



FREDERICK COUNTY GOVERNMENT

DIVISION OF FIRE & RESCUE SERVICES

Office of the Chief

Jessica Fitzwater
County Executive

Thomas Coe, Chief

Dear Physician:

Your patient has expressed a desire to participate in the Candidate Physical Agility Test (CPAT), which is part of the testing process for the position of Firefighter for Frederick County.

Enclosed you will find a description of the testing process, as well as a DOCTOR'S CERTIFICATION OF FITNESS TO PERFORM A PHYSICAL ABILITY TEST. Please review the enclosed documents and evaluate the physical ability of your patient to participate in the testing process.

Should you have any questions, please contact Frederick County's Fire & Rescue Services Training Office at (301) 600-1716.

Frederick County: Rich History, Bright Future

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**FREDERICK COUNTY GOVERNMENT
DIVISION OF FIRE & RESCUE SERVICES
5370 Public Safety Place
Frederick, MD 21704**

Pre-Employment Candidate Physical Ability Test

General Description of Tasks:

- 1. Stair Climb**
- 2. Hose Drag**
- 3. Equipment Carry**
- 4. Ladder Raise and Extension**
- 5. Forcible Entry**
- 6. Search**
- 7. Rescue**
- 8. Ceiling Breach and Pull**

Description of Events

Participant will be wearing a weighted vest of 75 pounds during Event 1. This will be reduced to 50 pounds during Events 2-8. This is to simulate the wearing of protective equipment during firefighting. This is a timed test, which must be completed within ten minutes and twenty seconds.

Event 1 – Stair Climb

This event is designed to simulate the critical tasks of climbing stairs in full protective clothing while carrying a high-rise pack (hose bundle) and climbing stairs in full protective clothing carrying fire fighter equipment. This event challenges the candidate's aerobic capacity, lower body muscular endurance and ability to balance. This event affects the candidate's aerobic energy system, as well as the following muscle groups: quadriceps, hamstrings, glutes, calves, and lower back stabilizers.

Event Description

For this event, the candidate must wear two 12.5-pound weights on the shoulders to simulate the weight of a high-rise pack. Prior to the initiation of the timed CPAT, there is a 20-second warm-up on the StepMill at a set stepping rate of 50-steps per minute. During this warm-up period, the candidate is permitted to dismount, grasp the rail or hold the wall to establish balance and cadence. If a candidate falls or dismounts the StepMill during the 20-second warm-up period, the candidate must remount the StepMill and restart the entire 20-second warm-up period. The candidate is allowed to restart the warm-up period twice. The timing of the test begins at the end of this warm-up period when the proctor calls the word "START." There is no break in time between the warm-up period and the actual timing of the test. For the test, the candidate must walk on the StepMill at a set stepping rate of 60-steps per minute for three minutes. This

concludes the event. The two 12.5-pound weights are removed from the shoulders. Walk 85-feet within the established walkway to the next event.

Event 2 – Hose Drag

This event is designed to simulate the critical tasks of dragging an uncharged hoseline from the fire apparatus to the fire occupancy and pulling an uncharged hoseline around obstacles while remaining stationary. This event challenges the candidate's aerobic capacity, lower body muscular strength and endurance, upper back muscular strength and endurance, grip strength and endurance, and anaerobic endurance. This event affects the candidate's aerobic and anaerobic energy systems, as well as the following muscle groups: quadriceps, hamstrings, glutes, calves, lower back stabilizers, biceps, deltoids, upper back, and muscles of the forearm and hand (grip).

Event Description

For this event, the candidate must grasp a hoseline nozzle attached to 200 feet of 1-3/4 inch hose. Place the hoseline over the shoulder or across the chest, not exceeding the 8-foot mark. The candidate is permitted to run during the hose drag. Drag the hose 75-feet to a pre-positioned drum, make a 90-degree turn around the drum, and continue an additional 25-feet. Stop within the marked 5-foot by 7-foot box, drop to at least one knee and pull the hoseline until the hoseline's 50-foot mark crosses the finish line. During the hose pull, the candidate must keep at least one knee in contact with the ground and knee(s) must remain within the marked boundary lines. This concludes the event. Walk 85-feet within the established walkway to the next event.

Event 3 – Equipment Carry

This event is designed to simulate the critical tasks of removing power tools from a fire apparatus, carrying them to the emergency scene and returning the equipment to the fire apparatus. This event challenges the candidate's aerobic capacity, upper body muscular strength and endurance, lower body muscular endurance, grip endurance, and balance. This event affects the candidate's aerobic energy system, as well as the following muscle groups: biceps, deltoids, upper back, trapezius, muscles of the forearm and hand (grip), glutes, quadriceps, and hamstrings.

Event Description

For this event, the candidate must remove the two saws from the tool cabinet, one at a time, and place them on the ground. Pick up both saws, one in each hand, and carry them while walking 75-feet around the drum, then back to the starting point. The candidate is permitted to place the saw(s) on the ground to adjust grip. Upon return to the tool cabinet, place the saws on the ground, pick up each saw one at a time, and replace the saw in the designated space in the cabinet. This concludes the event. Walk 85-feet within the established walkway to the next event.

Event 4 – Ladder Raise and Extension

This event is designed to simulate the critical tasks of placing a ground ladder at a fire structure and extending the ladder to the roof or window. This event challenges the candidate's aerobic capacity, upper body muscular strength, lower body muscular strength, balance, grip strength, and anaerobic endurance. This event affects the candidate's aerobic and anaerobic energy

systems, as well as the following muscle groups: biceps, deltoids, upper back, trapezius, muscles of the forearm and hand (grip), glutes, quadriceps, and hamstrings.

Event Description

For this event, the candidate must walk to the top rung of the 24-foot aluminum extension ladder, lift the unhinged end from the ground, and walk it up until it is stationary against the wall. This must be done in a hand over hand fashion, using each rung until the ladder is stationary against the wall. The candidate must not use the ladder rails to raise the ladder. Immediately proceed to the pre-positioned and secured 24-foot aluminum extension ladder, stand with both feet within the marked box of 36 inches by 36 inches, and extend the fly section hand over hand until it hits the stop. Then, lower the fly section hand over hand in a controlled fashion to the starting position. This concludes the event. Walk 85-feet within the established walkway to the next event.

Event 5 – Forcible Entry

This event is designed to simulate the critical tasks of using force to open a locked door or to breach a wall. This event challenges the candidate's aerobic capacity, upper body muscular strength and endurance, lower body muscular strength and endurance, balance, grip strength and endurance, and anaerobic endurance. This event affects the candidate's aerobic and anaerobic energy systems as well as the following muscle groups: quadriceps, glutes, triceps, upper back, trapezius, and muscles of the forearm and hand (grip).

Event Description

For this event, the candidate must use a 10-pound sledgehammer to strike the measuring device in the target area until the buzzer is activated. During this event, candidates must keep their feet outside the toe-box at all times. After the buzzer is activated, place the sledgehammer on the ground. This concludes the event. Walk 85- feet within the established walkway to the next event.

Event 6 – Search

This event is designed to simulate the critical task of searching for a fire victim with limited visibility in an unpredictable area. This event challenges the candidate's aerobic capacity, upper body muscular strength and endurance, agility, balance, anaerobic endurance, and kinesthetic awareness. This event affects the candidate's aerobic and anaerobic energy systems as well as the following muscle groups: muscles of the chest, shoulder, triceps, quadriceps, abdominals, and lower back.

Event Description

For this event, the candidate must crawl through a tunnel maze that is approximately 3-feet high, 4-feet wide and 64-feet in length with two 90-degree turns. At a number of locations in the tunnel, the candidate must navigate around, over, and under obstacles. In addition, at two locations, the candidate must crawl through a narrowed space where the dimensions of the tunnel are reduced. The candidate's movement is monitored through a narrowed space where the dimensions of the tunnel are reduced. The candidate's movement is monitored through the maze. If for any reason, the candidate chooses to end the event, the candidate may call out or rap sharply on the wall or ceiling and the candidate will be assisted out of the maze. Upon exit from the maze, the event is concluded. Walk 85-feet within the established walkway to the next event.

Event 7 – Rescue

This event is designed to simulate the critical task of removing a victim or injured partner from a fire scene. This event challenges the candidate's aerobic capacity, upper and lower body muscular strength and endurance, grip strength and endurance, and anaerobic endurance. This event affects the candidate's aerobic and anaerobic energy systems, as well as the following muscle groups: quadriceps, hamstrings, glutes, abdominals, torso rotators, lower back stabilizers, trapezius, deltoids, latissimus dorsi, biceps, and muscles of the forearm and hand (grip).

Event Description

For this event, the candidate must grasp a 165-pound mannequin by the handle(s) on the shoulder(s) of the harness (either one or both handles are permitted), drag it 35-feet to a pre-positioned drum, make a 180-degree turn around the drum, and continue an additional 35-feet to the finish line. The candidate is not permitted to grasp or rest on the drum. It is permissible for the mannequin to touch the drum. Candidates are permitted to drop and release the mannequin and adjust their grip. The entire mannequin must be dragged until it crosses the marked finish line. This concludes the event. Walk 85-feet within the established walkway to the next event.

Event 8 – Ceiling Breach and Pull

This event is designed to simulate the critical task of breaching and pulling down a ceiling to check for fire extension. This event challenges the candidate's aerobic capacity, upper and lower body muscular strength and endurance, grip strength and endurance, and anaerobic endurance. This event affects the candidate's aerobic and anaerobic energy systems, as well as the following muscle groups: quadriceps, hamstrings, glutes, abdominals, torso rotators, lower back stabilizers, deltoids, trapezius, triceps, biceps, and muscles of the forearm and hand (grip).

Event Description

For this event, the candidate must remove the pike pole from the bracket, stand within the boundary established by the equipment frame, and place the tip of the pole on the painted area of the hinged door in the ceiling. Fully push up the 60-pound hinged door in the ceiling with the pike pole three times. Then, hook the pike pole to the 80-pound ceiling device and pull the pike pole down five times. Each set consists of three pushes and five pulls. Repeat the set four times. Candidates are permitted to stop and, if needed, adjust their grip. Releasing the grip or allowing the pike pole handle to slip, without the pike pole falling to the ground, does not result in a warning or constitute a failure. Candidates are permitted to re-establish their grip and resume the event. If the candidate does not successfully complete a repetition, the proctor calls out "MISS" and the candidate must push or pull the apparatus again to complete the repetition. This event and the total test time end when the candidate completes the final pull stroke repetition as indicated by a proctor who calls out "TIME."



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**DOCTOR'S CERTIFICATION OF FITNESS TO
PERFORM CANDIDATE PHYSICAL ABILITY TEST**

I have reviewed the attached eight (8) elements of the Frederick County Division of Fire & Rescue Services' (DFRS) "Candidate Physical Ability Test" and certify that the candidate listed below is under my care, and is able to prepare for and perform the elements of the test safely.

Candidate's Name:
Agency to Which Application is Made:
Date of Examination:

Expiration date is six months from date of exam.

Doctor's Signature:
Name Printed/Typed:
Address:
Phone Number:

This form will expire six months from the date of examination. Upon expiration, a new certification form must be completed before any further processing can be done.

*******IMPORTANT*******

Candidate: You must bring this form with you when you report for the Mentoring Program or Physical Ability Test.

Without this form, you will not be tested.