highly stressed environment. There are no right or wrong answers, and no one is disqualified from appointment as a Firefighter just because they disclose that they have (or have had) a specific illness, condition, or procedure.

You will not know the results of the psychological screening on the same day as the initial medical examination. The computerized mental health questionnaire will be reviewed and, in some cases, an FDNY medical professional will call you to ask follow-up questions and/or ask you to appear for an in-person interview with an FDNY mental health professional. If it is determined that you will not be able to safely perform the job of a Firefighter, you will be sent an NOPD.

If 12 months pass from the date of your initial psychological screening and you have not yet been appointed as a Firefighter, the FDNY will schedule you for another psychological screening. This psychological screening is the same process outlined above. You cannot be appointed as a Firefighter unless you have passed the psychological screening within 12 months of appointment.

3. The Timed Run

If you pass both the medical examination and the psychological screening, and assuming that you are otherwise qualified, you will be scheduled for a timed run that takes place at the FDNY Fire Academy approximately 2 to 4 weeks before you would be appointed as a Probationary Firefighter. You will be required to run 1.5 miles in 13 minutes or less.

If you cannot pass the timed run, you will be required to take the Stairmill Test again. You will be transported from the FDNY Fire Academy to BHS the same day of the failed run to attempt the stairmill.

Even if you fail the timed run and the Stairmill Test, you still may be able to become a Firefighter if you provide satisfactory results from these three follow-up diagnostic tests:

1. Echocardiogram
2. Methacholine Challenge Chamber
3. Exercise Treadmill Stress Test

You will have the option of being scheduled by BHS for these diagnostic tests conducted by an outside provider at no cost to you or having the medical testing done by a provider of your choice at your own expense.

You can read about the Stairmill Test in Appendix B and the diagnostic tests in Appendix B-2.

If it is determined that you did not pass the timed run, or do not qualify under the other procedures described above, you will be sent an NOPD.

**KEEP READING FOR MORE IMPORTANT INFORMATION ABOUT THE
FDNY MEDICAL EXAMINATION**

4. APPENDICES

Appendix A	Brief Description of the Medical Examination Stations
Appendix B	Cardiopulmonary Fitness Evaluation and Description of the Stairmill Test
Appendix B-1	Consent and Release
Appendix B-2	Description of Selected Diagnostic Testing
Appendix C	Table of Target Weight for FDNY Firefighter Candidates
Appendix D	Additional Instructions to Candidates for Initial Medical Examination
Appendix E	Contact List

APPENDIX A

THE MEDICAL EXAMINATION STATIONS

There is no set order in which you will visit the medical examination stations, except that BHS personnel will ensure that:

- (1) you visit the Vital Signs, Electrocardiogram (EKG), and Pulmonary Function stations, before the Cardiopulmonary Fitness Evaluation (Stairmill Test) station;
- (2) you visit the Routine Laboratory station at some point after the Stairmill Station;
- (3) you do not visit the Hearing station immediately after the Stairmill Test Station; and
- (4) the Physician Evaluation will usually be the last station you visit.

Below is a brief description of each station and conditions that may require further evaluation. Please note that the list of conditions is not complete and that there are other types of conditions, which are rarer, that might be identified at a particular station or through subsequent testing.

STATION NAME	FOCUS OF TEST	EXAMPLES OF CONDITIONS THAT MAY REQUIRE FURTHER EVALUATION
Cardiopulmonary Fitness Evaluation (Stairmill Test)	See Appendix B	This test is explained in more detail in Appendix B
Chest X-Ray	Tests for heart, pulmonary, and spinal conditions	<ul style="list-style-type: none">• Evidence of pulmonary disease• Enlarged heart• Severe scoliosis• Use of a heart pacemaker or implantable defibrillator
Electrocardiogram (EKG)	Measures cardiovascular activity	<ul style="list-style-type: none">• Any deviation from a normal heart rate and/or a normal sinus rhythm
Hearing	Candidates are placed in a sound proof booth and asked to identify different frequencies of sound transmitted through earphones	<ul style="list-style-type: none">• Hearing loss in the unaided ear is greater than 40 decibels (dB) at 500 Hz, 1000 Hz, 2000 Hz, and 3000 Hz

STATION NAME	FOCUS OF TEST	EXAMPLES OF CONDITIONS THAT MAY REQUIRE FURTHER EVALUATION
Immunization/PPD	Tests for tuberculosis	<ul style="list-style-type: none"> • Positive test for tuberculosis
Laboratory Test (Routine)	Blood and urine samples are collected and tested for certain medical conditions	<ul style="list-style-type: none"> • Abnormal red and/or white blood cell count • Abnormal blood or urine glucose • Elevated levels of serum creatinine (a measure of kidney function) • Elevated liver function blood tests
Laboratory Test for Unauthorized Substances	Candidates provide a urine sample before a witness	<ul style="list-style-type: none"> • Positive test for an unauthorized substance not reported as a legal prescription to BHS, including, but not limited to, methadone, opiates, heroin, cocaine, marijuana, barbiturates, and benzodiazepine. Any candidate that tests positive for such substances will be sent an NOPD. • Even with a legal prescription, the chronic use of certain categories of substances may be incompatible with the job of a Firefighter. These categories include, but may not be limited to, opiates, pain medications, anti-psychotic medications, sedatives, sleeping pills, beta blockers and anti-coagulants. A positive test for one of these types of substances will require further evaluation. Candidates will be reviewed on an individualized basis, and BHS may have the candidate provide a prescription history, an explanation for the prescription and an opinion as to how long the prescription will be continued from the prescribing physician.
Mask Fit	Tests ability to wear the breathing mask used to perform Firefighter duties	<ul style="list-style-type: none"> • Inability to wear face piece with a proper seal due to, for example, facial hair or facial deformity

STATION NAME	FOCUS OF TEST	EXAMPLES OF CONDITIONS THAT MAY REQUIRE FURTHER EVALUATION
Physician Evaluation	Review of data and documentation, interview of candidate, and physical examination	<ul style="list-style-type: none"> • Any item listed above • A medical abnormality that would not be found during an examination already made by BHS, such as a heart murmur • Where BHS has determined that the candidate is not able to safely complete the BHS examination, the reasons for BHS's determination will be reviewed with the candidate.
Pulmonary Function Test	<p>Measures air flow in lungs</p> <p>Inhaling and exhaling are measured by a spirometer (candidates will breathe into and out of the device)</p>	<ul style="list-style-type: none"> • Capacity to forcibly exhale (FVC) and forcibly exhale air in one second (FEV1) is less than 80 percent of the predicted value for your height, gender and race⁴ or the ratio of these measures (FEV1/FVC) is less than 0.70 • Evidence of pulmonary disease
Vision	<p>With the use of an electronic vision screener, candidates are tested for near sightedness, far sightedness, depth perception, color and peripheral vision</p> <p>You may wear glasses or contact lenses during this test</p>	<ul style="list-style-type: none"> • Far vision acuity less than 20/40 binocular (even if corrected with lenses or spectacles) • Monochromatic vision • Monocular vision

⁴ Predicted values are based on a candidate's age, height, ethnicity, and gender, as determined by National Health and Nutrition Examination Survey (NHANES) III.

STATION NAME	FOCUS OF TEST	EXAMPLES OF CONDITIONS THAT MAY REQUIRE FURTHER EVALUATION
Vital Signs	Blood pressure, height, weight, pulse, and oxygen saturation measurements	<ul style="list-style-type: none"> • Systolic blood pressure equal to or exceeding 140 (mmHG) • Diastolic blood pressure equal to or exceeding 90 (mmHG) • Weight exceeding the upper limit of your target weight (see Appendix C for target weight ranges) • Body Mass Index (BMI) equal to or exceeding 30. The BMI is an integrated measure of weight and height. • Resting Heart Rate (Pulse) equal to or greater than 100 beats per minute

APPENDIX B

Cardiopulmonary Fitness Evaluation and Description of the Stairmill Test

One of the required medical examination stations is a cardiopulmonary fitness evaluation test, which is conducted on a stairmill (this is referred to here as the “Stairmill Test”).

1. The Stairmill Machine and How to Prepare for the Stairmill Test

The Stairmill Test takes place on a stairmill machine. A stairmill is different from stair stepper machines, which are more typically found in gyms. The main difference between a stairmill and a stair stepper is that your feet do not leave the pedals when using a stair stepper. On the stairmill, you will pick up your foot as the next step descends towards you. A stairmill is a better representation of climbing an actual staircase. Below is a picture of the type of stairmill on which the test is administered. It is the same machine you used during your Candidate Physical Agility Test (“CPAT”), but the Stairmill Test for the FDNY medical examination is different than the stairmill portion of the CPAT that is administered by DCAS.



The FDNY encourages you to maintain your physical fitness throughout your entire candidacy and to practice on a stairmill machine. Some local gyms have stairmill machines. You can also purchase a 50-pound weighted vest to practice with, since such a vest is used during the Stairmill Test. If you do not have access to a gym with a stairmill, you can practice by climbing stairs in the stairwell of a building wearing a 50-pound vest or carrying 50 pounds in a backpack capable

of holding the weight. Climb at a rate of 58 steps per minute without touching the handrails or sidewalls, as described below.

2. Ability to Take Stairmill Test

Before you can begin the Stairmill Test on the first attempt, a nurse will review your completed computerized medical history and the results from the Vital Signs, EKG, and Pulmonary Function Test stations to check for any medical conditions that may make it unsafe for you to proceed with the Stairmill Test. Such conditions may include:

- (a) A systolic blood pressure exceeding 140 (mmHg) or a diastolic blood pressure exceeding 90 (mmHg);
- (b) An irregular heartbeat;
- (c) A bone fracture that occurred within the last 12 months;
- (d) The chronic use of prescribed medication including, but not limited to, blood thinners, beta blockers, sedatives, and narcotics;
- (e) A history of heart disease, including a heart stent;
- (f) A history of stroke;
- (g) Morbid obesity;
- (h) Recent surgery; or
- (i) A history of pulmonary disease.

If you have any of these conditions, or any other condition or test results which, in the nurse's medical opinion, indicate that you should not proceed with the Stairmill Test, you will be verbally notified that you may not take the Stairmill Test until an FDNY physician reviews your condition(s) and/or medical test result(s), examines you, and makes a decision about whether you can safely proceed with the Stairmill Test. Even if you cannot proceed with the Stairmill Test, you will be permitted to complete other parts of the medical examination (unless BHS has determined that it is not safe for you to continue with those other parts). The Stairmill Test (or an acceptable alternative test as described in this Appendix) must be successfully completed before you can be appointed as a Firefighter. You will have three attempts (on different days) to pass the Stairmill Test and, if you cannot pass it, you will need to undergo alternative testing.

If BHS determines, after reviewing your conditions and examining you, that you are not able to safely proceed with the Stairmill Test on the day of your medical examination, you will be given a Candidate Discharge Report stating those diagnoses/body parts that need to be addressed before you may safely proceed with the Stairmill Test. Although any Candidate Discharge Report you receive will address your individual circumstance, examples of issues that other people have been required to address in the past before being allowed to take the Stairmill Test include: morbid obesity, high blood pressure, a rapid heart rate, and bone fractures. **Read your**

Candidate Discharge Report carefully and pay attention to any requirements. You will be given a copy of the Candidate Discharge Report, and it will be available in the Candidate Portal.

3. Description of the Stairmill Test

BHS personnel will provide you with a 50-pound vest that you will wear during the entirety of the test. You will climb on the stairmill for a total of five minutes. For the first minute, you will climb at a rate of 50 steps per minute. For the next four minutes, you will climb at a rate of 58 steps per minute. The five-minute period will be continuous – there is no break. Once the test has begun, you may not touch any part of the stairmill with your hands, arms, or any other body part during the entire five-minute period.

A uniformed member of the FDNY will be present in the Stairmill station to act as a spotter for each candidate, and the test will be conducted under the oversight of FDNY medical personnel (physician, nurse practitioner, physician assistant or registered nurse).

If you complete the test without visual signs of dizziness or physical distress, you will pass the Stairmill Test.

You will not pass the Stairmill Test if:

- You step off the stairmill for any reason before the end of the five-minute period.
- You touch any part of the handrail with one or both of your hands, arms, or any other body part.
- BHS personnel observe signs of dizziness or physical distress (for example, clutching one's chest, loud audible wheezing, uncontrolled coughing, vomiting or retching).

4. Tips Concerning Proper Procedure

During the Stairmill Test, you may not touch any part of the stairmill with your hands. If you touch the stairmill with your hands for any reason (whether because of dizziness, physical distress, or any other reason), BHS personnel will turn off the machine and discontinue the test.

Note that in addition to not touching the stairmill machine while you are taking the Stairmill Test:

- You must climb on the stairmill one step at a time and avoid bouncing or bumping onto any part of the stairmill.
- You are not permitted to wear any joint bracing or support.
- The stairmill machine will display the amount of time that elapses during the test.
- BHS personnel are not permitted to communicate with or otherwise distract you from completing the test, unless they observe a condition which could harm you. You are

not permitted to wear earplugs/earbuds or anything else that could inhibit necessary communications with BHS personnel.

You can only attempt the Stairmill Test once per visit. However, with the approval of an FDNY physician, you can attempt the Stairmill Test up to three times on three different dates. You can become a Firefighter if you can pass the Stairmill Test or (after failing three attempts) submit the results of an exercise treadmill stress test. If you pass the Stairmill Test at any point and you meet all other requirements of the medical examination, you will be considered medically qualified.

5. If You Fail Your First Attempt

If you do not pass the Stairmill Test on your first attempt, your Candidate Discharge Report will indicate you remain in reserve status for cardiopulmonary and you will be scheduled for a second attempt, generally within 30 days of the first attempt.

6. Second Attempt Stairmill Test Procedure

On the day of your second attempt at the Stairmill Test, you will have to revisit the Vital Signs station, and the results of that station will be reviewed by FDNY medical personnel. Unless the personnel identify an issue, you will be allowed to proceed. If you are not allowed to proceed with the Stairmill Test on the second attempt, you will receive a Candidate Discharge Report. If you are allowed to proceed but do not successfully complete the Stairmill Test on the second attempt, you will receive a Candidate Discharge Report.

The procedure for the second attempt at the Stairmill Test is the same as the first attempt, as described above in Section 3 of this Appendix.

7. If You Fail Your Second Attempt at the Stairmill Test

(a) You Must Provide Satisfactory Echocardiogram and Methacholine Test Results to Continue with Further Testing

If you do not pass the Stairmill Test on your second attempt, your Candidate Discharge Report will indicate you remain in reserve status for cardiopulmonary. If you want to attempt the Stairmill Test a third time, BHS must review both:

- (1) The results of a two-dimensional echocardiogram, which is used to check if you have a structural heart defect; and
- (2) The results of a methacholine challenge test, which is used to check if you have asthma or other airway disease.

A more detailed description of this medical screening is found in Appendix B-2 below.

(b) Medical Screening Conducted by an outside Provider at No Cost to You

If you choose, the FDNY will schedule and pay for both tests (the two-dimensional echocardiogram and the methacholine challenge test) with an outside provider. If you choose this option, BHS will schedule you on a date or dates that are convenient for you. You are required to appear for the medical screening as scheduled. If you need to reschedule an appointment with an outside provider, you must contact the provider at the phone number listed on the Authorization Form. In general, you will be rescheduled to a date that is within 30 days of the date of your prior appointment. You are **not** permitted to reschedule your appointment with an outside provider more than two times. If you reschedule an appointment with an outside provider more than two times or you fail to appear for a scheduled appointment with an outside provider two times, the Authorization Form will no longer be valid (and will not be reissued) and you will receive an NOPD for Failure to Cooperate.

(c) Medical Screening Obtained at Your Expense

You also have the option to get the medical screening done by a medical services provider of your choice at your expense. If you require more than 30 days to secure the medical documentation of this outside medical screening, you may request an extension from BHS, as set forth in the scheduling instruction that will be given to you. If you fail to submit the results of the two-dimensional echocardiogram or the methacholine challenge test within the 30-day period, and you fail to request and be granted additional time, the FDNY will issue an NOPD for Failure to Cooperate.

(d) BHS Review of Medical Screening Results and Additional Documentation

An FDNY physician will review the results of the two-dimensional echocardiogram and the methacholine challenge test.

- If the results are medically acceptable to the FDNY physician, you will be allowed to proceed with a third attempt at the Stairmill Test, and BHS will call you to schedule a test date within 30 days of the call and will list that appointment date on the Candidate Discharge Report. You will receive the Candidate Discharge Report via email or US mail and will be able to access a copy of it in the Candidate Portal within a few days after it has been sent.
- If the FDNY physician finds that the result of one or more of the medical screenings is not medically acceptable, the FDNY will issue an NOPD to you.

8. Third Attempt at Stairmill Test

If, after reviewing the results of the two-dimensional echocardiogram and the methacholine challenge test, an FDNY physician finds you eligible to take the Stairmill Test a third time, the procedure for the third attempt at the Stairmill Test will be identical to the procedure for the second attempt, as described above in Section 6 of this Appendix.

9. Exercise Treadmill Stress Test

If you do not pass the Stairmill Test on the third attempt, you can take an exercise treadmill stress test scheduled and paid for by BHS or that you arrange at your own expense. If you are unable to provide satisfactory results, the FDNY will issue an NOPD to you. See Appendix B-2 for a description of the exercise treadmill stress test.

(a) Exercise Treadmill Stress Test Conducted by an Outside Provider at No Cost to You

You have the option of being scheduled for the exercise treadmill stress test with an outside provider at no cost to you. If you choose this option, BHS will schedule you on a date that is convenient for you. You are required to appear for the test as scheduled. If you need to reschedule the test, you must contact the provider at the phone number listed on the Authorization Form. In general, you will be rescheduled to a date that is within 30 days of the date of your prior appointment.

You are **not** permitted to reschedule your appointment with an outside provider more than two times. If you reschedule an appointment with an outside provider more than two times or you fail to appear for a scheduled appointment with an outside provider two times, the Authorization Form will no longer be valid (and will not be reissued) and you will receive an NOPD for Failure to Cooperate.

(b) Exercise Treadmill Stress Test Scheduled by You at Your Own Cost

You also have the option of providing the results of an exercise treadmill stress test that is administered by a medical services provider of your choice, at your own expense. You must submit test results from the exercise treadmill stress test within 30 days. If you require more than 30 days to secure the results, you may request an extension from BHS, as set forth in the Candidate Discharge Report that will be given to you. If you fail to submit the test result within the 30-day period and you fail to request and be granted additional time, the FDNY will issue an NOPD for Failure to Cooperate.

Do **not** take an exercise stress test if you have not been instructed to do so. BHS will **not** consider the results of the exercise treadmill stress test unless an FDNY physician finds that the results of the two-dimensional echocardiogram and methacholine challenge are acceptable. As stated above, if the results of the two-dimensional echocardiogram and the methacholine challenge are not acceptable to an FDNY physician, the FDNY will issue an NOPD to you.

(c) Firefighter Candidate Exercise Treadmill Stress Test Certification

The outside provider who administers the exercise treadmill stress test (whether scheduled by BHS or by you) will be required to provide BHS with a report confirming whether you have or have not safely attained the minimum aerobic requirement described below in Appendix B-2.

10. Consent Form for Medical Testing Offered at No Cost to You

If you choose to obtain any medical testing offered at no cost to you, you will be required to complete the “Consent and Release Form,” a copy of which is included as Appendix B-1 to this document.

The City will not be liable for any injury or illness that you suffer from the medical testing provided at no cost to you.

APPENDIX B-1

CONSENT AND RELEASE

I _____, consent to participate in the following medical testing at no cost to me (please indicate your consent by writing your initials next to the procedure(s)):

_____ Two Dimensional Echocardiogram

_____ Methacholine Challenge Test

_____ Exercise Treadmill Stress Test (to 12 Metabolic Equivalents (METs))

_____ OTHER (to be inserted by BHS):

To the best of my knowledge, I have no cardiopulmonary disease, including asthma; I am medically able to participate in the medical testing being offered to me; and I am consenting to take these tests.

I have been given the opportunity to direct any questions concerning any part of the medical testing, including side effects, to the FDNY Bureau of Health Services. I will receive a copy of the results of any medical testing. If I wish to discuss the results of such medical testing with a medical services provider to determine any diagnosis or need for further medical treatment, it must be with a medical services provider of my own choosing and at my own expense.

In consideration for obtaining any part of the medical testing at no cost to me, I hereby release and hold harmless the City of New York, its agencies, officers, employees and agents, from any and all claims, causes of action, suits, damages or judgments, related to any injury or illness that I, my heirs, executors, administrators and assigns, EVER HAD OR WILL HAVE, in connection with any part of the medical testing arranged for me by BHS and paid for by the FDNY.

I understand that this Consent and Release shall not affect any rights that I may have to challenge a medical disqualification under the NY Civil Service Law, should I be deemed to be medically disqualified.

Candidate Signature

Candidate Printed Name

Witness Name

Witness Signature

Date

APPENDIX B-2

DESCRIPTION OF SELECTED DIAGNOSTIC TESTING CONDUCTED BY OUTSIDE PROVIDERS

TWO DIMENSIONAL ECHOCARDIOGRAM: This is a non-invasive diagnostic test that uses ultrasound to look at the heart size, wall motion, heart valves and ejection fraction of the heart. This test looks for underlying structural or mechanical heart problems that may be the reason for your inability to exercise at a moderate to high level or to complete the Stairmill Test.

METHACHOLINE CHALLENGE TEST: This is a pulmonary diagnostic test for airway reactivity or asthma. During this test, your breathing capacity is measured after each successive inhaled dose of methacholine – a nonspecific irritant. The test continues until either the maximum dose of methacholine is reached or the test is terminated because your breathing has decreased by 20% of your baseline or to levels that are deemed unsafe by the expert administering the test. At the conclusion of the test, you may be required to inhale a bronchodilator (a substance that dilates the airways to the lungs) to determine whether your breathing improves. If the result of the methacholine test is positive, or abnormal, it may indicate that you have asthma or reactive airways disease, which may be the reason for your inability to exercise at a moderate to high level or to complete the Stairmill Test. The results of the methacholine challenge test may also show diminished lung capacity, as measured during one second of forced expiratory volume (FEV1) or the forced vital capacity, which is the total amount of air forcibly exhaled (FVC). Any of the above abnormalities may cause a candidate to be medically disqualified.

EXERCISE TREADMILL STRESS TEST: This diagnostic test helps to determine how well the heart responds to exertion. You will walk and/or run on a treadmill, and should wear comfortable clothing and exercise footwear. The person administering the test will gradually increase the speed and elevation of the treadmill to determine whether you can safely exercise at a moderate to high level. You will be monitored using external (non-invasive) electrodes, similar to when you had your resting electrocardiogram during your medical evaluation. The test will be administered by a technician who will observe your heart rate, blood pressure and heart rhythm pattern and stop the test early if any of these become abnormal or if you appear to be in undue distress. You must submit results showing that you achieved metabolic performance to 12 METs. A “MET” is a metabolic equivalent, which is the standard used to measure aerobic capacity during physical activity.

**THE TEST DESCRIPTIONS FOUND ABOVE ARE GENERAL. TEST PROCEDURES
MAY DIFFER SOMEWHAT FROM PROVIDER TO PROVIDER. THE FIRE
DEPARTMENT DOES NOT OVERSEE AND IS NOT RESPONSIBLE FOR TEST
PROCEDURES CONDUCTED BY OUTSIDE MEDICAL SERVICES PROVIDERS.**

APPENDIX C

TABLE OF TARGET WEIGHT FOR FDNY FIREFIGHTER CANDIDATES

ADULT MALES

HEIGHT	TARGET WEIGHT UPPER LIMIT
4' 10"	157.0
4' 11"	163.0
5' 0"	169.0
5' 1"	174.0
5' 2"	180.0
5' 3"	184.0
5' 4"	187.0
5' 5"	192.0
5' 6"	197.0
5' 7"	202.0
5' 8"	206.0
5' 9"	211.0
5' 10"	216.0
5' 11"	221.0
6' 0"	226.0
6' 1"	230.0
6' 2"	236.0
6' 3"	242.0
6' 4"	248.0
6' 5"	255.0
6' 6"	261.0
6' 7"	268.0
6' 8"	275.0
6' 9"	282.0
6' 10"	289.0
6' 11"	296.0
7' 0"	303.0

APPENDIX C (continued)

ADULT FEMALES

HEIGHT	TARGET WEIGHT UPPER LIMIT
4' 10"	157.0
4' 11"	161.0
5' 0"	164.0
5' 1"	168.0
5' 2"	172.0
5' 3"	176.0
5' 4"	181.0
5' 5"	186.0
5' 6"	191.0
5' 7"	196.0
5' 8"	200.0
5' 9"	204.0
5' 10"	208.0
5' 11"	211.0
6' 0"	215.0
6' 1"	221
6' 2"	227
6' 3"	233
6' 4"	240
6' 5"	246
6' 6"	252
6' 7"	259
6' 8"	265
6' 9"	271
6' 10"	279
6' 11"	286
7' 0"	293

APPENDIX D

Additional Instructions to Candidates for Initial Medical Examination

Inquiries – You are encouraged to direct any questions or concerns to an officer at BHS as soon as possible, so that these matters may be addressed as they arise. Officers are dressed in uniform and wear white shirts.

Personal Health – The FDNY strongly encourages candidates to be in good health for their medical examination. If, prior to the date for your *initial* medical examination or upon arrival for your *initial* medical examination, you discover that you do not feel well or you are recovering from an injury or illness, you should re-schedule your *initial* medical examination by calling the FDNY Candidate Investigation Division (“CID”) at the phone number listed in Appendix E (Contact List). If an injury or medical condition is discovered after you have commenced the examination, BHS will discontinue the examination and you will be directed to meet with an FDNY physician, who will determine whether you may proceed. You may confer with BHS about all follow-up appointments after the *initial* medical examination.

Cell Phones – Phones are not allowed in the testing areas. Personal items may be stored in a gym or duffel bag that will be kept in a training room. If you need to make a telephone call during the examination, please notify an officer, who will assist you.

Vital Signs – On the date of your examination, your height will be measured in the Vital Signs station. Please ensure that your hair is worn in such a manner or style that the height bar may rest comfortably atop your head. In addition, certain head coverings may require removal. If you require a religious accommodation, please contact the FDNY Equal Employment Opportunity (EEO) Office at the phone numbers listed in Appendix E (Contact List).

Pulmonary Function Test – You will be instructed to breathe into and out of a spirometer, a device that measures the amount of air flowing in and out of your lungs. Please follow the instructions that will be given to you by the technician, who will guide you through the process.

Nurse Review – A nurse will review the results of the Vital Signs, EKG, and Pulmonary Function stations to ensure that you may proceed with the Stairmill Test.

Blood Work – Blood work will not be taken until after you have completed the Stairmill Test. If you bring a snack, wait until after your blood work is done to eat.

Hearing - The Hearing Station may not be visited directly after the Stairmill Test, as all you might hear is your heartbeat.

Vision – You should bring and wear eyeglasses or contact lenses during the eye test, if you use either of these.

FDNY Physician – When you meet with an FDNY physician, you will have the opportunity to discuss any medical history or condition not previously disclosed on your computerized medical questionnaire. If necessary, you may amend your responses to the computerized medical questionnaire. However, your intentional failure to disclose information in response to questions in the computerized medical questionnaire could result in your disqualification.

Chest X-Ray – An FDNY radiology technician will take a chest x-ray of all candidates. After you have met with an FDNY physician, the need for one or more additional x-rays may be required and, if that is the case, you will be directed to the x-ray station.

APPENDIX E

Contact List

FDNY Bureau of Health Services (“BHS”)

FDNY Bureau of Health Services
New York City Fire Department
9 MetroTech Center, 2nd Floor (Room 206)
Brooklyn, NY 11201
Phone: 718-999-1870/1897
Facsimile: 718-999-0087

FDNY Candidate Investigation Division (“CID”)

Mailing address: Candidate Investigation Division
Fire Department, City of New York
9 MetroTech Center
Brooklyn, NY 11201

Email: CID@fdny.nyc.gov

FDNY Equal Employment Opportunity (EEO) Office

Equal Employment Opportunity Office
New York City Fire Department
9 MetroTech Center, Room 4E-1
Brooklyn, NY 11201
Phone: (718) 999-1447/1448
Email: eeo@fdny.nyc.gov

FDNY Recruitment

Phone: 718-999-FDNY (3369)
E-mail: Recruitment@fdny.nyc.gov

New York City Department of Administrative Services (“DCAS”)

NYC Department of Citywide Administrative Services
1 Centre Street, 17th Floor
New York, NY 10007
Phone: (212) 669-1357 (automated number to confirm status of civil service exams)