

# Central Saanich Fire Department



## *Firefighter Applicant Physical Fitness Evaluation Appointment Checklist*

This information package provides a detailed overview of the physical evaluation process. More information can be obtained from contacting Fire Administration at 250-544-4238.

You can contact the Central Saanich Fire Department about your appointment by phone at 250-544-4238 or by email at: [fdadmin@csaanich.ca](mailto:fdadmin@csaanich.ca)

Your letter of conditional acceptance from the **Central Saanich Fire Department** informs you of the date and time of your appointment.

### Complete the Checklist!

<u>To do:</u>	<u>Action:</u>	<u>Done:</u>
<ul style="list-style-type: none"><li>• Arrange doctor's appointment to complete medical clearance form (page 7 and 8)</li></ul>	<ul style="list-style-type: none"><li>• Bring the completed Medical Clearance Form with you on your test day</li></ul>	
<ul style="list-style-type: none"><li>• Read the Information Package carefully</li></ul>	<ul style="list-style-type: none"><li>• Prepare as well as you can</li></ul>	
<ul style="list-style-type: none"><li>• Questions/Problems?</li></ul>	<ul style="list-style-type: none"><li>• Email us for help at <a href="mailto:fdadmin@csaanich.ca">fdadmin@csaanich.ca</a></li></ul>	

## ***Firefighter Applicant Physical Fitness Evaluation Information Package***

The physical evaluation program is administered CSFD and is not medically supervised. It was created by the School of Physical Education at the University of Victoria. **Please read the following information carefully in order to prepare for the tests.**

### **GENERAL INFORMATION**

The tests will be completed at the Central Saanich Fire Department, 1512 Keating Cross Road Saanichton, British Columbia. You will be scheduled to attend a testing time on a weekend that is set by the Fire Department.

There are locker rooms where you may change. You should bring your own towel if you want to shower afterwards.

The testing program runs on a strict schedule, so you must be on time. If you are not familiar with the Saanichton area, please allow yourself a little extra time to acquaint yourself.

You should expect to be at the Fire Department for about 3-4 hours on your test day. This amount of time permits adequate rest between tests so that you will be able to perform as well as possible.

### **MEDICAL CLEARANCE FOR TESTING**

The tests are very demanding and are designed to assess the physical capabilities of healthy individuals. In order to be tested, **you must have a physician certify that you are medically fit to undertake the tests.**

The ***Medical Clearance for Testing*** form (pages 7 and 8 of this package) **must be signed by your physician and you must bring it with you when you come to the Fire Department for testing. You will not be permitted to complete the tests unless this form has been completed by your physician.**

### **DESCRIPTION OF THE PHYSICAL FITNESS TESTS**

This program is designed to evaluate the physical work capacities of healthy, physically active individuals. Each test requires maximal effort. All the tests are completed while wearing firefighting personal protective equipment (PPE) weighing about 22kg (50lbs). This ensemble includes: helmet, flash-hood, gloves, pants, boots, jacket and self-contained breathing apparatus (SCBA). You will not breathe from the SCBA, but you must carry it. For safety during the treadmill test, running shoes are substituted for firefighting boots.

After completing the treadmill test, you will rest for 60 minutes before starting an orientation to the job-related performance tests. The orientation to the job-related tests consists of a "walk-through" session to practice each of the tasks. This will take approximately 30 minutes and will familiarize you with testing procedures and provide a suitable warm-up for the demanding tests that follow.

## DESCRIPTION OF THE PHYSICAL FITNESS TESTS (Continued)

Each test is followed by a rest period of 3 minutes for recovery and hydration. You are not permitted to leave the testing area or remove the PPE during the rest periods. The tests are described briefly in the following sections:

### 1. Aerobic Endurance

Aerobic fitness will be predicted during a progressive exercise test on a treadmill. After a standardized 5-minute warm-up, you will walk at 3.5 mph and 10% grade for 8 minutes followed by a 5-minute cool down. In order to pass the treadmill test, you must complete the 5-minute warm-up, the 8-minute constant work rate phase and the 5-minute cooldown. (18-minutes total) Please note we do NOT use a metabolic cart and mask system, as pictured.



Incline	Time (min)	Speed
0	0-3	3.5
2	3-4	3.5
6	4-5	3.5
10	5-13	3.5
0	13-18	Slow



### 2. Charged Hose Advance

You will drag 3 lengths of charged (full of Water) 44mm (1.75") hose a distance of 30m (100'). The lengths of hose are 'snaked' behind the starting line. The nozzle is held over the shoulder, and you advance to the finish line as quickly as possible (running is not permitted). This test assesses lower body strength, power for pulling and dragging. Should be completed safely and correctly in 27 seconds or less.

### 3. High Volume Hose Pull

Starting from an erect position facing forward, straddling the rope on the floor, you will bend and pick up a length of static 16mm (5/8") rope attached to a weighted hose. The test time begins when you begin to reach for the rope.

Keeping your feet securely in place, you will use the rope to pull the sled over the floor for a distance of 15.24m (50ft). You will then walk 15.24m (50ft) and repeat the pull, walk back 15.24m (50ft) and repeat the pull for a third and final time. This test assesses upper body strength, power, and endurance for pulling and hoisting. This test should be completed correctly and safely in 110 seconds or less.



### **DESCRIPTION OF THE PHYSICAL FITNESS TESTS (Continued)**

#### **4. Forcible Entry Simulation**

Starting from a standing position, you will pick up the 4.5kg (10lb) dead blow hammer and use it to hit the striking block. The test time begins as soon as you reach for the hammer that is standing on the floor directly in front of the block. The time will stop when the striking block crosses the green triangle at 30.5cm (12') on the sled deck. This test assesses muscle strength and power for striking. This test should be completed in 19 seconds or less.



#### **5. Victim Drag**

Starting from an erect position, you will bend to grasp and drag a mannequin weighing approximately 68.2 kg (150lb) through a serpentine obstacle course. You will turn around a traffic cone at 15m and return to the start for a total distance of 30m (100'). The test time starts when you move to pick up the mannequin and ends when the mannequin's feet are completely across the finish line. No part of your body or the mannequin may touch the traffic cones during the test. This test assesses upper and lower body muscle strength and endurance for pulling and dragging. This test should be completed correctly and safely in 57 seconds or less.



## 6. Ladder Climb

Starting from a standing position facing the ladder, you will climb 10 rungs (3.45m) up and down a 7.2m (24') ladder. This is repeated 5 times as quickly as possible. A repetition begins with both feet on the floor at the base of the ladder. You will climb and place two feet on the tenth rung (weight bearing step is required), reverse direction and climb down until both feet are again on the floor to complete the repetition. The test time starts when you move to start climbing and ends when both feet are on the floor after the fifth repetition. You must always maintain 3 points of contact on the ladder, and must climb the ladder rung by rung, without missing any of the rungs. The test should be completed correctly and safely in 97 seconds or less. This test evaluates leg strength and endurance required for climbing under load.



## DESCRIPTION OF THE PHYSICAL FITNESS TESTS (Continued)

### 7. Equipment Carry/Vehicle Extrication

You will lift and carry small (20kg or 44lb) and large (36 kg or 80 lb) vehicle extrication tools (the “Jaws of Life”) from the starting point and place them in designated places on the ground 15m (50’) away. Next, you will pick up the smaller (20kg) tool, carry it 7.6m (25’) and set it down in front of a vehicle door mock-up. The smaller tool must be held in a level position at right angles to the door mock-up with the ‘jaws’ in firm contact with each of the 3 marks that are similarly oriented to the 3 ‘pins’ that must be broken to remove the door. The tool must be held in the correct position for 30 seconds on each mark. The tool is set down between each hold. After this sequence is completed, you will return both tools to the starting point. This test evaluates muscular strength and endurance required to lift, carry, and use heavy tools. This test should be completed correctly and safely in 225 seconds or less.



### 8. Aerial Ladder Climb

You will climb to the top and back of our 23m (75ft) aerial ladder. This is not a timed test. It will be done slowly and safely. This test is designed to evaluate your ability to deal with height.



### 9. Confined Space Test

You will be required to put on a blacked out SCBA mask and find your way through a small obstacle course. You will not be required to breathe through the SCBA. This test is designed to test your ability to work in dark and confined spaces.

### 10. Dexterity Test

You will be required to couple and un-couple hose and perform other tasks using both your left and right hands. You will also be asked to perform tasks from memory. This test is designed to test your ability to listen and take direction.



## EFFECTIVE PREPARATION FOR THE TESTS

In order to do your best, you should come to the Fire Department on your testing day well-nourished and well rested. You should not do strenuous exercise on the days immediately before your tests. Sleep well the night before and try to be as relaxed as possible.

Avoid alcoholic beverages the day before and definitely on the day of your test. Do not smoke or drink beverages with caffeine (tea, coffee, hot chocolate, cola, etc.) for at least two hours prior to your test.

Do not eat for at least two hours before your test appointment. However, it is important to be well nourished and well hydrated. The tests are very demanding and most individuals are extremely tired at the end of each test.

If your appointment is first thing in the morning, do not skip breakfast. You should eat a light meal (e.g., fruit, toast or cereal, and juice) about three hours before your test.

## WHAT DO I NEED TO BRING?

### Clothing

Bring the following items of clothing with you: **shorts, two T-shirts, running shoes, extra socks, and sweats**. Your T-shirt will be wet from sweat after the treadmill test. You should change into a dry shirt and then put on sweats to keep warm during the 60-minute rest period.

We have a good selection of firefighting boots; however, getting an exact fit may not always be possible. In order to get the best fit, bring several pairs of socks (thin and thick sport socks).

### Nutrition

You should bring a water bottle or sports drink (e.g., Gatorade). You may want to eat a **small** snack (e.g., banana or energy bar) during the rest period between the treadmill test and the job-related tests.

Be careful to practice in advance so that you know how much to eat and drink during 3+ hours of intermittent, extremely strenuous exercise. If you eat or drink too much you will feel sick and do poorly. If you eat and drink too little, you will get dehydrated and do poorly.

Optimal nutrition and hydration strategies tend to be very individual. Work this out for yourself. Don't follow someone else's advice unless you have had the chance to make sure it works for you under the kind of conditions you will experience during these tests.

### Identification

Your drivers' license (with photograph) is required in order to register for the test and verify your identity.

**Medical Clearance**

You must bring the **Medical Clearance for Testing** document that has been completed by your physician. This document provides medical clearance for you to undertake the specific tests in this program. You will not be permitted to do any of the tests until the Medical Clearance for testing document has been signed by your physician.



# Central Saanich Fire Department



## ***Medical Clearance for Testing***

Applicant Name: \_\_\_\_\_

This program is designed to **evaluate the physical work capacities of healthy, physically active individuals**. Each test requires maximal effort. All of the tests are completed while wearing firefighting personal protective equipment (PPE) that weighs approximately 22 kg (50 lb). This ensemble includes: helmet, flash-hood, gloves, pants, boots, jacket and self-contained breathing apparatus (SCBA). The applicant is not required to breathe from the SCBA but must carry it. For safety during the treadmill test, running shoes are substituted for firefighting boots. The tests are administered by the Central Saanich Fire Department, and are **not medically supervised**. The test procedures are described briefly below:

### **Aerobic Endurance**

Depending on fitness level and motivation, this test requires the individual to walk on the treadmill for between 18 minutes. Regardless of the fitness level of the individual, the test normally involves maximal effort. Combined with the exercise stress, the weight and heat retention properties of the PPE result in a significant level of fatigue.

After completing the treadmill test, the applicant will rest for 60 minutes before moving on to the job-related performance tests.

### **JOB-RELATED PERFORMANCE TESTS**

Prior to completing the job-related tests, the applicant will complete a “walk-through” session where they are allowed to practice each of the tasks. This takes approximately 30 minutes and serves to familiarize the applicant with testing procedures and provides a suitable warm-up for the demanding tests that follow. Each test is followed by a rest period of 3 minutes for recovery and hydration. Applicants are not permitted to leave the testing area or remove the PPE during the rest periods.

### **Charged Hose Advance Test**

Applicants drag a charged (full of water) 44mm (1.75”) hose a distance of 30m (100’). Three 15 m (50’) lengths of hose are “snaked” behind the starting line. The nozzle is held over the shoulder and the applicant advances to the finish line as quickly as possible. This test assesses lower body strength and anaerobic power.

### **JOB-RELATED PERFORMANCE TESTS (Continued)**

**High Volume Hose Pull Test**

Applicants pull a bundle of hose weighing approximately 56kg (123lbs) a distance of 15 m (50') over a smooth concrete floor using a rope. This task is repeated 3 times. During this test, the applicant is stationary and must pull the hose bundle towards them using 16 mm (5/8") rope. This test assesses upper body strength, power, and endurance.

**Forcible Entry Simulation Test**

Using a 4.5kg (10lb) dead blow hammer, the applicant moves a striking block 68kg (151lbs) a distance of 30.5cm (12") as rapidly as possible. This test assesses muscle strength, power and endurance, particularly in the upper body.

**Victim Drag Test**

The applicant drags a mannequin weighing 68.2kg (150lbs) a total distance of 30m (100'). The test starts with the mannequin lying "face-up" on the floor and the applicant standing. The applicant lifts the mannequin and walks backwards for 15m, turns around a traffic cone and returns to the start line as quickly as possible. This test assesses strength, power, and agility.

**Ladder Climb Test**

The applicant climbs a 7.3m (24') ladder to the 10<sup>th</sup> rung and returns to the floor as quickly as possible. This task will be repeated five times. This test assesses muscle strength, endurance, and anaerobic capacity.

**Equipment Carry/Vehicle Extrication Test**

The applicant carries small (18kg or 40lbs) and large (36kg or 80lbs) vehicle extrication tools ("Jaws of Life") a total distance of 30m (100'). In addition, the applicant will lift and hold the 18kg tool in specific positions that simulate the work required to remove a vehicle door. The tools will then be returned to the starting position. This test is designed to evaluate the strength required to lift, carry and use heavy tools in rescue situations.

Is this individual taking any medication that could affect normal physiological responses to exercise? No \_\_\_\_\_ Yes \_\_\_\_\_ If yes, please explain.

Is there any medical reason that this individual should not undertake very strenuous exercise? No \_\_\_\_\_ Yes \_\_\_\_\_ If yes, please explain.

**I certify that this applicant has been given a medical examination and is medically fit to undertake the Physical Fitness Evaluation described above.**

Physician's Name \_\_\_\_\_

Date \_\_\_\_\_

Address \_\_\_\_\_

Telephone \_\_\_\_\_

Signature \_\_\_\_\_

Physician's Stamp