

## MEDICAL EXAMINATION FAQs – PART 7

### CARDIOPULMONARY FITNESS STATION

#### **Q-1: What is tested at the Cardiopulmonary Fitness (Stairmill) Test Station?**

At the Cardiopulmonary Fitness Test station, you will take a test on a stairmill to determine your ability to meet the aerobic demand of firefighter tasks. This test is often referred to as the “stairmill test.”

#### **Q-2: Must I pass an examination before I can take the stairmill test?**

A-2: Before you can begin the stairmill test, an FDNY nurse will review your completed computerized medical questionnaire and the results from the Vital Signs, electrocardiogram (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 systolic blood pressure exceeding 140 (mmHg) or a diastolic blood pressure exceeding 90 (mmHg);
- An irregular heartbeat;
- A bone fracture that occurred within the last 12 months;
- The chronic use of prescribed medication including, but not limited to, blood thinners, beta blockers, sedatives, and narcotics;
- A history of heart disease, including a heart stent;
- A history of stroke;
- Morbid obesity;
- Recent surgery; or
- A history of pulmonary disease.

#### **Q-3: What happens if the FDNY nurse who reviews my information determines that I should not proceed with the stairmill test?**

A-3: If an FDNY nurse, in his/her medical opinion, believes 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). In that case, an FDNY physician will examine you and review the medical test results and/or conditions, and make a decision about whether you can safely proceed with the stairmill test.

**Q-4: If an FDNY physician determines that it would be unsafe for me to take the stairmill test on the day of the medical exam, may I take the stairmill test another time?**

A-4: If an FDNY physician determines that it would be unsafe for you to take the stairmill test, you will either be (1) permitted to schedule another stairmill test when the condition has been properly treated and has resolved; or (2) asked to obtain additional testing to make sure that it is safe for you to take the stairmill test. You will be notified of what additional testing is needed in a Candidate Discharge Report.

**Q-5: What happens during the stairmill test?**

A-5: You will be given a 50-pound vest that you will wear for the entire 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 will be no break.

A uniformed member of the FDNY will be present to act as a spotter, and the test will be observed by FDNY medical personnel (a physician, a nurse practitioner, a physician assistant or a registered nurse).

**Q-6: What would cause me to fail the stairmill test?**

A-6. You will fail the test if any of the following occurs:

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

**Q-7: If I fail the stairmill test or it is determined that it would be unsafe for me to take the stairmill test, can I still complete the other 11 stations?**

A-7: You will be allowed to complete the remaining stations unless an FDNY physician has determined that it is not safe for you to continue with the other parts of the medical exam. The stairmill test (or an alternative test that BHS advises is acceptable) must be successfully completed, however, before you can be appointed as a Firefighter.

**Q-8: If I fail the stairmill test, may I take the stairmill test another time?**

A-8: If you fail the stairmill test, you will be evaluated by an FDNY physician. Based upon the physician's assessment, you will either be permitted to schedule a retest or be asked to obtain additional testing to make sure that it is safe for you to retake the stairmill test. The additional testing needed would be listed in the Candidate Discharge Report.

**Q-9: If I am eligible to take the stairmill test a second time, how long will I have to prepare for it?**

A-10: You will be scheduled for a second stairmill test to take place between 30 and 45 days after the first stairmill test so that you have time to improve your physical conditioning.

**Q-10: Is the second stairmill test the same?**

A-10: Yes, the second stairmill test is the same as the first stairmill test.

**Q-11: If I don't pass the stairmill on the second try, can I take the stairmill test a third time?**

A-11: You can only take the stairmill a third time if you obtain the results of a methacholine challenge test and an echocardiogram. These two tests will be conducted by a third-party provider at another location at no cost to you, unless you choose to schedule the tests with outside medical providers of your choice. If you wish to take these tests at FDNY's third-party providers, FDNY personnel will schedule these tests for you. After the results of these tests are submitted to the FDNY, an FDNY physician will evaluate the results of those two tests and, if they are satisfactory, you will be allowed to attempt the stairmill test a third time.

**Q-12: Why do I need to obtain a methacholine challenge test and an echocardiogram to take the third stairmill test?**

A-12: If you failed the stairmill test twice, an FDNY physician must determine whether there are underlying conditions that may be preventing you from passing. Two potential underlying problems are asthma and structural heart disease. The methacholine challenge test is used to diagnose asthma, and the echocardiogram tests for structural heart problems.

**Q-13: If I fail the third attempt, is there a way I can still be medically qualified?**

A-13: If you fail the stairmill test three times, you can be medically qualified. To do so, you must (1) provide BHS with satisfactory results from a methacholine challenge test, an echocardiogram, and an exercise treadmill stress test; and (2) satisfy all other requirements of the BHS medical examination. An exercise treadmill stress test is conducted by a third-party provider at another location at no cost to you, unless you choose to schedule the test with an outside medical provider of your choice. If you wish to take this test at FDNY's third-party provider, FDNY

personnel will schedule the test for you. After the result of this test is submitted to the FDNY, an FDNY physician will evaluate the result and, if it is satisfactory, you will have passed the stairmill test.