

## PARAMEDIC PHYSICAL EVALUATION TEST

### **To All Applicants:**

The Paramedic Physical Evaluation Testing or PET is performed on all applicants for the position of Paramedic with the City of Greater Sudbury's Paramedic Services. The objective assessment is conducted by staff with Cambrian College of Applied Arts and Technology. PET certificates conducted by Collège Boréal shall be considered equivalent for the purpose of CGS Paramedic Services Hiring.

The assessment protocol is set out in this document. All applicants must successfully complete the testing within the six-month period prior to any offer of employment.

It is the responsibility of applicants to arrange their PET assessment directly with Cambrian College faculty once notified of advancement in the hiring process. The contact information necessary to secure a testing time is as follows: Rob McCann at 705-566-8101 ext. 7378 or email [rob.mccann@cambriancollege.ca](mailto:rob.mccann@cambriancollege.ca). All applicants must advise the College that they are requesting a PET assessment for a position with the City of Greater Sudbury Paramedic Services. Additionally, applicants must quote the appropriate Employment Opportunity number as indicated on the posting.

The remaining pages in this document set out the following:

- 1) Physical Evaluation Test Description**
- 2) Physical Evaluation Test – (PET) Informed Consent**
- 3) Participant Statement**
- 4) PET Check List**
- 5) PET Evaluation Result Form**

Thank you

A handwritten signature in black ink, appearing to read 'Paul Kadwell'.

**Paul Kadwell, Deputy Chief**  
Paramedic Services

# Physical Evaluation Test Description

## Pre-Screening

- Prior to the testing session, the candidate will be required to complete the following screening components:

## Physical Activity Readiness Questionnaire (PAR-Q).

- The candidate must answer the questions honestly.

## Preliminary Instructions

- The candidate must follow all the preliminary instructions.

## Consent Form

- The client must sign a consent form which describes the testing items.

## Resting Heart Rate and Blood Pressure Measures

- A candidate's resting heart rate must be below 100 beats per minute and their resting blood pressure must be 144/94 and below to meet the safety requirements for the test (Canadian Society of Exercise Physiology Guidelines).
- If a client does not meet the pre-screening criteria, they are unable to do the test and they will require doctor's permission before they are able to go through the testing session.
- The testing results will be mailed to the candidate and it is valid for a six-month period.

## PET – Circuit Test

The PET circuit is a series of job performance, physical ability tests that simulate the most common daily physical demands of Emergency Medical Services (EMS) work. The test involves a three-cycle circuit obstacle course, identifying four typical physical labor tasks which paramedics must perform on a daily basis, including strength, agility, anaerobic capacity, and flexibility.

The physical aspects of EMS work can be described by these four physical activities and are felt to be crucial, essential and critical. The PET circuit must be successfully completed within a standardized pre-determined time before the complete application is accepted and processed by Greater Sudbury EMS for consideration.

In each cycle of the obstacle course, at least two of the above physical labor tasks are challenged. Aspects of the test duplicate a scenario where the paramedic must (a) get to the patient; (b) physically attend the patient; and (c) remove the patient. As the level of performance demanded varies per situation, the test is practical and deemed to be both realistic and reasonable.

## Cycles

### 1. Obstacle Course – Mobility Run

The PET circuit consists of an approx. 300 m (984ft) obstacle run where the candidate must demonstrate gross motor ability such as mobility, agility, flexibility, power, and general aerobic endurance.

### 2. Strength Station

The strength station consists of a pull unit where the candidates will be required to suspend a 50lb (23kg) weight off the ground and travel through four 180 degree arcs, keeping the weight elevated during the entire exercise.

### 3. Body Drag

The body drag session of the PET circuit requires the candidate to drag an approximate 90lb mannequin over a distance of 30m (100ft). A hose/sled weighted to 90lb may be used to simulate the dummy.

## DESCRIPTION OF PET

PET consists of three cycles at a controlled timed pace. The first cycle consists of an approx 100m obstacle run where the candidate must demonstrate gross motor ability such as agility, flexibility, and general endurance.

The course is laid out in the following manner (see Appendix 1):

1. Starting from the start marker pylon, the candidate runs straight ahead to the first obstacle – the balance beam. The balance beam must be crossed lengthwise. If a foot touches the floor, the candidate must go back to the beginning of the beam.
2. From the beam, the candidate runs forward to the second marker, turns and proceeds up and down the staircase twice. The candidate turns and continues around the outside of the next marker and turns to face the over/under obstacles. The candidate must go over the first obstacle (large box), go fully under the second obstacle (low bar), go over the third obstacle (large box), and go fully under the last obstacle (low bar). If any of the bars are knocked off, the candidate is penalized five (5) seconds per bar.
3. The candidate, upon exiting the over/under component, proceeds forward around the outside of the next marker back to the main gym floor, run continues forward in a straight run to the pull component.

4. Upon reaching the pull unit, the candidate grasps the rope and pulls the weight (50lb/23kg) off the floor. Maintaining the weight in this position (elbows are to remain flexed), the candidate moves through four arcs of 180 degrees. The weight is then lowered in a controlled manner to the floor.
5. From the pull unit, the participant goes around the outside of the next marker, situated just beyond the pull unit; turns and proceeds down to the start line.

The second cycle consists of another obstacle run where the candidate must demonstrate; further general endurance, strength, power, and agility. (see Appendix 2):

1. From the start marker, the candidate runs ahead to the balance beam, crosses the balance beam without feet touching the floor.
2. From the balance beam, the candidate runs forward to the end of the gym around the last pylon to the outside and faces the over/under components.
3. The candidate must go over the first obstacle (large box), go fully under the second obstacle (low bar), go over the third obstacle (large box), and go fully under the last obstacle (low bar). If any of the bars are knocked off, the candidate is penalized five (5) seconds per bar.
4. The candidate then proceeds forward; runs around the outside of the next marker; coming back into the main circuit proceeding to the body drag. In a safe and controlled manner, the participant must drag the approximate 90lb weight along the gym floor for a distance of 30m (100ft), moving backwards. At this point, in a safe and controlled manner, the participant lowers the dummy or weight to the floor. The candidate continues forward around the end pylon to the mat for the sit up component.
5. At the floor mat, the candidate lies flat on their back with knees at a 90 degree angle and performs, or at least attempts ten (10) consecutive, controlled sit ups. The feet must remain on the floor and the wrists must pass the knees on each contraction. Upon completing ten sit-ups, the candidate gets up and proceeds to the start line pylon.

The third and final cycle is identical to the first cycle. The components of the third cycle are the balance beam, up and down the stairs twice, over/under component, and straight run down to the pull station. Upon exiting the pull component, the candidate goes around the last pylon, which will become the finish line.

## Protocol Summary

Course – Three (3) cycles, timed run

### Cycle One

Start  
Balance Beam  
Stairs (twice)  
Marker  
Over/Under  
Marker  
Straight Run  
Pull Station  
Marker

### Cycle Two

Start  
Balance Beam  
Straight Run  
Marker  
Over/Under  
Marker  
Body Drag  
Marker  
Sit-ups (10)

### Cycle Three

Start  
Balance Beam  
Stairs (twice)  
Marker  
Over/Under  
Marker  
Straight Run  
Pull Station  
Marker

## PET Performance Guidelines

- I. In order to maintain balance, a shuffle movement of the feet is suggested at the pull station. The back should be kept straight throughout the movement, abdominal muscles contracting, thus stabilizing the pelvis.
- II. The candidate must remain in control throughout the pull activity. The pull activities are performed under maximal exertion, and the candidates demonstrate their potential to work under severed stress. It is important that the elbows remain bent throughout the activity, and candidates must be reminded of this throughout the performance of this activity.
- III. Test administrators should provide candidates with direction and encouragement throughout. Faults can occur as follows:
  - i. Stepping off the balance beam
  - ii. Failing to fully clear either of the "under stations"
  - iii. Failing to run around the outside of the pylons
  - iv. Failing to adequately drag or drop the dummy (sled)
  - v. Failing to maintain the weights off the floor at the pull station through each arc (must restart from beginning of pull machine if this occurs)
  - vi. Not maintaining proper technique in the sit-ups.

In each case, the candidate is asked to re-do the portion of the test or replace the knocked down item with an assessed penalty. Three unsuccessful trials at any station of the cycles will constitute a failure, and the candidate will be asked to attempt the course again at a later date.

## Additional Tests:

### Aerobic Fitness Test

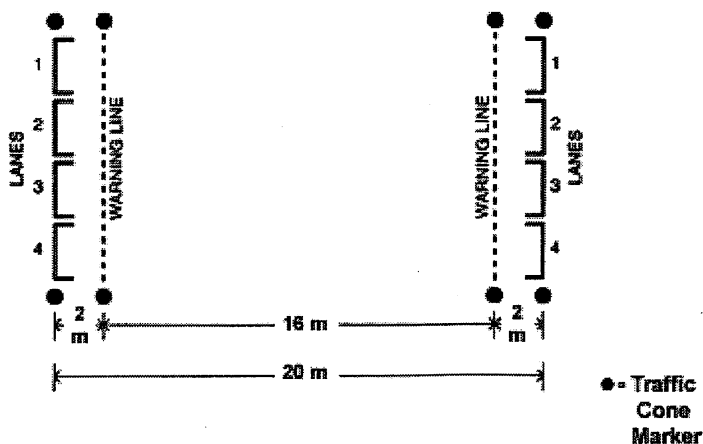
The 20m (67ft) Shuttle Run evaluates your aerobic fitness or work capability for physically demanding tasks on the job as well as everyday paramedic activities. In this test, you run back and forth between two marked lines over a 20m course in time with audio signals recorded on a CD.

The time permitted to cover the 20m at the beginning of the test requires a slow jog. Thereafter, for each 20m, the time between audio signals lessens, requiring that you pick up your running pace. The audio signal informs you of the "stage" you are at as the test progresses.

In each leg of the Shuttle Run, warning lines, placed 2m (7ft) before each of the 20-metre end lines, must be reached before the permitted time elapses and the audio signal sounds. You will be cautioned by an examiner if you fail to cross a warning line in time and you must still reach the end line before returning. The test ends when you miss two consecutive warning lines or you choose to stop.

Applicant must reach a minimum level of 6.5

### **Aerobic Shuttle Run**



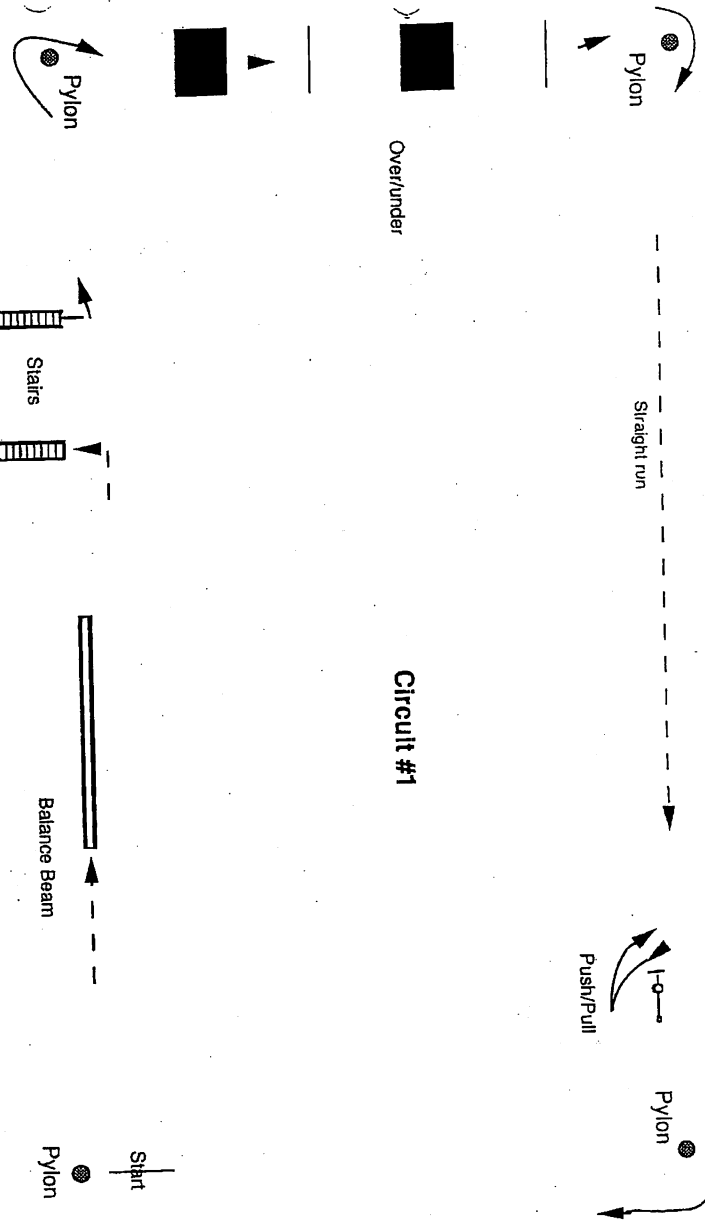
### **Stairchair Carry**

The applicant will carry a stairchair with a 95kg patient, up and down four flights of stairs with the aid of a partner within six (6) minutes. Applicant is permitted to place the stairchair down on the landings. If the applicant sets the stairchair down anywhere other than the landings three or more times or if safety is jeopardized, the lift will cease. Applicants are graded on technique and must score 70% or higher.

### **Stretcher Carry**

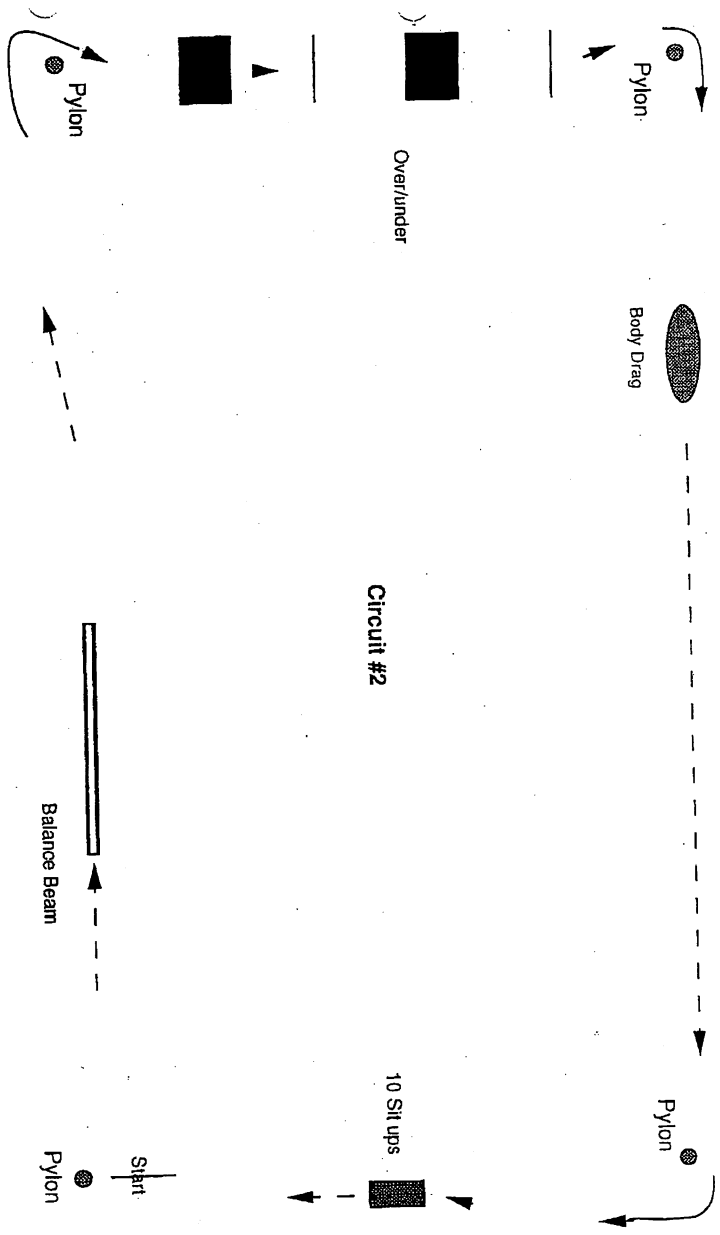
Applicant is required to lift a stretcher with a 95kg patient up and down seven stairs with the aid of a partner. Applicant is graded on technique and must score 70% or higher.

APPENDIX #1



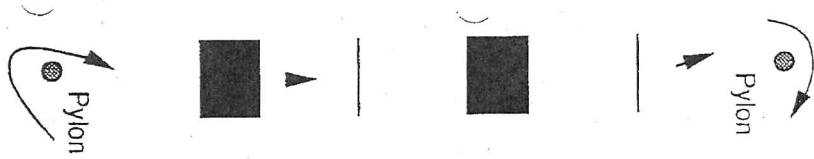
Appendix #1

APPENDIX #2

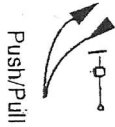
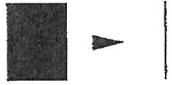


Appendix #2

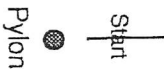
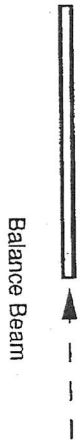
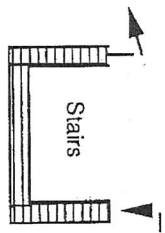
APPENDIX #3



Over/under



Circuit #3



Appendix #3

## Physical Evaluation Test – (PET) Informed Consent

I, \_\_\_\_\_, the undersigned, do hereby acknowledge:

1. My consent to perform the Physical Evaluation Test (PET) which involves a three-cycle circuit obstacle course, identifying four typical physical labor tasks which paramedics must perform on a daily basis; including strength, agility, anaerobic capacity, and flexibility, 20 meter (65 ft) shuttle run, stair chair lift, and stretcher lift;
2. My consent to the tests being supervised by a qualified fitness appraiser who has been trained to administer these fitness assessment protocols;
3. My understanding that my heart rate and blood pressure will be measured prior to and upon completion of the test;
4. My understanding that there are potential risks, i.e. episodes of transient light headedness, fainting, abnormal blood pressure, chest discomfort, leg cramps, nausea and on extremely rare occasions, heart attacks and I **assume those risks willingly**;
5. My obligation to immediately inform the appraiser of any pain, discomfort, fatigue, or any other symptoms that I may suffer during and immediately after the evaluation;
6. My understanding that I may stop any further testing, if I so desire, and that the evaluation may be terminated by the appraiser upon observation of any symptoms of undue distress or abnormal response;
7. My understanding that the tests will be explained and demonstrated to me; that precise instructions will be given as to what constitutes a fault and how it will be scored; that I will be given time to practice the various test items so I can develop a basic mastery as well as confidence in my abilities to undertake the PET or another Emergency Services physical abilities test; that I will follow all safety procedures as outlined;
8. My understanding that I may ask any questions or request further explanation or information about the procedures at any time before, during or after the evaluation;
9. That I have read, understood, and completed the Health Appraisal Questionnaire and answered NO to all questions or received clearance to participate from a licensed physician (must present a signed copy of the Physician's Referral Report)

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Witness: \_\_\_\_\_ Date: \_\_\_\_\_



# PET Check list:

1. Comfortable pair of running shoes (non-marking soles), shorts, t-shirt (long pair of pants, track pants, wind pants etc. is recommended for PET obstacle course portion)
2. Read over PET description
3. Read over and follow preliminary instructions
4. If required, obtain medical clearance
5. Have photo ID
6. **The cost for the PET test is the responsibility of the candidate. For method of payment, please contact the testing site**
7. Please note that you will need change for parking.