FIREFIGHTER APPLICANT PHYSICAL FITNESS EVALUATION INFORMATION PACKAGE

The physical evaluation program is administered by Allied Health Services within the Faculty of Human Kinetics and Recreation at Memorial University of Newfoundland. Please read the following information carefully in order to prepare for the tests.

GENERAL INFORMATION

Once you receive your testing date, you must register for the Fire Fighter Physical Fitness Evaluation at the Main Office of the School of Human Kinetics at Memorial University of Newfoundland. The phone number is 709-864-6796. The Main Office is located in the main lobby of the Physical Education Building.

Testing will be completed at the PowerPlex gymnasium, NL Sport Centre, in St. John's. You will be provided with a copy of your personal results as soon as you finish the tests for your records and certificates will be issued to those who meet the minimum requirements of the CFFM's Firefighter Pre-entry Fitness Evaluation protocol.

The testing program runs on a strict schedule, so you must be on time. If you are not familiar with the PowerPlex, NL Sports Centre, please allow yourself a little extra time to ensure you arrive with a few minutes to relax. A site-plan of the NL Sports Centre is provided on page 7.

IF YOU HAVE ANY QUESTIONS regarding your testing appointment, please contact Allied Health Services by phone at 709-864-6796 or email at ahealth@mun.ca

TESTING LOCATION

The tests are conducted at the PowerPlex Gymnasium at the NL Sports Centre, 90 Crosbie Road, St. John’s, NL. Driving directions coming from Columbus Drive are as follows: turn East onto Freshwater Road, then take the first right onto Crosbie Road. One you drive to the top of the hill, the PowerPlex Gymnasium will be on the left. You may park in that parking lot.

There are male and female locker rooms where you may change. You should bring your own towel and a lock with you to put on a "day-use" locker, since we have no provision for securing your valuables.
COST OF TESTING

- The fee for the testing service is $350.00 plus tax.
- You must register for testing at least 2 weeks in advance of the testing date.
- Payment must be made in person during registration to secure your testing time.
- There are NO refunds for missed appointments.
- There are NO refunds if you cancel your testing appointment without a valid medical reason and accompanying note from your physician. With a valid medical note, you will receive a refund of 50%.
- You must register in person at the main office. Acceptable forms of payment are cash, certified cheques, or credit/debit card.

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, provided on this website, must be signed by your physician and you must bring it with you when you come to the PowerPlex 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 a 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). 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.

Once the treadmill test is completed, you will have a 1 hour recovery period before moving on 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 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. You are not permitted to leave the testing area or remove the PPE during the rest periods. The tests are described briefly on the following pages.
1. **Aerobic Endurance**

Maximal work capacity is measured during a progressive, incremental exercise evaluation to exhaustion on a treadmill. After a standard 5-minute warm-up, you will walk at 3.5 mph and 10% grade for 8 minutes. After this phase is completed, the grade (and if necessary, speed) will be increased every minute until you are too tired to continue. The applicant can shuffle or lightly jog if necessary, once the speed increases. In order to pass the treadmill evaluation, you MUST complete the 5-minute warm-up, the 8-minute constant work rate phase and the 5-minute cool-down (for a total of 18 minutes). After the treadmill evaluation, you will rest for 60 minutes before starting an orientation to the job-related performance evaluation. Note: During the evaluation, expired gases **MAY BE** monitored with an automated metabolic measurement system, if available, to calculate the rate of oxygen consumption. Heart rate is also monitored continuously.

2. **Charged Hose Advance**

You will drag a charged (full of water) 38 mm (1.5 inch) hose a distance of 38.1 m (125'). Three 15.24 m (50') 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 evaluation assesses lower body strength and power and must be completed safely in less than 31 seconds.

3. **High Volume Hose Pull**

You will pull a bundle of hose weighing approximately 56 kg (123 lb) a distance of 15.24 m (50') over a smooth concrete floor using a rope. This task is repeated 3 times. During this evaluation, you must stand still and pull the hose bundle towards you using 16 mm (5/8") rope. This evaluation assesses upper body strength, power, and endurance and must be completed safely in less than 103 seconds.
4. Forcible Entry Simulation

You will use a 3.4 kg (8 lb) "dead blow" sledge hammer to move a weighted truck tire 102 kg (225 lb) a distance of 30.5 cm (12") as rapidly as possible. This evaluation assesses muscle strength, power and endurance, particularly in the upper body and must be completed safely in less than 45 seconds.

5. Victim Drag

You will drag a mannequin weighing 68.2 kg (150 lb) a total distance of 30.48 m (100'). The evaluation starts with the mannequin lying "face-up" on the floor. You will lift the mannequin and walk backwards for 15.24 m (50'), turn around a traffic cone and return to the start line as quickly as possible. This evaluation assesses muscle strength and endurance and must be completed safely in less than 49 seconds.

6. Ladder Climb

You will climb a 7.3 m (24') ladder to the 10th rung and return to the floor as quickly as possible. The applicant must touch each rung on the way up and down. This task will be repeated five times. This evaluation assesses muscle strength, endurance, and anaerobic capacity and must be completed safely in less than 109 seconds.

7. Equipment Carry/Vehicle Extrication

You will carry small 18 kg (40 lb) and large 36 kg (80 lb) mock vehicle extrication tools (the "Jaws of Life") a total distance of 76 m (250'). You will lift and hold the 18 kg (40 lb) tool in specific positions that simulate the work required to remove a vehicle door. This evaluation is designed to evaluate the strength and endurance required to lift, carry and use heavy tools in rescue situations. This evaluation must be completed safely in less than 270 seconds.
EFFECTIVE PREPARATION FOR THE TESTS

In order to do your best, you should come to the facility 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?

Proof of Payment

The testing fee ($350.00) must be paid to the Main Office in the Physical Education Building when you register for your testing appointment.

You will be provided a receipt, indicating the time of your testing appointment and providing proof of payment. You must bring your receipt with you to your testing appointment.

Identification

Photo identification (e.g. drivers licence) must be presented upon your arrival at the PowerPlex in order to verify your identity.

Medical Clearance

You must bring your completed Medical Clearance for Testing. This document must be completed by your physician. It provides medical clearance for you to undertake the specific tests in this program. You will not be permitted to do any of the tests without a Medical Clearance document that has been signed & stamped by your physician. You will also need to bring the Physical Activity Readiness Questionnaire with you. You can fill it out at home and sign it here during the check-in process of your testing.

Clothing

Bring the following items of clothing with you: shorts, a T-shirt, running shoes, extra socks, and warm-up clothing. We will provide you with PPE for the testing session. (For the treadmill test, you will be required to wear running shoes, but for all of the job-related tests, you will be required to wear rubber boots—provided for you).
Nutrition

You should bring a water bottle or sports drink (e.g., Gatorade). Do not try anything (Gatorade, Power Bar, etc.) for the first time during your test appointment. You should know how your body reacts to your nutritional plan well in advance of your appointment.

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.

SITE PLAN OF THE NL SPORTS CENTRE/POWERPLEX